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Meeting	Chipping Barnet Area Environment Sub-Committee
Date	26 March 2014
<b>Subject</b>	<b>Highways Planned Maintenance Works Programme for Chipping Barnet Area – 2014/2015</b>
Report of	Cabinet Member for Environment.
Summary of Report	This report seeks the Sub-Committee's approval for the Highway Planned Maintenance Works Programme for the Chipping Barnet Area during 2014/2015.

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Officer Contributors	Director of Development and Regulatory Services
Status (public or exempt)	Public
Wards Affected	All within the Sub-Committee Area
Key Decision	No
Reason for urgency / exemption from call-in	Not Applicable
Function of	Executive
Enclosures	<u>Appendix A:</u> Proposed Works by Wards during 2014/2015 <u>Appendix B:</u> Risk Management <u>Appendix C:</u> Planned Highway Maintenance Budget 2014/2015. <u>Appendix D:</u> Traffic Management Measures Review <u>Appendix E:</u> Highway Maintenance Schemes for 2013/14 £4 million additional funding. <u>Appendix F:</u> Planned Maintenance Budgets of last 10 years.
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## **1. RECOMMENDATION**

**That the list of roads for carriageway resurfacing, footway relay and other highway maintenance works in the Chipping Barnet Area for 2014/2015; as listed in Appendix A attached to this report, be approved.**

### **1.2 That, subject to the overall costs being contained within available budgets, the Director of Development and Regulatory be instructed to:**

- i) give notice under Section 58 of the New Roads and Street Works Act 1991 of the Council's intention to implement the highway works shown in Appendix A by advertising and consulting as necessary with public utility companies and Transport for London (TfL) for schemes proposed to be implemented during 2014/2015;**
- ii) implement the schemes proposed in Appendix A by placing orders with the Council's term contractors or specialist contractors appointed in accordance with the public procurement rules, and or the Council's Contract Procedure Rules as appropriate;**
- iii) Commission condition assessments of carriageways and footways within all constituent areas to determine the overall condition and appropriate measures to be considered in future programmes**
- iv) agree any variations to the scheduling of the programme in consultation with the Cabinet Member for Environment and the Chairman of this Sub-Committee.**

## **2. RELEVANT PREVIOUS DECISIONS**

**2.1 Cabinet 22 July 2002 decision number item 7 - approved the Planned Highway Maintenance Programme – initial Scheme Prioritisation Procedure.**

**2.2 Task and Finish Groups were subsequently introduced as part of the Overview and Scrutiny arrangements adopted by the Council in May 2009 and the Road Resurfacing Task and Finish Group reported to Cabinet on 12 April 2010 the issues noted within paragraph 9, "Background Information".**

**2.3 DPRs approved by the DRS Director in April and July 2011 authorised stages 1 and 2 of the Pothole Elimination Programme.**

**2.4 The Road Resurfacing Task and Finish Group report to Cabinet of 12 April 2010 recommended the following; 1) The Council introduce a Highways Asset Management approach to achieve best value for investment in the highway infrastructure. 2) A full survey be undertaken of the borough footways to enable footway schemes to be prioritised effectively. 3) Footway schemes should be carried out, as far as possible, to consistent standard across the network, using the same materials wherever possible.**

- 2.5 The Cabinet on the 4<sup>th</sup> of November, Item 5.4, approved an additional £4 million of funding to be spent on highway maintenance. A list of these schemes is included in Appendix E.

### **3. CORPORATE PRIORITIES AND POLICY CONSIDERATIONS**

- 3.1 The Council 2013 - 14 Corporate Plan has set three ambitious strategic objectives:

- Promote responsible growth, development and success across the Borough.
- Support families and individuals that need it-promoting independence, learning and the well-being, and
- Improve the satisfaction of residents and businesses with the London Borough of Barnet as a place to live, work and study.

The Corporate Plan also highlights various outcomes as a means to deliver the above objectives, the following is a list of these that are relevant to highways maintenance:-

- To maintain a well-designed, attractive place, with sustainable infrastructure across the Borough
- To maintain the right environment for a strong and diverse local economy
- To promote a healthy, active, independent and informed over 55 population in the Borough to encourage and support our residents to age well.

In recent years, the Council's Network Management Team has also been pursuing the following outcomes:

- Invest adequate funds to halt the deterioration of the conditions of roads and pavements in the short term and eliminate the backlog of maintenance.
- Procure an asset management system based on whole life costing.
- Highways maintenance to include a range of preventative type maintenance options including carriageway patching and micro surfacing.
- Protect and enhance our natural and built environment so that the Borough is clean and green.
- Ensure that our town centres are vibrant places where business can thrive.
- Reduce the percentage of Principal and Non-Principal Classified Roads where maintenance should be considered to 7 per cent (in need of maintenance).

