



## MEMORANDUM

**TO:** Marisa Perales, Environmental Commission Chair and Commissioners

**FROM:** Chuck Lesniak, Environmental Officer  
Watershed Protection Department

**DATE:** March 2, 2018

**SUBJECT:** Item 8: Amendment to PK-RE Development Agreement

The purpose of this memorandum is to provide you a summary of the background and other information related to this proposed amendment.

In 2005, the City Council approved an annexation and development agreement that included provisions for a privately owned wastewater treatment system to serve the Woods of Greenshores residential subdivision. An amendment to that agreement was approved in 2007. Both documents have been provided as posted backup to this item. The agreement includes a requirement for two wastewater treatment plants to serve the development. One has been constructed and is in operation. This plant land applies treated effluent under a TCEQ permit.

A portion of the subdivision, Woods of Greenshores Section 1, (Figure 1) was built without connection to the existing plant and had been planned to connect with the second plant. In the interim, the owner has been pumping wastewater directly from wastewater lines and hauling it to the existing plant. The owner no longer wishes to construct the second plant and has asked to amend the agreement to remove the requirement in the agreement to construct a second plant and to be able to connect Section 1 to the existing plant.

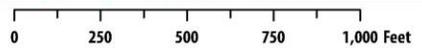
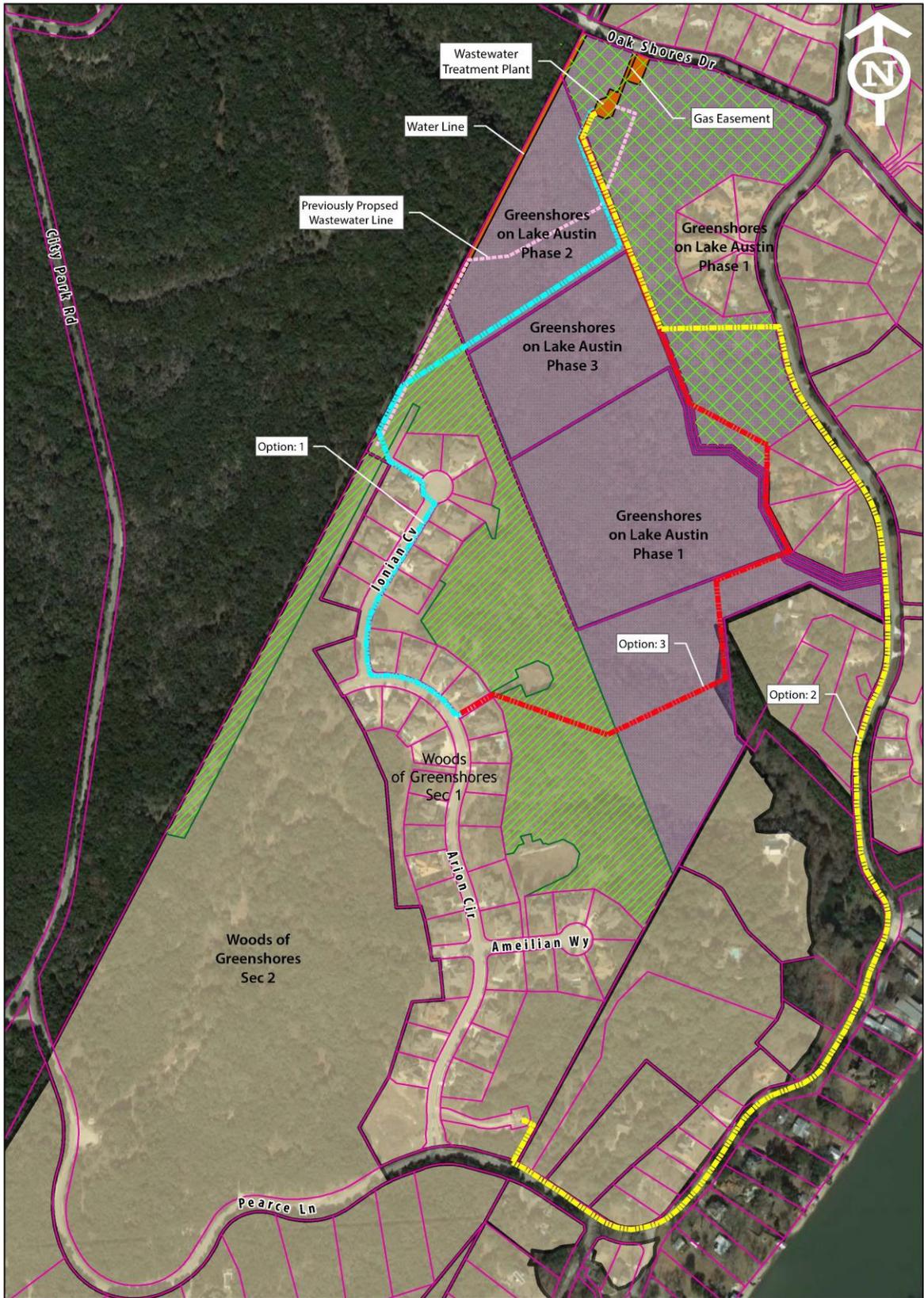
The most direct route is across an existing conservation easement and a required, future conservation easement (Figure 1) to be dedicated to the Balcones Canyonlands Conservation Plan (BCCP) as preserve land. This easement has not yet been dedicated, but will be managed by Travis County BCCP staff as is the existing easement tract. The route also crosses a Critical Water Quality Zone (CWQZ).

