



Member of the SNC-Lavalin Group

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[www.atkinsglobal.com/northamerica](http://www.atkinsglobal.com/northamerica)

March 23, 2018

**RECEIVED**

**MAR 23 2018**

Texas Commission Environmental Quality  
12015 Park Thirty-Five Circle Building F  
Austin, Texas 78753

HAND-DELIVERED

**WASTE PERMITS DIVISION  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY**

Re: Zilker Park Austin City Limits Staging Area  
2236 ½ Stratford Drive  
Engineer's Summary Letter  
Atkins Project No. 100053691

On behalf of our client, C3 Presents, LLC, Atkins is submitting this Subchapter T application to Disturb Final Cover Over Closed Municipal Solid Waste Landfill for Non-Enclosed Structure. The property is located at the northwest corner of Stratford Drive and Lou Neff Road and within the boundaries of Zilker Park.

The site is a total of 11.12 acres in the Barton Hills, Abstract No. 14 Lot ID 19276 legal description.

Construction on the site will be the development of a staging area for Austin City Limits Festival and its associated improvements, including water, drainage, water quality, electrical and other appurtenances. This project site is on the existing but closed Butler Landfill, regulated per the Texas Commission on Environmental Quality. The project is in the defined Edwards Aquifer Recharge Zone and is within the Town Lake/Lady Bird Lake Watershed, which is classified as a Water Supply Suburban by City of Austin watershed regulations.

The entire project site is located outside the boundaries of a 100 year flood plain, as shown on FEMA FIRM Panel No. 48453C0445J, dated January 6, 2016 for Travis County, Texas. Runoff created by the development will be captured in an existing drainage swale and conveyed to proposed Bio-filtration water quality pond. Water quality pond will drain in 48 hours and outlet to existing outlet to Lady Bird Lake along eastern end of the site. Upstream drainage of the property is captured via proposed drainage swale and proposed storm sewer system along Stratford Drive and conveyed to Lady Bird Lake via proposed outlet.

Access to the development will be via three drives on Stratford Drive and one on Lou Neff Road. Austin Energy will provide electrical service. The City of Austin will provide water service.

The existing grades of the site generally slope from south to north towards Lady Bird Lake. The total elevation difference is approximately 24 feet, sloping from 468 to 444 mean sea level (msl.) No on-site detention is proposed as the site is adjacent to Lady Bird Lake.

A water quality pond is proposed to treat the runoff from the new staging area. All water quality pond improvements are for the public land and will be city maintained. The proposed development will improve drainage systems in the area and convey existing runoff across the site to discharge into Lady Bird Lake.

# ATKINS

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Should you have any questions regarding this submittal, please do not hesitate to call me at 512-342-3217.

Sincerely,



3/2/08

Scott A. Smiley, P.E.  
Division Manager

**Facility Name:** Butler Landfill

**Applicant Name:** City of Austin Parks and Recreation Department – Tony Arnold

**SubT Authorization #:**

**Initial Submittal Date:**

**Revision Date:**



## Texas Commission on Environmental Quality

### Authorization to Disturb Final Cover Over Closed Municipal Solid Waste Landfill for Non-Enclosed Structure

If you are proposing a new enclosed structure or have an existing enclosed structure, please use Form TCEQ-20785, Application for Development Permit for Proposed Enclosed Structure Over Closed Municipal Solid Waste Landfill, or Form TCEQ-20786, Registration for Existing Enclosed Structure Over Closed Municipal Solid Waste Landfill.

#### 1. Application Type

- New Authorization  Revisions of Existing Authorization  
 Soil Boring Tests Authorization

If existing authorization, Authorization Number:

#### 2. Reason for Submittal

- Initial Submittal  Notice of Deficiency (NOD) Response

#### 3. Project description

Development of a staging area near Stratford Drive and Lou Neff Road. Construction to include placing crushed stone to reinforce to staging area, a water quality pond to treat runoff, and other site improvements such as electrical, water and stormwater.

#### 4. MSW Landfill Determination

If the landfill was discovered during construction, the construction activities shall be ceased pending authorization approval. Persons listed in 30 TAC 330.953(d) shall be notified within 30 days from landfill discovery, and the property shall be recorded in the real property records of the county where the property is located in accordance with 30 TAC §330.962(a).

Provide evidence that the engineer who determined the existence of the closed MSW landfill has notified the following persons of that determination in accordance with 30 TAC §330.953(d).

- (1)  Each owner and lessee  
(2)  Executive Director  
(3)  Local Government Officials  
(4)  Regional Council of Governments

### 5. Landfill's Permitting Status

What is the permitting status of the landfill?

- Active MSW Permit                       Landfill in Post-Closure Care  
 Revoked MSW Permit                       Un-permitted Landfill

If the landfill is in post-closure care and/or subject to an active MSW Permit, this application for final cover disturbance for non-enclosed structures over a closed MSW landfill shall be accompanied by a Permit Modification application prepared in accordance with 30 TAC §305.70.

If the landfill has completed the post-closure care period, but the MSW permit has not been revoked (site affected by an active MSW Permit), a Voluntary Revocation request of the MSW Permit shall be submitted in accordance with 30 TAC §330.465 prior to the submittal of this application for final cover disturbance for non-enclosed structures over a closed MSW landfill (see Instructions).

### 6. General Project Information

**Facility Name: Butler Landfill**

SubT Authorization No. (if available):

Regulated Entity Reference No. (if issued)\*: RN

Physical or Street Address (if available): **2236 ½ Stratford Drive**

City: **Austin** County: **Travis** State: **TX** Zip Code: **78746**

(Area code) Telephone Number: **512-974-7491**

*\*If this number has not been issued for the facility, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application.*

### 7. Contact Information

**Applicant (Lessee/Project Owner) Name: City of Austin**

Customer Reference No. (if issued)\*: CN 600135/98

Mailing Address: 200 S. Lamar

City: **Austin** County: **Travis** State: **TX** Zip Code: **78704**

(Area Code) Telephone Number: **512-974-7941**

Email Address: **Charles.vaclavik@austintexas.gov** *\*If the Applicant does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Applicant as the Customer.*

**Property Owner Name\*: City of Austin**

Mailing Address: **200 S. Lamar**

City: **Austin** County: **Travis** State: **TX** Zip Code: **78704**

(Area Code) Telephone Number: **512-974-7941**

Email Address: **Charles.vaclavik@austintexas.gov**

*\*If the Property Owner is the same as Applicant type "Same as "Applicant".*

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3

Field notes for 1931 (1932) 280.5 + 4351 ac

THE STATE OF TEXAS :

COUNTY OF DALLAS : BEFORE ME, the undersigned Authority, a Notary Public in and for said County and State, on this day personally appeared Rex Townsend, Vice President of the Rain Townsend Company, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and as the act and deed of said Company and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th day of July A. D. 1932.

