

## ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

Danny Miller, P.E. LJA Engineering, Inc.

COMMISSION MEETING

March 6, 2024 DATE:

NAME & NUMBER OF

Ledgestone Revised Wastewater Service Extension Request

PROJECT: #4622R

NAME OF APPLICANT OR

ORGANIZATION:

LOCATION: 9209 Ledgestone Terrace, Austin, Texas 78737

COUNCIL DISTRICT: Austin 2-Mile Extraterritorial Jurisdiction

PROJECT FILING DATE: November 3, 2023

WPD/ENVIRONMENTAL Kaela Champlin, Environmental Program Coordinator

STAFF: (512) 974-3443, Kaela.Champlin@austintexas.gov

WATERSHED: Slaughter Creek Watershed, Barton Springs Zone, Edwards Aquifer

Contributing Zone, Drinking Water Protection Zone

Wastewater Service Extension Revision REQUEST:

**STAFF** 

Recommended DETERMINATION:



#### **MEMORANDUM**

**TO:** Kevin Ramberg, Chair, and Members of the Environmental Commission

**FROM:** Kaela Champlin, Environmental Program Coordinator

Watershed Protection Department

**DATE:** February 13, 2024

**SUBJECT:** Ledgestone Revised Wastewater SER #4622R

Service Extension Requests (SER) located in the Drinking Water Protection Zone and outside of the City of Austin's full purpose jurisdiction require Council approval and review by the Environmental Commission. Watershed Protection Department staff have completed the review for Ledgestone Wastewater Revised SER #4622R and recommend approval of the request.

#### **Site Overview**

The site consists of one tract of approximately 77.78 acres, located at 9209 Ledgestone Terrace. The site is in the City of Austin's Two-Mile Extraterritorial Jurisdiction (ETJ), the Slaughter Creek Watershed, the Barton Springs Zone, and the Drinking Water Protection Zone. It is also within the Edwards Aquifer Contributing Zone and is subject to the Save Our Springs (SOS) Ordinance.

#### **Previously approved SERs**

The applicant previously received an approval for a wastewater SER (SER #4622) and a water SER (SER #5650) for this site. At the time, the applicant's proposal was for a 550-unit multifamily development with 275 Living Unit Equivalents (LUEs). The wastewater SER was recommended by the Environmental Commission, Water and Wastewater Commission, and subsequently approved by Council in June of 2020. The water SER was requested and approved in May of 2023. The staff memo and recommendations from the Environmental Commission are attached as Exhibit A.

#### **Request Summary**

In the revised wastewater SER, the applicant is proposing to add 50 LUEs, an increase from 275 LUEs to 325 total LUEs to accommodate the addition of retail and restaurant space on the site. The proposed development includes:

<b>Proposed Development Use</b>	Units	LUEs
Multifamily	140	98
Condo Units	360	180
Retail	11,620 sq. ft.	7
Restaurant	8,000 sq. ft	40
	Total LUEs	325

The applicant resubmitted a site plan application that is currently in review (Case Number: SP-2023-0177D). The applicant is subject to land use and development regulations established in the current Land Development Code standards.

## **Impacts from SER improvements**

#### Wastewater:

The applicant is proposing to replace approximately 1,800 feet of existing 12-inch gravity wastewater main with 15-inch gravity wastewater main (minimum 0.5% slope) along Williamson Creek. Portions of the proposed 15-inch gravity wastewater main are also proposed to be constructed by others. If the applicant's project timeline needs these wastewater improvements prior to the completion of them by others, then the design and construction of these improvements are the responsibility of the applicant.

Applicant will replace approximately 2,250 feet of existing 8-inch gravity wastewater main with a 12-inch gravity wastewater main along Towana Trail and Mowinkle Drive. The proposed 12-inch gravity wastewater main is also proposed to be constructed by others. If the applicant's project timeline needs these wastewater improvements prior to the completion of them by others, then the design and construction of these improvements are the responsibility of the applicant.

