

# Cabinet Member

**Decision Maker:** Cabinet Member for City Management & Air

Quality

Date: 16 December 2022

Classification: General Release

**Title:** Planned Preventative Maintenance (PPM)

programme for 2023/24

Wards Affected: All

Policy Context: A Fairer Westminster is one in which our

residents are at the heart of our decisionmaking and help to determine the City's future. By working with you, we can build a more inclusive City that celebrates our diverse communities, and where residents, workers and visitors from all backgrounds

will feel welcome and safe.

**Key Decision:** Yes, due to significant expenditure.

**Financial Summary:** The overall gross expenditure in respect of

the proposed PPM work contained in this report is £15,521,000 for which financial

approval is sought.

The net expenditure is £14,271,000 and is fully contained within the council's approved

capital programme for 2023/24.

Income totalling £1,250,000 is made up

from Contributions from Statutory

Undertakers in respect of work on the pipe

subway network.

**Report of:** Amy Jones, Director of Environment

# 1. Executive Summary

- 1.1 This report seeks approval for the proposed 2023/24 annual programme of Planned Preventative Maintenance (PPM) work in respect of Highways, Public Lighting & Bridges and Structures.
- 1.2 The report also seeks approval to undertake all the initial designs and approximately 50% of the detailed design of the schemes in the 2024/25 programme.

#### 2. Recommendations

- 2.1 That the Cabinet Member for City Management & Air Quality approves the following recommendations.
- 2.2 That the detailed proposals for the **Highways PPM programme** for 2023/24 at an estimated gross cost of £8,794,000 as detailed in Section 5.1 and Appendix A be approved.
- 2.3 That the detailed proposals for **Public Lighting PPM programme** for 2023/24 at an estimated gross cost of £ **4,662,000**, as detailed in Section 5.3 and Appendix D, be approved.
- 2.4 That the detailed proposals for the **Bridges and Structures PPM** programme for 2023/24 at an estimated gross cost of £2,065,000, as detailed in Section 5.2 be approved.
- 2.5 That the gross capital expenditure of £15,521,000 (net capital expenditure of £14,271,000) for 2023/24.
- 2.6 That the Cabinet Member for City Management delegates to the Acting Director for City Highways the authority to make changes to the programmes agreed in recommendations 2.1 to 2.4, subject to the proviso that the overall budget is not exceeded and that the Cabinet Member is consulted on any significant changes.

#### 3. Reasons for Decision

- 3.1 All assets deteriorate over time and any work aimed at maintaining the durability of the asset is classed as programmed maintenance. Such work prolongs the life of the asset and/or maintains structural capacity and is therefore considered as capital expenditure.
- 3.2 Each year the City Council's regular inspection and testing programmes determine the current condition of the various highway assets (Carriageways, Footways, Lighting and Bridges & Structures) and identifies the forward investment needs that will keep the highway network in a safe and reliable condition.
- 3.3 Provision has been made in the capital programme for this expenditure to enable these programmes of work to be implemented together with preparation of forward programmes of work for 2023/24.

3.4 The proposed Planned Preventative Maintenance programme set out in this report will ensure that the City Council's highway assets remain safe and effective.

# 4. Background, including Policy Context

- 4.1 The transport infrastructure in the City of Westminster is of local and national importance and in order to fulfil its potential, it is crucial that the highway network is adequately maintained. This includes not just carriageways and footways, but also bridges, street lighting, drainage, signage and other highway infrastructure assets.
- 4.2 To ensure that the City Council's highway network is efficiently maintained it is applying asset management principles and techniques adopting the standards set out in the National Codes of Practice Well Managed Highway Infrastructure which provides guidance on the efficient, effective and economic delivery of highway maintenance services and include advice on all new and emerging issues and technical developments.
- **4.3** The work needed to ensure effective maintenance can be split into three general headings:
  - *Inspection and Testing* Information gathering to determine asset condition and performance.
  - Routine and Reactive (ad-hoc) Maintenance Routine maintenance comprises of cyclic maintenance activities such as gully cleansing, bulk lamp change and clean etc. Reactive (ad-hoc) maintenance usually arises from the identification of defects from the inspection regime.
  - Programmed Maintenance Programmed maintenance is planned preventative maintenance which prolongs the life of an asset or maintains structural capacity and is therefore considered to be capital maintenance.
- 4.4 The Planned Preventative Maintenance (PPM) programmes identified in this report are classified as programmed maintenance and therefore funded from capital expenditure. The proposed programmes of work for Highways, Public Lighting and Bridges & Structures are set out in Section 5 below.

