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Where Values Make The Difference

**PURCHASING ITEM
FOR
COUNCIL AGENDA**

1. Agenda Item Number:

19

2. Council Meeting Date:
March 31, 2016

TO: **MAYOR AND COUNCIL**

3. Date Prepared: March 1, 2016

THROUGH: **CITY MANAGER**

4. Requesting Department: Police

5. **SUBJECT:** Purchase of Leica Geosystems Surveying Equipment

6. **RECOMMENDATION:** Staff recommends City Council approve the sole source purchase of Leica Geosystems surveying equipment from Surveyors Source, LLC, in the amount of \$88,664.08.

7. **BACKGROUND/DISCUSSION:** The Police Department Vehicular Crimes Unit (VCU) is responsible for investigating major collisions involving serious injury and fatal injury, and assists the Homicide Unit with measuring and recreating large crime scenes. As part of these investigations, the VCU uses specialized equipment to take precise measurements that can be used to create scaled scene diagrams, animations, and collision reconstruction. The ability to collect this information in a reliable and efficient manner at the time of investigation is critical to support the criminal prosecutions usually associated with these investigations. The current equipment in use by the VCU is outdated, difficult to maintain, and is becoming less reliable. Three different systems were evaluated. The Leica system was determined to be the best overall system, and it is currently used by other local jurisdictions. The purchase of Leica Geosystems surveying equipment will equip the VCU with up-to-date technology for reliable and efficient measurement collection and will allow the VCU to support cross-jurisdictional partnerships in data and equipment sharing.

8. **EVALUATION:** Staff researched products specific to law enforcement and found that none provide all of the elements of Leica's product. Staff received confirmation from Leica Geosystems that Surveyors Source, LLC, is the sole authorized distributor of the Leica Geosystems surveying equipment for the Arizona territory.

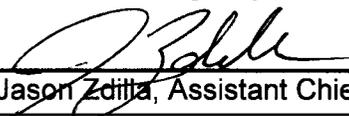
Through market research and the receipt of a best pricing quote, staff is confident that pricing for the equipment is fair and reasonable.

9. **FINANCIAL IMPLICATIONS:** Funding for this purchase is available in the General Fund, Police Field Operations, Other Equipment (Account No. 101.2030.6320).

10. **PROPOSED MOTION:** Move City Council approve the sole source purchase of Leica Geosystems surveying equipment from Surveyors Source, LLC, in the amount of \$88,664.08.

APPROVALS

11. Requesting Department


Jason Zditza, Assistant Chief

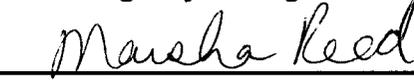
13. Department Head


Sean E. Duggan, Chief of Police

12. Procurement Officer


Raquel McMahon, CPPB

14. Acting City Manager


Marsha Reed



Management Services, Purchasing Division

Request for Sole Source Procurement Justification

TO: PURCHASING DIVISION

DATE: 2/2/16

FROM: Officer William Johnson #536
Chandler Police Dept/ Traffic Unit/ Vehicular Crimes Unit

PHONE: 480-782-4800

SUBJECT: Sole Source Request for the Purchase of: Leica TS16i Robotic Total Station unit with GPS Rover and Base Station. The request also includes all peripheral equipment and software such as tripods, mounts, batteries, etc., that permit use and functionality of the equipment. This equipment is more fully described in the line-item quote attached to memo dated 1/28/16.

REQUESTED SUPPLIER: Surveyors Source, LLC

SUPPLIER'S ADDRESS: 4317 N 16th St, Phoenix, AZ 85016

CONTACT: Nick Cournoyer **PHONE:** 602-359-8670 **COST ESTIMATE \$** 88,664.08

STATEMENT OF NEED: *(Provide background information, description of project, etc. to establish circumstances leading to request. Attach documents as appropriate to support statements.)*

The CPD Vehicular Crimes Unit, with the assistance of the Traffic Unit members, is responsible for investigating serious injury and fatal collisions within the city of Chandler. Many of these investigations involve serious and in-depth criminal investigations involving charges of aggravated assault, manslaughter and homicide. In addition, the unit has a support role to assist the CPD Homicide Unit when needed to collect information at crime scenes and major incidents. The VCU uses survey quality equipment to document and map collision and crime scenes so that the information can later be turned into a diagrams and animations to be presented as evidence in court. The current equipment used by the unit is over ten years old, lacks service support, and is outdated technology. In an effort to expand the capabilities of the unit as well as supply equipment that will meet the unit needs into the future, we are seeking to replace our current equipment with the listed Leica system.

