



### **ITEM FOR ENVIRONMENTAL COMMISSION AGENDA**

COMMISSION MEETING DATE REQUESTED:	November 7, 2018
NAME & NUMBER OF PROJECT:	All Stor Westlake SP-2017-0478D
NAME OF APPLICANT OR ORGANIZATION:	Nhat Ho, Civiltude, LLC, 512-761-6161
LOCATION:	9021 FM 2244, Austin, TX 78746
COUNCIL DISTRICT:	Not Applicable; the site is in the Austin 2-mile Extra-Territorial Jurisdiction (ETJ)
PROJECT FILING DATE:	November 22, 2017
DSD/ENVIRONMENTAL STAFF:	Pamela Abee-Taulli, Environmental Review Specialist Senior 512-974-1879, <a href="mailto:pamela.abee-taulli@austintexas.gov">pamela.abee-taulli@austintexas.gov</a>
WATERSHED:	Barton Creek Watershed, Barton Springs Zone, Drinking Water Protection Zone
ORDINANCE:	Watershed Protection Ordinance (current code)
REQUEST:	Variance request is as follows: 1. Request to vary from LDC 25-8-342 Fill Requirements to allow fill up to 11 feet.
STAFF DETERMINATION:	Staff determination is that the findings of fact have been met. Staff recommends the following condition: that the applicant provide a landscape plan, which is not required in the ETJ.
REASONS FOR DETERMINATION:	Findings of fact have been met.



Development Services Department  
Staff Recommendations Concerning Required Findings

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Project: All Stor Westlake SP-2017-0478D  
Ordinance Standard: Watershed Protection Ordinance  
Variance Request: Request to vary from LDC 25-8-342, Fill Requirements, to allow fill up to 11 feet.

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A. Land Use Commission variance determinations from Chapter 25-8-42 of the City Code:

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

Yes The variance is required in order to provide access to an otherwise developable site. The only possible access, which is from Bee Caves Rd., must cross slopes exceeding 15 percent in grade. LDC 25-8-301 allows a person to construct a driveway on a slope with a gradient of more than 15 percent if it is necessary to provide primary access to at least two contiguous acres with a gradient of 15 percent or less. According to the applicant's engineer, this site meets these conditions.

However, in order to make the access and parking compliant with ADA slope requirements, fill exceeding 4 feet is necessary.

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

Yes The fill is required to provide ADA compliant parking and access to the building and to provide a fire lane along the east side of the building as required by fire code.

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

Yes The current layout is the minimum deviation from code requirement that could accommodate the required fire lane.

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

Yes The fill for the fire lane is upslope of the building foundation, which will stabilize the fill. Fill for the parking will be stabilized by a four and a half foot retaining wall that will be constructed before the fill is placed.

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

Yes Development with the variance will provide non-degradation level of water quality, per standard requirement in the Barton Springs Zone.

B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-422 (Water Quality Transition Zone), Section 25-8-452 (Water Quality Transition Zone), Article 7, Division 1 (Critical Water Quality Zone Restrictions), or Section 25-8-652 (Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long):

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

Yes / No NA

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

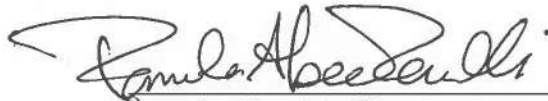
Yes / No NA

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

Yes / No NA

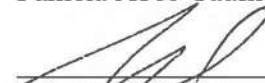
Staff Recommendation: Approve, with conditions.

Environmental Reviewer:

  
Pamela Abee-Taulli

Date 10-26-18

Environmental Review Manager:

  
Mike McDougal

Date 10-26-18

Environmental Officer

  
Chris Herrington

Date 10/26/2018



## ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

### PROJECT DESCRIPTION

#### Applicant Contact Information

Name of Applicant:	ALL STOR WESTLAKE LTD
Street Address	500 W 5TH STREET, SUITE 700
City State ZIP Code	AUSTIN, TX 78701
Work Phone	512-682-5552
E-Mail Address	BCALLAHAN@ENDEAVOR-RE.COM

#### Variance Case Information

Case Name	ALL STOR WESTLAKE
Case Number	SPC-2017-0478D
Address or Location	9021 FM 2244
Environmental Reviewer Name	PAMELA ABEE-TAULLI
Environmental Resource Management Reviewer Name	SCOTT HIERS
Applicable Ordinance	LDC 25-8-342
Watershed Name	BARTON CREEK
Watershed Classification	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input type="checkbox"/> Water Supply Rural <input checked="" type="checkbox"/> Barton Springs Zone

Edwards Aquifer Recharge Zone	<input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment <input type="checkbox"/> Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Distance to Nearest Classified Waterway	900 feet
Water and Waste Water service to be provided by	WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY
Request	The variance request is as follows (Cite code references: 25-8-352 ALLOW FILL GREATER THAN 4 FEET

Impervious cover	Existing	Proposed
square footage:	<u>0.0</u>	39732
acreage:	<u>0.0</u>	<u>0.912</u>
percentage:	<u>0.0</u>	12.06
Provide general description of the property (slope range, elevation range, summary of vegetation / trees, summary of the geology, CWQZ, WQTZ, CEFs, floodplain, heritage trees, any other notable or outstanding characteristics of the property)	<p>THE TRACT SLOPES DOWN FROM FM 2244 AT APROXIMATELY 20 PERCENT GRADE TO A FLATTER AREA WHERE THE BUILDING, PARKING AND FIRE LANE WILL BE CONSTRUCTED. THE TRACT IS COVERED WITH CEDAR TREES AND BRUSH WITH SOME PRIOR DISTURBANCE ON THE EAST BOUNDARY WHEN THE ADJACENT BUILDING WAS CONSTRUED. THERE ARE STEEP SLOPES WITHIN THE SITE AND A CHANNEL IN THE SOUTHWEST CORNER OF THE SITE. TWO CRITICAL ENVIRONMENT FEATURES, A WETLAND AND A SEEP ARE ALSO IN THE SOUTHWEST CORNER, AND THE PROJECT IS PROVIDING AT LEAST 150 FOOT SETBACK FOR ANY DISTURBANCE.</p>	

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)	TO REDUCE THE SLOPE OF THE DRIVEWAY, FILL WILL BE USED TO BRING IT INTO COMPLIANCE WITH THE SLOPE CONSTRAINTS, WHICH WILL RESULT IN FILL OVER 4 FEET FOR THE DRIVEWAY AND FIRE LANE ON THE NORTH AND EAST SIDE OF THE BUILDING.
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## **FINDINGS OF FACT**

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

Include an explanation with each applicable finding of fact.

Project: ALL STOR WESTLAKE

Ordinance: 25-8-342

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

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

Yes THE APPLICANT WISHES TO DEVELOP THE PROPERTY TWITH A DRIVEWAY LESS THAN THE MAXIMUM SLOPE ALLOWED TO PROVIDE ACCESS TO FLATTER PORTIONS OF THE PROPERTY.

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

YES THE FILL IS REQUIRED TO ALLOW FLAT PARKING AREA FOR ADA SPACE AND ENTRANCE TO THE BUILDING, AND PROVIDE A FIRE LANE ALONG THE EAST SIDE OF THE BUILDING AS REQUIRED BY THE FIRE CODE.

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

YES SEVERAL LAYOUT WERE PROPOSED BUT THE CURRENT DESIGN IS THE MINIMUM DEPARTURE TO ALLOW THE ACCESS AND FIRE LANE ON THE EAST SIDE OF THE BUILDING

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

YES, THE FILL WILL BE STABILIZED SINCE THE BUILDING FOUNDATION WILL BE DOWNSLOPE OF THE FILL AREA.

