

READING BOROUGH COUNCIL

REPORT BY DIRECTOR OF ENVIRONMENT AND NEIGHBOURHOOD SERVICES

TO:	TRAFFIC MANAGEMENT SUB-COMMITTEE		
DATE:	10 MARCH 2016	AGENDA ITEM:	11
TITLE:	HIGHWAY MAINTENANCE UPDATE AND PROGRAMME 2016/2017		
LEAD COUNCILLOR:	COUNCILLOR A PAGE	PORTFOLIO:	STRATEGIC ENVIRONMENT, PLANNING AND TRANSPORT
SERVICE:	TRANSPORTATION AND STREETCARE	WARDS:	BOROUGH WIDE
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1. PURPOSE OF REPORT AND EXECUTIVE SUMMARY

- 1.1 To inform Councillors of the £ 1.424 Million (works and fees) programme for Highway Maintenance for 2016/2017 from the Local Transport Plan (LTP3) settlement.
- 1.2 The report outlines the background to the selection of schemes and Appendix 1 details the list of schemes in each category to be undertaken in 2016/2017. The categories are Major Carriageway Resurfacing, Minor Roads Surfacing, Footway Resurfacing, Bridge/Structural Maintenance and Major Maintenance Schemes. A detailed breakdown of allocations in each is shown in paragraph 4.9.

2. RECOMMENDED ACTION

- 2.1 That the Sub-Committee notes the Highways Maintenance Update & the proposed Programme for 2016/2017 and to give spend approval as set out in paragraph 4.9.

3. POLICY CONTEXT

- 3.1 To secure the most effective use of resources in the delivery of high quality, best value public service.
- 3.2 To make travel more secure, safe and comfortable for all users of the public highway.

4. THE PROPOSAL

Highway Maintenance Update

- 4.1 Following the successful completion of the Pothole Repair Plan 2 during 2014/15 we can report that there has been a significant reduction in the number of potholes on the Borough's Highway network during the current Financial Year.
- 4.2 There is currently no backlog in recorded pothole defects and repairs are carried out in a timely manner in compliance with job ticket durations i.e. 1 hour emergency, 1 day, 7 days or 28 days, as deemed appropriate.
- 4.3 In the Government's Autumn Statement 2015, it was announced that additional funding is being made available to Local Councils for pothole repairs. As more information becomes available, including the funding allocation for this Council, the Committee will be updated accordingly. Given the success of the two previous Pothole Repair Plans, at this stage, we would propose a third Pothole Repair Plan. As before, this would enable potholes of a lesser depth than the Council's current investigatory criteria to be repaired, which can only help to extend the life of roads until such time that they require a more comprehensive maintenance treatment.

Highway Maintenance Programme 2016/2017

Local Transport Plan (LTP3) Settlement

- 4.4 The Borough Council receives an annual Local Transport Block Funding (Integrated Transport & Highway Maintenance) settlement from the Department for Transport (DfT) for highway maintenance work. This settlement covers the general headings of bridges, highways and lighting. The Highway Authority then needs to demonstrate that it has made suitable use of their allocation in accordance with highway needs and within the general criteria for which LTP maintenance funding is allocated.
- 4.5 In December 2014, the Secretary of State for Transport announced how the Department for Transport planned to allocate £6 Billion being made available between 2015/16 and 2020/21 for local highways maintenance capital funding. Ministers reached a decision on how to allocate the £976 Million of local highways maintenance capital block funding available each year based on a 'needs based' formula funding model.

4.6 Reading Borough Council's settlement for this 6 year cycle is as follows:

FINANCIAL YEAR	AMOUNT OF SETTLEMENT
2015/16	£ 1,472,000
2016/17	£ 1,350,000
2017/18	£ 1,309,000
2018/19	£ 1,185,000
2019/20	£ 1,185,000
2020/21	£ 1,185,000

4.7 Every authority had the opportunity to secure additional funding on an "incentive basis", dependent on its pursuit of efficiencies and use of asset management; and/or from a competitive Challenge Fund for major maintenance projects.