JUSTIFICATION FOR SOLE SOURCE: *(Describe the unique nature of the product or service, what efforts were made to locate other sources, any market testing and research results, any other information that may help evaluate the request for sole source. Attach documents as appropriate to this request.)*

The justification for the sole source purchase of this equipment was detailed in the attached memo entitled "Request to Replace VCU Data Collection Equipment" dated 1/28/16.

STATEMENT OF REQUESTOR:

This recommendation for Sole Source Procurement is based upon an objective review of the product or service being required and appears to be in the best interest of the City. I know of no conflict of interest on my part. No gratuities, favors or compromising action have taken place. Neither have my personal familiarity with particular brands, types of equipment, materials or firms been a deciding influence on my request for this Sole Source Procurement when there are other known suppliers to exist.

TO BE COMPLETED BY REQUESTING DEPARTMENT AND SUBMITTED TO PURCHASING
(PLEASE TYPE)

REQUESTER:


Signature Required

DATE: 2/17/16

DIVISION HEAD:


Signature Required

DATE: 02/17/16

DEPARTMENT DIRECTOR OR DESIGNEE:

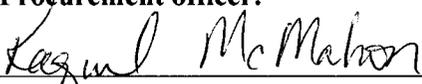

Signature Required

DATE: 2-18-16

PURCHASING REVIEW AND RECOMMENDATION:

PURCHASING APPROVAL:

Procurement officer:


Signature Required

DATE: 2-24-16

PURCHASING AND MATERIALS MANAGER:


Signature Required

DATE: 2/24/16



Quote Number
16019

Date: February 16, 2016

| | | | |
|---|--------------------------------------|---------------------------|--|
| Quote Prepared for: | | Order Information: | |
| Company: <u>Chandler Police Dept</u> | Address: <u>251 N. Desert Breeze</u> | Surveyors Source LLC | Attn: <u>Nick Cournoyer</u> |
| Contact: <u>Daryl Nyby</u> | City: <u>Chandler</u> | 4317 N. 16th St. | Phone: <u>602-359-8670</u> |
| Email: <u>daryl.nyby@chandleraz.gov</u> | State: <u>AZ</u> | Phoenix, AZ 85016 | Fax: <u>602-274-3740</u> |
| Phone: <u>480-782-4217</u> | Zip: <u>85226</u> | | Email: <u>nick@SurveyorsSource.com</u> |
| Fax: _____ | Account: _____ | | |