# 5. Proposed Planned Preventative Maintenance (PPM) Programme

# 5.1 Highways

- 5.1.1 The City Council's annual prioritised PPM programme for footways and carriageways is developed using its Value Management (VM) process which assess scheme priorities using the following weighted criteria engineering condition; defect history; visual appearance and network hierarchy. The Highway Inspectors make an assessment of the engineering condition and visual condition of all Westminster's footways and carriageways at least once a year as part of their routine inspection regime. Each street has its own network hierarchy category assigned to it and data on the defect history of a street is taken from the CONFIRM asset management system.
- 5.1.2 To support the inspectors in this process we also utilise independent thirdparty surveys to validate the scores provided. For carriageways we use an artificial intelligence product and for footways we use manual condition surveys carried out by a third-party provider.
- 5.1.2 The proposed 2023/24 PPM programmes contained at the back of this report have been developed with the application of the VM process described above, along with the results of the extensive consultation undertaken with Ward Members, Amenity Societies, highway inspectors and key stakeholders through the annual 'Highway Nominations' process.
- 5.1.3 Officers will arrange for a response to all nominees in April 2023 so that they know the outcome of the nominations they have submitted and will at that point open up nominations for the 2024/25 PPM programme.
- 5.1.4 The Footway and Carriageway programmes contained in this report in Appendix A are the proposed programmes for 2023/24 and the provisional programme for 2024/25. The 2024/25 programme will also be used as the reserve list for the 2023/24 programme.
- 5.1.5 The Minor Works programme in the PPM programme for footways and carriageways is to allow early intervention to areas of defective carriageway and footway which are in poor condition but over a relatively small area and would therefore not normally qualify for the main PPM programme. Targeting early intervention of some defects should result in a reduction of the number of reactive jobs that are currently being found on the network and produce an overall improvement in network condition. It is proposed to continue with the Minor Works programme line in 2023/24.
- 5.1.6 The Highways Review Panel (HRP) set up in in 2017 comprising of councillors, officers, representatives from the council's Service Provider and a number of 'lay members' from various amenity societies across Westminster met in October of 2022. The purpose of the HRP is for officers to communicate to Members and the lay members of the panel the process officers apply to develop the programme of PPM schemes and any changes being proposed. The primary remit of the lay members of the panel is to scrutinise these processes, particularly the Value Management scoring prioritisation and provide feedback.

- 5.1.7 A statement from the Highways Review Panel can be viewed in the Appendix F.
- 5.1.8 The 2023/24 list of schemes has been checked on site for rigour and cross checked with planned utility works and major public realm schemes to avoid any potential conflicts for network space. We continue to work closely with teams across the council to ensure co-ordination with other activities and in some cases that may mean in-year changes to the programme. Early consultation and co-ordination with key stakeholders is in place to ensure that the proposed programmes are deliverable as part of the approval process.
- 5.1.9 The following table sets out the proposed PPM expenditure for Highways for 2023/24. Appendix A provides the detailed list and includes the source designation. There are numerous data sources which have been included as part of the programme development such as the value management score and nominations received from stakeholders e.g. Amenity Societies.
- 5.1.10 The proposed PPM expenditure for Highways, including the 2023/24 and initial designs for the 2024/25 programme is summarised in the following table.