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

Yes / No [provide summary justification for determination]

B. NOT APPLICABLE.

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





## Exhibits for Commission Variance

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



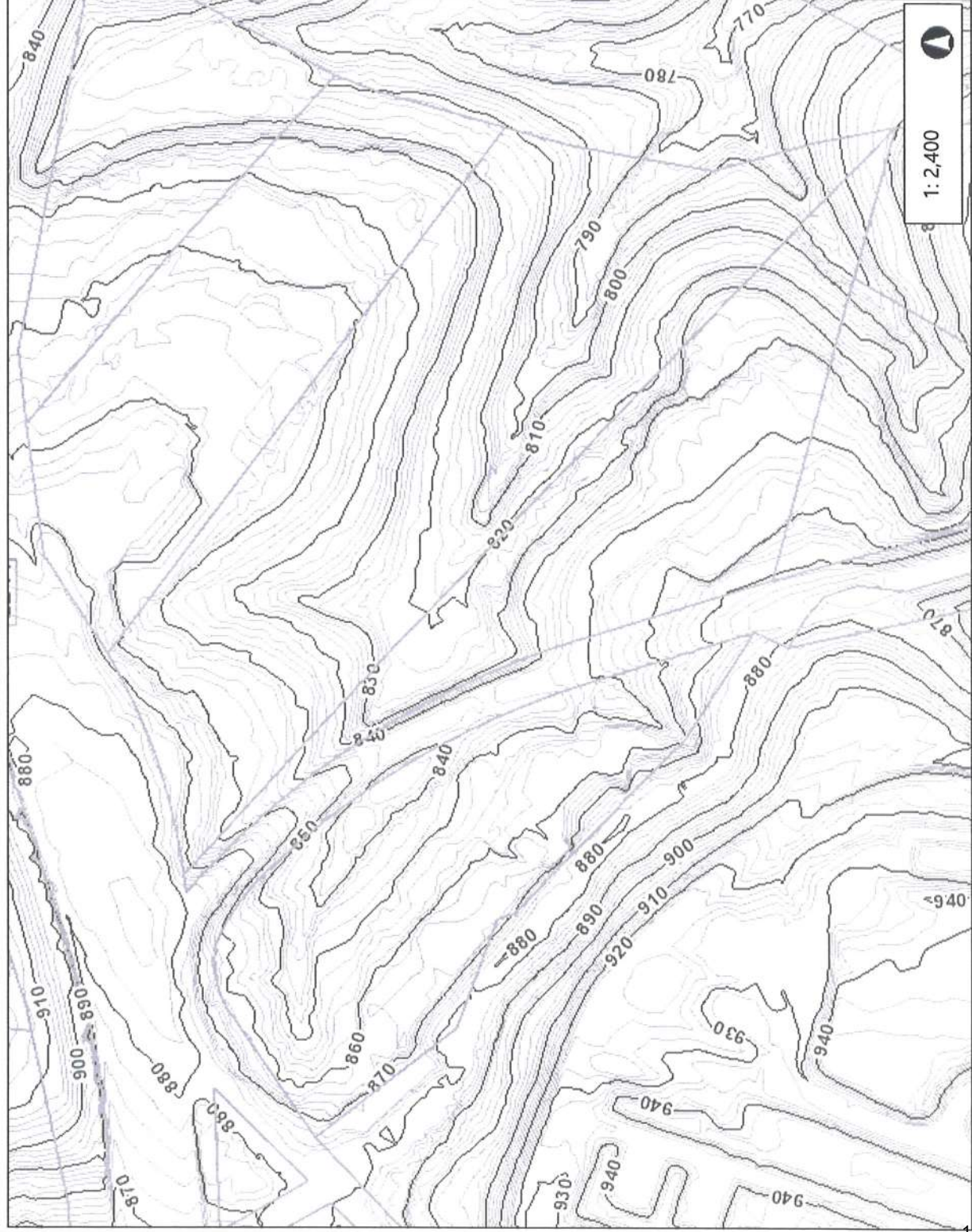
Imagery ©2018 Google, Map data ©2018 Google 100 ft

All Stor Westlake  
9021 FM 2244  
AP-2017-0478D  
Aerial photo





# Property Profile



1:2,400

## Legend

- Jurisdiction
  - FULL PURPOSE
  - LIMITED PURPOSE
  - EXTRATERRITORIAL JURISDICTION
  - 2 MILE ETJ AGRICULTURAL AGR
  - OTHER CITY LIMITS
  - OTHER CITIES ETJ
- TCAD Parcels
- Contours Year 2012
  - 2 Ft Contours
  - 10 Ft Contours

## Notes

9021 FM 2244

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey. This product has been produced by the City of Austin for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

0.1 Miles  
0 0.04 0.1  
NAD\_1983\_StatePlane\_Texas\_Central\_FIPS\_4203\_Feet  
Date Printed:



**PROPOSED LEGEND**

- MULCH SOCK
- LOC --- LIMIT OF CONSTRUCTION
- X--SF--X SILT FENCE
- RB--- ROCK BERM
- CSA CONTRACTOR STAGING AREA
- SCS STABILIZED CONSTRUCTION ENTRANCE

**SLOPE LEGEND**

- 0-15 %
- 15-25 %
- 25-35 %
- > 35 %

**NOTES:**

1. A PRE-CONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
2. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED.
3. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD EROSION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS.
4. CONTRACTOR SHALL UTILIZE DUAL CONTROL MEASURES DURING SITE CONSTRUCTIONS SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER EGS T.A.B.C. OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
5. SILT FENCE INSTALLATION SHALL COMPLY WITH ECA 1.5.4.0.
6. THE CONTRACTOR SHALL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY.

**BENCHMARK INFORMATION:**

BM #1: COTTON SPINDLE WITH "CHAPARRAL" WASHER SET IN ASPHALT NEAR THE EDGE OF THE EASTBOUND LANE OF BEE CAVE ROAD, APPROXIMATELY 50 FEET EAST OF CRYSTAL CREEK ROAD.

ELEVATION = 884.47'

BM #2: COTTON SPINDLE WITH "CHAPARRAL" WASHER SET IN ASPHALT ALONG THE NORTHEAST BOUNDARY LINE OF THE SUBJECT TRACT, NEAR THE SOUTH CORNER OF EXISTING BUILDING LOCATED AT 8947 BEE CAVE RD, AUSTIN, TX 78746.

ELEVATION = 857.01'  
VERTICAL DATUM: NAVD 88 (GEOID 128)

**SURVEY:**

TOPOGRAPHIC SURVEY BY CHAPARRAL SURVEYING, INC. DATED 06/05/2017 AND CITY OF AUSTIN GIS 2012 TOPO.

**CRITICAL ENV. FEATURES:**

W1 WETLAND  
S1 SEEP

**SLOPE TABLE**

ENTIRE PROPERTY		
SLOPE	AREA (SF)	AREA (AC)
0 - 15% SLOPE	147,813	3.39
15 - 25% SLOPE	100,408	2.30
25 - 35% SLOPE	52,283	1.20
35% + SLOPE	28,989	0.67
TOTAL AREA	329,488	7.564

NO. DATE REVISIONS  
THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON AN UNRECORDED SURVEY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

ALL STOR WESTLAKE  
9021 FM 2244, AUSTIN, TX 78764  
**EXISTING CONDITIONS, SLOPE  
MAP AND PREL. E&SC PLAN**

**CIVILITUDE**  
ENGINEERS & PLANNERS  
5110 LANCASTER COURT  
AUSTIN, TX 78723  
PHONE 512 761 6161  
FAX 512 761 6167  
WWW.CIVILITUDE.COM

SCALE: 1"=50' DGN. BY: JMS  
JOB NO. A248-001 DWN. BY: MAA

STATE OF TEXAS  
NHAAT M. HO  
118194  
05/25/2022  
SHEET NO. 3 OF 15



CURVE TABLE					
CURVE	RADIUS	DELTA	ARC	BEARING	CHORD
C1	766.31'	19°25'56"	259.90'	N68°40'18"E	258.66'
					(N68°14'16"E 259.09')

LINE TABLE			
LINE	BEARING	DISTANCE	RECORD INFO.
L1	S53°12'15"E	184.10'	(882°49'00"E 184.46')
L2	S48°03'03"E	69.02'	(547°20'30"E 68.98')

# ACCESSIBILITY NOTES:

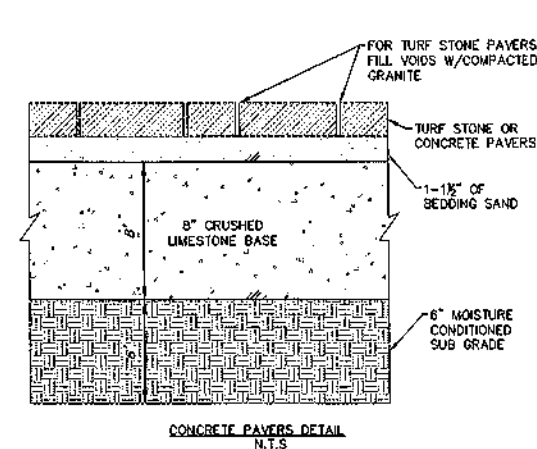
1. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATIONS ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS SUCH AS THE 2010 STANDARDS FOR ACCESSIBLE DESIGN OR THE 2012 TEXAS ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.

