

WEST CAMPUS ENERGY PLANT
GLHN Architects & Engineers, Inc.



UNIVERSITY
OF WYOMING

WEST CAMPUS SATELLITE ENERGY PLANT EXTERIOR



EDAC Approval 9/25/2018 and Facilities Contracting Committee Approval 9/28/2018

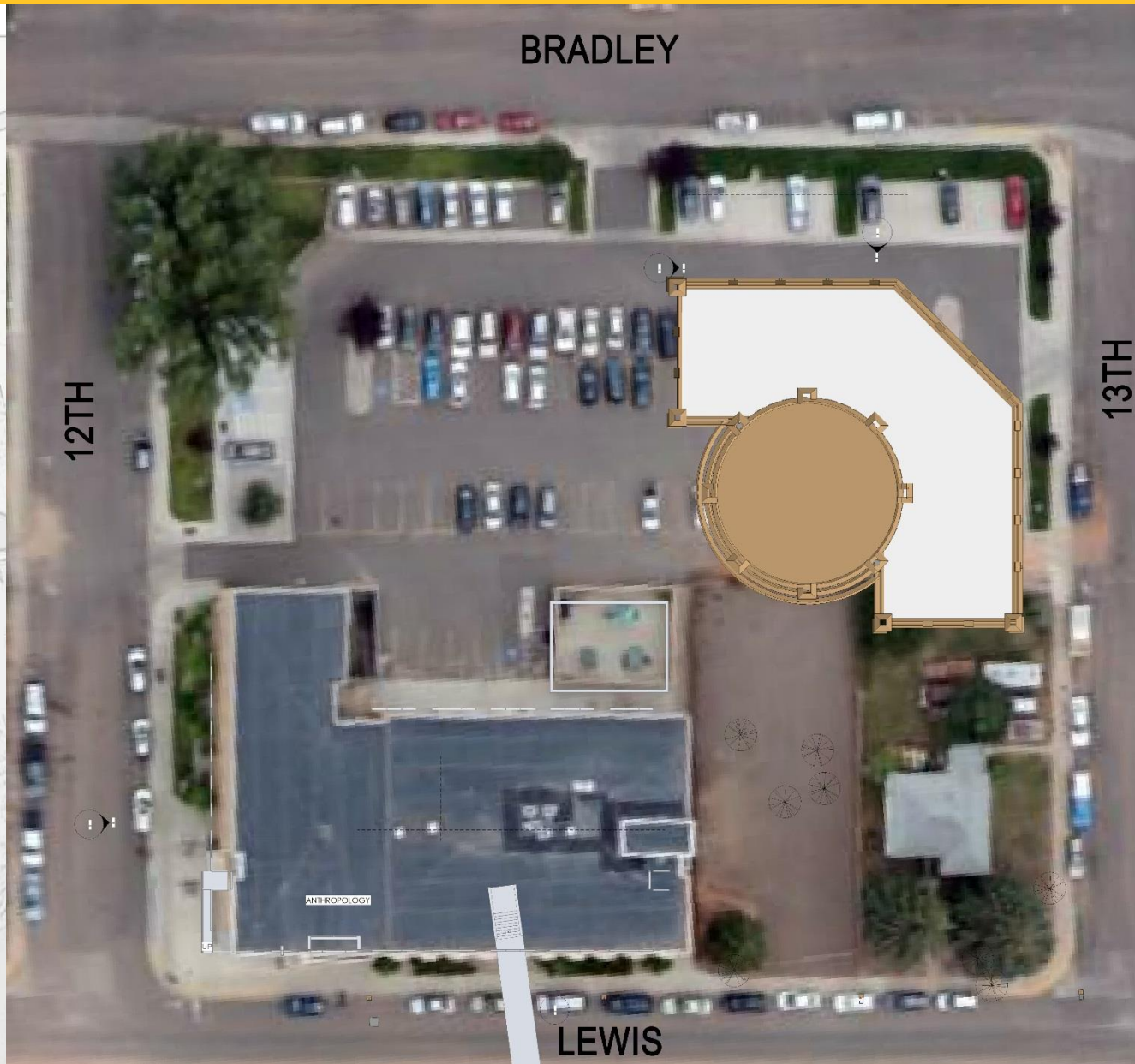
GUIDING PRINCIPLES

- **ENERGY EFFICIENCY**
- **RELIABILITY**
- **UTILITY COST SAVINGS**
- **FUTURE CAPACITY**
- **CONSISTENT WITH CAMPUS PLANS**
 - **LONG RANGE DEVELOPMENT PLAN**
 - **HISTORIC PLAN**
 - **UTILITY MASTER PLAN**
- **BEST VALUE FOR THE CITIZENS OF WYOMING**

CRITICAL ISSUES AT HAND

- **MEETING NEEDS OF THE NEAR TERM FUTURE BUILDINGS**
 - **ENGINEERING EDUCATION AND RESEARCH BUILDING (HOT WATER/CHILLED WATER)**
 - **SCIENCE INITIATIVE (HOT WATER/CHILLED WATER)-
APRIL 2021**
- **MEET LONG TERM CAMPUS HEATING AND COOLING NEEDS**
 - **LRDP/UMP ESTIMATE 1-3% GROWTH PER YEAR**
 - **EXCEEDING CURRENT CAPACITY**
 - **EFFICIENT EQUIPMENT OPERATION**
 - **SECURING LONG TERM HEATING FUEL SOURCES (COAL/GAS)**
- **AGING INFRASTRUCTURE**

LOCATION-NORTHEAST OF ANTHROPOLOGY



NE CORNER FROM BRADLEY AND 13TH



NW CORNER FROM BRADLEY



SE CORNER FROM LEWIS AND 13TH



WEST FAÇADE FROM 12TH



WEST CAMPUS SATELLITE ENERGY PLANT- IMPACT ON PLANNED CAMPUS GREENSPACE



CONSTRUCTION WILL ELIMINATE 5,000 SQUARE FEET OF GREENSPACE FORESEEN IN LRDP

COST IMPLICATIONS OF EDAC RECOMMENDATION

CLASSICAL DESIGN AND 20% INCREASE IN PLANT CAPACITY

- PREVIOUSLY PROPOSED CONCEPT CONSTR. COST-**\$23.5M**
- CONSTRUCTION COST INCREASE FOR 20% UPSIZE AND CLASSICAL ARCHITECTURE-**\$5.0M**
INCLUDES:
 - INCREASED SITE DISTRIBUTION-**\$1.4M**
 - INCREASED MECH/ELECT CAPACITY-**\$900K**
 - EXTERIOR WALLS-**\$760K** (FAÇADE AND GLAZING)
 - INTERCONNECTION OF PLANT UTILITIES-**\$600K**
 - PLANT WING INTERCONNECTION AND STONE TANK FAÇADE- **\$400K**
 - INTERCONNECTION OF BASEMENT STRUCTURES-**\$400K**
 - MAJOR DESIGN CHANGES (SITE LOCATION AND BUILDING TYPE) WILL REQUIRE ADDITIONAL DESIGN PERIOD SCHEDULE OF UP TO **5 MONTHS** AND INCREASED DESIGN FEES OF UP TO **\$500K**



SITE AERIALS-UNIVERSITY OF WYOMING WEST CAMPUS



MOVING FORWARD

END OF PRESENTATION