

**From:** [Michael Whellan](#)  
**To:** [Sirwaitis, Sherri](#); [Rivera, Andrew](#)  
**Cc:** [Michael Whellan](#)  
**Subject:** FW: Luby's Site - Horizon Environmental Report - shared with City staff - Scott Hiers  
**Date:** Tuesday, August 3, 2021 11:30:53 AM  
**Attachments:** [image003.png](#)  
[image004.png.msg](#)  
[Horizon Environmental Report - Luby's Site 5-14-2021 .pdf.msg](#)

---

\*\*\* External Email - Exercise Caution \*\*\*

Yesterday, Commissioner Thompson asked about the caves - - we had done this report (attached) and shared it with Environmental Staff back in May before proceeding with the rezoning case - - I believe Scott Heirs (City of Austin, Senior Environmental Scientist, PG) is the point person on karst features at the City. Might be good to have him at the hearing to discuss the report and his independent assessment?

MJW.

---

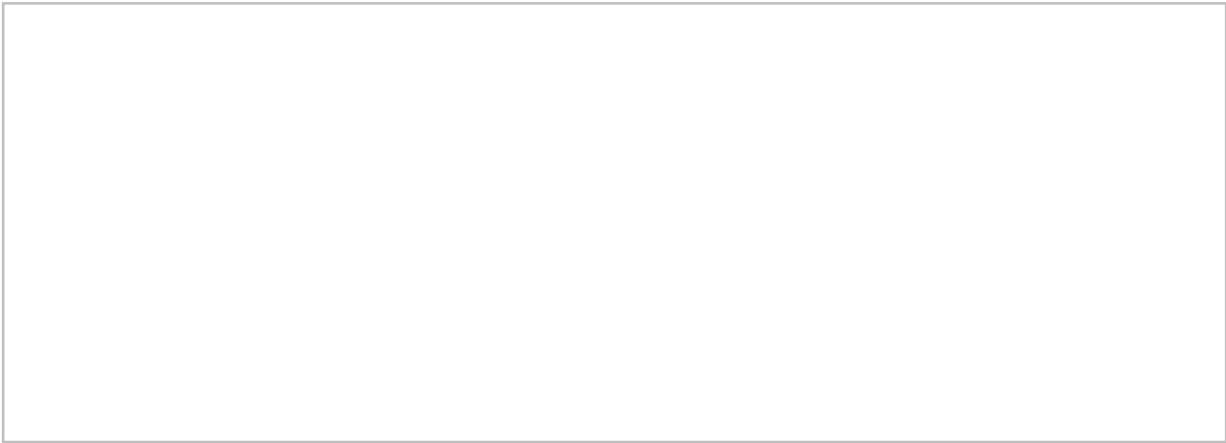
**From:** Michael Whellan  
**Sent:** Tuesday, August 3, 2021 11:23 AM  
**To:** 'BC-Carrie.Thompson@austintexas.gov' <BC-Carrie.Thompson@austintexas.gov>  
**Cc:** Michael Whellan <; Michael Gaudini <> **Subject:** Luby's Site - Horizon Environmental Report - shared with City staff - Scott Hiers

The attached report was shared with City Environmental Staff; we also discussed it with them before proceeding with the rezoning because we wanted to be sure that they too agreed with the conclusions, which are as follows:

#### **CONCLUSIONS AND RECOMMENDATIONS**

Based upon the results of the karst feature investigation, Luby's Cave (F-1) does not provide habitat for endangered karst invertebrates and no biological collections are recommended. It is Horizon's opinion that Luby's Cave (F-1) would not qualify as a critical environmental feature (CEF) with an associated setback buffer due to its nature (i.e., interstitial, apparently encountered during previous City of Austin utility construction), current developed site conditions, the fact that its surface expression was covered with a City of Austin manhole, and the presence of an underground City of Austin wastewater line within the feature.

**Dead Dog Cave – entrance has been paved over in the TxDOT right-of-way for over 40 years:**



**CAUTION:** This email was received at the City of Austin, from an EXTERNAL source. Please use caution when clicking links or opening attachments. If you believe this to be a malicious and/or phishing email, please forward this email to [cybersecurity@austintexas.gov](mailto:cybersecurity@austintexas.gov).



Environmental Services, Inc.

14 May 2021

Mr. Brett Denton  
Arden Residential  
5453 Burnet Road, Suite 203  
Austin, Texas 78746

**RE: Draft Comprehensive Report – Luby’s Site at Steck and MoPac  
8176 North MoPac Expressway  
Austin, Travis County, Texas  
HJN 21048.001**

Dear Mr. Denton:

Per your request, Horizon has summarized the tasks listed below related to karst features/caves located at the Luby’s restaurant site (subject site) and/or the immediate site vicinity. In addition, the information/reports for each listed task are attached to this letter report.

#### **KARST SURVEY**

The objective of the karst survey was to evaluate the structural development, subgrade extent, and habitat potential for endangered karst invertebrates at approximately 1 geologic feature (F-1). This feature is a subsurface void covered by a storm sewer lid located along the eastern property boundary of Luby’s along the southbound service road for the MoPac Expressway.

Based on the results of the karst survey, feature F-1 meets the requirements to be classified as a cave based on it being a natural underground open space formed by the dissolution of limestone that is large enough for an average-sized person to enter. Horizon staff surveyed/mapped the feature, which has been named **Luby’s Cave** for identification purposes. The total footprint of the cave extends 21 feet from southeast to northwest and 14 feet from east to west, with a total depth of approximately 15 feet. Additionally, Luby’s Cave does not appear to provide habitat for endangered terrestrial karst invertebrates (TKIs) based on its small size and highly variable and/or unstable temperatures/humidity. The karst survey letter report is presented in Attachment A.

#### **TEXAS SPELEOLOGICAL SURVEY FORMAL DATA REQUEST**

Additionally, Horizon submitted a formal written data request to the Texas Speleological Survey (TSS) on 16 April 2021. A formal data request is used where the volume of sensitive data requested is potentially significant and/or where a greater degree of assurance is desired from the requestor that the data will not be misused. This type of request is used in karst areas to obtain further information on caves that may occur in the area.

The results of the TSS data export request showed no apparent cave (entrances) located within the Luby’s site and approximately 4 cave entrances located outside the Luby’s site but within the requested area of interest (i.e., <0.25-mile radius) (see Figures 1 and 2 in Attachment B). The four listed caves are Dead Dog Cave No. 2 (SE driveway entrance into Luby’s), Dead Dog Cave No. 1 (Trap Door Spider Cave, outside western Luby’s property boundary), Dead Dog Cave No. 6 (north of NW entrance into Luby’s under Steck

Boulevard), and Dead Dog Cave No. 4 (due west of Luby’s under existing apartment complex). According to TSS, all the cave entrances have been covered by area development. TSS provided cave maps for only Dead Dog Cave No. 2 and Dead Dog Cave No. 1 (Trap Door Spider Cave) (see Attachment B). TSS also provided a written summary and a spreadsheet of data findings (see Attachment B). Luby’s Cave (F-1) was not documented by the TSS.

## **EMAILS AND PERSONAL TESTIMONIES**

During the investigation of the subject site, Horizon has corresponded with various individuals via email and phone concerning karst features/caves at the subject site. Select emails from Scott Hiers, PG (City of Austin) are presented in Attachment C. As for phone calls, Horizon contacted Mike Warton (ACI Consulting, Inc.) concerning caves at/near the subject site. Mr. Warton stated that the entrance to Dead Dog Cave No. 2 was located within the southeastern driveway into the Luby’s and a manhole was placed over the cave entrance to provide future access into the cave. However, he stated that this manhole was paved over during construction of the Luby’s. In addition, Mr. Warton stated that Trap Door Spider Cave (Dead Dog Cave No. 1) was filled/sealed with concrete during construction of the Luby’s.

## **GROUND PENETRATING RADAR STUDY**

Based on the results of the TSS formal data request and conversation with Mr. Warton, Horizon recommended conducting a ground penetrating radar (GPR) survey to accurately locate the entrance to Dead Dog Cave No. 2. On 30 April 2021, Round Rock Geophysics of Round Rock, Texas conducted a GPR survey along the southeastern driveway into Luby’s. The GPR survey was conducted using an SIR 4000 system from Geophysical Survey Systems, Inc. (GSSI) with a 270-megahertz antenna for maximum resolution and depth. The GPR survey provided details of the subject cave entrance area to an approximate depth of 20 feet below surface grade. GPR field data were collected along several profile lines spaced at 2-foot intervals that crossed the driveway in approximate east-west directions (see Attachment D).

Interpretation of the GPR survey results indicate an asphalt and concrete-covered driveway, several buried utility lines, and the location of a possible manhole with an apparent connected cave passage extending towards the MoPac access road. The manhole is located off-site within a Texas Department of Transportation (TxDOT) right-of-way (ROW) approximately 70 feet from the start of GPR profile lines 1, 3, and 5. Additionally, the location of the manhole was marked on the ground with spray paint by the GPR survey crew (see Attachment D). Based on the results of the GPR study, the former entrance to Dead Dog Cave No. 2 is located off-site within the southeastern driveway entrance into Luby’s; however, it has been paved over with concrete and is not accessible in its present condition. The manhole location, according to the GPR survey, is very close to where TSS shows the original entrance to Dead Dog Cave No. 2.

## **CONCLUSIONS AND RECOMMENDATIONS**

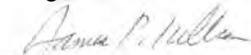
Based upon the results of the karst feature investigation, Luby’s Cave (F-1) does not provide habitat for endangered karst invertebrates and no biological collections are recommended. It is Horizon’s opinion that Luby’s Cave (F-1) would not qualify as a critical environmental feature (CEF) with an associated setback buffer due to its nature (i.e., interstitial, apparently encountered during previous City of Austin utility construction), current developed site conditions, the fact that its surface expression was covered with a City of Austin manhole, and the presence of an underground City of Austin wastewater line within the feature.

Based on the results of the TSS data request and the GPR survey, the entrance to Dead Dog Cave No. 2 is located off-site within the southeastern access driveway to the Luby’s site. It is Horizon’s opinion that Dead Dog Cave No. 2 would not qualify as a CEF with an associated setback buffer due to current site conditions (i.e., it has been entirely paved over with concrete for the past 40 years and there is a manhole within the TxDOT ROW). Horizon does not recommend any further action since this location has been verified by three reliable sources (TSS, Mr. Warton, and Round Rock Geophysics).

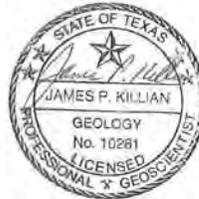
Based on the results of the TSS data request and conversation with Mr. Warton, the entrance to Dead Dog Cave No. 1 (Trap Door Spider Cave) is located off-site from the Luby’s site. It is Horizon’s opinion that Dead Dog Cave No. 1 (Trap Door Spider Cave) does not qualify as a CEF with an associated setback buffer due to its reported status (i.e., concrete filled/sealed during past construction) and current developed site conditions (it has been covered by an asphalt driveway for the past 40 years).

Horizon appreciates the opportunity to be of service to you and provide this comprehensive letter report. Please contact us if you have any questions or require additional information.

For Horizon Environmental Services, Inc.  
Registered TBPG Firm No. 50488



James Killian, P.G.<sup>1</sup>  
Senior Geologist – Horizon



## ATTACHMENTS

- Attachment A: Karst Survey Letter Report – F-1 (Luby’s Cave)
- Attachment B: Texas Speleological Survey (TSS) Data – Luby’s
- Attachment C: Email correspondence - Karst features/caves at Luby’s
- Attachment D: Ground Penetrating Radar (GPR) Report – Luby’s (SE driveway entrance)

---

<sup>1</sup> Registered Professional Geologist, State of Texas

**ATTACHMENT A**  
**KARST SURVEY REPORT**

27 April 2021

Mr. Brett Denton  
Ardent Residential  
5453 Burnet Road, Suite 203  
Austin, Texas 78746

**RE: Environmental Resource Inventory – Luby’s at Steck and MoPac  
Austin, Travis County, Texas  
HJN 21048.001**

Dear Mr. Denton:

Per your request, Horizon has investigated 1 geologic feature that was apparently covered by a storm sewer lid at the subject site.

## **KARST SURVEY METHODOLOGY**

The objective of this exploration was to evaluate the structural development, subgrade extent, and habitat potential for endangered karst invertebrates at approximately 1 geologic feature (F-1).

Tasks included surveying/mapping of any subgrade void space and determining habitat potential for endangered karst invertebrates.

