



City of Richmond

Report to Committee

To: General Purposes Committee **Date:** October 3, 2024
From: Grant Fengstad **File:** 04-1370-01/2024-Vol
 Director, Information Technology 01
Re: **Award of Contract 8337P - Database Encryption Project**

Staff Recommendation

1. That Contract 8337P - Database Encryption Project be awarded to Eclipsys Solutions Inc., for a value of \$662,249.16, excluding taxes, for a contract term of five years as described in the report titled "Award of Contract 8337P - Database Encryption Project" dated October 3, 2024, from the Director, Information Technology; and
2. That the Chief Administrative Officer and the General Manager, Finance and Corporate Services be authorized to execute the contracts and all related documentation with Eclipsys Solutions Inc.

Grant Fengstad
 Director, Information Technology
 (604-276-4096)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Department	<input checked="" type="checkbox"/>	
Purchasing	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

The City of Richmond (“City”) operates and manages database technology provided by Oracle and Microsoft in support of many mission-critical enterprise applications and systems serving approximately 2,500 employees and over 170,000 registered MyRichmond customers.

While these databases are secured by physical data centre security, firewalls, and cybersecurity software, the actual information stored in the databases, including backup files, are not encrypted. This would potentially allow a malicious party to gain access to the unencrypted database and or backup files, which in turn, can be restored with the information easily viewed.

In response to the Cybersecurity event that occurred in June 2023, staff are recommending additional database safeguards to protect and secure City data against malicious parties. Staff are recommending that the City implement database encryption technology that secures the data on storage media whereby only authorized parties can decrypt it. Database encryption is an additionally licensed component of Oracle, which requires an Oracle Advanced Security license. Database encryption is included in our current Microsoft SQL Server license agreement.

Implementing database encryption protects data stored on media in the event that the storage media or data file is stolen. Failing to encrypt the databases would introduce potential risk should City data become compromised and accessible by malicious parties.

This report supports Council’s Strategic Plan 2022-2026 Focus Area #4 Responsible Financial Management and Governance:

Responsible financial management and efficient use of public resources to meet the needs of the community.

4.2 Seek improvements and efficiencies in all aspects of City business.

Analysis

Procurement Process

The City issued a Request for Proposal (RFP) 8337P – Database Encryption Project on BC Bid on May 7, 2024, which closed on June 4, 2024.

The RFP scope was for the:

1. Design, installation, and configuration of database encryption as it relates to the Oracle and SQL Server databases.
2. A recommendation for the supply of the required Oracle Advanced Security product to enable encryption.
3. An additional four (4) year license agreement for all Oracle database products currently in use at the City including Oracle Database Enterprise Edition, Oracle Real Application Clusters (“RAC”) and Oracle Advanced Security (beyond year one (1) project completion).

Review Process

The Proposals were evaluated by City staff and consisted of a two-phased evaluation process. The first phase involved independent reviews of each Proposal, which assessed the financial proposals, company information, past projects and team composition, as well as the ability to meet technical requirements.

Table 1 provides a summary of the financial proposals received, with scores awarded by the evaluation team based on the criteria listed above.

Table 1 – Phase 1 Evaluation Summary

Schedule / Specifications	Eclipsys Solutions Inc.	Syntronic R&D Canada
Software License Fees - Oracle Advanced Security Option	\$93,537.89	\$103,564.00
Software License Fees - Oracle Database Prod Environment	\$624,905.87	\$1,024,069.00
Software License Fees - Oracle Database Test Environment	\$312,456.84	\$583,913.00
Professional Services Fees	\$74,873.00	\$468,600.00
Financial Proposal (excluding taxes):	\$1,105,773.60	\$2,180,146.00
Total Evaluation Score (out of 100)	88.67	53.61

Phase 1 Evaluation Summary

The proposal submitted by Eclipsys Solutions (“Eclipsys”) received the highest overall score. Although Eclipsys’ financial proposal was initially over-budget, their proposal outlined a comprehensive methodology for the provisioning of the solution including qualified resources to implement database encryption on both Oracle and SQL Server environments, which met all the City’s technical requirements.

Syntronic R & D Canada Inc. (“Syntronic”) financial proposal was twice the amount of Eclipsys’ and the company did not demonstrate relevant experience with past engagements where Oracle and SQL Server database encryption solution was implemented.

Based on the review and scoring by staff, only the submission by Eclipsys progressed to the second evaluation phase.

Phase 2 Evaluation Summary

Phase 2 of the evaluation process included an interview and offered the proponent an opportunity to clarify elements of their proposal and allow staff to assess technical/business competencies relevant to the project as set out in the RFP.

Eclipsys was asked to leverage channels that entitle the City to government discounts on Oracle Database Licensing and limits to inflationary increases of Software Support and Licensing to a specific Consumer Price Index.

Eclipsys responded with a revised financials proposal on Table 2 which includes the following:

- A new five (5) year agreement that references the Eclipsys Standard Agreement with Oracle
- A discount of 35% and price hold for support increases which is in line with the current BC Government Oracle Master Agreement (35%)
- Inflationary Adjustment Rate (IAR) capped at 2% for support renewals years 2 to 4 on newly acquired Oracle Advanced Security Option
- Inflationary Adjustment Rate (IAR) capped at 2% for existing Oracle Enterprise Edition and Real-Application Cluster (RAC) licences renewal with Eclipsys Solutions

Table 2. Revised Financial Proposal

Schedule / Specifications	Eclipsys Solutions Inc.
Software License Fees - Oracle Advanced Security Option	\$93,537.89
Software License Fees - Oracle Database Prod Environment	\$325,907.32
Software License Fees - Oracle Database Test Environment	\$167,930.95
Professional Services Fees	\$74,873.00
Total Contract Amount (excluding taxes)	\$662,249.16

Financial Impact

Funding is available within the consolidated 5 Year Financial Plan (2024-2028). Table 3. outlines the professional services costs to implement database encryption on both Oracle and SQL Server, as well as Oracle software purchase costs for Advanced Security module to run database encryption. Table 4. outlines the Oracle annual term licensing costs to license all Oracle database products currently in use at the City including Oracle Database Enterprise Edition, Oracle Real Application Clusters (“RAC”) and Oracle Advanced Security for four (4) additional years.

Table 3. Estimated Costs to Complete Project in Year 1 (excluding applicable taxes)

Description	Costs
Eclipsys Solutions Inc. – Professional Services Costs	\$74,873.00
Eclipsys Solutions Inc. – Oracle Initial Term Licensing Costs (Year 1)	\$93,537.89
Total Estimated Costs	\$168,410.89

Table 4. Estimated Costs to operate the system for 4 years after project completion (excluding applicable taxes)

Description	Costs
Eclipsys Solutions Inc. – Oracle Annual Software License Cost (Year 2)	\$111,061.06
Eclipsys Solutions Inc. – Oracle Annual Software License Cost (Year 3)	\$118,913.65
Eclipsys Solutions Inc. – Oracle Annual Software License Cost (Year 4)	\$127,373.82
Eclipsys Solutions Inc. – Oracle Annual Software License Cost (Year 5)	\$136,489.74
Total Operating Costs over 4 years	\$493,838.27

Conclusion

Staff recommend that Contract 8337P - Database Encryption Project be awarded to Eclipsys Solutions Inc. as it represents best value to the City for a five-year term in the amount of \$662,249.16 exclusive of taxes.



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