Highways			
Description	Estimated Cost		
Carriageway Improvements			
Core carriageway schemes (including cycle friendly gullies)	£3,020,000		
CCTV Drainage Surveys	£160,000		
Capitalisation of CAT 2 repairs	£205,000		
Client fees (Inc. Compliance and Audit)	£242,000		
Design (incl. TTO's)	£370,000		
Topo, Coring, Cellar Surveys for 23/24 programme	£179,000		
SUB-TOTAL	£4,176,000		
Minor Works Programme			
Carriageway & Footway works	£500,000		
Client fees (Inc. Compliance and Audit)	£30,000		
Design (incl Technical Analysis of ACS)	£75,000		
SUB-TOTAL	£605,000		
Highways (Continued)			
Description	Estimated Cost		
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Footway Improvements			

Footway Improvement Programme (includes footway strengthening, mastic asphalt conversion & Damaged Paving)	£1,600,000
Capitalisation of CAT 1 repairs	£155,000
Client fees (Inc. Compliance and Audit)	£131,000
Design	£120,000
Topo, Coring, Cellar Surveys for 23/24 programme	£212,000
SUB-TOTAL	£2,218,000
Surface Water Management Programme	
Drainage Improvement Sites including Deep Drainage and Standing Water defects	£1,100,000
Client Fees (Inc. Compliance and Audit)	£100,000
SUB-TOTAL	£1,200,000
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Street Nameplates Programme	
Street nameplates	£50,000
Client Fees (Inc. Compliance and Audit)	£6,000
SUB-TOTAL	£56,000
Asset Management	
Asset Management Consultation	£90,000
Value Management for 2024/25 programme development	£29,000
Annual Condition Surveys for 24/25 programme	£90,000
Network Condition Assessment/Analysis for 23/24 programme	£80,000
SUB-TOTAL	£289,000
Voids In Public Highway	
Investigation, inspection, and remedial works	£250,000
Highways Total	£8,794,000

5.1.11 The total (gross) costs of the Highways PPM programmes in the table above is £8,544,000 for which financial approval is sought. The current Highways budget provision in the approved capital programme is £8,544,000.

# **Surface Water Management Programme**

5.1.11 The surface water management programme is made up of the following areas of work and following the flood events of July 2021 the budget for these

elements was increased to accelerate the council's programme to make repairs to the drainage system.

- Drainage Improvement Sites A long list of prioritised drainage improvement sites has been provided in Appendix D. This programme line mainly covers work to reconstruct gullies because they are in need of repair. Some schemes will necessitate large scale excavations because pipe connections between a gully and the main sewer have collapsed and need replacing. A number of sites across the city suffer from standing water after heavy rainfall. This can be due to incorrect pavement levels in the carriageway or footway or the need to provide extra gullies. Increased expenditure in drainage infrastructure has meant that we have introduced a Value Management approach to identify high risk areas and action accordingly.
- **Drainage Strategy & Inventory** Long term plans and improvements to the drainage service rely on having an accurate inventory and condition data which can be used to inform and validate strategies to improve the service.
- 5.1.12 FM Conway are currently carrying out CCTV surveys of the whole drainage system and this work is continuing next year with a view to this being completed in 23/24. The repairs identified through the process will form part of the drainage improvements programme as well as issues discovered when carrying out routine/ reactive maintenance.
- 5.1.13 The council will also CCTV survey all gullies in roads that we plan to resurface to ensure that any drainage repairs are carried out ahead of resurfacing works to minimise future disruption and asset deterioration associated with return visits.