## **KARST SURVEY RESULTS**

The investigations of the subject feature occurred 26 April 2021. The feature is described as follows:

Geologic feature F-1 is a subsurface void covered by a storm sewer lid located along the eastern property boundary of Luby’s along the southbound service road for the MoPac Expressway (Loop 1). Inside the void and below the lid, there is no associated stormwater infrastructure, such as a manhole and/or stormwater line. The feature was likely interstitial with no connection to the surface prior to the utility (wastewater line) construction in the unpaved right-of-way area. After entering through the opening, the feature enlarges into one small room about 5 to 6 feet high with a lowering of the ceiling towards the west. The east side of the void is completely walled off by concrete from an existing wastewater line and associated fill material. Along the wastewater line, the void extends approximately 5 feet to the south and 7.5 feet to the north. Across the entire length of the room near the wastewater line (azimuth: N351W) are two 2-inch-diameter steel pipes that appear to be additional underground utility lines. The furthest lateral extent of the void is approximately 14 feet to the northwest (azimuth: N331W) where the ceiling lowers at a headwall and continues for another 3 feet before becoming too low to follow. Approximately 11.5 feet due

west from the entrance is a rimrock dam with constant dripping water entering through a small cavity opening from the west. This apparent inflow of water drains down underneath a headwall into what appears to be another low bedding plane void, but is inaccessible due to large boulders and breakdown blocking the pathway. Any potential dig leads found within the room were inaccessible due to large breakdown and/or low ceiling heights. This feature meets the requirements to be classified as a **cave** based on it being a natural underground open space formed by the dissolution of limestone that is large enough for an average-sized person to enter. On 26 April 2021, Horizon staff conducted a short survey and map of the feature, which has been named **Luby's Cave** for identification purposes. The total footprint of the cave extends 21 feet from southeast to northwest and 14 feet from east to west, with a total depth of approximately 15 feet.

## **KARST FEATURE ASSESSMENT**

In Central Texas, cave development and potential karst invertebrate species habitat usually occur within the more porous and/or solutioned stratigraphic members of the Edwards Formation. Caves that have developed within the Edwards via a natural entrance path (i.e., sinkhole, solution cavity, or solution-enlarged fracture) frequently provide more suitable conditions for karst invertebrates. However, if a cave develops within the Edwards and does not have a natural connection to the surface (i.e., interstitial), the cave or void is usually a sterile environment (void of organisms). Unsuitable habitat occurs because there is no surface connection that allows organic materials into the cave to sustain any invertebrate life forms. Caves that do have a surface connection also require sufficient depth and/or extent to provide stable temperature and humidity. All these factors are examined and reviewed in determining the potential for karst invertebrate species habitat in the subgrade.

The results of the Karst Survey have identified 1 geologic feature (F-1) at the subject site that has sufficient subsurface development to be classified as a **cave**. The standards established by the Texas Speleological Survey (TSS) require a karst feature to have, at a minimum, 15 feet of human-traversable subterranean passage to be properly classified as a cave. This distance may be vertical, horizontal, or a combination of both.

During exploration of the cave, a constant search for biological life forms was made; however, no troglobitic or endangered cave-dwelling species (invertebrates) were found. Cave feature F-1 (**Luby's Cave**) does not appear to provide habitat for endangered terrestrial karst invertebrates (TKIs) based on highly variable or unstable temperatures and humidity. This cave feature was closely inspected and contained sufficient moisture input to provide potential habitat for endangered TKIs; however, its existing configuration severely limits favorable conditions in which additional subgrade development would occur. Feature development appears to have been massively infilled with soils and/or restrictive to the shallow subsurface and, as a result, is subjected to radical seasonal temperature and moisture changes.

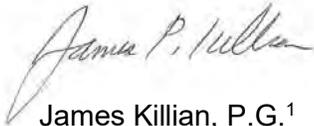
## RECOMMENDATIONS

Based upon the results of the karst feature investigation, no biological collections (i.e., Phase III Karst Survey) are recommended for this cave feature (F-1). In addition, further consultation with the City of Austin is recommended to determine if this feature would qualify as a critical environmental feature (CEF) with an associated setback buffer, if applicable, due to current site conditions and/or existing underground utility infrastructure.

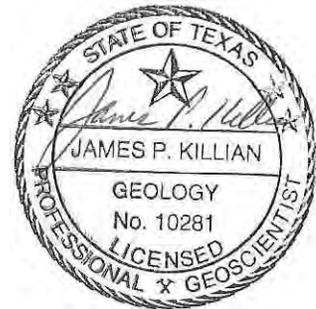
Based on the identified geologic information, a moderate potential exists that subsurface voids may be encountered during any proposed construction or grading activities. If such voids are encountered, excavation should stop immediately, and a qualified karst geologist should be contacted to perform an inspection of the voids.

Horizon appreciates the opportunity to be of service to you and provide this letter report. Please contact us if you have any questions or require additional information.

For Horizon Environmental Services, Inc.  
Registered TBPB Firm No. 50488



James Killian, P.G.<sup>1</sup>  
Senior Geologist – Horizon



## REFERENCES

(Nearmap) Nearmap US PhotoMaps. Created by Nearmap\_Engineering 20 April 2017. Imagery date 16 April 2021.

(OSM) OpenStreetMap contributors. Open Street Map, <<http://www.openstreetmap.org>>. Available under the Open Database License ([www.opendatacommons.org/licenses/odbl](http://www.opendatacommons.org/licenses/odbl)). Accessed 16 April 2021.

(UT-BEG) The University of Texas at Austin Bureau of Economic Geology; C.V. Proctor, Jr., T.E. Brown, J.H. McGowen, N.B. Waechter, and V.E. Barnes. *Geologic Atlas of Texas*, Austin Sheet. Francis Luther Whitney Memorial Edition. Revised 1995.

---

<sup>1</sup> Registered Professional Geologist, State of Texas

**APPENDIX A**  
**FIGURES**



**Legend**

 Subject Site



**Horizon**  
Environmental Services, Inc.

Date:	04/28/2021
Drawn:	KRS
HJN NO:	21048.001 GA
Source:	OSM, 2021

**Figure 1**  
Vicinity Map  
Luby's Site at Steck and MoPac  
8176 North Mopac Expressway  
Austin, Travis County, Texas



0 1,000 2,000  
Feet



F-1  
Luby's Cave

**Legend**

-  Sensitive Geologic Feature
-  Cave Footprint
-  Subject Site



**Horizon**  
Environmental Services, Inc.

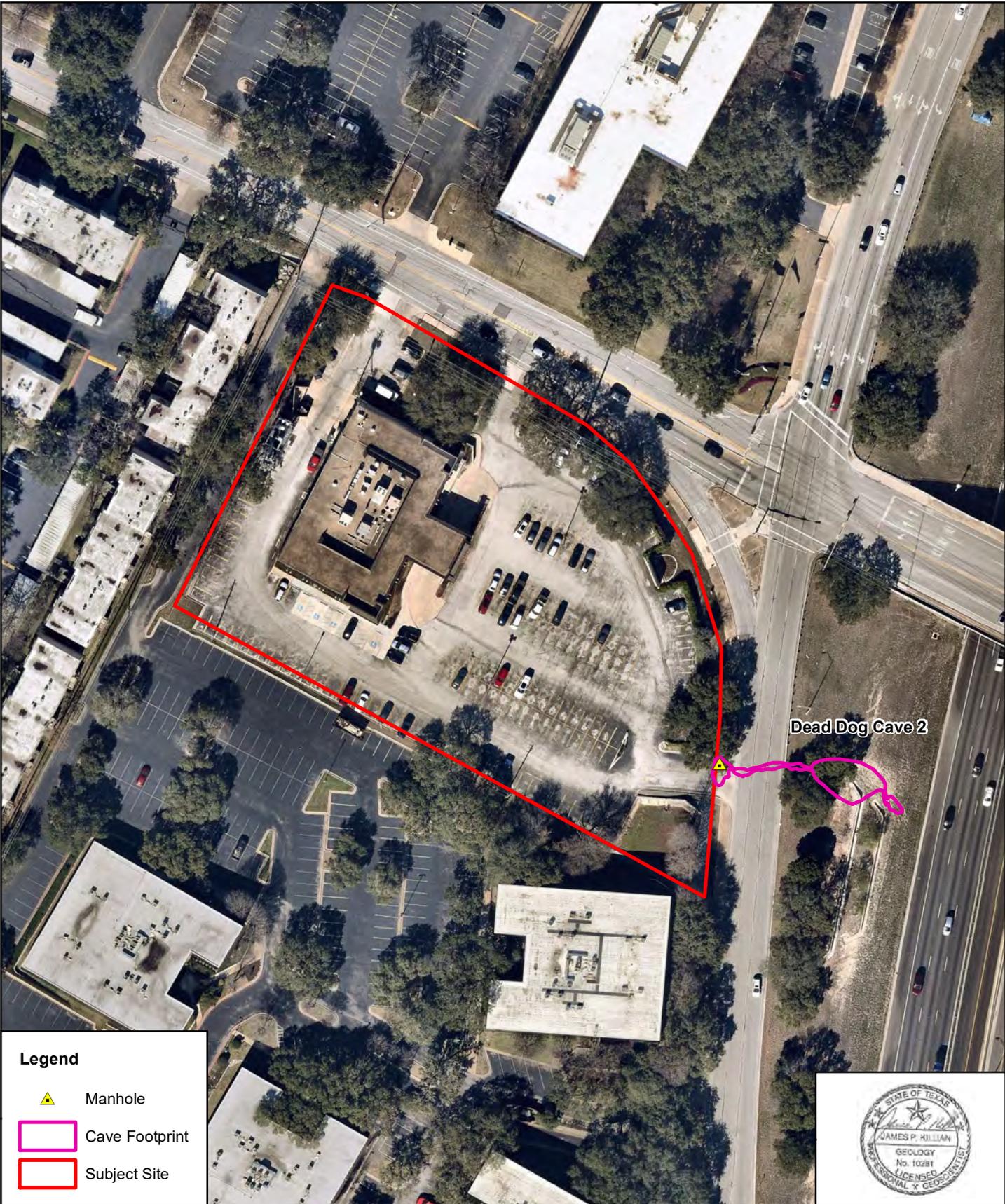
Date:	04/28/2021
Drawn:	KRS
HJN NO:	21048.001 GA
Source:	Nearmap, 2021

**Figure 2**  
Geologic Feature Map  
Luby's Site at Steck and MoPac  
8176 North Mopac Expressway  
Austin, Travis County, Texas



0 50 100  
Feet





Dead Dog Cave 2

**Legend**

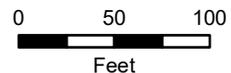
-  Manhole
-  Cave Footprint
-  Subject Site

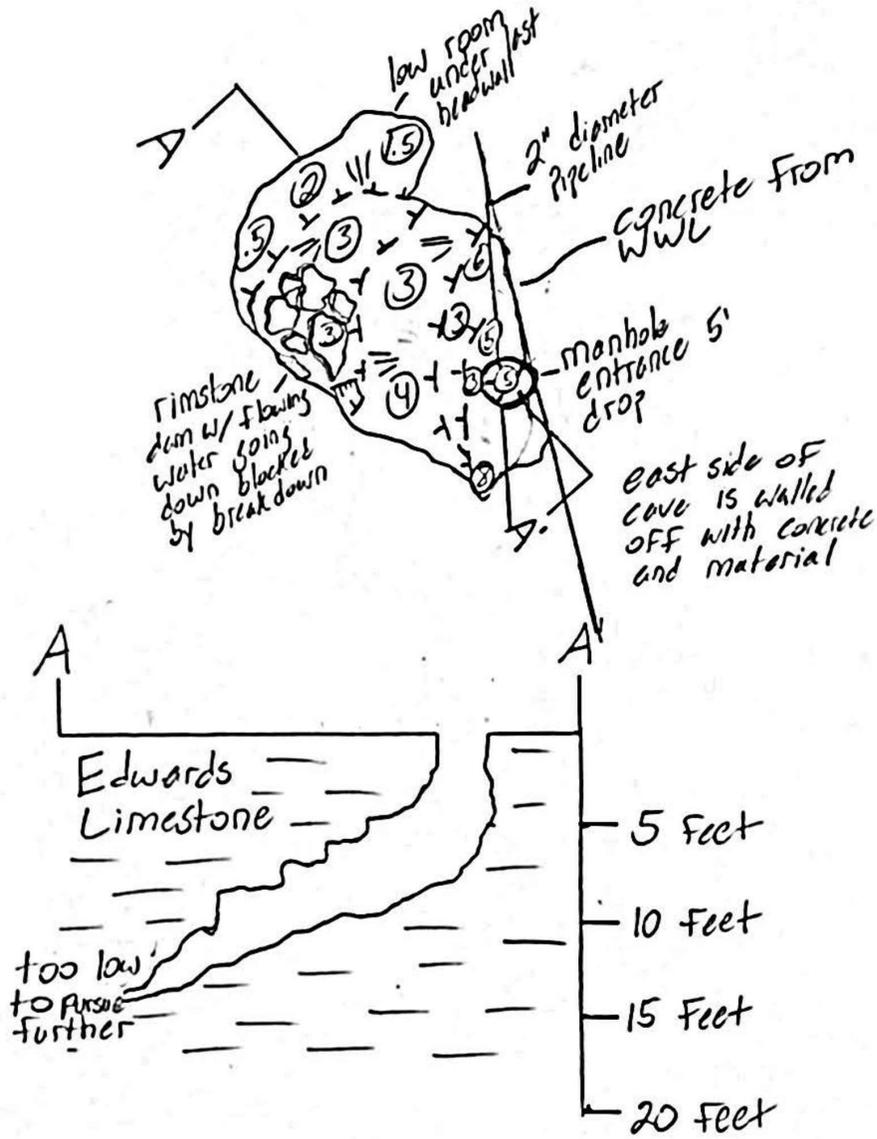


**Horizon**  
Environmental Services, Inc.

Date:	05/14/2021
Drawn:	KRS
HJN NO:	21048.001 GA
Source:	Nearmap, 2021

**Figure 4**  
Dead Dog Cave Footprint and  
Manhole Location Map  
Luby's Site at Steck and MoPac  
8176 North Mopac Expressway  
Austin, Travis County, Texas



