



Environment Committee

27 November 2019

Title	Street Lighting Asset Improvement Project Progress Update
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Report of	Chairman of the Environment Committee
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Wards	All
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Status	Public
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Urgent	No
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Key	No
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Enclosures	Appendix 1 – Initial Equalities Impact Assessment – <i>to follow</i>
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Summary

To provide an update on the progress of the Street Lighting Improvement Project consisting of LED lantern and Central Management System (CMS) conversion by the Street Lighting Private Finance Initiative (PFI) Service Provider

Officers Recommendations

1. That Committee note the progress and roll out plan of the LED lighting across the borough

1. WHY THIS REPORT IS NEEDED

- 1.1 The Environment Committee approved the LED Lighting conversion project at its meeting on 14 March 2019 and it has requested as part of its forward programme to receive updates on progress of the project.
- 1.2 The LED Project has been identified as a project that will provide substantial financial savings and these savings have been profiled to be delivered over a two-year period (2019/20 and 2020/21) as the project is being rolled out and then on an ongoing basis. These savings are included in the Council's current and forward budgets and it is therefore appropriate that the Committee retain good visible oversight of the project's progress to be assured that the required benefits and savings will be delivered in an efficient and timely manner.

2. REASONS FOR RECOMMENDATIONS

- 2.1 This is a major project which involves carrying out alterations in the form of lantern conversions to 90% of the existing street lighting assets (29,472), which includes lighting columns and illuminated signs on the public highway.
- 2.2 Such projects require careful planning and control to ensure that they are delivered in the most efficient and timely manner. Since the approval was granted for the project to proceed the Council's Street Lighting Team and PFI Service Provider have been working closely on establishing all required actions to allow a smooth mobilisation of the project. These actions have included the following:
 1. To draft, negotiate and agree a contract Deed of Variation (DoV) which allows necessary changes to the contract to accommodate the material changes imposed by the project on the contract and the ongoing impacts of the change in respect to operational matters.
 2. To review all existing contractual Method Statements to identify the extent of drafting changes required as a result of the project.
 3. To draft, negotiate and agree the revised Method Statements
 4. To draft and enter into a Tri-Party Agreement (Authority, Service Provider and Service Providers Contractor) that allows an understanding of all parties that the Project mobilisation and commencement should not be delayed by the detailed work required by items 1 and 2. above

5. To draft and agree a Design Quality Plan which clearly identifies the way in which the Service Provider will produce designs allowing the Authority to conduct appropriate due diligence on the designs.
6. Agree the programme for the Design process
7. Agree the programme for the Installation of the Lanterns and CMS
8. Service Provider to place initial equipment (lantern and controls) order to the chosen equipment supplier Philips Signify in good time to allow delivery in advance of the programmed installation commencement date – subject to a sufficient number of designs being completed by the required milestone
9. Organise an initial trial installation of equipment in eight roads to enable any teething issues in the setting up of the control systems and lantern operation to be identified and addressed prior to the main programme commencing
10. Ongoing Monitoring tests conducted on the trial sites to verify full operation

2.3 It can be confirmed that good progress has been made on all of the above actions. Based on the current status of all of the above actions it has been possible to establish an installation programme as follows:

Period	Assets	Cumulative
Nov-19	1,000	1,000
Dec-19	1500	2500
Jan-20	2500	5000
Feb-20	4,100	9,150
Mar-20	4,150	13,300
Apr-20	4,150	17,450
May-20	4,150	21,600
Jun-20	3,150	24,750
Jul-20	2,722	27,472
Aug-20	2,000	29,472

2.4 The programme will be rolled out on a ward by ward basis. The order in which each ward will be completed is identified below. It should be noted that it is not possible to make adjustments to this programme as this dictates the order of the design process which in turn dictates the equipment to be ordered at appropriate key programme milestones.

