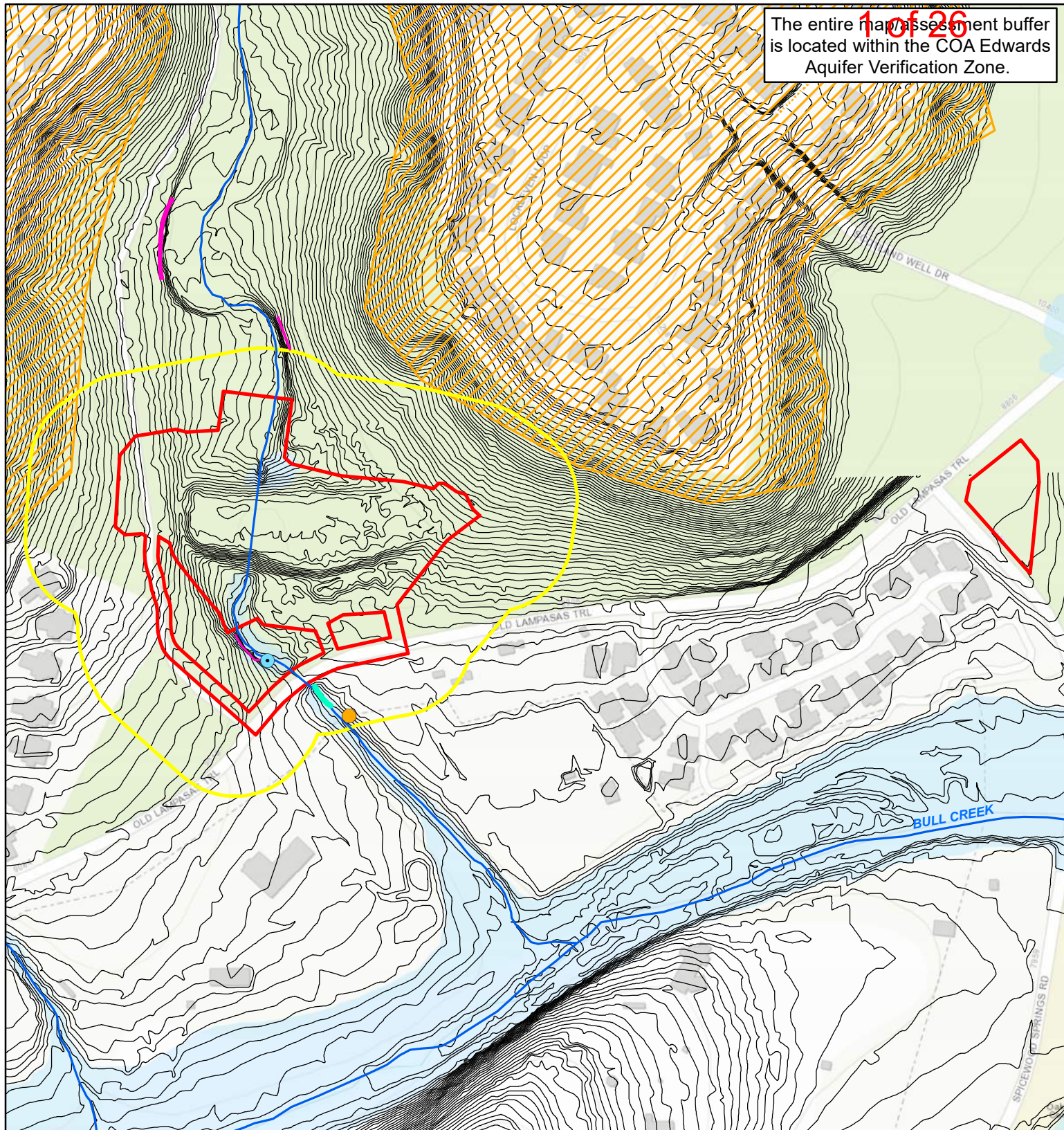
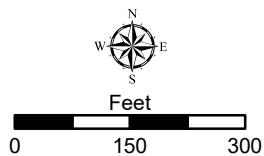


1 of 26
The entire map/assessment buffer is located within the COA Edwards Aquifer Verification Zone.



- Baer-identified Seep CEF
- Baer-identified Spring CEF
- COA Elevation Contour (2-ft)
- Baer-identified Wetland CEF
- Baer-identified Rimrock CEF
- COA Edwards Aquifer Recharge Zone
- FEMA 100-year Floodplain

- Proposed Limits of Construction
- Assessment Area (150-ft)



Baer Project No. 112009.02
Date: March 14, 2019

TBPE Firm No. F-3181 TBPG Firm No. 50030
Base Map: World Topographic Map

Figure 4
Topographic Map with
2-ft Contours and CEFs

Old Lampasas #3 Dam
Rehabilitation for Dam on
Tributary to Bull Creek



Baer Engineering
and Environmental Consulting, Inc.



Jennifer Lueckemeyer <jlueckemeyer@baereng.com>

Old Lampasas Dam - ERI waiver

Kimberly Patak <KKP@freese.com>

Mon, Oct 15, 2018 at 1:44 PM

To: Jennifer Lueckemeyer <jlueckemeyer@baereng.com>

Cc: Will Huff <Will.Huff@freese.com>

Jennifer –

Attached is correspondence from the City re: the ERI waiver that they anticipated providing for the project back when it was called an Environmental Assessment. Hopefully this will help our case. - K

Kimberly K Patak, P.E., CFM, ENV SP

Associate - Water Resources Design

Freese and Nichols, Inc.

10431 Morado Circle, Bldg. 5, Ste. 300

Austin, TX 78759

512-617-3100 office

512-617-3138 direct

512-917-4069 mobile

www.freese.com

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----- Forwarded message -----

From: "Acosta, Eduardo" <Eduardo.Acosta@ci.austin.tx.us>

To: Kimberly Patak <KKP@freese.com>

Cc: "Henry, Andrea" <Andrea.Henry@ci.austin.tx.us>

Bcc:

Date: Mon, 14 Feb 2011 16:58:34 +0000

Subject: environmental assessment waiver for Old Lampasas #3 (park at spicewood)

Please see the environmental assessment waiver below. Also, Sylvia located the rimrock CEF and has generated a GIS shapefile. I am in the process of having it copied to our server and can share with FNI once obtained.