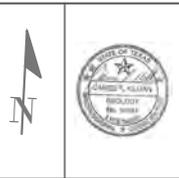


**Horizon**  
Environmental Services, Inc.

Date: 04/28/2021  
 Drawn: KRS  
 HJN NO: 21048.001KS

Luby's Cave (F-1)  
 Luby's Site at Steck and MoPac  
 Austin, Travis County, Texas  
 Suuntos & Tape Survey, 26 April 2021  
 Personnel: J. Killian, J. Yarbrough, C. Hall  
 Length: 21' Width 14' Depth: 15'  
 Drafted By: J. Yarbrough

② Ceiling Height (ft)  
 △ Survey Station  
 1" = 10'



**APPENDIX B**  
**PHOTOGRAPHS**



**PHOTO 1**  
View of geologic feature F-1 (cave), facing north



**PHOTO 2**  
View of F-1 entrance covered by storm sewer lid, facing down



**PHOTO 3**  
View of geologic feature F-1 (cave entrance), facing up



**PHOTO 4**  
View of eastern side of cave walled off by concrete from wastewater line (WWL), facing east



**PHOTO 5**  
View of rimstone dam with dripping water, facing west



**PHOTO 6**  
Closer view of rimstone dam with water draining under flowstone headwall, facing west



**PHOTO 7**  
View of southern wall of cave, facing south



**PHOTO 8**  
View of 2-inch-diameter buried steel piping running through cave next to WWL, facing north



**PHOTO 9**  
View of northern wall of cave, facing north



**PHOTO 10**  
View of low bedding plane room to the northwest underneath final headwall, facing northwest

**ATTACHMENT B**

**TSS DATA**

Summary of TSS data export for Horizon Environmental Services 4-16-21 data request.

The data export includes 4 caves located inside or on the edges of the indicated interest area. All of the cave entrances have been covered by development.

The included shape file contains location data.

The included Excel file contains memo fields for feature description and biological data. Copy cell contents into a text editor such as MSWord for improved readability. Note that the description for Dead Dog Cave #4 more closely matches the location of Dead Dog Cave #6.

Three map pages were found in our files. No photos were found.

Marvin Miller



**Legend**

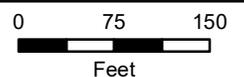
- TSS Cave Data
- Subject Site

**Horizon**  
Environmental Services, Inc.

Date:	05/02/2021
Drawn:	SBF
HJN NO:	21048.001 PA
Source:	Nearmap, 2021 TSS, 2021

**Figure 1**

Texas Speleological Survey Data  
Luby's Site at Steck and MoPac  
8176 North MoPac Expressway  
Austin, Travis County, Texas



**ATTACHMENT C**  
**EMAIL CORRESPONDENCE**

**From:** [Hiers, Scott](#)  
**To:** [James Killian](#)  
**Cc:** [Sydow, Lindsey](#); [Markowski, Michael](#); [Andrews, Alan](#); [Rice, Radmon](#); [Brown, Eric](#)  
**Subject:** Dead Dog Cave  
**Date:** Monday, April 19, 2021 1:35:31 PM  
**Attachments:** [Trails and Tales of Old Austin and Travis County - Dead Dog Cave!.pdf](#)  
[TSS Dead Dog Cave 2 map \(Fieseler 1972\).tif](#)  
[TSS Dead Dog Cave 2 map \(Kastning 1983\).tif](#)

---

**[EXTERNAL EMAIL]**

Hi James,

The City of Austin Watershed Protection Department does not have an location for Dead Dog Cave. The only information we have is the attached cave map and article form Trails and Tales of Old Austin. Sounds like a manhole cover was installed to permit access to the cave, but was paved over when the Luby's was built. I would recommend reaching out the Texas Speleological Society (TSS). Perhaps, they have move information. Any information that you find on the cave, please pass it along to me.

Thanks!

Scott E. Hiers, P.G.  
City of Austin – Watershed Protection Dept.  
505 Barton Springs Rd.  
Austin, TX 78704  
512-974-1916  
512-217-5047

This electronic mail message is intended exclusively for the individual or entity to which it is addressed. This message, together with any attachment, may contain the sender's organization's confidential and privileged information. The recipient is hereby notified to treat the information as confidential and privileged and to not disclose or use the information except as authorized by sender's organization. Any unauthorized review, printing, retention, copying, disclosure, distribution, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this message in error, please immediately contact the sender by reply email and delete all copies of the material from any computer. Thank you for your cooperation.

**[EXTERNAL EMAIL]** Exercise caution. Do not open attachments or click links from unknown senders or unexpected email

Sunday, September 2, 2018

## Dead Dog Cave!

This is an expanded post of my history article for the September 2018 issue of the Northwest Austin Civic Association (NWACA) newsletter (<http://nwaca.org/newsletter/>)

Recently the world held its breath as boys and coach of a Thai soccer team were stranded in a cave. Our neighborhood had its own cave drama, albeit not on the scale of the Thai soccer team. I'm referring to Dead Dog Cave[1], its entrance now buried beneath Luby's parking lot near Steck and Mopac Service Road.

The cave was first brought to the attention of cavers about 1958. A gentleman exploring a sink hole crossed a ledge which gave way, climber and rock falling to the bottom of the sink. Subsequent exploration and removal of dirt, rocks, and dog bones (hence the name) revealed a cave 175 feet long, with a depth of 91 feet.

The cave features tight crawl spaces only 8 inches wide; not for the claustrophobic! At one point a narrow vertical passage opens in the ceiling of a walking-size passage. The walking passage extends 15 feet to a six-foot drop into the "Big Room," a room 60 feet long, 30 feet wide, and 30 feet high. Big by Travis County cave standards. The drop into the Big Room is undercut and unclimbable without climbing aids. Inside the Big Room, from a fissure issues a small stream creating a waterfall which falls to the floor creating an area of flowstone. The water flows to a small drain at the lowest point in the cave, 91 feet below the surface.

Even though relatively few braved the difficult path to the Big Room, the cave had a reputation among cavers. The cave also had a reputation among teens!

July 5, 1978, three teenagers from the neighborhood decided to visit the cave. The trip was uneventful until the three attempted to exit. The boy in the lead became pinned in a two-foot-wide passage, 25 feet from the surface by a cave-in, rocks crushing his legs several inches below his hips. The exit thus blocked, his friends behind him were trapped as well. It was about 8:30 pm when the call went out for help from an adult who had gone with the teens, staying near the entrance, presumably for just this reason.

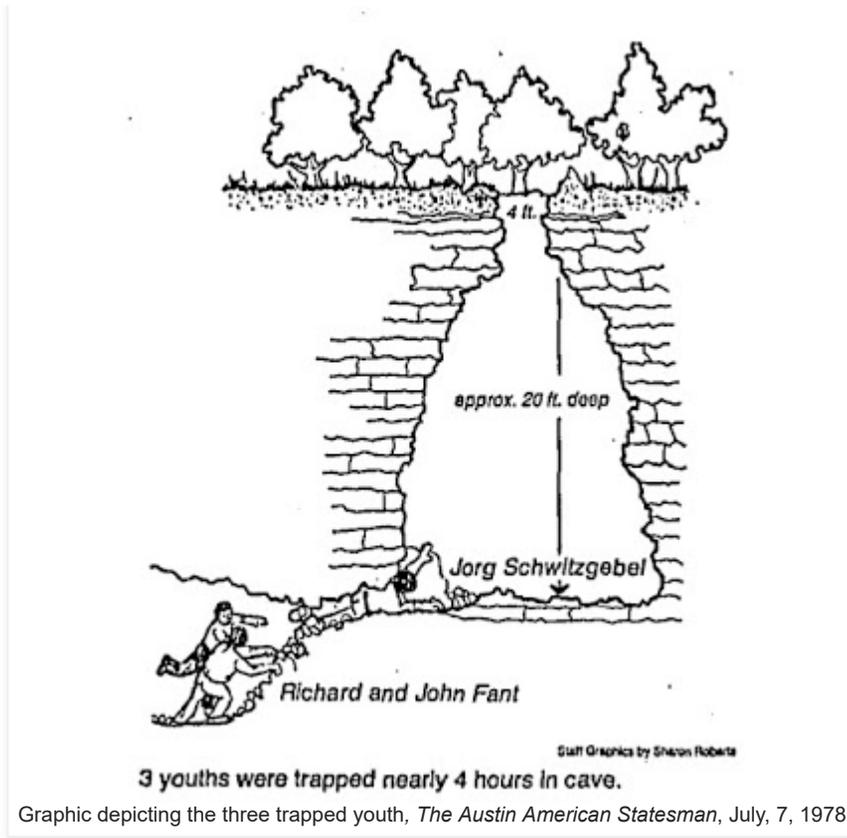
First on the scene was the Fire Department but they were unable to free the boy using a rope, at which time cavers from the Austin Cave Club were called in for assistance. The plan then was to dig out the loose rocks holding the boy in the narrow passage. The most effective implement was a coffee can from the Red Cross truck that had arrived to provide refreshment for the rescuers. After hours of digging the boy was freed about 12:30 am as applause rang out from a crowd of

hundreds of onlookers. "All I could think of," said the boy "was that if the rest came down I would be dead."

That was not the first incident at Dead Dog Cave. Another gentleman told me he got stuck in 1959 when he was a 10th grader at McCallum High; once again cavers came to the rescue. But speculation on the 1978 incident was that construction activities for the extension of MoPac had destabilized the cave leading to the cave-in that pinned the teen. State highway engineers made plans to close the cave with concrete. Cavers talked with engineers, and they agreed to include a manhole cover to permit access to the cave. Unfortunately, when Luby's was built, the significance of that manhole was not appreciated and was paved over, cutting off access to the infamous Dead Dog Cave!

## Photos





## Footnote, References

[1] The cave is officially known as Dead Dog Cave #2 (yes, there is a Dead Dog Cave #1), and also as Steck Cave. Here I'll refer to it simply as Dead Dog Cave. My thanks to Jerry Atkinson for his help on this article, and William Russell for use of his write-up, "Major and significant caves and karst features of Travis County, Texas." Texas Speleological Survey, Austin, Texas (in publication 2018).

Kelly, Lee. "Cave-in won't stop teens: Better preparation planned for next exploration", *The Austin American Statesman*, Nov 19, 1978

Turner, Allan. "Youngsters avoid injury in cave-in; entrance sealed", *The Austin American Statesman*, July 6, 1978