City staff have agreed to amend the agreement as requested with certain conditions (Attachment 1), which the owner has agreed to and staff is recommending approval of the amendment with those conditions.

Attachments

cc:

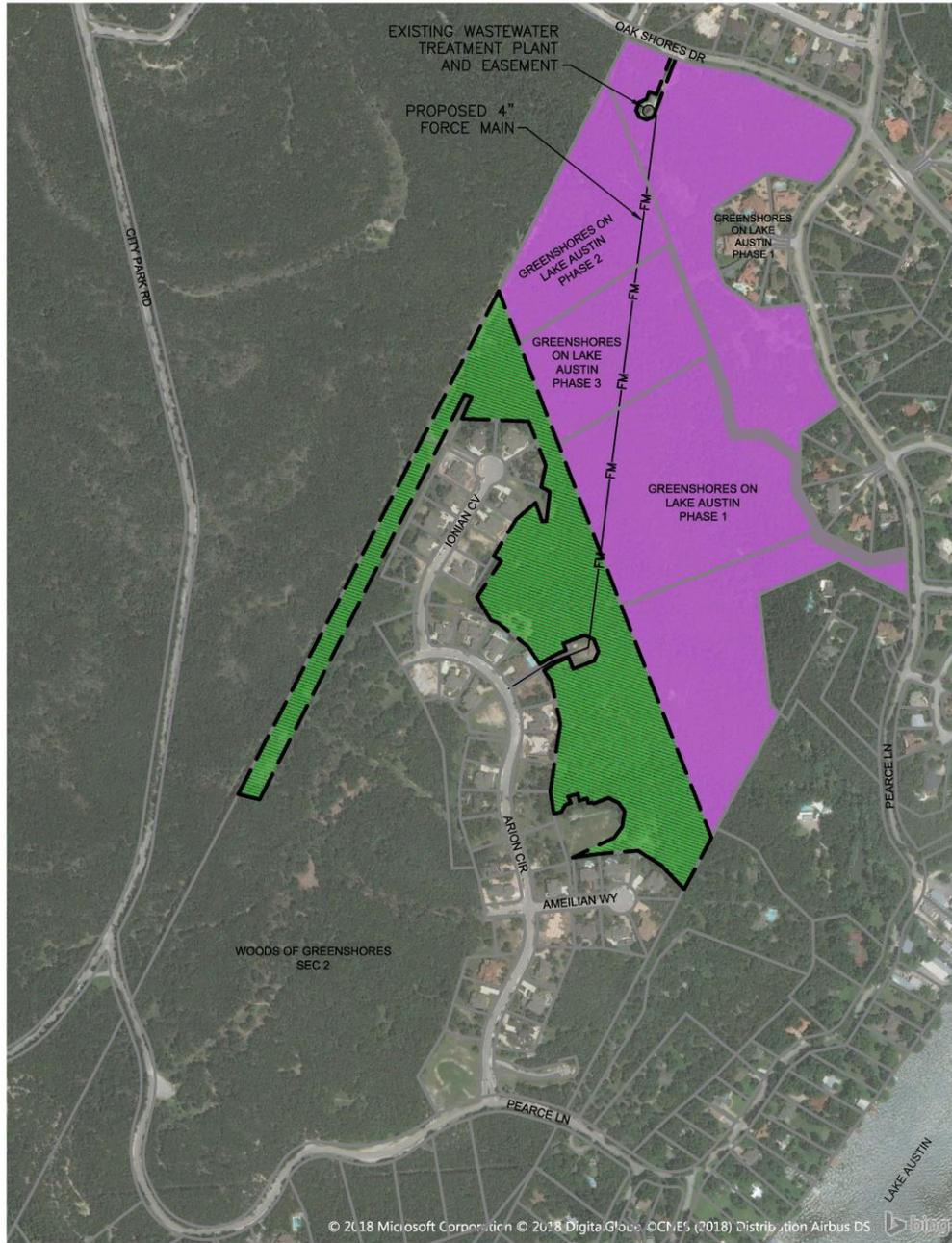
Figure 1



This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-ground survey and represents only the approximate relative location of property boundaries. Travis County has produced this product for reference purposes only and offers no warranties for the product's accuracy or completeness.

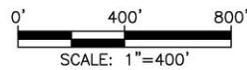
Figure 2

FILE: P:\Projects\2100 - Eppright\101-Greenshores\CAD\Exhibits\2100-101\_AREA MAP.dwg TAB: EXHIBIT-11X17-P PLOTTED: 3/1/2018 11:14 AM BY: GLENN POPE



LEGEND

-  PROPOSED CONSERVATION EASEMENT
-  GREENSHORES CONSERVATION EASEMENT



 **Green Civil Design**  
 Engineering & Consulting  
 Texas Registered Engineering Firm F-17563

11130 Jollyville Rd., Ste. 101  
 Austin, Texas 78759  
 (512) 640-6590

THE WOODS OF GREENSHORES  
 WW. F.M. ROUTE

AREA MAP

FIGURE 1 OF 1

## Attachment 1

### Term Sheet for Amendment to Greenshores Annexation and Development Agreement

City staff will support an amendment to the current contract to allow for existing Woods of Greenshores residential subdivisions to be connected to the existing wastewater treatment plant with the following conditions:

#### General

- The amendment will only apply to currently approved subdivisions. Any future development shall comply with existing requirements for a second treatment plant.
- Prior to the City moving forward with an amendment to the agreement, please provide:
  - A copy of the TCEQ permit for the current wastewater treatment system and any current enforcement actions or those within the past 5 years.
  - A copy of the treatment system's soil moisture monitoring plan and results from the past three year's monitoring events.

