



**UNIVERSITY OF HOUSTON  
Campus Facilities Planning Committee  
Request for Project Approval Form**

1. **Project Number**
2. **Project Name** **Campus Utility Plant  
Expansion**
3. **Committee Date** **April 10, 2009**
4. **Requesting Department** **Plant Operations**
5. **Contact Name & Phone Number** **Dave Irvin, x2-5579**
6. **Presenter:** **Dave Irvin**

7. **Description of Request**

This item requests site approval for an expansion of the Central Plant footprint needed to house additional equipment providing increased utility to the campus.

**Project Description**

The central plant will be expanded into parking lot 19F to the west by approximately 50feet.

Modification of the current plant equipment includes removal of existing outdated chiller with 3 new 2500 Ton chillers; replacement of cooling towers 1-4 and addition of a cooling tower cell; replacement of modification of existing boilers to low pollution models; and associated utility modifications or improvements to support the new or modified equipment.

**Background Information:**

This project is critical for Tier One and Campus expansion and has a number of goals.

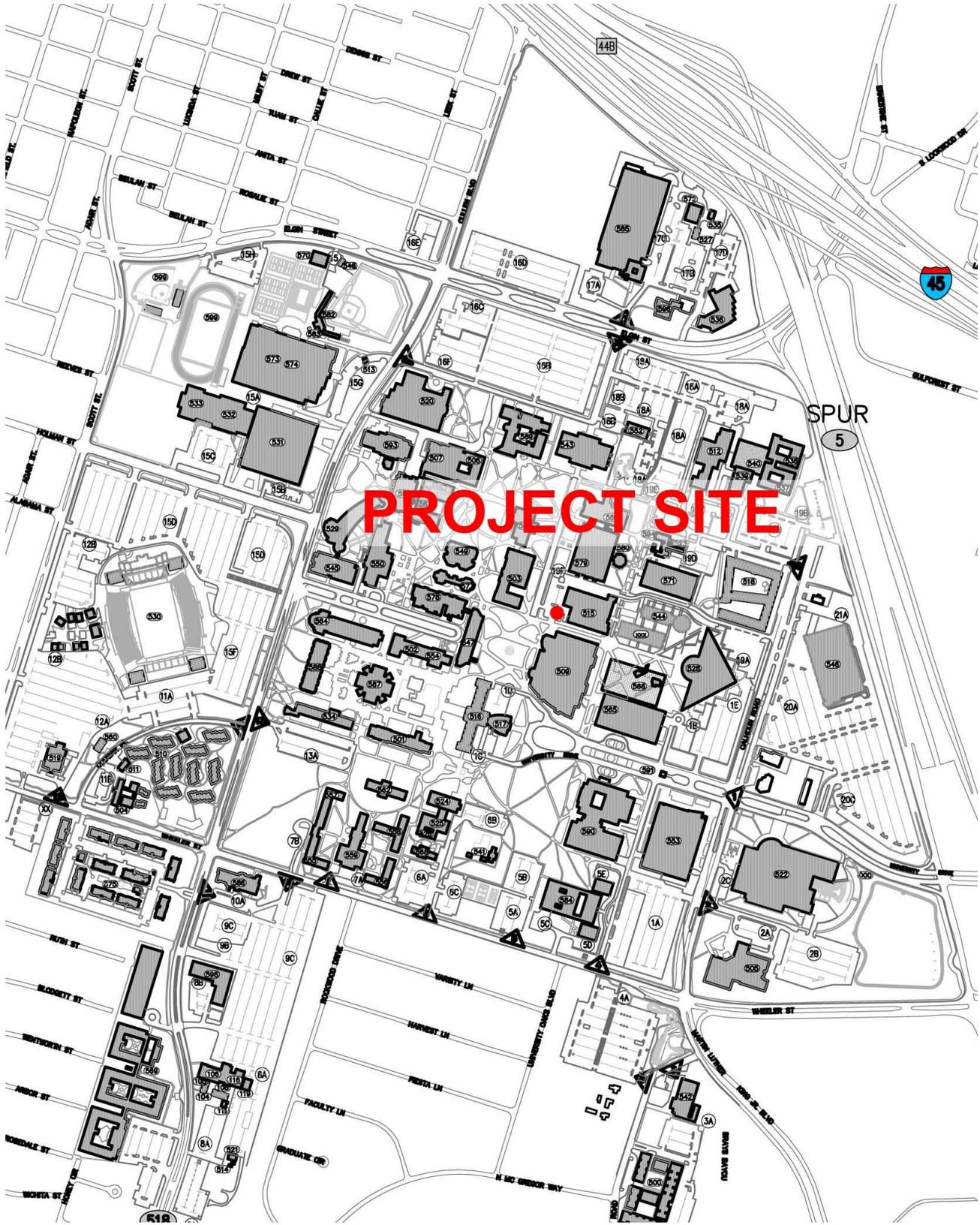
- 1) Existing equipment in the Central Plant is past its manufacturer recommended life, is increasingly expensive to maintain and repair and must be replaced.
- 2) Because it is older equipment our current plant is energy inefficient and not as clean as new state of the art technology—a major problem in an air quality non attainment zone like Houston. The Federal Government and EPA have mandated that we replace existing equipment with new lower polluting equipment as part of the mandates to force Houston to meet clean air requirements.
- 3) With the increased efficiency we will reduce energy usage by 3-4%, save significant money and reduce the University's carbon footprint dramatically.
- 4) Finally this project will increase the Central Plant capacity to serve the future buildings needed to support the Framework Plan and house Tier One Research, increased on campus housing, additional instructional and student support space.