Imaging Robotic System w/ Base/Rover GNSS

| Part Number | Product Description | Quantity | Price | TOTAL |
|-------------|---|----------|--------------|--------------|
| | TS16i, Robotic Total Station Package | | | |
| 822441 | TS16 I 5" (1.5mgon) R500, total station with 5 MP overview camera, PowerSearch, automatic target recognition, reflectorless R500 | 1 | \$ 27,950.00 | \$ 27,950.00 |
| 827646 | Leica Captivate - Measure & Stakeout for TS/MS | 1 | \$ 1,500.00 | \$ 1,500.00 |
| 793973 | GEB222, Lithium-Ion battery, 7.4V/6Ah, chargeable. To be used with TS11/TS12/TS15/16 | 2 | \$ 220.00 | \$ 440.00 |
| 799185 | GKL311, Single-bay Charger Professional 3000. Charger for one Li-Ion battery (GEB211, GEB212, GEB221, GEB222, GEB241, GEB242 and GEB331), including AC/DC, adaptor and cigarette lighter cable. | 4 | \$ 140.00 | \$ 560.00 |
| 788853 | RH16, RadioHandle with integrated Bluetooth module and radio antenna. | 1 | \$ 1,650.00 | \$ 1,650.00 |
| 777508 | GDF321, Tribrachs Series 5000, without optical plummet. | 1 | \$ 385.00 | \$ 385.00 |
| 754384 | GRZ122, 360° reflector with 5/8" thread adapter for mounting of GPS antenna. | 1 | \$ 1,700.00 | \$ 1,700.00 |
| 667301 | GST120-9, Heavy duty tripod, self-closing, with side clamp screws and carrying strap. | 1 | \$ 350.00 | \$ 350.00 |
| 754389 | GLS12F, Reflector pole, telescopic to 2.00m with circular bubble, ft graduations. | 1 | \$ 300.00 | \$ 300.00 |
| | GNSS Rover | | | |
| 6008450 | GS14 Performance SmartAntenna - GPS/GLONASS, 3.75G Modem & UHF Tx/Rx | 1 | \$ 11,140.00 | \$ 11,140.00 |
| 767790 | GAD108, Arm to mount external UHF/GSM Antenna to GS15 SmartAntenna, usefull in areas of poor radio or cellphone network | 1 | \$ 245.00 | \$ 245.00 |
| 667243 | GAT2, Gainflex radio antenna, frequency range 435-470MHz. | 1 | \$ 50.00 | \$ 50.00 |
| 772806 | GEB212, Lithium Ion battery, 7.4V / 2.6Ah, chargeable | 2 | \$ 130.00 | \$ 260.00 |
| 667217 | GAD31, Screw-to-stub adapter for fitting GPS antenna on carriers with stub and poles with stub | 1 | \$ 140.00 | \$ 140.00 |
| 754389 | GLS12F, Reflector pole, telescopic to 2.00m with circular bubble, ft graduations. | 1 | \$ 300.00 | \$ 300.00 |
| | GNSS Base | | | |
| 6008450 | GS14 Performance SmartAntenna - GPS/GLONASS, 3.75G Modem & UHF Tx/Rx | 1 | \$ 11,140.00 | \$ 11,140.00 |
| 767790 | GAD108, Arm to mount external UHF/GSM Antenna to GS15 SmartAntenna, usefull in areas of poor radio or cellphone network | 1 | \$ 245.00 | \$ 245.00 |
| 667243 | GAT2, Gainflex radio antenna, frequency range 435-470MHz. | 1 | \$ 50.00 | \$ 50.00 |
| 772806 | GEB212, Lithium Ion battery, 7.4V / 2.6Ah, chargeable | 2 | \$ 130.00 | \$ 260.00 |
| 798181 | GDF112-1, Tribrach with optical plummet | 1 | \$ 350.00 | \$ 350.00 |
| 667216 | GRT146, Carrier with 5/8" screw, GPS antenna screws on directly. | 1 | \$ 110.00 | \$ 110.00 |
| 667244 | GZS4-1, Height hook with integrated tape measure. Supplied with additional tape graduated in feet and inches. | 1 | \$ 200.00 | \$ 200.00 |