# NOTES:

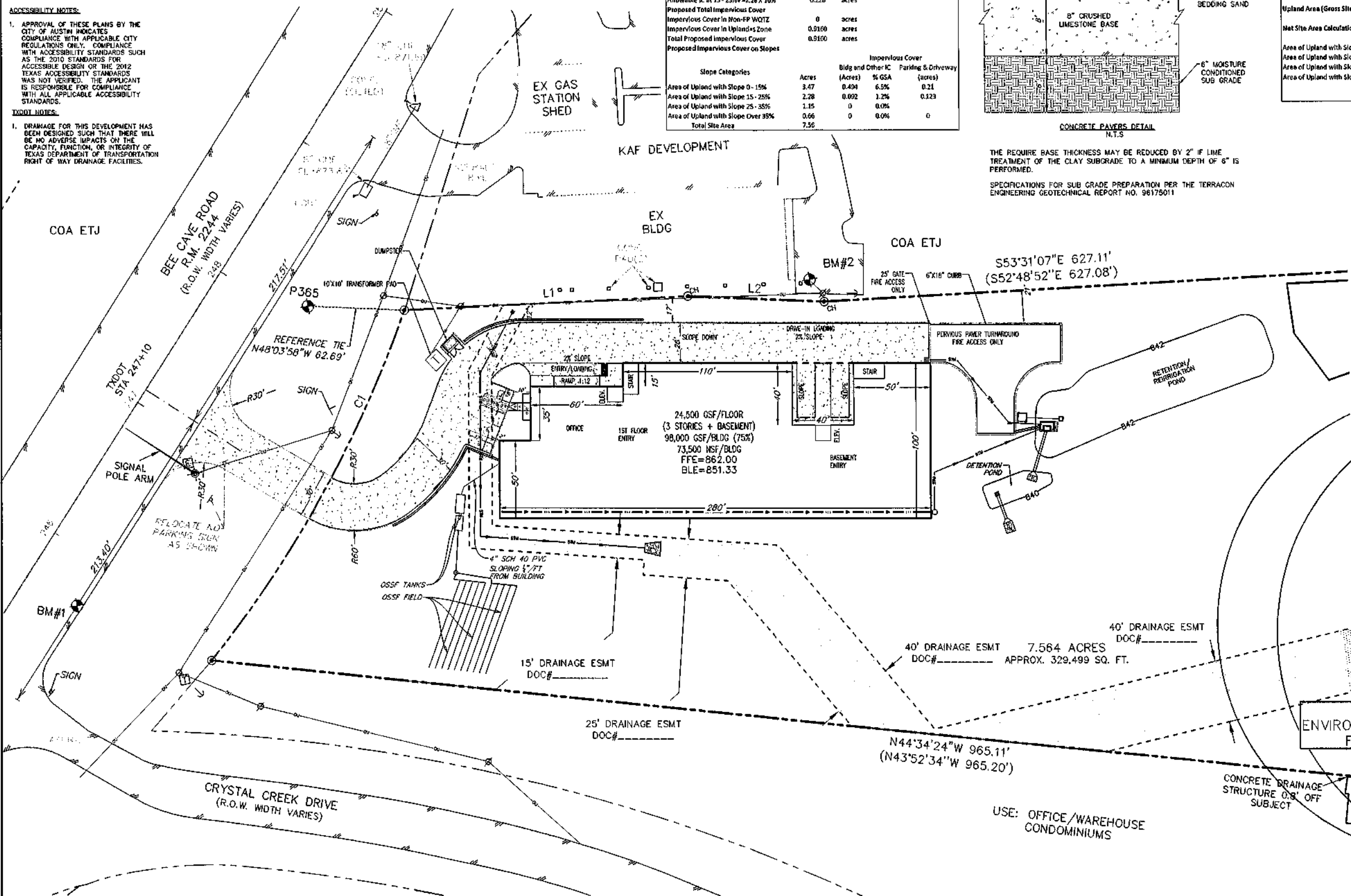
1. DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION, OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DRAINAGE FACILITIES.

Impervious Cover Table			
Use: Client/Service Storage			
	Existing	Proposed Removal	Proposed Addition
Building	-	-	24,500
Parking/Driveway	-	-	15,029
Stairs & Other	-	-	393
Total (Area)	-	-	40,733
Gross Site Area	229,499	52	7,564
Total (Percent)	0.00%	0.00%	12.36%

APPENDIX Q-2: IMPERVIOUS COVER			
Water Quality Transition Zone			
Water Quality Transition Zone Outside of 100 Floodplain (Non-FP WQTZ) = 0 Acres			
Allowable Impervious Cover			
Impervious Cover Allowed at 0.0% X Non-FP WQTZ = 0.0 Acres			
Impervious Cover Allowed at 10.0% X Net Site Area = 0.9224 Acres			
Total Impervious Cover Allowed			0.9224 Acres
Allowable Impervious Cover Breakdown by Slope Category			
Allowable IC at 15 - 25%v = 2.28 X 10%			0.228 acres
Proposed Total Impervious Cover			0.9100 acres
Impervious Cover in Non-FP WQTZ			0 acres
Impervious Cover in Uplands Zone			0.9100 acres
Total Proposed Impervious Cover			0.9100 acres
Proposed Impervious Cover on Slopes			
Slope Categories			
Area of Upland with Slope 0 - 15%	3.47	0.494	6.5%
Area of Upland with Slope 15 - 25%	2.28	0.092	1.2%
Area of Upland with Slope 25 - 35%	1.15	0	0.0%
Area of Upland with Slope Over 35%	0.66	0	0.0%
Total Site Area	7.56		



APPENDIX Q-1: NET SITE AREA		
Net Site Area is Only Applicable To		
Watersheds Classified As Barton Springs Contributing Zone		
Gross Site Area (GSA)	7.5640	Acres
Site Deductions		
Critical Water Quality Zone (CWQZ)	0.0	Acres
Water Quality Transition Zone (WQTZ)	0.0	Acres
Wastewater Irrigation Areas	0.037	Acres
Deduction Subtotal	0.037	Acres
Upland Area (Gross Site Minus Total Deduction)	7.5270	Acres
Net Site Area Calculation		
Area of Upland with Slope 0 - 15%	3.470	X 100 % = 3.470 Acres
Area of Upland with Slope 15 - 25%	2.280	X 40 % = 0.912 Acres
Area of Upland with Slope 25 - 35%	1.150	X 20 % = 0.230 Acres
Area of Upland with Slope Over 35%	0.660	X 0 % = 0.000 Acres
Net Site Area Total	4.612	Acres



EXISTING LEGEND	
	FIRE HYDRANT W/ GATE VALVE
	WATERLINE W/ GATE VALVE
	WATERLINE W/ DOUBLE SERVICE
	WATERLINE W/ SINGLE SERVICE
	STORM SEWER W/ MANHOLE
	STORM SEWER W/ CURB INLET
	GROUND CONTOUR
PROPOSED LEGEND	
	FIRE HYDRANT W/ GATE VALVE
	WATERLINE W/ GATE VALVE
	WATERLINE W/ DOUBLE SERVICE
	WATERLINE W/ SINGLE SERVICE
	WASTEWATER W/ CLEANOUT
	WASTEWATER W/ SINGLE SERVICE
	STORM SEWER W/ MANHOLE
	STORM SEWER W/ CURB INLET
	GROUND CONTOUR
	OVERHEAD UTILITY
	GAS LINE



NO. DATE

REVISIONS

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN BY AN APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

ALL STOR WESTLAKE

9021 FM 2244, AUSTIN, TX 78764

SITE PLAN

CIVILITUDE

ENGINEERS & PLANNERS

5110 LANCASTER COURT

AUSTIN, TX 78723

PHONE 512 761 6181

FAX 512 761 6167

INFO@CIVILITUDE.COM

SCALE: 1"=30'