Of the £6 Billion, £578 Million has been set aside for an incentive fund scheme, to help reward Local Highway Authorities who can demonstrate they are delivering value for money in carrying out cost effective improvements.

Each Local Highway Authority in England (excluding London) was invited to complete a self-assessment questionnaire, in order to establish the share of the incentive fund they will be eligible for in 2016/2017. Local Authorities are not competing with each other for funding, but are demonstrating that efficiency measures are being pursued in order to receive their full share of the funding.

Each Authority scores themselves against 22 questions, and place themselves into one of 3 Bands on the basis of the available evidence.

The incentive funding awarded to each Local Highway Authority is based on their score in the questionnaire and is relative to the amount received through the needs-based funding formula. The current banding model is shown in the table below.

This table, therefore, shows an indicative estimate of what each Authority could potentially receive in additional funding per Band per Financial Year to 2020/21.

Highways maintenance incentive funding formula and indicative incentive allocations for Reading Borough Council award over the next 5 Financial Years is as follows:

YEAR	AWARD	BAND	INCENTIVE
2016/2017*	£1,350,000*	3 (100%)	£84,000
		2 (100%)	£84,000
		1 (90%)*	£74,000*
2017/2018	£1,309,000	3 (100%)	£123,000
		2 (90%)	£110,000
		1 (60%)	£74,000
2018/2019	£1,185,000	3 (100%)	£247,000
		2 (70%)	£176,000
		1 (30%)	£74,000
2019/2020	£1,185,000	3 (100%)	£247,000
		2 (50%)	£123,000
		1 (10%)	£25,000
2020/2021	£1,185,000	3 (100%)	£247,000
		2 (30%)	£74,000
		1 (0%)	0

*Note: For 2016/2017 Reading Borough Council falls within 'Band 1' so the total award with incentive is: £1,350,000 + £74,000 = £1,424,000

- 4.8 To enable Reading Borough Council to achieve the maximum incentive funding, the Council has set aside £115,000 to employ an Asset Manager and an Assistant on a 2 year contract, to deliver an asset management programme that moves Reading from 'Band 1' to 'Band 3'.
- 4.9 In previous years the LTP3 settlement has been split into a number of different areas to make best use of the funds available, and it is intended to continue with this approach. Against each heading is the proposed works allocation based on the 2016/2017 settlement for works.

	2015/16 Spend (Works Only)	2016/17 Spend Proposal (Works Only)
Major Carriageway Resurfacing	£525,000	£623,600
Minor Roads Surfacing	£175,000	£120,000
Footway Resurfacing	£55,400	£50,000
Bridge/Structural Maintenance	£150,000	£150,000
Street Lighting	£25,000	0
Major Maintenance Schemes	£350,000	£288,000

Major Carriageway Resurfacing (£623,600 works)

- 4.10 Due to the limited and reduced funding available it is necessary to prioritise the schemes based on nationally accepted technical assessment processes as well as visual engineering assessments.
- 4.11 The provisional programme for category 1 and 2 roads (mainly class A and class B roads and roads with high volumes of commercial traffic) surface treatment has been prioritised after assessment of carriageways using information from:
- SCANNER surveys which checks the structural integrity and residual life of existing carriageways;
 - SCRIM (sideways-force coefficient routine investigation machine) surveys to check skidding resistance.
 - VISUAL/ENGINEERING ASSESSMENT by Highways Engineering Team.
- 4.12 Based on the above assessments the roads/sections of roads listed in Section A of Appendix 1 are recommended for treatment in 2016/2017. These are shown in priority order and will be progressed until the allocation is spent. To make the most effective use of the budget available only the sections of the roads with a poor residual life, as identified from the SCANNER surveys and visual engineering assessments, will be treated. Estimated costs, based on current information, are shown against each scheme and on this basis it would suggest that schemes 1 to 11 could be achieved in the 2016/2017 maintenance programme.
- 4.13 Tenders for this work will be invited shortly and the documents will include reserve schemes, in the event that returned tender prices prove to be more favourable than current estimates suggest, thus enabling us to undertake further scheme(s) within the available budget. In the event of unforeseen carriageway deterioration outside of the scope of normal maintenance work, the programme of works would be reviewed and if necessary a reallocation of funding within the budgets would be made to undertake higher priority carriageway schemes.