Order	Ward	Anticipated Installation Period
1	High Barnet	November/December
2	East Barnet	December/January
3	Oakleigh	January
4	Underhill	January/February
5	Brunswick Park	February
6	Finchley & Church End	February
7	Coppetts	February/March
8	Garden Suburb	March

9	Woodhouse	March
10	Childs Hill	March
11	West Finchley	April
12	East Finchley	April
13	Golders Green	April/May
14	West Hendon	May
15	Hendon	May
16	Colindale	May/June
17	Mill Hill	June
18	Burnt Oak	June
19	Edgware	July
20	Hale	July/August
21	Totteridge	August

2.5 As of the date of drafting this report (25/10/19) the following progress has been made in respect to the design and equipment ordering process.

Identification of the required Lighting Standard	11 Wards Completed	Equivalent to 14,651 Assets
Designs completed and submitted for Authority Scrutiny	8 Wards Completed	Equivalent to 11,726 Assets
Authority Review of Designs and Comments made	8 Wards Completed	Equivalent to 11,726 Assets
Designs Signed Off and ready for equipment Ordering	7 Wards Completed	Equivalent to 10,535 Assets
Lanterns Ordered	Approximately 6 Wards	8,000 Assets

2.6 This is currently a very positive position, as the achievement of this progress is currently ahead of the design programme by almost two months.

2.7 The initial trial designs and installations were completed in the first week of October in eight roads in the High Barnet Ward. This trial has gone exceptionally well with no difficulties to report. The comments received from local residents whilst the work was taking place have been positive and no complaints have been received since the equipment became operational.

2.8 Both the Service Provider and the Authorities Street Lighting Team have been closely monitoring the new equipment to ensure that it continues to operate without any issues.

This has included instigating some test faults to ensure that the new Central Management System (CMS) is identifying and proactively reporting this status change, thereby allowing effective and timely maintenance response. All tests conducted to date have been fully successful and therefore this has provided reassurance that all functions of the new equipment operate as expected and required.

- 2.9 The initial equipment order (2,100 Assets) was placed at the end of September with a quoted delivery date of the week commencing 18 November 2019. As the design process has progressed ahead of programme it has also been possible to place the second order for equipment (5,100 Assets) with an anticipated delivery date prior to the Christmas break.
- 2.10 The timing of ongoing orders will be carefully planned to co-ordinate with both the design programme and the installation programme.
- 2.11 The drafting and agreeing of the Deed of Variation has been a detailed and time-consuming piece of work, however the parties have reached a position where the main principals and operational detail has been mutually agreed. The current version of the DoV is now with the respective party's lawyers for a final check and preparation for signing. The Council's lawyer has confirmed that the DoV as currently drafted is ready to be progressed to finalisation with signing and sealing on behalf of the Council, however this is subject to the Service Providers lawyers not making any material changes. It is anticipated that the DoV will have been signed in advance of the installation programme progressing, however if for any reason it does not achieve this milestone the Tri-Party Agreement identified in 2.2 above allows commencement of the installation programme.
- 2.12 At the same time a lot of effort has gone into reviewing and substantially redrafting a number of the contracts Method Statements. These are close to being finalised and although they are referred to in the DoV they will not hold up the finalisation of the DoV,
- 2.13 In summary, the Project has progressed as well as could be expected and we are now well placed to commence the installation programme before the date of this meeting. Confirmation as to whether this important milestone has been achieved will be given at the meeting.

3. ALTERNATIVE OPTIONS CONSIDERED AND NOT RECOMMENDED

- 3.1 Not Applicable

4. POST DECISION IMPLEMENTATION

- 4.1 Close monitoring of the delivery programmes and monitoring of the benefits and savings derived as the programme progresses to a conclusion.