Willie Foley

(Notary Seal)

Notary Public, Dallas County, Texas.

Filed for record Aug. 2, 1932 at 5 P. M. Recorded Aug. 3, 1932 at 11 A. M.

0 - - - - - 0

THE STATE OF TEXAS :

COUNTY OF TRAVIS. I KNOW ALL MEN BY THESE PRESENTS:

THAT whereas, on December 29, 1931, A. J. Zilker, joined by his wife, Mrs. A. J. Zilker, conveyed by deed to the Board of Trustees of the Public Free Schools of the City of Austin, in accordance with the certain proposition theretofore made by said A. J. Zilker to said Board of Trustees, and upon the terms and conditions expressed in the deed, certain tracts of land situated in Travis County, Texas, said deed being recorded in Book 461, at pages 562-565, inclusive of the Deed Records of Travis County, Texas, to which deed and record thereof reference is here made for particulars; and,

WHEREAS, the tracts of land conveyed and intended to be conveyed by said deed are only generally described therein, and not by definite metes and bounds upon accurate survey thereof; and since said deed, a survey has been made of said tracts of land, and it is expedient to now describe said tracts of land according to said survey; Now, therefore,

I, A. J. Zilker, joined <sup>herein</sup> by my wife, Mrs. A. J. Zilker, in consideration of the premises and for the purpose and upon the terms and conditions expressed in the deed first above mentioned, and in confirmation thereof, and for the purpose of more particularly described <sup>the</sup> the tracts of land conveyed and intended to be conveyed by the deed first hereinabove mentioned, and confirming said deed in all particulars, have granted, sold and conveyed, and by these presents do grant, sell and convey unto the Board of Trustees of the Public Free Schools of the City of Austin, Texas, all of those certain tracts of land and premises situated in the County of Travis and State of Texas, described as follows, to-wit:

FIRST TRACT: Beginning at a stake in the wet edge of the Colorado River/its South bank on said stake being in the north line of the 131 1/2 acre Walsh tract out of the William Barton Survey in Travis County, Texas, and in the south line, produced, of the Dohme tract out of the Henry P. Hill League in Travis County, Texas, at a point N. 67 E. 109 feet from a concrete monument at the upper corner of the William Barton Survey and the most southeasterly corner of the Henry P. Hill League in Travis County, Texas, said concrete monument being at the location of the original corner of the William Barton Survey and the Henry P. Hill League on the Colorado River in Travis County, Texas; thence with the wet edge of the south bank of the Colorado River in a downstream direction with the following meanders along the northeast line of the Walsh tract out of the the William Barton Survey; S. 66° 15' E. 98 feet; S. 69° 05' E. 515.2 feet, S. 62° 58' E. 405.4 feet, and S. 55° 55' E. 424.5 feet to the mouth of Barton Creek; thence with the wet edge of Barton Creek with its northwest bank in an upstream direction along the following meanders, same being along the southeast line of the Walsh tract out of the William Barton Survey; S. 71° 30' W. 106 feet, S. 60° 00' W. 309.2 feet, S. 50° 00' W. 141.4 feet, S. 58° 30' W. 151.4 feet, S. 55° 35' W. 197.5 feet, and S. 65° 30' W. 499.6 feet to a point in the east line of old County

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tin and Bee Cave Road as fenced, S. 7° 33' W. for a distance of 355.5 feet to a stake for corner; S. 80° W. 75.5 feet to stake, S. 85° 30' W. 900.3 feet to stake for corner, S. 84° 46' W. 135 feet to stake for corner; S. 89° 05' E. 980 feet to stake for corner, S. 85° 40' W. 284.5 feet to stake for corner, N. 87° 30' W. 559.6 feet to stake for corner, N. 71° 32' W. to stake for corner of a distance of 69.4 feet from which a concrete monument at the most southerly corner of the Dohme 100 acre tract and at the most easterly corner of the Kolony 25 acre tract bears N. 31° 40' W. 34 feet thence continuing with the east line of the Austin and Bee Cave Road as fenced, N. 46° 47' W. for a distance of 72.7 feet to a stake for corner, from which the concrete monument at the most southerly corner of the 100 acre Dohme tract and at the most easterly corner of the 25 acre Kolony tract, bears S. 65° 00' E. 42.3 feet; thence along the east line of the Austin and Bee Cave Road as fenced for the following courses and distances; N. 37° 24' W. 228.5 feet to a stake for corner N. 27° 45' W. 187 feet to a stake for corner, N. 7° 24' W. 122.6 feet to a stake for corner, N. 0° 26' E. 415.6 feet to a stake for corner, N. 21° 17' W. 37.8 feet to a stake for corner, N. 35° 11' W. 305.8 feet to a stake for corner, N. 20° 11' W. 204.4 feet to a stake for corner, N. 1° 52' E. 115 feet to a stake for corner, and N. 35° 26' W. 62 feet to a stake for corner on the east bank of Dry Creek; thence along fence on north side of Austin and Bee Cave Road, across Dry Creek; N. 65° 17' W. 95 feet to a stake for corner; S. 49° 00' W. 549 feet to a stake for corner; S. 75° 50' W. 132 feet to a stake for corner; thence again crossing Dry Creek N. 80° 36' W. 104 feet to a stake for corner in the north line of the Austin and Bee Cave Road; thence with north line of the Austin and Bee Cave Road, as fenced, N. 46° 27' W. for a distance of 129 feet to a stake for corner, N. 73° 04' W. 131 feet to a stake for corner; and N. 81° 50' W. for a distance of 112 feet to a stake for corner, said stake being at the intersection of the East line of the Delana tract with the north line of the Austin and Bee Cave Road as fenced; thence with the southeast line of the Delana property adjoining this tract on the Northwest, along the division line as fenced, N. 55° 55' E. for a distance of 919.6 feet to a stake N. 55° 14' E. for a distance of 1004.1 feet to a stake; N. 55° 11' E. for a distance of 911.9 feet to a stake for corner at a large 46 inch elm stump; thence along fence N. 35° 30' W. 320 feet to a stake; N. 23° 00' W. 27 feet to a stake; N. 1° 00' W. 190 feet to a stake at a fence corner; and N. 46° 30' E. for a distance of 49 feet to a stake in the wet edge of the Colorado River on its south bank; thence with the wet edge of the Colorado River along the meanders of its south bank in a downstream direction as follows: S 72° 24' E. 395.5 feet S. 46° 54' E. 556.7 feet, S. 57° 01' E. 298.1 feet, S. 54° 05' E. 294.8 feet, S. 4° 00' W. 175.5 feet S. 37° 10' E. 570.4 feet, S. 31° 40' E. 291 feet, S. 51° 02' E. 195.2 feet, S. 49° 45' E. 312.6 feet S. 58° 18' E. 315.8 feet S. 62° 42' E. 546.1 feet S. 65° 10' E. 490.5 feet and S. 06° 15' E. 284.1 feet to the place of the beginning, containing in all 230.5 acres of land, which includes approximately 80 acres out of the Walsh tract in the William Barton Survey, 192.5 acres out of the Henry P. Hill League, (of which 106.5 acres is out of the Dohme tract and 86 acres is out of the Copes tract), and approximately 3 acres by limitation off the Delana tract adjoining the Copes tract.