The applicant will construct an appropriately sized lift station at the approximate location shown on the attached map. Approximately 4,775 feet of appropriately sized force main from the proposed lift station and extend north to W. US 290 Hwy, then northeast along West US 290 Highway and then north along South Bend Drive to the existing 8-inch gravity wastewater main located in Circle Drive. The lift station and force main improvements are also proposed by the applicant for SER #4796. If the others construct the lift station and force main first, then the applicant will construct appropriately sized lift station and force main upgrades as needed to serve this development.

Applicant will also construct approximately 2,150 feet of 8-inch gravity wastewater main from the proposed lift station described above and extend north to W. US 290 Hwy and then along W. US 290 Hwy to the subject tract. A map showing the approximate locations of these improvements can be found on the attached map, Exhibit B.

## Alternative Wastewater Service:

Watershed Protection Department staff determined that if the estimated 325 LUEs are permitted, approximately 79,625 gallons per day of wastewater would be produced. If service is not extended to the site and wastewater disposal is required, there are two options for this amount of effluent treatment: an Onsite Sewage Facility (OSSF) or land application (surface irrigation or subsurface land application). Land application would require a Texas Land Application Permit

(TLAP) or a Subsurface Area Drip Dispersal System (SADDS) issued by the Texas Commission on Environmental Quality (TCEQ).

Most of the site is located on Brackett-Rock outcrop soils with some areas of Volente silty clay loam along the northeastern boundary. Brackett-Rock outcrop soils are not ideal for OSSFs or land application because the soil type is thin and rocky and there are severe limitations for septic tank absorption fields and pond construction noted in the soil survey due to the shallow depth of bedrock. Soil could be imported at a considerable expense, but the land application system maintenance requirements would increase due to the underlying Brackett soils. Soil piping and preferential flow paths would likely form, allowing wastewater migration below the root zone.

OSSFs could be developed with single family residences, but Travis County requires a lot size of at least one acre for OSSFs. Under these rules, a multifamily development with a similar density as currently proposed would not be possible.

If a SADDS were built onsite, it would require roughly 19 acres of the site area for an application area, storage pond, and a wastewater treatment plant footprint to reach secondary treatment levels. This would consist of roughly 25% of the tract coverage that would need to be deducted from the net site area calculations associated with the impervious cover limits.

If spray irrigation were used, it would require roughly 25 acres of the site area for the spray irrigation area, surface spray pond, and the wastewater treatment footprint. This would consist of roughly 32 percent of the tract coverage that would need to be deducted from the net site area calculations associated with the impervious cover limits.

Based on the information provided by the applicant, the site contains 76.49 acres of net site area and 19.39 acres of allowable impervious cover. If service is not extended to the site and wastewater disposal is required under a TLAP, the allowable impervious cover would likely reduce to about 13.17 to 14.59 acres depending on the type of land application permit. The total proposed impervious cover on the site is 16.87 acres.

Based on the information provided, the applicant would not be able to develop with the same intensity with a TLAP. Furthermore, due to the unsuitability of the soils in this area, a centralized wastewater system would be preferable to a TLAP.

## Water:

The applicant previously received an approved water SER (#5650). However, the applicant notified staff that they now plan to utilize service from West Travis County Public Utility Agency (PUA). Therefore, no revised water SER has been submitted at this time.

#### **Environmental impacts**

The property is in the Slaughter Creek Watershed and classified as the Barton Springs Zone. The site is in the Drinking Water Protection Zone, the Edwards Aquifer Contributing Zone, and is subject to the Save Our Springs (SOS) Ordinance. A wetland critical environmental feature (CEF) and its associated buffer were identified by staff during the review process along a natural channel of Slaughter Creek on the northern portion of the property. The southwestern and eastern

corners of the site are within the Slaughter Creek critical water quality zone and water quality transition zone. The site does not drain to occupied salamander habitat.

