

AGENDA TITLE:

Report on Capital Improvement Project – Options for location of Fuelmaker Natural Gas Fueling Station

RECOMMENDED ACTION:

Provide staff direction with regard to site priorities

SUMMARY

The City received the fully executed agreement with the Transportation Authority of Marin (TAM) to implement the Fuelmaker Project. The Fuelmaker will allow fueling of the Sally Shuttle from a local location instead of the Regional PG&E facility in San Rafael.

Before proposals are solicited for the Fuelmaker equipment staff needs to know priority ranking of potential sites for the Fuelmaker. Knowing Council priority on the location will assist in determining full costs to purchase and install the equipment

Staff seeks direction on the location priorities for the equipment.

BACKGROUND

The City acquired the Sally Shuttle, a natural gas powered 15 passenger bus in 2003. The Shuttle is used to transport residents and visitors around the City and is most often used during special events. The nearest natural gas fueling facility is in San Rafael at the PG&E Service Center.

In an effort to make operating the Sally Shuttle more convenient a proposal was prepared to install a "Fuelmaker" in the Sausalito. The fuelmaker uses low pressure natural gas in utility lines and then further compresses **t** and allows this material to be pumped into natural gas powered motor vehicle fuel tanks.

The City was awarded a grant of \$65,000 to purchase and install this Fuelmaker equipment. We just received back from TAM, the fully executed funding agreement making it possible to begin incurring costs to install the equipment.

Item #: _____6.A____ Meeting Date: __10-02-07___ Page #: 1

ISSUES

The Sally Shuttle is solely fueled by natural gas. The nearest station is at the Regional PG&E Service Facility on Anderson Drive in San Rafael, approximately 15 miles away. There have been problems getting the shuttle to the fueling station because the fuel levels were allowed to go lower than needed to get to the station. A local source would provide a useful alternative location.

Performance of the Fuelmaker is not precisely known at this time but the system generally fuels one or two vehicles at a time. First generation Fuelmakers (circa 1995) required 8 hours to refuel a vehicle. The current generation of Fuelmakers fuel vehicles much faster (approximately 15 minutes to 1 hour) but still not at a rate deemed acceptable for a commercial operation (3-5 minutes). The Fuelmaker is expected to be useful for one to 4 vehicles for a period of approximately 5 years.

Location of the Fuelmaker.

Staff believes there are three potential sites for the Fuelmaker Equipment:

City Hall
The Corporation Yard
Martin Luther King Park

City Hall

Advantages	Disadvantages
Close to the Sally Shuttle	Security
Low risk to private property	Possible loss of parking space

The Shuttle is parked at City Hall. Placing the Fuelmaker there would be most convenient for the drivers to fuel the vehicle. The City Hall Parking lot is in a hole so should there ever be a fire at the fueling station, risks to adjacent private property would be low. Risks to the City Hall would depend on precise location that will have to be determined after discussions with the vendors and then reported back to the Council.

Corporation Yard

Advantages	Disadvantages
Secure	Limited available space
	Not Close to Sally Shuttle
	Private residents nearby

Item #: 6.A Meeting Date: 10-02-07 Page #: 2 In discussions with City staff, it was discovered that the City experimented with alternative fuel (propane or compressed natural gas) police cars. At the time a fueling tank was placed at the Corporation Yard and vehicles would be fueled there. Fueling was problematic because the Police operation is 24/7 while the corporation yard is open from approximately 7:00 AM until 4 PM. The fueling tank was placed in an area reserved for fleet parking and maintenance vehicles had to be parked in the aisles impacting circulation and material storage. The tank was within 50 feet of a private residence and could have been a problem if fire broke out. For these and other reasons the Police abandoned its efforts with alternative fuels and the fueling tank was removed. The Fuelmaker is expected to have similar problems as in the past at the corporation yard location.

Martin Luther King (MLK) Park

Advantage	Disadvantage
Could be made secure	Not close to the Sally Shuttle
Small space impact	City doesn't own the property yet.
Could be sited away from private	
residences	

MLK is a large site. During many hours of the day traffic is light and access is good. There appears to be room for a Fuelmaker and the parking stall(s) required for its operation. A Fuelmaker could be located to cause minimal impact to adjacent private residences. The site is about one mile north of City Hall which is comparable distance to normal gasoline stations. The City doesn't own the site yet and placing the Fuelmaker might limit possible "MLK endgame" scenarios.

There may be other sites as well. Staff believes the suggested three are the strongest candidates.

Staff believes the Fuelmaker is a bridge technology. Using it will help the City staff and the community decide if Alternative Fuels will work for a larger fleet. The equipment will last approximately 5-7 years. If viable the next step would be to consider a commercial grade natural gas facility. A Commercial grade facility would have equipment costs of approximately \$350,000 and additional costs for site preparation. Such cost for one or two city vehicles is not reasonable. Staff believes a commercial grade facility would have to be done in partnership with the private sector.

All of the sites have good points and bad points. Staff seeks direction regarding the priority of the various sites. When fuelmaker proposals are sent out they will be constrained by the site priorities set by the Council.

FISCAL IMPACT

Item #:	6.A
Meeting Date: _	_10-02-07
Page #:	3

This project is identified in the 2008 City Budget, General Capital Section.. Expenditure authorization is not being sought at this time. Staff will seek expenditure authorization at a subsequent meeting.

STAFF RECOMMENDATIONS

Provide staff direction regarding location priorities for the Fuelmaker.				
PREPARED BY:	SUBMITTED BY:			
Todd Teachout City Engineer	Adam W. Politzer City Manager			
	Item #: Meeting Date: _ 	10-02-07		
	Page #: _	<u>4</u>		