| | | | | | | |
|---------|--|---|----|----------|----|----------|
| 667301 | GST120-9, Heavy duty tripod, self-closing, with side clamp screws and carrying strap. | 1 | \$ | 350.00 | \$ | 350.00 |
| 791695 | GVP659 Container for two antennas and CS controller | 1 | \$ | 350.00 | \$ | 350.00 |
| | CS35 Controller | | | | | |
| 833131 | CS35-2. US, Ruggedized Win8.1 Pro 64-bit Tablet Computer including: | 1 | \$ | 5,995.00 | \$ | 5,995.00 |
| 832120 | GEB236, Lithium-Ion battery, 10.8 V/8.7 Ah, rechargeable, for CS35 | 1 | \$ | 450.00 | \$ | 450.00 |
| 832118 | GKL235, Charger for CS35 batteries GEB235 and GEB236. Country specific AC/DC adaptor (GEV280-x) not included. | 1 | \$ | 450.00 | \$ | 450.00 |
| 832127 | GHT78, Tablet holder for attaching a CS35 Tablet with a GHT63 clamp to a pole. GHT63 | 1 | \$ | 650.00 | \$ | 650.00 |
| 767880 | GHT63, Clamp arrangement for attaching the GHT66 and GHT78 to all poles. | 1 | \$ | 100.00 | \$ | 100.00 |
| 827719 | Leica Captivate - Measure & Stakeout for CS35. | 1 | \$ | 1,500.00 | \$ | 1,500.00 |
| | CS20 Controller | | | | | |
| 823167 | CS20 3.75G / CDMA Disto Field Controller. | 1 | \$ | 5,950.00 | \$ | 5,950.00 |
| 799190 | GEB331, Li-Ion battery, 12.2V/2.8Ah, rechargeable, for CS20. | 2 | \$ | 180.00 | \$ | 360.00 |
| 807157 | GHT66, Holder attaching a CS20 with a GHT63 clamp to a pole. GHT63 is not included. | 1 | \$ | 100.00 | \$ | 100.00 |
| 767880 | GHT63, Clamp arrangement for attaching the GHT66 and GHT78 to all poles. | 1 | \$ | 100.00 | \$ | 100.00 |
| 817057 | GVP724, Small-sized hard container for 360° prism and controller for TS Robotic Pole setup | 1 | \$ | 200.00 | \$ | 200.00 |
| 827719 | Leica Captivate - Measure & Stakeout for CS35. | 1 | \$ | 1,500.00 | \$ | 1,500.00 |
| | Extended Warranty | | | | | |
| 6009550 | 3 yr Viva TPS (TS16) Silver CCP | 1 | \$ | 4,950.00 | \$ | 4,950.00 |
| 6009653 | 3 yr CS20 Silver CCP | 1 | \$ | 2,450.00 | \$ | 2,450.00 |
| 6009646 | 1 yr Ext. CS35 Bronze CCP | 1 | \$ | 810.00 | \$ | 810.00 |
| 6003723 | 3 yr Viva GNSS (GS1X) Silver CCP | 2 | \$ | 1,490.00 | \$ | 2,980.00 |
| | Infinity office Software | | | | | |
| 808788 | Infinity Basic (Floating) | 1 | \$ | 500.00 | \$ | 500.00 |
| 808791 | TPS data-processing for Infinity | 1 | \$ | 250.00 | \$ | 250.00 |
| 808796 | Infinity Imaging Measurement | 1 | \$ | 950.00 | \$ | 950.00 |
| 6008250 | 3 Year Infintiy CCP, Basic | 1 | \$ | 951.00 | \$ | 951.00 |

*A total of 5 days of hardware / software training is included.

- Training can be used in 1/2 days
- Training should be kept to a maximum of 5 people
- Training can be on-site or at an office location
- User manuals / technical reference manuals are available for download from Leica Geosystems

*Leica Geosystems provides no-charge technical support for the life of the product

*CCP is the software Maintenance program as well as the extended warranty for the hardware

| | | | | |
|---------------------------|--------------------|--------------------------|-----------|------------------|
| Accepted By: _____ | Date: _____ | Sub Total: | \$ | 91,221.00 |
| Signature: _____ | | Discounted Price: | \$ | 81,642.80 |
| | | Taxes: | \$ | 7,021.28 |
| | | TOTAL: | \$ | 88,664.08 |



Leica Geosystems, Inc.
5051 Peachtree Corners Cir.
Norcross, GA 30092
Office (248) 391-1366
Mobile (248) 872-7506
Tony.Wilson@LeicaUS.com

Tuesday, February 02, 2016

To Whom It May Concern:

Please accept this letter as confirmation that Surveyors Source LLC located at 4317 N 16th St, Phoenix, Arizona is the sole authorized distributor and service center for Leica Geosystems' Surveying segment products in the state (consisting of GNSS, optical surveying instruments, robotic/imagery instruments, multi-stations, related software, firmware, and customer care packages).

On behalf of Leica Geosystems I would like to thank you for your interest in our portfolio of Surveying Solutions. We are confident that Surveyors Source will provide the highest level of sales, service and support.

Should you have any questions please do not hesitate to call me directly at 248-391-1366.

Sincerely,

A handwritten signature in black ink that reads "Tony Wilson".

