

ZONING CHANGE REVIEW SHEET

CASE: C814-2009-0139 Bull Creek PUD

Z. P. C. DATE: 07-06-2010

ADDRESS: 4909 FM 2222 Rd

AREA: 53.8741 Acres

APPLICANT: Booth Family Living Trust
(David Booth)

AGENT: Armbrust & Brown, LLP
(David Armbrust)

NEIGHBORHOOD PLAN AREA: None

CAPITOL VIEW: No

WATERSHED: Lake Austin/Bull Creek

T.I.A.: No.

HILL COUNTRY ROADWAY: Yes

DESIRED DEVELOPMENT ZONE: No

ZONING FROM: SF-2 - Single Family Residence - Standard Lot, SF-6 - Townhouse & Condominium Residence and LA - Lake Austin Residence.

ZONING TO: PUD - Planned Unit Development

SUMMARY STAFF RECOMMENDATION:

Staff recommends Planned Unit Development – PUD with the conditions listed in the Department Comments.

BASIS FOR RECOMMENDATION:

1. *The proposed zoning should be consistent with the purpose statement of the district sought.*

The Bull Creek PUD is comprised of approximately fifty four (54) acres and fronts on Lake Austin and Bull Creek. The requested Planned Unit Development (PUD) zoning district is in keeping with the purpose statement of a PUD district designation is to preserve the natural environment, encourage high quality development and innovative design.

ZONING AND PLATTING COMMISSION RECOMMENDATION:

The motion to approve staff's recommendation for PUD zoning; was approved by Commissioner Sandra Baldrige's motion, Commissioner Teresa Rabago second the motion on a vote of 6-0; Commissioner Patricia Seeger was absent.

ENVIRONMENTAL BOARD RECOMMENDATION:

The Environmental Board at their regularly scheduled meeting of June 2nd, voted to approve the Bull Creek Planned Unit Development. Please see the attached Environmental Board Motion Sheet.

PARKS AND RECREATION BOARD RECOMMENDATION:

The Parks and Recreation Board at their regularly scheduled meeting of March 23rd, voted to approve the Bull Creek Planned Unit Development. Please see the attached Parks and Recreation Board minutes.

DEPARTMENT COMMENTS:

The Planned Unit Development (PUD) district is the designation for a large or complex single or multi-use development that is planned as a single contiguous project and that is under unified control. The purpose of a PUD district designation is to preserve the natural environment, encourage high quality development and innovative design, and ensure adequate public facilities and services for development within a PUD. A PUD district designation provides greater design flexibility by permitting modifications of site development regulations. Development under the site development regulations applicable to a PUD must be superior to the development that would occur under conventional zoning and subdivision regulations. A PUD district must include at least 10 acres of land, unless the property is characterized by special circumstances, including unique topographic constraints.

The Bull Creek PUD proposes one single family residence with accessory structures located on 53.8741 acres of land in the City's Full Purpose jurisdiction. Additional structures with proposed accessory uses will include: a guest house, family recreation building, security/storage building, barn, skyspace art piece, cabana, and pool. In addition, an olive orchard, gardens, multiple deck areas, terraces, boardwalks, a constructed habitat for migratory birds, native prairie and forest restoration areas, and pedestrian trails are proposed on the site. Currently there is one single family structure, a stone terrace area along Bull Creek, swimming area, and three boat docks all to remain. The project is located on the south side of RM 2222, approximately one mile east of the intersection of Capitol of Texas Highway, (360) and RM 2222, in the Drinking Water Protection Zone.

The proposed Bull Creek PUD is located in the Bull Creek and Lake Austin Watersheds; both are classified as water supply suburban. The PUD includes six tracts of land with only one currently developed with a single family structure and pool located on it. The remaining five tracts are relatively undeveloped with the exception of two boat docks and an existing swim area boardwalk along the Bull Creek outfall into Lake Austin. Bull Creek is adjacent to the west portion of the property, while Lake Austin is adjacent to the south portion of the property.

Prior to the submittal of the Bull Creek PUD, a 21 lot preliminary subdivision plan, (C8-04-0164, Attachment "A") and a four dwelling unit condominium zoning site plan (C14-85-003.25, Attachment "B") had been approved on two of the tracts. Three existing land status determinations would have allowed three residences on the remaining respective lots. In addition to the existing single family residence, all of these prior entitlements would have allowed 28 total residences on the site. The subdivision plat has been withdrawn and the condominium zoning site plan has been deleted. The Bull Creek PUD will consist of one single family residence with accessory structures.

Staff from the Planning and Development Review department has worked with the applicant to provide additional benefits in site development as support for the proposed PUD:

The Bull Creek PUD significantly reduces the overall allowable density for the site. Previously, approximately 23 single family residences and four condo units had been approved on a portion of this site. This project seeks to construct one single family residence with accessory structures on the 53.8741 acres.

- Impervious cover for the entire PUD development will be limited to 14 percent of the net site area. This is significantly less than the 30% allowable impervious cover under current code.

- An ecological preservation and conservation plan has been included as guidance for the removal of invasive species. To allow for a landscape recover effort to transform the land back into a more diverse woodland, prairie/wildflower meadow and riparian/stream bank plant community. The following efforts have already started and will continue:
 - Meadow rehabilitation
 - Removal of invasive tree species
 - Native hardwood tree planting – Over the last year, 188 trees have been planted. Additional trees are proposed over the next several years.
 - Slope stabilization to control areas of erosion.
 - Organic fertilization and inoculation of micro-organisms.
 - Construction of wildlife water features to provide water during drought periods.
 - Ongoing consultation with the U.S. Fish and Wildlife Service, the Ladybird Johnson Wildflower Center, Texas A&M range ecologists, and the Natural Resource and Conservation Service on restoration projects for the property.
 - Annual bird and mammal surveys to assess the health and wildlife population.
- A seasonal habitat for migratory birds has been proposed for approximately three acres bordering Bull Creek and Lake Austin. This will consist of two shallow basins that will allow each area to be filled to provide forage area for these migratory birds. Installation of this constructed habitat is contingent upon obtaining the appropriate permits from all applicable jurisdictions, as well as the results of ongoing studies that the size, location, and depth will have a positive impact on migratory birds.
- The project currently proposes to comply with the Austin Energy PUD Green Building Program in effect when the PUD application was submitted. Items presently being studied, include but are not limited to the following:
 - - A. Water Conservation:
 1. Reuse of gray water – Pending permitting and feasibility issues, the project intends to incorporate reuse water systems into the building design.
 2. Irrigation from Lake Austin – The owners currently have a permit to draw water for irrigation onsite. The overall percentage of the site that is covered with vegetation which requires irrigation is relatively low and the dominant planting strategy involves using drought tolerant native plant material.
 3. Water conservation, low flow fixtures – Water efficient plumbing fixtures are planned to be used wherever possible in the project.
 - B. Energy Use:
 1. Green roof- A portion of the main house roof will incorporate a green roof with vegetation.
 2. Photovoltaic's – Subject to appropriate metering, the roof of the barn is planned to be covered with solar PV panels to generate electricity. The applicant envisions the barn as an energy center with panels consolidated for power generation across the site to all buildings.
 3. Commissioning – A commissioning agent has been retained to ensure that the building systems are running at their intended design criteria.
 4. Green energy subscription – The Owners will purchase Green Energy through Austin Energy, as needed.

5. Geothermal – The proposed geothermal heat exchange system is a central plant system.
6. Reduced lighting loads - A building management system will be installed to allow for lights to be dimmed and controlled from any point in house.
7. Energy use efficiency through glass performance - High performance glazing will be used throughout the project to achieve energy-efficient envelope design.
8. Maximize vegetated areas - The majority of the site will remain vegetated, thus reducing the site's contribution to an urban "heat island" effect.

C. Environmental Impact:

1. Storm water runoff and water quality for watershed protection - Roof and area drainage will be collected and redistributed on site via non-erosive devices.
2. Reduced site disturbance - The guesthouse design is a free span over a natural ravine to reduce site disturbance.
3. Recycling storage - Each building will have facilities for recycling.
4. Bicycle storage for staff - The barn will have bicycle racks for house staff and grounds crew.
5. Certified wood - Certified wood will be used wherever possible on interior finishes and millwork.
6. Construction waste management – The contractor will recycle waste materials and excavated dirt as part of Austin Energy's Green Building program.
7. Utilizing existing site features – Re-grading of the site is minimal. It is primarily limited to building and parking areas.
8. Restore or protect open areas - Much of the site has been impacted by overgrazing. At project completion there will be more plant material per acre than currently.
9. An integrated pest management plan shall be established.

The project presently proposes to incorporate at least two art installations which may be seen from Lake Austin or Bull Creek.

1. All land uses within the Lake Austin (LA) Residence zoning district are permitted. In addition, the following land uses will now be a permitted use.

- Urban Farm
- Crop Production

2. The following are Site Development Regulations that will be modified for the Bull Creek PUD:

CODE MODIFICATIONS

CODE SECTION	DESCRIPTION	PROPOSED CODE MODIFICATION
Section 25-1-535(B)(4)	Describes how long project duration applies to projects within the Drinking Water Protection Zone	Modifies project duration expiration date of site plans completed for the PUD to ten years after the date of approval of each individual site plan.
Section 25-2, Subchapter B, Article 2, Division 5, 2.3.1	Describes Tier One minimum requirements that PUDs must adhere to	Modifies Tier One requirements consistent with this PUD.
Section 25-2, Subchapter B, Article 2, Division 5,	Describes land use plan amendment and expiration	Clarifies that including additional accessory uses and structures may be approved administratively by the

3.1	requirements	Director, and does not constitute a substantial amendment.
Section 25-2-492	Describes the permitted, conditional, and prohibited uses for the LA zoning district, as well as site development regulations.	1) Modifies the permitted land uses allowed on the property, and 2) Modifies the interior side yard setbacks to zero within the PUD.
Section 25-2-551(B)(2)	Describes shoreline setback requirements for LA zoning	Modifies the LA district regulations to allow a proposed constructed habitat for migratory waterfowl, decks, trails, impervious walks, boardwalk, terraces, skyspace structure, site electrical, weir system, berms, swimming area, and related improvements to be located within the shoreline setback. Also allows maintenance and remodel of existing swimming area, boat docks, walkways, and associated facilities. Related cut/fill required for the improvements listed above shall be allowed in accordance with PUD Exhibit J.
Section 25-2-551(B)(5)	Describes shoreline setback requirements for LA zoning	Modifies the LA district regulations to allow development on limited gradients that exceed 35 percent. This modification would be applicable to the guest house and recreation building, as shown on Exhibit K.
Section 25-2-863(C)	Describes urban farm requirements	Modifies the requirements to allow an urban farm on a site greater than five acres.
Section 25-2-893(D)	Describes accessory uses for principal residential uses	Modify the accessory use regulations to allow two guest houses.
Section 25-2-900	Describes home occupations	Modifies the home occupation requirements so that only the following home occupation regulations apply: 1) a home occupation may occur within the primary residence or accessory structures and 2) a home occupation may include the occupant of the primary residence and staff assisting with property and household management, domestic service household maintenance (interior and exterior), landscaping, security, bookkeeping, and personnel working for the owner or owner's nonprofit foundation.
Section 25-2, Subchapter F: Residential Design and Compatibility Standards	Describes residential design standards for new homes to ensure compatibility within existing neighborhoods	Modifies Section 2.5 so that the interior side yard setbacks are zero within the PUD and modifies Section 2.6 so that the interior lot line setback planes do not apply within the PUD.
Section 25-5-81(B)	Describes site plan expiration	Modifies the expiration date of site plans for the PUD to ten years after each individual site plan.
Section 25-7-152	Describes dedication to the public of an easement or right-of-way for a drainage facility and stormwater flow	Modify this requirement so that a drainage easement dedicated to the public is not required for the arroyo within the property. An easement for the FEMA floodplain will be dedicated along Bull Creek.
Section 25-8-64	Describes impervious cover assumptions	Modify the requirement to allow impervious cover to be calculated over the entire property and not on a lot by lot basis.
Section 25-8-261(C)	Describes requirements within the Critical Water Quality Zone	Modify the requirements to allow a proposed migratory bird habitat, birdbath facilities, decks, levees, trails, sidewalks, boardwalk, remnant foundation, terraces, skyspace structure, security equipment, wiring, swimming area, and related facilities to be located within the CWQZ, as shown in Exhibit C. Also allows maintenance and remodel of existing swimming area, boat docks, walkways, and terraces. Related cut/fill required for the improvements

		listed above shall be allowed in accordance with PUD Exhibits J.
Section 25-8-281(B)	Describes critical environmental features (CEF)	Modify the requirements to allow CEFs to be located on this residential lot, since access to this area will be restricted due to its minimal use as a single family residence, as well as ongoing ecological preservation and restoration efforts.
Section 25-8-281(C)	Describes CEF buffers	Modify the requirements to allow a 50 foot buffer for Rimrocks 1 and 2, and a 150 foot buffer for the emergent wetland fringe located within Bull Creek. For the emergent wetland fringe located within Bull Creek, the following items may be located within the buffer area: trails, existing retaining wall, proposed trees, stone stairs, regraded slope, migratory habitat for waterfowl, raised wood boardwalk, native plant garden, security equipment, wiring, and related facilities.
Section 25-8-302(A)(1) & (2)	Describes construction of a building or parking area	Modify the requirements of this section to allow small portions of building and parking area proposed near the guest house to be constructed on slopes greater than 25 percent, as shown on Exhibit K.
Section 25-8-302(B)	Describes construction of a building or parking area	Modify the requirements to this section to incorporate construction on gradients greater than 25 percent. This will be applicable to portions of the property shown in Exhibit K.
Section 25-8-302(B)(2)	Describes construction of a building or parking area	Modify the requirement for terracing construction uphill or downhill of a slope with a gradient of more than 15 percent, so that it is optional for the guest house structure, as shown in Exhibit K. Terracing shall be optional for the portion of the slopes that are not constructed on, but merely spanned by the building.
Section 25-8-321	Describes when clearing of vegetation is allowed and prohibited	Modify the requirements of this section to allow clearing of vegetation and clearing of trees under 19 inches in diameter for the planting of an olive orchard approximately four (4) acres in size, as shown approximately on Exhibit C.
Section 25-8-341	Outlines cut requirements	Modify the requirements of this section to allow cuts to exceed four feet in depth at the following locations: adjacent to the skyspace structure, near the main house and for a small portion of the driveway, adjacent to and near the guest house, and the entryway for the recreation building, as shown in Exhibit J.
Section 25-8-342	Outlines fill requirements	Modify the requirements of this section to allow fills to exceed four feet in depth at the following locations: adjacent to the skyspace structure, around the main house, for portions of the driveway and culvert, and adjacent to the guest house, as shown in Exhibit J.
Transportation Criteria Manual Section 5.3.P. and COA Standard 433S-1	Describes driveway grade breaks	Modify this requirement to allow a driveway apron to slope away from the street and to exceed a two (2) percent grade for the entire driveway apron, as shown in Exhibit M.

EXISTING ZONING AND LAND USES:

	ZONING	LAND USES
SITE	LA, SF-2 & SF-6	Residential/Agricultural
NORTH	PUD	Single Family Residential
SOUTH	LA	Agricultural/undeveloped
EAST	SF-2	Single Family Residential
WEST	SF-2	Agricultural

CASE HISTORIES:

CASE NUMBER	REQUEST	PLANNING COMMISSION	CITY COUNCIL
C814-75-002 The Courtyard	From I-SF-3 to PUD	Approved PUD [Vote: 7-0]	Approved PUD [Vote: 7-0]
C814-74-005 Cat Mountain Villas	From SF-3 to PUD	Approved PUD [Vote: 7-0]	Approved PUD [Vote: 7-0]

NEIGHBORHOOD ORGANIZATION:

- Homeless Neighborhood Assoc.
- Austin Neighborhoods Council
- League of Bicycling Voters
- North Austin Neighborhood Alliance
- 2222 Property Owners Assoc.
- Long Canyon HOA
- Glen Lake Neighborhood Assoc.
- 2222 Coalition of Neighborhoods
- Courtyard HOA
- Middle Bull Creek Neigh. Assoc.
- Steiner Ranch Comm. Assoc.
- Comanche Trail Comm. Assoc.
- River Place Residential Assoc.
- Canyon Creek HOA

SCHOOLS:

Highland Park Elementary School
Lamar Middle School
McCallum High School

PARKS COMMENTS RECIEVED:

Applicant will need to go before the Navigation Committee then the Parks and Recreation Board regarding the boat dock(s).

SITE PLAN COMMENTS RECEIVED:

All Site Plan comments have been cleared.

TRANSPORTATION COMMENTS RECEIVED:

Please provide approval from COA Fire Department regarding driveway. All other Transportation comments are cleared.

ENVIRONMENTAL COMMENTS RECEIVED:

All Environmental comments are cleared, applicant to appear before the Environmental Board on June 2nd.