#### Recommendation

The Watershed Protection Department recommends approval of the revised wastewater SER #4622R for the following reasons:

- A wastewater SER was previously approved in 2020 with a similar intensity. This revised SER will add 50 LUEs so the applicant may add retail and restaurant uses to their development.
- Alternative wastewater systems such as OSSF or land application are not preferred due to the thin and rocky soils on this site. This can lead to soil piping and preferential flow paths that are likely to form, allowing wastewater migration below the root zone.

The attached exhibits provide further detail on the applicant's request. Please feel free to contact Kaela Champlin at (512) 974-3443 or <a href="mailto:kaela.champlin@austintexas.gov">kaela.champlin@austintexas.gov</a> if you have any questions or comments about the proposed revision.

cc: Brett Ueno, Graduate Engineer, Austin Water
Colleen Kirk, P.E., Austin Water
Liz Johnston, Deputy Environmental Officer, Watershed Protection Department
Katie Coyne, Environmental Officer, Watershed Protection Department

## **EXHIBIT A**



## ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

COMMISSION MEETING

DATE: June 3, 2020

NAME & NUMBER OF

#4622

NAME OF APPLICANT OR

**ORGANIZATION:** 

PROJECT:

Daniel Ryan, P.E. LJA Engineering, Inc.

Ledgestone Wastewater Service Extension Request

LOCATION: 9021 W US 290 Hwy, Austin, TX 78737

COUNCIL DISTRICT: Austin 2-Mile Extraterritorial Jurisdiction

PROJECT FILING DATE: October 17, 2019

WPD/ENVIRONMENTAL K

STAFF:

Kaela Champlin, Environmental Officer's Office (512) 974-3443, kaela.champlin@austintexas.gov

WATERSHED: Slaughter Creek Watershed, Barton Springs Zone, Edwards Aquifer

Contributing Zone, Drinking Water Protection Zone

REQUEST: Wastewater Service Extension

**STAFF** 

DETERMINATION: Recommended



#### **MEMORANDUM**

**TO:** Linda Guerrero, Chair, and Members of the Environmental Commission

**FROM:** Kaela Champlin, Environmental Officer's Office

Watershed Protection Department

**DATE:** May 21, 2020

**SUBJECT:** Ledgestone Wastewater SER #4622

Service Extension Requests (SER) located in the Drinking Water Protection Zone and outside of the City of Austin's full purpose jurisdiction require Council approval and review by the Environmental Commission. Watershed Protection Department staff have completed the review for Ledgestone Wastewater SER #4622 and recommend approval of the request.

#### **Site Overview**

The site consists of one tract of approximately 77.78 acres, located at 9021 W US 290 Hwy. The site is in the City of Austin's Limited Purpose Jurisdiction, the Slaughter Creek Watershed, the Barton Springs Zone, and the Drinking Water Protection Zone. The site is also within the Edwards Aquifer Contributing Zone and is subject to the Save Our Springs (SOS) Ordinance. An Environmental Resource Inventory submitted by the applicant identified no critical environmental features within the property.

The applicant is proposing to develop a 550-unit multi-family development. A site plan has not yet been submitted to the City of Austin.

## **Development Impacts**

#### Water:

The site is located in the water service area of the West Travis County Public Utility Agency (PUA).

#### Wastewater:

The applicant shall construct approximately 1,000 feet of 8-inch gravity wastewater main in Circle Dr and extend south along Circle Dr and then west along US 290 to the highest point that can be served by the proposed gravity wastewater main, as approximately shown on the attached map. Applicant shall also construct an appropriately sized public lift station at the approximate location shown on the attached map. Applicant shall construct approximately 6,150 feet of

appropriately sized force main from the proposed lift station and extend north through the subject tract and northeast along US 290 Hwy to the proposed 8-inch gravity wastewater main in US 290 Hwy. Applicant shall dedicate appropriately sized wastewater easements from the proposed lift station west to Ledgestone Terrace and north to W US 290 Hwy.

