



MEMORANDUM

Date: September 21, 2022

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Leshner *Jan Leshner*
County Administrator

Re: **Additional Information for the Board of Supervisors September 20, 2022 Meeting – Agenda Item No. 22**

During the Board of Supervisors meeting on September 20, 2022, a question was asked whether Theelios Consulting, LLC had previously been compensated for services performed for the Pima County Recorder prior to the contract request discussed in Agenda Item No. 22.

On August 11, 2022, Pima County Recorder Gabriella Cazares-Kelly submitted via email the attached memorandum dated August 12, 2022 to the Procurement Director requesting Payment of Invoice No. 001 from Theelios Consulting, LLC for emergency Oracle database services performed by Shiva Prasad on August 5, 2022.

The invoice in the amount of \$2,394.00 was for 21 hours at \$110/hour. The payment request was reviewed and approved by the Procurement Director on August 11, 2022 as an off-contract purchase pursuant to Administrative Procedure 22-27.

JKL/dym

Attachment

c: The Honorable Gabriella Cázares-Kelly, Recorder
Steve Holmes, Deputy County Administrator

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240 N. Stone Ave., 1st Floor
Tucson, AZ 85701

Doc. Recording: (520) 724-4350
Voter Registration: (520) 724-4330



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GABRIELLA CÁZARES-KELLY, Recorder

MEMORANDUM

TO: Terri Spencer, Procurement Director
FROM: Gabriella Cázares-Kelly *GCK*
RE: Request for Authorization to Issue a Payment Request (PR)
DATE: August 12, 2022

This memorandum is to request your authorization to issue a payment request for pending invoice no. 001 from Theelios Consulting, LLC.

The invoice is for emergency Oracle database services performed by Shiva Prasad of Theelios Consulting in the amount of \$2,394. Shiva Prasad was employed as our Database Administrator (DBA) for 8 years until he retired in January of this year.

Dating back to April of this year, users experienced temporary interruptions of access to both our voter registration program and our records management program. Our former IT Manager, John Unekis, who ran data centers for the Federal Government and an Oracle Database Administrator contracted for 10 hours a week through TekSystems were not able to identify the issue. It seemed that our Oracle Database Appliances were at maximum capacity but no changes had been made to explain this. Temporary solutions were employed to keep the database functioning and our department intended to request a new Master Agreement for on-premises professional services through Oracle at the beginning of the new year after the election.

On the morning of August 4th, our Recording Technicians reported that they were unable to access any records in the records management program. Additionally, our public search on our website as well as our web e-recording interface was not functioning. We record between 700 and 1500 documents per day. The majority of the documents we record are land transactions, and not being able to record these documents will hold up the ability for new homeowners to take possession of their new homes.

Our contracted DBA was alerted immediately and could not find a solution. We initiated a support case with Oracle through our support contract. The responses from Oracle were slow and unhelpful. In the meantime, our contracted DBA contacted our former DBA, Mr. Prasad as he had done for simple advice since his retirement. Mr. Prasad was unable to identify the issue without being logged into our system. In the meantime, we reached out to ITD for support and a DBA with familiarity with Oracle offered his services. Unfortunately, this issue required expertise with Oracle. That evening, our Senior Systems Administrator visited the home of Mr. Prasad and securely logged him into our system to diagnose. He was unable to diagnose the issue. We were all aware of the very real threat that our voter system could also fail. This would be catastrophic since we were busy processing ballots to meet our statutory deadlines.

Early in the morning of August 5th, day 2 of the shutdown of our customers' ability to record documents, Mr. Prasad suspected that journal files from a failed replication process over the previous several months were causing errors and a backup of journal files. Mr. Prasad attempted to walk the contracted DBA through the process of stopping the Dataguard replication procedure but the contracted DBA was unsuccessful in doing so. This call was facilitated by our acting IT Manager, Marion Chubon. Mr. Prasad said he could come into our office and access the necessary Oracle functions from his old desktop computer. He came in at 3:00 pm and stopped the Dataguard connection which cleared all journal entries and within 10 minutes, our system was working again.

However, this was simply a temporary fix because Dataguard is a critical backup to our data and if we simply turned it back on again, the journal files would quickly build up again and cause the same issue. Mr. Prasad worked on Saturday August 6 and discovered that our Voter program was a few journal entries away from shutting down like our recording program. He worked several hours to identify the original issue and fixed the problem entirely.

When Mr. Prasad retired in January, our office made the decision to not fill his vacated position for a few reasons:

1. We were in the middle of a procurement for a new cloud based, commercial record management program. This program will be fully implemented in March or April of 2023. Our need for onsite database storage and management would be cut in half.
2. We are exploring the feasibility of migrating our remaining database, the voter registration database, to the cloud and to another database system.
3. Government IT departments are struggling across the country to fill positions in the market and are turning to commercial products and 24/7 support services. The current classification for the DBA position is not competitive in the marketplace and we were lucky to have such a highly skilled subject matter expert such as Mr. Prasad for as long as we did. His personal circumstances made this position attractive, and he was willing to take a substantial pay cut. My previous DPR informed me that it took months to fill the position held by Mr. Prasad prior to hiring him. The likelihood of finding another skilled Oracle Appliance & Software expert was daunting.
4. The job typically requires only 5-20 hours a week making a consultant a better fit.

Due to these reasons, we reached out to a contractor who had helped us set up our voter database many years ago and he agreed to contract with the Pima County IT contract vendor, TekSystems. We utilize him for 7-12 hours a week, saving the county a great deal of money.

It became clear that our contracted DBA, while very knowledgeable about the Oracle software, does not have subject matter expertise of the specialized Oracle Database Appliances. Since April, Ms. Chubon has attempted to find a pathway to hire Mr. Prasad as a part time consultant. She spoke with ITD purchasing and was told that the maximum consulting fee under the IT consulting Master Agreements was \$85, well under the industry standard for this type of skillset. Mr. Prasad was unwilling to work for so low an amount, nor should he.

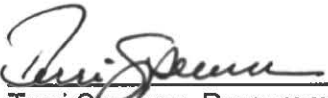
Today we debriefed the events that occurred and identified some steps moving forward to more quickly identify critical issues.

1. Our contracted DBA will send a report of his daily database healthchecks.
2. Our contracted DBA will write programs for the results of the healthchecks to be sent to an email accessed by all the parties involved.
3. Our contracted DBA will write a program to remove all journal files from the Oracle Appliances after 5 days (pending review.)

Additionally, we hope to explore a new Master Agreement with Mr. Prasad's company. It is our contention that a sole source contract is justifiable due to Mr. Prasad's subject matter expertise, his familiarity with our unique database configuration and the need for only 10-12 hours per week of work. This solution is the most responsible and cost effective solution for the next year or two.

While we attempted to initiate an emergency procurement through proper channels, we were unable to get the information requested before Mr. Prasad was able to fix our problem. He prioritized getting the system running, rather than creating a document outlining the scope of what he was doing. We know you can understand the severity of what we were dealing with. We greatly appreciate the support that Procurement, ITD and the County Administrator gave us during this crisis and we thank you for your careful consideration.

☒ Approved ☐ Denied



Terri Spencer, Procurement Director

Date: 8/11/2022

Cc: County Administrator, Jan Leshar
ITD Interim Director, Mark Hayes