

Item 6.

Tender - T-2023-973 - Supply of LED Luminaires and Smart Controls

File No: X096255.012

Tender No: T-2023-973

Summary

This report provides details of the tenders received for the Supply of LED Luminaires and Smart Controls contracts.

This tender is for the provision of LED luminaires and an associated Smart Lighting Control system for the City's public domain lighting, including road, footway, park, plaza and laneway luminaires. The City previously tendered for the existing portfolio of LED luminaires in 2011 and these assets are now reaching the end of their operational life.

The City plans to replace the existing luminaires and associated control equipment with modern, efficient and smart LED equipment, while not compromising the level of lighting currently achieved. Also, the City plans to install smart lighting controls to operate these luminaires, with a supporting Central Management System and Communications Network. This upgrade aims to maintain current lighting levels while enhancing energy efficiency and management capabilities.

A new supply service for LED luminaires and an associated smart control system will enable the City to substantially reduce the energy required to operate public domain lighting and improve the City's management and control arrangements of these luminaires.

The Supply of LED Luminaires and Smart Controls was tendered in early 2024. The tender included 14 different LED luminaire categories of products that may be supplied by one or multiple successful tenderers. The Smart Controls system is to be provided by one service provider for all luminaire types.

This report recommends that Council accept the tenders of Tenderer B, C, E and F for the Supply of the various types of LED Luminaires, and Tenderer D for Supply of Smart Control system.

Recommendation

It is resolved that:

- (A) Council accept the tenders of Tenderers B, C, E and F for the Supply of the Various Types of LED Luminaires and Tenderer D for the Supply of Smart Controls for the Schedule of Rates outlined in Confidential Attachment B to the subject report for a period of five years with the option of two, two-year extensions, if appropriate;
- (B) Council note that the total contract sums and contingencies for the Supply of LED Luminaires Contracts and for the Supply of Smart Controls contract are outlined in Confidential Attachment A to the subject report;
- (C) authority be delegated to the Chief Executive Officer to finalise, execute and administer the contracts relating to the tender; and
- (D) authority be delegated to the Chief Executive Officer to exercise the options referred to in (A), if appropriate

Attachments

Attachment A. Tender Evaluation Summary (Confidential)

Attachment B. Schedule of Rates (Confidential)

Background

1. The City of Sydney operates approximately 8,000 luminaires for the provision of public domain lighting in roads, footways, parks, plazas and laneways. This is additional to approximately 10,500 luminaires operated by Ausgrid which also service the local government area.
2. The City has successfully operated public domain lighting for many decades and this service has continued to require the provision of luminaires from external suppliers.
3. In 2011, the City tendered the Energy Efficient LED Lighting Retrofit contract. This service included the supply, installation and maintenance of over 6,000 LED luminaires on City owned street light poles. The luminaires supplied under the contract have a service life of 11.4 years (50,000 operating hours).
4. The existing LED luminaires were installed progressively over several years and many have now reached their full service life and are out of warranty. LED Luminaires operating beyond their service life are prone to failing and the level of light emitted fades to a level below design requirements as time progresses.
5. It is vital that the City commence a renewal of LED luminaires that have reached the end of their service life. This is necessary to minimise the City's exposure to escalating maintenance costs for one-off luminaire replacements, to ensure luminaires emit light levels that meet design requirements and to capitalise on the benefits of the next generation of LED luminaires.
6. The latest LED luminaires available for public lighting can perform with up to 30 per cent less energy than the City's current LED luminaire portfolio. This has been made possible through both advances in LED luminaire design, and with the use of a smart control system.
7. A public lighting smart control system allows the lighting operator to optimise the energy needed to power an LED luminaire. It also provides the ability to remotely monitor for any luminaire outages and promptly address any inoperable luminaires.
8. LED luminaire suppliers and smart control system suppliers in the marketplace generally do not specialise in installation and maintenance services. It is common practice for public domain lighting operators to have service arrangements dedicated for the supply of luminaires and separate service arrangements for the installation and maintenance activities. By splitting these activities, the City can leverage the greatest quality, cost and time efficiencies available from service providers who specialise in LED luminaire supply, or otherwise in the installation and maintenance of LED luminaires.
9. The Supply of LED Luminaires and Smart Controls contracts will ensure the City has an ongoing supply provision of LED Luminaires and will enable the City to commence management of lights with a smart control system.
10. The contracts for the Supply of LED Luminaires and Smart Controls includes the supply of 14 different LED luminaire products to meet compliance, environmental sustainability and architectural needs as identified in the Sydney Lights Code. The suite of luminaire products will also support consistency of the City's design palette.
11. All services within the contracts are based on tendered Schedule of Rates pricing.