From: Clamann, Andrew
Sent: Monday, February 14, 2011 8:39 AM
To: Pope, Sylvia; Acosta, Eduardo
Cc: Henry, Andrea
Subject: RE: park at spicewood ERM comments

Yes, I'll save Sylvia some time and provide the formal waiver now:

Based on the observations of a site visit by both Sylvia Pope and Andrew Clamann, and based on proposed project information provided during the site visit, a waiver to the requirement for an Environmental Assessment can be provided as per LDC 25-8-121 and ECM1.3.0(A)(7). Although the waiver for the Environmental Assessment is being provided, recommendations/requirements may still be provided by both the ERM Hydrogeologist and Wetland Biologist during review. FYI, although no wetland CEFs were observed, rimrock CEFs were identified in the Zone of Influence. Rimrock CEFs and CEF setbacks should be shown on site plans, labeled "Rimrock Critical Environmental Feature" and "Critical Environmental Feature Setback".

To avoid confusion during completeness check, please print a hard copy of this correspondence as documentation of the approved waiver for an EA, and included it in the application packet. If there is a cover letter or engineer's summary, please refer to the waiver within. Sylvia Pope and Andrew Clamann should be included in review process.

Thanks,

Andrew Clamann

Environmental Scientist

City of Austin, Watershed Protection

(512) 974-2694

andrew.clamann@ci.austin.tx.us

From: Pope, Sylvia
Sent: Sunday, February 13, 2011 4:59 PM
To: Acosta, Eduardo
Cc: Henry, Andrea; Clamann, Andrew; Pope, Sylvia
Subject: RE: park at spicewood ERM comments

I believe that it does. Once Andrew Clamann confirms that it does, I can send you a more formal waiver.

What say you, Andrew?

Sylvia R. Pope, P.G.

Hydrogeologist

City of Austin

Watershed Protection Department

Environmental Resources Management Division

Water Resources Evaluation Section

512-974-3429 Phone

512-802-7366 Pager

512-974-2846 Fax

From: Acosta, Eduardo
Sent: Friday, February 11, 2011 4:32 PM
To: Pope, Sylvia
Cc: Henry, Andrea
Subject: RE: park at spicewood ERM comments

Sylvia, Based on your review of site, does this site qualify for an environmental assessment waiver?

From: Pope, Sylvia
Sent: Thursday, January 06, 2011 4:50 PM
To: Acosta, Eduardo
Cc: Pope, Sylvia; Johns, David; Peacock, Ed
Subject: RE: park at spicewood ERM comments

Eduardo, Here's an unsigned memo on the Park at Spicewood project. I'll bring you a signed copy tomorrow. Please let me know if you want me to send a shapefile of the rimrock.

Sylvia R. Pope, P.G.

Hydrogeologist

City of Austin

Watershed Protection Department

Environmental Resources Management Division

Water Resources Evaluation Section

512-974-3429 Phone

512-802-7366 Pager

512-974-2846 Fax

From: Acosta, Eduardo
Sent: Thursday, January 06, 2011 1:27 PM
To: Pope, Sylvia
Subject: FW: park at spicewood

Sylvia, did you have any comments to supply from our creekwalk for the Park at Spicewood Springs. I am resending the 100 year flood plain we had prepared for you.

From: Acosta, Eduardo
Sent: Monday, December 06, 2010 11:57 AM
To: Pope, Sylvia
Subject: Fw: park at spicewood

From: Harper, Bond
Sent: Friday, November 19, 2010 05:08 PM
To: Acosta, Eduardo
Cc: Pope, Sylvia
Subject: RE: park at spicewood

Please see attached.

Bond A. Harper

Watershed Engineering

City of Austin


(512) 974-2829

From: Acosta, Eduardo
Sent: Friday, November 19, 2010 4:13 PM
To: Harper, Bond
Cc: Pope, Sylvia
Subject: park at spicewood

Bond, can you prepare a map that shows the 100 year inundation area for the park at spicewood dam? Thanks.

Eduardo Acosta, P.E., CFM, LEED AP
Stormwater Pond Safety Program Manager
Watershed Engineering Division
(512)974-3008

Please consider the environment before printing this message.

 **noname.eml**
35K [View as Text](#) [Download](#)

ATTACHMENT 14
CEF ADMINISTRATIVE VARIANCE

**Watershed Protection Department
Administrative Variance Form
Findings of Facts**

For the City of Austin

Related to LDC 25-8-42 and 25-8-281 or City Code 30-5-42 and 30-5-281

GENERAL SITE INFORMATION:

1. SITE/PROJECT NAME: Old Lampasas #3 Dam Modernization
2. COUNTY APPRAISAL DISTRICT PROPERTY ID No.: Travis County Property IDs: 164674, 164673
3. ADDRESS/LOCATION OF PROJECT: 9022 Old Lampasas Trail, Austin, TX 78750
4. WATERSHED: Bull Creek
5. THIS SITE IS WITHIN THE (Check All that Apply):
 EDWARDS AQUIFER RECHARGE ZONE: _____ ☐ YES* ☒ NO
 EDWARDS AQUIFER CONTRIBUTING ZONE: _____ ☐ YES* ☒ NO
6. CRITICAL ENVIRONMENTAL FEATURES (CEFs) are present on site (please provide a number):

<u>1</u> Spring(s)/Seep(s) _____ Canyon Rimrock(s) _____ Bluff(s)	_____ Point Recharge Feature(s) _____ Wetland(s) <u>1</u> Total Number of CEF(s) on Site
---	--

One (1) additional spring, one (1) wetland, and three (3) rimrocks are within 150-ft of the Site work area. The spring outfall (S-3) is described as a CEF, not the identified subterranean origin points.