5. IMPLICATIONS OF DECISION

- 5.1 **Corporate Priorities and Performance**

- 5.1.1 The Council faces an anticipated budget challenge of £69.9m to 2023/24 and to address that gap, the Council have had to make some decisions about priorities and how limited funds are spent. This means that the Council need to do some things in different ways and the LED conversion project is a good example of this.
- 5.1.2 To ensure the Council has a plan that reflects local priorities, as well as a financial strategy that will support a financially sustainable position, the development of the proposed Corporate Plan and MTFS has been aligned to cover the next five years (2019/20 to 2023/24). This will help to ensure we have a medium-term plan setting out how we will allocate our limited resources in line with what we want to achieve for the borough.
- 5.1.3 To support delivery of the outcomes in the proposed Corporate Plan, Barnet 2024, each Theme Committee is responsible for delivering any corporate priorities that fall within its remit, as well as any additional priorities that relate to matters the Committee is responsible for under its Terms of Reference.
- These priorities inform an annual Theme Committee delivery plan which sets out the key activities, performance indicators/targets, and risks in relation to the corporate and committee priorities. The LED Conversion Project is included in the Theme Committees planned priorities with an expectation that the project will produce significant financial savings whilst also enhancing services.
- 5.1.4 Barnet has been innovative in its approach to tackling the challenges local government faces. The Council has been open to new ways of doing things and working closely with partners across the public, private and voluntary sectors. This Project is a good example of working with partners to develop new ways of working and delivering services.
- 5.1.5 This Project supports the council's corporate priorities as expressed through the Proposed Corporate Plan for 2019-24 which sets out the vision and strategy for the next five years based on the core principles of fairness, responsibility and opportunity, to make sure Barnet is:
- A pleasant, well maintained borough that we protect and invest in
 - Our residents live happy, healthy, independent lives with the most vulnerable protected
 - Safe and strong communities where people get along well
- 5.2 **Resources (Finance & Value for Money, Procurement, Staffing, IT, Property, Sustainability)**
- 5.2.1 There are no significant resource implications associated with this proposal as the existing street lighting monitoring team are overseeing the Project delivery.

- 5.2.2 The Capital cost of the LED conversion Project £7.6M has been scrutinised by the Capital Board who have agreed to fund the Project with Capital funding.
- 5.2.3 A further funding source has been identified. SALIX, a government backed, interest free loan, instigated to encourage and assist local authorities with specific and innovative energy saving proposals.
- 5.2.4 An application has been made for a SALIX loan and based on their funding criteria the Council have been successful in being awarded a £5.7M loan to support the Project. This is an interest free loan which is repayable within a five-year period following the completion of the Project. The Capital Board have identified that the repayments of the SALIX loan will be funded from the Council's Capital resources.
- 5.2.5 A detailed Business Case has been produced to demonstrate that this capital investment will provide value for money through a relatively quick pay back due to a significant reduction in ongoing revenue charges. This is two-fold in reduced energy charges and savings in ongoing operational maintenance through the PFI Contract. These combined savings are estimated to be in the order of £850,000 per annum.
- 5.2.6 In addition to the above savings the project will assist in minimising future escalating costs associated with energy inflation. This is due to the significant reduction in energy consumption having converted to the energy efficient LED light source.

5.3 Social Value

- 5.3.1 As well as the economic benefits highlighted in this report the Project will also provide benefits in reducing the Authority's Carbon footprint which provides environment benefits for all.
- 5.3.2 It is also anticipated that the white light provided by the LED light source will be well received by residents as it is generally considered that lighting appears to be improved when utilising a white light source. This is due to its ability to truly represent colours when lit after dark, whereas the existing light source does not have good colour rendition qualities. It is often considered that this enhances the aesthetics of an area and is considered to provide a safer feel to an area.

In addition, and as identified earlier in this report it is recognised that improvements to street lighting can have a positive impact on reducing crime and the fear of crime. By creating a safer feel to an area, it encourages more people to visit these areas after dark and this helps to improve the vibrancy of an area and sustain local businesses, such as pubs, restaurants, theatres, cinemas, sports centres, etc.

5.4 Legal and Constitutional References

- 5.4.1 Under Article 7 of the Constitution the Theme Committee that is responsible for Highway functions, including Street Lighting, is the Environment Committee.

5.4.2 The Environment Committee have approved at their November 2018 meeting the LED Conversion Project as one of the Projects that will be included in their programme of savings.

5.4.3 This Project has arisen from the Council's future financial planning exercises which has included looking at innovative ways to reduce existing and future expenditure. Despite the significant Capital investment required to convert the street lights to low energy LED units the Projects Business Case demonstrates that this investment will repay itself within a seven-year period due to the annual savings of £850K on completion of the project and this saving will increase year on year as the project is also safeguarding against significant future energy charge increases. On that basis, this project is aligned with the Council's fiscal, Best Value duty.

