UNIVERSITY OF ARKANSAS

Request for Qualifications – Engineers
MAPLE HILL STEAM TO HOT WATER CONVERSION

The University of Arkansas Fayetteville, in accordance with the policies of the Board of Trustees, is soliciting responses from qualified engineers for *Maple Hill steam to hot water conversion.*

PROJECT DESCRIPTION

Background.

Heating for campus buildings at the University of Arkansas was provided by a central steam system as early as 1908, after an appropriation by the General Assembly of $10,000. The original coal-fired central boiler plant provided steam to the university's early buildings. It expanded with the implementation of the 1925 Plan to serve the resulting new buildings, starting with the Agriculture Building in 1927, the University Library (now Vol Walker Hall) in 1935, the Chemistry Building in 1936, and others that followed soon after, all of which were connected via a series of utility tunnels. In 1956, in response to the rapid growth of the post-World War II era, a larger Central Heating Plant was built along Dickson Street and the tunnel system was extended. During the late 1950s and 1960s, the campus expanded to the northwest, into what is now called Maple Hill, with the construction of the Animal Science Building, Fulbright Hall (since demolished), Hotz Hall, and Reid Hall, etc. All the buildings located in the district are currently served by underground steam distribution infrastructure first introduced at that time.

Most modern district energy systems use hot water for heating rather than steam because district heating hot water (HHW) is more energy efficient, less complex to maintain, and safer to operate. However, steam is still used for district energy in certain applications because of its unmatched ability to move a lot of energy over a long distance. The university has adopted a transition strategy to leverage the existing steam infrastructure to its best advantage, while positioning the campus for the longer-term use of heating hot water. The campus is accomplishing this by converting areas of campus to heating hot water through "HHW mini-plants". The campus uses district steam to make HHW near to a group of buildings, then pipes HHW to those buildings for heating. This project will be the fourth campus mini-plant in the university district energy system.

Project scope.

In 2024, the university commissioned an initial study to help delineate the project scope[1]. The project will convert nine buildings in Maple Hill to district HHW and will provide capacity to interconnect the two

[1] See the 2024 study here:
https://fama.uark.edu/campus-planning/capital-budgeting/2024_rfq_eng_maplehillsteamtohotwater_study.pdf

proposed new residence halls that are currently in design. Conversion of the individual buildings will be phased over time, once the distribution system is installed. The new HHW mini-plant will be located in the basement of the North Chiller Plant, which is adjacent to a major steam service line on Maple Street. The new North Chiller Plant HHW mini-plant will be sized to serve 842,318gsf in the Maple Hill district. The buildings included are:

Margaret Clark Hall (Clark Hall) / 68,439gsf
Willard B. Gatewood Jr Hall (Gatewood Hall) / 43,423gsf
Arthur M. Harding Hall (Harding Hall) / 62,211gsf
Hotz Hall / 100,000gsf
Maple Hill East / Maple Hill West / 215,000gsf
Maple Hill South / 107,500gsf
Gordon Morgan Hall (Morgan Hall) / 89,780gsf
Reid Hall / 95,235gsf
Pat Walker Health Center / 60,730gsf

Maple Hill central site / TBD (in design)
Maple Hill north site / TBD (in design)

The new mini-plant will be sized to allow for future connection to the John W. Tyson Building and the Agricultural, Food, and Life Sciences Building. The two buildings are not currently configured to accommodate HHW, so they will be converted when their mechanical infrastructure undergoes substantial renewal. The project will install new HHW piping throughout the district, as well as repurpose much of the existing steam infrastructure for HHW service. Existing tunnels will be used where possible, and supplemented by direct-bury lines. No new tunnels will be constructed as part of the project.

PROJECT TEAM

The project requires experience with design of district energy systems, conversion of existing building mechanical systems and utility service connections, as well as integrating service lines into a tight urban context with minimal visual disruption.

PROJECT COST

The total project cost is currently estimated at $25 million. Total project cost includes the construction cost and soft costs like design fees. Engineers and consultants will work with Facilities Management to coordinate with current projects and anticipate future campus development, as well as advance campus operational efficiencies, sustainability requirements, and landscape standards.