Applicant shall construct approximately 1,800 feet of 15-inch gravity wastewater main (minimum 0.4% slope) from the existing 15-inch gravity wastewater main along Williamson Creek, and extend west to the existing 12-inch gravity wastewater main located west of Covered Bridge Dr, as approximately shown on the attached map. The proposed 15-inch gravity wastewater main shall replace the existing 12-inch gravity wastewater main in its path. Applicant shall reconnect all existing wastewater services from the existing 12-inch gravity wastewater main to the proposed 15-inch gravity wastewater main.

Applicant shall construct approximately 2,250 feet of 12-inch gravity wastewater main (minimum 1.0% slope) from the existing 8-inch gravity wastewater main located north of Towana Trl, and extend south towards Towana Trl, west along Towana Trl, and then south along Mowinkle Dr to the existing 8-inch gravity wastewater main in Mowinkle Dr, as approximately shown on the attached map. The proposed 12-inch gravity wastewater main shall replace the existing 8-inch gravity wastewater main along its path. Applicant shall reconnect all existing wastewater services from the existing 8-inch gravity wastewater main to the proposed 12-inch gravity wastewater main.

### Alternative Wastewater Service:

The applicant has stated that the site could develop with a similar density with decentralized service approved by a Texas Land Application Permit (TLAP) issued by the Texas Commission on Environmental Quality.

#### **Environmental Impacts**

The property is in the Slaughter Creek Watershed and classified as the Barton Springs Zone. The site is in the Drinking Water Protection Zone, the Edwards Aquifer Contributing Zone, and is subject to the Save Our Springs (SOS) Ordinance. The southwestern and eastern corners of the site are within the Devils Pen Creek critical water quality zone and water quality transition zone. An Environmental Resource Inventory was conducted by the applicant, and no known recharge environmental features or critical environmental features were found onsite. The site does not drain to occupied salamander habitat.

Based on the information provided by the applicant, the site contains 74.88 of net site area. Therefore, the site contains 18.72 acres of allowable impervious cover. If service is not extended to the site and wastewater disposal is required under a Texas Land Application Permit with the Texas Commission on Environmental Quality, the allowable impervious cover would likely reduce to 15.1 acres based on staff's estimation of the irrigation area. By staff's estimation, the site could develop without any required Land Use Commission variances to the City of Austin Land Development Code.

#### Recommendation

Staff review determined that there are no significant environmental risks to extend service to the site and therefore recommends approval of Service Extension Request #4622.

The attached information provides further detail on the applicant's request. Please feel free to contact Kaela Champlin at (512) 974-3443 or <a href="mailto:kaela.champlin@austintexas.gov">kaela.champlin@austintexas.gov</a> if you have any questions or comments about the proposed SER.

cc: Kevin Critendon, P.E., Austin Water
Colleen Kirk, P.E., Austin Water
Christopher Herrington, P.E., Watershed Protection Department



#### ENVIRONMENTAL COMMISSION MOTION 20200603-006c

**Date:** June 3, 2020

**Subject:** Ledgestone Wastewater Service Extension Request #4622

**Motion by:** Kevin Ramberg Seconded by: Wendy Gordon

### **RATIONALE:**

**WHEREAS**, the Environmental Commission recognizes the applicant wishes to conduct a public hearing and seeks approval of a wastewater service extension request on property locally known as 9021 W US 290 Hwy.

**WHEREAS**, the Environmental Commission recognizes that staff review determined that there are no significant environmental risks to extend service to the site and therefore recommends approval of Service Extension Request #4622.