7. IDENTIFY WHICH CEF(s) ARE REQUESTING THE VARIANCE(s):

CEF TYPE: <u>Rimrock</u>	CEF ID NO. <u>206529; 206530; 270</u>
CEF TYPE: <u>Spring</u>	CEF ID NO. <u>206531; 206532</u>

8. X ATTACH CEF LOCATION MAP AND CRITICAL ENVIRONMENTAL WORKSHEET

VARIANCE FROM (CHECK ALL THE APPLY):

- ☐ LDC 25-8-281(A) or City Code 30-5-281(A) - Drainage patterns for proposed development must be designed to protect critical environmental features from the effects of runoff from developed areas, and to maintain the catchment areas of recharge features in a natural state. Special controls must be used where necessary to avoid the effects of erosion, or sedimentation, or high rates of flow.
- ☐ LDC 25-8-281(B) or City Code 30-5-281(B) – A residential lot may not include a critical environmental feature or be located within 50 feet of a critical environmental feature.
- ☒ LDC 25-8-281(C)(1)(a) or City Code 30-5-281(C)(1)(a) - The width of the buffer zone is 150 feet from the edge of the critical environmental feature (does not apply to recharge features or wetlands) *
- ☐ LDC 25-8-281(C)(1)(b) or City Code 30-5-281(C)(1)(b) - The buffer zone coincides with the topographically defined catchment basin, except that the width of the buffer zone from the edge of the critical environmental feature is: not less than 150 feet; (ii) not more than 300 feet; and (iii)

calculated in accordance with the Environmental Criteria Manual (*Point Recharge Features Only*) *.

- ☒ LDC 25-8-281(C)(2) or City Code 30-5-281(C)(2) – Within a buffer zone described in this subsection: (a) the natural vegetative cover must be retained to the maximum extent practicable; (b) construction is prohibited; and (c) wastewater disposal or irrigation is prohibited.
- ☐ LDC 25-8-281(C)(3) or City Code 30-5-281(C)(3) - If located at least 50 feet from the edge of the critical environmental feature, the prohibition of Subsection (C)(2)(b) does not apply to: (a) a yard or hiking trail; or (b) a recharge basin approved under LDC [25-8-213](#) (*Water Quality Control Standards*) that discharges to a point recharge feature: (c) an innovative runoff management practice approved under LDC [25-8-151](#) (*Innovative Management Practices*).
- ☐ LDC 25-8-281(C)(4) or City Code 30-5-281(C)(4) - Perimeter fencing with not less than one access gate must be installed at the outer edge of the buffer zone for all point recharge features. The fencing must comply with the Standard Specifications Manual.
- ☐ LDC 25-8-281(C)(5) or City Code 30-5-281(C)(5) - The owner must maintain the buffer zone in accordance with standards in the Environmental Criteria Manual to preserve the water quality function of the buffer.

***Administrative Variances do not apply to projects that seek a reduction of the Critical Environmental Feature (CEF) buffer of less than 50-ft for a point recharge feature, a spring and a seep. Such variances are formal land use commission variances (See LDC 25-8-41 or City Code 30-5-41). Wetland buffer modification and reductions are not variances (LDC 25-8-282 or City Code 30-5-282).**

The director of the Watershed Protection Department may grant a variance described in Subsection (B) only after determining that development in accordance with the variance meets the objective of the requirement for which the variance is requested. In regards to critical environmental features, the minimum standard for the conservation of and the development around a CEF is:

- To prevent loss of recharge to localized aquifers supplying local seeps and springs essential to the maintenance of the ecosystem and the base flow and water quality of many of Austin's creeks; and
- To prevent loss of recharge to the Edwards Aquifer and to protect the quality of the recharge to the Edwards Aquifer.
- To maintain and/or enhance the baseflow quantity and water quality in watercourses to maximum extent possible.
- To reduce existing and future pollutant loads in watercourses to the maximum extent possible.

Please provide a written response to following questions explaining how the above standards will be met (Check 'X' for which questions apply).

1. ____ For a property in the Barton Springs Zone, the granting of the variance will result in water quality that is at least equal to the water quality achievable without the variance.

2. X For variance(s) from Section [25-8-281](#), which are indicated above, the proposed protective measures proposed with the variance will preserve all characteristics of the critical environmental feature at least equal to the water quality and quantity and achievable without the variance.

A goal of this project is to protect the water quality of the Bull Creek watershed by rehabilitating the project dam. The grading of the replacement dam with three-to-one vegetated slopes is intended to reduce sediment runoff compared to the current uneven, eroding boulder slopes.

Construction limits are planned to be greater than 50 feet from rimrock CEFs brg_id 270 and RR-2, and spring CEF S-1. CEF buffers for the spring CEFs S-3 and S-2, rimrock RR-1, and wetland W-1 would be disturbed.

One spring (S-3) flows out from beneath the existing dam and must be excavated for the safety of the replacement structure. This spring outlet has two origin points within the natural creek embankment that were identified using geophysical methods, and no excavation is proposed within the natural embankment. Flow from the spring origins is planned to be guided within a constructed drainage system designed for use as habitat by Jollyville Plateau Salamanders, a listed threatened species present at the site. By preventing springflow from transporting fill material from the dam, this system would reduce or eliminate sedimentation that is adversely affecting the creek and downstream CEFs.

A storm water pollution and prevention plan (SWPPP) would be implemented and maintained during construction to reduce impacts from stormwater runoff. The SWPPP would include a range of erosion and sedimentation control best management practices (BMPs) that are intended to maintain water quality, including:

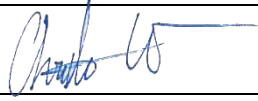
- Erosion blankets and matting for non-embankment areas outside of 2-year floodplain;
- Mulch filter berms and socks throughout the construction site;
- Mulch along dam embankment slope and bounded by mulch socks to prevent debris from entering aquatic habitat;
- Perimeter silt fence to reduce wildlife incursions;
- Sod and seeding for permanent stabilization on embankment;
- Revegetation following COA Standard Specification 604S, for permanent stabilization in all other areas;
- Bypass system for upstream water to divert around the work areas; and
- Severe service rock berms (i.e., rock berms wrapped in filter fabric) downstream of the work areas.