Minor Roads Surfacing (£120,000 works)

- 4.14 For category 3 roads (residential and other distributor roads) there is generally no skid or condition information available therefore priorities have to be established as a result of visual condition surveys to determine deterioration. The common types of deterioration are, for example, the number of potholes, rutting, the amount of patching and cracking.
- 4.15 An assessment of the road surface condition for minor roads is therefore carried out annually using the Council's pro-forma. The assessment process

consists of scoring the carriageway condition against various criteria. Those roads with the highest scores are then subjected to a further engineering assessment and those which, again, score highly through this process as well as being considered appropriate, are recommended for inclusion in the next Financial Year's minor roads surfacing programme, subject to budget availability.

- 4.16 Based on the above a list of schemes has been prepared as detailed in Appendix 1 Section B. Estimated costs based on current information are shown against each scheme and would suggest that schemes 1 to 8 could be achieved this year. Tenders for his work will be invited shortly and the documents will include reserve schemes (schemes 9 to 13 as shown in Appendix 1 Section B) in case the tender prices returned are more favourable than current estimates enabling us to do more schemes within the available budget.

Footway Resurfacing (£50,000 works)

- 4.17 Potential footway resurfacing schemes are identified as a result of visual condition surveys to determine deterioration. An assessment of the footway surface is carried out annually using the Council's pro-forma. The assessment process consists of scoring the footway condition against various criteria; those footways with the highest scores, as well as being considered appropriate, are then recommended for inclusion in the next Financial Year's footway maintenance programme, subject to budget availability. Many requests for footway resurfacing schemes are also received from Ward Councillors and members of public, but the amount of funding available is not sufficient to deal with every request.
- 4.18 In recent years the footway maintenance programme has consisted of 'slurry sealing' surfacing. Although this is a cost-effective process which provides a new 'thin veneer' overlain surface which seals and ultimately extends the life of footways, this treatment has limitations and has not been well received by local residents at every location. Where footways have more comprehensive deterioration or wear and tear, resurfacing and/or localised reconstruction is a more appropriate maintenance treatment.
- 4.19 As was the case with the 2015/2016 footway maintenance programme it is proposed to focus on resurfacing/reconstructing several more footways/stretches of footway in 2016/2017 rather than a slurry sealing programme. Unlike slurry sealing, which is carried out by a specialist contractor, footway resurfacing/reconstruction work is carried out in-house by the Council's Highways and Drainage Operations Team.
- 4.20 The schemes listed in Section C of Appendix 1 are recommended for action in 2016/2017. Estimated costs, based on current information, are shown against each scheme and would suggest that schemes 1 to 7 could be achieved this year. Two reserve footway resurfacing/reconstruction schemes

8 and 9 (as shown in Appendix 1 Section C) would be implemented if the costs for the main footway programme prove to be less than the current estimates thus enabling us to do more schemes within the available budget.

Bridge/Structural Maintenance (£150,000 works)

- 4.21 The Council has maintenance responsibility for around 80 bridges and 300 other structures. Each structure is inspected in line with the Code of Practice for Highway Structures. Based on these inspections the priority for works within the capital programme is determined and a rolling 5 year programme is developed and updated annually. Section D of Appendix 1 details the schemes proposed for 2016/2017.