12. The Supply of LED Luminaires and Smart Controls contracts will ensure the City has the capability to:
 - (a) renew LED luminaires as they reach the end of their service life;
 - (b) supply LED luminaires and smart controls for new projects;
 - (c) optimise the energy and maintenance required for each LED luminaire;
 - (d) capitalise on the latest innovations and sustainability improvements over the contract life; and
 - (e) provide a consist lighting design palette.
13. The benefits of the Supply of LED Luminaires and Smart Controls contracts include:
 - (a) high-quality public domain lighting for pedestrians and road users;
 - (b) value for money through competitively awarded services;
 - (c) a substantial reduction in energy consumption for the overall lighting service;
 - (d) improved reliability of the lighting service;
 - (e) reductions in whole of life maintenance costs through longer life assets with a lower energy consumption;
 - (f) real time light outage and failure notification resulting in prompt repair before receiving reports from the community; and
 - (g) the capability to deploy sensors affixed to LED luminaires for future smart city needs.
14. Due to the extensive number of service providers in the market, combined with the overall value of the services sought, the City determined that an open tender process would result in the best value for money outcome.

Invitation to Tender

15. Request for Tenders were advertised through Tenderlink on 13 February 2024 for six weeks. A subsequent extension of time was approved and tenders closed on 5 April 2024.

Tender Submissions

16. Twelve submissions were received from the following organisations for the supply of LED luminaires:
 - Buckford Illumination Group NSW Pty Ltd (ABN - 35449861325)
 - CU Phosco Australia Pty Ltd (ABN - 37661900358)
 - Lumen & Co Pty Ltd (ABN - 28609968890)
 - FOS Lighting Pty Ltd (ABN - 76072502311)
 - HBW Lighting (ABN - 45834920504)
 - Hub Australasia Pty Ltd (ABN - 87611271937)
 - IBEX (NZ) PTY LIMITED / Ibex Lighting (ABN - 31612550697)
 - OrangeTek International Pty Ltd (ABN - 36169495327)
 - Schreder Australia Pty Ltd (ABN - 17604331937)
 - Signify Australia Ltd (ABN - 49606173648)
 - Traffic Technologies Ltd (ABN - 21080415407)
 - The Trustee for BRIGHTLITE UNITTRUST, Trading as Connected Light Solutions (ABN - 13322464749)
17. Seven submissions were received from the following organisations for the supply of smart controls:
 - Buckford Illumination Group NSW Pty Ltd (ABN - 35449861325)
 - Hub Australasia Pty Ltd (ABN - 87611271937)
 - IDT Global Holdings Pty Ltd (ABN - 36656960191)
 - Schreder Australia Pty Ltd (ABN - 17604331937)
 - Signify Australia Ltd (ABN - 49606173648)
 - Traffic Technologies Ltd (ABN - 21080415407)
 - The Trustee for BRIGHTLITE UNITTRUST, Trading as Connected Light Solutions (ABN - 13322464749)
18. No late submissions were received.

Tender Evaluation

19. All members of the Tender Evaluation Panel have signed Pecuniary Interest Declarations. No pecuniary interests were noted.
20. The relative ranking of tenders as determined from the total weighted score is provided in the Confidential Tender Evaluation Summary – Attachment A.
21. All submissions were assessed in accordance with the approved evaluation criteria being:
 - (a) Degree of Experience - The Tenderer is to demonstrate organisational experience relevant to the Work Category (including qualifications and experience of local technical staff), resources and track record. Also, the Tenderers demonstrated experience supplying to a similar sized project.
 - (b) Degree of Scope Compliance (Products & Returnable Schedules) - Ability to fully comply with specification - LED luminaire and smart control performance attributes, functionality, warranty and compliance as assessed against the individual specification requirements as set out in returnable schedules.
 - (c) Demonstrated Capacity to Deliver - The Tenderer is to provide details of all current and future commitments, start date, duration of project, expected end date. As well as resource management plan, current availabilities.
 - (d) Social Procurement, Environment & Sustainability - The Tenderer is to demonstrate capability to provide environmental and sustainable outcomes during the contract period with consideration given to innovation, modern slavery and compliance with requirements for warranty conditions.
 - (e) Work, Health and Safety.
 - (f) Financial and commercial trading integrity including insurances, including assessment of Schedule of Rates based on value for money and average LED luminaire energy savings.
 - (g) LED Aesthetic and Architectural merit.
22. It is recommended that Council accept the tender of Tenderers B, C, E and F for the supply of the various types of LED Luminaires and Tenderer D for Supply of Smart Controls outlined in Confidential Attachment A.
23. The recommended tenders have offered LED luminaires with operational lives in the order of 100,000 hours or 23 years. This is double the life that was achieved from the previous 2011 tender. The new LED luminaires will also provide on average a 30 per cent reduction in energy required when compared to the existing LED luminaires. It is anticipated that the Smart Controls will generate further energy savings of at least five per cent.