BMPs would be regularly inspected and maintained, and an environmental inspector with Stop Work Authority will be on site to monitor construction.

During Phase 1 of construction, the area at the spring outlet would be cordoned off, no work would take place in this area, and the buried spring would flow undisturbed and unchanged to the tributary. If there were a sudden loss of spring flow because of construction activity during this phase, then work would stop to determine a remedy. Phase 2 of construction, within the area of the spring at the dam, would proceed only while the spring and creek are dry.

The southern construction entrance is an existing compacted dirt trail. The staging/spoils area will be accessed by two stabilized construction entrances and bordered by mulch socks to prevent erosion and sedimentation. This area will be revegetated according to COA 609S Seeding and Planting Specification. At the completion of construction, the stabilized construction entrance will be replaced with a reinforced concrete maintenance drive on the west side of the dam. Plantings will be added to the eastern side of the drive to serve as a vegetated filter before runoff reaches the creek and rimrock CEF.

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities.

Print Name: Christen Warkoczewski		Telephone: 512-453-3733
Signature: 		Email: cwarkoczewski@baereng.com
Representing: Baer Engineering and Environmental Consulting, Inc		Date: 7/21/2022
(Name of Company)		

FOR WATERSHED PROTECTION DEPARTMENT ONLY

The waiver from LDC 25-8-281(A) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from LDC 25-8-281(B) is :	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from LDC 25-8-281(C)(1)(a) is:	<input type="checkbox"/> Denied	<input checked="" type="checkbox"/> Approved**
The waiver from LDC 25-8-281(C)(1)(b) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from LDC 25-8-281(C)(2) is:	<input type="checkbox"/> Denied	<input checked="" type="checkbox"/> Approved**
The waiver from LDC 25-8-281(C)(3) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from LDC 25-8-281(C)(4) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from LDC 25-8-281(C)(5) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**

The waiver from City Code 30-5-281(A) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from City Code 30-5-281(B) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from City Code 30-5-281(C)(1)(a) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from City Code 30-5-281(C)(1)(b) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from City Code 30-5-281(C)(2) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from City Code 30-5-281(C)(3) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from City Code 30-5-281(C)(4) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**
The waiver from City Code 30-5-281(C)(5) is:	<input type="checkbox"/> Denied	<input type="checkbox"/> Approved**

****For each CEF and each variance granted, the applicant must pay a variance fee, and provide proof of payment by submitting a copy of the receipt to Watershed Protection Department reviewer to clear comment.**

**Variance Fee = Number of Variances 2 x 254.00 Fee = \$ 508.00

Reasoning:

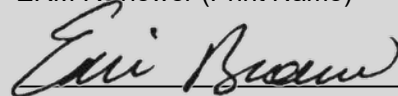
Water quality and habitat for endangered salamanders will remain throughout construction phases

7/10/2023

Date

Eric Brown

ERM Reviewer (Print Name)



Signature

1	Project Name:	Old Lampasas #3 Dam Modernization
2	Project Address:	9022 Old Lampasas Trail, Austin, TX 78750
3	Site Visit Date:	07/15/2011; 10/26/2018; 7/8/2019
4	Environmental Resource Inventory Date:	7/26/2019 (waiver)

5	Primary Contact Name:	Christen Warkoczewski
6	Phone Number:	512-453-3733
7	Prepared By:	Christen Warkoczewski
8	Email Address:	cwarkoczewski@baereng.com

[illegible]