Butler Park Works

SECOND TRACT: Beginning at an iron stake for the northeast corner of the A. J. Zilker 40 acre tract as described in Travis County Deed Records, Volume 172, Page 460, said iron stake being in the South right of way line of the I. & G. N. Railway at the intersection of the said right-of-way line with the east line of the George W. Spear League on the north side of the Colorado River in Travis County, Texas, and from which iron stake a set stone which is the most easterly corner of Lot #1, of a subdivision of 258 acres of George W. Spear League in the City of Austin, Travis County, Texas, as recorded in Travis County, Deed Records, Book "S", Page 501 bears N. 29° 47' E. 985.93 feet; thence with the east line of said George W. Spear League S. 29° 50' N. for a distance of 1137.5 feet to an iron stake on the north bank of the Colorado River, in

in evidence, passing an iron stake for the northwest corner of the Sand Beach Reserve at 62 feet thence running with west line of said Reserve to corner; thence with the wet edge of the Colorado River along its north bank, same being the approximate south line of the George W. Spear League running an upstream direction with the following meanders; N. 54° 17' W. 357.2 feet, N. 52° 15' W. 510 feet E. 40° 45' W. 360 feet N. 55° 09' W. 303.5 feet to an iron stake for the southwest corner of the A. J. Zilker 40 acre tract, said corner being in the division line between Lot No. 4 and Lot No. 5, out of a subdivision of 252 acres out of the George W. Spear League produced to the Colorado River; thence with the west line of said A. J. Zilker 40 acre tract N. 29° 50' E. 1550 feet to an iron stake for the northwest corner of said tract and from which stake the centerline of the connecting spur between the Austin Dam and Suburban Railway and the main line of the Missouri Pacific Railway, as evidenced by the existing rails, bears N. 29° 50' E. 108 feet and from which northwest corner a concrete monument set in West 6th Street bears N. 29° 50' E. 506.92 feet and from which northwest corner the southwest corner of Lot #5 of said 252 acre subdivision as described above bears N. 29° 50' E. 517.79 feet; thence 10 feet distance from and parallel to the center of the spur line tract S. 40° 00' E. 28 feet to an iron stake in the south 100 foot right-of-way line of the I. & G. N. Railway; thence with the south right-of-way line of the I. & G. N. Railway and 100 feet southerly and parallel to the centerline of said railroad line for the following courses and distances for the north line of said A. J. Zilker 40 acre tract; S. 22° 20' E. 569.4 feet S. 24° 25' E. 222.8 feet S. 50° 00' E. 266 feet S. 56° 20' E. 178 feet S. 59° 30' E. 65.1 feet S. 44° 51' E. 147.9 feet S. 46° 50' E. 145 feet, and S. 60° 45' E. 250 feet to an iron stake at the place of beginning, and containing 43.51 acres of land.

The purpose and intent of this instrument is to convey all of the premises within the boundaries of the two tracts above set out, which were acquired and owned by the said A. J. Zilker through the various conveyances to him of those portions of the Walsh Dolme Copes and Hunter tracts on the South or West side of the Colorado River and the Bulter lease tract out of the Geo. W. Spear League on the North or East side of the Colorado River, referred to in said original deed from A. J. Zilker and wife to the Grantee of date December 29, 1931, to which reference is here made; together with such other tracts or parcels of land which may have been acquired by the said A. J. Zilker by limitation or otherwise, and which are also included in said boundaries.

TO HAVE AND TO HOLD unto said Board of Trustees of the Public Free Schools of the City of Austin, Texas, their successors and assigns, the said above two described tracts of land and premises, in trust for the purposes hereinbefore referred to.

And we do hereby bind ourselves, our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said land and premises unto the said Board of Trustees of the Public Free Schools of the City of Austin, Texas, their successors and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

WITNESS OUR HANDS, at Austin, Texas, this the 21st day of July A. D. 1932.

A. J. Zilker  
Mrs A. J. Zilker



THE STATE OF TEXAS )  
COUNTY OF TRAVIS. ) BEFORE ME, Noyes D. Smith, a Notary Public in and for Travis County, Texas, on this day personally appeared A. J. Zilker known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed. And also on this day personally appeared before me Mrs A. J. Zilker, wife of said A. J. Zilker, also known to me to be the person whose name is subscribed to the foregoing instrument, and having been examined by me privily and apart from her husband and having the same fully explained to her by me, she, the said Mrs A. J. Zilker, acknowledged such instrument to be her act and deed, and declared that she had willingly signed the same