- 3.2 In the approved Local Implementation Plan (LIP) 2014/2015 submitted to Transport for London (TfL), the Council is strongly committed to maintaining and improving highway assets in the Borough under the Maintenance Theme.

- 3.3 In conjunction with the planned maintenance works it is proposed to review existing traffic management measures to meet the key objectives of the Traffic Management Strategy. These are to secure improvements in traffic flows,

reduce congestion, thereby maximise network performance, and reduce the incidence of traffic 'rat runs' in the adjoining residential roads.

#### **4. RISK MANAGEMENT ISSUES**

- 4.1 Appendix B attached to this report sets out the results of the risks assessed.
- 4.2 The extreme weather encountered over the past few winters has resulted in a rapid deterioration of the core fabric of many patched and heavily deteriorated carriageways. The whole life condition of these carriageways is susceptible to further reduction by increased frequency of future extremes of weather unless timely intervention is carried out by a planned programmed of appropriate highway maintenance. The reactive attention to defects or filling of pot-holes has been technically proven to be only a short-term and a superficial remedy to highway damage.
- 4.3 Based on the 2011 condition surveys, the current highway maintenance backlog has been estimated to be £97.3 million. The funding required to address this backlog, based on traditional maintenance treatments, has been assessed to be £20 million per year over a 5 year period. Given the current economic climate this is clearly unsustainable and there is therefore the risk that continuing deterioration of the highway will substantially increase the backlog and/or result in closure of roads. In order to reduce this risk officers are proposing the use of preventative type treatments which cost considerably less than the traditional maintenance treatments and are cost effective in extending the life of the highway.

#### **5. EQUALITIES AND DIVERSITY ISSUES**

- 5.1 Good roads and pavements have benefits to all sectors of the community in removing barriers and assisting quick, efficient and safe movement to school, work and leisure.
- 5.2 The physical appearance and the condition of the roads and pavements have a significant impact on people's quality of life. A poor quality street environment will give a negative impression of an area, impact on people's perceptions and attitudes as well as increasing feelings of insecurity. The Council's policy is focused on improving the overall street scene across the borough to a higher level and is consistent with creating an outcome where all communities are thriving and harmonious places where people are happy to live.
- 5.3 There are on-going assessments carried out on the conditions of the roads and pavements in the borough, which incorporates roads on which there were requests by letter, email, and phone-calls from users, Members and issues raised at meetings such as Forums, Leader listens and Chief Executive walkabouts, etc. The improvements and repairs aim to ensure that all users have equal and safe access across the borough regardless of the method of travel. Surface defects are remedied to benefit general health and safety issues for all.

There is an on-going process of regularisation and de-clutter of street furniture and an updating of highway features to meet the latest statutory or technical expectations.

## 6. USE OF RESOURCES IMPLICATIONS (Finance, Procurement, Performance & Value for Money, Staffing, IT, Property, Sustainability)

6.1 Funding is being sought from all possible sources to address the on-going deterioration of the non-principal local roads and to improve the condition of footways, eliminating the backlog of repairs. Appendix F shows the Planned Maintenance Budgets over the last 10 years; this shows a gradual reduction of the level of spending over recent years, with the exception of the last two years. This reduction of planned maintenance has contributed to the planned maintenance backlog. In addition, as funding reduces, the ability to provide a satisfactory level of investment in the road network decreases and this in turn generates increasing levels of reactive cost and works.

6.2 A bid for carriageway resurfacing and footway relay works on principal roads borough wide was included in the Local Implementation Plan (LIP) 2014/15 submitted to Transport for London (TfL), during September 2013. TfL confirmed a total grant allocation of £4.501 million in December 2013 and the breakdown of the approved grant is as follows:

<b>Programme</b>	<b>Allocation (£'000)</b>
Corridors, Neighbourhoods and Supporting Measures	£3,325
Principal Road Maintenance	£1,076
Local Transport Funding	£100
Major Schemes	Nil

TfL approved £ 1,076k grant for the 2014 - 15 programme maintenance of the principal road network. The approval process has taken into account the condition of the principal road network based upon the annual road condition surveys. TfL Financial Guidance procedures will be followed when implementing works and seeking reimbursement of costs.