City of Austin Use Only CASE NUMBER:	
--------------------------------------	--

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

Method

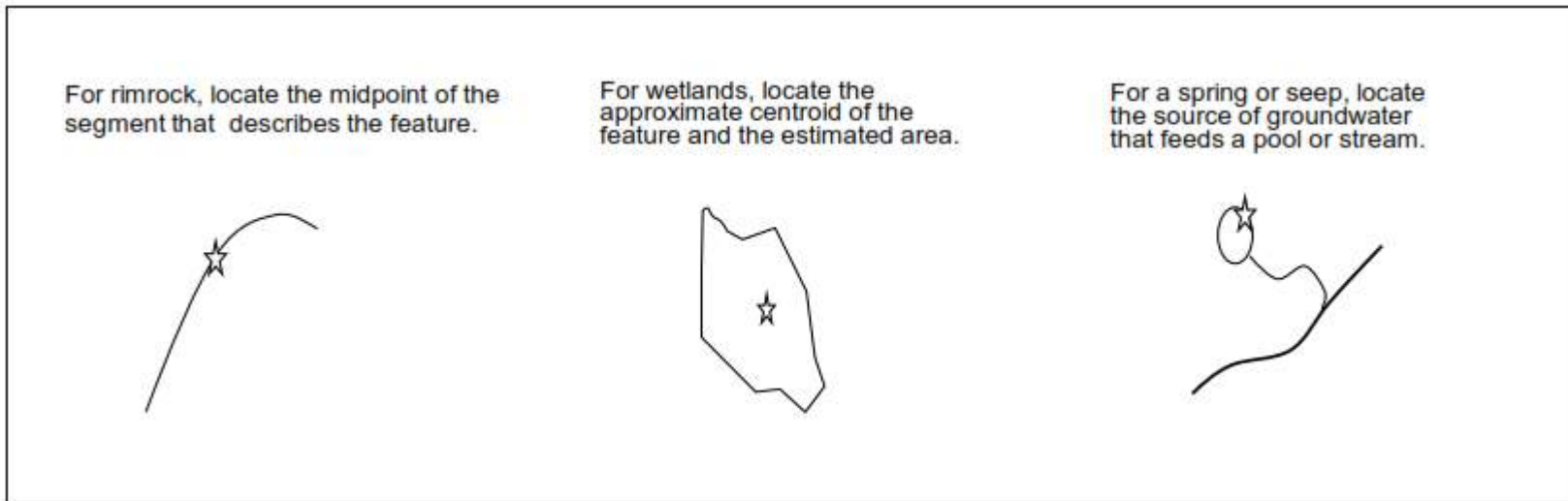
Accuracy

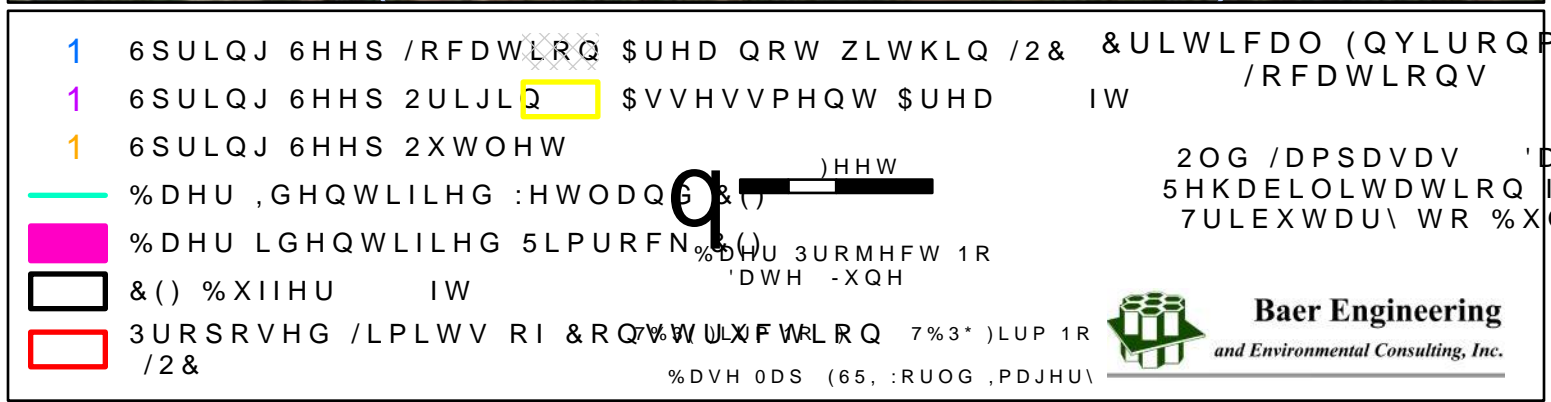
GPS ☒ sub-meter ☐

Surveyed ☐ meter ☒

Other ☐ >meter ☐

Professional Geologists apply seal below





Old Lampasas #3 Dam Modernization

9018-1/2 Old Lampasas Trail

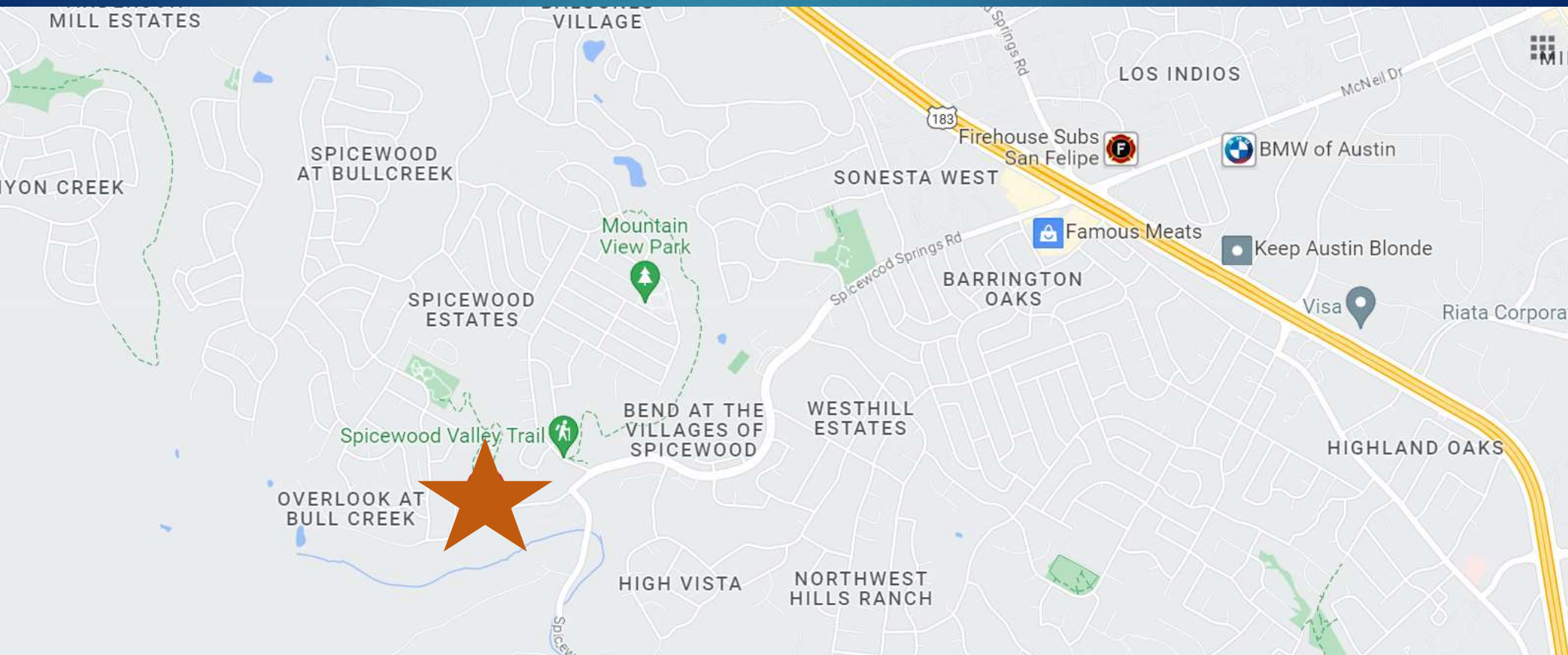
SP-2022-0558D

Mike McDougal

Environmental Policy Program Manager

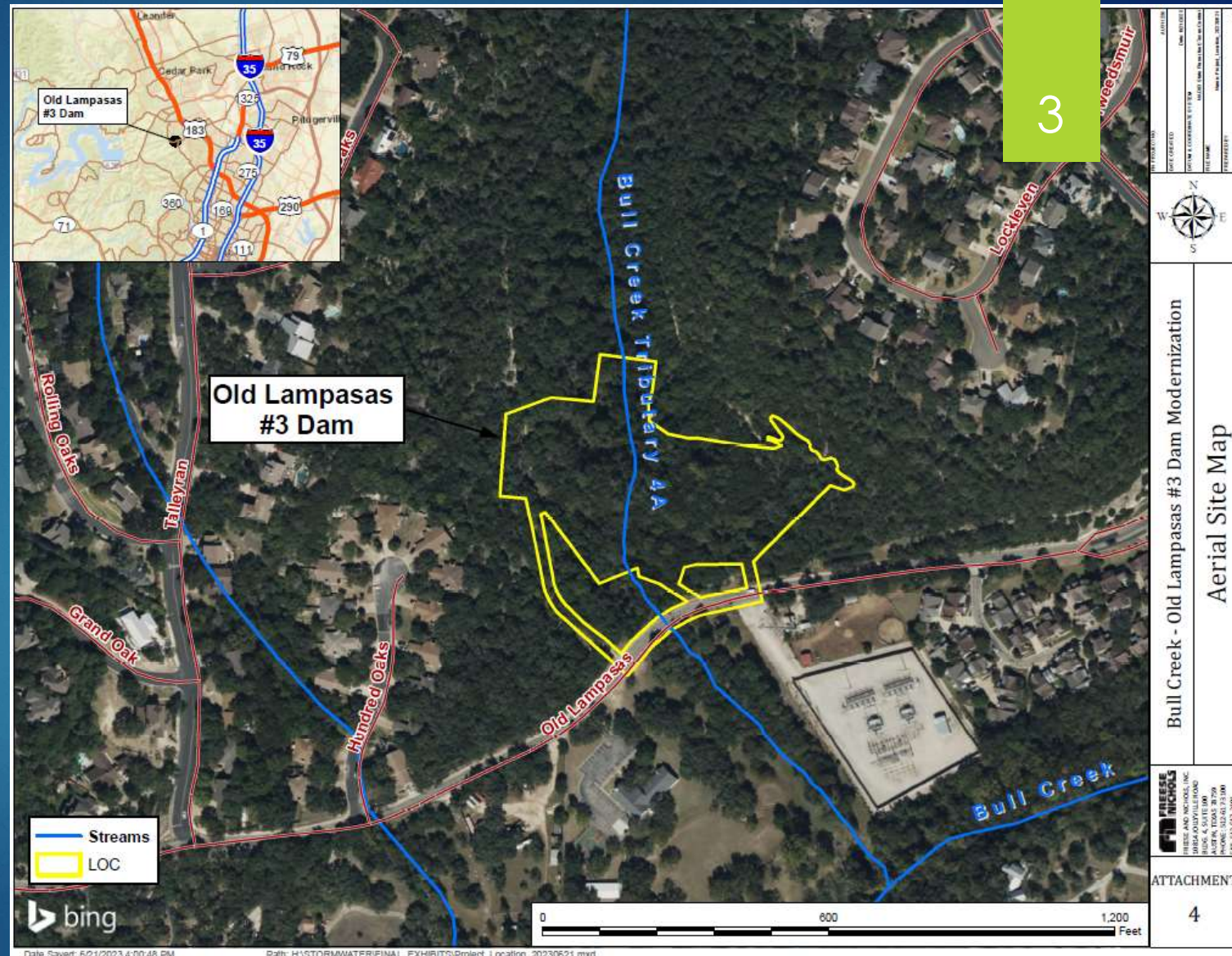
Development Services Department

Vicinity Map



Property Data

- ▶ Bull Creek Watershed
- ▶ Water Supply Suburban Watershed Classification
- ▶ Drinking Water Protection Zone
- ▶ Not located over Edwards Aquifer Recharge Zone
- ▶ District 6 & ETJ



Synopsis

4

- ▶ The existing dam was built in the early 1980s.
- ▶ The dam is classified by TCEQ as intermediate sized and high-hazard due to the downstream infrastructure.
- ▶ The dam was damaged during Tropical Storm Hermine in September of 2010. Repairs are necessary.

Synopsis - continued

5

- ▶ The existing 60-inch corrugated metal pipe principal spillway has failed and water is currently passing under the pipe.
- ▶ The proposed improvements to Old Lampasas No. 3 Dam are intended to improve the level of safety of the dam to both the public and to the environment, and to mitigate potential future impacts.
- ▶ The dam improvements are required by both the City and the Texas Commission on Environmental Quality (TCEQ) to comply with City and State dam safety criteria.