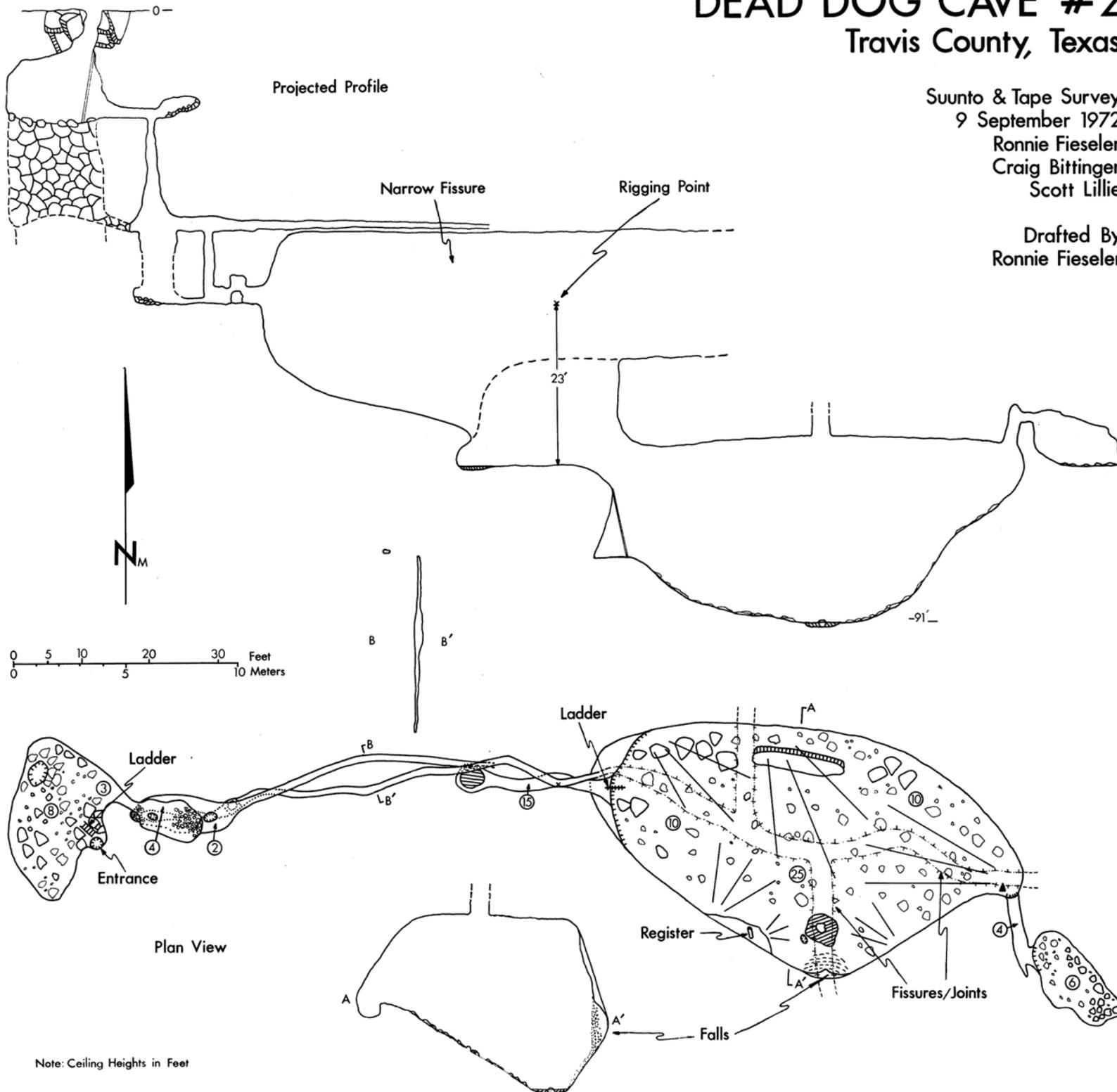
Turner, Allan. "Cave where 3 trapped one of hundreds here", *The Austin American Statesman*, July, 7, 1978

# DEAD DOG CAVE #2

Travis County, Texas

Suunto & Tape Survey  
9 September 1972  
Ronnie Fieseler  
Craig Bittinger  
Scott Lillie

Drafted By  
Ronnie Fieseler



Note: Ceiling Heights in Feet

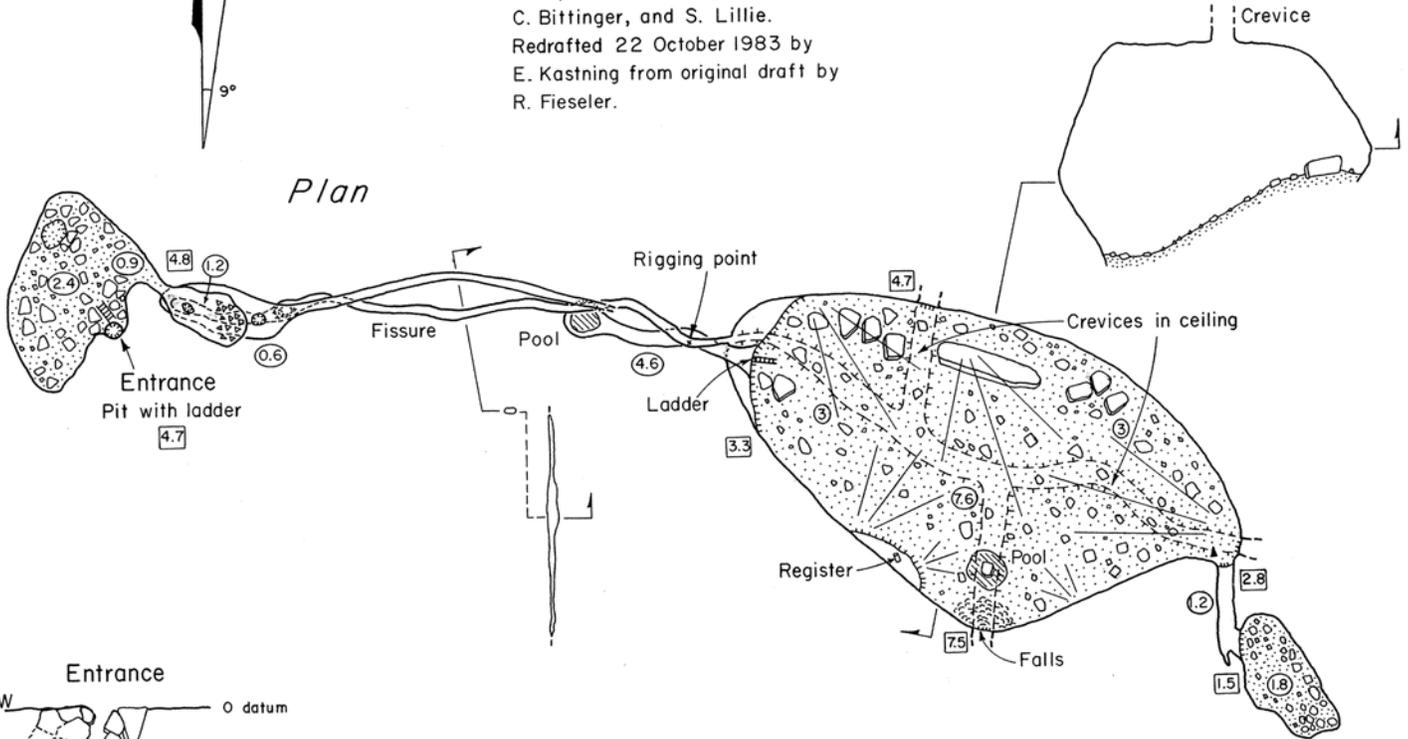
# DEAD DOG CAVE No. 2

## TRAVIS COUNTY, TEXAS

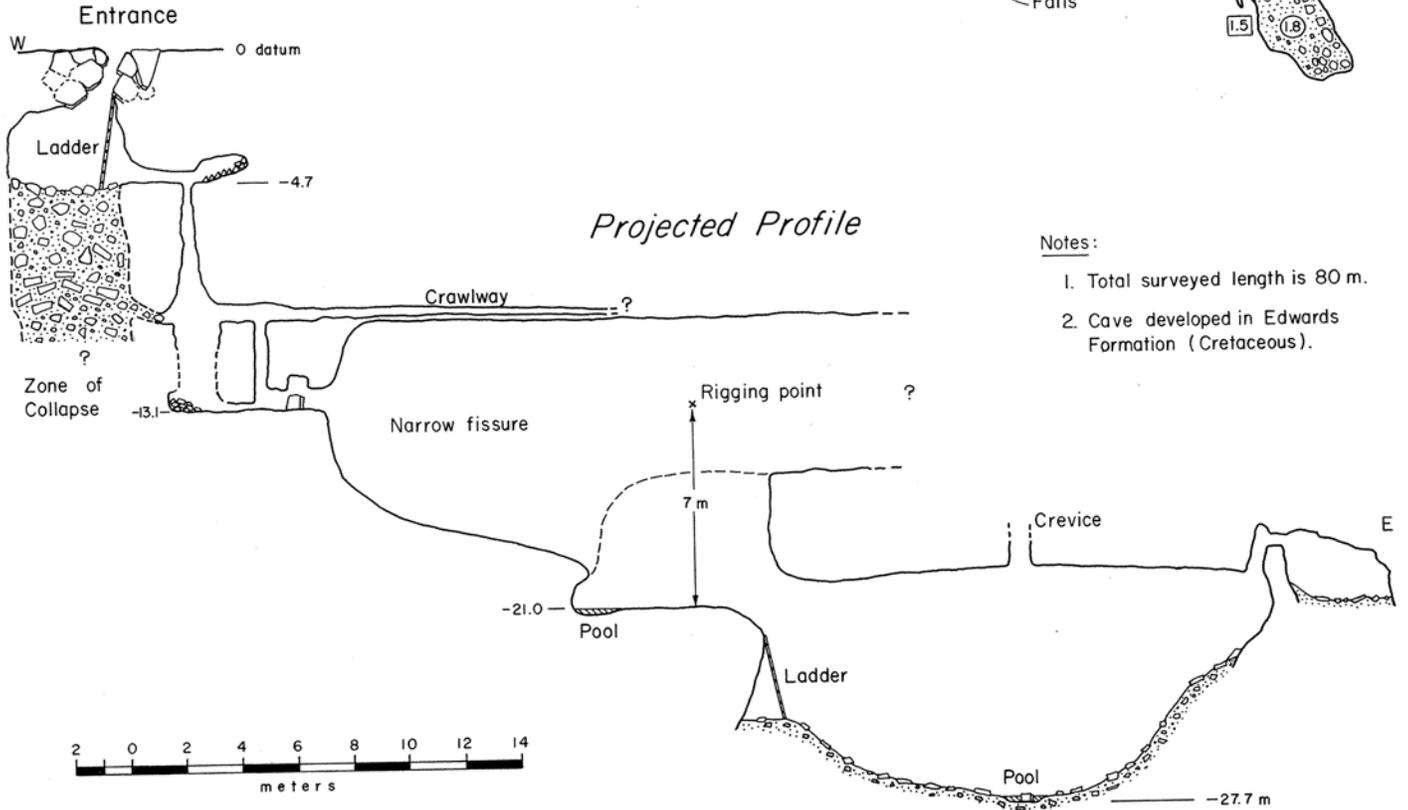
Suunto compass and tape survey  
 9 September 1972 by R. Fieseler,  
 C. Bittinger, and S. Lillie.  
 Redrafted 22 October 1983 by  
 E. Kastning from original draft by  
 R. Fieseler.



*Plan*



*Projected Profile*



**Notes:**

1. Total surveyed length is 80 m.
2. Cave developed in Edwards Formation (Cretaceous).

**From:** [Hiers, Scott](#)  
**To:** [James Killian](#)  
**Cc:** [Sydow, Lindsey](#); [Markowski, Michael](#); [Andrews, Alan](#); [Rice, Radmon](#); [Brown, Eric](#); [Hauwert, Nico](#)  
**Subject:** RE: Dead Dog Cave  
**Date:** Monday, April 19, 2021 3:29:56 PM  
**Attachments:** [Dead Dog Cave 06 Jul 1978, 1 - Austin American-Statesman at Newspapers.com.pdf](#)  
[Dead Dog 19 Nov 1978, 28 - Austin American-Statesman at Newspapers.com.pdf](#)  
[16 Mar 1989, 25 - Austin American-Statesman at Newspapers.com.pdf](#)  
[Dead Dog Cave Austin American Statesman Thu Mar 16 1989 page 2 .pdf](#)

---

**[EXTERNAL EMAIL]**

All,

I found this Austin American Statesman articles.

Scott E. Hiers, P.G.  
City of Austin – Watershed Protection Dept.  
505 Barton Springs Rd.  
Austin, TX 78704  
512-974-1916  
512-217-5047

This electronic mail message is intended exclusively for the individual or entity to which it is addressed. This message, together with any attachment, may contain the sender's organization's confidential and privileged information. The recipient is hereby notified to treat the information as confidential and privileged and to not disclose or use the information except as authorized by sender's organization. Any unauthorized review, printing, retention, copying, disclosure, distribution, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this message in error, please immediately contact the sender by reply email and delete all copies of the material from any computer. Thank you for your cooperation.

---

**From:** Hiers, Scott  
**Sent:** Monday, April 19, 2021 1:35 PM  
**To:** James Killian <james\_killian@horizon-esi.com>  
**Cc:** Sydow, Lindsey <Lindsey.Sydow@austintexas.gov>; Markowski, Michael <Michael.Markowski@austintexas.gov>; Andrews, Alan <Alan.Andrews@austintexas.gov>; Rice, Radmon <Radmon.Rice@austintexas.gov>; Brown, Eric <Eric.Brown@austintexas.gov>  
**Subject:** Dead Dog Cave

Hi James,

The City of Austin Watershed Protection Department does not have an location for Dead Dog Cave. The only information we have is the attached cave map and article form Trails and Tales of Old Austin. Sounds like a manhole cover was installed to permit access to the cave, but was paved over

when the Luby's was built. I would recommend reaching out the Texas Speleological Society (TSS). Perhaps, they have move information. Any information that you find on the cave, please pass it along to me.

Thanks!

Scott E. Hiers, P.G.  
City of Austin – Watershed Protection Dept.  
505 Barton Springs Rd.  
Austin, TX 78704  
512-974-1916  
512-217-5047

This electronic mail message is intended exclusively for the individual or entity to which it is addressed. This message, together with any attachment, may contain the sender's organization's confidential and privileged information. The recipient is hereby notified to treat the information as confidential and privileged and to not disclose or use the information except as authorized by sender's organization. Any unauthorized review, printing, retention, copying, disclosure, distribution, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this message in error, please immediately contact the sender by reply email and delete all copies of the material from any computer. Thank you for your cooperation.