Tony Wilson
Leica Geosystems, Inc.
Director of Sales, US Distribution

- when it has to be right



Memo

To: Chief Duggan

From: Officer W. Johnson, VCU *WJ*
Assistant Chief Jason Zdilla
Commander David LeVoy
Lieutenant Scott Veach *SV*

Through: Sergeant Dan Stout *DS*

Date: January 28, 2016

Re: Request to Replace VCU Data Collection Equipment

On 11/1/15 the Police Department Vehicular Crimes Unit (VCU) was formed within the Chandler Police Department Traffic Bureau. The members of the unit began to explore technology options to improve upon the capabilities of our unit in the area of recording and collecting measurement data to later diagram and document both collision and crime scenes. Information gathered using data collection equipment is precise measurement data that is used to recreate scenes for the purposes of investigations and in court proceedings. The data collection equipment currently in use by the unit is obsolete, expensive and difficult to maintain, and is no longer supported. Discussion about new technologies had taken place within the traffic unit in July of 2015, but with the formation of the new VCU, it became more evident that updated technology would be needed for our unit to meet the needs of its mission. This mission includes documenting, diagramming and reconstructing major collision scenes as well as documenting major crime scenes.

This exploration was undertaken with the intent to collect information to present through the chain of command about current technologies, approximate operating and purchasing costs of those technologies and to collect input from our neighboring jurisdictions about their current equipment. As part of our exploration, we used training opportunities with other agencies, discussion with their detectives and VCU investigators, as well as demonstrations from various vendors to determine the most commonly used equipment. While researching equipment in use in neighboring jurisdictions, VCU took the opportunities to partner with our colleagues through compatible data and technology sharing and took those factors into consideration as well.

The exploration included the evaluation of three system brands; Leica, Trimble and Topcon. Each of the companies had two opportunities to present their equipment and members of the VCU handled and operated each unit, creating small test diagrams with each system. Representatives of each company had an opportunity to conduct classroom presentations on their respective systems as well.

Based on our evaluations of the three systems, the VCU determined that the technology offered by the Leica system would best fulfill the unit requirements with regard to current needs and needs into the future. In addition, VCU found that the Department of Public Safety and Maricopa County Sheriff's Office have multiple Leica systems in the field and Tempe Police Department is in the process of purchasing Leica systems, which will support cross-jurisdictional partnerships and data and equipment sharing.

A summary of the three products evaluated follows.

Leica Advantages:

- This system can be operated in GPS mode as long as clear view of sky is present, but can quickly change to robotic (line of sight) mode when under cover, indoors or if other GPS obstructions are present
- Can be operated by as little as one person if scene safety allows
- Capable of more advanced features than other comparable systems that were evaluated by the traffic unit
- Capable of taking scaled panoramic photos (5 MP) that will allow measurements on three axis (X,Y,Z) including elevation taken from the main total station unit. This allows the investigator to return to the scene and take three-dimensional measurements if needed while also providing a full view of the crime scene for jury presentations
- The displays of portable devices used to collect data are significantly larger and more visible in bright light than comparable systems
- Portable devices have capacity to complete some diagramming work in the field
- Able to view completed scene work on the portable devices while still in the field
- System is capable of being separated into two collection systems, one GPS and one Robotic which provides for a backup system in the event of maintenance or breakdown
- Separation of system allows for processing multiple scenes or faster processing of large extensive scenes if necessary
- Equipment firmware upgrade available with extended warranty purchase of \$6300
- Local support and maintenance in Phoenix
- Lower cost compared to quotes received from other equally equipped systems that were demonstrated and evaluated by members of the traffic unit

Leica Disadvantages:

- Panoramic picture is of lower pixels than HD designed cameras, but suitable for measurements and court presentation applications
- More complicated user interface compared to some other units, but still manageable in basic modes and added features are worth the additional training time
- Proprietary "Infinity" software is required for the advanced functions of the unit such as photo measurement and scene editing
- \$500 per year maintenance for "Infinity" Software updates and upgrades

Trimble Disadvantages

- The unit works primarily in point data collection, so the ability to complete line work in the field is not an option
- The data collector screens are difficult to see in direct sunlight and there is no expected upgrade to address the issue

- The unit requires a powered prism due to the fact that the measuring laser can be confused by other reflective surfaces, such as the reflective striping used on patrol vehicles, fire department equipment and traffic vests
- Panoramic photography is an optional upgrade and is a separate unit from the main total station. Because of this, the photography upgrade requires additional equipment.
- Only two software file extensions compatible with current diagramming software

Topcon Disadvantages

- Local support services are of questionable quality and sustainability
- The unit works only in point collection, no ability to complete line work.
- Issues with maintaining connectivity during evaluation
- Panoramic photography is not an option
- Only a single file extension that is compatible with current diagramming software