# 5.2 Bridges and Structures

- 5.2.1 The maintenance identified in this section of the report refers to the City Council's stock of highway structures bridges, footbridges, tunnels etc. The work identified has been derived by prioritising the outstanding items of work in the current structures 'Workbank'. The Workbank holds a forward plan of capital schemes for delivery over the next 5 to 10 years through either the annual rolling programme of PPM covered by this report, or through other sources of funding such as the City Council's wider Capital Programme or grant funding from Transport for London.
- 5.2.2 The Workbank and prioritisation process assimilates information and trends from a number of different sources such as the results from the annual inspection programmes, life cycle planning outputs and the general day to day knowledge and understanding of needs associated with managing the highway structures stock.
- 5.2.3 The annual programme of Planned Preventative Maintenance for Bridges & Structures can be divided into two broad headings:

**Structural** - This is essential to ensure the integrity and load carrying capacity of the Bridge/Structure is maintained.

# Non-Structural - such work includes:

- Renewal of Mechanical and Electrical equipment
- Renewal of Lighting
- Major Repainting / Corrosion Protection
- Renewal / Replacement of drainage systems etc.
- 5.2.1 The programme of prioritised Programmed Maintenance for Bridges & Structures in 2023/24 for which financial approval is sought is as follows:

Bridges and Structures PPM 2022/23	
Description	Estimated Cost
Structural	
Pipe Subway – Brickwork Repairs Phase 1 of 5	£250,000
Pipe Subway - Access Improvements - CARBON EFFICIENT SCHEME	£38,000
Pipe Subway - Utilities Bracket Improvements – Immediate Works – Phase 4 of 4	£77,000
Pipe Subway – Cranbourn Deep level Access and pump and control panel upgrades Improvements	£85,000
Sutherland Avenue Retaining Wall	£35,000
Bessborough Subway Wall Joints and Ties	£22,000
Harrow Road Retaining walls and Arches – Stage 5 Works	£47,500
Charing Cross Anti-skid Application	£22,000
Sub-Total	£576,500
Non-Structural	
Pipe Subway – LED Lighting Upgrade - Phase 5 of 6	£102,000
Charing Cross M&E Upgrades	£170,000
Marble Arch Fountain M&E Upgrades	£72,500
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Bessborough Subway M&E Upgrades	£35,000
. 0	£35,000 £150,000
Bessborough Subway M&E Upgrades  Pipe Subway – Ventilation Improvements – Design Works  Pipe Subway – Kingsway Steel carriageway troughs and beam anti corrosion and water management injection Phase 2 of 3	£150,000 £195,000
Bessborough Subway M&E Upgrades  Pipe Subway – Ventilation Improvements – Design Works  Pipe Subway – Kingsway Steel carriageway troughs and beam	£150,000
Bessborough Subway M&E Upgrades  Pipe Subway – Ventilation Improvements – Design Works  Pipe Subway – Kingsway Steel carriageway troughs and beam anti corrosion and water management injection Phase 2 of 3	£150,000 £195,000

Carbon Friendly - Strand Underpass OVD System Upgrade, CCTV/ OVD/ SOS Telephones	£40,000	
Carbon Friendly – WCC Infrastructure Asset Monitoring and Integration Feasibility	£38,000	
Statues and Monuments Inspections	£15,000	
Sub-Total	£990,500	
Other costs (split between lines as detailed below)		
Client Costs (including Compliance & Audit costs)	£91,900	
Design & Management Costs	£144,300	
Risk & Contingency	£125,100	
Asset Management – Improvements to BridgeStation	£32,000	
Assets of Unknown Origin	£105,000	
Sub-Total	£498,300	
Bridges and structures Total	2,065,300	

- 5.2.2 The total (gross) costs for the above proposed programmes of work is estimated at £2,065,000 for which financial approval is sought.
- 5.2.3 The costs associated with the Pipe Subway Network total £1,250,000 (including all fees and risk & contingency). All these costs are fully funded by the Utility Companies who house their plant and equipment in the Pipe Subways. The City Council is able to recharge their costs to maintain the Pipe Subway network to the utility companies under the London County Council General Powers Act 1958.
- 5.2.4 The total income in 2023/24 is expected to be £1,250,000, the overall net cost to the city council is therefore £815,000 for which provision of £815,000 exists within the current capital programme.
- 5.2.5 A simple narrative of the requirements of each scheme in the programme of work is provided below.

