

**10<sup>th</sup> January 2013****Agenda Item:11****REPORT OF SERVICE DIRECTOR HIGHWAYS****STREET LIGHTING ENERGY SAVING – UPDATE****Purpose of the Report**

1. The County Council spends just over £4M each year on energy for street lighting, (lit) road signs, bollards and traffic signals, this makes up 15% of the total highway revenue budget. With energy prices continuing to rise the Council is continuing to implement a programme of street lighting energy saving measures to control this cost. The measures include part-night lighting in appropriate residential areas, dimming or switching off street lighting where appropriate on main roads (dimming is not usually a viable option for lower power street lights in residential areas) and is also undertaking trials with LED (low energy) lanterns where street lighting columns are due for replacement. The project is expected to save approx. £500,000 per annum in energy savings once complete.
2. The purpose of this report is to provide an update on the street lighting energy saving project and seek approval for the revised programme, principles of scheme development, and procedures for requests for alterations to schemes.

**Background**

3. At Cabinet on 8<sup>th</sup> Sept 2010 a programme of street lighting measures was agreed to achieve significant energy, carbon dioxide (CO<sub>2</sub>) and cost savings. The measures comprised switching off, dimming and part-night lighting.
4. The programme was launched in October 2010 and part-night lighting and switch off has been implemented initially in Rushcliffe and Bassetlaw. A key part of the approach has been to consult widely on specific proposals and have flexibility in the Authority's approach to ensure community concerns are taken into account before any changes are made on the ground. This has worked well, with responses from Parish Councils and other interested parties being fully considered during the consultation phase.

**Scheme Principles**

5. Following experience gained through implementing the schemes light will be retained along late night bus routes and high risk flood areas. Attached at Appendix A are the principles used in developing schemes with these

amendments for consultation with local communities.

## **Scheme Reviews**

6. More recently community feedback, including petitions and questionnaires have been received from a number of areas expressing concern around rising crime rates and safety on the highway. It is considered prudent therefore to complete the post implementation reviews and to re-profile the programme accordingly. At the same time delivery of the dimming programme will be progressed more quickly as this will return savings without the need for detailed consultation.
7. 12 month crime and accident data is now available for the earliest schemes implemented and these are shown in Appendix B with the proposed actions
8. In the future it is proposed that if a request is received via the Parish Council/County Councillor, the 6 month review results will be referred to. If this shows no significant increase in crime/accident data then no changes will take place at that time and monitoring will continue. When the 12 month review data is available this will be looked at again and an assessment made. (Appendix C)
9. It is further proposed that any areas where there has been an increase in night time crime or accident data and to ensure that this can be dealt with at the earliest opportunity, consultation will take place with the local County Councillor to determine an appropriate response to be implemented immediately.
10. In order to deal with individual issues quickly and efficiently alterations of 5 columns or fewer will continue to be considered as operational decisions by officers.

## **Programme Update**

11. An updated programme November 2012 – March 2013 is shown at Appendix D.

## **LED Trials**

12. Light-Emitting Diode (LED) in recent years has become an increasingly economically viable alternative to traditional street lighting as the initial costs have come down substantially, particularly when installed on columns due for replacement. With advances in technology and more and more suppliers on the market prices are now more competitive than ever. LED offer whiter, brighter light which is more directional and once installed is estimated to reduce street light energy consumption by some 40 per cent. LED have a

longer life-span which has the added benefit of less on-going maintenance costs.

As there are now so many suppliers on the market representatives from the street lighting team have met with some of the more reputable companies to establish trials of LED on residential roads in Nottingham.

Four companies will be trialled as follows:

- Patrick Road, West Bridgford – Phillips
- Freda Road, Carlton – Urbis
- Deep Furrows, Carlton – Advanced LED
- Harris Road, Chilwell – LED Roadway Lighting

All the trial schemes have been designed to meet British Standards.

The trials will determine:

- views of local residents on the different quality of light through use of questionnaires.
- Information to determine future specification of LED for Nottinghamshire street lighting;
- Increased detail for future design of LED street lighting schemes;
- future maintenance requirements;

A record of any maintenance works will also be kept to monitor performance between the different suppliers. LED will be introduced into the future street lighting capital column replacement schemes taking account of the outcome of the trials procured through the new highways contract.

Patrick Road is the first scheme to be implemented and works should commence shortly, the local members are aware and will be kept informed through-out the process.

## **Benefits for Sustainability and the Environment**

13. The County Council is committed to reducing CO<sub>2</sub> where possible through the delivery of its services. The Carbon Reduction Energy Efficiency Scheme (CRCEES) is proposed to be implemented in 2014 and large authorities will be penalised for the amount of CO<sub>2</sub> used. Part night lighting, dimming and the use of alternative light sources will result in a reduction in CO<sub>2</sub> and subsequent penalties. It is proposed that County Councils who show that they are reducing CO<sub>2</sub> may have the opportunity to bid for alternative funding for energy reduction schemes in the future.

## **Financial Implications**

14. No direct financial implications arising from the content of this report

## **Statutory and Policy Implications**

15. This report has been compiled after consideration of implications in the Public Sector Equality Duty and in respect of finance, equal opportunities, human resources, crime and disorder, human rights, the safeguarding of children, sustainability and the environment and those using the service and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

## **RECOMMENDATIONS**

16. It is recommended that Committee:

- a) Notes the content of this report
- b) Approves the principles for scheme development at Appendix A
- c) Approves the proposed actions in Appendix B
- d) Approves the process for scheme review at Appendix C
- e) Approves the revised programme at Appendix D

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**Service Director Highways**

**For any enquiries about this report please contact:**

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## **Constitutional Comments**

Committee have power to decide the Recommendation.SHB.05.12.12.

## **Background Papers**

Cabinet Report 8<sup>th</sup> September 2010 – Street Lighting Energy and Cost Saving

## **Electoral Division(s) and Member(s) Affected**

All