#### BCCP

- The Owner must demonstrate the legal right to construct the wastewater force main along its entire length prior to the execution of the agreement amendment. This shall include demonstrating compliance with US Fish and Wildlife Service Section 10(a)(1) permit (TE-029780-2) and the Greenshores Conservation Easement Agreement.
- Horizontal directional drilling shall be done in such a manner as to avoid the tree root zone in the Conservation Easement areas. The only exception is for a bore pit and associated pipeline within 50 feet of the Greenshores wastewater treatment plant. At a minimum, the pipeline depth under the Conservation Easement areas shall be 40 feet. A lesser depth may be approved by the City if the owner can demonstrate that achieving that depth is infeasible through all available means, such as a deeper entry/exit bore pit or other methods.
- A mitigation plan must be developed and submitted for approval to City and County environmental staff prior to the City issuing a permit for the project. At a minimum, the plan shall include criteria for identifying damage to the environment, methods for mitigating any environmental damage, a monitoring period for environmental impacts, and a timeline for restoration activities.
- PK-RE will provide a cash deposit to Travis County in the amount of \$10,000 to be utilized if PK-RE or successor activities damage habitat and PK-RE fails to perform the necessary restoration. The County will release any remaining funds in the cash deposit if no damage has been detected two years after completion of the project.

#### Project Design and Construction

- The project will be designed to comply with the City of Austin Land Development Code and its associated technical manuals, standards, and specifications.
- The City will not issue a development permit for the project until the following are provided to the City of Austin and Travis County:
  - A report, sealed by a professional engineer, is provided for the City's review demonstrating that the existing treatment plant, effluent storage pond, and existing effluent irrigation area are functioning as designed and in compliance with TCEQ permit requirements and have capacity for 110% of the projected effluent volume from the full build-out of all currently approved subdivisions connected and to be connected to the

## Attachment 1

wastewater system using a water balance consistent with TCEQ requirements in 30 TAC 222 or 30 TAC 309 (as applicable).

- Evidence of TCEQ approval for treatment of the additional effluent is provided to the City or that the additional effluent is allowed under the current permit and additional permitting by TCEQ is not required.
- The wastewater force main must be bored for the entire length with no surface expression within City or County designated conservation land with the exception of a bore pit and associated pipeline within 50 feet of the Greenshores wastewater treatment plant and must meet all applicable requirements of the City and County Balcones Canyon Conservation Plan.
- The force main will be installed within a carrier pipe to contain any leaks. An alarm system will be installed, operated, and maintained at the treatment plant and the originating lift station to detect spillage in the carrier pipe.
- Components of the boring for the force main include:
  - Installing and monitoring effluent leak detection sensors within the carrier pipe.
  - Installing a carrier pipe made of materials that have a 50-year life expectancy.
- A professional engineer shall submit the following additional reports for the City's review and approval prior to the submittal of a site plan:
  - A frac-out, or inadvertent release of drilling lubricant, plan provided to the City and County for review and approval, which identifies activities to minimize the potential for frac-out, provides for early detection of frac-outs, specifies a minimum-impact response in the event of a frac-out, and details notification protocol to City and County environmental staff in the event of a frac-out. An on-site environmental inspector must be present at all times during drilling, and drilling may only occur during daylight hours except with prior approval by the City of Austin and Travis County.
  - A spill/overflow response plan to recover wastewater effluent from the carrier pipe prior to surface overflow onto the ground surface; and
  - A void detection and grouting protocol for the horizontal directional drilling. The protocol should include the rate of loss of drilling fluid that would indicate a void greater 2 cubic feet in volume; and the method and material for grouting the void.

### Post-Construction

- The new wastewater infrastructure must be inspected, tested, and found compliant with City-approved construction plans by a professional engineer with sealed report provided to the City and County prior to use with wastewater.
- The owner or operator of the system shall pressure test the carrier pipe prior to initial operation and every five years thereafter to insure that the carrier pipe is watertight.
- City and County staff are to be provided right of entry to inspect any portion of the wastewater system upon prior written request.
- The Owner will inspect or will cause an inspection to be done of the wastewater treatment plant and irrigation area on a quarterly basis. The inspection reports will be provided to the City within 30 days after each inspection for a five-year period. Thereafter, an annual inspection will be required with the report submitted to the City within 30 days after the inspection.