DGN. BY: JMS

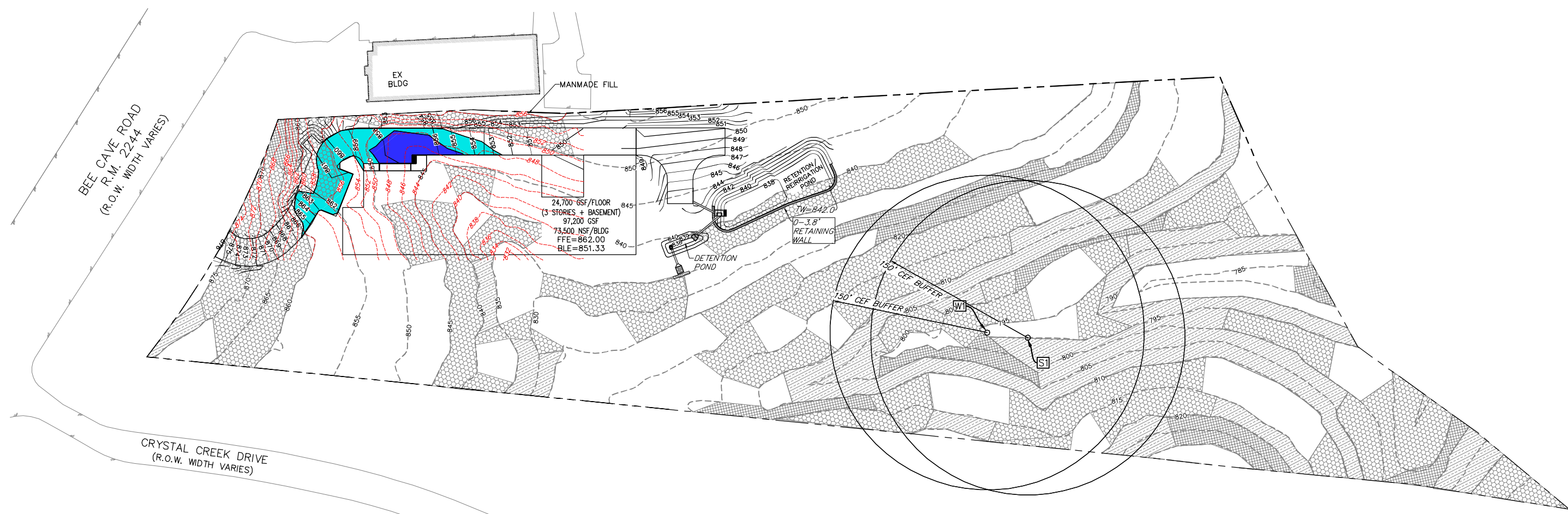
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SHEET NO.

5

OF 15

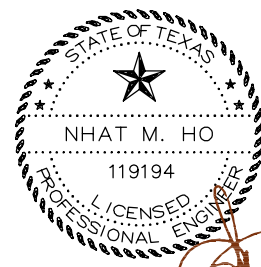
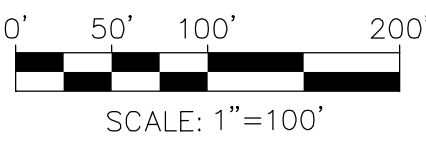


Elevations Table				
Number	Minimum Elevation	Maximum Elevation	Area (Ac)	Color
1	Fill 4.00	8.00	0.10	
2	Fill 8.00	11.00	0.035	

SLOPE TABLE		
ENTIRE PROPERTY		
SLOPE	AREA [SF]	AREA [AC]
0 - 15% SLOPE	164,953	3.79
15 - 25% SLOPE	97,171	2.23
25 - 35% SLOPE	49,084	1.13
35% + SLOPE	18,279	0.42
TOTAL AREA	329,488	7.564

SLOPE LEGEND

- 0-15 %
- 15-25 %
- 25-35 %
- > 35 %



ALL STOR WESTLAKE  
9201 FM 2244, AUSTIN TX 78746  
FILL EXHIBIT

**CIVILITUDE**  
ENGINEERS & PLANNERS  
5110 LANCASTER CT, AUSTIN, TX 78723  
PHONE 512 761 6161 FAX 512 761 6167  
FIRM REG# F-12469 INFO@CIVILITUDE.COM

SCALE: 1" = 100' ON 11X17  
DATE: 09/10/2018  
JOB NO: A248-001 SHEET 14.1 OF 1



5110 Lancaster Court Phone 512 761 6161  
Austin, Texas 78723 Fax 512 761 6167  
Firm Registration #12469 hello@civilditude.com  
www.civilditude.com

May 29, 2018

Environmental Commission  
Zoning and Platting Commission  
c/o Development Service Department  
505 Barton Spring Road  
Austin, Texas 78704

Re: Land Use Commission Variance – Fill Over 4 Feet  
All Stor Westlake, SP-2017-0478D  
9021 FM 2244  
Austin, Texas 78746

Dear Commissioners:

On behalf of our client, All Stor Westlake, Ltd., we are requesting a variance for fill over 4 feet for the construction of the access drive, parking, and fire lane for the All Stor Westlake Project in accordance with Section 25-8-41(A) of the Land Development Code (LDC). The Site Development Permit is to allow the construction of a convenience storage building, driveway, access drive, parking and fire lane on the 7.564-acre tract. Due to the steep slopes on the site, the impervious cover is limited to 12.1 percent of the tract. The site slopes from north to south, with the grades of the driveway from FM 2244 requiring that the access drive, parking and fire lane be raised to accommodate the grades of the driveway. The water quality for the development will meet the SOS requirements.

Below are the findings of fact for the variance:

1: The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development;

Whereas FM 2244 is the only access point for the property and the driveway slope is less than the ground slope to provide safe access to the site, the property can only be developed by filling the access drive, parking spaces and fire lane to match the elevation created by the driveway slope.

2. The variance is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;

The condition is not caused by the method chosen to develop the property because any development of the property would require a driveway to FM 2244 and the related grades required to provide a slope that does not exceed the City of Austin maximum slope requirements.

3. The variance is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property;

The variance is needed to provide safe access onto the property for any development to occur.



4. The variance does not create a significant probability of harmful environmental consequences;

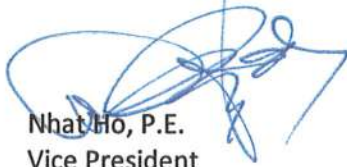
The fill allowed by the variance will be stabilized by retaining walls or 3:1 vegetated slopes to alleviate the probability of harmful environmental consequences.

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

The project will provide water quality that exceeds the SOS requirements by treating 108 percent of the runoff volume required.

Attached is an exhibit showing the location for the fill over 4 feet. We appreciate your favorable consideration of the fill variance. Please do not hesitate to contact me at 512-569-9830 if you have any questions.

Sincerely,



Nhat Ho, P.E.  
Vice President



# City of Austin Environmental Resource Inventory

**Bee Caves Road Tract  
Bee Caves Road at Crystal Creek Drive  
Austin, Travis County, Texas**

April 18, 2017

Terracon Project No. 96177135A



**Prepared for:**

Cerco Development, Inc.  
Austin, Texas

**Prepared by:**

Terracon Consultants, Inc.  
Austin, Texas

[terracon.com](http://terracon.com)

**Terracon**

Environmental



Facilities



Geotechnical



Materials

**ENVIRONMENTAL RESOURCE INVENTORY FORM  
FOR THE CITY OF AUSTIN  
RELATED TO LDC 25-8-121, CITY CODE 30-5-121, ECM 1.3.0 & 1.10.0**

**APPENDICES**

**APPENDIX A – ADDITIONAL DISCUSSION**

**APPENDIX B – EXHIBITS**

**APPENDIX C – SITE PHOTOGRAPHS**

**APPENDIX D – CREDENTIALS**

**APPENDIX E – GENERAL COMMENTS**

## Environmental Resource Inventory

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

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

1. SITE/PROJECT NAME: Bee Caves Road Tract
2. COUNTY APPRAISAL DISTRICT PROPERTY ID (#'s): 521558
3. ADDRESS/LOCATION OF PROJECT: Bee Caves Road at Crystal Creek Drive, Austin
4. WATERSHED: Barton Creek
5. THIS SITE IS WITHIN THE (Check all that apply)
 

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

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

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

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

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

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

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

8. There is a total of 5 (#s) Critical Environmental Feature(s)(CEFs) on or within 150 feet of the project site. If CEF(s) are present, attach a detailed **DESCRIPTION** of the CEF(s), color **PHOTOGRAPHS**, the **CEF WORKSHEET** and provide **DESCRIPTIONS** of the proposed CEF buffer(s) and/or wetland mitigation. Provide the number of each type of CEFs on or within 150 feet of the site (Please provide the number of CEFs):

2 (#'s) Spring(s)/Seep(s)      - (#'s) Point Recharge Feature(s)      - (#'s) Bluff(s)  
 - (#'s) Canyon Rimrock(s)      3 (#'s) Wetland(s)

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

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

All ERI reports must include:

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

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

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

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

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

Soil Series Unit Names, Infiltration Characteristics & Thickness		
Soil Series Unit Name & Subgroup**	Group*	Thickness (feet)
BID - (Appendix A for name)	D	0-4'
BoF - (Appendix A for name)	D	0-5'
TdF - (Appendix A for name)	D	0-1'

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

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

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

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

The 1988 U.S. Geological Survey (USGS) 7.5-Minute Topographic Map (Austin West, Texas Quadrangle) of the project site was reviewed. Based on the review of the USGS map, site elevation is depicted to be approximately 790-860 feet above mean sea level, with the site sloping southeast. The 1988 USGS map depicts a north-south oriented unnamed, tributary of Barton Creek, intermittent stream adjoining the site to the east. The map does not depict other surface waterbodies on or within 150 feet of the site boundary.