#### Pipe Subway Works - Various Works

- 5.2.6 Westminster is responsible for maintaining a 4.5mile network of underground tunnels in the borough which contain various utility services e.g. gas, water, electricity, communications cables etc. As mentioned in 5.2.6 above, the costs to maintain the pipe subway network is fully recoverable form the utility services. In 2023/24 financial approval is sought of £1,250,000 (Inclusive of risk and contingency etc. The works required are described in more detail in the narrative below.
- 5.2.7 These costs are fully rechargeable to the utility companies with equipment in the affected pipe subway.
- 5.2.8 Work proposed in the Pipe Subway Network in 2023/24 is as follows:

- Brickwork repairs throughout the pipe subway network and further investigations into causes of cracking in the brickwork to develop the most cost-effective repair methodology. The works will be undertaken in highest priority order.
- Deep level access improvements consisting of the replacement of corroded access ladders. Works also include installation of new security doors.
- Anti-corrosion painting to the steel troughs and beams and water management measures in the Kingsway Pipe Subway.
- Following on from the option study, works to combat the the effects of condensation on the steel pipes belonging to the utility companies within the pipe subway in particular gas and water. Install methods to increase ventilation within the network and reduce condensation. Reducing condensation will reduce the risk to the utility assets within the network.
- Continued improvements to lighting and utility brackets within the pipe subway network.

#### **Charing Cross Mechanical and Electrical Upgrades**

5.2.9 Upgrade all mechanical and electrical units up to the current regulations. Ensure that components that are critical to the safe operation of the asset are up to date. This includes but is not limited to the installation of the new distribution board. This also allows for testing and inspection of the finished system.

#### Marble Arch Fountain Mechanical and Electrical Upgrades

5.2.10 Replacement of the pumps that maintain the fountain, currently only one pump is functioning. This also includes the distribution board and control panel replacement.

#### **Marble Arch Fountain Feasiblity**

5.2.11 Feasiblity study on the future improvement works to the fountain. Review the tourism potential and use of the public space. The current fountain is prone to water loss.

# **Strand Underpass OVD Upgrades**

5.2.12 Following on from the beam one upgrade to the OVD system, these works enable the camera system and network within the tunnel.

# **Sutherland Avenue Roundabout Retaining Wall**

- 5.2.13 Scheme to repair the stonework to repair the identified defects on the wall of the roundabout. The scheme will also repair other defects that have been identified.
- 5.2.14 These works also include fabrication and installation of missing railing and repainting of existing railings.

# **Harrow Road Retaining Walls/Arches**

5.2.1 Following on from the investigative works and feasibility works to the retaining wall and arches on Harrow Road. These works are to the voids that have been identified in the arches. The works to the arches include brickwork repairs and and decommissioning the arches by infilling or other means. This will ensure there are no future risks to the highway. Also need to agree stakeholder access arrangement for future maintenance and inspections.

# Bessborough Subway – Expansion Joint and Tiling works/Mechanical and Electrical Upgrades

5.2.2 Bessborough Subway is located next to Pimlico Station and is an important transportation link. Following on from recent works to the subway, this scheme will upgrade the mechanical and electrical components that have been identified as critical. The expansion joints are to be cleaned and resealed.

# **Charing Cross Staircase Nosing Replacement**

5.2.15 Following on nosing replacement to other exits, the stairs at Exit 4 will be treated with an anti-slip coating. Other defects will be repaired for example the replacement of ceiling tiles.

#### **Statues and Monuments Inspections**

5.2.16 We have identified the highest priority statues and monuments that are cleaned regularly but require a more in-depth inspection of the structures. Defect reports and details of the structure will be added to BridgeStation.

#### **Asset Management**

5.2.26 To make improvements and implement initiatives that help with planning the capital investment programmes for PPM. These initiatives are essential if the council is to undertake maintenance optimally and achieve value for money. These initiatives typically involve improvements to the Bridge Management System (Bridgestation) and updating Life Cycle Plans etc. the results help inform the forward programme of capital maintenance.