# Approximate Locations of Deed Tracts making up the Zilker Park area

City of Austin  
Real Estate Services



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

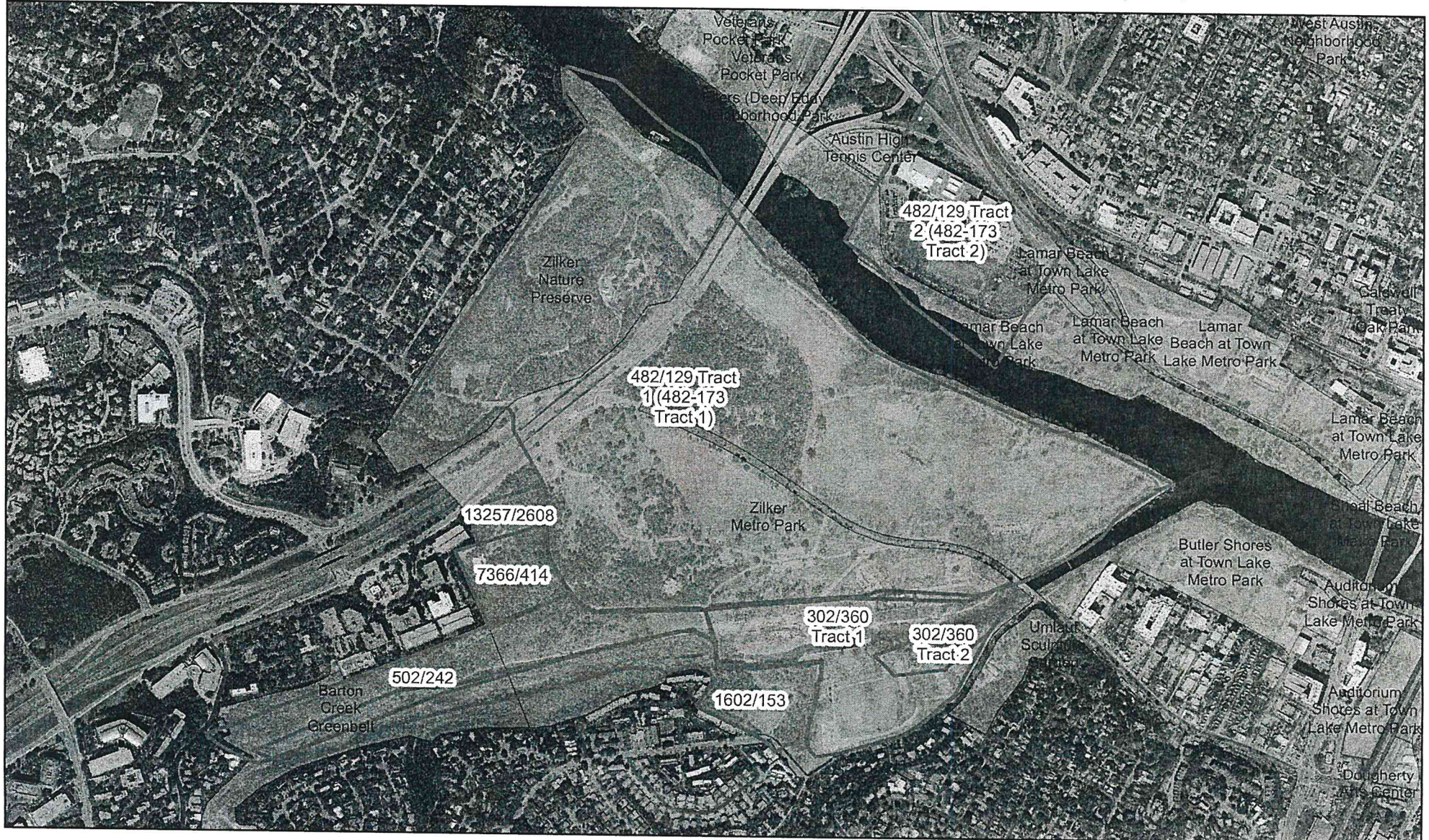
-  Zilker Park Deeds
-  City of Austin Parks

2015 Aerial Imagery, City of Austin

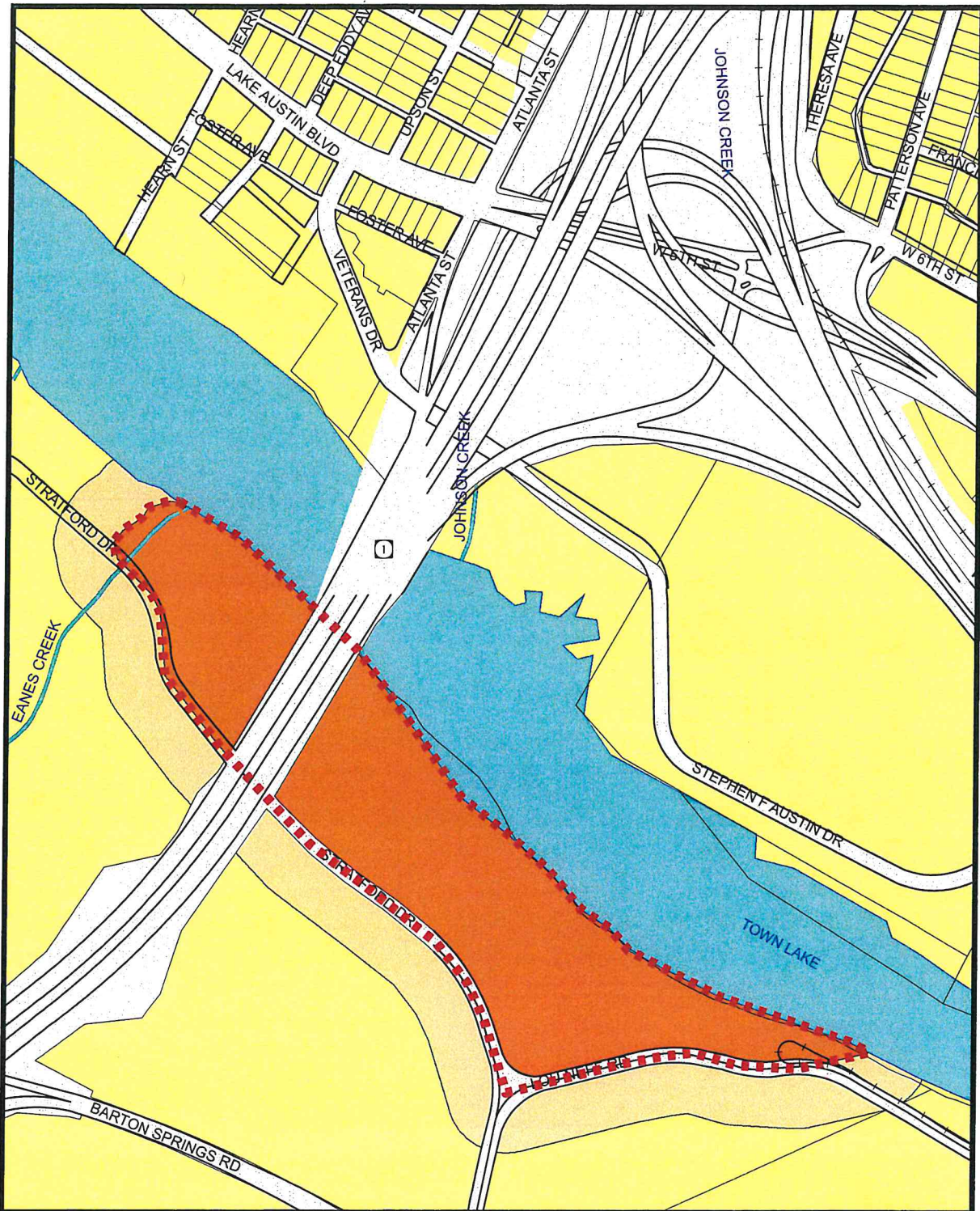


This product has been produced by the Office of Real Estate Services for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

Produced by CBoas, 4/14/2017



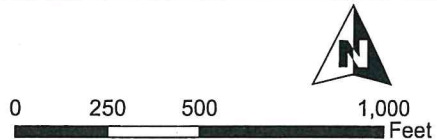




# #7. Butler

- Landfill Features**
- Estimated Landfill Boundary
  - Landfill
  - Landfill Buffer

- City of Austin Jurisdiction**
- FULL
  - LTD
  - 2 MILE
  - 5 MILE
- Lot Lines**
- Roads
  - Water features



## Watershed Protection Development Review

Watershed Protection & Development Review Department, The City of Austin produced this map for the sole purpose of use as a work resource and as an estimated boundary of landfills in & around Austin. The City of Austin does not warrant the map &/or information regarding its accuracy or completeness. Reproduction is not permitted without permission from the City of Austin-Watershed Protection & Development Review Department.