**THEREFORE**, the Environmental Commission recommends approval of Service Extension Request #4622.

## **VOTE 8-0**

For: Smith, Thompson, Neely, Coyne, Maceo, Ramberg, Guerrero, and Bedford

Against: None Abstain: None Recuse: None

Absent: Creel, Nill, Gordon

Approved By:

Linda Guerrero, Environmental Commission Chair



## ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

COMMISSION MEETING

DATE: May 3, 2023

NAME & NUMBER OF Ledgestone Water Service Extension Request

PROJECT: #5650

NAME OF APPLICANT OR

**ORGANIZATION:** 

Vito Trupiano, P.E., Endeavor Real Estate Group

LOCATION: 9209 Ledgestone Terrace, Austin, TX 78737

COUNCIL DISTRICT: Austin 2-Mile Extraterritorial Jurisdiction

PROJECT FILING DATE: March 8, 2023

WPD/ENVIRONMENTAL Kaela Champlin, Environmental Program Coordinator, Watershed

STAFF: Protection Department

(512) 974-3443, kaela.champlin@austintexas.gov

WATERSHED: Slaughter Creek Watershed, Barton Springs Zone, Edwards Aquifer

Contributing Zone, Drinking Water Protection Zone

REQUEST: Water Service Extension

Staff recommends approval of the water service extension

DETERMINATION:



#### **MEMORANDUM**

**TO:** Kevin Ramberg, Chair, and Members of the Environmental Commission

**FROM:** Kaela Champlin, Environmental Program Coordinator, Watershed Protection

Department

**DATE:** May 3, 2023

**SUBJECT:** Ledgestone Terrace Water SER #5650

Service Extension Requests (SER) located in the Drinking Water Protection Zone and outside of the City of Austin's full purpose jurisdiction require Council approval and review by the Environmental Commission. Watershed Protection Department staff have completed the review for Ledgestone Water SER #5650 and recommend approval of the request.

#### Site Overview

The site consists of one tract of approximately 77.78 acres, located at 9209 Ledgestone Terrace. The site is in the City of Austin's 2-mile Extraterritorial Jurisdiction, the Slaughter Creek Watershed, the Barton Springs Zone, and the Drinking Water Protection Zone. The site is also within the Edwards Aquifer Contributing Zone and is subject to the Save Our Springs (SOS) Ordinance.

The applicant is proposing to develop a 550-unit multi-family development with 275 LUEs. The applicant applied for a site plan on December 22, 2021 (Permit/Case: 2021-205506 SP; Reference File Name: SP-2021-0473D) However, the application is currently expired and the last review updates were in March 2022. According to the application, the project was being reviewed with current code standards.

#### **Development Impacts**

#### Water:

Two water service options are proposed. Applicant intends to pursue Option 1; however, AW has also provided Option 2 to provide flexibility if adequate space is not available east of South Bend along US 290 in consideration of the ongoing highway expansion project, other utility conflicts, and/or inability to acquire easement along this path.

The two water service options are described in the following paragraph.

## Water Service Option 1:

- The applicant is proposing to construct 5,000 feet of 16-in water main from the existing 30-inch water transmission main located in South View Road and extend west along West US Highway 290 to the subject tract, as approximately shown on Attachment A. The proposed 16-inch water main will replace the existing 8-inch mains along this path and all existing services will be reconnected to the proposed 16-inch water main.
- The applicant is also proposing to construct 4,450 feet of "looped" 8-inch water main from the proposed 16-inch water main described above, and extend south and then east to the existing 6-inch water main located in West View Road, as shown on Attachment A.

## Water Service Option 2:

- The applicant is proposing to construct 4,500 feet of 16-inch water main from the existing 12-inch water main located in Circle Drive and extend southwest along South Bend Avenue and then west along US Highway 290 West to the subject tract, as shown on Attachment 2.
- The applicant is also proposing to construct 4,450 feet of "looped" 8-inch water main from the proposed 16-inch water main described above, and extend south and then east to the existing 6-inch water main located in West View Road, as shown on Attachment B.

The improvements will be shared with the adjacent property at 8921 W US Highway 290, Water SER #5672. If this project needs these water improvements prior to the completion of them by others, the design and construction of those improvements are the responsibility of the applicant.

#### Wastewater:

A wastewater service extension request was recommended by the Environmental Commission on June 3, 2020 and was subsequently approved by Council on June 11, 2020.

#### Alternative Water Service:

The site is in the water service area of the West Travis County Public Utility Agency (PUA). If the applicant is denied a water SER from the City of Austin, they would be required to apply for water service from West Travis County PUA.