**[EXTERNAL EMAIL]** Exercise caution. Do not open attachments or click links from unknown senders or unexpected email



Jorg Schwitzgebel, left, and John Fant at Dead Dog Cave.

## Cave-in won't stop teens

Better preparation planned for next exploration

By LEE KELLY

Despite some serious injuries, some bad moments and a massive rescue effort, two modern-day Flint Flints trapped for five hours in a Northwest Texas cave said today they are ready to explore the subterranean depths again.

But this time the youths say they'll climb into a safer cave — and they'll be better prepared.

Jorg Schwitzgebel, 18, and John Fant, 15, can still recall the sensations that thoughts of death haunted them when they were trapped. Still, they say that dangers exist in the small limestone caves that are tucked under the surface of Central Texas and they plan to follow the advice of professional cavers on future trips.

The two teenagers, and Paul's younger brother, Richard, 12, were climbing out of Dead Dog Cave four months ago when a partial cave-in occurred, immobilizing Jorg and cutting off their exit. A friend outside the cave brought a team of fire, police and medical personnel who spent hours rescuing the trio.

Today, with two-year-old brothers, the two older boys say they weren't frightened as they lay amidst the rubble, disoriented and jagged ledges listening to workers scrape away mud and rocks to free the cave's explorers.

"We weren't scared. We were bored," John says.

Ready?

"Well, Jorg at first was yelling like the teenagers. 'Please get me out of here. Get me out. But he was really just worried he would come to legs,'" John says.

Jorg made in confirmation.

"And I was worried for a bit if they just buried Jorg and the 125-pound truck on him would fall down on me," John says. "Richard was asleep in another part of the cave most of the time."

Jorg's legs were purple and swollen for three days but all three boys were released safely and without permanent injury.

The cave they were trapped in was sealed with a landslide shortly after their accident, but no sign of the cave nearby for youths discovered a cave opening in the cave had been made. They helped a photographer blink the new entrance.

Now, another cave in an area surrounded by brush and trees not far from their houses has aroused their curiosity, they say.

And this time they say they'll follow advice offered by the University Speleological Society, a cavers' organization at the University of Texas whose members were instrumental in their rescue.

"We'll be cautious," Jorg says. "It's not near a residential area and weakened by blowing rain the other."

"We'll be prepared," John says. "Last time we weren't. We didn't have ropes, water or strong flashlights and I had on a summer shirt. It got cold."

They did have a third person stationed above ground who alerted rescue workers to their plight, but this time they say they'll follow all the safety rules of cave exploring.

According to Speleological Society member Ernest Banding, "Cave exploring is safe if the proper techniques and safety procedures are followed."

**WARD Great Sewing Machine Sale**

**1/2 price**  
**\$110 off deluxe sewing head.**  
**99<sup>88</sup>\***  
200.00 in Spring  
78 Gen. Catalog

I built-in creative which can sew for 8 more creative stitches.

Built-in buttonholer. Drop feed. pushbutton reverse. Slit-length, width dial. Ribbon winder, auto shut-off. \*Head only. Needs control, extra.

**Save \$20**  
Wards upright vac with attachments.  
Tanks included.  
**69<sup>88</sup>**  
Regularly \$9.95

**Save \$51**  
Open-arm handles all your sewing needs.  
Tact slide-on tear (not shown) for fluffed job.  
Open-arm from \$118.00  
**149<sup>88</sup>**  
Regularly \$200

ENJOY IT NOW WITH CHARG-ALL—NO MONEY DOWN

**Sew to save. We'll help.**

AMERICAN LEASE PLAN

5621 N. INTERREGIONAL CAPITAL PLAZA PHONE 452-8161

OPEN 10 A.M. - 9 P.M. DAILY  
AUTOMOTIVE: 8 A.M. - 9 P.M.

Sunday, November 19, 1978 Austin American-Statesman B13

**PREVIEW**  
**GRAND OPENING**  
**TWO DAYS ONLY—OPEN TO THE PUBLIC**  
**MONDAY NOV. 20th FROM 10 TIL 6**  
**TUESDAY NOV. 21st FROM 10 TIL 8**

**WE PAY YOU**

WE SPECIALIZE IN FINER NAME BRAND FURNITURE AND BEDDING NORMALLY FOUND ONLY IN FANCY PLUSH SHOWROOMS. HUGE QUANTITY BUYING POWER, NO MIDDLE MEN, AND LOWER OVERHEAD ALLOW US TO SELL AT EXTREMELY LOW PROFIT MARGINS. DUE TO OUR HIGH VOLUME AND FAST MERCHANDISE TURNOVER, WE GUARANTEE IN WRITING TO BEAT ANYBODY'S PRICE OR.

**WE PAY YOU 120% OF THE DIFFERENCE!!**  
WE BELIEVE TALK IS CHEAP AND SINCE NO ONE ELSE MAKES THIS GUARANTEE—THAT ABOUT SAYS IT ALL—COMPARE ANYWHERE.

**SAVE UP TO 80%**

**FREE LAMPS**

DURING OUR SPECIAL PREVIEW GRAND OPENING WE ARE OFFERING A PAIR OF FREE LAMPS FROM A SPECIAL GROUP WITH THE PURCHASE OF ANY LIVING, DINING OR BEDROOM SUITE.

**DINETTES** WE HAVE 35 STYLES OF DINETTES. TOP DESIGNER STYLES AT LOW PRICES. COMPARE WITH ANY DINETTE SPECIALTY OR FURNITURE STORE ANYWHERE.

**DINING ROOM** FAMOUS BRAND DINING ROOMS FROM \$199 TO \$2995. DISCOUNT PRICE. WHY PAY RETAIL?

**FINANCING AVAILABLE**

1. MASTER CHARGE 2. VISA 3. INSTANT CREDIT TO \$1750 (ON THE SPOT IF YOU QUALIFY)  
4. ANY AMOUNT OF FINANCING CAN BE ARRANGED (SEE STORE FOR DETAILS)

**LIVING ROOM**  
DECORATOR LIVING ROOM AND DEN SETS  
PRICED FROM \$199 TO \$1895

**BEDROOM**  
AMERICA'S TOP NAME BRAND BEDROOMS  
PRICED FROM \$199 TO \$1895

YOU WILL BE PLEASANTLY SURPRISED, BECAUSE WE LIKE YOU HAVE SEEN MANY COME ON ADO. THIS IS FOR REAL!

**INSTANT CREDIT**  
ASK US HOW YOU MAY QUALIFY FOR INSTANT CREDIT. WE CAN ARRANGE FINANCING FOR—  
UP TO \$750 NET AMOUNT  
ALL WITHHOLDINGS SUBJECT TO AGENCY RATES. ALL SOLD ON A 10% COME-TO-SERVE BASIS. WE RESERVE THE RIGHT TO LIMIT QUANTITIES ON ALL MERCHANDISE. SOME MERCHANDISE MAY NOT BE ELIGIBLE FOR INSTANT CREDIT. WE RESERVE THE RIGHT TO LIMIT QUANTITIES. PRICES MAY BE DIFFERENT. LOWER PRICES AVAILABLE.

**Discount INTERIORS**  
DECORATOR FURNITURE DISCOUNT PRICES

821 BRENTWOOD AT 6000 N. LAMAR

PREVIEW GRAND-OPENING HOURS FROM 10 TIL 4 TUES. 10 TIL 4

thursday morning July 6, 1978

Austin American-Statesman

hot Partly cloudy and continued high temperatures. High, upper 90s. Low, upper 70s. Dews, 42°

• Vol. 97 - No. 237 - © 1978, Austin American-Statesman, all rights reserved - 16 cents

Nurses show special session inn sight

By JIM BAKER
When the state's 181 legislators descended on the Capitol next week for the special session, they may be spending more time looking for lodging than worrying about tax relief.



Firefighter climbs into hole where three teens were trapped.

Trapped for 4 hours 3 youths rescued after cave ordeal

By RON POWELL, KIM TRISON and ROBERT SCHWAB
Three youths were trapped inside a cave in Northwest Austin for about four hours Wednesday night after a portion of the underground passageway collapsed as they were climbing out.

"Stiff," the youth responded. "I'm going to need a pair of shoes."
Speakers, who helped authorities shore up the cave opening and rescue the trapped inside, speculated that the youths had been trapped by their inexperience with the cave, probably shaken by repeated dramatic blasting in the area, where McCall's Extension is under construction.

Jail controversy

Audit turned up commission, company link

Several of four parts
"I personally feel that the conflict of interest finding is legitimate and is the most serious finding that resulted from the audit. Any report should address this finding fully."

Despite Whitson's protest, the criminal justice division shelved the audit. Powers said recently, however, that the auditing commission issued a "monitoring basis" while the commission quietly took care of the problems the audit uncovered.

Whitson resigned because the revision threw out the audit's central conclusion: that Gov. Dan Claitor's commission appointed, David Hall Youngblood, had no authority to commission an audit to promulgate a set of jail construction standards susceptible to deletion in court.

LEAA reorganization planned

WASHINGTON - The Carter administration and key congressional leaders have agreed on a plan to reorganize the troubled Law Enforcement Assistance Administration, hoping to increase grants and eliminate state government vetoes on how localities can spend the federal money.

index

Table with 2 columns: Section Name and Page Number. Includes: Assignments Dp-11, Financial 8P-1, Arts and Letters D4, Food 8P-12, Classified Ads E1-14, Horoscopes D6, Comics 88, Life Style D1-12, Crossword 88, Personalities D2, Dear Abby D5, News D11, Deaths 84, Sports C1-6, Education A10, TV Log D9, Bob Fucker D1, Your Good Health D3

Nuts and bolts

The workers didn't speak a word, not once opening to light a cigarette, take a drink for lunch, or use the washroom. Even more remarkable, they worked 16 hours a day without pay.

Government forecasts

7 percent inflation rate

WASHINGTON - The Carter administration has revised its economic forecast, and the new is that the 1978 inflation rate will be 7 percent, and an economic growth rate barely sufficient to keep unemployment from rising.

Dad arrested looking for son lost in crowd

By JAMES NEPP
A father who lost his 7-year-old child and found one of the Tule Lake Florists of July 1971 in Tuesday night found himself arrested before he found his son.

"I had just thought, 'This would be a bad place to lose Brad,'" said Charles (Bud) McDaniel. Then McDaniel's wife, Kathy, noticed that her husband had wandered off.



Charles (Bud) McDaniel and son Brad

WEEKLY

Your weekly  
community newspaper

WEST  
**NEIGHBOR**

Serving West and Central Austin,  
Hyde Park and Northwest Hills

Thursday, March 16, 1989 Austin American-Statesman

**On the West Side**

By Martin Hobratsch

**Her Irish cake brings smiling**

Four years ago, Gayle Browne began selling her Irish whiskey cakes in her antique store on Kerbey Lane. Since then, Browne's Killkinney Cakes has expanded and sells its wares via mail order. This weekend, Browne said she hopes to impress even more people with her cakes at the Texas Irish Festival in San Antonio.

"The biggest thing about this for us is that it's a chance to reach a larger spectrum of people who wouldn't get a chance to find out about us because they don't live in Austin," Browne said.

Killkinney Cakes started with a recipe Browne found while she was living in Ireland during the late 1960s.

"I had been making them for friends for years, and then about four years ago I saw an article in the newspaper about locally produced food gifts," said Browne. "So, I looked into what I had to do to sell my cakes."

Browne said she chose the name Killkinney because it was something that "would remind people of Ireland but not be associated with other Irish things, like the Blarney Stone."

The cakes are baked in a shop on East Avenue, and Browne sells them in her store and through mail order catalogs.

Although she sells several different flavors of liquor cakes, by far the best seller is the Irish whiskey cake. Especially around St. Patrick's Day.

"We send quite a few to people's Irish friends, and even friends who aren't Irish," said Browne.

**McCallum tradition**

Lending a helping hand has become a tradition at McCallum High School, where each grade level does a service project to help out the school and community.

This year, the freshman class is planning to collect clothes for a Clothes Closet to help out the needy, said freshman class counselor Blomdell Smith.

"We decided that these days there are some people who can't afford the clothes they need, but there are enough people at McCallum who are generous that we could start a clothes closet," said Smith.

The students are organizing for the collection, which will take place throughout April.

"We're going to have a box out in the morning for people to leave the clothes in," she said. "We're hoping to talk to some local cleaners who might offer to clean the clothes for free."

Smith said the drive will focus on students and the McCallum faculty.

"If someone from the community wants to donate something, we certainly won't discourage them," she said.

Smith said the clothes closet will operate on a word-of-mouth basis. "If we hear of someone who needs the clothes, we will get in touch with them," she said.

**Youth government**



Austinite Bill Russell, near the opening of Whirlpool Cave in Southwest Austin, is one of several Central Texas cave explorers. "We like to call ourselves 'cavers,'" Russell says. "We're the serious ones." Russell is often called upon by local emergency rescue teams to help free amateur explorers who become trapped in area caves.