<b>8.</b>	<b>Cost of Project</b>	<b>\$45,000,000</b>
<b>9.</b>	<b>Source of Funding:</b>	<b>CRDM</b>
<b>10.</b>	<b>Proposed Start Date:</b>	<b>Upon BOR approval (April 2009)</b>

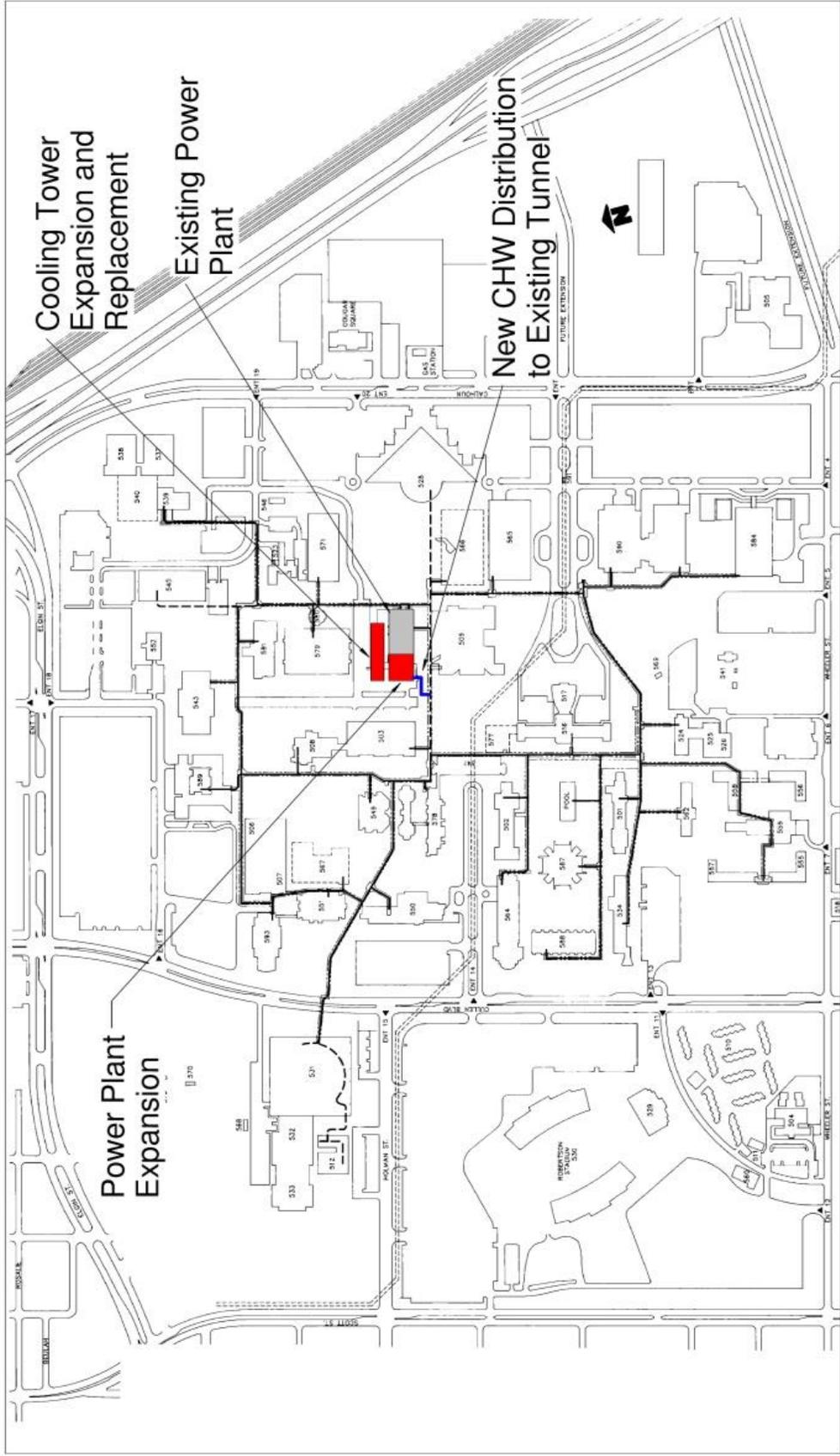
Date: \_\_\_\_\_

\_\_\_\_\_  
 Dave Irvin  
 Associate Vice Chancellor/Associate Vice President  
 Plant Operations