CITY COUNCIL DATE: July 29th, 2010

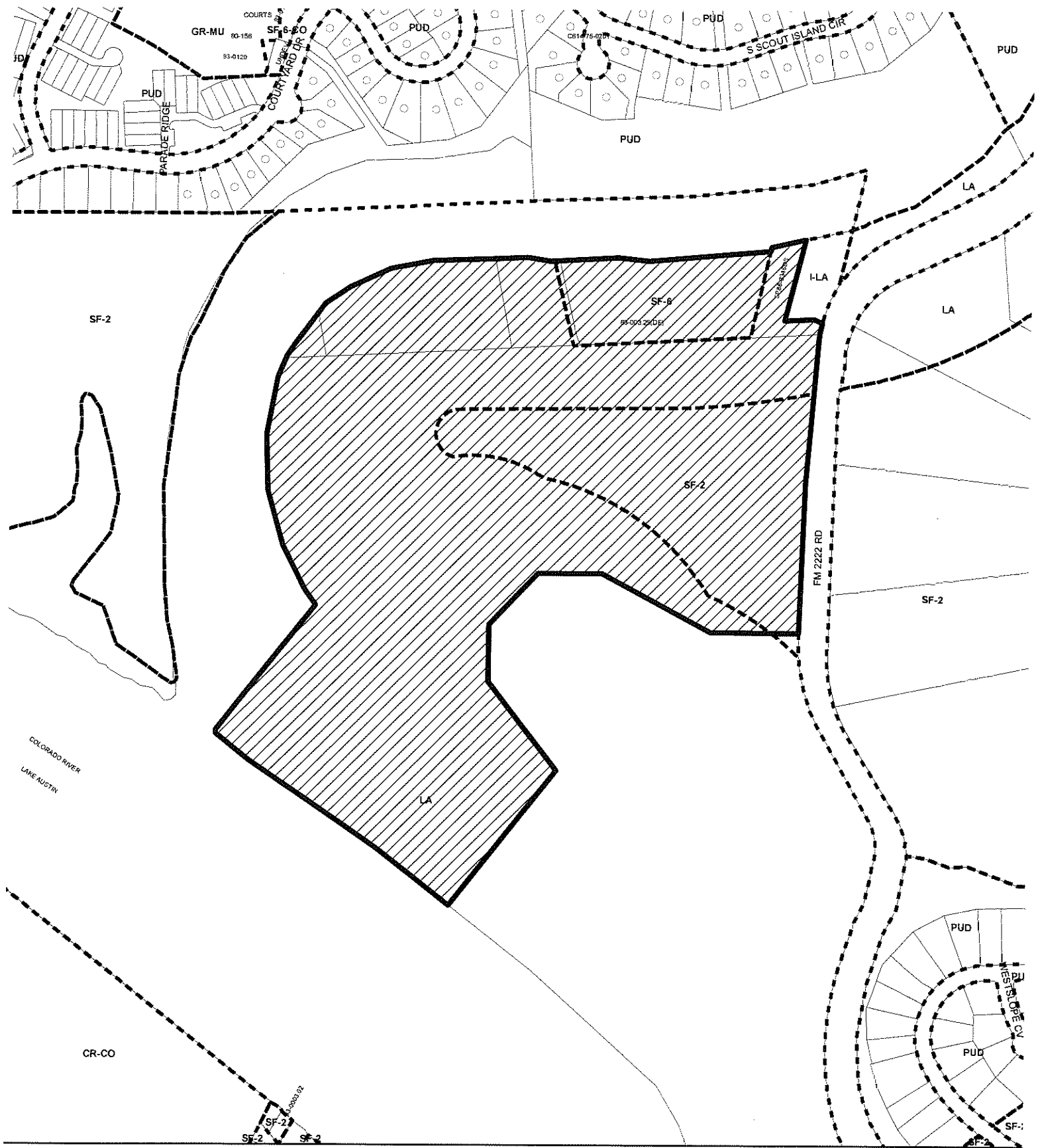
ACTION:

ORDINANCE READINGS: 1ST 2ND 3RD

ORDINANCE NUMBER:

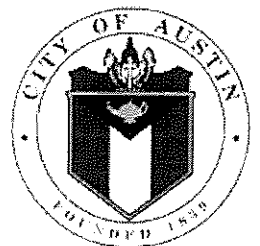
CASE MANAGER: Clark Patterson
Clark.patterson@ci.austin.tx.us

PHONE: 974-7691



PLANNED UNIT DEVELOPMENT

ZONING CASE#: C814-2009-0139
 LOCATION: 4909, 4923 & 4925 FM 2222
 SUBJECT AREA: 53.8741 ACRES
 GRID: G29
 MANAGER: C. PATTERSON



This map has been produced by the Communications Technology Management Dept. on behalf of the Planning Development Review Dept. for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.





ENVIRONMENTAL BOARD MOTION 060210-3a

Date: June 2, 2010

Subject: Bull Creek PUD C814-2009-0139

Motioned By: Phil Moncada

Seconded by: Bob Anderson

Recommended Action:

The Environmental Board recommends approval with conditions to Land Development Codes:

- (1) LDC 25-8-64 (Impervious Cover Calculations) Allow impervious cover to be calculated over the entire property and not on a lot by lot basis;
- (2) LDC 25-8-261(C) (Critical Water Quality Zone Development – Along Lake Travis, Lake Austin, or Town Lake) Allow a proposed migratory bird habitat, birdbath facilities, decks, levees, trails, sidewalks, boardwalks, remnant foundation, terraces, skyspace structure, security equipment, wiring, swimming area, and related facilities to be located within the CWQZ, as shown in Exhibit C. Also, allows the remodel of the existing swimming area, boat docks, walkways, and terraces;
- (3) LDC 25-8- 281(B) (Critical Environmental Features) Allow CEF's to be located on a residential lot;
- (4) LDC 25-8- 281(C) (Critical Environmental Features) Allow for a reduction in the 150 standard buffer to a 50 foot buffer for Rimrocks 1 and 2. Allow for no additional CEF buffer along the two sections of very narrow Cypress fringe wetland sections bordering Lake Austin and the mouth of Bull Creek, Allows within the emergent wetland CEF 150 buffer and the narrow Cypress fringe wetland, the following items: pedestrian trails, an existing retaining wall, proposed trees, stone stairs, re-graded slope, migratory bird habitat, raised wood boardwalk, native plant garden, security equipment, wiring, and related facilities;
- (5) LDC 25-8-302(A) (1), (A) (2), (B), and (B) (2) (Construction of a building or parking area) Allow small portions of the guest house building and parking area to be constructed on slopes greater than 25 percent as shown on Exhibit K. To allow terracing on the uphill and downhill sides of these slopes for the portion of these slopes that will not be directly constructed on, but merely spanned by the guest house building;
- (6) LDC 25-8-321 (Clearing of Vegetation) Allow for the clearing of vegetation and the clearing of trees under 19 inches in diameter for the planting of an olive orchard approximately four acres in size as shown approximately on Exhibit C; (7) LDC 25-8-341 (Cut Requirements) Allow cut to exceed four feet, not to exceed 16.402 feet in depth at the following locations: around the main house, for the driveway to the main house, adjacent to the guest house, adjacent to the skyspace structure, and at the entry to the recreation building as shown in Exhibit J; and (8) LDC 25-8-342 (Fill Requirements) Allow fill to exceed four feet, not to exceed 11.551 feet in depth at the following locations: adjacent to the skyspace structure,

around the main house, for portions of the driveway and culvert, adjacent to the guest house, and at the entry to the recreation building as shown in Exhibit J.

The City of Austin's Environmental Resource Management Department determined that this project will allow development of this single family project while providing protection to (CEF's) Critical Environmental Features located on this site. The applicant has reduced impervious cover by 50%.

Board condition:

Applicant will adhere to the Hill Country Roadway Ordinance even though they have SF designation zoning per PUD.

Rationale:

Staff recommendations and this project has only requested 14% impervious to the entire site.

Vote 5-0-0-1-1

For: Anderson, Gary, Maxwell, Moncada and Neely

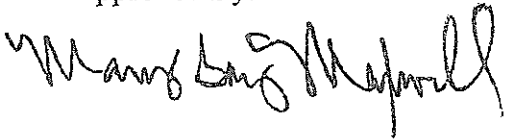
Against:

Abstain:

Absent: Beall

Vacant:

Approved By:

A handwritten signature in black ink, appearing to read "Mary Gay Maxwell". The signature is fluid and cursive, with the first name "Mary" being the most prominent.

Mary Gay Maxwell
Environmental Board Chair



Parks and Recreation Board
Regular Meeting
March 23, 2010

Board Chair Guerrero called the board meeting to order at 6:16 p.m.

Board Members in Attendance:

Board Chair Linda Guerrero, Vice-Chair Sara Marler, Hill Abell, Jeff Francell, Carol Lee Jerry Perales and Jane Rivera.

Staff in Attendance:

Sara Hensley, Ricardo Soliz, Marty Stump, Chris Yanez and Tino Garcia.

1. Approval of Minutes – Amended

The minutes for the regular meeting of 03/23/10 were approved with the following amendment on Board Member Perales motion, seconded by Board Member Rivera. Motion carried on a vote of 7-0. The amendment was to edit page four, paragraph D. replacing a nay vote from Board Member Hill to Board Member Lee.

2. Citizen Communication – General

After Board Chair Guerrero announced that Item # 9 was being pulled: (a recommendation to the Director regarding the construction and management of the future North Austin Recreation Center), the following was read into the record:

“The North Austin Civic Association Members present are in opposition to the City of Austin partnering with the YMCA for the construction and management of the new North Austin Civic Center”. The members were: Martha Dempsey, Doris Williams, Jocelin Fontenot, Angela Barker, Robert Baker, Lloyd Langsdorf and Elenor Langsdorf.

Gavino Fernandez, East Town Lake Citizens, spoke about the lack of accessible programs at east side recreation centers.

Paul Hernandez, East Town Lake Citizens, expressed concern about the lack of accessible programs for low income kids at the Camacho Recreation Center.

Danny Perez, East Town Lake Citizens, expressed concern about the swimming schedule at Metz, Palm and Martin pools.

Charlie McCabe, Austin Parks Foundation, reported on It's My Park Day.

3. Briefs

a. Mayfield Park Community Project:

The brief was presented by Karen Cannatti, Chair of the Mayfield Park Community Project.

b. Turkey Creek Update

The brief was presented by Sheila Holbrook White.

c. Bull Creek Restoration

The brief was presented by Chris Herrington and Mike Kelly from Watershed Protection Department.

d. ZACH Scott New Theatre Project

The brief was presented by Arthur Andersson, Andersson Wise Architects.

e. Update on the Festival Beach Community Gardens

The brief was presented by Marty Stump, Planning, Design and Construction Division.

D. Director's Report

Director Hensley reported on the following:

- Assistant Director Farhad Madani announced his retirement after 27 years of service with the department. A farewell reception will be held on Wednesday, April 14th from 3-6 p.m. at Zilker Clubhouse. Rick Ramirez was announced as the new Acting Assistant Director.
- No bids were received on the Request for Proposal (RFP) for the upcoming Trail of Lights. Questions remain on how to proceed.
- The Board will be briefed on Private Gain on Public Properties at the next Parks Board meeting.
- The Board will soon receive memos regarding: 1) trees and pool fees at Barton Spring Pool and; 2) qualifications for lifeguards at SARC and Camacho Recreation Center.
- The Board, staff and citizens will be invited to attend a public meeting to meet the finalists and to provide input for the two vacant Assistant Director positions.

- The Central Park Conservancy Workshop will be held Thursday, March 25th at the Mexican American Cultural Center.

E. NEW BUSINESS AND ACTION ITEMS

- a. Make a recommendation to the City Council regarding land development code modifications for the Bull Creek PUD.

The motion to recommend to the City Council land development code modifications regarding the Bull Creek PUD was made by Board Member Francell. The motion stipulates that the swimming area footprint be approved upon submission of a site plan which details design and construction as well as an agreement by the applicant on the number of restrictions for future development of the shoreline of the property to include: 1) limiting the number of boat slips that are existing currently and; 2) agree not to use the boat slips for commercial purposes and; 3) for the Environmental Resource Management division of Watershed Protection Department to review and comment on shoreline strategies. **The request must come back to the Board for approval.** Seconded by Board Member Rivera. Motion carried 5-1-1.

Vote count: Members voting aye: Board Vice-Chair Marler, Hill, Perales, Francell and Rivera.

Members voting nay: Board member Lee

Members abstaining: Board Chair Guerrero.

- b. Make a recommendation to the Director regarding future alcohol designation for the west end of Fiesta Gardens (a rental facility).

Gavino Fernandez, East Town Lake Citizens, requested that the Board support a ban on the sale of alcohol on the west end of Fiesta Gardens.

Paul Hernandez, East Town Lake Citizens, also requested that the Board support a ban on the sale of alcohol on the west end of Fiesta Gardens.

Marcos De Leon, President East Town Lake Citizens, also requested a ban on alcohol on the west end of Fiesta Gardens.

Danny Perez, East Town Lake Citizens, also requested a ban on alcohol on the west end of Fiesta Gardens.

The motion to recommend to the Director not to change the alcohol designation at the west end of Fiesta Gardens was made by Board member Francell, seconded by Board Member Lee. Motion carried 4-2.

Vote count: Members voting aye: Guerrero, Perales, Francell and Lee.

Members voting nay: Hill and Rivera.

Members abstaining: None.

c. Make a recommendation to the Director regarding the construction and management of the future North Austin Recreation Center.

This item was pulled by Board Chair Guerrero.

d. Make a recommendation to the City Council regarding the Parks and Recreation Department's current concessions in Town Lake Park.

The motion to recommend to the City Council the approval of the Parks and Recreation Department's concession report for current concessions in Town Lake Park was made by Board Member Francell, seconded by Board Member Perales. Motion carried 6-0.

Vote count: Members voting aye: Guerrero, Hill, Francell, Rivera, Lee and Perales.

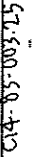
Members voting nay: None

Members abstaining: None

F. Future Items From the Board

A template complete with guidelines for community gardens requests will be forthcoming. Board Member Perales requested revisiting the concessions contracts so fees can go to the department budget rather than the general fund. Board Chair Guerrero announced that she would be appointing a three member committee to draft a supporting resolution to the Mayor and Council.

With no further business, the meeting was adjourned at 9:25 p.m.



1. Locales for Special Tax
2. Residues in City Site Area



MEMORANDUM

FROM: Sylvia R. Pope, P.G.
Environmental Resources Management
Watershed Protection Department

TO: Environmental Board Members

DATE: June 2, 2010

SUBJECT: Recommendations for canyon rimrock Critical Environmental Features identified on the Bull Creek Planned Unit Development (PUD) site. Case No. C814-2009-0139.

This tract, located on the shores of Lake Austin and the mouth of Bull Creek, contains two canyon rimrock Critical Environmental Features (CEFs). The applicant's environmental consultant; Horizon Environmental Services, Inc.; and I identified the canyon rimrock CEFs on December 7, 2009. The locations and descriptions of Rimrock 1 and Rimrock 2 CEFs are included in the PUD application as Exhibit N.

The canyon rimrock CEFs are outcrops of the Glen Rose Formation. Rimrock 1 is 400 feet long by 8 feet in height. Rimrock 2 is 133 feet long by 6 feet in height. This stratigraphic horizon forms canyon rimrock CEFs at multiple locations along the northern and eastern shoreline of Lake Austin. No seeps or springs are associated with either rimrock.

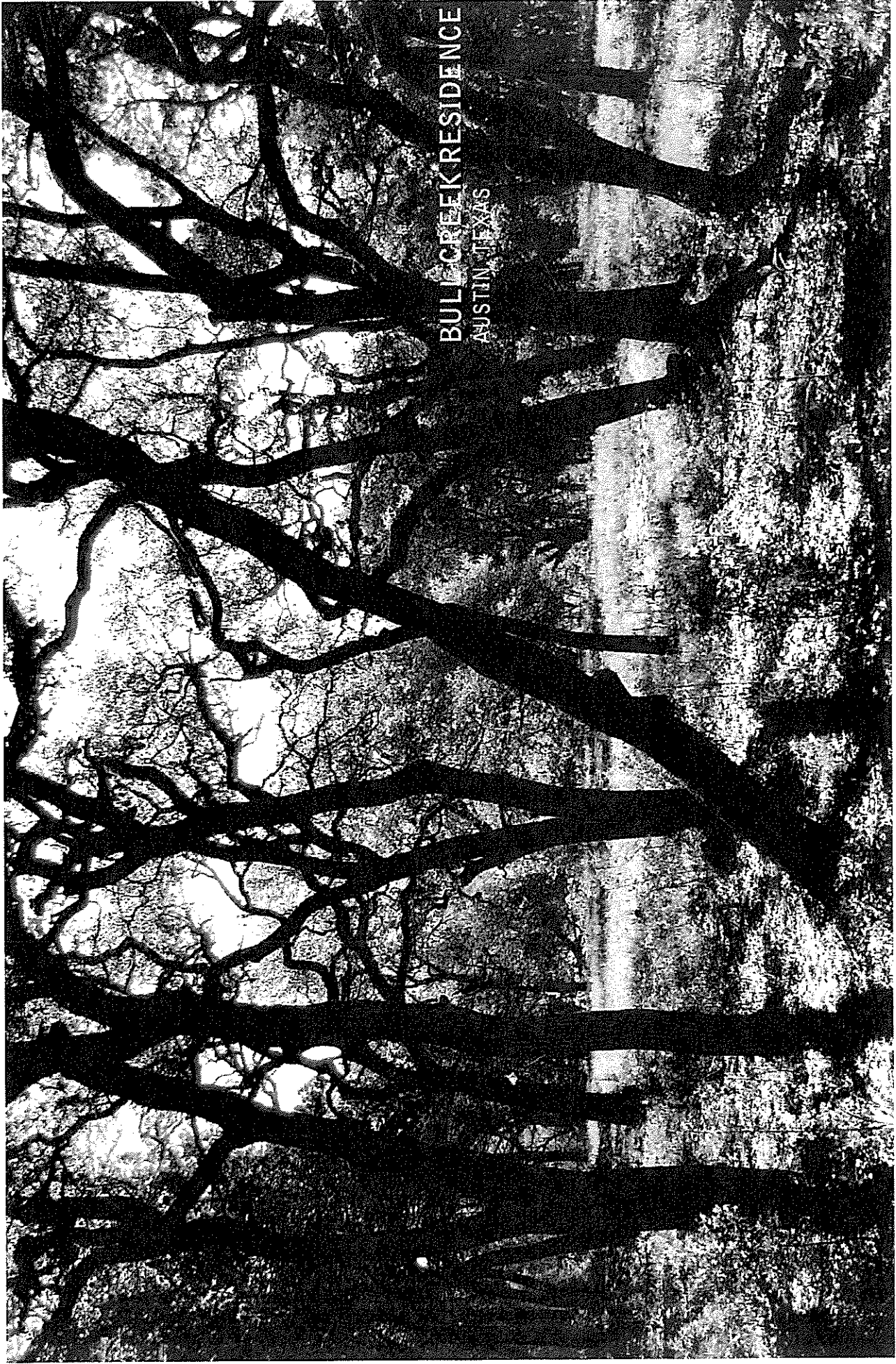
Canyon rimrock was first identified and regulated as a Critical Environmental Feature with the implementation of the Comprehensive Watersheds Ordinance in 1986. The reason for their designation as a CEF was to reduce sedimentation in creeks originating as erosion from construction. Water quality problems had resulted from the disturbance of vegetation and soils in close proximity to vertical rock faces along canyonheads. In order to reduce the impacts to receiving waters, canyon rimrock was defined and an upslope buffer was required. This buffer establishes a no disturbance area that allows any sediment that bypasses erosion and sedimentation controls to settle out within a vegetated area prior to reaching a vertical rock face adjacent to a waterway. The Comprehensive Watersheds Ordinance also established a standard CEF buffer distance of 150-foot width. This width was determined from predictive models of the overland distance traveled by sediment particles from construction sites.