6.3 The total Council budget allocation for planned maintenance carriageway and footway works in the combined areas for 2014/15 is not known at the time of writing but will be published as soon as this information is available. This figure will not include measures proposed as part of the TfL bid. The schemes shown in Appendix A will be funded through grants from TfL, Borough Capital and S106 contributions from private developments. Appendix C annexed, gives the breakdown of the Planned Maintenance Budget for 2014 /2015, which has been assumed at £3 million. Appendix C also includes details of the TfL or LIP funding and any S106 funding. Appendix A has been prepared as a list of schemes for each stream of funding, such as TfL, Borough Capital contributions and contributions from private developers. The

6.4 Officers have prioritised schemes in order to get the maximum benefit and value for money. Roads in need of treatment but are not included in the programme, due to the limited budgets, are included in the reserve list and may be implemented if funding becomes available. If not, they will be considered further in the future in a new programme subject to meeting the appropriate criteria and approval process. It should be recognised that it would be desirable to carry out works on all roads listed as high priority; however, the current budget allocation does not allow for the full extent of the programme.

As a consequence the high priority roads not completed this year will likely need some maintenance work carried out in order to keep them in a reasonably safe condition. This will add further pressure to the Responsive Maintenance budget in the next financial year.

- 6.5 The carriageway and footway estimates given in Appendix A are provisional and may be subject to change following completion of the individual scheme designs. The estimates are based on the contract rates of the London Highways Alliance Contract (LoHAC), which the Council is in the process of adopting to use as a means to deliver all the highway maintenance as from April 2014. Significant changes will be discussed with the Cabinet Member for Environment and there may be a need to vary the length or type of treatment within each street to ensure that the overall budget is not exceeded. Works will be contained within the overall approved budget.
- 6.6 There are no staffing ICT or property implications but may be possible issues during transgression to DRS

## **7. LEGAL ISSUES**

- 7.1 None, save those contained in the main body of the report

## **8. CONSTITUTIONAL POWERS**

- 8.1 Constitution Part 3, Responsibility for Functions, Paragraph 3.10 - Area Environment Sub-Committees perform functions that are the responsibility of the Executive relating to highways use and regulation that are not the responsibility of the Council.

## **9 BACKGROUND INFORMATION**

- 9.1 The Highways Act 1980 (HA 1980) sets out the main duties of the highway authorities in England and Wales. Highway maintenance policy is set within a legal framework. Section 41 of the HA 1980 imposes a duty to maintain highways which are maintainable at public expense and almost all claims against authorities relating to highway functions arise from an alleged breach of this section. The HA 1980 sits within a much broader legislative framework specifying powers, duties and standards for highway maintenance.
- 9.2 The Council has a duty to ensure that the statutory functions and responsibilities in relation to highways are discharged. The Authority also has a duty to ensure a safe passage for the highway user through the effective implementation of the legislation available to it, principally the HA 1980, and in particular Section 41, of the Act.
- 9.3 Planned highway maintenance is generally funded by Borough Capital Funding. Capital allocations are also made by Central Government through the LIP process taking into account factors such as road length, classification, traffic figures and road condition data derived from the condition indicators, UK Pavement Management System (UKPMS), National Road Maintenance Condition Survey (NRMCS) and condition surveys. Revenue allocations funding, which covers mostly reactive maintenance, is generally provided from a combination of local council tax and other Government Revenue Support Grants. Funding is further sought from Private Developers, secured as a

condition of planning approval under S106 of the Town and Country Planning Act 1990. It is important to ensure that realistic benefit is obtained for highway maintenance from contributions in respect of new developments.

- 9.4 The programme proposed by this report was based on condition surveys, covering 100% of the roads and 50% of the Footways, carried out in the summer of 2013 by independent consultants, as per the recommendations of the 2010 Task and Finish Group. The surveys on the Borough roads have been carried out by Cormorant Surveys/Appia by using the L B Ealing Framework contract, which the Council agreed to adopt. The condition surveys on the Council's Principal roads are commissioned through the London Borough of Hammersmith and Fulham and financed by TfL. As per the Prioritisation Procedure approved by the Cabinet in 2002, highway officers and inspectors have contributed to the process by providing an independent assessment of the condition of the highway, following a visual survey. This was achieved by visually inspecting all the individual roads suggested by members of the public, Ward Councillors and Highway Inspectors as requiring maintenance.
- 9.5 Schemes have been prioritised based on the known condition and in the interest of achieving best value for investment in the highway infrastructure. In order to achieve best value, the proposed treatments include a large scale patching programme where the full length of the road need not be resurfaced. As previously mentioned, all roads for which the Borough is the Highway Authority have recently been visually surveyed and defects have been recorded to date. From this information each road has been scored to achieve a condition rating and a schedule has been produced which identifies the ranking of each road on a relative condition basis to date. Each of the 2,000 plus roads in the borough has been ranked together with a usage factor as per the Prioritisation Procedure approved by the Cabinet in 2002. Those that are ranked highest are likely to be prioritised for inclusion in the 2013/14 programme in accordance with the available budget. The benefit of the ranking process will be that should additional funding become available during the year the next highest ranked road will be brought into the programme.
- 9.6 The current national condition indicators covering highways are National Indicators NI 130-01 and NI 130-02. These indicators have replaced the former NIs 168 and 169 in 2010/11 and measure the condition of Principal and Non Principal roads respectively. Principal roads are regional or district distributor routes made up mostly of 'A' designated roads acting as a network between Trunk roads and roads of local importance. The single data list is published by the Central Government Website for Barnet is:

National Indicator	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012 /13
N.I 130-01: Principal roads where maintenance should be considered - Provides an Indication of the proportion of principal	9	3	3	5	4	4	9

roads where structural maintenance should be considered.							
N.I 130-02: Non-principal classified roads where maintenance should be considered - Provides an Indication of the proportion of B and C-class roads where structural maintenance should be considered.	10	9	6	6	5	3	3

- 9.7 Although Best Value Performance indicator BVPI 187 has been dropped from the new National Indicator Set, it is acknowledged that the condition of footways is a very valuable indicator, not only in terms of accessibility and safety, but also in the contribution that well maintained footways make to the appearance of local neighbourhoods, and also of the level of public satisfaction with the Borough's highways service provision. Therefore it is proposed to develop a new local indicator that will measure the condition of the entire footway network Borough wide. Whilst previous footway maintenance programmes have primarily targeted the Categories 1 and 2 footways, the condition of the major part of the footway network must also be considered. A comprehensive condition survey needs to be completed and the aim of this is primarily to get a full and accurate picture of the condition of the full network. This also enables a comparison to be made of the relative condition of the "residential pavements" with the BVPI 187 footways. Also successive surveys, year – on – year, will allow the comparison of footway condition across the whole network and demonstrate trends in improvement or deterioration Borough wide. Based on the most recent condition surveys the BVPI 187 equivalent is 42%.
- 9.8 Under Section 58 of the New Roads and Street Works Act 1991, the Highway Authority is required to issue a formal three-month Notice of its intention to carry out substantial road works on the public highway. This requirement is aimed at preventing or restricting streets being dug up soon after they have been resurfaced or closed for major works. This is a legal notice which is served on all the statutory undertakers who carry out work in the Borough. The Highways Authority is required to commence the works within one month of the date specified in the notice. The restriction on statutory undertakers carrying out street work applies for a period of 12 months after the works have been implemented. Statutory companies can, in some cases, still carry out emergency works with the consent of the Highway Authority. The Notice will be published in the London Gazette and sent to all the utility companies for co-ordination.
- 9.9 The Traffic Management Act 2004 introduced a new class of Strategic Roads for London where the London Boroughs retain highway and traffic authority



responsibilities but for which Transport for London (TfL) has oversight. This requires the Council to notify TfL, or both TfL and neighbouring boroughs if its proposal to undertake works, such as maintenance, would be likely to affect traffic operations on a strategic road in its own area. All schemes are in the process of being assessed, to secure improvements in traffic flows and reduce congestion within a safe environment. TfL will be provided with the necessary information within the stipulated timescales for the relevant schemes.

- 9.10 The programme needs to be flexible to accommodate schemes which emerge during the course of the year, either as a result of sudden and rapid deterioration or urgent local needs which are agreed to take priority. Schemes may also slip, for example when other promoters identify works which need to proceed prior to the maintenance scheme. Building flexibility into the system will help us ensure that a responsive service can be provided to changing needs. We have therefore included a reserve list of schemes to replace programmed schemes in case an approved scheme needs to be replaced due to unforeseen circumstances. It may also be necessary to introduce further roads into the programme which are not currently listed in this report. This should only be necessary if a road has rapidly deteriorated during the programme period to a point where intervention involving reconstruction is the only option in order to maintain the road in a safe condition.
- 9.11 A substantial programme of investment in highway maintenance has the potential to increase traffic disruption in the short term and consequently can raise user inconvenience. Effective co-ordination and harmonisation combined with careful and considerate design and programming of works should avoid or significantly mitigate this.
- 9.12 Following the extreme weather conditions of the recent winters there has been an increase in appearance of potholes and associated defects. The ingress of water into surface cracks followed by freezing and thawing has inevitably resulted in accelerated deterioration of road surfaces and an exceptional increase in the number of potholes. The continuous cycle of freezing and thawing, particularly on roads where long term maintenance had not been undertaken, has led to deterioration of road surfaces. A total of £3m was spent in repairing potholes over the years 2009/10 and 2010/11. The cold weather in January 2013, coupled with the highways maintenance backlog, has resulted in another wave of potholes over the next few months. It is estimated that the Council has spent in excess of £600,000 in repairing potholes during the last financial year.
- 9.13 Appendix A lists all carriageway resurfacing, patching, micro asphalt and footway relay works in each ward which are intended to be undertaken during 2014/2015. Where appropriate, the table shows the section of the street that will be treated. Relevant information about the work in each location will continue to be provided in advance to residents by letter and signing. In order to maximise improvement to the street scene, action will be taken to tidy up associated infrastructure and generally reduce street clutter.
- 9.14.1 Traffic Management Measures Review – See Appendix D annexed, detailing the procedure of appraisal process and consultation / governance arrangements in relation to the removal and subsequent assessment relating