Performance Measurement

24. The City will ensure that all performance standards are achieved during the contract term through the regular assessment of the Key Performance Indicators, including:
- (a) Key Deliverables:
 - Supplied equipment complies with technical specifications.
 - Completion of warranty claims.
 - Meets required operational units required.
 - (b) Time - Supply of components to meet schedules agreed with the City administration and document management.
 - (c) Quality - Equipment deliveries in full, on time and delivered to correct location.
 - (d) Reporting - Required reports provided in documented timeframe.
 - (e) Communication - Responded to requests for information and reports as required by contract.
 - (f) Work, Health and Safety compliance - Safety incidences and near misses occurring as a result of the supply of services and deliverables under the contract are reported as per legislative and contractual requirements.

Financial Implications

25. The total contract sum and contingency for the Supply of LED Luminaires and Smart Controls contract is detailed in the Tender Evaluation Summary in Attachment A. The Schedule of Rates is detailed in Attachment B.
26. The Schedule of Rates offered are considered competitive.
27. There are sufficient funds allocated for these services within the relevant capital and maintenance budgets and future years' forward estimates.
28. The quantity of work awarded each year is subject to approved capital works programs and maintenance activities required to achieve desired service levels for the City. The City does not guarantee any minimum quantity of works in any given year.

Relevant Legislation

29. The tender has been conducted in accordance with the Local Government Act 1993 and the Local Government (General) Regulation 2021.
30. Local Government Act 1993 - Section 10A provides that a council may close to the public so much of its meeting as comprises the discussion of information that would, if disclosed, confer a commercial advantage on a person with whom the council is conducting (or proposes to conduct) business.
31. Attachments A and B contain confidential commercial information of the tenderers and details of Council's tender evaluation and contingencies which, if disclosed, would:
 - (a) confer a commercial advantage on a person with whom Council is conducting (or proposes to conduct) business; and
 - (b) prejudice the commercial position of the person who supplied it.
32. Discussion of the matter in an open meeting would, on balance, be contrary to the public interest because it would compromise Council's ability to negotiate fairly and commercially to achieve the best outcome for its ratepayers.

Critical Dates / Time Frames

33. As existing LED luminaires are now operating beyond the warranty and service life, these assets are starting to require replacement. To cater for the variance in age of existing LED luminaires, there is a need to commence supplying replacement LED luminaires, and for this provision to continue on an ongoing basis.
34. LED luminaires, at the scale required, will take approximately four months to supply once ordered. To achieve a preferred supply timetable, the contracts for the supply of LED Luminaires and Smart Controls are required to commence no later than 1 October 2024.
35. The initial contract term for the Supply of LED Luminaires Contracts and Supply of Smart Controls contract is five years. There is provision for two optional extensions to the contracts term of two years each, subject to performance and further consideration as to whether the contract remains best for the City's needs.

Options

36. The preferred option (as tendered) allows for the City to have LED luminaires and smart controls directly supplied, and then a separate service provider install and maintain these assets. This ensures the City has “best in class” choice of suppliers with the ability to award to multiple suppliers to provide the 14 luminaire types required. A key risk associated with this approach is the need for the City to manage two separate and linked contracts for supply and ongoing maintenance. This risk has been mitigated by the provision of necessary City resources, contract terms for supplier relationship management requirements, and warranty conditions with recourse that applies where there is premature asset failure.
37. An alternative option would be for the City to engage one service provider for all LED luminaires and smart controls supplied, installed and maintained. This was the past arrangement for the previous service contract awarded in 2012. This option is not recommended as it diminishes the City's choice to select the best-in-class LED luminaire. Most LED luminaire and smart control suppliers operate globally, whilst installation and maintenance contractors operate locally. To require these companies to partner together will impose additional risks on each company resulting in higher costs as well as a poorer market response and ongoing service.
38. Another alternative option would be for the City to engage a service provider for public lighting as a service. Under this arrangement assets would be supplied, installed and maintained under a subscription based service per asset. This model transitions asset ownership to the service provider for a long term and the City is no longer obligated to procure assets. This approach is not recommended as the City has less control over asset design and energy efficiency outcomes over the long term. This option diminishes performance otherwise achieved through the routine competitive tender of services and results in high annual costs as the service provider carries more finance and risk related costs.

Public Consultation

39. There was no public consultation prior to this tender being advertised.

VERONICA LEE

Director City Services

Peter Shields, Chief Engineer