

City Council Agenda Summary Sheet (Purchases)

Agenda No:

Date: February 4, 2004

Prepared For: **Paul Shumejko, Transportation Engineer**
Marc Matich, Traffic Technician

City File No:

Meeting Date: February 18, 2004

PURPOSE:

The Department of Public Service recommends accepting the bid for a Mobile Global Position Satellite (GPS) Data Collection Unit for the management of the City's traffic operations to Environmental Systems Research Institute, Inc. as the lowest responsive, responsible bidder in the amount of \$3,845.00.

DISCUSSION:

In October of 2003, the Traffic Division & Management Information Departments jointly filled out a grant application for GIS equipment and computer software from ESRI & Trimble for a Mobile Government Demonstration Project. The grant application stated our need for use of a GPS hand held unit within the Traffic Division. As part of the eligibility for this grant, it was a requirement to have current developed software available to use with GIS equipment. The MIS department already developed a software sign program for the Traffic Division; we only needed acquisition of equipment for data collection. This equipment would be for sole use by the Traffic Division and used on a daily basis. ESRI & Trimble informed us that the City was not selected as one of the two eligible grantees. However, since the City had submitted a grant application ESRI would offer the City the GIS equipment and software at \$1,655.00 savings from the original cost.

Presently, the City of Rochester Hills does not have a comprehensive record system for tracking and inventorying City traffic signs. The need to develop a computer-based Geographic Information System (GIS) sign inventory system is immeasurable. A GIS-based sign data collection system enables the construction, maintenance, and engineering personnel of highway agencies to develop in-depth sign inventories including: counts, locations, conditions, and maintenance schedules. When used to their full potential, GIS-based sign data collection system can serve as a valuable record keeping system for tort liability and asset management. This includes information on a variety of highway agency needs such as: signs, guardrails, traffic signals, street lights, pavements, bridges, pavement markings, pathways, traffic count points, etc.

With MIS assistance, we have developed a computer-based sign inventory. When the sign inventory data is accompanied with a GIS system, staff will have the capability to access precise sign counts and their locations in the field. Additionally, the sign conditions can be monitored and any changes can be tracked over time. To assist our department in developing such a comprehensive system, a field inventory program is first being proposed. With the aid of a

mobile Global Position Satellite (GPS) unit, trained personnel can locate warranted and unwarranted traffic signs, and determine the need for additional and/or replacement signage. The GPS would provide the initial field data to start a citywide sign inventory system, and ultimately providing City personnel with the necessary data to determine the best management practices for maintaining a citywide sign inventory. The project will also serve as the basis for the City to estimate time, labor, and equipment requirements that will be involved in future sign inventory programs.

The objective of this project is to complete a pilot traffic sign inventory system for the City. The inventory will be completed using state-of-the-art mapping and GIS referencing systems. It is expected that this pilot inventory project will serve as the model for future citywide inventory and management system that will enable staff to efficiently monitor the quantity, location, and condition of each traffic sign within our system. This pilot study will involve the collection of key data items for traffic signs located adjacent to City’s roadways. The key information included in the data collection will include: sign type, location (based on GPS coordinates, route with respect to the roadway), condition, and support device. All data will be recorded and stored in a computerized GIS database.

The proposed project will be completed within the framework of the following six tasks:

- Task 1 – Equipment Acquisition and Set-up
- Task 2 – Data Collection
- Task 3 – Validation Completion of Database.
- Task 4 – Update Inventory
- Task 5 – Conduct Training for Personnel
- Task 6 – Transfer Sign Inventory Database to Departments

The department solicited bids for the Traffic Sign Management and GIS System and from the solicited bids three (3) bids were obtain. Environmental Systems Research Institute, Inc. was the lowest responsive, responsible bidder.

FISCAL INFORMATION:

Costs associated with the Traffic Sign Management and GIS System was not identified in the 2004 annual operating budget. A budget amendment will be forthcoming.

Fund Name	Fund Account #	Description	Budget Amount	Cost	Remaining Budget
Local Road	474.977000	Traffic-Equipment Capitalized	\$0	\$3,845.00	

Vendor Name and Address:

Environmental Systems Research Institute, Inc.
 380 New York Street
 Redlands, CA 92373-8100

Reason for Selection:

Lowest Responsive, Responsible Bidder

Method of Purchase:

Purchase Order & Faxed Authorization

RECOMMENDATION:

It is recommended that City Council accepting the bid for a Mobile Global Position Satellite (GPS) Data Collection Unit for the management of the City's traffic operations to Environmental Systems Research Institute, Inc. as the lowest responsive, responsible bidder in the amount of \$3,845.00.

ATTACHMENTS:

Bid Tab
Product Information
Resolution
Purchasing Authorization

Department Authorization: Roger Rouse, Director of Public Service

Reviewed by:

Fiscal: *Jean Farris*

Clerks: *Susan Koliba-Galeczka*

Approved by: *Pat Somerville*

RESOLUTION

NEXT AGENDA ITEM

RETURN TO AGENDA