The Bull Creek PUD proposes 50-foot wide CEF Buffers for Rimrock 1 and Rimrock 2. The 50-foot wide buffer for Rimrock 1 will remain undisturbed during any future construction projects. Construction of the guest house will temporarily reduce the buffer for Rimrock 2 to 40 feet but the disturbed area will be revegetated in accordance with City of Austin Standard Specification Item No. 609S.

I am in agreement with the proposed 50-foot wide CEF buffers for the following reasons:

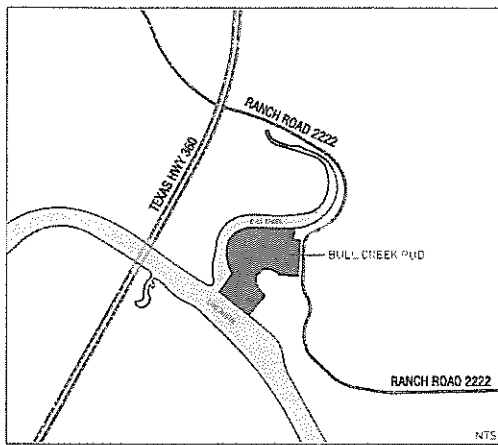
- 1.) The hydrogeologic characteristics and aesthetic integrity of Rimrock 1 and Rimrock 2 will be preserved.
- 2.) Where the area upslope of a canyon rimrock has gentle to moderate slopes, it is vegetated and the proposed development is not high density; a reduction of the standard 150-foot width CEF buffer may be warranted. In this case, Exhibit L shows that most of the area upslope of Rimrock 1 and Rimrock 2 is less than 15% slope.
- 3.) 50-foot wide CEF buffers adjacent to similar canyon rimrock have been granted for other tracts such as in the Steiner Agreement for Steiner Ranch and other subdivision, multi-family and commercial tracts.
- 4.) The previous plat for a portion of this tract proposed construction of condominium units directly on or near Rimrock 1. That plat was vacated prior to submittal of this PUD application. The PUD application will not result in disturbance to Rimrock 1 or Rimrock 2.
- 5.) The applicant has adjusted their land use plan to eliminate direct disturbance to the canyon rimrock CEFs. The PUD proposal protects the canyon rimrock CEFs while allowing the owner reasonable use of this extraordinary property.

cc: Clark Patterson, Planning and Development Review Department
James Dymkowski, Planning and Development Review Department
Ingrid McDonald, Planning and Development Review Department
Andrew Clamann, Watershed Protection Department
Patrick Murphy, Watershed Protection Department

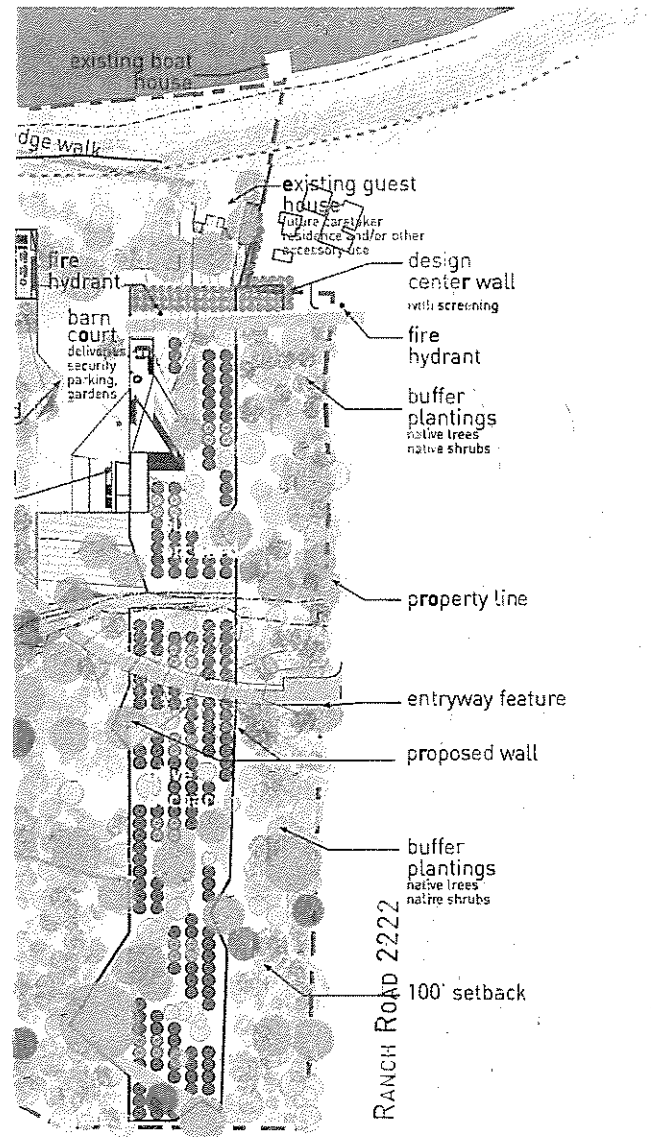


BULL CREEK RESIDENCE
AUSTIN, TEXAS

C814-2009-0139



VICINITY MAP/BULL CREEK PUD

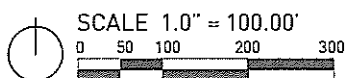


NOTE: Proposed site development regulations, waivers from and modifications of the code are listed on the exhibits supporting the land use plan.

NOTE: All buildings and structure locations are approximate and subject to final design.

NOTE: Installed fire protection systems to be approved and inspected by Austin Fire Department, in accordance with Exhibit D, General Note 8.

ACREAGE: 53.8741



**BULL CREEK PUD
EXHIBIT D – NOTES**

BASE ZONING AND PERMITTED USES

1. Land uses within the LA zoning district shall be permitted uses.
2. Additional permitted uses shall include:
 - Crop Production
 - Urban Farm
3. During construction, the existing structure on the property may be used as a dwelling and for activities to assist the site with construction.

GENERAL NOTES

1. The PUD will comply with the Hill Country Roadway Ordinance, with the following exceptions, because of its character as a single family residence with accessory structures:
 - a. Land Development Code (LDC) Sections 25-2-1122, *Floor to Area Ratio of a Nonresidential Building*, and Section 25-2-1123, *Construction on Slopes* – Construction on slopes shall only need to comply with Exhibit K. The guest house will not disturb slopes greater than 25 percent, but will merely span them, similar to a free span bridge structure. Although construction will not actually occur on slopes greater than 25 percent, this variance request is required, due to staff's interpretation of the City's code.
 - b. LDC Section 25-2-1126, *Building Materials* – The small amounts of reflective and non-native building materials included on structures will be 100 feet behind a 10 foot tall masonry wall that is located 100 feet from the ROW of RM 2222 and behind dense vegetation with additional native tree and shrub plantings.
 - c. Environmental Criteria Manual (ECM) Sections 3 through 3.3.5, *Tree Surveys* – The Project will provide a survey of the eight inch trees on the property. Single family regulations only require documentation of 19 inch and greater trees. Mitigation will conform to the tree permits approved for the property by the City's arborist.
 - d. The following provisions shall supersede the Hill Country Roadway Ordinance landscaping provisions of the LDC and ECM:
 - 1) A 100 foot roadway vegetative buffer shall be provided from the RM 2222 right-of-way. At or outside of the proposed 100 foot roadway vegetative buffer, a ten (10) foot tall wall/fence is proposed for the purposes of visibility and sound attenuation. The owners intend to supplement the existing native vegetation with additional native tree plantings between RM 2222 and the wall. The intent of the additional tree plantings is to

preserve and enhance the view of native vegetation for vehicles along RM 2222. Additionally, entryway features may be allowed within the 100 foot setback in the vicinity of the driveways for purposes of locating the address of the property and providing screening between properties.

- 2) At least 40 percent of the site in the Hill Country Roadway 1000 foot setback area shall be left in a natural state, except for vegetative management activities in accordance with a) the existing wildlife management plan approved by the Travis County Appraisal District for the property and b) the Ecological Conservation and Preservation Plan outlined in Exhibit E of this PUD.
 - e. LDC Section 25-5-142, *Land Use Commission Approval* - The project will go before the Land Use Commission for approval as part of the PUD process. The Owner has agreed to provide administrative site plans for the following: improvements to the swim area, boat docks, and proposed habitat for migratory waterfowl. If environmental variances are requested for the recreation building, then an administrative site plan shall be submitted for it.
2. Impervious cover shall be limited to 14 percent of the net site area of the overall property.
 3. All proposed and/ or manmade environmental features are defined in the Land Development Code and the Environmental Criteria Manual, and are not classified as features that are of critical importance to the protection of environmental resources. These manmade environmental features shall include seasonal holding ponds created and/or proposed by this PUD, and shall not be considered CEFs and/or wetlands either now or in the future. In doing so, they shall not be required to comply with Land Development Code Sections 25-8-281 and 25-8-282, or any future modifications to these sections of the code.
 4. All utilities and/or lift stations located within the PUD perimeter boundary shall not require the dedication of any easements. The owner agrees to allow utility providers, with 24 hours notice, to construct, operate, maintain, repair, replace and upgrade utilities and/or lift stations in, under and across the property, only in locations approved by the owner. The approximate location of utilities and utility lines are shown within the PUD documents. Final utility locations are to be determined at a later date.
 5. Energy consumption and ratings shall be measured by taking all of the meters on the site into consideration rather than each single meter.
 6. The project will comply with the single family residential tree removal and clearing requirements of the City Code in effect on the date the PUD application was submitted. The PUD is for one single family residence with accessory uses. A tree clearing permit shall be required only for 19 inch diameter and larger protected trees.
 7. Lighting for the skyspace structure shall only allow a low level of interior lighting outward. Only a very small amount of light will escape skyward through the opening, but no lights will be directed at the opening itself. Light fixtures will have a diffusing

cover over them. Luminaires shall not shine directly onto neighboring properties, roadways or distribute excessive light skyward.

8. The proposed main house, barn, recreation center, and guest house structures shall provide fire sprinkler protection. As part of the building permit process, the Owner shall work with Austin Fire Department to develop final designs in accordance with NFPA standards.
9. The Owner shall:
 - a. Continue to accept and convey all offsite runoff through the Property.
 - b. Not increase the velocity of the runoff beyond the Property, including appropriate detention, if necessary.
 - c. Operate, maintain, replace, upgrade, and repair any natural drainage ways and related facilities.
 - d. Allow the City to inspect the drainage area with prior written notice and an appointment with the Owner or Owner's agent.
10. In a restrictive covenant, the Owner shall agree to:
 - a. Limit the number of boat slips on the property to the number that is existing, as of the date of this ordinance, and
 - b. Not use the boat slips for commercial purposes.
11. Cypress fringes are located on portions of the property and are shown accordingly. However, there is no setback associated with them.
12. The swim area may be reconstructed not to exceed 50 feet from the shoreline, in accordance with the hatched area as shown in Exhibit I. Shoreline modifications for the swim area will exceed LDC and ECM requirements in order to preserve the natural and traditional character of the shoreline (LDC 25-7-61(A)(5)), maintain the integrity of protected riparian areas and minimize damage to physical and biological characteristics (ECM 1.7.7(A)). Facets of the proposed plan will:
 - a. Maintain the water quality benefits and biological integrity of a functioning, natural, vegetated shoreline by providing landscape details which replace existing shoreline vegetation with more desirable native species that provide bank stabilization and natural character;
 - b. Provide the slope of a natural shoreline with minimal stone toe armor pursuant to the current recommendations for bank stabilization of City of Austin Environmental Resource Management Division wetlands biologist;

- c. Provide native wetland plantings as mitigation for any impacts to protected wetland areas with the approval of City of Austin Environmental Resource Management Division wetlands biologist;
 - d. Provide the seal of a Texas professional engineer to certify that the hydraulic and structural design of dock and shoreline treatment are adequate that the improvement complies with the ordinances of this City, DCM and the laws of this State (LDC 25-7-62);
 - e. Eliminate the use of wire mesh fencing in the water; and
 - f. Provide a site plan for dock/deck/shoreline modifications.
13. Administrative site plans shall be submitted for review and approval for new improvements to the swim area, boat docks, and proposed habitat for migratory waterfowl. If environmental variances are requested for the recreation building, then an administrative site plan shall be submitted for it. Due to the overall residential use, no other site plans shall be required.

Site plan regulations, such as Hill Country Roadway, landscaping, and other requirements applicable to commercial uses shall not be applied to the administrative site plan(s). Tree surveys shall be submitted when required by single family regulations, in accordance with such regulations for 19 inch and greater trees.

Project duration shall not apply, as outlined in the code modification table. The improvements shown in an administrative site plan(s) shall be constructed within ten years after the date of its approval.

14. As part of the building permit approval process, the City may review and inspect the grading and erosion and sedimentation controls for the main house (and driveway), barn, guest house, and Turrell skyspace art piece to ensure compliance with environmental variances described in the PUD exhibits. Tree surveys shall be submitted when required by single family regulations, in accordance with such regulations for 19 inch and greater trees.
15. As part of the 50 foot buffer proposed for Rimrock 1 and 2, as shown on Exhibit N, Critical Environmental Features, the following conditions shall apply:
- a. A 40 foot limit of construction be maintained from Rimrock 1 and 2,
 - b. The 10 foot wide area within the CEF buffer that is disturbed during construction must be revegetated with plants and seeds from City of Austin Standard Specification Item No. 609S, and
 - c. Erosion and sedimentation controls must be placed at the limits of construction.
16. Sidewalk requirements for the site will be met by the Applicant through the posting of fiscal.

CODE MODIFICATIONS

CODE SECTION	DESCRIPTION	PROPOSED CODE MODIFICATION
Section 25-1-535(B)(4)	Describes how long project duration applies to projects within the Drinking Water Protection Zone	Modifies project duration expiration date of site plans completed for the PUD to ten years after the date of approval of each individual site plan.
Section 25-2, Subchapter B, Article 2, Division 5, 2.3.1	Describes Tier One minimum requirements that PUDs must adhere to	Modifies Tier One requirements consistent with this PUD.
Section 25-2, Subchapter B, Article 2, Division 5, 3.1	Describes land use plan amendment and expiration requirements	Clarifies that including additional accessory uses and structures may be approved administratively by the Director, and does not constitute a substantial amendment.
Section 25-2-492	Describes the permitted, conditional, and prohibited uses for the LA zoning district, as well as site development regulations.	1) Modifies the permitted land uses allowed on the property, and 2) Modifies the interior side yard setbacks to zero within the PUD.
Section 25-2-551(B)(2)	Describes shoreline setback requirements for LA zoning	Modifies the LA district regulations to allow a proposed constructed habitat for migratory waterfowl, decks, trails, impervious walks, boardwalk, terraces, skyspace structure, site electrical, weir system, berms, swimming area, and related improvements to be located within the shoreline setback. Also allows maintenance and remodel of existing swimming area, boat docks, walkways, and associated facilities. Related cut/fill required for the improvements listed above shall be allowed in accordance with PUD Exhibit J.
Section 25-2-551(B)(5)	Describes shoreline setback requirements for LA zoning	Modifies the LA district regulations to allow development on limited gradients that exceed 35 percent. This modification would be applicable to the guest house and recreation building, as shown on Exhibit K.
Section 25-2-863(C)	Describes urban farm requirements	Modifies the requirements to allow an urban farm on a site greater than five acres.

Section 25-2-893(D)	Describes accessory uses for principal residential uses	Modify the accessory use regulations to allow two guest houses.
Section 25-2-900	Describes home occupations	Modifies the home occupation requirements so that only the following home occupation regulations apply: 1) a home occupation may occur within the primary residence or accessory structures and 2) a home occupation may include the occupant of the primary residence and staff assisting with property and household management, domestic service household maintenance (interior and exterior), landscaping, security, bookkeeping, and personnel working for the owner or owner's nonprofit foundation.
Section 25-2, Subchapter F: Residential Design and Compatibility Standards	Describes residential design standards for new homes to ensure compatibility within existing neighborhoods	Modifies Section 2.5 so that the interior side yard setbacks are zero within the PUD and modifies Section 2.6 so that the interior lot line setback planes do not apply within the PUD.
Section 25-5-81(B)	Describes site plan expiration	Modifies the expiration date of site plans for the PUD to ten years after each individual site plan.
Section 25-7-152	Describes dedication to the public of an easement or right-of-way for a drainage facility and stormwater flow	Modify this requirement so that a drainage easement dedicated to the public is not required for the arroyo within the property. An easement for the FEMA floodplain will be dedicated along Bull Creek.
Section 25-8-64	Describes impervious cover assumptions	Modify the requirement to allow impervious cover to be calculated over the entire property and not on a lot by lot basis.
Section 25-8-261(C)	Describes requirements within the Critical Water Quality Zone	Modify the requirements to allow a proposed migratory bird habitat, birdbath facilities, decks, levees, trails, sidewalks, boardwalk, remnant foundation, terraces, skyspace structure, security equipment, wiring, swimming area, and related facilities to be located within the CWQZ, as shown in Exhibit C. Also allows maintenance and remodel of existing swimming area, boat docks, walkways, and terraces. Related cut/fill required for the improvements listed above shall be allowed in accordance with PUD Exhibits J.
Section 25-8-281(B)	Describes critical environmental features (CEF)	Modify the requirements to allow CEFs to be located on this residential lot, since access to this area will be restricted due to its minimal use as a single family residence, as well as ongoing

		ecological preservation and restoration efforts.
Section 25-8-281(C)	Describes CEF buffers	Modify the requirements to allow a 50 foot buffer for Rimrocks 1 and 2, and a 150 foot buffer for the emergent wetland fringe located within Bull Creek. For the emergent wetland fringe located within Bull Creek, the following items may be located within the buffer area: trails, existing retaining wall, proposed trees, stone stairs, regraded slope, migratory habitat for waterfowl, raised wood boardwalk, native plant garden, security equipment, wiring, and related facilities.
Section 25-8-302(A)(1) and (2)	Describes construction of a building or parking area	Modify the requirements of this section to allow small portions of building and parking area proposed near the guest house to be constructed on slopes greater than 25 percent, as shown on Exhibit K.
Section 25-8-302(B)	Describes construction of a building or parking area	Modify the requirements to this section to incorporate construction on gradients greater than 25 percent. This will be applicable to portions of the property shown in Exhibit K.
Section 25-8-302(B)(2)	Describes construction of a building or parking area	Modify the requirement for terracing construction uphill or downhill of a slope with a gradient of more than 15 percent, so that it is optional for the guest house structure, as shown in Exhibit K. Terracing shall be optional for the portion of the slopes that are not constructed on, but merely spanned by the building.
Section 25-8-321	Describes when clearing of vegetation is allowed and prohibited	Modify the requirements of this section to allow clearing of vegetation and clearing of trees under 19 inches in diameter for the planting of an olive orchard approximately four (4) acres in size, as shown approximately on Exhibit C.
Section 25-8-341	Outlines cut requirements	Modify the requirements of this section to allow cuts to exceed four feet in depth at the following locations: adjacent to the skyspace structure, near the main house and for a small portion of the driveway, adjacent to and near the guest house, and the entryway for the recreation building, as shown in Exhibit J.
Section 25-8-342	Outlines fill requirements	Modify the requirements of this section to allow fills to exceed four feet in depth at the following locations: adjacent to the skyspace

		structure, around the main house, for portions of the driveway and culvert, and adjacent to the guest house, as shown in Exhibit J.
Transportation Criteria Manual Section 5.3.P. and COA Standard 433S-1	Describes driveway grade breaks	Modify this requirement to allow a driveway apron to slope away from the street and to exceed a two (2) percent grade for the entire driveway apron, as shown in Exhibit M.