Date: 09.20.2006

### 3.7 #7, BUTLER

**Location:** The Butler landfill is owned by the City of Austin and is located in south Austin along the shore of Town Lake and the MoPac bridge.

**Prior Use:** Stockpiles of fill material and four 55-gallon drums of what appeared to be monitoring well purge water were stored in the area west of the bridge. No evidence of illegal dumping was evident.

**Groundwater:** Since 1984, the COA has conducted field investigations and a risk assessment for groundwater. Three monitoring wells have been installed; 2 east of the MoPac bridge, 1 west of the MoPac bridge.

**Remediation:** Design of erosion control improvements and remediation of the exposed landfill waste at Eanes Creek occurred in 2004, with construction scheduled to begin in 2005.

**Current Conditions:** Current conditions associated with this site may pose a current or future concern to human health or the environment, based on the following factors:

- proximity of recreational uses to landfill,
- exposed landfill materials due to erosion at the stream and river banks,
- unrestricted public access.

Based on the actions already being undertaken by the COA at this site, no additional actions have been recommended.

**Reference:** Information in this fact sheet comes from the following:

1. Geomatrix Consultants. November 2004. *2004 Supplemental Assessment to Landfills in the Vicinity of Austin, TX*. Prepared for City of Austin Public Works Department.
2. Underground Resource Management, Inc. November 1984. *Landfills in the Vicinity of Austin, TX*. Prepared for the City of Austin.



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Austin, Texas 78744  
512.447.9081 Ph  
512.443.3442 Fax  
[www.hvj.com](http://www.hvj.com)

**Request to Disturb Final Cover over a Closed Municipal Solid Waste Landfill for Non-Enclosed Structures**

**To:** TCEQ

**From:** Jason Schwarz, PE, Project Manager – Geotechnical  
HVJ Associates,

**Inc. DATE:** March 22, 2018

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The Butler Landfill is owned by the City of Austin and is located along the southern shore of Town Lake along the MoPac bridge. The landfill covers stockpiles of fill material and four 55 gallon drums containing monitoring well purge water. HVJ drilled and sampled 20 locations with a skid steer loader equipped with an auger. The borings were drilled through the top cover of the landfill to a maximum depth of 6 feet. The borings served as a liner verification and were not drilled through the existing landfill waste. HVJ used an OVM meter during drilling operations to monitor the levels of methane gas. One boring B-23 had detected levels of methane, and the remaining borings did not evidence detectable levels of methane. The borings were backfilled with bentonite chips and compacted back to existing grade. Groundwater was encountered in boring B-15 at a depth of 3.5 feet.

Final design plans will be submitted to TCEQ upon completion using the information gathered in this boring activity. The bores are intended to help define the extent of landfilled materials in the subject area. Atkins will be providing all plans and specifications.

Zilker Disturbance

Sincerely,

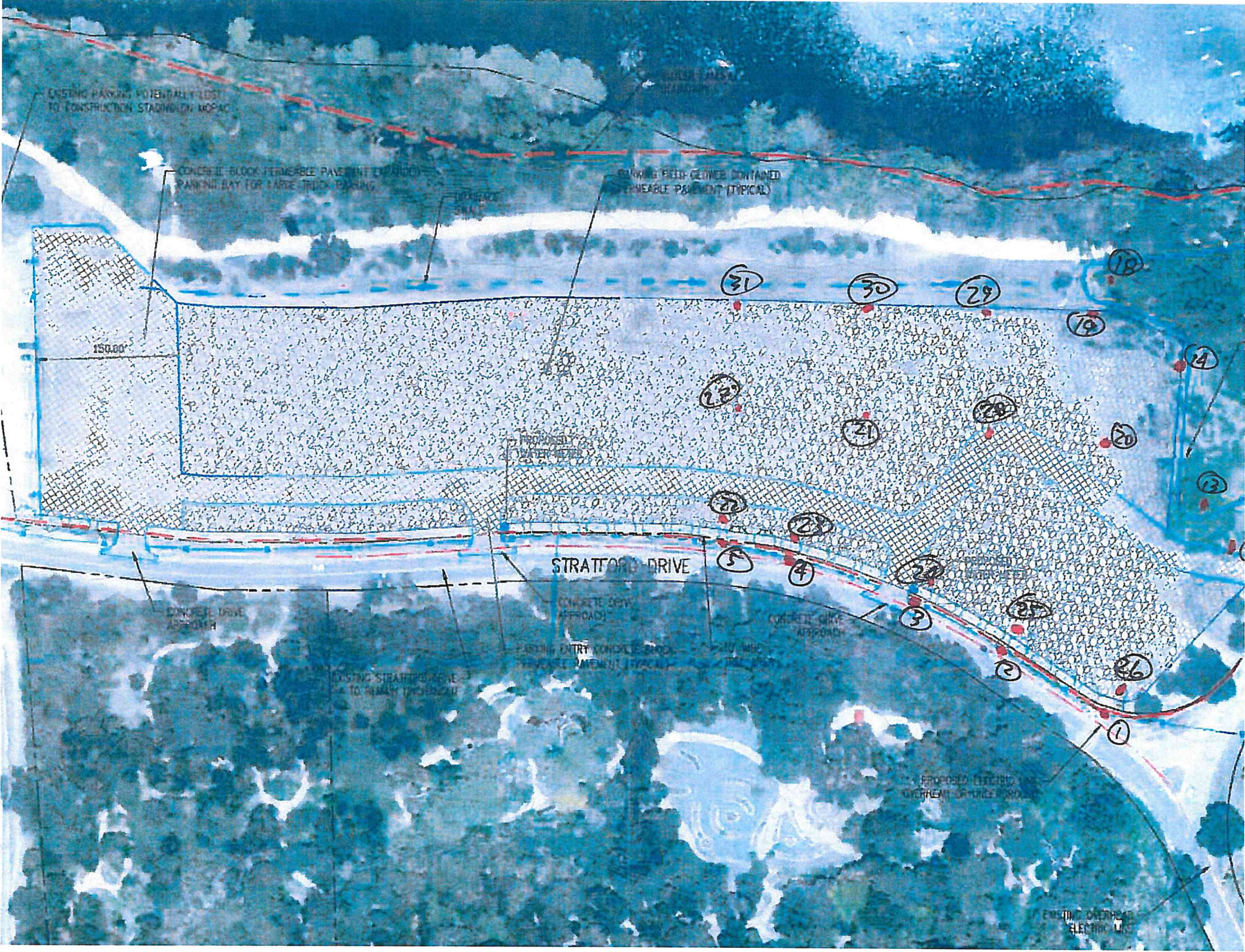
**HVJ ASSOCIATES**  
Firm License No. F-18091