Street Lighting

- 4.22 During the regular safety inspections, life expired street lighting equipment has been identified; typically over the last 2 to 3 years around 150 to 160 columns have been replaced on an annual basis. A programme of testing is undertaken each year on a sample of the street lighting stock with 3000 columns, signs and high-masts being tested in 2015/2016. A significant investment has been made in testing and renovating 19 High Mast columns around the IDR which were in a poor state of repair. They have been proven to be structurally sound and the cabling and luminaires have been replaced and upgraded to LED with the Mayflower CMS system. The conversion to LED has reduced energy consumption by 50%.
- 4.23 Work began in 2014 to prepare a business case for an Invest to Save LED street lighting upgrade project for the Borough. LED street lighting luminaires have been used in the Borough since 2012 and they use 50% less energy and have a life expectancy of 15-20 years rather than 3 years for existing discharge type lamps. Through collaborative working with Slough and Wokingham Borough Councils, who were also planning to swap to LED a joint procurement exercise was discussed with a view to letting a joint contract, sharing costs and maximising economies of scale. During this work an opportunity arose to bid for Challenge funding from the DfT for highways improvement works. A successful bid was made jointly by the 3 Authorities and 70% (£6.68 Million) of the full cost of £9.8 Million was secured by Reading, reducing the Borough's contribution to 30% (£2.94 Million) and funding was secured. A joint LED swap out contract was tendered in Autumn 2015 and Volker Highways were awarded the contract to swap out 11,329 street lights, 2578 sign lights, 890 illuminated bollards and 2533 life expired columns. The contract works begin in April 2016 with completion in March 2018. All equipment will be controlled by the Mayflower CMS system which allows remote dimming, will monitor energy usage accurately and report faults remotely.
- 4.24 Existing maintenance budgets will reduce as the number of LED units increase over the next 2 years and by April 2018 it is envisaged that

maintenance cost will reduce by 50% - 55% and energy consumption will reduce by 50%, creating significant savings in both revenue and capital budgets.

Illuminated Bollards/Traffic Signs

- 4.25 As part of the street lighting Invest to Save LED swap out works, the 890 remaining mains powered illuminated bollards will be changed to solar powered types. 2578 illuminated road signs will be either changed to LED types or be de-illuminated.

Major Maintenance Schemes (£288,000 works)

- 4.26 The specialist concrete penetration stabilisation work in Northumberland Avenue (between Cressingham Road and Canterbury Road) was completed this Financial Year (2015/2016). Following completion of this stabilisation work, funding was available to resurface a short section of Northumberland Avenue, near to Cressingham Road junction, this Financial Year. The remaining section is included in the 2016/2017 major carriageway resurfacing programme to complete this scheme.
- 4.27 The Whiteknights Reservoir Flood Alleviation Scheme is included in the Highway Maintenance Programme 2016/2017 (Section E of Appendix 1 refers). As reported to Policy Committee on 15th February 2016 the allocation of funding from the LTP 2016/2017 Bridges & Carriageways Capital Award is up to a maximum of £288,000, including £120,000 contingency for risk towards the scheme. The remaining funding for this scheme is being provided by the Council's Capital Borrowing Programme.

Other Carriageway Maintenance Works (£ To Be Confirmed)

- 4.28 Subject to available funds left within the £120,000 risk contingency for Whiteknights Reservoir Flood Alleviation Scheme and available funding from the Government for pothole repairs, as announced in the Government's Autumn Statement 2015, it is proposed to undertake a programme of other carriageway maintenance works. This would consist of works to those roads which repeatedly do not meet the appropriate criteria for inclusion within the major carriageway resurfacing or minor roads surfacing programmes, but would benefit from other maintenance treatment(s) to extend the life of these assets. Examples of such maintenance works are explained in more detail below:
- Based on the SCRIM survey results it is recommended that a small programme of carriageway surface retexturing work is carried out in 2016/2017. This process is appropriate where the carriageway surface appears, overall, to be in a good condition but would benefit from a surface rejuvenation to improve/restore skid resistance, extending

the life of the road. This process would prove to be a cost-effective treatment, when compared with full scale resurfacing, enabling more roads to be treated.