BULL CREEK PUD

EXHIBIT E – ECOLOGICAL PRESERVATION/REHABILITATION PLAN

The Bull Creek PUD property has remained more or less intact in the midst of a highly developed urban area. However, over the years it has been overgrazed by domestic livestock and generally neglected which has resulted in a proliferation of nonnative and invasive species. Its diverse attractions include lake and creekside frontage, gently rolling hills, arroyos, mature oaks and junipers, and a wide expanse of meadows. Thus, the property has the potential to become a species-rich biosphere with many benefits to wildlife, water quality and the neighboring landscape.

GOAL

To initiate an on-going program of landscape interventions designed to hasten positive changes that will help the property self-heal, so that more diverse plant communities with greater ecological stability will thrive. The intention is to make the property more hospitable and attractive to wildlife and humans alike.

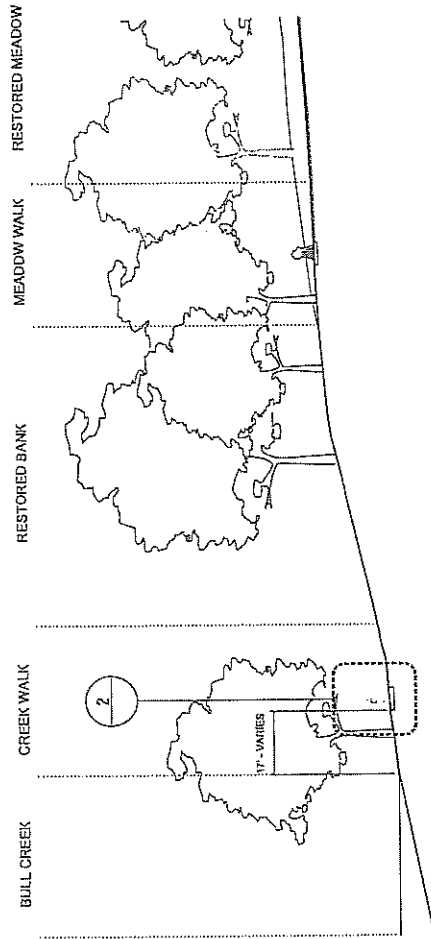
PREVIOUSLY INITIATED WORK

1. Meadow Rehabilitation – Native grasses have been planted to restore the grassland area to its natural state. This process was started in 2008 and efforts will continue for four seasons on approximately 12 acres of the site.
2. Removal of Invasive Tree Species – Non-native species of trees have been removed. However, this is an ongoing project and most efforts have been focused on woody plant species. This program of removing aggressive invasive species will be part of the continuing management plan for the property.
3. Native Hardwood Tree Plantings – Over the last year, the following trees and shrubs have been planted, with appropriate irrigation, to create diversity to the woodlands areas on the site: 125 – 15 gallon trees, 6 – 20 gallon trees, 27 – 30 gallon trees, 30 – 65 gallon maple trees (4 inch caliper balled and burlapped), for a total of 188 trees and shrubs. Numerous additional trees are proposed to be planted over the next several years.
4. Slope Stabilization – Slope stabilization has been installed where dense stands of invasive species have been removed and in the woodlands areas where some of the cedar or ashe juniper have been thinned to help control erosion. In accordance with the proposed removal of invasive species, additional slope stabilization is proposed.

GENERAL STRATEGIES FOR IMPROVING CONDITIONS

1. Remove invasive species each growing season and replacing with native trees, shrubs, grasses, and forbs.
2. Through plowing, direct seeding of native grasses and forbs, and cultivation of cover crops, suppress noxious weeds, reduce soil compaction, and gradually increase the successful establishment of native grasses and wildflowers.

3. Improve soil ecology through a program of organic fertilization and inoculation with micro-organisms. This will enhance the establishment of native grasses.
4. Reduce the domination of ashe juniper through select clearing, in order to allow understory plants a chance to thrive.
5. Enrich the woodlands by planting more native hardwoods and shrubs over multi-seasons.
6. Improve the filtering of stormwater run off by the establishment of native grasslands, and by proper management techniques such as timely mowing, creation of swales to guide runoff to areas where it can be absorbed, and to monitor fragile and unstable areas to avoid wash outs.
7. Stabilize eroded slopes, old roads, bare areas, and other remnants of past land uses practices by setting check logs, rock berms, and mulch.
8. Construct “guzzlers” or wildlife water features to provide water during drought periods.
9. Coordinate landscape efforts to comply with wildlife management plans. This includes following Plateau Consultant’s guidelines for clearing, mowing, and other activities.
10. Avoid or strictly limit use of any chemicals that could have a negative effect on groundwater quality or wildlife.
11. Provide brush piles in certain areas of the property for wildlife use.
12. Seek the advice and consultation of other experts such as the U.S. Fish and Wildlife Service, the Ladybird Johnson Wildflower Center, Texas A&M range ecologists, and the Natural Resource and Conservation Service on restoration projects.
13. Continue to conduct annual bird and mammal surveys to assess the health of the wildlife population.



1 SITE SECTION - TYP.

SCALE: 1/32"=1'-0"

GRAVEL/PAVE2 STABILIZING STRUCTURE
(OR APPROVED EQUAL)
FILL RING SECTION WITH FINE NATIVE
LIMESTONE GRAVEL - TYPE B OR APPROVED EQUAL

FILTER FABRIC UNDERNEATH

ALUMINUM EDGING, TYP.

SEEDED SURFACING (AS SPECIFIED)

OPEN GRADED BASE COURSE (TYPE #57)
COMPACT TO 95% MODIFIED PROCTOR DENSITY

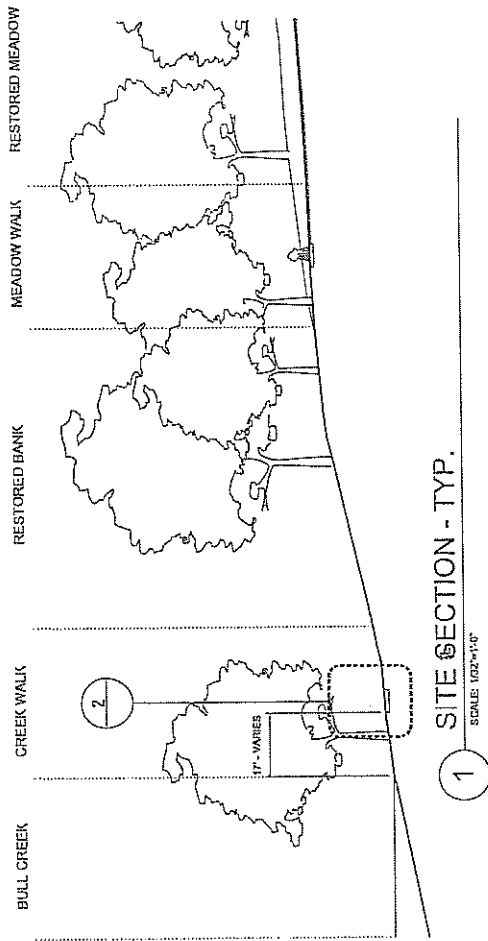
COMPACTED OR UNDISTURBED SUBGRADE

VARIES

1"
SLOPE

2 VEHICULAR PERVIOUS WALK SECTION - TYP.

SCALE: 1/8"=1'-0"



2" OF TYPE 0 NATIVE LIMESTONE AGGREGATE
OR APPROVED EQ.

FILTER FABRIC UNDERNEATH

ALUMINUM EDGING, TYP.

SEEDED SURFACING (AS SPECIFIED)

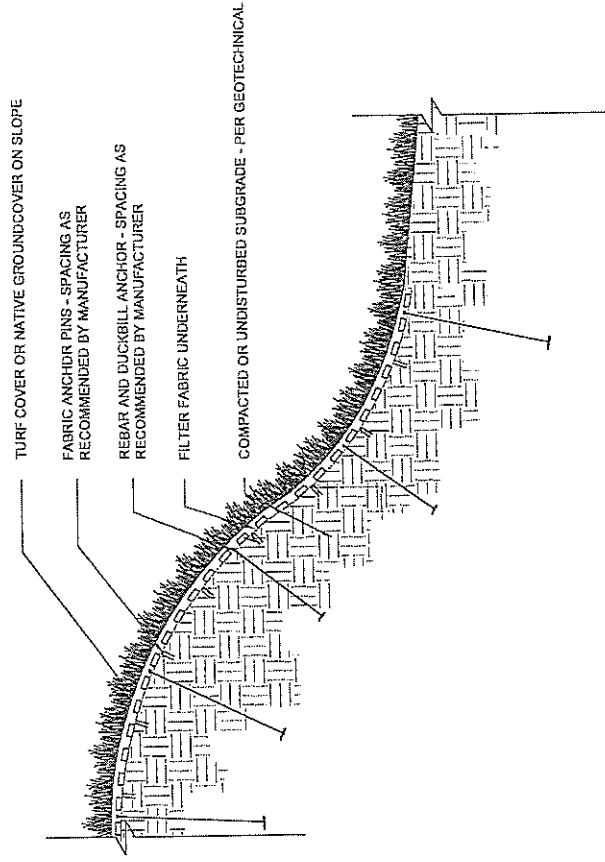
OPEN GRADED BASE COURSE (TYPE #57)
COMPACT TO 95% MODIFIED PROCTOR DENSITY

NON COMPACTED / UNDISTURBED SUBGRADE

4" MIN.

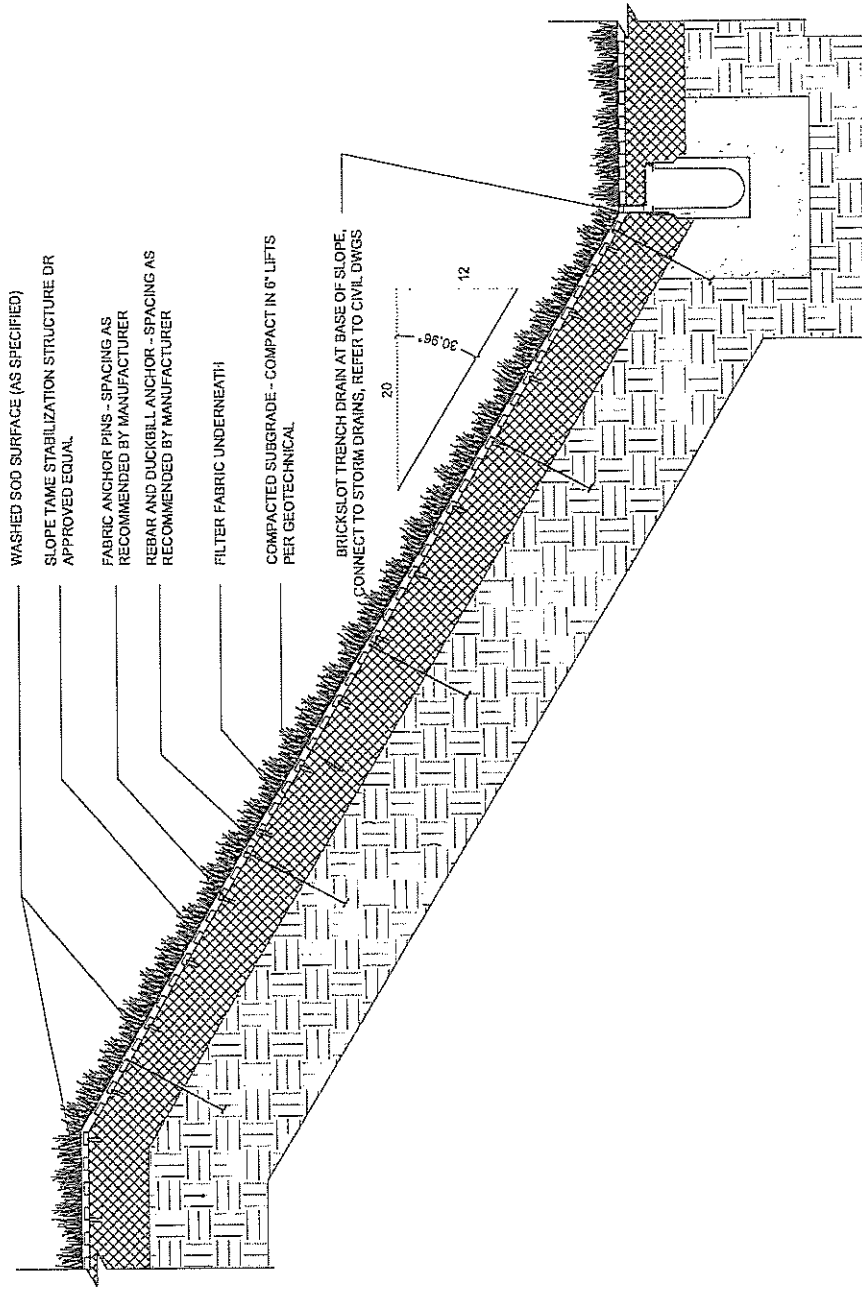
SLOPE

2 PEDESTRIAN PERVIOUS WALK SECTION - TYP.
SCALE: 1/4"=1'-0"



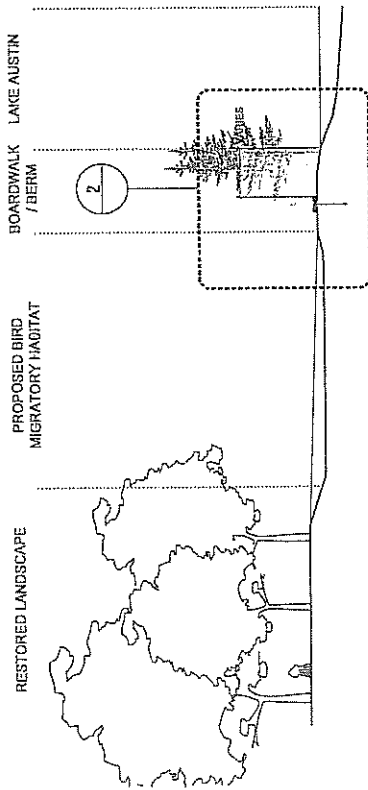
1 NATURAL SLOPE STABILIZATION DETAIL- GREATER THAN 3:1 - TYP.