Continued in Appendix A...

**List surface geologic units below:**

Geologic Units Exposed at Surface		
Group	Formation	Member
Trinity Group	Upper Glen Rose Limestone(Kgru)	N/A

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

The site is located within the Edwards Aquifer Contributing Zone as mapped by the City of Austin Development Web Map. According to the Geologic Atlas of Texas, the site is underlain by Upper Glen Rose Limestone (Kgru). Kgru is characterized as limestone, dolomite, and marl in alternating resistant and recessive beds forming stairstep topography; limestone, aphanitic to fine-grained, hard to soft and marly, light-gray to yellowish-gray; dolomite, fine-grained, porous, yellowish-brown; marine megafossils include molluscan steinkerns, rudistids, oysters, and echinoids; upper part relatively thinner bedded, more dolomitic and less fossiliferous than lower part, thickness about 220 feet.

The Atlas did not depict any faults on or adjoining the site. A review of aerial photographs did not reveal lineations, which typically indicate the presence of faulting.

Continued in Appendix A...

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

There are 0 (#) wells present on the project site and the locations are shown and labeled

     (#'s) The wells are not in use and have been properly abandoned.

     (#'s) The wells are not in use and will be properly abandoned.

     (#'s) The wells are in use and comply with 16 TAC Chapter 76.

There are 2 (#s) wells that are off-site and within 150 feet of this site.

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

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

The Texas Parks and Wildlife Department's (TPWD) Ecological Mapping Systems – Omernik Ecoregions Level III, of the project site was reviewed. Based on a review of the TPWD ecological mapping, the site is located in the Edwards Plateau. TPWD describes the Edwards Plateau as grasslands, juniper/oak woodlands, and plateau live oak or mesquite savannah.  
Continued in Appendix A...

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

If yes, list the dominant species below:

Woodland species	
Common Name	Scientific Name
escarpment oak	Quercus fusiformis
southern red oak	Quercus falcata
ashe juniper	Juniperus ashei
eastern red cedar	Juniperus virginiana
common ligustrum	Ligustrum japonicum

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

If yes, list the dominant species below:

Grassland/prairie/savanna species	
Common Name	Scientific Name
bermuda grass	Cynodon dactylon
common greenbriar	Smilax bona-nox
Queen Anne's-Lace	Daucus carota
common dewberry	Rubus trivialis
agarita	Mahonia trifoliolata
prickly-pear	Opuntia stricta
ragweed	Ambrosia trifida

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

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

Hydrophytic plant species		
Common Name	Scientific Name	Wetland Indicator Status
common spikerush	Eleocharis palustris	Obl
common maiden-hair fern	Adiantum capillus-veneris	FACW

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

☐ YES ☒ NO (Check one).

**12. WASTEWATER REPORT** – Provide the information requested below.

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

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

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

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

☒ YES ☐ NO (Check one).

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

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

Wastewater lines are proposed within the Critical Water Quality Zone?

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

Is the project site is over the Edwards Aquifer?

☒ YES ☐ NO (Check one).

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

No effects are anticipated on the receiving watercourses or the Edwards Aquifer.

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

Date(s) ERI Field Assessment was performed: April 12, 2017

Date(s)

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

Jared Cobb

512.891.2606

Print Name

Telephone



jdobb@terracon.com

Signature

Email Address

Terracon Consultants, Inc.

April 18, 2017

Name of Company

Date

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

Professional  
Seal





## **APPENDIX A**

### **ADDITIONAL DISCUSSION**

**Surface Soils:**

BID – Brackett-Rock outcrop complex, 1 to 12 percent slopes

BoF – Brackett-Rock outcrop-Real complex, 8 to 30 percent slopes

TdF – Tarrant-Rock outcrop complex, 18 to 50 percent slopes

**Description of Site Topography and Drainage *Continued...***

The National Wetlands Inventory (NWI) Mapper V2 of the project site was reviewed to identify suspect wetland areas and waterbodies within the project site boundaries. The review of the NWI Mapper indicated the presence of one riverine area (R4SBC) adjoining the site to the east. This area is further described as an intermittent streambed that is seasonally flooded. The NWI mapper did not reveal other suspect wetlands or waterbodies on or within 150 feet of the project site.

Additionally, as mapped by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel No. 48453C0430J (Effective January 6, 2016), the project site is mapped outside the 100-year and 500-year floodplain zones and is in Zone X (unshaded).

Terracon accessed (April 6, 2017) the City of Austin (COA) Development Web Map to review previously identified Natural Features and setbacks within and adjoining the site. The review of the COA Development Web Map indicated the presence of six natural features and four setbacks/buffers. These areas are further described below:

- A creek (Object ID: 25809, Creek ID: 17655) is mapped adjoining the site to the west.
- A creek (Object ID: 15047, Creek ID: 8585) is mapped adjoining the site to the west.
- A creek (Object ID: 23541, Creek ID: 14944) is mapped transecting the southcentral portion of the site.
- A creek (Object ID: 27570, Creek ID: 20195) is mapped adjoining the site to the east.
- A wetland (Object ID: 456, Case Number: SP-05-1741D) is mapped adjoining the site to the northeast.
- A wetland (Object ID: 448, Case Number: SP-05-1741D) is mapped adjoining the site to the east.
- A biological resource buffer (Object ID: 187, Case Number: SP-05-1741D) is mapped adjoining the site to the northeast.
- A biological resource buffer (Object ID: 380, Case Number: SP-05-1741D) is mapped adjoining the site to the east.

## Environmental Resource Inventory (ERI)

Bee Caves Road Tract ■ Austin, Travis County, Texas

April 18, 2017 ■ Terracon Project: 96177135A



- A Critical Water Quality Zone (Object ID: 15637, Creek Buffer ID: 1237) is mapped adjoining the site to the east.
- A Water Quality Transition Zone (Object ID: 15788, Creek Buffer ID: 1388) is mapped adjoining the site to the east.

The COA Development Web Map did not reveal other features and/or buffers on or within 150 feet of the project site. For additional information please refer to the online COA Development Web Map (<http://www.austintexas.gov/GIS/developmentwebmap/Viewer.aspx>).

### Field Reconnaissance

During the site reconnaissance, Terracon assessed areas for CEF characteristics throughout the project site and identified three wetland CEFs and two spring/seep CEFs. Coordinate locations for each CEF area are listed in the above CEF Worksheet and are illustrated on Exhibit 2 in Appendix B. The CEF areas are further described below:

Wetland W-1 is dominated by common maiden-hair fern (*Adiantum capillus-veneris*), and common spike-rush (*Eleocharis palustris*) and displays saturation, water stained leaves, sediment deposits, and drift deposits. W-1 appears to be associated with creek (Object ID: 23541, Creek ID: 14944).

Spring/Seep S-1 displays some hydrophytic vegetation including common maiden-hair fern (*Adiantum capillus-veneris*). S-1 is located in the southcentral portion of the site.

Spring/Seep S-2 displays some hydrophytic vegetation including common maiden-hair fern (*Adiantum capillus-veneris*). S-1 is located adjoining the site to the east.

Wetlands W-2 and W-3 are dominated by common spike-rush (*Eleocharis palustris*) and displays saturation and water stained leaves. W-2 and W-3 appear to be associated with creek (Object ID: 27570, Creek ID: 20195). W-2 and W-3 were previously identified and indicated on the COA Development Web Map wetland (Object ID: 456, Case Number: SP-05-1741D) and wetland (Object ID: 448, Case Number: SP-05-1741D).

