LED Streetlighting - proposed implementation - estimated financial impact

APPENDIX A

	Year	0 2013/14	<i>1</i> 2014/15	2 2015/16	<i>3</i> 2016/17	<i>4</i> 2017/18	5 2018/19	- <i>6</i> 2019/20	<i>7</i> 2020/21	<i>8</i> 2021/22	10 2022/23	11 2023/24	<i>12</i> 2024/25	13 2025/26	14 2026/27	15 2027/28	<i>16</i> 2028/29	Totals
Total Cost Less TfL funding		288,889	1,011,111 (50,000)	·	-	-	-	-	-	-	•	•	·	-	·	-		1,300,000 (50,000)
Less loan Initial Cost to Council	_	(171,111) 117,778	(598,889) 362,222															(770,000) 480,000
Loan repayment			192,500	192,500	192,500	192,500												770,000
Capital Cost to Council	_	117,778	554,722	192,500	192,500	192,500												1,250,000
Revenue Savings Energy Component replaceme	nt	(25,667)	(117,553) (44,235)	(166,566) (58,980)	(173,229) (58,980)	(180,158) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(187,365) (58,980)	(2,724,188) (457,095)
Total revenue savings	_	(25,667)	(161,788)	(225,546)	(232,209)	(239,138)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(3,594,143)
Net flow in year		92,111	392,934	(33,046)	(39,709)	(46,638)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(246,345)	(2,344,143)
Net flow cumulative		92,111	485,045	451,999	412,290	365,651	119,307	(127,038) Payback yea	(373,383) ar 6	(619,728)	(866,073)	(1,112,418)	(1,358,763)	(1,605,108)	(1,851,453)	(2,097,798)	(2,344,143)	
NPV at 4%		1	0.962	0.925	0.889	0.855	0.822	0.790	0.760	0.731	0.703	0.676	0.650	0.625	0.601	0.577	0.555	
NPV of net flow in year		92,111	378,002	(30,568)	(35,301)	(39,876)	(202,495)	(194,613)	(187,222)	(180,078)	(173,181)	(166,529)	(160,124)	(153,966)	(148,053)	(142,141)	(136,721)	
Net NPV flow cumulation	ve	92,111	470,114	439,546	404,244	364,369	161,873 Pa	(32,739) ayback yr 6	(219,961)	(400,040)	(573,220)	(739,749)	(899,874)	(1,053,839)	(1,201,893)	(1,344,034)	(1,480,755)	

SUMMARY OF INITIAL FUNDING

 Salix Loan
 770,000 Final decision on loan to be confirmed

 LBH capital - general
 380,000

 LBH capital - streetcare
 55,000

 LBH capital - community safety
 45,000

 TfL
 50,000

 1,300,000

SIGNIFICANT CONCLUSIONS

Investment pays back in year 6 - a good rate of return

From 2018/19 onwards, ongoing base savings of £247k - no need for further capital investment

Strong financial case for proceeding

ASSUMPTIONS

- 1 Assume 1.02.14 start to 31.10.14
- 2 Unit cost of capital investment £1.3m by 6,000 units gives £217 per unit
- 3 Energy savings pa of £154k at current prices. Per Ofgem, assumed energy 4% rise year on year from 14/15 to 18/19 thereafter assumed to stabilise
- 4 Very prudent assumption made around component replacement; assumed above every 10 years, in line with warranty; however, industry standard is 15-20 years

(Annual current cost £17.83 pa; anticipated cost of £8 pa - difference £9.83, times 6,000 units gives saving of £58,980)