- There are a number of concrete roads across the Borough which have previously been overlain with a thin flexible surfacing course. Over time this surfacing has locally worn away leaving a 'scabbed' surface. Typically these areas do not meet the Council's current defect investigatory level to trigger repairs and as long as the underlying concrete slabs are in a stable condition, they are unlikely to increase in depth. A typical example of such surface deterioration is evident on the Mayfair carriageway. Although such deterioration is aesthetically not pleasing, if the underlying concrete slabs are in reasonable condition, such roads do not score/rank as high as other roads for programmed maintenance work. Nevertheless such roads would benefit from an appropriate treatment whereby the existing surfacing is either rejuvenated or replaced to not only improve the running surface but to also seal and protect the underlying concrete slabs, in turn, extending the life expectancy of these roads.
- There are also examples of localised carriageway deterioration where the surfacing and/or sub-structure shows sign of wear and tear in specific areas but not extensive enough to justify full-scale maintenance work to the complete carriageway area. In such situations, substantially sized patching, whether in the form of a surfacing course or a greater depth of reconstruction, can rectify the issue locally and help to extend the overall life expectancy of the complete road.

The Committee will be updated on any programme of other carriageway maintenance works at a future Traffic Management Sub-Committee Meeting.

5. CONTRIBUTION TO STRATEGIC AIMS

- 5.1 The Highway Maintenance Update and Programme 2016/2017 will contribute to the Council's Corporate Plan 2015 - 2018 objectives of 'Providing infrastructure to support the economy' and 'Keeping the town, clean, safe, green and active'.

6. COMMUNITY ENGAGEMENT AND INFORMATION

- 6.1 Defects reported by members of the public on the Borough Council's public highway network are assessed / considered for appropriate action in accordance with the Council's investigatory criteria.
- 6.2 Schemes are identified through an assessment process however members of the public also request sites and these are considered as part of the assessment process.

6.3 The Highway Maintenance Update and Programme 2016/2017 is available on the Council's website.

7. EQUALITY IMPACT ASSESSMENT

7.1 In addition to the Human Rights Act 1998 the Council is required to comply with the Equalities Act 2010. Section 149 of the Equalities Act 2010 requires the Council to have due regard to the need to:-

- eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
- advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

7.2 The Highway Maintenance Programme 2016/2017 consists of improvement work to the Borough Council's existing public highway network. There is no overall change to service delivery at this time. Should any future updates/amendments be required, which result in service delivery changes, an equality impact assessment will be carried out.

8. LEGAL IMPLICATIONS

8.1 The Borough Council, as Highway Authority, has a duty under the Highways Act 1980 to carry out highway maintenance and maintain highway structures.

9. FINANCIAL IMPLICATIONS

9.1 The proposed Highway Maintenance Programme 2016/2017 will be funded by the 'Local Transport Plan (LTP3) capital settlement for highways' and the 'Government's Autumn Statement 2015 - additional funding for pothole repairs'.

9.2 The proposed street lighting LED replacement programme will jointly be funded by the 'DfT Challenge Fund Award' and 'An Invest To Save' capital borrowing.

10. BACKGROUND PAPERS

10.1 LTP3 document.

10.2 Whiteknights Reservoir Flood Alleviation Planning Consent Report - Planning Committee 10th February 2016.

- 10.3 Whiteknights Reservoir Flood Alleviation Spend Approval Report - Policy Committee 15th February 2016.
- 10.4 Traffic Management Sub-Committee Report - 12th March 2015.

HIGHWAY MAINTENANCE PROGRAMME 2016/2017

Section A - Major Carriageway Resurfacing Schemes (£623,600)

	Ward	Road	Estimated Cost (£)	Cumulative Cost (£)
1	Church / Katesgrove	Northumberland Avenue (Remaining section from Canterbury Road to Cressingham Road)	149,700	149,700
2	Abbey	Kings Road (Highbridge Wharf to o/s Jacobs No.25, including part Duke Street, Kings Street and High Street)	50,200	199,900
3	Battle	Cow Lane/Portman Road/Beresford Road junction (Including part of spur roads)	50,600	250,500
4	Abbey	The Forbury (Valpy Street to The Forbury/Abbots Walk and including slip road to Forbury Road)	44,500	295,000
5	Abbey/ Redlands	Kings Road (Gas Works Road to o/s No.179 and including slip road into Queens Road)	96,500	391,500
6	Mapledurham	Woodcote Road (o/s No.188 to Blagrove Lane)	59,300	450,800
7	Mapledurham	Woodcote Road (Junction with Woodcote Way to Richmond Road)	41,400	492,200
8	Abbey	Kings Road (Outlook Public House to Highbridge Wharf)	40,700	532,900
9	Abbey	Kings Road (Watlington Street to Outlook Public House)	42,300	575,200
10	Abbey	Caversham Road (Pedestrian Crossing to Brigham Road)	7,600	582,800
11	Abbey	Caversham Road (Abattoirs Road to Northfield Road)	46,300	629,100
		<u>RESERVE SCHEMES</u>		
12	Katesgrove	Basingstoke Road (Outside Gowrings Garage to Craddock Road)	24,400	653,500
13	Park	Wokingham Road (Holmes Road to Heath Road)	22,600	676,100
14	Peppard	Caversham Park Road (Near Junction with Kiln Road)	8,100	684,200