5.5 Risk Management

5.5.1 The overarching aims of the Council's risk management framework are to improve the organisation's ability to deliver its strategic objectives by managing risk; creating a risk culture that adds value to operational activities; and achieving sustained benefit across the portfolio of activities.

5.5.2 The Council's medium term financial strategy is designed to meet the challenges ahead and provide some flexibility to deal with varying service pressures, which may arise.

5.5.3 It has been identified that the Council has a significant risk in managing the ongoing street lighting budget and has therefore identified this as a risk within the Service Risk Register. This is due to the significant above inflation energy charge increases that have occurred in recent years and are estimated to continue to rise significantly in the future.

5.5.4 This Project is aimed at meeting this challenge as the conversion to low energy LED lanterns will significantly reduce the energy consumption of the street lighting assets. The new LED lanterns will also have an inbuilt intelligent Central Management System (CMS) which will enable the Council to have better control on the lighting assets as the CMS provides the capability to further reduce energy consumption by dimming the lighting at appropriate times.

5.6 Equalities and Diversity

5.6.1 The 2010 Equality Act outlines the provisions of the Public Sector Equalities Duty which requires Public Bodies **to have due regard** to the need to:

- eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Equality Act 2010
- advance equality of opportunity between people from different groups
- foster good relations between people from different groups

5.6.2 The broad purpose of this duty is to integrate considerations of equality into day business and keep them under review in decision making, the design of policies and the delivery of services.

5.6.3 The changes that are being proposed to the street lighting service are considered to provide benefits for all service users, whilst also delivering efficiency savings.

5.6.4 An initial Equalities Impact Assessment has been undertaken and this has identified that there are no significant equalities and diversity issues associated with this proposal.

5.6.5 It is envisaged that this EIA will be reviewed and updated as the Project progresses, especially as the designs are produced as it is this stage of the Project when any adverse impacts may become apparent, although this is anticipated to be highly unlikely.

5.7 **Corporate Parenting**

5.7.1 Not applicable in the context of this report.

5.8 **Consultation and Engagement**

5.8.1 The outcomes achieved from this project will be to enhance the existing street lighting quality, whilst also delivering savings.

5.8.2 As identified above a detailed lighting design process is being undertaken to ensure that the outcome of the project maintains compliance with the British Standard Code of Practice recommendations for lighting the public highway.

5.8.3 This is a lantern conversion project and as such there will be no changes in the locations of lighting columns. It is envisaged that the project will deliver the required level of lighting compliance without the need to consider any relocation of existing columns. If there are a limited number of occasions where a design cannot achieve reasonable compliance it may at that point be necessary to consider relocating existing lighting columns, subject to additional funding being available. As and when this is deemed necessary residents will be advised of the planned changes in column locations via being provided with a plan showing the proposed repositioning of lighting columns. This will provide residents with the opportunity to comment on the proposal prior to finalising the designs on these streets.

5.9 **Insight**

5.9.1 This Project has arisen from research and the outcomes of a detailed Business Case

which identified the opportunities and benefits that can be derived from implementing the proposed project.

- 5.9.2 The Street Lighting PFI Service Provider has extensive experience of having completed similar projects for other clients and therefore experience and useful intelligence has been obtained from these projects. This has provided some additional assurance in terms of assumptions made on the energy consumption reductions that may be achievable as these principals have been tested on previous projects.
- 5.9.3 In addition feedback provided by Authorities who have already undertaken LED conversion projects has been very positive with such projects being very well received by residents.

6. BACKGROUND PAPERS

- 6.1 Business Case for the LED Conversion Project
- 6.2 Authority Change Notice under the Street Lighting PFI Contract
- 6.3 Service Providers response to the Authority Change Notice
- 6.4 Service Providers Tender evaluation for the supply of the lanterns and CMS.
- 6.5 SEELS (SALIX Energy Efficiency Loans Scheme) Business Case and Application
- 6.6 DPR 1330 Street Lighting PFI Contract – Energy Saving Measures – 16th June 2011.
- 6.7 Environment Committee Report 14th March 2019
- 6.8 Initial Equalities Impact Assessment