

10.00am, Thursday 30 April 2015

## Request for Prudential Borrowing and Award of Contract for Stair Lighting – Energy Efficiency Proposal

Item number 8.4

Report number

Executive/routine

Wards

### Executive summary

On 30 September 2014, the Finance and Resources Committee considered a report on a proposal to introduce new energy efficient lighting systems in 14,000 tenement blocks across the city.

A business case was developed to advise on the costs of an LED replacement programme and the projected savings which could be generated through reduced maintenance and electricity costs, as well as a reduction in carbon emissions.

This report advises Council about the outcome of the business case and seeks approval for prudential borrowing of £2.13 million over 10 years and the award of a one year contract for the upgrading of approximately 22,500 light fittings.

### Links

Coalition pledges [P8, P50](#)

Council outcomes [CO16, CO18, CO19](#)

Single Outcome Agreement [SO4](#)

## Request for Prudential Borrowing and award of contract for stair lighting – Energy Efficiency Proposal

### Recommendations

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It is recommended that City of Edinburgh Council:

- 1.1 Approves the capital costs of approximately £2.13 million, required to fund the LED lighting upgrade for the next year from prudential borrowing.
- 1.2 Awards a one year contract for the supply of LED gear trays and diffusers to Edmundson Electrical Ltd at an estimated contract value of £1.35 million.
- 1.3 Agrees to receive a further report in April 2016 and on an annual basis until the project is completed on the roll out of the project. Approves the installation of the gear trays and diffusers by Edinburgh Building Services (EBS) at a cost of £0.725 million.

### Background

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- 2.1 On 18 March 2014, a presentation on the options for improving the energy efficiency of stair lighting by installing and fitting LED lighting systems was discussed at the Transport and Environment Policy Development and Review Sub Committee. It was agreed that a business case would be developed which considered the cost and viability of installing LED technology within the communal stair areas of privately owned traditional tenement blocks and the outcome was reported to the Health, Social Care and Housing Committee on 9 September 2014.
- 2.2 The Committee agreed to seek approval from Council to procure a contract for the introduction of new energy efficient lighting systems in 14,000 communal stairs across the City.
- 2.3 The Housing Service, in conjunction with Commercial and Procurement Services completed a procurement process to appoint a supplier of LED gear trays and diffusers to enable the delivery of a LED lighting programme over a year. If approved, the new term contract will commence in June 2015.
- 2.4 The level of lighting will be improved using the LED Lighting. The current installed fittings hold two fluorescent tubes with two separate circuits which when new, give a total of 960lm in each fitting. Currently, one tube will be on for 24 hours, whilst the other will either be on dusk until midnight or dusk until dawn

dependant on the light to the stairwell. This means that during certain parts of the day, the current fittings only produce 50% of the total fittings capacity. The new LED fittings are single circuit so will produce 1100lm all the time. The LED fitting is 10 watts which is more economical than the existing 14 watt tubes in the current fitting.

- 2.5 A pilot installation was carried out by EBS in six stairs, containing 62 homes and was completed in July 2014. All the residents involved in the pilot were asked to complete a questionnaire on the quality of the work and the level of light in the stair after the installation. Of the 62 questionnaires issued, only 5 were returned. All the returns reported 100% satisfaction with the installation and the quality of light.

## Main report

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- 3.1 The stair lighting service costs the Council approximately £2.1 million each year. This is split between electricity costs of approximately £0.9 million and maintenance, bulb replacement and reactive repair costs of approximately £1.2 million.
- 3.2 A business case was developed to investigate replacing all existing light fittings with LED equivalents, on the assumption that LED lighting systems would consume less energy and require less maintenance.
- 3.3 The Council reviewed two options which were to:
- Install a new fitting; or
  - Replace existing gear trays and diffusers with LED gear trays and diffusers, which would fit into existing units.
- 3.4 From the business case it was identified that a replacement gear tray and diffuser would be 45% cheaper and have a reduced installation time.
- 3.5 The replacement programme is scheduled to be delivered over the next four years and will involve the replacement of 90,000 units at a rate of 22,500 units per year. The tender process to select an external supplier was administered by Commercial and Procurement Services.
- 3.6 A mini competition was issued on 24 February 2015 to all suppliers on the Scotland Excel Electrical materials framework. This framework has six pre-qualified suppliers:-
1. Rexel Senate
  2. Edmundson Electrical
  3. Bemco
  4. Rexel – Newey & Eyre
  5. Trilight
  6. Holland House Electrical

- 3.7 The selection process which utilised the Scotland Excel framework agreement ensures suppliers have previously passed a quality assessment. For the purpose of this tender the scoring mechanism used was 100% on "Price". The Council also introduced mandatory criteria on the supplier's ability to meet the specification and guarantee. This was assessed on a Pass/Fail basis.
- 3.8 The tender process concluded that Edmundson Electrical Ltd is the most economically advantageous supplier and has therefore been identified as the preferred bidder.
- 3.9 Acknowledging the potential for technological advancement, it is proposed to run a mini competition every year for only 22,500 units at a time which will allow for any new developments in technology and will allow the Council to monitor the replacement programme, ensuring it is meeting targets. At the end of each year a full assessment and evaluation will be undertaken including an evaluation of alternative funding arrangements.
- 3.10 EBS currently carries out the Stairlighting programme of maintenance and re-lamping. This team along with any additional resources will be utilised to deliver the new programme in line with agreed timescales.