# **Assets of Unknown Origin**

5.2.27 Every year the City Council has to deal with assets that are either within the public highway or adjacent to the public highway which have no known

- ownership. Often these assets have been neglected and require work to repair or make safe. It is usually the City Council that has to step in and deal with these assets as part of its obligation under the Highways Act 1980 to maintain a network which is in safe operating condition.
- 5.2.28 Typical examples of such assets recently have been the Lancaster Gate Memorial and the Police Call Box in Piccadilly etc. These assets are often legacy structures which still remain after adjacent buildings have long since been demolished and no clear ownership remains, or the time taken to establish ownership is likely to be lengthy and work is required urgently.
- 5.2.29 Financial approval of £105,000 is sought in 2023/24 to deal with these assets of unknown origin and where necessary make safe and repair if it is deemed appropriate for public safety reasons.

# 5.3 Public Lighting

- 5.1.1 In developing the annual programme of Planned Preventive Maintenance (PPM) for Public Lighting, recognised and established Asset Management principles and techniques have been applied with a view to prolonging the life of the asset and/or maintaining structural capacity and meet the city for all objectives ensuring that public lighting is efficiently managed and that its residents and visitors can enjoy safe and well-lit streets.
- 5.1.2 The programme of proposed schemes, which is presented in more detail in **Appendix D**, has been through a prioritisation process using the City Council's Lighting Value Management Model (LVMM). This process considers a range of factors e.g. structural integrity, lighting efficiency and performance, social locations and road hierarchy. Improvements to the data calculating these factors has been undertaken to further align with the City for All Vision pillars.
- 5.1.3 The following table summarises the proposed 2023/24 annual programme of PPM for Public Lighting together with the estimated costs against each budget heading of the overall programme.

Lighting		
Description	Estimated Cost	
Lighting Improvements	£1,649,000	
Aged Expired Equipment	£385,000	
Cherished Column Replacement	£82,000	
Load Testing	£150,000	
Structurally Critical Columns	£2,271,000	
Illuminated Sign Replacement	£100,000	

5.1.4 The total cost for the above proposed PPM programmes of work is estimated at £4,662,000 (Inclusive of all fees, risk and contingency and design costs), for which financial approval is sought. Provision for this expenditure exists within the approved capital programme for 2023/24.

# **Lighting Improvements**

- 5.1.5 A works programme that comprises of 'whole street' improvements to meet the Westminster Lighting Standard requiring replacement of all Columns and/or Lanterns. A 'Value Management' prioritisation process is used based on an aggregated score of structural risk, lighting deficiency, and visual condition of the column, lantern and electrics. In addition, the process takes account of other 'Local' factors including, accident black-spots, low lighting levels, high crime area, prime site/important streets, area of significant pedestrian use and complaints.
- 5.1.6 The Value Management process has been revised to include the recent visual inspection Guidance Note 22 Asset Management Toolkit: Minor Structures (GN22), providing street and asset level column condition. This aligns with the risk-based approach of Well Managed Highway infrastructure.
- 5.1.7 The councils LED/CMS rollout in 2019-2022 has greatly reduced energy consumption and carbon emissions. And the budgets usage has reflected this with a greater amount of column replacements and re-use of existing LED lanterns.
- 5.1.8 2021/22's asset inventory update has provided improvements to our asset locations and their current attachments to improve our knowledge of our columns remaining useful life, improving our future LVMM process.

#### Age Expired

- 5.1.9 A key part of the annual PPM programme is 'Age Expired Equipment'. It is essential to replace equipment that has become 'age expired' or beyond economical repair. The current approach is to replace assets in line with asset life included within 'life cycle' planning. So, as an example: for an asset that has an 'asset life' of say 40 years this would assume a replacement programme of 2.5% of the stock each year. Similarly, for an 'asset life' of say 20 years this would assume a replacement programme of 5% of the stock each year.
  - 5.1.10 The 'Lighting Improvement' and 'Age Expired Equipment' programmes are closely aligned to prioritise lighting improvements towards those streets where assets are at or reaching end of life.