#### **Environmental Impacts**

The property is in the Slaughter Creek Watershed and classified as the Barton Springs Zone. The site is in the Drinking Water Protection Zone, the Edwards Aquifer Contributing Zone, and is subject to the Save Our Springs (SOS) Ordinance. The southwestern and southeastern corners of the site contain a natural channel of Slaughter Creek and its critical water quality transition zone and water quality transition zone. The northeastern corner of the property also contains water quality transition zone for Devils Pen Creek.

An Environmental Resource Inventory was conducted by the applicant, and no known recharge environmental features or critical environmental features (CEFs) were found onsite. Two wetland CEFs were later identified by COA staff along a natural channel of Slaughter Creek on the norther portion of the site. The applicant will be required to comply with the CEF setback requirements on the site. The site does not drain to occupied salamander habitat.

#### Recommendation

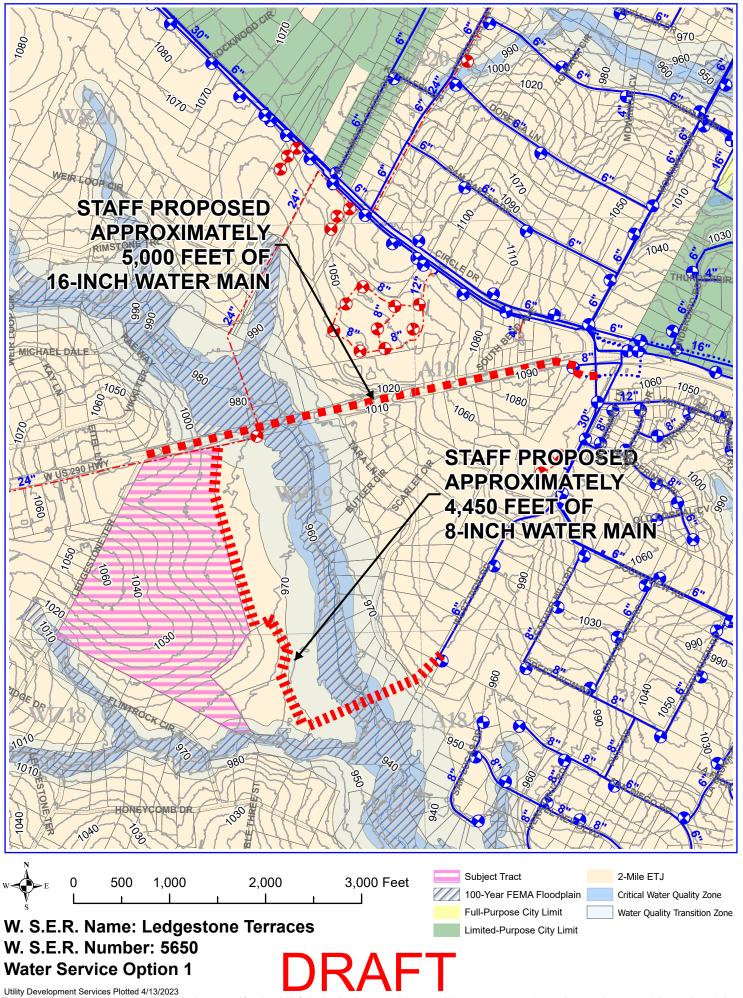
While sensitive environmental features do exist within the parcel, WPD staff recommend approval of Service Extension Request #5650 for the following reasons:

- The approved wastewater SER on the site and adjacent to the site will eventually allow for the construction of new public wastewater infrastructure and the proposed infrastructure is similar to that which has been approved previously.
- Based on the information provided, the water line is code compliant. The proposed water line is a perpendicular crossing of Devils Pen Creek and can be administratively approved during the site plan process.