SCALE: 1"=10'



1 ARCHITECTURAL SLOPE STABILIZATION DETAIL - TYP.

SCALE 1"=1'-0"



1 SITE SECTION - TYP.

SCALE: 1/32"=1'-0"

PROPOSED BIRD MIGRATORY AREA

LAKE AUSTIN

EX. CYPRESS TREE LINE (C.E.F.)
NO GRADING WITHIN DRIP LINE OF TREES

PROPOSED ELEVATED BOARDWALK
W/ HELICAL PIER STRUCTURAL SUPPORT

VARIES

4'-0"

EX. GRADE - 493.00' ϕ
BOTTOM OF BIRD HABITAT - 491.53' ϕ

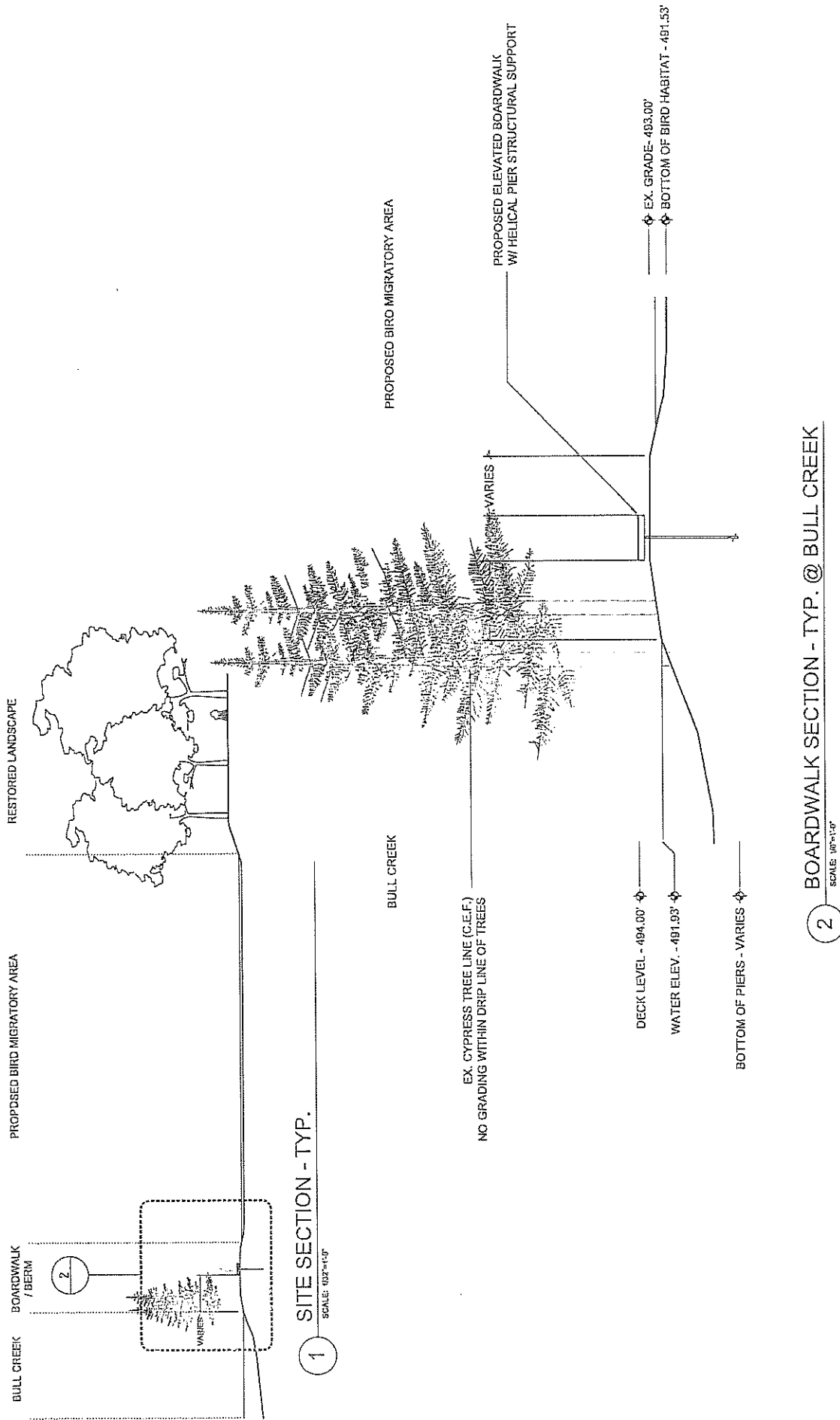
ϕ DECK LEVEL - 494.00'

ϕ WATER ELEV. - 491.93'

ϕ BOTTOM OF PIERS - VARIES

2 BOARDWALK SECTION - TYP. @ LAKE AUSTIN

SCALE: 1/8"=1'-0"



BULL CREEK PUD
EXHIBIT F – CONSTRUCTED HABITAT FOR MIGRATORY WATERFOWL PLAN

Aerial maps from before 1960 show that the previous owners impounded the western edge of the property where Bull Creek flows into Lake Austin to create more pasture land. Though composed of untold amounts of fill and contained by a low concrete bulkhead, this area composed of roughly three acres continues to have a high water table.

Because of these conditions, it is proposed that this area comprising approximately three acres bordering on Bull Creek and Lake Austin be converted into a constructed seasonal habitat for migratory waterfowl. This will involve dividing the area into three shallow basins that will allow each separate area to be filled up to two feet deep with water so as to provide a forage site for migratory birds.

While Lake Austin is important to all kinds of wildlife, it is too deep to provide ducks and other birds the opportunity to wade and peck at muddy bottoms for plants, small fish, tadpoles and insects to eat. Lake Austin's shoreline has almost been completely urbanized with lawns, planted vegetation and golf courses, and therefore has very few remaining seasonal wetlands to attract birds on their ancient migrations. From their vantage point high above, birds can gauge the depth of water by the particular reflected glare. They can also see to the bottom of the shallow zone, and that will attract them to this spot.

The US Fish and Wildlife Service (USFWS) have offered to provide technical expertise for the design, construction supervision, and other advice concerning how best to attract waterfowl and other wildlife to this unique and diverse ecosystem.

Installation of this constructed habitat is contingent upon obtaining the appropriate permits from all applicable jurisdictions, as well as the results of ongoing studies that the size, location, and depth have a positive impact on migratory waterfowl.

BULL CREEK PUD
EXHIBIT G – GREEN BUILDING AND ENVIRONMENTAL BENEFITS

OVERALL

The proposed land use plan will greatly reduce the amount of development that could occur on the property. City staff has estimated that current zoning and subdivision regulations allow 23 single family residences and six condominium units, while the proposed plan is for one single family residence with related accessory uses.

GREEN BUILDING

The Project currently proposes to comply with the Austin Energy PUD Green Building Program in effect when the PUD application was submitted. Items presently being studied along with the design of the main house and accessory structures include, but are not limited to the following:

Water Conservation

1. Reuse of gray water - Pending permitting and feasibility issues, the project intends to incorporate reuse water systems into the building design.
2. Irrigation from Lake Austin - The Owners currently have a permit to draw water for irrigation of the planting on site. The overall percentage of the site that is covered with vegetation which requires irrigation is low and the dominant planting strategy involves using drought-tolerant natives.
3. Water conservation, low flow fixtures - Water efficient plumbing fixtures will be used wherever possible in the project.

Energy Use

1. Green roof - A portion of the main house roof will incorporate a green roof with vegetation.
2. Photovoltaics – Subject to appropriate metering, the roof of the barn is planned to be covered with solar PV panels to generate electricity. The barn is envisioned as an energy center with solar panels consolidated for power generation across the site and to all buildings. The buildings may be metered separately for their individual power consumption but the barn is anticipated to be the central plant for much of the mechanical and electrical equipment.
3. Commissioning - A commissioning agent has been brought into the project to ensure that building systems are running at their intended design criteria.
4. Green energy subscription – The Owners will purchase Green Energy through Austin Energy, as needed.

5. Geothermal – The proposed geothermal heat exchange system is a central plant system. It is more efficient than a traditional chiller and boiler system, therefore reducing energy consumption of the central plant system over the year.
6. Reduced lighting loads, reduced site levels - A building management system will be installed to allow for lights to be dimmed and controlled from any point in house. Site lighting levels will be markedly reduced from what would be present in a conventional subdivision.
7. Energy use efficiency through glass performance - High performance glazing will be used throughout the project to achieve energy-efficient envelope design while allowing daylight into the spaces.
8. Maximize vegetated areas - The majority of the site will remain vegetated, thus reducing the site's contribution to an urban "heat island" effect.

Environmental Impact

1. Storm water runoff and water quality for watershed protection - All roof and area drainage will be collected and redistributed on site via non-erosive devices.
2. Reduced impervious cover - The guesthouse free spans a natural ravine to reduce site disturbance. The recreation pavilion has a paddle tennis court on its roof to reduce the amount of impervious coverage.
3. Recycling storage - Each building will have facilities for recycling.
4. Bicycle storage for staff - The barn will have bicycle racks for house staff and grounds crew.
5. Certified wood - Certified wood will be used wherever possible on interior finishes and millwork.
6. Construction waste management - Contractor will recycle waste materials and excavated dirt as part of Austin Energy's Green Building program.
7. Utilizing existing site features - Regrading of the site is minimal. It is primarily limited to building and parking areas.
8. Restore or protect open areas - Much of the site has been impacted by overgrazing. At project completion there will be more plant material per acre than currently. Improvement of the soil quality is an ongoing part of the restoration program.

ENVIRONMENTAL

In addition to the innovative ecological preservation and conservation plan, constructed habitat for migratory waterfowl, and green building elements included within this single family project, there are other more traditional environmental benefits from the project. These include the following:

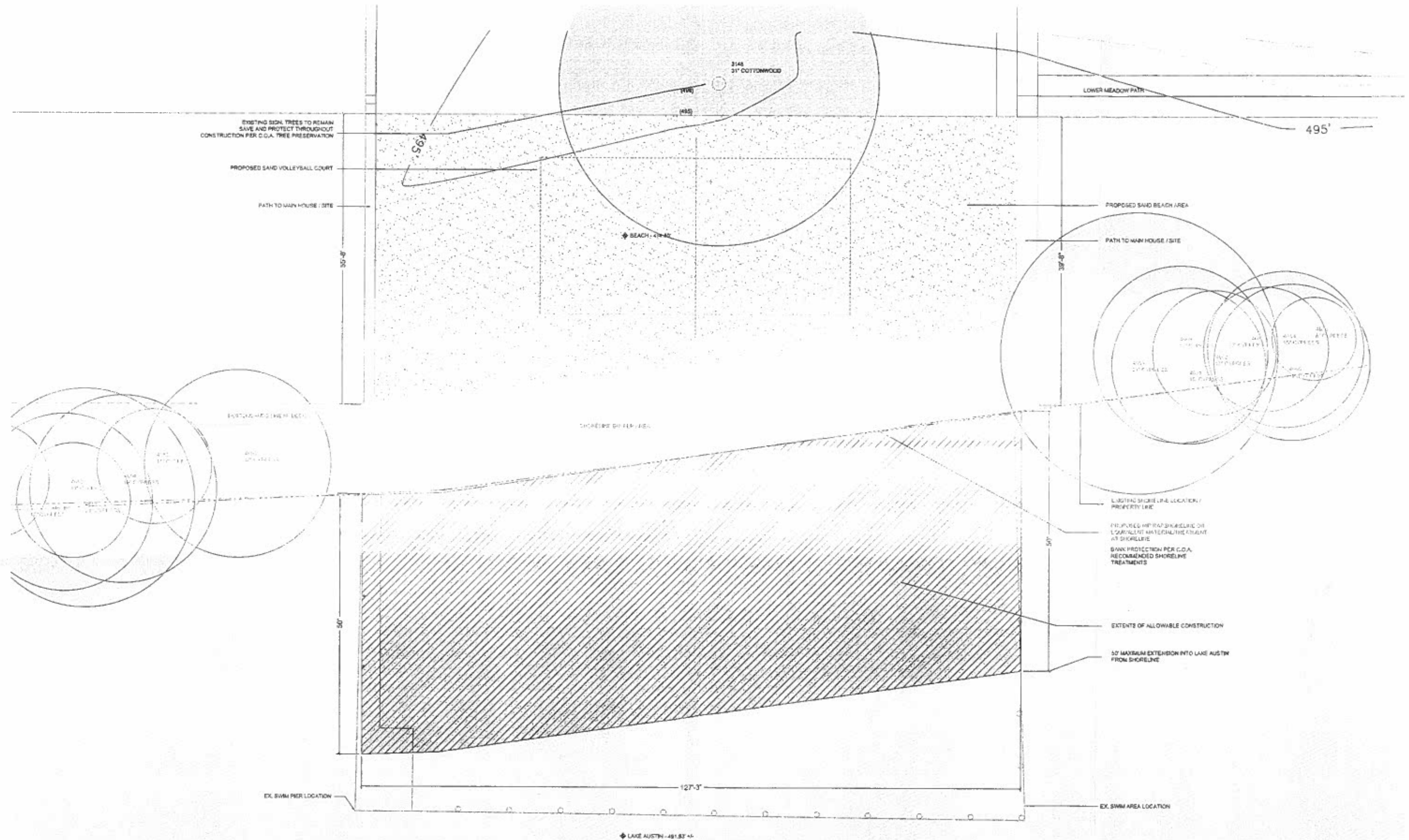
1. A reduction of impervious cover and overall density well below that which is otherwise allowed by the code. A maximum of 14 percent impervious cover is proposed over the entire 53.8741 acre property with far fewer structures than could be constructed under conventional zoning.
2. Revegetation and restoration of three acres of land to enhance the spread of water and minimize erosion. These areas will function as rough textured medium to tall height prairie grasses, which slow down and disperse storm water, enhancing the water quality along the drainage feature that runs through the property.
3. An integrated pest management plan shall be established.

**BULL CREEK PUD
EXHIBIT H – ARTWORK**

The project presently proposes to incorporate at least two art installations which may be seen from Lake Austin or Bull Creek. Approximate locations of these installations are shown on Exhibit C.

The first piece has been commissioned by artist James Turrell, who specializes in skyspace structures which utilize natural light, combined with a complex internal lighting system, to create a visually pleasing experience.

In addition, the owners have proposed to commission artist Jorge Pardo to assist with the remodeling of one of the existing boat docks. Jorge Pardo is well known for his work in maintaining the functionality of everyday items, but at the same time increasing their aesthetic value as works of art.



03.15.2010

BULL CREEK PUD EXHIBIT I - SWIM PIER
CITY OF AUSTIN CASE NUMBER: C814-2009-0139

BULL CREEK P.U.D.

GRAPHIC SCALE
1 INCH = 100 FEET
1 inch = 100' ft.

BULL CREEK
APPROX. 1% FEMA FLOOD PLAIN
75' CRITICAL WATER QUALITY SET BACK

AREA #1
(TURRELL SKYSPACE LOCATION)
APPROX. EDGE OF WATER
75' CRITICAL WATER QUALITY SET BACK
APPROX. 1% FEMA FLOOD PLAIN

AREA #2
COA FULLY DEVELOPED 1% FLOODPLAIN

AREA #3
OLIVE ORCHARD
F6'-8'
F4'-6'

AREA #4
APPROX. EDGE OF SLOPE
75' CRITICAL WATER QUALITY SET BACK

AREA #5
75' CRITICAL WATER QUALITY SET BACK







AREA #6
75' CRITICAL WATER QUALITY SET BACK

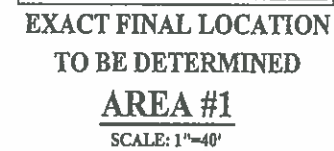
LAKE AUSTIN
APPROX. 1% FEMA FLOOD PLAIN
75' CRITICAL WATER QUALITY SET BACK
UPPER REEF FIELD
LOWER REEF FIELD
BEACH (SHARP)
NET GARDEN
NET GARDEN

ASSOCIATED WITH TRAILS, PEDESTRIAN WAYS ARE DEPICTED HERE FOR THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR THE DESIGN AND/OR CODE THESE ITEMS. REFER TO THE LANDSCAPE ARCHITECT FOR DETAILS AND SPECIFICATIONS. THE ARCHITECT IS SOLELY RESPONSIBLE FOR THE ACCURACY, AND ADEQUACY OF THEIR DESIGN, AND SPECIFICATIONS FOR THESE ITEMS WHETHER OR NOT THE ENGINEER HAS REVIEWED OR DEPICTED THEM ON THE PLANS.

CUT/FILL AND CONSTRUCTION ON HANDED UPON FINALIZING THE SITE PROPOSED GRADING.

AREA #3
SCALE: 1"=50'

Minimum Elevation (feet)	Maximum Elevation (feet)	Color	AREA (SF)	AREA (%)
-6.000	-4.000		13851.2	40.2
-8.000	-6.000		12899.4	36.9
-10.000	-8.000		6297.4	18.3
-12.000	-10.000		1314.3	3.8
-14.000	-12.000		236.2	0.7
-16.402	-14.000		50.1	0.1



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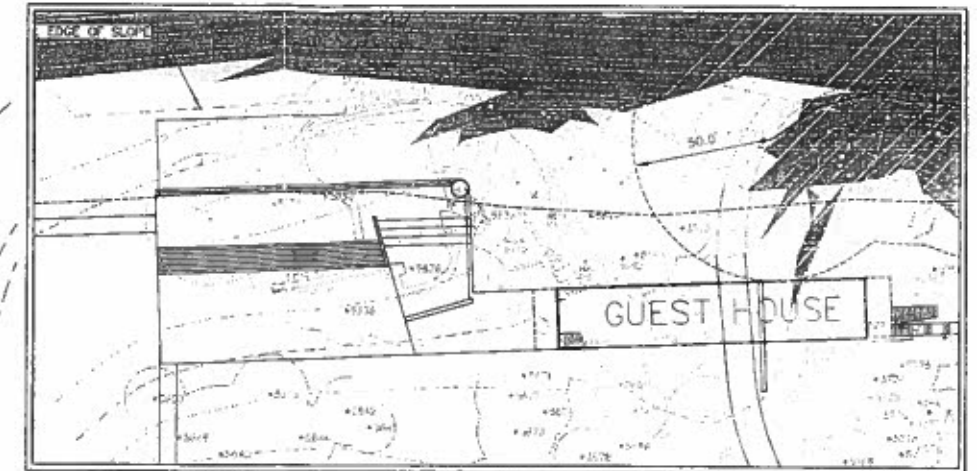
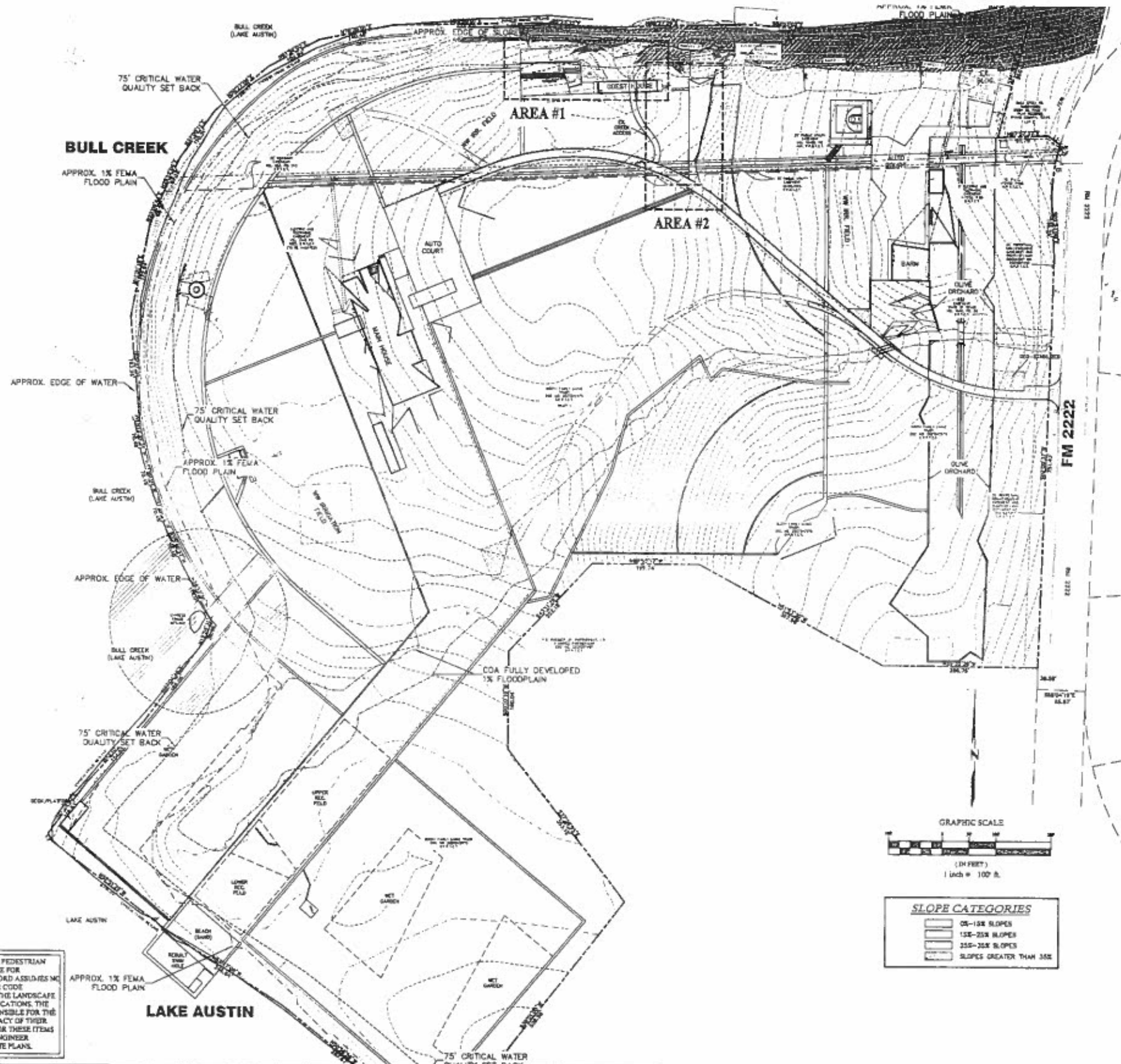
THE LIMITS OF CUT/FILL AND CONSTRUCTION ON SLOPES WILL CHANGE UPON FINALIZING THE SITE LAYOUT AND PROPOSED GRADING.