#### **Cherished Columns**

5.1.11 A specific 'Cherished Column' replacement programme, included to deal with 'age expired heritage columns' many of which are protected as 'listed' items of street furniture and therefore protected in law and are of significant historic value.

# **Load Testing**

- 5.1.12 To ensure that the structural risk is understood and managed an annual programme of load testing was introduced following the catastrophic failure of a lamp column in Cavendish Square on 5 January 1998.
- 5.1.13 Non-destructive load testing is a vital asset management tool to understand the structural condition of columns and their life expectancy. Other, more specialised, testing is also undertaken on some cherished equipment, including magnetic crack detection testing and thickness testing.
- 5.1.14 Records from previous testing programmes help build up 'deterioration profiles' of the asset types and life characteristics.
- 5.1.15 The application of GN22 will also include testing and inspections of our flashing beacon and illuminated signposts, to gauge their condition and incorporate into replacement programmes. GN22 provides a step-by-step column assessment as part of a risk-based approach that aligns with the code of practice well-managed highway infrastructure.

# **Structurally Critical Columns**

- 5.1.16 Any column found to be structurally unsafe or at risk, following analytical assessment (load testing) and specialist investigation during the current financial year, is replaced under the budget for 'Structurally Critical Columns'.
- 5.1.17 Due to three column failures in the last five years it was identified that older large grey wornum columns are providing false positive load testing results due to the embellishment kits hiding the true condition of the column. The failed columns were all older than 30 years and this enhanced structural critical budget is the second and final year of a two year programme to replace all 925 wornums. A list of roads having these replaced is included in the appendices.
- 5.1.18 Part of this budget is also to be used to further develop the City Council's risk management strategy for lighting columns and to develop improved deterioration modelling to ensure that best value is achieved.

# **Illuminated Signs Replacement**

5.1.19 The Council has focused on de-illumination of signs as part of the 20mph speed limit put in place in 2020 where road safety audits confirm the de-illumination in line with current traffic sign regulations, reducing energy usage and carbon

5.1.20 Where a sign still needs to be illuminated, we will change to externally illuminated LED signs. We will look to replace existing externally sign lights using traditional light sources with LED lights, followed internally illuminated signs with retro-reflective signs and LED sign lights to allow expected future changes to illumination requirements to be implemented easier.

#### Gas street lighting electrification programme

- 5.1.21 Westminster City Council are the custodians of an historic catalogue of Cherished and Listed lighting furniture.
- 5.1.22 The Council has engaged local residents, conservation groups and businesses on the proposed works. The planned programme has been paused while discussions progress. The exception being if urgent public safety requirements necessitate an immediate fix.
- 5.1.23 Following the engagement review, 174 of the gas lights are proposed to remain, with the remaining 94 unlisted assets to be changed to the gas effect LED, along with additional infills to improve lighting levels in roads with moderate and high crime reports. Financial approval for works in 2023/24 of £500,000 is required to progress with Gas electrification programme. This work will be subject to final agreement with stakeholders from the engagement exercise, along with a review of the unlisted lights for re-use rather than replacement, and discussion with Historic England prior to them being converted to electric. This budget will also enable us to carry out any safety critical works that arise.

#### **Isolated Pitches & Market Electrics**

- 5.1.24 With the growth, development and changing nature of markets and isolated pitches, the power demands have also increased beyond the design capabilities of the local network. In addition, it has been sometime since these power facilities have been upgraded to modern standards. Too often in recent years these power sources have failed.
- 5.1.25 The budget is for investigation and improvements to the existing infrastructure only and to bring up to current standards.
- 5.1.26 Financial approval of £1,100,000 was provided in 2019/20 and this work will continue into 2023/24 following surveys during 2022. £230,000 for Market electrical improvements and £330,000 of Isolated Pitch improvements required. No further funds are required at this stage.