to physical measures that are removed as part of the re-surfacing works. The review assesses any identified amendments to existing traffic calming or management measures to ensure quantifiable benefit to the community.

- 9.15 As recommended by the 2010 Task and Finnish Group funding The Council developed a Highway Asset Management Plan (HAMP). Officers have also started Asset Collection Inventories for the whole of the road network making use of the 2010/11, 2011/12 and 2012/13 LIP allocations. The 2014/15 LIP allocation has no allowance for developing a HAMP and any additional funding required will need to be met by Council budgets.
- 9.16 Using Highway Asset Management principles and the previous year's condition surveys (2010/11) carried out on the whole of the road network; officers have estimated the maintenance backlog on the highways network to be £97.293 million. A breakdown of this figure is given below:

Asset	Estimated Maintenance Backlog
Principal Roads	£7.179 million
Remaining Borough Roads	£49.333 million
All Roads	£56.512 million
Footways	£40.781 million
Total Roads and Footways	£97.293 million

The funding required to address this maintenance backlog is estimated at £19.6 million per year, over a five year period. It must be emphasised that without the appropriate investment the maintenance backlog will continue to grow and already the passage of two intervening winters renders the above figures an underestimate of the problem. In order to address this problem a capital bid of some £6 million over the next six years has been submitted aimed at reducing the maintenance backlog, arresting further deterioration and reducing the expensive responsive repairs and the insurance claims.

- 9.17 Adopting HAMP principles marks a move away from "worst first" approach to maintenance operated by the Council sofar. Council officers have therefore recently reviewed the highway maintenance treatments to focus on a preventative approach to maintenance. This will help to maximise the available budget recognising that under the current economic conditions the budgets to address the maintenance backlog are currently not available. Alternative treatments, cheaper than the traditional resurfacing, which will preserve and extend the life of carriageway for a number of years, by minimising the whole life costs of the highways have been considered. These treatments include sealing of carriageway cracks and joints, other localised treatments of carriageway cracks, surface dressing, patching, micro surfacing/micro asphalt-preceded by localised patching, if appropriate. A schedule of items of work for these treatments has been prepared together with the appropriate specification and warrantees and these prices have been incorporated in the current term contracts. A number of potential roads have been identified as suitable for these treatments and are therefore proposed as shown in Appendix A.

- 9.18 Some of these treatments have been tried during the current financial year. Micro asphalt resurfacing was applied to four roads in the programme providing 64% savings and further reducing the overall impact to the environment in terms of reducing lorry journeys to landfill sites that are normally associated with traditional resurfacing methods. This maintenance treatment where appropriate will also be recommended again this year.

The review of other resurfacing and treatment methods meant that we were able to introduce Fortseal carriageway preservation system to one of the roads in the programme. The process consist of spraying a hard bitumen emulsion on to the road surface. This application seals the surface to prevent the effects of oxidation and ravelling, thus helping to arrest further deterioration.

Another method of reconstructing a carriageway by recycling the existing lower road layers in-situ and stabilising them by adding cement has also been tried succesfully. In addition to significant environmental benefits and a much lower carbon footprint compared to normal reconstruction methods, this process has provided a financial saving of some 25%.

- 9.19 An addendum referring to Appendix C will be issued prior to the meeting if capital funding has been ratified.

## **10. LIST OF BACKGROUND PAPERS**

- 10.1 Inspection Survey records and results; Central Project files; advertisement for the London Gazette.
- 10.2 Any persons wishing to inspect the background papers listed above should contact Brian Francis or Chris Chrysostomou on 0208-359-7514 and 020-8359-7200.