3-22-18

Jason Schwarz, PE  
Senior Project Manager

JS



EXISTING PARKING POTENTIALLY LOST TO CONSTRUCTION STAGING ON MOPAC

CONCRETE BLOCK PERMEABLE PAVEMENT EXPANDED PARKING BAY FOR LARGE TRUCK PARKING

PARKING BAY WITH GEOTEXTILE CONTAINED PERMEABLE PAVEMENT (TYPICAL)

150.00'

STRATFORD DRIVE

CONCRETE DRIVE APPROACH

CONCRETE DRIVE APPROACH

CONCRETE DRIVE APPROACH

PARKING ENTRY CONCRALE BRICK PERMEABLE PAVEMENT (TYPICAL)

EXISTING STRATFORD DRIVE TO REMAIN UNDERPAVED

PROPOSED UTILITY TRENCH OVERHEAD OR UNDERGROUND

EXISTING OVERHEAD ELECTRIC LINES

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# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-1

Date: 3/9/2017

Elevation: 469 feet

Groundwater during drilling: N/A

Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;"> <p>SHEAR STRENGTH, TSF</p> <p>●    ■    ▲    *</p> <p>0.5    1.0    1.5    2.0</p> </div> <div style="text-align: center;"> <p>MOISTURE CONTENT, %</p> <p>○    □</p> <p>PLASTIC LIMIT    LIQUID LIMIT</p> <p>10    20    30    40    50    60    70    80    90</p> </div>
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">0</div> <div style="margin-bottom: 20px;">465</div> <div style="margin-bottom: 20px;">5</div> <div style="margin-bottom: 20px;">460</div> <div style="margin-bottom: 20px;">10</div> </div>		Brown, <b>SILTY LEAN CLAY (CL-ML)</b> , moist. [Fill]			

Shear Types:    ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG-17-10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-2

Date: 3/9/2017

Elevation: 469 feet

Groundwater during drilling: N/A


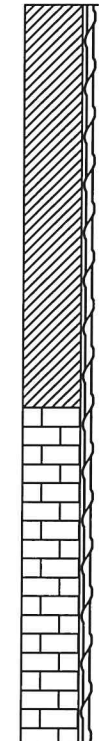
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF                        0.5 1.0 1.5 2.0                      MOISTURE CONTENT, %                      PLASTIC LIMIT LIQUID LIMIT                      10 20 30 40 50 60 70 80 90                 </div>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">                     0 465 5 460 10                 </div>  </div>		Brown, <b>SILTY CLAY (CL-ML)</b> , moist. [Fill]  White, hard, <b>LIMESTONE</b> , interbedded with brown clay.			

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

Shear Types: ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    \* = UU Triaxial

See Plate 3 for boring location.

PLATE



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-3

Date: 3/9/2017

Elevation: 468 feet

Groundwater during drilling: N/A


Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF                      ●    ■    ▲    *                      0.5    1.0    1.5    2.0                 </div> <div style="text-align: center;">                     MOISTURE CONTENT, %                      PLASTIC LIMIT    LIQUID LIMIT                      10    20    30    40    50    60    70    80    90                 </div>
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">0</div> <div style="margin-bottom: 20px;">465</div> <div style="margin-bottom: 20px;">5</div> <div style="margin-bottom: 20px;">460</div> <div style="margin-bottom: 20px;">10</div> </div>		<p>Brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist, trace brick. [Fill]</p> <hr style="border-top: 1px dashed black;"/> <p>White, hard, <b>LIMESTONE</b>, interbedded with brown clay.</p>			

Shear Types:    ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-4

Date: 3/9/2017

Elevation: 463 feet

Groundwater during drilling: N/A


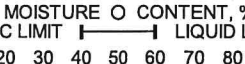

Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;"> <p>SHEAR STRENGTH, TSF</p>  <p>MOISTURE CONTENT, %</p> <p>PLASTIC LIMIT      LIQUID LIMIT</p>  </div>					
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">0</div> <div style="margin-bottom: 20px;">460</div> <div style="margin-bottom: 20px;">5</div> <div style="margin-bottom: 20px;">455</div> <div style="margin-bottom: 20px;">10</div> </div>		<p>Brown to reddish brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist. [Fill]</p> <hr style="border-top: 1px dashed black;"/> <p>White, hard, <b>LIMESTONE</b>, interbedded with brown clay.</p>  <p>-Auger refusal @ 3.5'</p>								

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-5

Date: 3/9/2017

Elevation: 462 feet

Groundwater during drilling: N/A

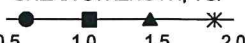
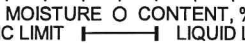

Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF   </div> <div style="text-align: center;">                     MOISTURE CONTENT, %                      PLASTIC LIMIT      LIQUID LIMIT   </div>
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">0</div> <div style="margin-bottom: 20px;">460</div> <div style="margin-bottom: 20px;">5</div> <div style="margin-bottom: 20px;">455</div> <div style="margin-bottom: 20px;">10</div> </div>		..... Brown, <b>SILTY LEAN CLAY (CL-ML)</b> , moist. [Fill]			

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-6

Date: 3/9/2017

Elevation: 464 feet

Groundwater during drilling: N/A

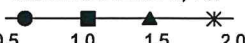
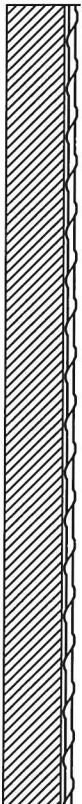
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF                        0.5    1.0    1.5    2.0                 </div> <div style="text-align: center;">                     MOISTURE CONTENT, %                      PLASTIC LIMIT    LIQUID LIMIT                      10    20    30    40    50    60    70    80    90                 </div>
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">0</div> <div style="margin-bottom: 20px;">460</div> <div style="margin-bottom: 20px;">5</div> <div style="margin-bottom: 20px;">455</div> <div style="margin-bottom: 20px;">10</div> </div>		..... Brown to tan, <b>SILTY LEAN CLAY (CL-ML)</b> , moist to dry, with sand. [Fill]			

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

Shear Types:    ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    \* = UU Triaxial

See Plate 3 for boring location.