Staff photo by Marc Fort

**THE UNDERGROUND**

Austin area has multitude of small caves

Story by Steve Weingarten  
American-Statesman Staff

Jörg Schwitzgebel and Bill Russell met in a cave near Schwitzgebel's Northwest Austin home in 1978.

Schwitzgebel, then 14, had gone with neighbor kids into Dead Dog Cave, one of the 250 or so caves in the limestone formations that underlie most of Travis County west of the Balcones Fault, a geologic formation that runs through the western part of Austin.

Others in the neighborhood had been in the cave several times before, but that day in 1978 Schwitzgebel and John and Richard Fant became trapped under rubble loosened by construction work on the nearby MoPac Boulevard expressway.

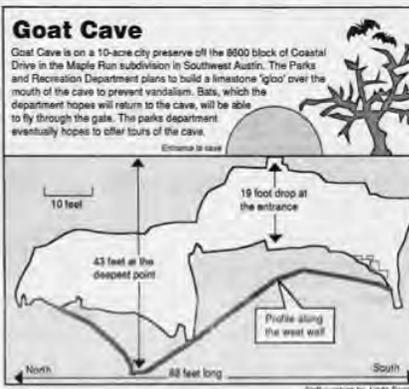
Dead Dog Cave, which has since been paved over, was one of those holes in the ground of western Travis County that help recharge aquifers and that may shelter bats or endangered troglodytes — such as spiders and millipedes — that spend their lives underground.

Russell is familiar with many of these caves. It was his expertise that led to his 1978 encounter with Schwitzgebel and the Fants.

When a relative at the mouth of Dead Dog Cave realized the three

**Goat Cave**

Goat Cave is on a 10-acre city preserve off the 8600 block of Goastal Drive in the Maple Run subdivision in Southwest Austin. The Parks and Recreation Department plans to build a limestone 'gate' over the mouth of the cave to prevent vandalism. Bats, which the department hopes will return to the cave, will be able to fly through the gate. The parks department eventually hopes to offer tours of the cave.



nearly 200 caverns he estimates are around Austin, is Airmen's Cave, a two-mile-long chamber with an entrance in the Barton Creek Greenbelt. That cave extends southeast under the Westgate Mall.

He said a half-dozen caves in Travis, Williamson and Hays counties are inhabited by colonies of Mexican brown bats, and even an amateur can tell which they are — the smell of ammonia from guano is overpowering. Inside, the decomposing guano pushes temperatures above 100 degrees and nourishes scorpions, pseudoscorpions, beetles, spiders, mites and ticks.

"There are usually very few animals in caves, and they tend to be very small because there are almost no food sources. Maybe a leaf or two will blow in," he said. "But in a bat cave, there is tremendous energy from the guano. There is probably more life per square-foot of guano than any place else on Earth."

Leo Stone, preserves manager for Austin's Parks and Recreation Department, said vandals have driven away thousands of bats that once roosted in Goat Cave, near the Maple Run subdivision in southwest Austin.

"We've had neighborhood children throw tar paper in and set fire to it, filling the whole room with smoke," Stone said.

Last year, homemaker Bill Milburn donated Goat Cave and 10 surrounding acres to the city for a nature preserve after Russell and fellow caver Craig Bittinger rescued five boys lost in Maple Run Cave, another cavern on the 10 acres. Besides Goat Cave and Maple Run Cave, the plot includes two large

See Caves, Page 5

boys were trapped, police were summoned, and they sent for Russell and fellow caver Peter Strickland to free the boys.

Russell was also among those called last year when five Southwest Austin boys became lost in a cave called Maple Run Cave near their neighborhood. In both cases, the rescues were successful.

"I was a very lucky human being," Schwitzgebel recalled last week. "It could have been much worse. The circulation in my legs was cut off and I could have lost them."

Schwitzgebel, now 25 and a doctoral student of chemical engineering at the University of Texas, said he never again ventured into a cave.

"I went off into above-ground exploration since then. Right after that I got into soccer, and now I have my nose in the books."

Russell, on the other hand, still crawls around underground nearly every weekend. And officials still call the 52-year-old IRS employee when they need help with a cave rescue.

Russell said dedicated subterranean members of the Texas Speleological Society chapter in Austin avoid the term "spelunker."

"We like to call ourselves 'cavers.' We're the serious ones. We think of spelunkers as Boy Scouts with flashlights," he said.

Russell said the longest of the

## Caves From Page 1

sinkholes.

Stone said Goat Cave Preserve "has some excellent examples of different mineral formations. The way the limestone is laid down, you can see the water drip through when it rains. It's very different from standing on the surface and watching water seep in."

Goat Cave is closed to the public until the Parks Department begins guided tours, possibly as early as fall. The entrance to Maple Run Cave has been sealed by bulldozers, but could be reopened for groups of professional cavers, a parks official said.

To protect bats that officials hope will return to Goat Cave, Stone said the Parks Department hopes to build a limestone "igloo" over the mouth of the cavern with a vandals-proof, bat-friendly gate.

When Austin's newest living exhibit opens, it will highlight the minimal aspects of nature that dwell in caves.

"Most flora and fauna in caves are so small that most people don't see them or disregard them. Without realizing it, they can step on them," said Stuart Strong, program manager for the Parks and Recreation Department. "The tightrope we're trying to walk is permitting the public to see this, while recognizing that it will put a burden on the cave residents."

Residents of Goat Cave include a millipede that lives, breeds and dies only within the cave, according to Stone. There are also species of spiders and scorpions.

James Reddell, a caver and the assistant curator of entomology at Texas Memorial Museum, said

only the most remote caverns in Travis County have been unaffected by development.

"Almost every time I go into a cave in the Austin area, I find trash, beer cans, names written on the walls and broken formations," Reddell said.

He said insects following the trail of garbage left by human intruders are evicting cave-dwelling invertebrates from their homes.

"Cockroaches, pillbugs, fire ants and hothouse millipedes can take over a habitat and the limited amount of food in these small caves," he said.

According to Reddell, about 50 caves around San Antonio and 20 caves around Austin have been destroyed in the past 10 years by vandals spray-painting on walls, property owners dumping trash and souvenir-hunters breaking off stalactites and stalagmites.

The loss worries biologists, who use the simple environments within caves to test larger theories about life's mysteries, Reddell said.

Nancy McClintock of Austin's Department of Environmental Protection agreed that steps must be taken to protect endangered cave-dwelling organisms.

"We're losing species like crazy and we don't even know what we're losing," she said. "When do you draw the line about when it matters? After how many species do you start worrying?"

Scientists have no way to estimate how many local species have become extinct.

McClintock said the Austin Comprehensive Watershed Ordinance helps safeguard habitats, but mainly protects caves because they are critical in the subterranean water cycle.

The 1986 city ordinance, McClintock said, says everything within 50 feet of a cave entrance must be left natural — except for hiking trails — and all construction must be set back at least 150 feet to prevent runoff from streets from draining into cave mouths.

While builders must take the caves into account when they plan drainage systems and erosion and sedimentation controls, she said homeowners may also pollute aquifers through caves.

"There is a real abuse and over-use of lawn chemicals — fertilizers as well as pesticides — that can have a real serious effect on aquatic organisms and well as the native invertebrate fauna," McClintock said.

But some construction projects have been given exemptions from the terms of the ordinance.

McClintock said city and state officials are negotiating with the contractor building the southern extension of Mopac Expressway to relocate a storm drain that would discharge only runoff less than 20 feet from Whirlpool Cave, which is near the freeway's intersection with William Cannon Drive.

Texas legislators are considering additional protection for caves and aquifers. Last week, the House Environmental Affairs Committee discussed a bill sponsored by Rep. Lena Guerrero that would penalize landowners who seal off caves or otherwise impede the flow of water into the recharge points without a permit from their local underground water conservation district.

Guerrero's Cave Protection/ Ground Water Protection Bill authorizes \$1,000 fines and 180 days in jail for first offenders, and \$2,000 penalties and a year in jail for repeat violators.

Every Item Reduced 1/2 PRICE

SAVE 75% OFF RETAIL ON EVERY ITEM

NAME BRAND CLOTHING

2701 W. Anderson Lane • SALE HOURS: MON-FRI. 9-9, SAT. 9-6, SUN. 10-6

## Shoe Repair Specials

Austin

3106 Windsor Rd. at Exposition (next to Fresh Plus) 477-6515

3509 Jefferson at 35th St. (next to Shamrock Cleaners) 458-2253

Shoe Hospital  
Quality Shoe & Boot Repair

- Next-day service available on most repairs
- We also repair all types of leather goods
- Ladies heel caps done While U-Wait (Windsor Rd. only)

Mon.-Fri. 7:30-6  
Sat. 8:00-4

<p>Men's Dress Soles &amp; Heels</p> <p><b>\$16<sup>95</sup></b> Reg. 29.95</p> <p>Please present coupon with shoes</p> <p><b>NO LIMIT</b></p> <p>Not valid w/other specials Exp. 4-1-89 Offers valid at above locations only.</p>	<p>Ladies' Heel Caps</p> <p><b>\$2<sup>49</sup></b> Reg. 4.65</p> <p>Please present coupon with shoes</p> <p><b>NO LIMIT</b></p> <p>Not valid w/other specials Exp. 4-1-89 Offers valid at above locations only.</p>	<p>Boots—Soles &amp; Heels</p> <p><b>\$22<sup>95</sup></b> Reg. 34.95</p> <p>Please present coupon with boots</p> <p><b>NO LIMIT</b></p> <p>Not valid w/other specials Exp. 4-1-89 Offers valid at above locations only.</p>
--	--	--

From: [Hiers, Scott](#)  
To: [James Hill](#)  
Subject: Dead Dog Cave Entrance Photo  
Date: Tuesday, April 20, 2021 1:22:42 PM  
Attachments: [image001.png](#)

[EXTERNAL EMAIL]

James,

The WFD GDS staff stop by the Luby's site and located the manhole entrance for Dead Dog Cave. Looks like someone has already found it.



Scott E. Hiers, P.G.  
City of Austin – Watershed Protection Dept.  
505 Barton Springs Rd.  
Austin, TX 78704  
512-974-1916  
512-217-5047

This electronic mail message is intended exclusively for the individual or entity to which it is addressed. This message, together with any attachment, may contain the sender's organization's confidential and privileged information. The recipient is hereby notified to treat the information as confidential and privileged and to not disclose or use the information except as authorized by sender's organization. Any unauthorized review, printing, retention, copying, disclosure, distribution, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this message in error, please immediately contact the sender by reply email and delete all copies of the material from any computer. Thank you for your cooperation.

[EXTERNAL EMAIL] Exercise caution. Do not open attachments or click links from unknown senders or unexpected email

**ATTACHMENT D**  
**GPR REPORT**



**The use of Ground Penetrating Radar  
to locate Possible Cave Entrance  
8176 North Mopac Expressway, Austin, TX  
Project No. 218189**

---



**May 12, 2021**

## Summary

Round Rock Geophysics was contracted to perform Ground Penetrating Radar (GPR) surveys as part of an effort to locate the possible access to the famous Dead Dog cave. The survey area is located at **8176 North Mopac Expressway, Austin, TX** and is shown in Figure 1 below.



Figure 1: Location map of the GPR Survey Area.

## Background

As detailed in the request for proposal, the historic Dead Dog cave is believed to have its access close to the intersection of Steck Ave. and MoPac as shown in Figure 1. Presently, this possible access (Manhole) is covered with reinforced concrete and is part of the access road to Luby's Restaurant. There is no sign of it from the surface except historical evidence showing it to be close to the North Eastern corner of the driveway to the Restaurant.

## Scope

The main scope of the GPR survey was to locate this Manhole and to guide the effort to expose it by excavation and/or other means. In doing so, the GPR survey is expected to provide some details of the cave entrance to an approximate depth of 20-ft.

## The GPR Survey

The GPR survey was done with SIR 4000 system from Geophysical Survey System (GSSI) and 270-MHz antenna for maximum possible resolution and depth of investigation. The limits of the survey area include the possible location of the Manhole entrance to the cave as shown in

Figure 1. Field data was collected along profile lines spaced at 2-ft interval and crossing the driveway in the nearly East-West direction. Preliminary observation of the field data has confirmed the good data quality, but it didn't reveal any details of the target Manhole.

In addition to the GPR survey along the pre-planned grids, a survey profile was completed along the southern sidewalk of the driveway.



Figure 2: Location and orientation of GPR survey Lines.

## GPR Results and Discussion

The raw field data was processed using the appropriate software packages and following standard procedures to produce the results. These final results are shown both as 2 and 3-dimensional cross sections and depth slices as Figures 3 to 7 below.

Interpretation of the results have shown the details of the asphalt and concrete covered driveway with the location of the possible Manhole and several utility lines.

This possible Manhole is located at an approximate distance of 70-ft from the start of the profile lines 1,3, and 5. There is an indication of a possible Cave entrance connected to this Manhole and extending towards Mopac access road. This entrance slopes towards the Western side of the driveway with an approximate angle of 45-Degrees. The details of this possible feature are beyond the scope of the current GPR survey.