Proposed Improvements

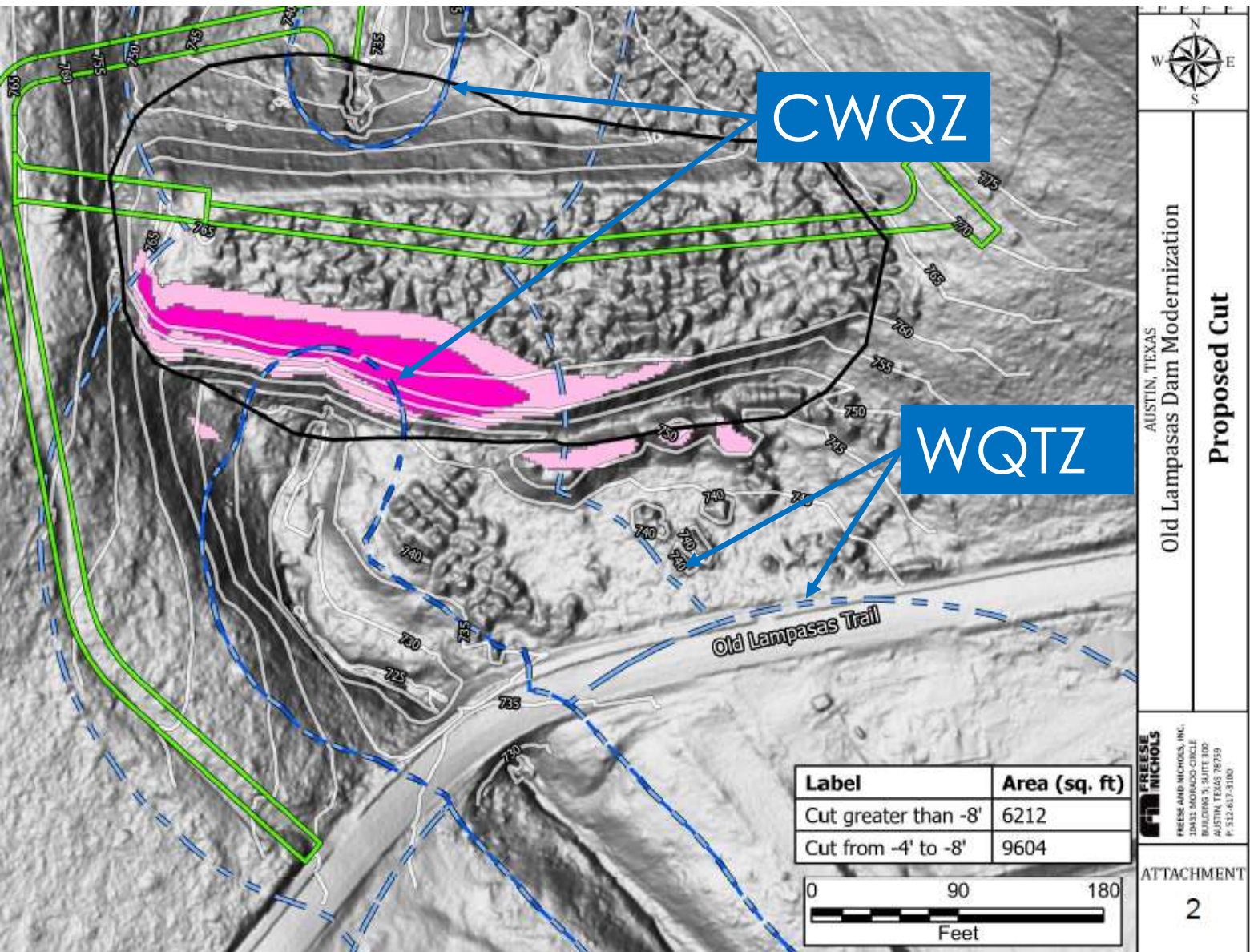
6

- Removal of existing trees and boulders along the dam footprint,
- Replacement of the existing 60-inch diameter CMP principal spillway with a new 42-inch diameter reinforced concrete pipe (RCP) principal spillway and cradle,
- Installation of a new intake structure and low flow riser upstream of the dam to control the water level within the pond and provide extended detention for water quality benefits,
- Replacement of the existing wastewater line through the embankment of the dam with a new line parallel to the 42-inch RCP,

Proposed Improvements - continued

7

- Removal of the existing wastewater line upstream of the centerline of the dam,
- Grading and resurfacing of the upstream and downstream embankment slopes to provide increased stability,
- Raising the top of dam and auxiliary spillway elevations to meet City and State dam safety criteria,
- Installation of a new auxiliary spillway,
- Installation of a new concrete headwall for the principal spillway and downstream armoring of the existing plunge pool,
- Installation of a new permanent maintenance drive to allow WPD Field Operations to access and maintain the structure, and
- Installation of a new Flood Early Warning System (FEWS).