ENVIRONMENTAL MODIFICATION PLAN EXHIBIT J - CUT AND FILL



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BULL CREEK P.U.D.



AREA #1
SCALE: 1" = 30'



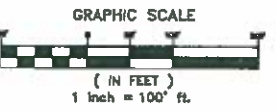
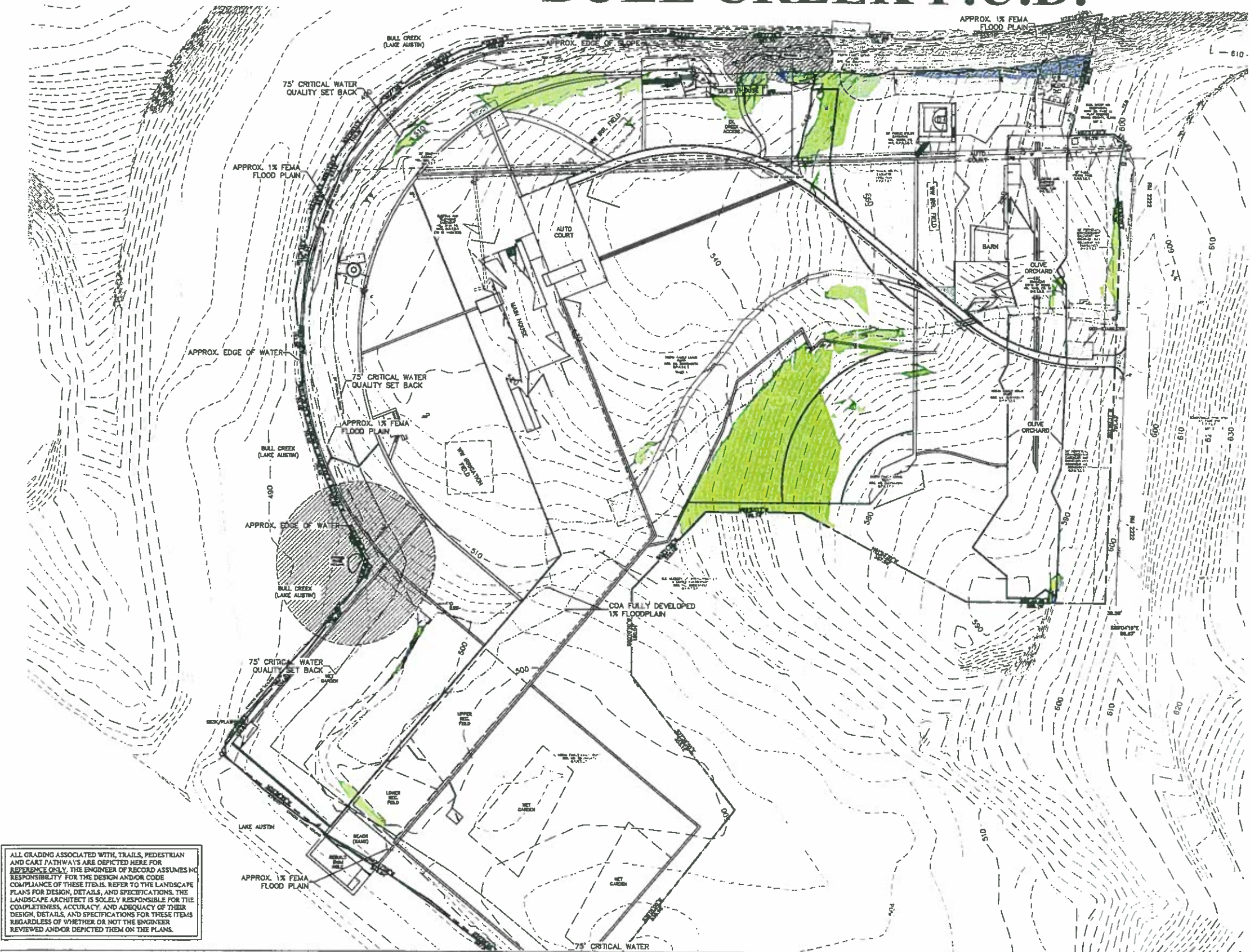
AREA #2
SCALE: 1" = 30'

ENVIRONMENTAL MODIFICATION PLAN EXHIBIT K - CONSTRUCTION ON SLOPES



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BULL CREEK P.U.D.



SLOPE CATEGORIES	
0%-15% SLOPES	Light Green
15%-25% SLOPES	Medium Green
25%-35% SLOPES	Dark Green
SLOPES GREATER THAN 35%	Blue

NOTES:
1. THIS PROJECT IS LOCATED IN THE LAKE AUSTIN WATERSHED, WATER SUPPLY RURAL.
2. TWO-FOOT CONTOUR TOPOGRAPHY IS BASED ON CITY OF AUSTIN GIS DATA, DATED 2003.

APPENDIX Q-1 NET SITE AREA	
Total gross site area =	53.08 Acres
Site Deductions:	
Critical water quality zone (CWQZ) =	6.72 Acres
Water quality transition zone (WQTZ) =	0.00 Acres
Wastewater collection area =	0.40 Acres
Deduction subtotal =	7.12 Acres
Upland area (gross area minus total deductions) =	45.96 Acres
Net Site Area Calculation:	
Area of Upland with Slopes 0 - 15% =	43.54 Acres
Area of Upland with Slopes 15 - 25% =	3.01 Acres
Area of Upland with Slopes 25 - 35% =	0.09 Acres
Area of Upland with Slopes above 35% =	0.22 Acres
Subtotal	46.86 Acres
Net Site Area (subtotal) =	44.78 Acres

APPENDIX Q-2 IMPERVIOUS COVER	
Allowable Impervious Cover	
Impervious cover allowed at	18% WQTZ = 0.00 Acres
Impervious cover allowed at	25% X NSA = 13.43 Acres
Road Name	1/2 ROW 1/2 Pavement Length %IC Deductions
FM 2222	48 25 962 88.98% 0.254
Deductions for perimeter roadway =	0.254 Acres
Total (Allowable) Impervious Cover =	13.17 Acres
ALLOWABLE IMPERVIOUS COVER BREAKDOWN BY SLOPE CATEGORY	
Total slope 15 - 25% =	3.01 Acres X 10% = 0.30 Acres
PROPOSED TOTAL IMPERVIOUS COVER	
Impervious Cover in CWQZ (Structure)	0.84 Acres = 12.50%
Impervious cover in WQTZ =	0.00 Acres = 0%
Impervious cover in Upland Zone =	6.42 Acres = 12.90%
Total proposed impervious cover =	6.26 Acres
PROPOSED IMPERVIOUS COVER ON SLOPES	
IMPERVIOUS COVER	
BUILDING / AND OTHER IMPERVIOUS COVER	
DRIVEWAYS ROADWAYS	
SLOPE CATEGORIES	% OF CATEGORY
ACRES	AC.
0 - 15%	43.54 1.08 2.5%
15 - 25%	3.01 0.22 0.7%
25 - 35%	0.09 0.00 0.0%
Over 35%	0.22 0.00 0.0%
Subtotal	1.11 2.16
Total Site Area	46.86 Acres

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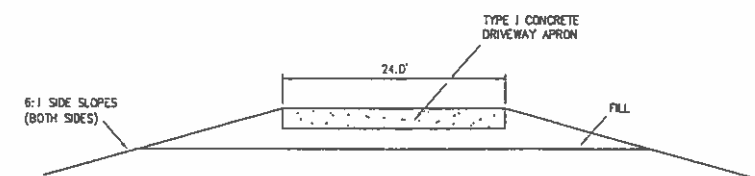
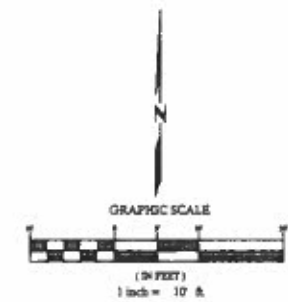
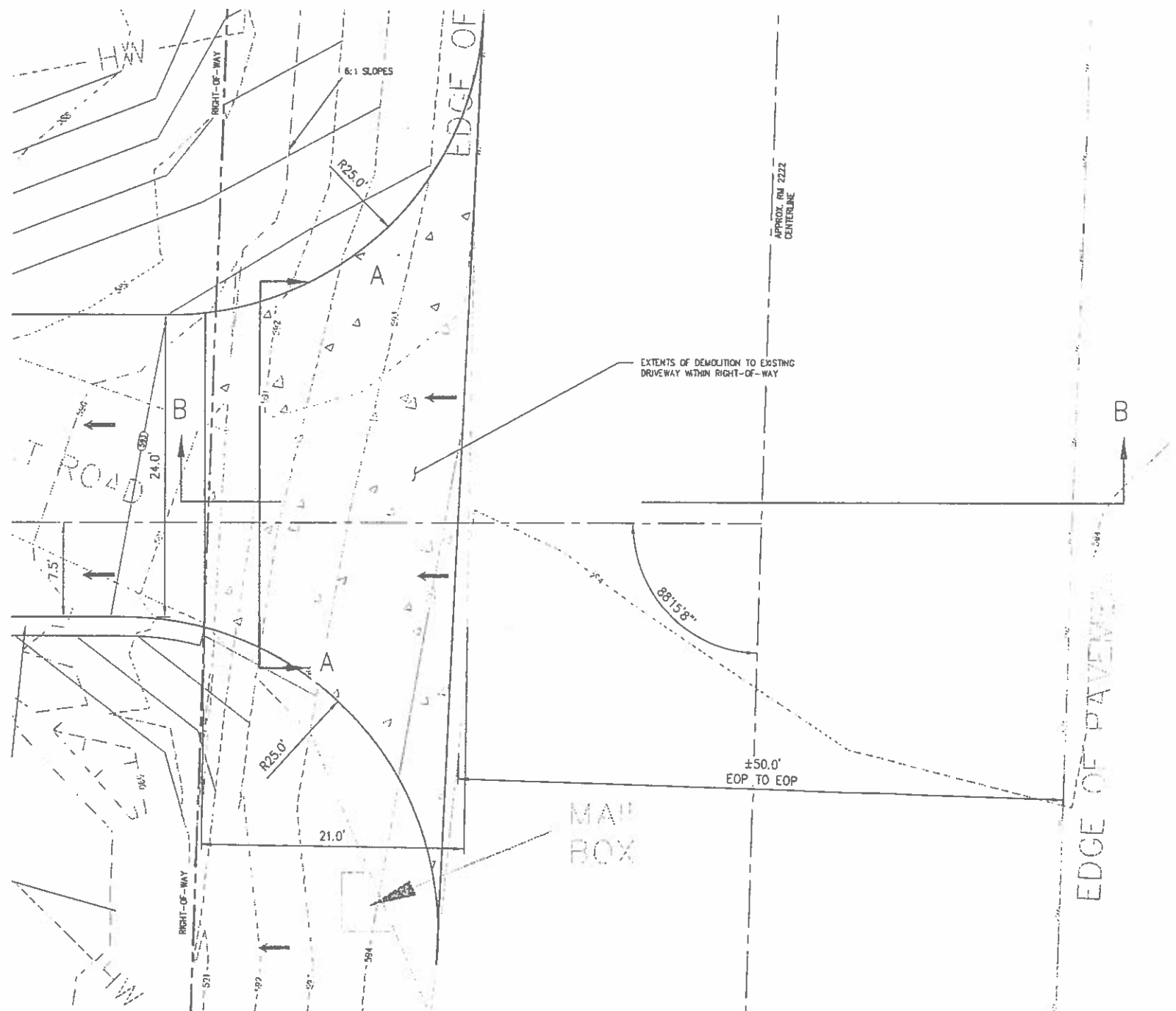
EXHIBIT L - SLOPE ANALYSIS



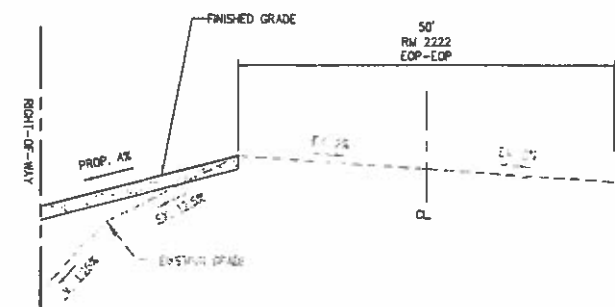
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BULL CREEK P.U.D.



TYPICAL X-SECTION A-A
WITHIN RIGHT-OF-WAY
SCALE: N.T.S.



X-SECTION B-B
DRIVEWAY APRON
SCALE: N.T.S.

BULL CREEK P.U.D.

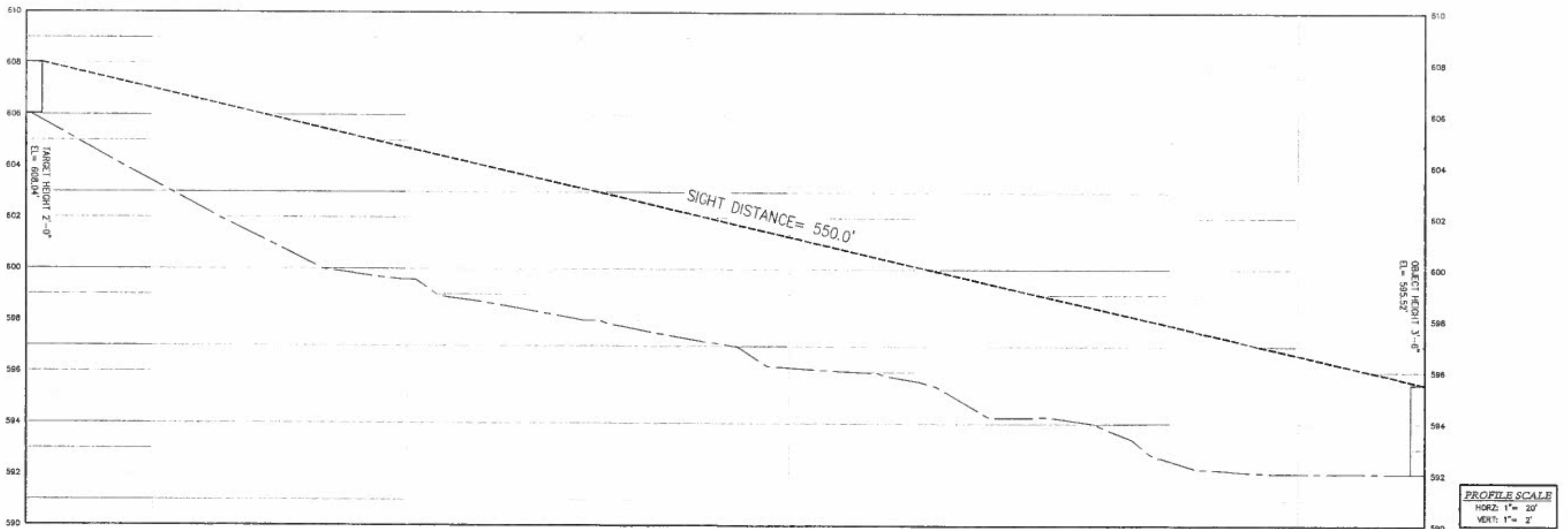
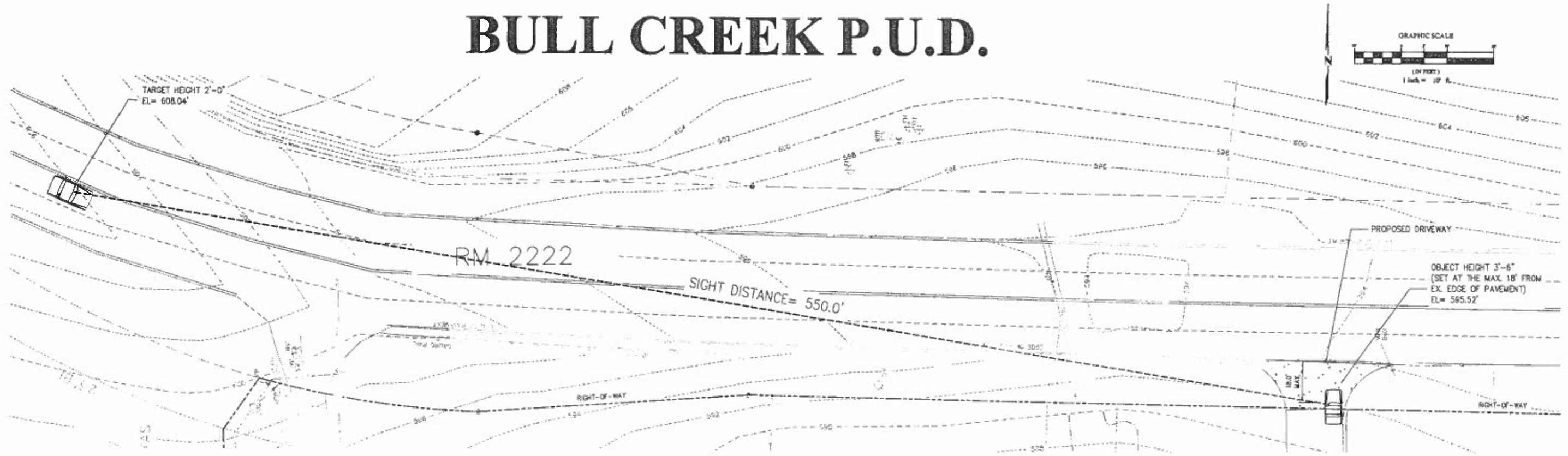