Attachments:  
 Project location plan  
 Framework Precinct Plan



**LOCATION PLAN**



Cooling Tower Expansion and Replacement

Existing Power Plant

New CHW Distribution to Existing Tunnel

Power Plant Expansion

**G1.1**

March 17, 2009

Scale 1" = 400'-0"

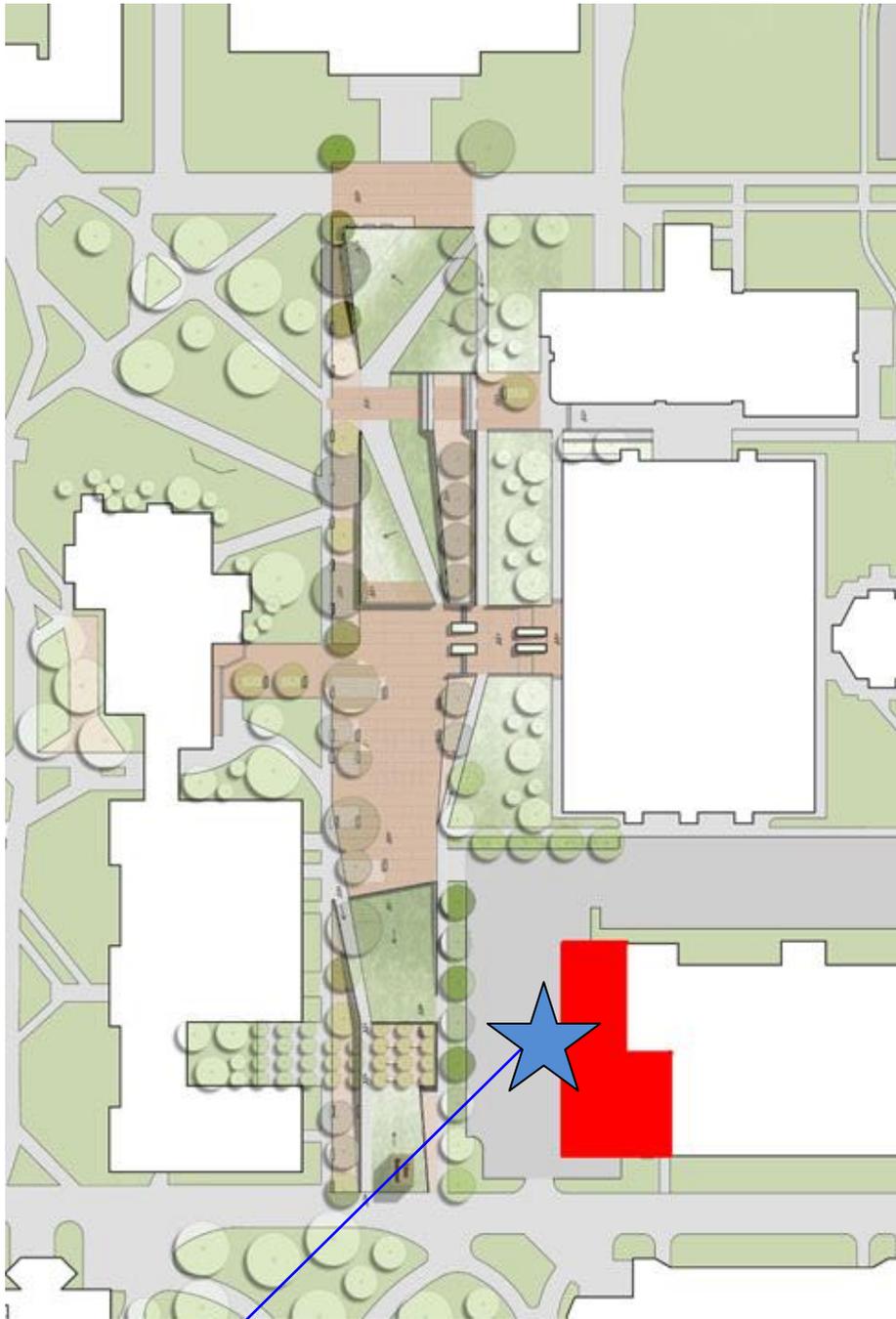
**SHAH SMITH & ASSOCIATES**

**Chilled Water Distribution**

**Power Plant Expansion 2009**

University of Houston

GEOTECH ENGINEERING AND TESTING + KUO & Associates, Inc. + PINNACLE STRUCTURAL ENGINEERS + PGAL ARCHITECTURE + INTELLEX



**Project Site**

**FRAMEWORK PLAN PRECINCT LOCATION**