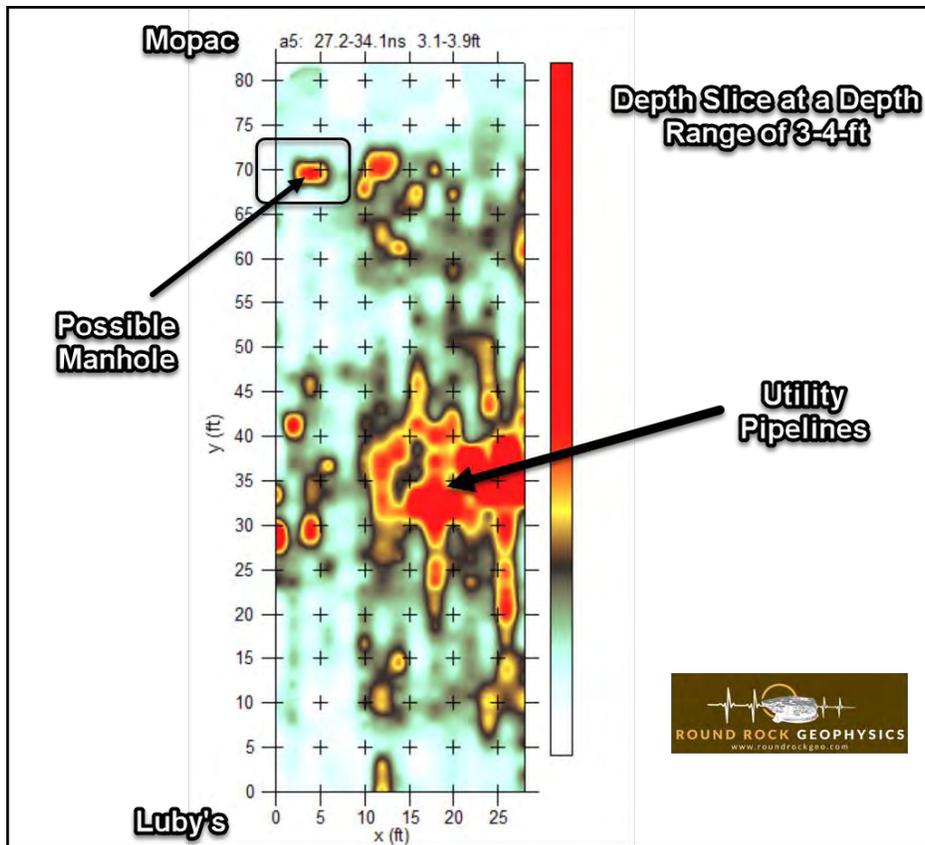


Figure 3: Representative depth slice of the processed GPR survey data.

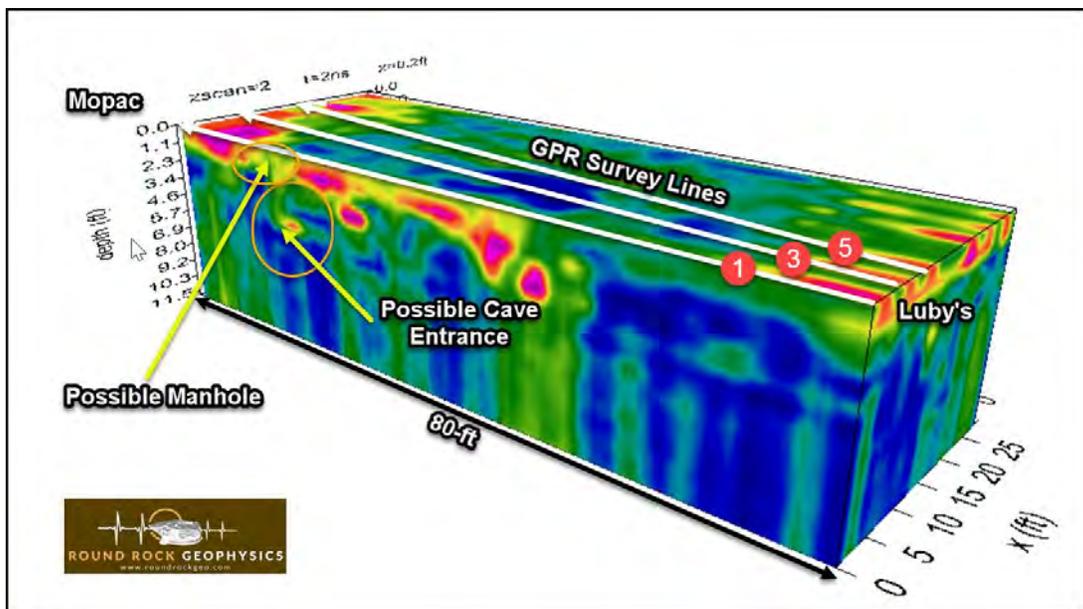


Figure 4: 3-Dimensional view of the processed GPR data and its interpretation.

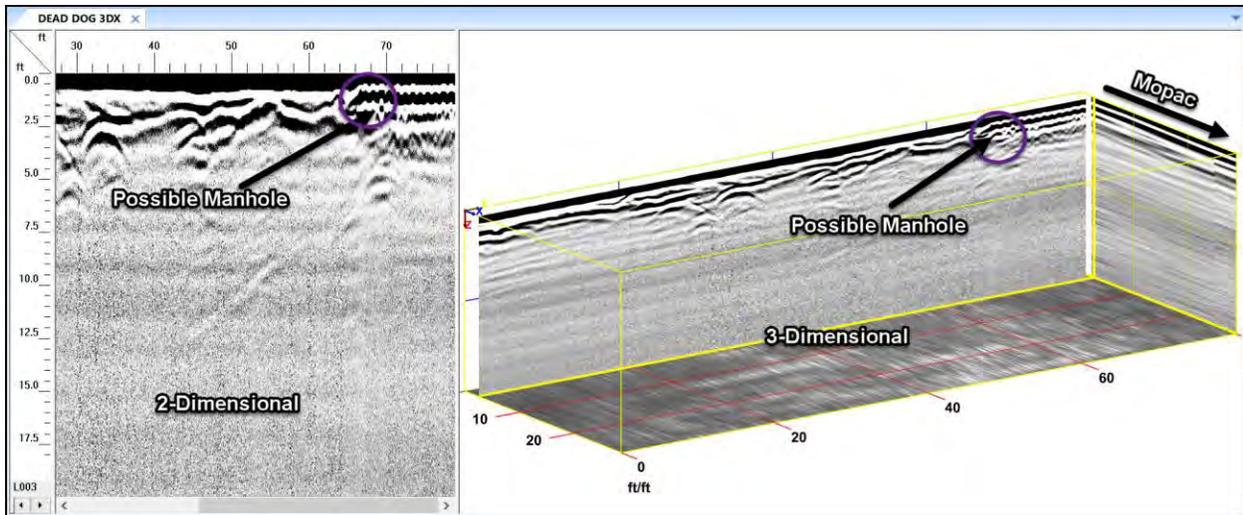


Figure 4: 2 and 3-Dimensional views of the processed GPR data.

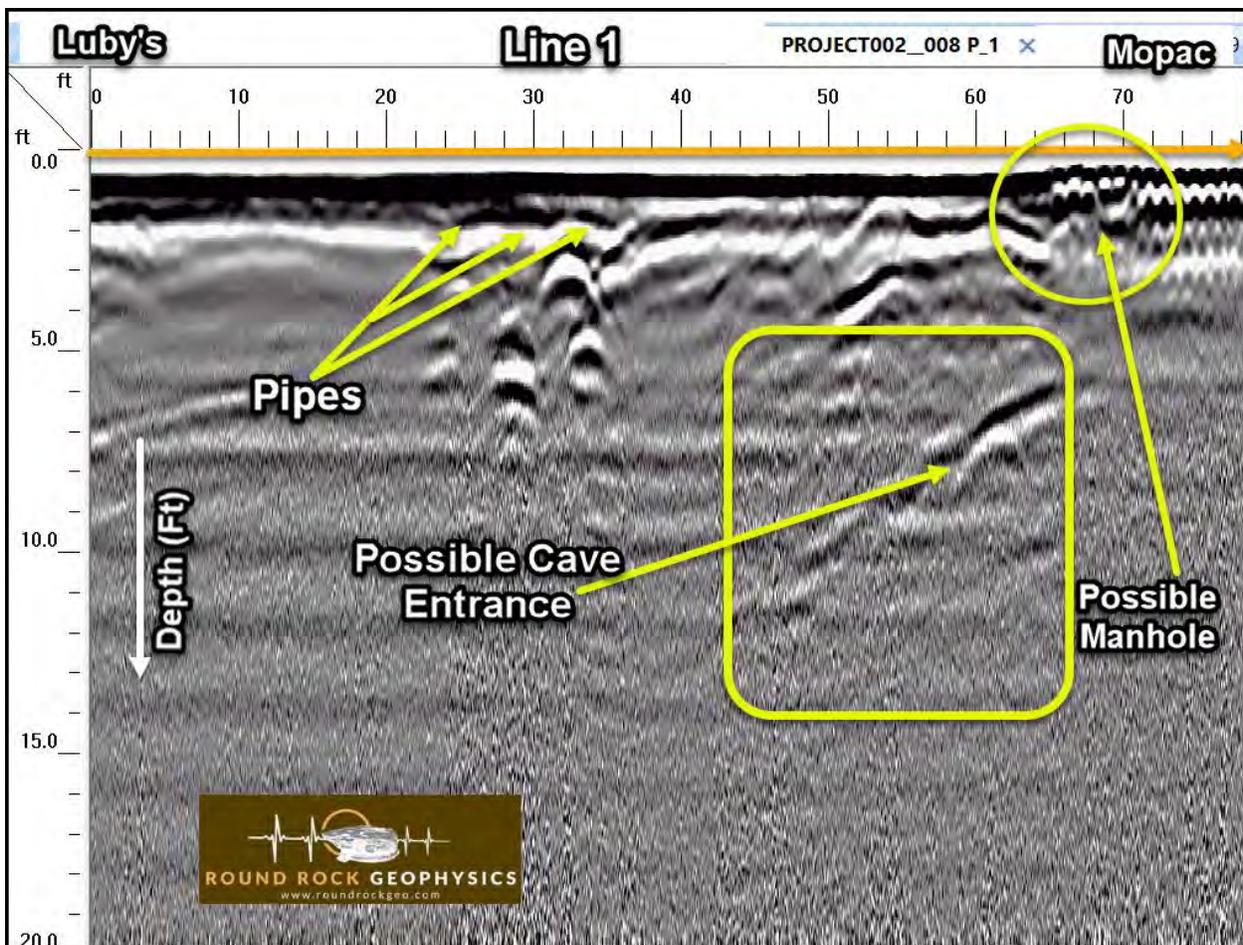


Figure 5: Cross-sectional view of the GPR survey result along Line 1.

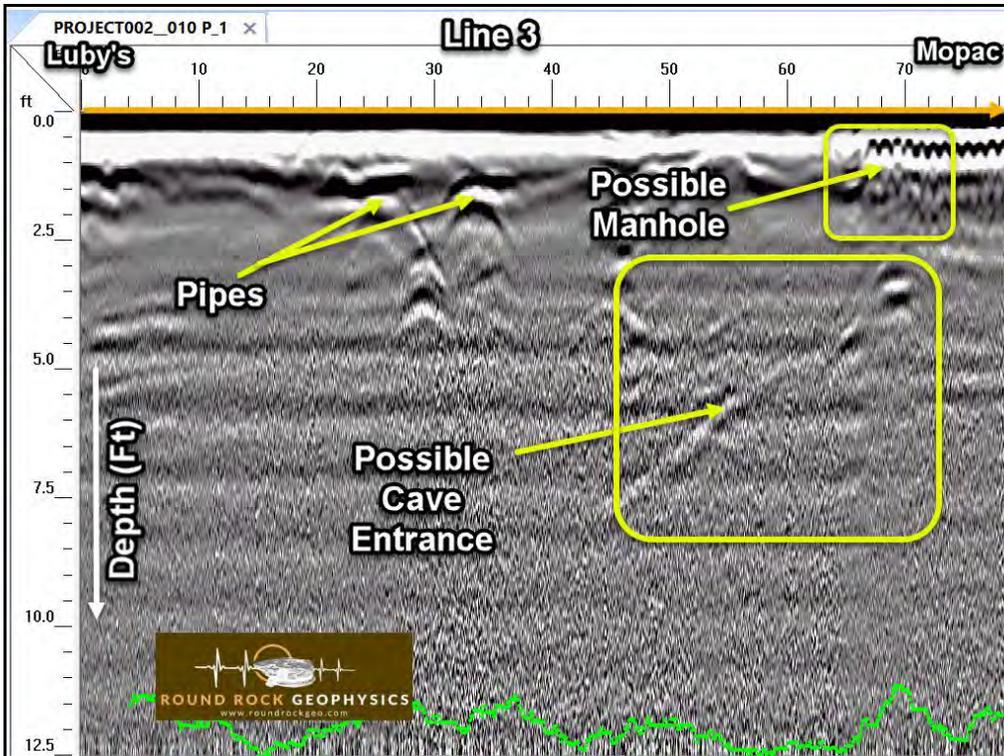


Figure 6: Cross-sectional view of the GPR survey result along Line 3.