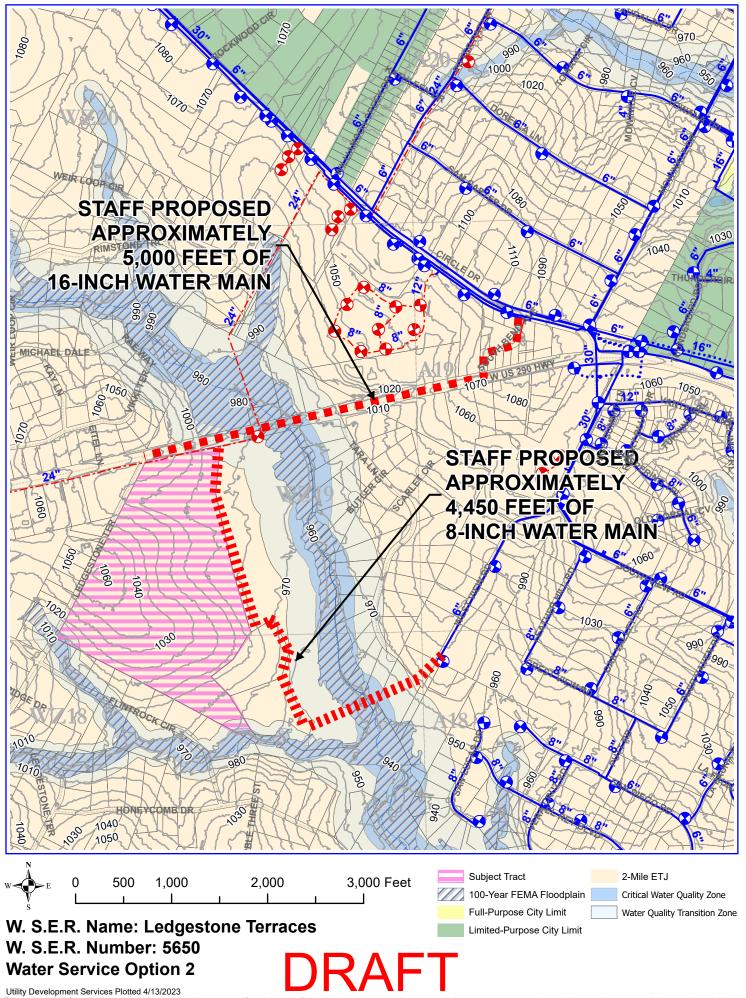
The attached information provides further detail on the applicant's request. Please feel free to contact Kaela Champlin at (512) 974-3443 or <a href="mailto:kaela.champlin@austintexas.gov">kaela.champlin@austintexas.gov</a> if you have any questions or comments about the proposed SER.

cc: Brett Ueno, Graduate Engineer, Austin Water Colleen Kirk, P.E., Austin Water Liz Johnston, Deputy Environmental Officer, Watershed Protection Department

# ATTACHMENT A



# ATTACHMENT B





#### **ENVIRONMENTAL COMMISSION MOTION 20230503-004**

**Date:** May 3, 2023

Subject: Ledgestone Water Service Extension Request #5650

Motion by: Jennifer Lee Bristol

Seconded by: Kevin Ramberg

#### **RATIONAL:**

**WHEREAS**, the Environmental Commission recognizes the applicant is requesting a Water Service Extension within the Austin 2-Mile Extraterritorial Jurisdiction; and

WHEREAS, the Environmental Commission recognizes the site is located in the Slaughter Creek Watershed, Barton Springs Zone, Edwards Aquifer Contributing Zone, and the Drinking Water Protection Zone; and

WHEREAS, the Environmental Commission recognizes that staff recommends the water service extension.

**THEREFORE**, the Environmental Commission recommends the WSE request.

**VOTE: 6-2** 

For: Krueger, Schiera, Ramberg, Bristol, Coffer, and Nickells

Against: Brimer and Sullivan Abstain: Qureshi and Scott

Recuse: none Absent: none

Approved By: Kevin Ramberg, Environmental Commission Chair

## **EXHIBIT B**