Terracon also observed creek (Object ID: 23541, Creek ID: 14944), and creek (Object ID: 27570, Creek ID: 20195). Upland vegetation was observed along the creeks' banks. Terracon did not observe other CEF areas within the project site.

### Description of Site Plant Communities *Continued...*

During the site visit, Terracon assessed areas that represented different vegetative communities throughout the project site to thoroughly review if these areas may exhibit hydrophytic vegetation. Upland vegetative communities were observed to be dominated by species including escarpment

## Environmental Resource Inventory (ERI)

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oak (*Quercus fusiformis*), southern red oak (*Quercus falcata*) ashe juniper (*Juniperus ashei*), eastern red cedar (*Juniperus virginiana*), common ligustrum (*Ligustrum japonicum*), Bermuda grass (*Cynodon dactylon*), ragweed (*Ambrosia trifida*), agarita (*Mahonia trifoliolata*), Queen Anne's-Lace (*Daucus carota*), erect prickly-pear (*Opuntia stricta*), dewberry (*Rubus trivialis*), Johnson grass (*Sorghum halepense*), wild onion (*Allium canadense*), greenbriar (*Smilax bonanox*), and wild grape (*Vitis rotundifolia*).

Hydrophytic plant species are listed above in the *Field Reconnaissance* section.

The overall vegetated cover associated with the site is an estimated 90 percent.

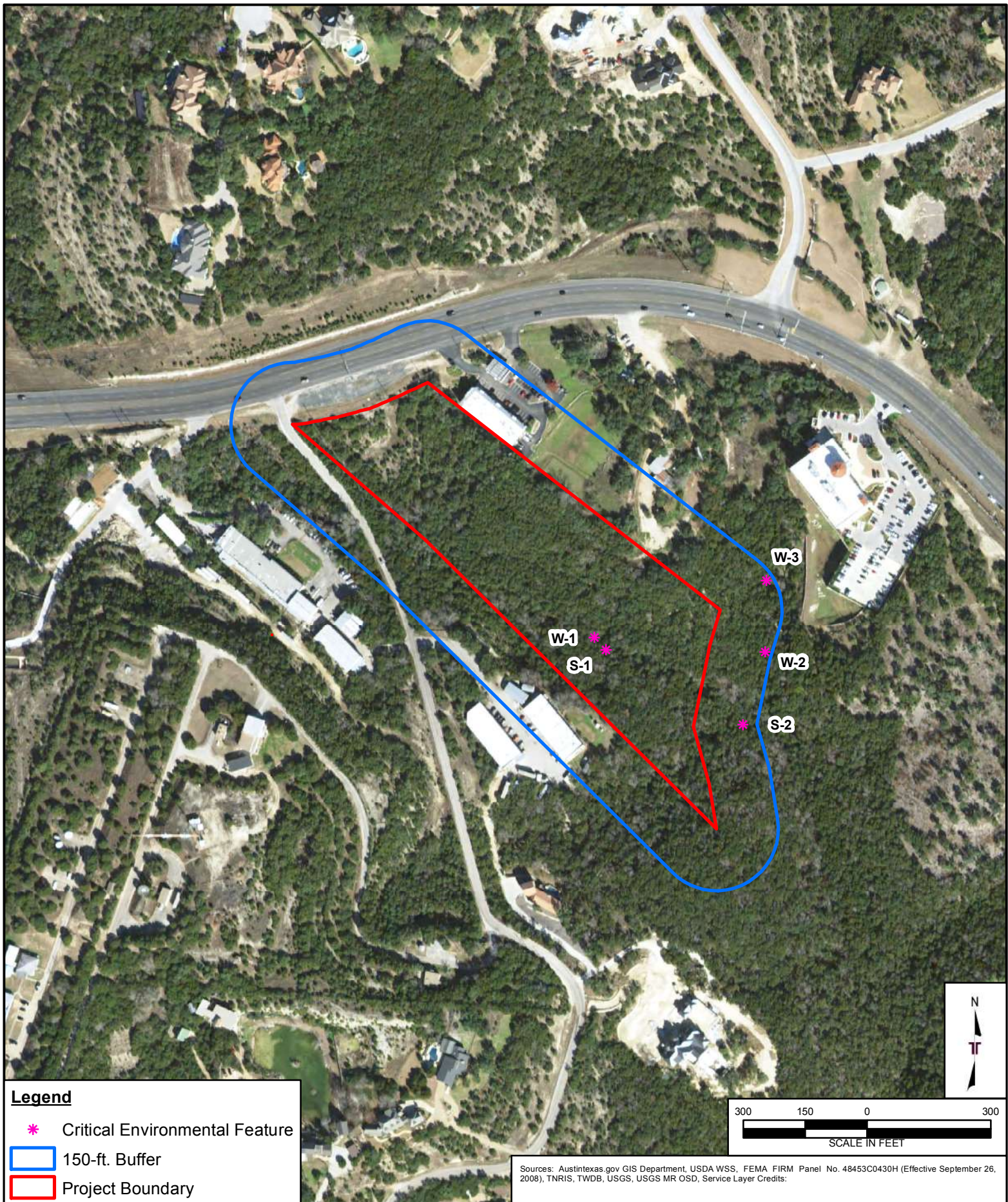
## **APPENDIX B**

### **EXHIBITS**









# Legend

- \* Critical Environmental Feature
- 150-ft. Buffer
- Project Boundary

Sources: Austintexas.gov GIS Department, USDA WSS, FEMA FIRM Panel No. 48453C0430H (Effective September 26, 2008), TNRIIS, TWDB, USGS, USGS MR OSD, Service Layer Credits:

Project Mngnr:	JC	Project No.:	96177135A
Drawn By:	Terracon	Scale:	AS SHOWN
Checked By:	JC	File No.:	96177135A
Approved By:	AS	Date:	Apr 14, 2017

**Terracon**  
Consulting Engineers & Scientists  
5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735  
PH. (512) 442-1122 FAX. (512) 442-1181

## Site 2015 Historic Aerial Photo and CEFs

Bee Caves Road Tract  
Bee Caves Road at Crystal Creek Drive  
Austin, Travis County, Texas

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## EXHIBIT

2





**Legend**

Project Boundary

USDA WSS Map Unit

Sources: Austintexas.gov GIS Department, USDA WSS, FEMA FIRM Panel No. 48453C0430H (Effective September 26, 2008), TNIRIS, TWDB, USGS, USGS MR OSD, Service Layer Credits:

Project Mngr:	JC
Drawn By:	Terracon
Checked By:	JC
Approved By:	AS
Project No:	96177135A
Scale:	AS SHOWN
File No.:	96177135A
Date:	Apr 5, 2017

**Terracon**  
 Consulting Engineers & Scientists  
 5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735  
 PH. (512) 442-1122 FAX. (512) 442-1181

