


EXHIBIT 2

Inventory of Proposed Phase 1 Energy Performance Contract Projects

	
Exhibit 2 MSU Phase 1 Project FIM List	
FIM Name	FIM Description
Brick Breeden Fieldhouse	
BBF 09.01 - Arena Lighting	Replace the existing metal halide fixtures with high efficiency sport lights. Suspend the new fixtures from the catwalk to facilitate easier access for maintenance. To improve horizontal light levels, the basketball court should receive supplemental lighting from the bridges. Enhance the lighting control system to provide separate customizable lighting for different events and practices, such as, pole vault, track, basketball, shot put, etc.
BBF 09.02 - Lighting Upgrade excl. Arena	Replace the current the current (32 W) T8 bulbs with lower wattage (28W or 25W) bulbs. Upgrade any remaining T12 fixtures to modern energy efficient lighting and ballasts.
BBF 09.03 - Occupancy Sensors	Install occupancy sensors throughout the facility to automatically shut off lights in unoccupied areas.
Koch & Story Tower	
KST 01.03 - Upgrade Boiler Burner	Upgrade old boiler burner on existing boiler to a burner of comparable or superior spec to the existing upgraded boiler burners and perform a tuning procedure on the existing boiler burners to ensure maximum performance.
Hapner Hall	
HPH 01.01 - Mechanical Room Insulation Upgrade	Insulate all condensate piping, etc. with permanent insulation and all condensate traps, valves, pumps, etc. with removable insulation.
HPH 01.02 - Pump System Reconfiguration	The heating hot water system is currently split into five zones served by four 2hp circulation pumps. Install two larger staged pumps with premium efficiency motors controlled by VFDs to circulate heating hot water throughout the building.
HPH 03.02 - Bakery Exhaust Hood Replacement	The bakery currently uses an existing exhaust hood originally intended to exhaust large amounts of air from cooking equipment that is no longer located in the facility. Remove the existing exhaust hood and replace with a properly reduced capacity hood that is better suited to the current use of the affected bakery area.
HPH 04.03 - Comprehensive Digital Controls	Install comprehensive DDC controls to manage and optimize building systems. Retrocommission all building systems with new controls system.
HPH 09.01 - Lighting Upgrade	Replace existing T-12 fixtures with T-8 fixtures, add occupancy sensors, and replace existing 32W T-8 lamps with 28W lamps.
HPH 15.01 - Refrigeration DHW Preheat	Install a heat recovery system that utilizes rejected heat from refrigeration equipment to preheat DHW and/or OSA.
HPH 18.02 - Dormitory Room Low-Flow Water Fixtures	Install automatic low-flow water faucet in the individual dormitory rooms to improve water conservation.
Langford Hall	
LAN 01.01 - Mechanical Room Insulation Upgrade	Insulate all condensate piping, etc. with permanent insulation and all condensate traps, valves, pumps, etc. with removable insulation.
LAN 01.02 - Flash Steam Heat Recovery	Install a flash steam heat recovery system.
LAN 04.01 - Comprehensive Digital Controls	Install comprehensive DDC controls to manage and optimize building systems. Retrocommission all building systems with new controls system.
LAN 04.02 - Thermostats	Some rooms utilize manual valves to adjust supply and return steam to fin tube units. Install thermostats in the individual rooms to allow greater control of heating system.
LAN 09.01 - Lighting Upgrade	Replace existing T-12 fixtures with T-8 fixtures, add occupancy sensors, and replace existing 32W T-8 lamps with 28W lamps.
Miller Dining Hall	
MDH 12.01 - Replace DHW Heater	The existing ARCO instant DHW heater is leaking and needs to be replaced.
MDH 15.01 - Refrigeration DHW Preheat	Install a heat recovery system that utilizes rejected heat from refrigeration equipment to preheat DHW and/or OSA.
Overall Measures	
OM 16.01 - Vending Misers	Install vending misers on all auxiliaries vending machines.
OM 28.01 - Network Computer Control Software	Utilize a software package, such as EZ GPO, that is capable of managing auxiliaries staff and auxiliaries student computer lab power use based on inactivity.