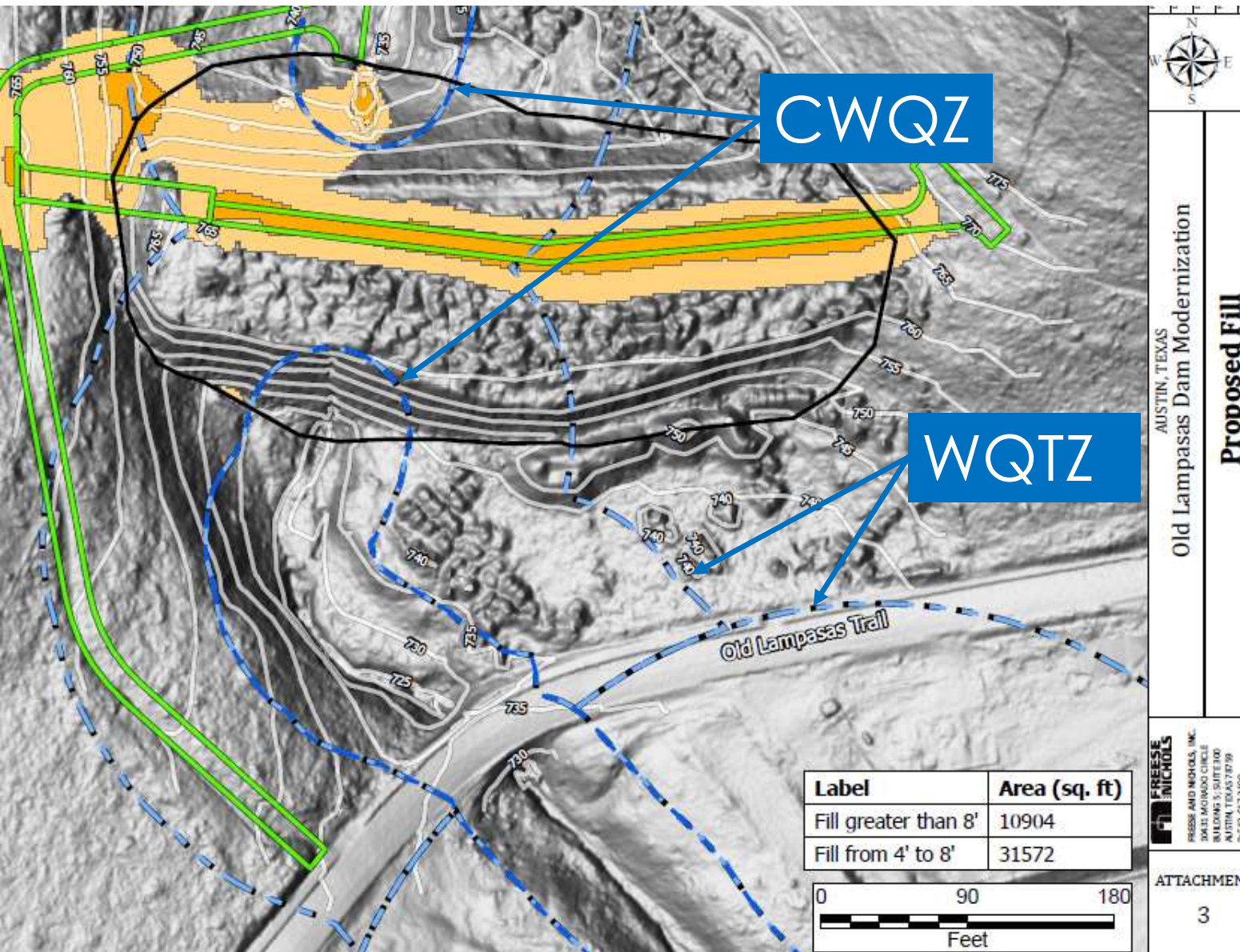


8

Cut
CWQZ
WQTZ
Exhibit

Proposed Cut

-  Cut greater than -8'
-  Cut from -4' to -8'



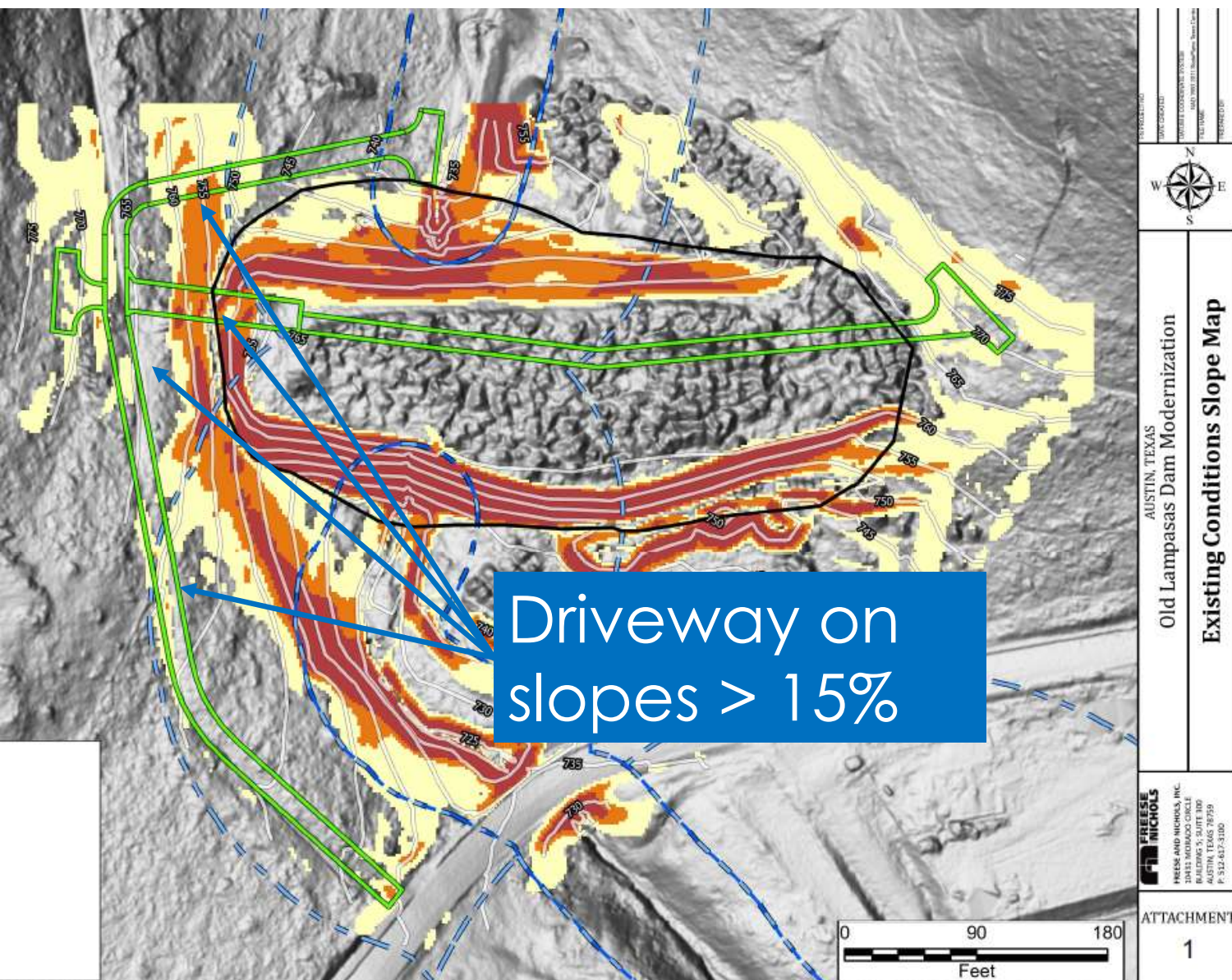
9

Fill
CWQZ
WQTZ
Exhibit

Proposed Fill

Fill greater than 8'

Fill from 4' to 8'



10

Slope Exhibit

Survey Topo Percent Rise

- 15% to 25%
- 25% to 35%
- 35% and Greater

Dam view from above

11



Spillway Pipe (upstream view)

12



- ▶ This is the failed spillway pipe

Spillway Pipe (downstream view)



► Pipe has failed

Substantial erosion – pipe should be buried