## Measures of success

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- 4.1 The measures of success are:
- Reduced maintenance and replacement costs.
  - Reduced energy costs.
  - Reduced carbon emissions.
  - Increased customer satisfaction.

## Financial impact

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- 5.1 The capital cost for upgrading 22,500 light fittings is approximately £2.13 million. The supply of equipment (LED gear trays and diffusers) is estimated to be £1.41 million and installation costs of £0.725 million
- 5.2 The capital costs required to fund the LED lighting upgrade would be met from prudential borrowing. This would be over a 10 year period for assets and installation costs for LED's that burn dusk till dawn at a repayment cost of £0.241 million per annum and a 6 year period for assets and installation costs for LED's that burn 24/7 at a repayment cost of £0.067m per annum. The anticipated savings in maintenance and energy costs of the service would meet the annual borrowing costs.
- 5.3 It is projected that following the completion of the upgrade programme, the annual cost of the maintenance service will reduce by £0.225 million per annum and the annual cost of energy will reduce by £0.116 million, providing a recurring total saving of £0.341million. When factoring in the forecast savings against annual cost of borrowing, the net realisable benefit would be £0.032 million per

annum for the first six years of the borrowing repayment term, rising to £0.100 million for the last 4 years of the borrowing repayment term. When the repayment of borrowing is finished, a full saving of £0.341 million will be achieved.

- 5.4 There is currently no available funding within the Council's capital investment programme to support this works stream. Given the forecast savings to be realised from this investment, a spend to save funding option was considered a viable way forward.
- 5.5 The costs associated with procuring this contract are up to £10,000.

### **Risk, policy, compliance and governance impact**

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- 6.1 By improving the energy efficiency of existing homes, the LED light upgrading programme contributes to the Council's objectives identified in the Sustainable Edinburgh 2020 plan and the Home Energy Strategy.
- 6.2 Procurement risks have been minimised by using the Scotland Excel framework agreement for electrical material.

### **Equalities impact**

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- 7.1 The proposals in the report will have a positive impact on the quality of Council homes and in turn tenants' quality of life.
- 7.2 Investing in improving the lighting in communal stairs will increase energy efficiency and reduce the risk of anti social behaviour.

### **Sustainability impact**

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- 8.1 The impacts of this report have been considered in relation to the Climate Change (Scotland) Act 2009 Public Bodies Duties. The proposals in this report will reduce carbon emissions. The installation of LED lighting upgrades would save approximately 2,100 tonnes of CO2 each year.

### **Consultation and engagement**

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- 9.1 This report has been produced in conjunction with Commercial and Procurement Services.
- 9.2 Consultation was carried out with the 62 residences within the pilot project. 100% of residents who responded to the survey confirmed they were very satisfied/ very satisfied with the improvement to the lighting within their stair and the standard of workmanship.

### **Background reading/external references**

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[Climate Change \(Scotland\) Act 2009: Public Bodies Duties](#)

[Transport and Environment Committee, Energy Policy, 27 August 2013](#)

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## Links

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<b>Coalition pledges</b>	P8 – Make sure the city’s people are well-housed, including encouraging developers to build residential communities starting with brown field sites. P50 - Meet greenhouse gas targets, including the national target of 42% by 2020
<b>Council outcomes</b>	CO16 – Well Housed – People live in a good quality home that is affordable and meets their needs in a well managed Neighbourhood. CO18 – Green – We reduce the local environmental impact of our consumption and production CO19 - Attractive Places and Well Maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm.
<b>Single Outcome Agreement</b>	SO4 – Edinburgh’s communities are safer and have improved physical and social fabric.
<b>Appendices</b>	Appendix 1: Summary of Tendering and Tender Evaluation Processes

## Appendix 1 - Summary of Tendering and Tender Evaluation Processes

<b>Contract</b>	<b>Supply of LED gear tray and diffuser.</b>
Contract period (including any extensions)	One year
Estimated contract value	£ 1.408m (Annually)
EU Procedure chosen	Mini competition using Scotland Excel Framework.
Invitations to tender issued	7
Tenders returned	4
Tenders fully compliant	3
Recommended supplier/s	1 – Edmundson Electrical LTD
Primary criterion	100% on price with pass/fail criteria used on meeting the specification and guarantee.
Evaluation criteria and weightings and reasons for this approach	100% on price. Pass/Fail on specification.
Evaluation Team	Greg Player (Price Evaluation) Phil Webb (Reviewed Specification)