

Montana State Univeristy - Auxiliary Services
Energy Conservation Projects - Phase II
Project Listing and Financing

Facility Improvement Measures

Digital Controls Upgrades ¹	459,262
Retro-Commissioning of Mechanical Systems ²	178,428
Energy Insulation Improvements and upgrades ³	420,250
Irrigation System Conversion from Domestic Water Sources (Family Housing)	2,485,379
Mechanical System Upgrades ⁴	1,132,288
Windows Upgrade, North Hedges	1,480,335
Construction Sub-total	6,155,942

Project Soft Costs

Hazardous Materials Testing & Abatement	95,000
Project Fee (MSU Facilities Services) ⁵	79,000
Support/Training (MSU Facilities Trades)	55,000
Plan Review/Engineering Support	33,000
Owner Costs (Impact Fees, Permits, Review Fees, Staging Costs, Printing)	17,050
Utility Locates	10,000
Project Contingency	55,000
Soft Cost Sub-total	344,050

Total Project Budget/Estimate 6,499,992

Requested Construciton Authority 6,500,000

Applied Loan Proceeds 2,000,000

Balance of Project to be Financed (Borrowing Authority) 4,500,000

Annual Energy Savings available for financing repayment source 390,000

Simple payback of amount financed in years 11.5

Annualized Board of Investment Loan Payments @ imputed interest rate of 3.16% for 15 years 381,500

Imputed interest rate of 3.16% represents the average interest rate of the loan program over the past ten years. Current interest rate is 1.25% resulting in savings of \$50K for the first year for example. Such savings will be applied to the loan principle effectively pulling the repayment period below 15 years.

¹ Includes Hapner, Koch, & Langford

² Includes Fitness Center, Hannon, Johnstone, South Hedges & Strand Union

³ Includes Miller Dining, Roskie, Hedges South, & Koch

⁴ Includes Fieldhouse & Johnstone

ITEM 157-2009-R1112: attachment

⁵ Project has been delegated to MSU Facilities Services by A&E Division.