EXHIBIT M - DRIVEWAY DETAILS - (2 of 5)



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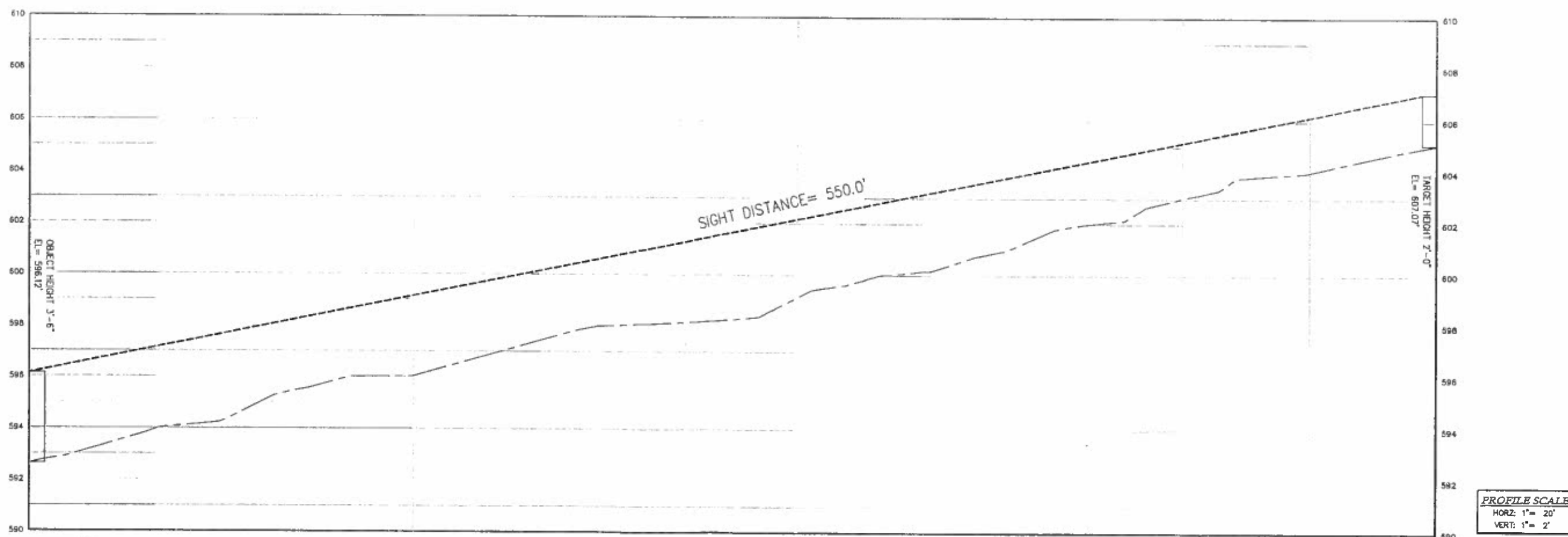
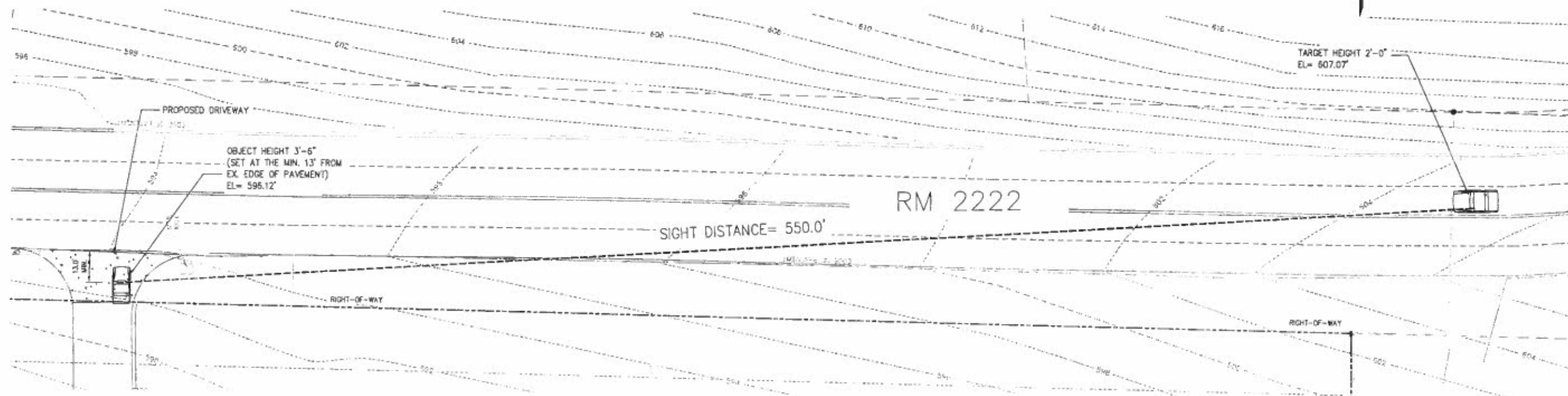
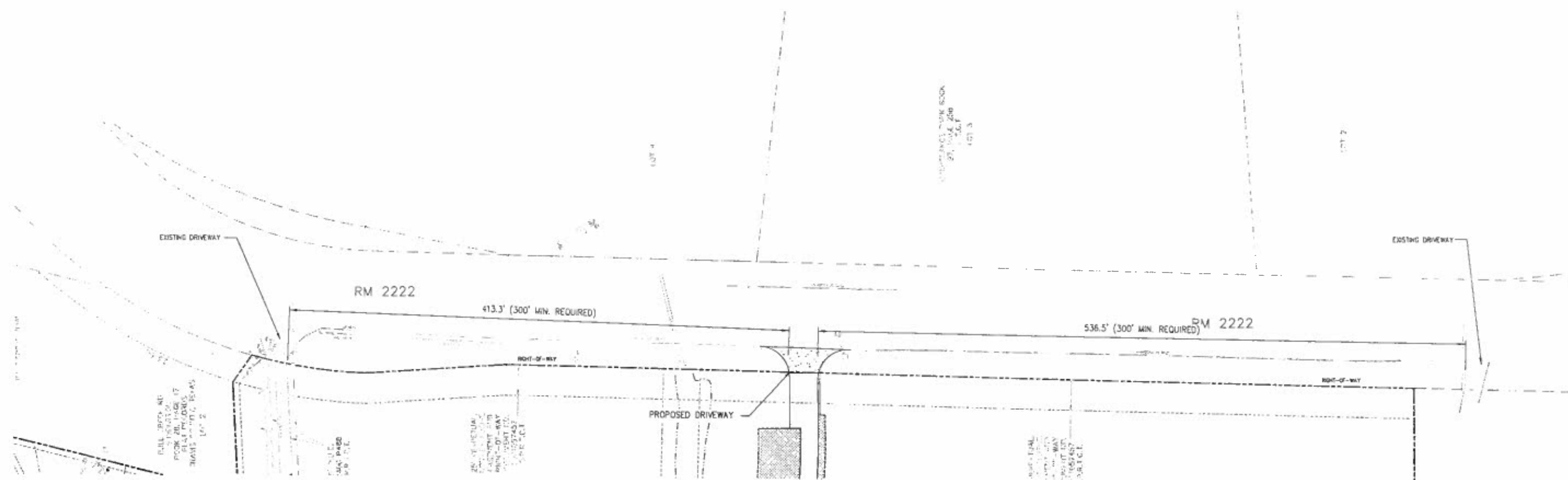


EXHIBIT M - DRIVEWAY DETAILS - (3 of 5)

CA

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ALL CRITICAL ENVIRONMENTAL FEATURES REFERENCED ON THIS EXHIBIT WERE IDENTIFIED BY HORIZON ENVIRONMENTAL SERVICES, INC. ENVIRONMENTAL ASSESSMENT REPORT DATED 28 JANUARY 2018.

City of Austin Site Review Critical Environmental Features				
Project Name:		55-acre Bull Creek Tract	5	Primary
Project Address:		Bull Creek and Lake Austin	6	P
Date:		1/28/2010	7	
Environmental Assessment Date:		1/25/2010	8	CEFS Loc
FEATURE TYPE	FEATURE ID	FEATURE LONGITUDE	FEATURE	FEATURE
[Wetland, Rimrock, Recharge Feature, Seep, Spring]	[see S-1]	[WGS 1984 in Meters]	notation	[WGS 1984 in Meters]
Wetland	Wetland Fringe	-97.790541 DD	DD	30.00
Wetland	Cypress Fringe 1	-97.790216 DD	DD	30.00
Wetland	Cypress Fringe 2	-97.791426 DD	DD	30.00
Rimrock	Rimrock 1	-97.786451 DD	DD	30.00
Rimrock	Rimrock 2	-97.787693 DD	DD	30.00

City of Austin Site Review Critical Environmental Feature Worksheet									
Project Name:		55-acre Bull Creek Tract	5	Primary Contact Name:					
Project Address:		Bull Creek and Lake Austin	6	Phone Number:					
Date:		2/28/2020	7	Prepared By:					
Environmental Assessment Date:		2/25/2020	8	CEFS Located? (yes/no):		YES			
FEATURE TYPE (Wetland, Rimrock, Recharge Feature, Seep, Spring)	FEATURE ID (eg S-1)	FEATURE LONGITUDE (WGS 1984 In Meters) coordinate notation		FEATURE LATITUDE (WGS 1984 In Meters) coordinate notation		WETLAND DIMENSIONS (ft) X Y		RIMROCK DIMENSIONS (ft) Length Avg. Height	
Wetland	Wetland Fringe	-87.790541	DD	30.348763	DD	30	40		
Wetland	Cypress Fringe 1	-87.790216	DD	30.352438	DD	1180			
Wetland	Cypress Fringe 2	-87.791426	DD	30.347665	DD	1500			
Rimrock	Rimrock 1	-87.786453	DD	30.351509	DD			400	8
Rimrock	Rimrock 2	-87.787691	DD	30.351618	DD			133	6

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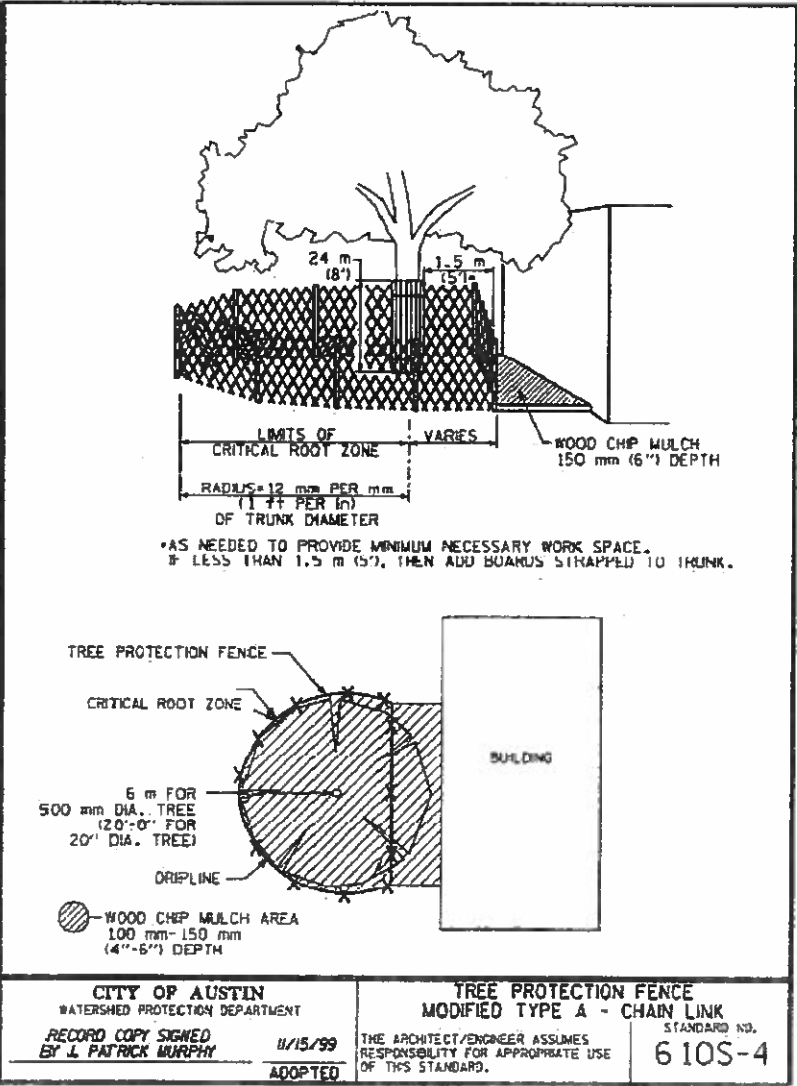
PLAN KEY

- 11111 EXTENTS OF PROTECTION AROUND SIGNIFICANT TREES
- EXISTING LIVE OAK ≥ 19"
- ◐ EXISTING TREE ≥ 19"
- ⊗ EXISTING TREE ≥ 19", TO BE REMOVED
- EXISTING TREE ≥ 19", TO BE TRANSPLANTED
- EXTENTS OF WORK

PLAN NOTES

1. PROTECT AND SAVE EXISTING TREES WITHIN LIMITS OF CONSTRUCTION AS IDENTIFIED ON PLAN. FINAL LOCATIONS TO BE VERIFIED BY LANDSCAPE ARCHITECT IN FIELD.
2. ALL FENCING PROTECTS CRITICAL ROOT ZONE (CRZ) OF SIGNIFICANT TREES PER CITY OF AUSTIN TREE PROTECTION ORDINANCE. SEE DETAIL.
3. THE CRITICAL ROOT ZONE (CRZ) IS ONE FOOT FROM THE TREE TRUNK FOR EACH DIAMETER INCH OF TRUNK SIZE.
4. FENCING IS REQUIRED TO BE CHAIN-LINK MESH AT A MINIMUM HEIGHT OF FIVE FEET. A SIX INCH LAYER OF MULCH WITHIN THE ENTIRE AVAILABLE ROOT ZONE AREA IS REQUIRED FOR TREES WHICH HAVE ANY DISTURBANCE INDICATED WITHIN ANY PORTION OF THE CRZ.
5. ALL TREES LESS THAN 19" DIAMETER ARE NOT SHOWN.