USDA Site Soil Map

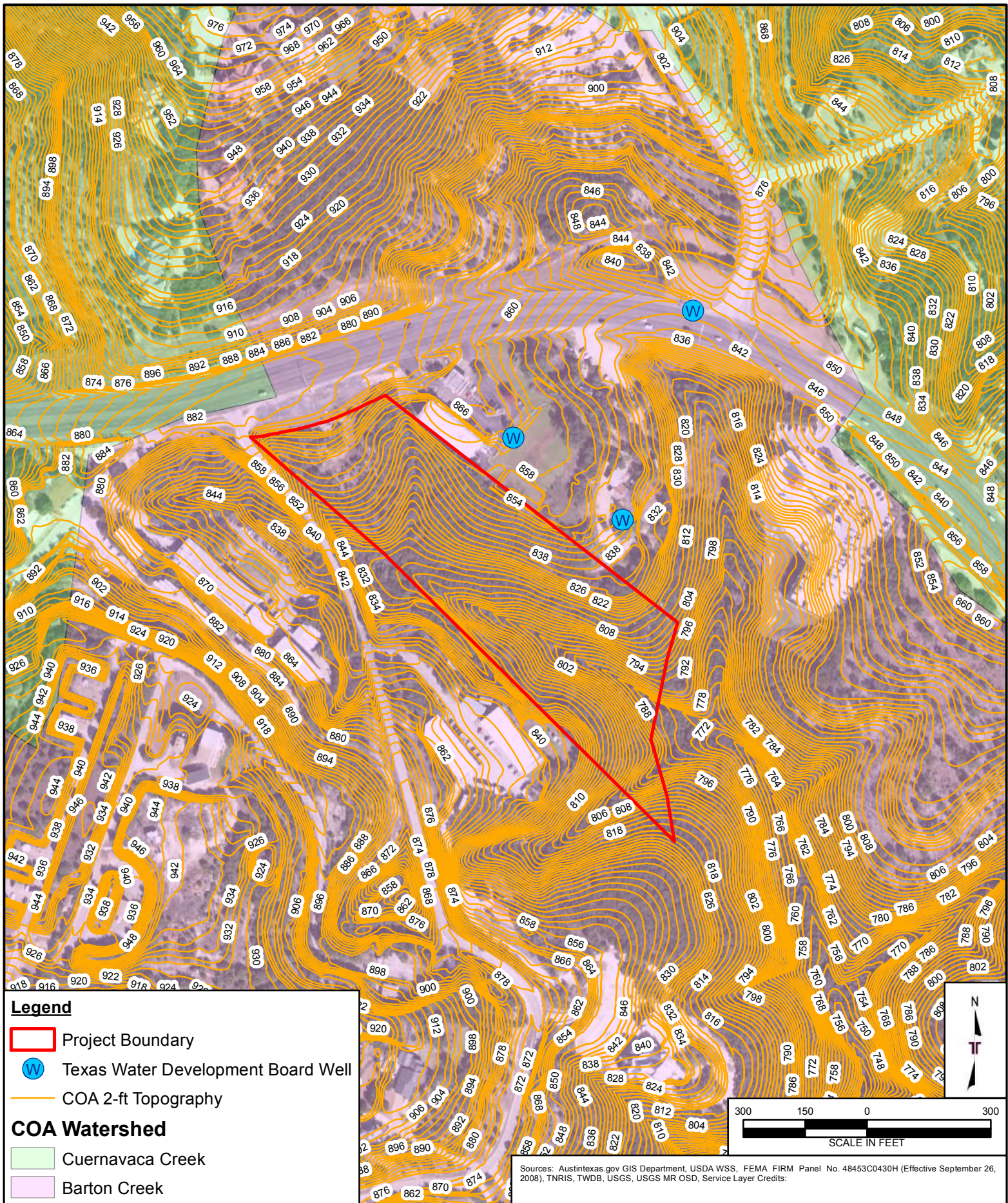
Bee Caves Road Tract  
 Bee Caves Road at Crystal Creek Drive  
 Austin, Travis County, Texas

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EXHIBIT

3





Project Mgr:	JC	Project No:	96177135A
Drawn By:	Terracon	Scale:	AS SHOWN
Checked By:	JC	File No.:	96177135A
Approved By:	AS	Date:	Apr 5, 2017

**Terracon**  
Consulting Engineers & Scientists  
5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735  
PH. (512) 442-1122 FAX. (512) 442-1181

Two Foot Topography and Wells
Bee Caves Road Tract Bee Caves Road at Crystal Creek Drive Austin, Travis County, Texas
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EXHIBIT
4





**Legend**

Project Boundary

**FEMA Floodplain Zone**

Floodway

100 Year

500 Year

X

Sources: Austintexas.gov GIS Department, USDA WSS, FEMA FIRM Panel No. 48453C0430H (Effective September 26, 2008), TNRIIS, TWDB, USGS, USGS MR OSD, Service Layer Credits:

Project Mngn:	JC	Project No:	96177135A
Drawn By:	Terracon	Scale:	AS SHOWN
Checked By:	JC	File No.:	96177135A
Approved By:	AS	Date:	Apr 5, 2017

**Terracon**  
Consulting Engineers & Scientists  
5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735  
PH. (512) 442-1122 FAX. (512) 442-1181

FEMA Floodplain Map

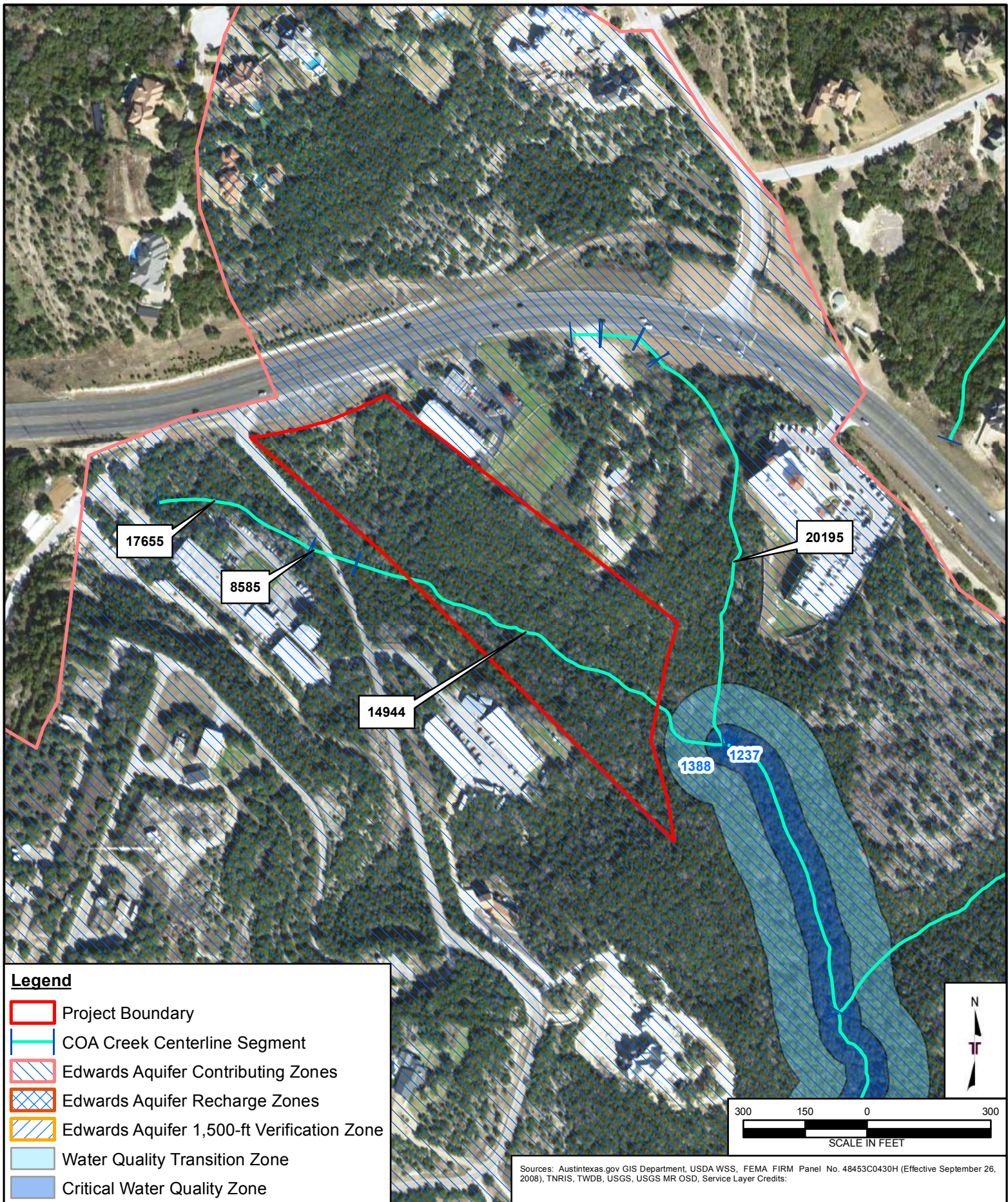
Bee Caves Road Tract  
Bee Caves Road at Crystal Creek Drive  
Austin, Travis County, Texas

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EXHIBIT

5





Project Mngr:	JC	Project No.	96177135A
Drawn By:	Terracon	Scale:	AS SHOWN
Checked By:	JC	File No.:	96177135A
Approved By:	AS	Date:	Apr 5, 2017

**Terracon**  
Consulting Engineers & Scientists  
5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735  
PH. (512) 442-1122 FAX. (512) 442-1181

Water Quality Zones

Bee Caves Road Tract  
Bee Caves Road at Crystal Creek Drive  
Austin, Travis County, Texas

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EXHIBIT

6



## **APPENDIX C**

### **SITE PHOTOGRAPHS**



**Photo 1** View of the north portion of the site.



**Photo 2** View of the south portion of the site.





**Photo 3** View of the east portion of the site.



**Photo 4** View of the west portion of the site.





**Photo 5** View of W-1.



**Photo 6** View of S-1.





**Photo 7** View of S-2.



**Photo 8** Typical view of W-2 and W-3.





**Photo 9** View of creek (Object ID: 23541, Creek ID: 14944).



**Photo 10** View of creek (Object ID: 27570, Creek ID: 20195).

## **APPENDIX D CREDENTIALS**

# JARED COBB

## STAFF SCIENTIST

### PROFESSIONAL EXPERIENCE

Mr. Cobb is a Staff Scientist working in the Environmental Department of Terracon's Austin, Texas office. Mr. Cobb has three years of experience as an environmental consultant regarding natural and cultural resources and ArcGIS spatial data.

