

ITEM #: 25
DATE: 03-26-24
DEPT: Electric

COUNCIL ACTION FORM

**SUBJECT: RESOLUTION APPROVING GEOTHERMAL EASEMENT AGREEMENT
FOR BAKER SUBDIVISION**

BACKGROUND:

With the development of Baker Subdivision, the City embarked upon an effort to create a district-based community geothermal system for use by single-family homes within the subdivision. The City Council first approved plans and specifications for a community system on September 22, 2020.

A single bid exceeding available funding was received for installation of the district-based system. Following an evaluation, the bid was rejected and the system was redesigned to provide individual geothermal wells to serve each residential lot. The City approved new plans and specifications reflecting the individual wells and awarded a contract for well drilling on February 9, 2021 in the amount of \$235,830. Installation of the wells proceeded in spring 2021 and was completed in July 2021. Note that use of geothermal on Lot 27, which is designated for multi-family affordable housing, was not included with the 2021 contract award. Design and construction of geothermal for Lot 27 was deferred until the City had a partner developer for the site.

With the final plat of Baker Subdivision, the City established a geothermal easement located along the rear property line of the single-family home lots. Along with the final plat, the City established restrictive covenants for the subdivision that required that each single-family lot (Lots 1-26) connect to a geothermal system provided by the City. No natural gas infrastructure was extended into the subdivision because of the City's investment in geothermal and the goal of supporting sustainability with lower associated carbon emissions for new housing.

In summer 2023, City staff was informed by the Story County Health Department that no permits had been approved for the geothermal wells that had been installed. According to the bid documents, permitting the wells was the responsibility of the well driller. However, City staff was informed that the driller was operating under the incorrect assumption that the new wells were covered under previously approved permit for a test well installed in the development in 2020. After discussions with County and the Iowa DNR staff, it was determined that although a test well permit had been granted, it did not exempt the City's additional wells from permitting requirements.

Electric Services proceeded in January 2024 to apply for well permits for all the existing wells. After discussion and review with the County, they determined the wells could be approved as installed. However, some wells were placed off of the lot that they serve due to conflicts with other utilities. Additionally, all the wells are in close proximity to abutting property lines. Therefore, to assure the wells are accessible and able to properly operate, an additional easement agreement is needed to meet the well siting regulations. **At this time, the existing wells are conditionally approved pending the approval and recording of the attached Easement Agreement.**

The attached agreement was drafted by the City Attorney's Office under the direction of the County as to what issues must be addressed. The County approved the draft agreement form and has asked the City to finalize its approval. The agreement is written to grant two different types of rights between the

Grantor and the Grantee, both of which are currently the City of Ames. This is true even though the City has purchase agreements for Lots 1-8 and an option agreement for Lot 27. The rights created in the agreement continue with successors of interest in properties related to the agreement.

The agreement accomplishes two essential things and includes notifications/disclosures about the City operating geothermal wells. First, it establishes that the wells are allowed to exist in their current configuration and location and that the right of access and use of the area for "Private Geothermal Wells," including abandonment and replacement if needed, exists in perpetuity.

Second, it allows for a "Private Geothermal System" to connect to the wells for benefit of the specified lot. The agreement includes an exhibit identifying each well and which lot benefits from use of each specific well. The wells are referred to as private in the agreement at the direction of the County for permitting purposes because they serve one individual lot, despite their ownership by the City. The private system refers to the connection of the well to the home that is served by the well, which is not intended to be publicly owned.

Although the City is the current owner of all lots in the subdivision, the City has entered into purchase agreements with Habitat for Humanity for the Lots 1-8 and an option agreement with Hatch Development for Lot 27. **Because of these contractual property interests it was necessary that both Habitat and Hatch sign the agreement to finalize the permitting of the wells.**

Habitat agreed to purchase lots in Baker Subdivision in April 2023 and subsequently secured additional lot interests for a total of eight lots. Habitat has started the construction of three homes and has connected two of these home to the existing geothermal wells. Upon notice by City staff to Habitat that the existing wells were not yet permitted, Habitat has worked with staff to understand in greater detail what the geothermal requirements and obligations were for the City and Habitat's future buyers.

City staff provided an initial draft of the agreement early in February and an updated version with the well exhibit at the end of February. Habitat initially expressed concern about the agreement language, how the operation of the system was addressed, and how the system was going to be permitted. In response to Habitat's concerns, staff responded with more information about the permit process and the agreement, information about an ordinance that will be proposed by staff for regulation of the geothermal system, and the intent to prepare an additional agreement with Habitat specifically for Lots 1-8.

The additional agreement will address the time period the City is obligated to provide the wells and the homeowner's ability to disconnect from the geothermal system in certain circumstances, along with other details. Staff intends for a draft ordinance to be available for City Council approval on April 9 and for the additional agreement to also be ready for approval later in April. It is essential to resolve these issues with Habitat to ensure they can close on the sale of their first completed home on Lot 8 in May.

Hatch Development reviewed the easement and determined their proposed development plan was not impacted by the easement agreement and has signed the agreement. With approval of the agreement by all parties, each developer will be able to continue with their planned housing projects.

ALTERNATIVES:

1. Approve the Geothermal Easement Agreement with Creekside Townhomes LLLP and Habitat for Humanity of Central Iowa for the existing well locations and their ongoing use as defined in

Attachment A and direct staff to proceed with completing an ordinance for the regulation of the geothermal well system and to draft an additional agreement with Habitat for use of wells for Lots 1-8.

2. Decline to approve the proposed agreement and direct Ames Electric to abandon the existing wells and seek new permit approvals for locating wells on each individual single-family home lots.

3. Direct staff to modify the proposed agreement and or location of some geothermal wells.

CITY MANAGER'S RECOMMENDED ACTION:

Permitting of the geothermal wells for single family lots within the Baker Subdivision will be complete with the approval and recording of the attached agreement. The agreement establishes legal rights for geothermal wells to exist, be maintained, replaced or abandoned in the easement area and establishes rights to connect to the wells to the benefit of future single-family homeowners' geothermal systems. It is critical to resolve the well permits at this time to allow for both Hatch and Habitat to continue with their projects.

An ordinance is planned to address many of the operational requirements of the geothermal system. An additional agreement with Habitat for Lots 1-8 will also be beneficial for both parties in support of our partnership for producing low income for sale housing. Additional work may be needed in the future to address conditions north of Tripp Street for the remaining 16 single-family lots as well.

Therefore, it is the recommendation of the City Manager that the City Council approved Alternative #1.

ATTACHMENT(S):

[Declaration of Geothermal Systems Easement & Agreement.pdf](#)