# Carver County Board of Commissioners April 15, 2008 County Board Room Carver County Government Center Human Services Building Chaska, Minnesota

#### County Board Work Session Agenda

Time	Topic			Page
4:00 p.m.	1.	ADMINISTRATIVE SERVICES		
•		1.1	Discussion of Siemens energy performance contracting	
			Proposal for Carver County	1-3
5:00 p.m.	2.	PUBLIC WORKS		
		2.1	Transportation topics -2008 County Highway and 2008 Sta	lte
			Highway Construction Projects	4
6:00 p.m.		Boar	d and Administrator Reports	

David Hemze
County Administrator



### REQUEST FOR BOARD ACTION

AGENDA ITEM: Discussion of Siemens energy performance contracting proposal for Carver County						
Originating Division: Administrative Services	Meeting Date: April 15, 2008					
Amount of Time Requested: 1 hour	Attachments for packet: ⊠Yes □ No					
Item Type: ☐Consent ☐Regular Session ☐Closed Sess	ion ⊠Work Session □Ditch/Rail Authority					
BACKGROUND/EXPLANATION OF AGENDA ITEM: As part of the Service Delivery Master Plan a Facilities Analysis was performed which identified several critical infrastructure items in need of immediate or short-term replacement. As priorities and budgets were developed budget plan that exceeded \$18 million was presented to the County. During this time, an alternative method of financing surfaced that not only complements needed improvements but also the new areas of construction at the Government Center.  On December 11, 2007, the Board contracted with Siemens to provide a County-wide building energy audit for						
\$12,500, which after significant and sometimes laborious discussion, has resulted in a capital replacement recommendation (addition of a central plant and other improvements) of over \$6 million and extend the life of the Government Center for another 30 years.						
The audit is now complete and it indicates that the County has done a superb job maintaining existing equipment, upgrading lighting systems and energy controls that contribute to energy conservation. With few exceptions, the County has "extracted as much savings as we possibly can without major capital improvements". The capital improvements Siemens is proposing for the County will significantly reduce electricity (down by 38%), natural gas (down by 65%), and water consumption (down by 28%) All together, the new equipment would reduce the County's utility and maintenance expenditures by over \$337,000/year. However, the proposed capital replacement will not pay back with energy savings alone.						
It must be realized that significant portions of the equipment in the Government Center is at, or past, the end of its useful life and capital cost avoidance and maintenance savings must play a role in meeting the intent of the Siemens plan. Siemens has indicated that with extraordinarily low interest rates, at or below 4%, and the extremely high rate of inflation of construction materials, about 8%, this is the time to seriously consider capital upgrades.						
County staff and Siemens will present the plan to the Board and will request input. Attached is some background information.						
ACTION REQUESTED: Request input and discussion from the	e County Board.					
FUNDING County Dollars = \$ Other Sources & Amounts =  = \$ TOTAL = \$ Related Financial Comments:	FISCAL IMPACT  None Included in current budget Budget amendment requested Other:					
⊠Reviewed by Division Director	Date: April 8, 2008					

## Background Information on Performance Contracting Siemens County Board Work Session – April 15, 2008

As part of the Service Delivery Master Plan a Facilities Analysis was performed which identified several critical infrastructure items in need of immediate or short-term replacement. As priorities and budgets were developed budget plan that exceeded \$18 million was presented to the County. During this time, an alternative method of financing surfaced that not only complements needed improvements but also the new areas of construction on the Chaska Campus.

A program was developed under Minnesota Statute § 16C.144 to implement comprehensive energy efficiency improvements in existing buildings partnering with Energy Services Companies. Energy Performance Contracting Services allows the County to use FUTURE energy and deferred maintenance savings into upfront capital projects.

The funding of energy efficiency improvement projects is typically through tax-exempt lease purchase agreements in which the Performance Contracting provider guarantees a certain level of on-going energy savings — these savings are then applied to what is typically a 15 year lease. The County may make lease payments to the finance company based on utility, operation, and maintenance cost savings.

The Audit and Engineering analysis produced a menu of performance contracting options. Individual projects ranged from \$5,000 to \$8,000,000. Total project costs ranged from \$35,000 to \$18,000,000.

If the County choose only to use energy savings only to pay for improvements within the 15 year statutory timeframe; only lighting and a new laundry system would qualify costing \$480,000.

Two primary goals are accomplished through this Energy Performance Contract.

1. Eliminate deferred maintenance and big ticket units requiring life expectancy replacement.

2. Document and achieve a significant Environmental impact for new construction and ongoing operations.

Following is the project descriptions, energy savings and project cost:

Description	Savings	Cost	Payback Years
Lighting Retrofit	\$64,097	\$443,797	10.1
Ozone Laundry Low Flow Plumbing	\$ 6,620	\$ 35,375	5.3
ADA Fixtures			
New Water Softener	\$ 6,590	\$124,500	18.9
BUR Roof systems	\$28,552	\$484,000	20
600+ ton Chiller		•	
9 M BTU Heat Plant			
Variable Pumps			
Buried Pipe to Bldgs.	\$192,600	\$3,120,000	17.6
Modify 60's Bldgs for			
Central Plant	\$ 35,259	\$ 640,000	18.2
Propane Gas Backup	•	\$156,000	6.0
Control Dian Exmansion	-		
Central Plan Expansion for Courts/Basement	\$338,467	\$884,388	33.2
101 Courts, 15abolitoit	φυυ, το τ	<b>4</b> • • • • • • • • • • • • • • • • • • •	
Solar Hot Water Heat	<u>\$ 3,219</u>	\$131,242	<u>40.8</u>
	\$701,324*	\$6,020,000	16.8

<sup>\*</sup> The savings total combines energy (electric, gas, water) operational and capital cost avoidance for the basement build out. It also includes \$46,492 in rebates.

From an environmental standpoint, the project would be equivalent to:

- Preserving 4,323 acres of forest annually.
- Removing 1,128 cars from the road annually.
- Eliminating the burning of 12,062 barrels of oil annually.
- Saving 1,420,000 gallons of water annually.



#### REQUEST FOR BOARD ACTION

ACENIDA ITEM: Transportation Tapica							
AGENDA ITEM: Transportation Topics							
Originating Division: Public We	orks Meeting Date: April 15, 1008						
Amount of Time Requested: 60 minute	Attachments for packet: ☐Yes ☒ No	)					
Item Type: ☐Consent ☐Regular Sess	ion	y					
BACKGROUND/EXPLANATION OF AGE	NDA ITEM:						
❖ 2008 County Highway Construction Pro	ojects						
❖ 2008 State Highway Construction Projects							
		•					
		. · · · · · · · · · · · · · · · · · · ·					
ACTION REQUESTED:							
No action is requested.							
ino action to requestion.							
		· · · · · · · · · · · · · · · · · · ·					
FUNDING  County Dollars = \$ Other Sources & Amounts = \$  TOTAL = \$ Related Financial Comments:	FISCAL IMPACT  None Included in current budget  Budget amendment requested  Other:						
⊠Reviewed by Division Director R	MG Date: April 7, 2008						