ANTICIPATED PROJECT SCHEDULE

Request for Qualifications (RFQ) issued	*February 7*
Statement of Qualification (SOQ) due	*February 25*
interviews of shortlisted firms	*March 31*
Board of Trustees selection announced	*May 22*
contract negotiations	*May-June 2025*
design starts	*July 2025*
construction starts	*May 2026*
project complete	*December 2029*

SUBMISSION

The deadline for responses is 1:00pm local time on Tuesday, February 25, 2025.
All respondents will be notified of the results by EMAIL, so please provide accurate contact information.

Address ten (10) copies of responses to:

Todd Furgason, Senior Campus Planner
University of Arkansas
Facilities Management Planning and Design
521 S. Razorback Road, FAMA C-100
Fayetteville, AR 72701

Notice to design teams:

The University of Arkansas Board of Trustees has expressed a clear preference for design teams that include a lead Arkansas consultant. Please note that this will be considered during the selection process.

Format requirements:

Printed responses should be no larger than 8.5in x 11in, limited to **50 sheets maximum (100 pages)**, fully recyclable (i.e. no plastic covers, plastic tabs, etc.) and bound with glue, staples, or thread (i.e. perfect bound, saddle stitching, etc.). No metal or plastic coils allowed. No loose pages or folders. **Responses that do not meet these requirements will be disqualified.**

Please send a digital copy of the response via email to *toddf@uark.edu* in addition to the printed booklets.

To avoid potential conflicts of interest, respondents should not communicate with university faculty or staff about this project. This document provides the relevant information for assembling a Statement of Qualifications. If you have questions about the selection process or the project scope, you can send them via email to toddf@uark.edu.

Content requirements:

Include the information below and organize it in an easily accessible manner. You do not need to divide the response into chapters exactly matching the descriptions below. **Responses that do not include the required licensure information will be disqualified.**

1. Proof of licensure or eligibility:

   Engineers: All engineers shall hold individual licenses in the State of Arkansas, and all engineering firms shall hold a valid Certificate of Authorization (COA) issued by the Arkansas State Board of Licensure for Professional Engineers and Professional Surveyors. Joint venture firms are also required to hold a COA. **A COPY OF A VALID ARKANSAS CERTIFICATE OF AUTHORIZATION MUST BE INCLUDED WITH THE SUBMITTAL.**

   Landscape Architects: All firms shall be licensed by the Arkansas State Board of Architects, Landscape Architects, and Interior Designers. A COPY OF A VALID ARKANSAS LICENSE MUST BE INCLUDED WITH THE SUBMITTAL.

   Civil Engineers: All engineers shall hold individual licenses in the State of Arkansas, and all engineering firms shall hold a valid Certificate of Authorization (COA) issued by the Arkansas State Board of Licensure for Professional Engineers and Professional Surveyors. Joint venture firms are also required to hold a COA. A COPY OF A VALID ARKANSAS CERTIFICATE OF AUTHORIZATION MUST BE INCLUDED WITH THE SUBMITTAL.

2. Organizational chart for design team and all consultants
3. **Specific project experience** (within the past five years) with design of district energy systems
4. Current office size, personnel description, and workload
5. Experience constructing projects under nationally-recognized sustainable rating systems
6. Experience with fully commissioned projects
7. Proof of current professional liability insurance coverage ($1,000,000 minimum required)
8. List of projects currently under contract with state agencies or educational facilities
9. Statement of diversity in the workforce, if applicable
10. Certificate of women-owned or minority-owned business, if applicable

PROFESSIONAL SERVICES REQUIRED

SITE PLANNING, CIVIL ENGINEERING, LANDSCAPE DESIGN, COST EVALUATION, SCHEMATIC DESIGN, DESIGN DEVELOPMENT, CONSTRUCTION DOCUMENTS, CONSTRUCTION ADMINISTRATION, AND PROJECT CLOSEOUT.

LOCATION

The project will affect buildings and landscapes throughout Maple Hill.