Section B - Minor Roads Surfacing Schemes (£ 120,000)

	Ward	Road	Estimated Cost (£)	Cumulative Cost (£)
1	Southcote	Shireshead Close	4,000	4,000
2	Mapledurham	Carlton Road	18,000	22,000
3	Mapledurham	Hewett Avenue	38,500	60,500
4	Southcote	Brunel Road	18,000	78,500
5	Abbey	Fobney Street	11,500	90,000
6	Abbey	Derby Street	5,260	95,260
7	Church	Holberton Road	20,500	115,760
8	Abbey	Cheapside	9,800	125,560
		<u>RESERVE SCHEMES</u>		
9	Tilehurst	Ash Road	14,000	139,560
10	Peppard	Stuart Close	32,300	171,860
11	Thames	Darell Road	13,100	184,960
12	Redlands	Eldon Square	8,500	193,460
13	Park/Redlands	Crescent Road	25,200	218,660

Section C - Footway Resurfacing Schemes (£ 50,000)

	Ward	Road	Estimated Cost (£)	Cumulative Cost (£)
1	Southcote	Coronation Square (Section outside health centre)	13,770	13,770
2	Peppard	Autumn Close (Section)	4,500	18,270
3	Minster	Berkeley Avenue (from 12 to 22A)	4,500	22,770
4	Peppard	Russet Glade (Section)	9,225	31,995
5	Tilehurst	Beverley Road (Section)	14,535	46,530
6	Katesgrove	Boulton Road (Section)	1,980	48,510
7	Thames	Chelford Way (Section)	2,295	50,805
		<u>RESERVE SCHEMES</u>		
8	Thames	Darell Road (Section)	2,925	53,730
9	Whitley	Basingstoke Road (Section)	7,695	61,425

Section D - Bridge/Structural Maintenance Schemes (£ 150,000)

	Ward	Location	Estimated Cost (£)	Cumulative Cost (£)
1	Abbey	Maintenance Repairs to residual Podium Structure	100,000	100,000
2	Abbey / Caversham	Bridge Assessment Programme (full SV assessment for Caversham Bridge and St Giles Culvert Extension)	25,000	125,000
3	Borough- wide	Annual Structural Maintenance Scheme	25,000	150,000
		<u>RESERVE SCHEMES</u>		
4	Abbey/Park	Kennet Side Retaining Wall strengthening Phase 3	200,000	350,000
5	Abbey	Kings Road Culvert Strengthening	250,000	600,000
6	Caversham	Hills Meadow Culvert strengthening	120,000	720,000
7	Kentwood	Vehicle Incursion site (Oxford Road)	30,000	750,000
8	Borough-wide	Bridge Assessment Programme (Local Transport Corridor structures including inspection/investigation for structural details and load assessment)	100,000	850,000
9	Borough-wide	Strengthening works to Local Transport Corridor structures (estimate only - to be confirmed after investigations and load assessments)	1,500,000	
10	Abbey/Park	Kennet Side Retaining Wall strengthening (remaining 1km length)	4,000,000	

Section E - Major Maintenance Schemes (£288,000 works)

	Ward	Location	Estimated Cost (£)	Cumulative Cost (£)
1	Park	Whiteknights Reservoir Flood Alleviation Scheme	288,000 *	288,000

*Final spend dependent on use of risk register within Whiteknights Reservoir Scheme