PLATE



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-7

Date: 3/9/2017

Elevation: 462 feet

Groundwater during drilling: N/A

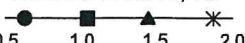
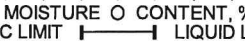
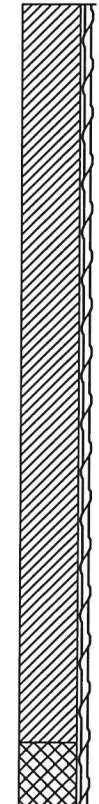
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF                        MOISTURE CONTENT, %                      PLASTIC LIMIT      LIQUID LIMIT   </div>
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">0</div> <div style="margin-bottom: 20px;">460</div> <div style="margin-bottom: 20px;">5</div> <div style="margin-bottom: 20px;">455</div> <div style="margin-bottom: 20px;">10</div> </div>		<p>Brown to light brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist to dry. [Fill]</p> <hr style="border-top: 1px dashed black;"/> <p><b>LANDFILL TRASH</b></p>			

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-8

Date: 3/9/2017

Elevation: 459 feet

Groundwater during drilling: N/A

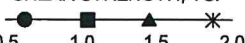

Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;"> <p>SHEAR STRENGTH, TSF</p>  <p>MOISTURE O CONTENT, %</p> <p>PLASTIC LIMIT      LIQUID LIMIT</p> <p>10 20 30 40 50 60 70 80 90</p> </div>									
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">0</div> <div style="margin-bottom: 20px;">455</div> <div style="margin-bottom: 20px;">5</div> <div style="margin-bottom: 20px;">450</div> <div style="margin-bottom: 20px;">10</div> </div>		<p>Brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist with limestone fragments. [Fill]</p> <hr style="border-top: 1px dotted black;"/> <p><b>LANDFILL TRASH</b>, with broken glass</p>												

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-9

Date: 3/9/2017

Elevation: 459 feet

Groundwater during drilling: N/A

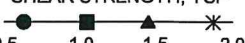
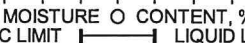
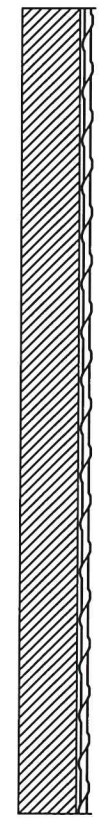
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF   </div> <div style="text-align: center;">                     MOISTURE CONTENT, %                      PLASTIC LIMIT    LIQUID LIMIT   </div>
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>0</p> <p style="text-align: center;">455</p> <p style="text-align: center;">5</p> <p style="text-align: center;">450</p> <p>10</p> </div> <div style="flex: 2; border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; position: relative;">  </div> </div>	<p>Brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist to semi-moist, trace gravel. [Fill]</p>				

Shear Types:    ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    ✱ = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING - AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-10

Date: 3/9/2017

Elevation: 457 feet

Groundwater during drilling: N/A

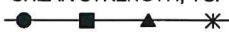
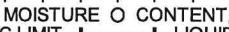
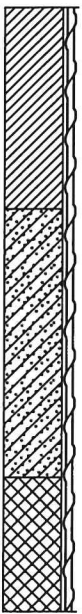
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	SHEAR STRENGTH, TSF  MOISTURE CONTENT, %  PLASTIC LIMIT LIQUID LIMIT
0    455    5    450    10		..... Brown, <b>SILTY LEAN CLAY (CL-ML)</b> , moist. [Fill]   ..... Reddish brown, <b>CLAYEY SAND (SC)</b> , moist. [Fill]    ..... <b>LANDFILL TRASH</b>			

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

Shear Types: ● = Hand Penet. ■ = Torvane ▲ = Unconf. Comp. \* = UU Triaxial

See Plate 3 for boring location.

PLATE



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-11

Date: 3/9/2017

Elevation: 454 feet

Groundwater during drilling: N/A

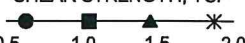
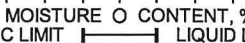

Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;"> <p>SHEAR STRENGTH, TSF</p>  <p>MOISTURE CONTENT, %</p> <p>PLASTIC LIMIT      LIQUID LIMIT</p>  </div>
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>0</p> <p style="text-align: center;">450</p> <p style="text-align: center;">5</p> <p style="text-align: center;">445</p> <p>10</p> </div> <div style="flex: 2; border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">  </div> </div>		<p>Brown to reddish brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist. [Fill]</p> <hr style="border-top: 1px dashed black;"/> <p>Gray, <b>SILTY LEAN CLAY (CL-ML)</b>, moist. [Fill]</p>			

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      ✱ = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17





# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-12

Date: 3/9/2017

Elevation: 457 feet

Groundwater during drilling: N/A

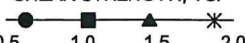
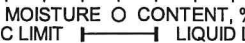
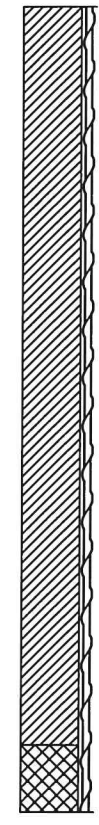
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF                        0.5    1.0    1.5    2.0                 </div> <div style="text-align: center;">                     MOISTURE CONTENT, %                        PLASTIC LIMIT    LIQUID LIMIT                      10    20    30    40    50    60    70    80    90                 </div>
0    455    5    450    10		Grayish brown, <b>SILT (ML)</b> , moist to wet, with clay. [Fill]          -Trace limestone fragments at 5'  LANDFILL TRASH			

Shear Types:    ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    ✱ = UU Triaxial

See Plate 3 for boring location.

PLATE

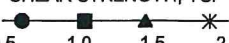
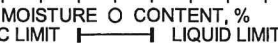

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

# LOG OF BORING

Project: ACL Staging Area at Zilker Park  
 Boring No.: B-15  
 Groundwater during drilling: 3.5 feet  
 Groundwater after drilling: N/A

Date: 3/9/2017  
 Northing: --  
 Easting: --

Project No.: AG 17 10031  
 Elevation: 451 feet  
 Station: N/A  
 Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	SHEAR STRENGTH, TSF  MOISTURE CONTENT, % PLASTIC LIMIT      LIQUID LIMIT 
0  450        5         445         10		..... Grayish brown, <b>SILT (ML)</b> , moist to wet, with clay. [Fill]                          ..... <b>LANDFILL TRASH</b>			

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      ✱ = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING - AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

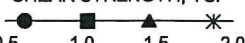
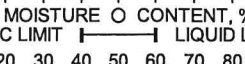
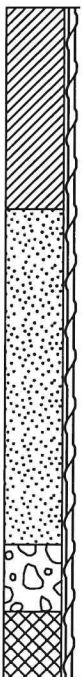


# LOG OF BORING

Project: ACL Staging Area at Zilker Park  
 Boring No.: B-16  
 Groundwater during drilling: N/A  
 Groundwater after drilling: N/A