PROTECTION DETAIL



SAVED TREES

TREE LOCATION	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	TREE TYPE	SAVED	TREE LOCATION	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	TREE TYPE	SAVED	TREE LOCATION	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	TREE TYPE	SAVED
3101 10' Live Oak	19						Live Oak	Saved	3124 50' 22' Pecan	50	22					Pecan	Saved	3125 30' Live Oak	33						Live Oak	Saved
3102 10' 15' Live Oak	20	15					Live Oak	Saved	3125 54' Cottonwood	54						Cottonwood	Saved	3127 30' Live Oak	1	5	7	9			Live Oak	Saved
3103 22' Cedar	22						Cedar	Saved	3126 51' Cottonwood	51						Cottonwood	Saved	3128 10' 15' Live Oak	15						Live Oak	Saved
3104 14' Cedar	19						Cedar	Saved	3127 24' Pecan	24						Pecan	Saved	3129 20' 10' Cedar	6	16					Live Oak	Saved
3105 14' Cedar	19						Cedar	Saved	3128 40' Cottonwood	40						Cottonwood	Saved	3130 10' Cedar	9		13				Cedar	Saved
3106 14' Cedar	19						Cedar	Saved	3129 52' Cottonwood	52						Cottonwood	Saved	3131 10' 15' Cedar	10	15					Cedar	Saved
3107 17' Live Oak	27						Live Oak	Saved	3130 33' Cottonwood	33						Cottonwood	Saved	3132 20' 10' Cedar	21						Live Oak	Saved
3108 22' Cedar	22						Cedar	Saved	3131 25' Cottonwood	35						Cottonwood	Saved	3133 10' 15' Cedar	7	10	11				Cedar	Saved
3109 21' Elm	21						Elm	Saved	3132 30' Cottonwood	30						Cottonwood	Saved	3134 10' 15' Live Oak	14	16					Live Oak	Saved
3110 14' Cedar	19						Cedar	Saved	3133 40' Cottonwood	40						Cottonwood	Saved	3135 20' 10' Cedar	21						Live Oak	Saved
3111 14' Live Oak	20						Live Oak	Saved	3134 47' Cottonwood	47						Cottonwood	Saved	3136 10' 15' Elm	11	13					Live Oak	Saved
3112 43' Live Oak	43						Live Oak	Saved	3135 26' Pecan	26						Pecan	Saved	3137 10' 15' Elm	18						Live Oak	Saved
3113 14' Elm	19						Elm	Saved	3136 25' Pecan	25						Pecan	Saved	3138 10' 15' Cypress	7	13					Cypress	Saved
3114 16' 15' Live Oak	18	15					Live Oak	Saved	3137 25' Pecan	35						Pecan	Saved	3139 10' 15' Cypress	7	8	10				Cypress	Saved
3115 22' Live Oak	22						Live Oak	Saved	3138 29' Pecan	29						Pecan	Saved	3140 10' 15' Cypress	7	20					Cypress	Saved
3116 24' Cedar	20						Cedar	Saved	3139 24' Pecan	39						Pecan	Saved	3141 10' 15' Cypress	7	11	12				Cypress	Saved
3117 14' Cedar	19						Cedar	Saved	3140 27' Pecan	37						Pecan	Saved	3142 10' 15' Cypress	9	11	13				Cypress	Saved
3118 14' Cedar	19						Cedar	Saved	3141 24' Willow	48						Willow	Saved	3143 10' 15' Cypress	7	14					Cypress	Saved
3119 14' Live Oak	19	15					Live Oak	Saved	3142 16' Willow	36						Willow	Saved	3144 10' 15' Cypress	8	9	12	12			Cypress	Saved
3120 14' Live Oak	22						Live Oak	Saved	3147 29' 25' Willow	29	25					Willow	Saved	3145 10' 15' Cypress	7	7	9	15			Cypress	Saved
3121 14' Live Oak	18	16					Live Oak	Saved	3144 20' Cypress	20						Cypress	Saved	3146 10' 15' Cypress	11	12					Cypress	Saved
3122 14' Live Oak	21						Live Oak	Saved	3145 11' Cottonwood	31						Cottonwood	Saved	3147 10' 15' Cypress	8	13					Cypress	Saved
3123 14' Live Oak	29						Live Oak	Saved	3146 11' Cedar	27	11					Cedar	Saved	3148 10' 15' Cypress	11	15					Cypress	Saved
3124 14' Live Oak	22						Live Oak	Saved	3147 12' 12' 11' 8' Cedar	12	12	11	8			Cedar	Saved	3149 10' 15' Cypress	8	15					Cypress	Saved
3125 14' Live Oak	20						Cedar	Saved	3148 24' 20' Live Oak	24	21					Live Oak	Saved	3150 10' 15' Cypress	7	12	17				Cypress	Saved
3126 14' Live Oak	27						Live Oak	Saved	3149 14' Live Oak	19						Live Oak	Saved	3151 10' 15' Cypress	9	10					Cypress	Saved
3127 14' Live Oak	24						Live Oak	Saved	3150 15' 14' Cypress	15	14					Cypress	Saved	3152 10' 15' Cypress	9	13					Cypress	Saved
3128 14' Live Oak	20						Cedar	Saved	3151 16' 14' Live Oak	16	14					Live Oak	Saved	3153 10' 15' Cypress	12	15					Cypress	Saved
3129 14' Live Oak	20						Cedar	Saved	3152 18' 15' Oak	18	15					Ash	Saved	3154 10' 15' Cypress	13	14					Cypress	Saved
3130 14' Live Oak	26						Cedar	Saved	3153 45' Live Oak	45						Live Oak	Saved	3155 10' 15' Cypress	8	13					Cypress	Saved
3131 14' Live Oak	20						Cedar	Saved	3154 24' Live Oak	24						Live Oak	Saved	3156 10' 15' Cypress	10	18					Cypress	Saved
3132 14' Live Oak	22	18					Cedar	Saved	3155 25' Live Oak	23						Live Oak	Saved	3157 10' 15' Cypress	7	12	12				Cypress	Saved
3133 14' Live Oak	21						Cedar	Saved	3156 30' Live Oak	30						Live Oak	Saved	3158 10' 15' Cypress	13	14					Cypress	Saved
3134 14' Live Oak	23						Live Oak	Saved	3157 22' Cedar	23						Cedar	Saved	3159 10' 15' Cypress	19						Cypress	Saved
3135 14' Live Oak	25						Live Oak	Saved	3158 54' Cypress	54						Cypress	Saved	3160 10' 15' Cypress	12	14					Cypress	Saved
3136 14' Live Oak	23						Live Oak	Saved	3159 14' 11' Live Oak	14	11					Live Oak	Saved	3161 10' 15' Cypress	5	10	14				Cypress	Saved
3137 14' Live Oak	27						Live Oak	Saved	3160 25' 19' Live Oak	25	19					Live Oak	Saved	3162 10' 15' Cypress	8	11	15				Cypress	Saved
3138 14' Live Oak	25						Live Oak	Saved	3161 24' Live Oak	24						Live Oak	Saved	3163 10' 15' Cypress	15	19					Cypress	Saved
3139 14' Live Oak	27						Live Oak	Saved	3162 27' Live Oak	27						Live Oak	Saved	3164 10' 15' Cypress	20						Cypress	Saved
3140 14' Live Oak	22						Live Oak	Saved	3163 24' Live Oak	21						Live Oak	Saved	3165 10' 15' Cypress	20						Cypress	Saved
3141 14' Live Oak	22						Live Oak	Saved	3164 24' Live Oak	24						Live Oak	Saved	3166 10' 15' Cypress	18	16					Cypress	Saved
3142 14' Live Oak	25						Live Oak	Saved	3165 12' Live Oak	22						Live Oak	Saved	3167 10' 15' Cypress	22						Cypress	Saved
3143 14' Live Oak	24						Live Oak	Saved	3166 12' Live Oak	22						Live Oak	Saved	3168 10' 15' Cypress	15	19					Cypress	Saved
3144 14' Live Oak	14	14					Spanish Oak	Saved	3167 22' Live Oak	21						Live Oak	Saved	3169 10' 15' Cypress	22						Cypress	Saved
3145 14' Live Oak	19	13					Live Oak	Saved	3168 24' Live Oak	24						Live Oak	Saved	3170 10' 15' Cypress	23						Cypress	Saved
3146 14' Live Oak	15	14					Spanish Oak	Saved	3169 21' Live Oak	21						Live Oak	Saved	3171 10' 15' Cypress	10	10	14				Ash	Saved
3147 14' Live Oak	13		8				Live Oak	Saved	3170 24' Live Oak	24						Live Oak	Saved	3172 10' 15' Cypress	19						Live Oak	Saved
3148 14' Live Oak	14	8	7				Live Oak	Saved	3171 25' Live Oak	25						Live Oak	Saved	3173 10' 15' Cypress	25						Cedar	Saved
3149 14' Live Oak	14	12					Cedar	Saved	3172 21' Live Oak	21						Live Oak	Saved	3174 10' 15' Cypress	30						Live Oak	Saved
3150 14' Live Oak	11	9	8				Live Oak	Saved	3173 14' 12' Cedar	14	12					Cedar	Saved	3175 10' 15' Cypress	34						Cypress	Saved
3151 14' Live Oak	20						Live Oak	Saved	3174 13' 10' Cedar	13	12					Cedar	Saved	3176 10' 15' Cypress	23						Cypress	Saved
3152 14' Live Oak	21						Live Oak	Saved	3175 21' Cedar	21						Cedar	Saved	3177 10' 15' Cypress	26						Cypress	Saved
3153 14' Live Oak	22						Live Oak	Saved	3176 24' Live Oak	21						Live Oak	Saved	3178 10' 15' Cypress	32						Cottonwood	Saved
3154 14' Live Oak	26						Live Oak	Saved	3177 14' Cedar	19						Live Oak	Saved	3179 10' 15' Cypress	21						Cottonwood	Saved
3155 14' Live Oak	21						Live Oak	Saved	3178 14' Cedar	19						Cedar	Saved	3180 10' 15' Cypress	19						Cedar	Saved
3156 14' Live Oak	19	16					Live Oak	Saved	3179 10' 15' Cedar	10	12					Cedar	Saved	3181 10' 15' Cypress	8	11					Spanish Oak	Saved
3157 14' Live Oak	20	17					Live Oak	Saved	3180 8' 11' Cedar	8	11					Cedar	Saved	3182 10' 15' Cypress	27						Live Oak	Saved
3158 14' Live Oak	24						Live Oak	Saved	3181 7' 12' Cedar	7	12					Cedar	Saved	3183 10' 15' Cypress	26						Live Oak	Saved
3159 14' Live Oak	15	9					Live Oak	Saved	3182 5' 11' Cedar	5	13					Cedar	Saved	3184 10' 15' Cypress	7	7	12				Spanish Oak	Saved
3160 14' Live Oak	20						Live Oak	Saved	3183 6' 13' Cedar	6	13					Cedar	Saved	3185 10' 15' Cypress	28						Live Oak	Saved
3161 14' Live Oak	20						Live Oak	Saved	3184 5' 14' Cedar	5	14					Cedar	Saved	3186 10' 15' Cypress	22						Live Oak	Saved
3162 14' Live Oak	20						Cedar	Saved	3185 2' 14' Cedar	6	13					Cedar	Saved	3187 10' 15' Cypress	20						Cedar	Saved
3163 14' Live Oak	16	10					Live Oak	Saved	3186 2' 14' Cedar	7	8	9				Cedar	Saved	3188 10' 15' Cypress	6	7	9				Live Oak	Saved
3164 14' Live Oak	32						Live Oak	Saved	3187 7' 12' Cedar	7	12					Cedar	Saved	3189 10' 15' Cypress	9	13					Live Oak	Saved
3165 14' Live Oak	21	18	18				Live Oak	Saved	3188 4' 4' 2' 10' Cedar	4	6	6	10			Cedar	Saved	3190 10' 15' Cypress	19	10					Hackberry	Saved
3166 14' Live Oak	20						Cedar	Saved	3189 11' 11' Cedar	11	11					Cedar	Saved	3191 10' 15' Cypress	19						Live Oak	Saved
3167 14' Live Oak	20						Cedar	Saved	3190 11' 11' Cedar	3	5	6	9			Cedar	Saved	3192 10' 15' Cypress	20						Pecan	Saved
3168 14' Live Oak	28						Cedar	Saved	3191 11' 11' Cedar	9	10					Cedar	Saved	3193 10' 15' Cypress	21						Cedar	Saved
3169 14' Live Oak	13	10	10				Live Oak	Saved	3192 11' 11' Cedar	7																

SAVED TREES (CONTINUED)

TREE LOCATION	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	TREE TYPE	SAVED
1000 10'10" LIVE OAK	9	10					Live Oak	Saved
1002 12'11" CEDAR	12	13					Cedar	Saved
1003 20' CEDAR	20						Cedar	Saved
1004 21' CEDAR	21						Cedar	Saved
1005 14' CEDAR	19						Cedar	Saved
1006 11'10" CEDAR	11	12					Cedar	Saved
1007 10'11" LIVE OAK	8	11					Elm	Saved
1008 14' CEDAR	19						Cedar	Saved
1009 7'10" CEDAR	7	7	7				Cedar	Saved
1010 11'11" CEDAR	11	13					Cedar	Saved
1011 11'11" CEDAR	7	14					Cedar	Saved
1012 11'11" CEDAR	11	11					Cedar	Saved
1013 10'10" CEDAR	5	7	8				Cedar	Saved
1014 8'10" CEDAR	6	12					Cedar	Saved
1015 4'10"11" CEDAR	6	8	9	9			Cedar	Saved
1016 10'10" CEDAR	5	8	9				Cedar	Saved
1017 10'10" CEDAR	9	7	7				Cedar	Saved
1018 10'10" CEDAR	8	12	13				Cedar	Saved
1019 10'10" CEDAR	15	9					Cedar	Saved
1020 10'10" CEDAR	9	13					Cedar	Saved
1021 10'10" CEDAR	9	12					Cedar	Saved
1022 10'10" CEDAR	8	6	7	9			Cedar	Saved
1023 10'10" CEDAR	5	5	5	10			Cedar	Saved
1024 10'10" CEDAR	3	5	13				Cedar	Saved
1025 10'10" CEDAR	10	15					Cedar	Saved
1026 10'10" CEDAR	20						Cedar	Saved
1027 12'10" CEDAR	12	15					Cedar	Saved
1028 10'10" CEDAR	10	13					Live Oak	Saved
1029 11'10" CEDAR	11	15					Cedar	Saved
1030 10'10" CEDAR	7	9	9	14			Cedar	Saved
1031 10'10" CEDAR	10	11					Cedar	Saved
1032 10'10" CEDAR	10	13					Cedar	Saved
1033 10'10" CEDAR	10	10					Cedar	Saved
1034 10'10" CEDAR	9	10					Cedar	Saved
1035 10'10" CEDAR	9	10					Cedar	Saved
1036 10'10" CEDAR	8	15					Cedar	Saved
1037 10'10" CEDAR	10	17					Cedar	Saved
1038 10'10" CEDAR	10	11					Cedar	Saved
1039 10'10" CEDAR	7	12					Cedar	Saved
1040 10'10" CEDAR	10	10	12				Cedar	Saved
1041 10' CEDAR	19						Cedar	Saved
1042 10'10" CEDAR	10	13					Cedar	Saved
1043 6'10"11" CEDAR	6	8	8	8	11		Cedar	Saved
1044 10' CEDAR	19						Cedar	Saved
1045 10'10" CEDAR	7	7	12				Cedar	Saved
1046 10'10" CEDAR	10	11					Cedar	Saved
1047 10'10" CEDAR	5	5	8	9			Cedar	Saved
1048 10'10" CEDAR	11	17					Cedar	Saved
1049 10'10" CEDAR	8	13	13				Cedar	Saved
1050 10'10" CEDAR	9	12					Cedar	Saved
1051 4'10"11" CEDAR	4	5	5	8			Cedar	Saved
1052 10'10" LIVE OAK	8	11	13				Live Oak	Saved
1053 10'10" CEDAR	4	8	7	8	11		Cedar	Saved
1054 10'10" CEDAR	5	7	13				Cedar	Saved
1055 10'10" CEDAR	4	8	8	8			Cedar	Saved
1056 10'10" CEDAR	5	8	10				Cedar	Saved
1057 10' LIVE OAK	19						Live Oak	Saved
1058 10'10" LIVE OAK	5	12	12				Live Oak	Saved
1059 10'10" CEDAR	8	8	8				Cedar	Saved
1060 10'10" CEDAR	9	15					Cedar	Saved
1061 10'10" CEDAR	7	8	13				Cedar	Saved
1062 10'10" LIVE OAK	8	9	9				Live Oak	Saved
1063 10'10" LIVE OAK	7	13					Live Oak	Saved
1064 10'10" CEDAR	8	10	12				Cedar	Saved
1065 10'10" CEDAR	8	13					Cedar	Saved
1066 10' LIVE OAK	25						Live Oak	Saved
1067 10'10" CEDAR	7	12					Cedar	Saved
1068 10'10" CEDAR	1	14					Cedar	Saved
1069 10'10" CEDAR	4	9	9	9			Cedar	Saved
1070 10'10" CEDAR	9	11					Cedar	Saved
1071 10'10" CEDAR	9	12					Cedar	Saved
1072 10' LIVE OAK	18						Live Oak	Saved
1073 10'11"10" CEDAR	10	11	18				Cedar	Saved
1074 10'10" CEDAR	8	15					Cedar	Saved
1075 10'10" CEDAR	7	8	12				Cedar	Saved
1076 10'10" CEDAR	5	8	9	9			Cedar	Saved
1077 8'10" LIVE OAK	8	15					Live Oak	Saved
1078 10'10" CEDAR	7	13					Cedar	Saved
1079 10'10" LIVE OAK	10	10					Live Oak	Saved
1080 10'10" CEDAR	9	10					Cedar	Saved
1081 10'10" CEDAR	9	10					Cedar	Saved
1082 10'10" LIVE OAK	10	10					Live Oak	Saved
1083 10' CEDAR	19						Cedar	Saved
1084 8'11" CEDAR	8	11					Cedar	Saved
1085 4'10"11" CEDAR	8	8	8				Cedar	Saved
1086 10' CEDAR	19						Cedar	Saved
1087 10'10" CEDAR	8	9	12				Cedar	Saved
1088 10' CEDAR	19						Cedar	Saved
1089 10'10" LIVE OAK	10	11					Live Oak	Saved
1090 10' CEDAR	19						Cedar	Saved
1091 10'10" LIVE OAK	7	12					Live Oak	Saved
1092 10'10" LIVE OAK	10	10					Live Oak	Saved
1093 10' LIVE OAK	20						Live Oak	Saved
Totals	7,124	2,863	1,019	224	72	17		
Grand Total	11,110							

REMOVED TREES

TREE LOCATION	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	TREE TYPE	REMOVED
1000 10'10" Cedar	19						Cedar	Removed
1002 10' Cedar	19						Cedar	Removed
1003 20' Live Oak	22						Live Oak	Removed
1004 20' Cedar	26						Cedar	Removed
1005 20' Live Oak	25						Cedar	Removed
1006 20' Cedar	20						Cedar	Removed
1007 10' Cedar	23						Cedar	Removed
1008 10' Cedar	24						Cedar	Removed
1009 20' Willow	27						Willow	Removed
1010 10' Willow	27						Willow	Removed
1011 10' Cedar	19						Cedar	Removed
1012 10'10" CEDAR	9	9	10				Cedar	Removed
1013 10'10" CEDAR	8	9	13	13			Cedar	Removed
1014 10' CEDAR	19						Cedar	Removed
1015 10'10"11" CEDAR	6	8	8	11			Cedar	Removed
1016 10'10"11" CEDAR	5	5	7	13			Cedar	Removed
1017 10' CEDAR	19						Cedar	Removed
1018 10' CEDAR	20						Cedar	Removed
1019 10' CEDAR	19						Elm	Removed
1020 10'10"11" CEDAR	10	10	14				Cedar	Removed
1021 10' CEDAR	19						Cedar	Removed
1022 10' CEDAR	19						Cedar	Removed
1023 10' CEDAR	19						Cedar	Removed
1024 10'10"11"10" CEDAR	5	5	5	8	9	10	Cedar	Removed
1025 10'10" CEDAR	4	9	12				Cedar	Removed
1026 10' CEDAR	19						Cedar	Removed
1027 22' CEDAR	22						Cedar	Removed
1028 10' CEDAR	19						Cedar	Removed
1029 10'10"12" CEDAR	8	8	12				Cedar	Removed
1030 11'11"10" CEDAR	11	11	12				Cedar	Removed
1031 10'11"11" CEDAR	9	11	11				Cedar	Removed
1032 10'10" CEDAR	9	12					Cedar	Removed
Totals	500	87	101	45	9	10		
Grand Total	712							

TRANSPLANTED TREES

TREE LOCATION	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	TREE TYPE	Transplanted
1011 20' Pecan	21						Pecan	Transplant
1024 10' Live Oak	19						Live Oak	Transplant
1027 20' Live Oak	20						Live Oak	Transplant
1028 10'10" Live Oak	19						Live Oak	Transplant
1031 10' Elm	8	9	14				Elm	Transplant
1032 10'10" CEDAR	10	13					Elm	Transplant
Totals	118	22	14	-	-	-		
Grand Total	154							

TREE SUMMARY (Trees Greater than 19 inches)

	Total Caliper Inch	Percentage
Saved Trees	11,110	92%
Transplanted Trees	154	1%
Removed Trees	792	7%
Total	12,056	