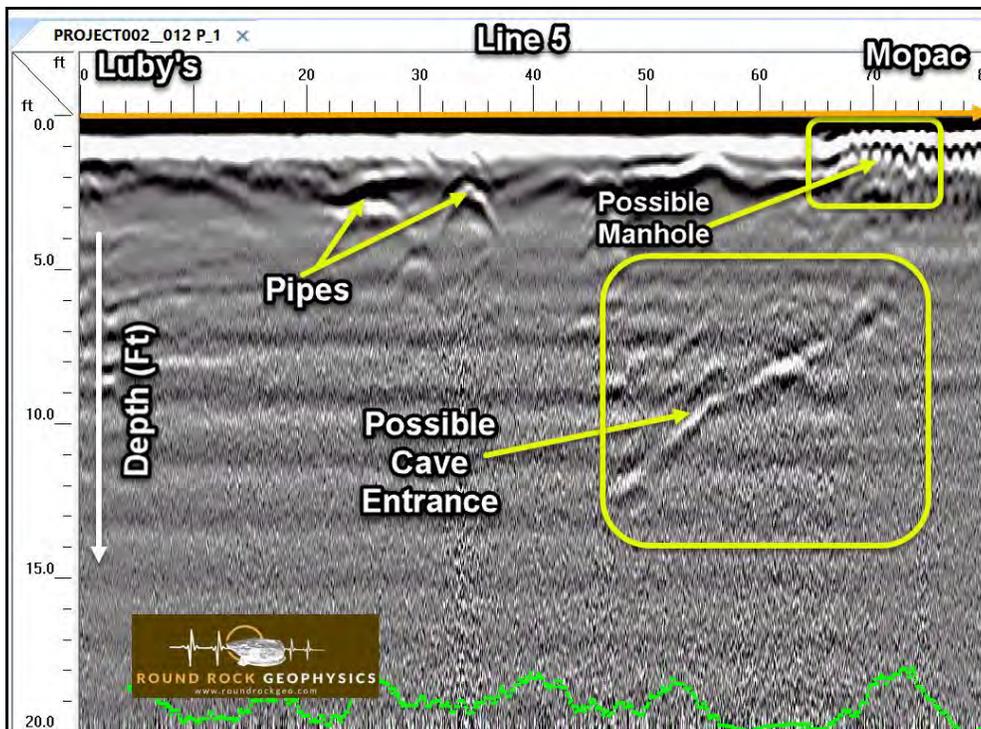


Figure 7: Cross-sectional view of the GPR survey result along Line 3.

## **Conclusion**

The GPR survey was successful in showing the details of the possible Manhole cover and associated features. The location of this possible feature is marked on the ground with spray paint. It is understood that there is a planned excavation of this location for confirmation. It needs to be noted that different objects of related physical nature can produce similar GPR signatures. Since our survey was all non-intrusive, all interpretations of the results are made based on our previous experiences in similar situations and other historical evidence. Therefore, we cannot claim that our interpretation is absolute and the excavation may produce results different from our interpretation.

## **Closure**

This report was prepared in accordance with generally accepted geophysical survey practices. No other warranty is expressed or implied. The data and analysis presented in this report are based on the available project information.

We appreciate the opportunity to provide you our services. For any question or comments about this report, please contact us with the following:

Round Rock Geophysics, LLC  
Email: [Info@RoundRockGeo.com](mailto:Info@RoundRockGeo.com)  
[www.RoundRockGeo.com](http://www.RoundRockGeo.com)  
Phone: 512 496 8728

---

**To:** James Killian  
**Subject:** RE: Luby's, Manhole Location

---

**From:** Brett Denton <[brett@ardent-residential.com](mailto:brett@ardent-residential.com)>  
**Sent:** Friday, May 14, 2021 10:03 AM  
**To:** James Killian <[jkillian@horizon-esi.com](mailto:jkillian@horizon-esi.com)>; Scott Flesher <[sflesher@horizon-esi.com](mailto:sflesher@horizon-esi.com)>  
**Cc:** Art Carpenter <[art@ardent-residential.com](mailto:art@ardent-residential.com)>; Greg Smyrl <[greg@ardent-residential.com](mailto:greg@ardent-residential.com)>; Brett Denton <[brett@ardent-residential.com](mailto:brett@ardent-residential.com)>; Joseph Longaro <[jlongaro@lja.com](mailto:jlongaro@lja.com)>; Eva Wong <[ewong@lja.com](mailto:ewong@lja.com)>  
**Subject:** Luby's, Manhole Location

[EXTERNAL EMAIL]

Hi James and Scott:

Please see attached photos and measurements of the location of the manhole. Let me know if you need anything else.

Thanks, Brett











5/14/21  
Bms



**LEGEND**

- 1/4" = 1' CURB
- 1/4" = 1' ASPHALT
- 1/4" = 1' CONC
- 1/4" = 1' BRICK
- 1/4" = 1' STONE
- 1/4" = 1' WOOD
- 1/4" = 1' METAL
- 1/4" = 1' PLASTER
- 1/4" = 1' GYPSUM
- 1/4" = 1' LIME
- 1/4" = 1' SAND
- 1/4" = 1' GRAVEL
- 1/4" = 1' SOIL
- 1/4" = 1' ROCK
- 1/4" = 1' VEGETATION
- 1/4" = 1' WATER
- 1/4" = 1' FENCE
- 1/4" = 1' DRIVE
- 1/4" = 1' WALK
- 1/4" = 1' RAILROAD
- 1/4" = 1' HIGHWAY
- 1/4" = 1' CANAL
- 1/4" = 1' DRAINAGE
- 1/4" = 1' UTILITY
- 1/4" = 1' EASEMENT
- 1/4" = 1' ENCROACHMENT
- 1/4" = 1' EJECTMENT
- 1/4" = 1' EASEMENT
- 1/4" = 1' ENCROACHMENT
- 1/4" = 1' EJECTMENT



**DESCRIPTION OF THE SURVEY**

This survey was made for the purpose of showing the location and extent of the several lots and blocks shown on the plat hereof, and for the purpose of showing the location and extent of the several streets and alleys shown on the plat hereof, and for the purpose of showing the location and extent of the several easements and encroachments shown on the plat hereof, and for the purpose of showing the location and extent of the several other things shown on the plat hereof.

**PRELIMINARY**

This survey was made for the purpose of showing the location and extent of the several lots and blocks shown on the plat hereof, and for the purpose of showing the location and extent of the several streets and alleys shown on the plat hereof, and for the purpose of showing the location and extent of the several easements and encroachments shown on the plat hereof, and for the purpose of showing the location and extent of the several other things shown on the plat hereof.

NO.	DESCRIPTION	AREA	PERCENT
1	LOT 1	1.234	100.00
2	LOT 2	1.234	100.00
3	LOT 3	1.234	100.00
4	LOT 4	1.234	100.00
5	LOT 5	1.234	100.00
6	LOT 6	1.234	100.00
7	LOT 7	1.234	100.00
8	LOT 8	1.234	100.00
9	LOT 9	1.234	100.00
10	LOT 10	1.234	100.00

**OWNER**  
 LIBERTY PARTNERS  
 LIMITED PARTNERSHIP  
 VIA LPA, P.O. BOX  
 843122

**REMARKS**

This survey was made for the purpose of showing the location and extent of the several lots and blocks shown on the plat hereof, and for the purpose of showing the location and extent of the several streets and alleys shown on the plat hereof, and for the purpose of showing the location and extent of the several easements and encroachments shown on the plat hereof, and for the purpose of showing the location and extent of the several other things shown on the plat hereof.

**REMARKS**

This survey was made for the purpose of showing the location and extent of the several lots and blocks shown on the plat hereof, and for the purpose of showing the location and extent of the several streets and alleys shown on the plat hereof, and for the purpose of showing the location and extent of the several easements and encroachments shown on the plat hereof, and for the purpose of showing the location and extent of the several other things shown on the plat hereof.

**REMARKS**

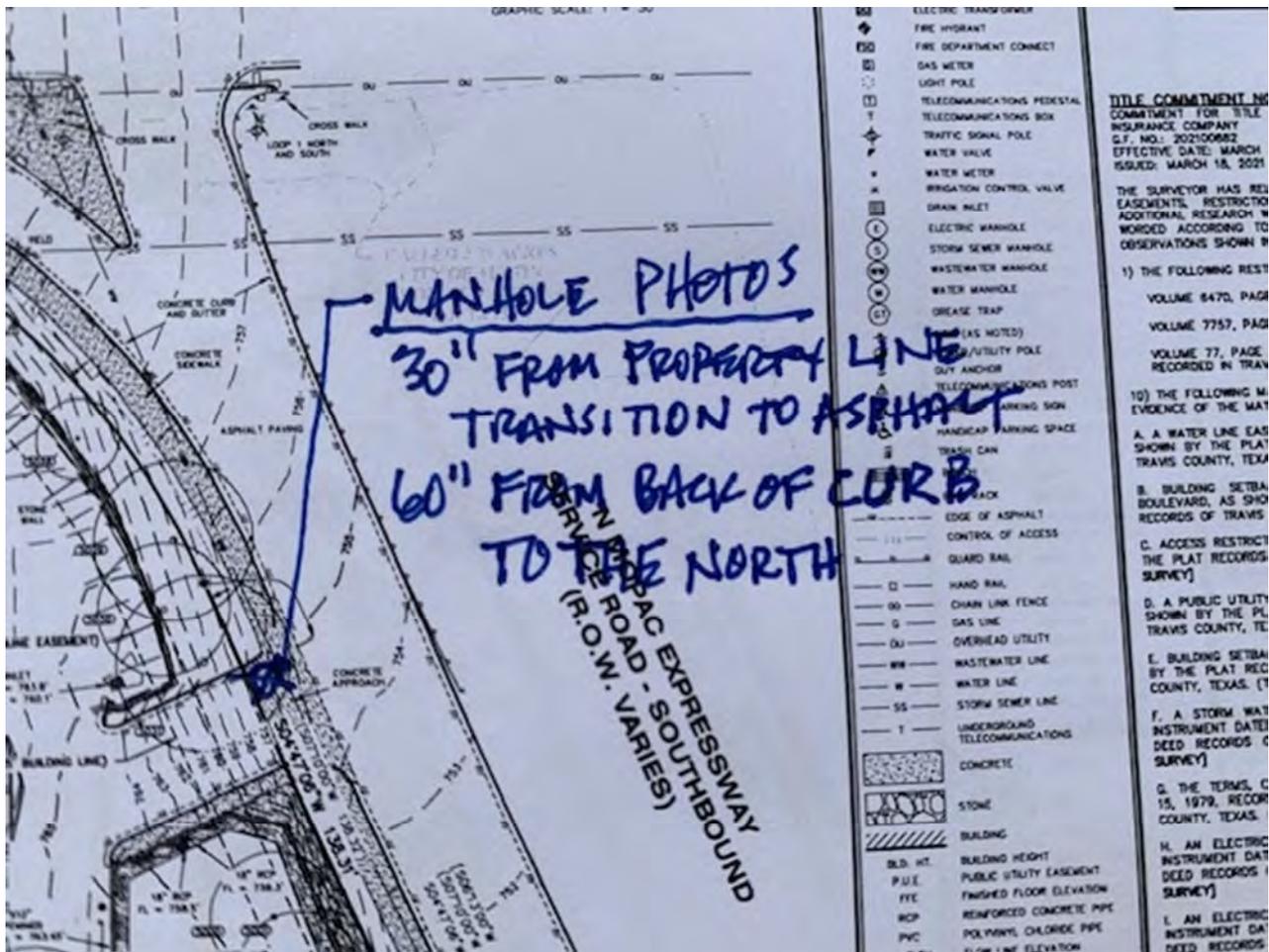
This survey was made for the purpose of showing the location and extent of the several lots and blocks shown on the plat hereof, and for the purpose of showing the location and extent of the several streets and alleys shown on the plat hereof, and for the purpose of showing the location and extent of the several easements and encroachments shown on the plat hereof, and for the purpose of showing the location and extent of the several other things shown on the plat hereof.

**REMARKS**

This survey was made for the purpose of showing the location and extent of the several lots and blocks shown on the plat hereof, and for the purpose of showing the location and extent of the several streets and alleys shown on the plat hereof, and for the purpose of showing the location and extent of the several easements and encroachments shown on the plat hereof, and for the purpose of showing the location and extent of the several other things shown on the plat hereof.

**ALTA NPS LAND TITLE, TOPOGRAPHIC AND TREE SURVEY OF LOT 1, J.V. WALDEN ADDITION City of Austin, Travis County, Texas**





Sent from my iPhone

[EXTERNAL EMAIL] Exercise caution. Do not open attachments or click links from unknown senders or unexpected email