Date: 3/9/2017  
 Northing: --  
 Easting: --

Project No.: AG 17 10031  
 Elevation: 456 feet  
 Station: N/A  
 Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                 SHEAR STRENGTH, TSF                     MOISTURE O CONTENT, %                  PLASTIC LIMIT LIQUID LIMIT   </div>
0     455     5     450     10		..... Brown, <b>SILTY LEAN CLAY (CL-ML)</b> , moist. [Fill]  ..... Reddish brown to tan, <b>POORLY GRADED SAND (SP)</b> , moist, with clay. [Fill]  ..... Gray, <b>POORLY GRADED GRAVEL</b> , semi-moist. [Fill]  ..... <b>LANDFILL TRASH</b>			

Shear Types: ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-22

Date: 3/9/2017

Elevation: 461 feet

Groundwater during drilling: N/A

Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	SHEAR STRENGTH, TSF MOISTURE CONTENT, % PLASTIC LIMIT LIQUID LIMIT
0		3" CRUSHED STONE PARKING LOT			
460		Brown, SILTY LEAN CLAY (CL-ML), moist. [Fill]			
5		LANDFILL TRASH			
455					
10					

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

Shear Types: ● = Hand Penet. ■ = Torvane ▲ = Unconf. Comp. ✱ = UU Triaxial

See Plate 3 for boring location.

PLATE



# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Boring No.: B-23

Groundwater during drilling: N/A

Groundwater after drilling: N/A

Date: 3/9/2017

Northing: --

Easting: --

Project No.: AG 17 10031

Elevation: 462 feet

Station: N/A

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>SHEAR STRENGTH, TSF</p> <p>●    ■    ▲    *</p> <p>0.5    1.0    1.5    2.0</p> </div> <div style="text-align: center;"> <p>MOISTURE CONTENT, %</p> <p>○</p> <p>PLASTIC LIMIT    LIQUID LIMIT</p> <p>10 20 30 40 50 60 70 80 90</p> </div> </div>															
0		3" CRUSHED STONE PARKING LOT																		
460		Brown, SILTY LEAN CLAY (CL-ML), moist. [Fill]																		
5		White, hard, LIMESTONE, interbedded with brown clay.																		
10		-Landfill cap not actually encountered, but measured spike in methane gas probe																		

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

Shear Types: ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    \* = UU Triaxial

See Plate 3 for boring location.

PLATE



# LOG OF BORING

Project: ACL Staging Area at Zilker Park  
 Boring No.: B-24  
 Groundwater during drilling: N/A  
 Groundwater after drilling: N/A

Date: 3/9/2017  
 Northing: --  
 Easting: --

Project No.: AG 17 10031  
 Elevation: 464 feet  
 Station: N/A  
 Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	SHEAR STRENGTH, TSF MOISTURE CONTENT, % PLASTIC LIMIT LIQUID LIMIT
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>0</p> <p>460</p> <p>5</p> <p>455</p> <p>10</p> </div> <div style="flex: 1; margin-left: 10px;"> <p><b>3" CRUSHED STONE PARKING LOT</b></p> <p>Brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist. [Fill]</p> <p>Gray, <b>POORLY GRADED SAND (SP)</b>, moist. [Fill]</p> <p><b>LANDFILL TRASH</b></p> </div> </div>					

Shear Types: ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    ✱ = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-25

Date: 3/9/2017

Elevation: 466 feet

Groundwater during drilling: N/A


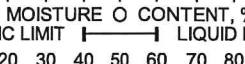
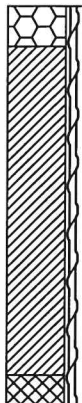
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	<div style="text-align: center;">                     SHEAR STRENGTH, TSF   </div> <div style="text-align: center;">                     MOISTURE CONTENT, %                      PLASTIC LIMIT      LIQUID LIMIT   </div>
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>0</p> <p>465</p> <p>5</p> <p>460</p> <p>10</p> </div> <div style="flex: 1;">  </div> </div>	<p><b>3" CRUSHED STONE PARKING LOT</b></p> <p>Brown, <b>SILTY LEAN CLAY (CL-ML)</b>, moist. [Fill]</p> <p><b>LANDFILL TRASH</b></p>				

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      ✱ = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

# LOG OF BORING

Project: ACL Staging Area at Zilker Park

Project No.: AG 17 10031

Boring No.: B-26

Date: 3/9/2017

Elevation: 468 feet

Groundwater during drilling: N/A

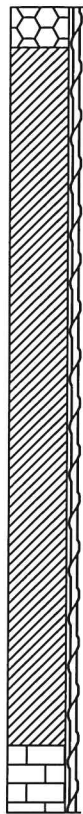
Northing: --

Station: N/A

Groundwater after drilling: N/A

Easting: --

Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	SHEAR STRENGTH, TSF  MOISTURE CONTENT, % PLASTIC LIMIT      LIQUID LIMIT
<div style="display: flex;"> <div style="margin-right: 10px;"> <p>0</p> <p>465</p> <p>5</p> <p>460</p> <p>10</p> </div>  </div>		<p style="border-bottom: 1px dotted black;">3" CRUSHED STONE PARKING LOT</p> <p>Brown, <b>SILTY CLAY (CL-ML)</b>, moist. [Fill]</p>            <p style="border-bottom: 1px dotted black;">White, hard, <b>LIMESTONE</b>, interbedded with brown clay.</p>			<div style="text-align: center;"> <p>●      ■      ▲      *</p> <p>0.5      1.0      1.5      2.0</p> <p>10      20      30      40      50      60      70      80      90</p> </div>

Shear Types:      ● = Hand Penet.      ■ = Torvane      ▲ = Unconf. Comp.      \* = UU Triaxial

See Plate 3 for boring location.

PLATE

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17




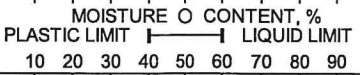





# LOG OF BORING

Project: ACL Staging Area at Zilker Park  
 Boring No.: B-32  
 Groundwater during drilling: N/A  
 Groundwater after drilling: N/A

Date: 3/9/2017  
 Northing: --  
 Easting: --

Project No.: AG 17 10031  
 Elevation: 467 feet  
 Station: N/A  
 Offset: N/A

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	DRY DENSITY PCF	SHEAR STRENGTH, TSF  MOISTURE CONTENT, % PLASTIC LIMIT LIQUID LIMIT 													
0		<b>3" CRUSHED STONE PARKING LOT</b>																
		Brown, <b>SILTY CLAY (CL-ML)</b> , moist. [Fill]																
465																		
5		White, hard, <b>LIMESTONE</b> , interbedded with brown clay.																
460																		
10																		

LOG OF SOIL BORING AG 17 10031 ZILKER BORING LOGS.GPJ HVJ.GDT 3/10/17

Shear Types: ● = Hand Penet.    ■ = Torvane    ▲ = Unconf. Comp.    ※ = UU Triaxial

See Plate 3 for boring location.

PLATE