Mr. Cobb completed two internships with Terracon before joining the firm full time. The first internship was comprised of working in the construction materials testing laboratory. The second internship was with the Natural Resources division. He assisted the Natural Resources team with wetland determinations and environmental assessments. Mr. Cobb is proficient in GIS and other tools used in wetland determinations.

He is also knowledgeable in writing technical reports pursuant to City of Austin Environmental Resources Inventory (ERI) Regulations, National Environmental Policy Act (NEPA), the Clean Water Act and the Rivers and Harbors Act, Environmental Assessments (EA), Categorical Exclusions (CE), Environmental Site Assessments (ESA), Storm Water Pollution Prevention Plans (SWPPP), Wetland Mitigation Plans and U.S. Army Corps of Engineers (USACE) Section 404 Permits.

Mr. Cobb has provided services to private industry and public sector clients both locally and throughout the nation.

### PROJECT EXPERIENCE

#### MX3 Homes – Austin, Texas

Performed and wrote a City of Austin Environmental Resources Investigation. Assessed 12 tracts of land (approximately 6 acres) for critical environmental features, including wetlands, rimrock, bluffs, recharge features, seeps and springs to assist client in feasibility of proposed residential development.

#### Austin Achieve Charter School – Austin, Texas

Performed and wrote a City of Austin Environmental Resources Investigation. Assessed approximately 25 acres for critical environmental features, including wetlands, rimrock, bluffs, recharge features, and seeps.

#### Cypress Creek Renewables, LLC - Texas and North Carolina

Performed Waters of the U.S. (WOUS) delineations and determinations for proposed solar farm sites around Texas and North Carolina. Assisted writing and submitting Jurisdictional Determination (JD) packages to various USACE Districts including Fort Worth, Galveston, Tulsa, and Wilmington. Coordinated with USACE in obtaining final determinations.

#### Montgomery County Community Development (Neighborhood Development) – Willis, Texas

Prepared an Environmental Assessment (EA) document pursuant to the NEPA required by the U.S. Department of Housing and Urban Development (HUD) and Texas Department of Housing and Community

### Education

*Bachelor of Science, Agriculture, 2011, Texas A&M University*

*Wetland Delineation Training Class – Richard Chinn Environmental Training, Inc.*

*Associates of Science, 2009, Lone Star College*

### Certification

*U.S. Army Corps of Engineers Wetland Delineation Manual Program Training*

*TXDOT Pre-certified:*

*2.3.1 – Wetland Delineation*

*2.4.1 – Nationwide Permit*

*2.4.2 – §404 (Title 33, United States*

*Code §1344) Individual Permits*

*2.6.1 – Protected Species Determination (Habitat)*

### Affiliations

*Real Estate Council of Austin (RECA)*

*Young Professionals in Transportation (YPT) Austin Chapter*

*Society of American Military Engineers (SAME), 2013-2014 Environment Committee; Young Members (YM) Group; Wetlands Workshop Chair*

*North Houston Association (NHA) – Environment Committee*

*Texas Association of Environmental Professionals (TAEP) Young Environmental Professionals (YEP)*

### Work History

*Terracon, Staff Scientist, September 2013-Present*

*Terracon, Field Scientist, June 2012-September 2013*

*Terracon, Summer Internship, May 2011 - August 2011*

*Texas A&M University, Student Farmer, February 2011 – May 2012*



Affairs (TDHCA) for a proposed housing and community development and performed site visit and GIS map-making and analysis.

### **West Independent School District – West, Texas**

Explosion. Assisted with writing and creating FEMA EA documents and exhibits. Also assisted with USFWS consultation on threatened and endangered species and their habitat.

### **Advanced Services, Inc. (Austin-Bergstrom International Airport) – Austin, Texas**

Assisted in writing an EA and wrote corresponding NEPA document for a proposed Fixed Base Operator Facility as part of an airport expansion project at the Austin-Bergstrom International Airport (ABIA) pursuant to Federal Aviation Administration (FAA) compliance requirements; performed site visit including a Threatened and Endangered Species/Migratory Bird Species Habitat Assessment and GIS map-making and analysis; published a public notice of the proposed project; concluded with a Finding of No Significant Impact.

### **Lone Star Circle of Care – Bastrop, Texas**

Wrote an environmental assessment document pursuant to the National Environmental Policy Act (NEPA) required by the Health Resources and Services Administration (HRSA) for a proposed community health center and performed site visit and GIS map-making and analysis.

### **Montgomery County Community Development (Health Center) – Conroe, Texas**

Wrote an environmental assessment document pursuant to NEPA required by the HUD and TDHCA for a proposed community health center and performed site visit and GIS map-making and analysis.

### **Leander Fire Department – Leander, Texas**

Prepared a Phase I Environmental Site Assessment (ESA) on approximately 2.5 acres of undeveloped land. Performed field reconnaissance, site owner interview and historic data research to identify Recognized Environmental Conditions for a proposed Fire Station.

### **The Urban Companies – Houston, Texas**

Prepared a Phase I Environmental Site Assessment (ESA) on approximately 4.6 acres of undeveloped land. Performed field reconnaissance, site owner interview and historic data research to identify Recognized Environmental Conditions.

## **EDUCATIONAL EXPERIENCE**

### **Horticulture Bachelors of Science – Texas A&M University**

Program focused on horticulture and engineered landscaping. Coursework included Plant Identification, Plant Physiology, Entomology, Plant Pathology, Soil Science, Genetics, Physics, Organic Chemistry, and Chemistry. Field experience in the Brazos County focused on sustainable farming and maintaining botanical gardens.

### **Wetland Delineation Training Class – Richard Chinn Environmental Training, Inc.**

Focused on the three criteria of wetlands. Program concentrated on the 1987 COE Wetlands Delineation Manual and the Atlantic Gulf Coastal Plain Regional Supplement with both classroom and field components.

### **Associate of Applied Science – Lone Star College**

Degree focusing on general Biology, Chemistry, Physics and Computer Sciences with classes in math and English.

## **ADDITIONAL SKILLS**

Experience with ArcGIS 2010, USACE Galveston Wetland Functional Assessments, USACE Galveston Stream Functional Assessments, COA FAFH tool, and Microsoft Office

## **APPENDIX E**

### **GENERAL COMMENTS**

The City of Austin (COA) Environmental Resource Inventory (ERI) was performed in accordance with generally accepted scientific and engineering evaluation practices of this profession undertaken in similar studies at the same time and in the same geographical area. The limitations of this ERI should be recognized.

In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. The scope of this ERI was conducted in general accordance with the City of Austin's Land Development Code (LDC), Section 25-8-121 (A), and the City of Austin Title 30-5. The service's scope is not intended to be compliant or consistent with the State of Texas Edwards Aquifer Rule (30 TAC 213, Subchapter B; pertaining to Travis County, Texas) or the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program. Field identification of Critical Environmental Features (CEFs) as defined by the COA can be seasonally influenced. Due to seasonal changes, Terracon cannot guarantee areas to exhibit or not to exhibit CEF characteristics at all times of the year.

CEF wetlands were evaluated using the USACE 1987 Manual and Great Plains Regional Supplement. The manuals provide assistance for identifying wetlands based on the three criteria discussed. However, the manuals alone may not have provided enough information to document whether or not the three criteria were met. Various physical properties or other visual signs used to evaluate whether the three wetland identification criteria areas were satisfied may not be straightforward, especially in disturbed or problem areas. The manuals also allow the user to visually estimate certain indicators, such as the percentage of area covered by dominant species for the entire community. Terracon did not attempt to identify every plant species and did not classify soil types by laboratory methods.

This report is for the exclusive use of the client and any relying government entities for the project being discussed. No warranties, either expressed or implied, are intended or made.