CAPITAL PROJECTS DETAIL

Date: 12/14/2006

243 MINOT STATE UNIVERSITY - BOTTINEAU

Time: 2:30:10 PM

Version: 2007-R-03-00243

Capital Project

Steam Line Replacement

	Request/Optional	Recommendation
Total Project Cost	252,000	252,000
General Fund	239,095	239,095
Federal Funds	0	0
Special Funds	12,905	12,905
Bonding	0	0

Is this a multibiennium project? No **No of Biens:** 1 **Est. Costs** 252,000

Future Increased Costs Associated with Project Approval

	2007-2009	2009-2011	2011-2013		2007-2009	2009-2011	2011-2013
Salaries and Wages	0	0	0	**FTE**	.00	.00	.00
Operating Expenses	0	0	0				
Equipment > $5,000	0	0	0	**General Fund**	0	0	0
IT Equipment > $5000	0	0	0	**Federal Funds**	0	0	0
Special Lines	0	0	0	**Special Funds**	0	0	0
Total	**0**	**0**	**0**	**Total**	**0**	**0**	**0**

Project Specifics and Justification

It is proposed to replace 850 linear feet of direct-buried steam and condensate lines that were installed between 1963 and 1971. These lines extend from the heating plant to six campus buildings. Water and condensate are dripping from the return lines, located in the boiler room, indicating that the lines are leaking steam and that ground water has penetrated the exterior conduit. According to engineering firm of Prairie Engineering P.C., direct buried steam lines of the type have an estimated life span of 20 to 25 years – These lines are 35 to 43 years old. Some of the lines are buried under asphalt roadway and sidewalk, which will have to be replaced to facilitate pipe installation. During 1998, a 150 foot section of broken direct-buried steam line was replaced. This section was newer than the lines currently in service. These steam and condensate lines are deteriorating and will fail in the near future. Planned replacement of these lines would avoid more costly emergency repairs, possible damage to equipment and loss of revenue should the campus experience a break during the heating season.