# 6 Financial Implications

6.1 The total gross expenditure in 2023/24 required to implement the annual works programmes for Programmed Maintenance of the City Council's Highways, Bridges & Structures and Public Lighting programmes, as set out

- paragraphs 2.1 to 2.4 of this report is £15,521,000 for which financial approval is sought.
- Taking into consideration, income statutory undertakers for work on the pipe subways totalling £1,250,000, the overall net cost to the City Council in 2023/24 will be £14,271,000
- 6.3 Budget provision of £14,271,000 for PPM across Highways, Lighting and Bridges and Structures is contained within the current approved capital programme.
- The revenue impact of funding the Capital Programme through borrowing will be met from the corporate budget provision for debt charges. However, City Management and Communities will be charged the depreciation cost for these assets, which are dependent on their useful life.
- The PPM programmes are considered such that they will have no negative impact regarding revenue maintenance costs in the future.

# 7. Legal Implications

- 7.1 The City Council, as local highway authority, has a duty under the Highways Act 1980 to ensure the effective maintenance and management of the Westminster's highway and highway assets (including lighting), so that they remain safe and effective.
- 7.2 Legal Services (ref: Isaac Carter) has considered this report and is satisfied that the PPM set out in paragraph 5 of this report helps discharge the City Council's duty (as per paragraph 7.1 above) in this respect.

# 8 Carbon Impact

- 8.1 Since the council's declaration of a climate emergency in September 2019, City Highways have been working closely their Service Provider FM Conway to look at ways of reducing carbon emissions from highway maintenance activities and delivering capital improvement schemes on the highway network.
- 8.2 In the 2020/21 PPM programme, a relatively simple scheme to replace the paving slabs in King Street St James's was chosen as a trial scheme to understand what carbon savings could be saved by:-
  - Using All electric plant and equipment
  - Using low carbon concrete paying slabs
  - Fully electric welfare units on site
  - 100% of arisings from site re-cycled
  - Use of HVO fuel (a green alternative to diesel) to power lorries servicing the site.

- Minimising people travel by working from home or using carbon friendly modes of transport where travel could not be avoided.
- 8.3 The King Street trial demonstrated that by introducing the above measures, carbon savings of 58% are possible, the trial was also valuable in terms of understanding the logistics of operating a low carbon site.
- 8.4 King Street provided the blueprint for a low carbon operating model, in 2021/22 7 footway paving schemes were delivered to the new operating model across the Westminster network.
- 8.5 The table below shows the estimated operational (on site) carbon savings that have been achieved since the King Street trial on footway schemes in the PPM programme.

	Operational carbon savings (Tonnes CO2e) *	Percentage Carbon Savings *
King Street	4.21	71%
Rathbone Street	5.59	94%
Norfolk Square	5.32	89%
Northumberland Place	5.27	89%
Hobart Place	5.6	94%
Alderney Street	4.69	79%

**Total Carbon Savings** 

30.68 Tonnes CO2e

- \* Savings are measured and compared against a similar footway scheme carried out without any carbon reductions measures applied.
- 8.6 The table shows that since the Kings Street trial in November 2020, carbon emissions totalling 30.68 Tonnes of CO<sub>2</sub> equivalent (TCO<sub>2</sub>e) have been saved from the council's annual footway programme and the entire annual footway repaving programme is now being delivered to the new low carbon operating model.
- 8.7 The next challenges will be to reduce carbon from other programme lines such as the annual carriageway re-surfacing programme which require larger items of plant for which there are currently no viable electric equivalents. It is likely that the uses of diesel alternatives such as Hydrotreated Vegetable Oil (HVO) which can provide CO<sub>2</sub> savings of up to 90% compared to diesel.
- 8.8 Carbon savings are also being made by incorporating new low carbon materials into the PPM programme, especially 'warm mix' asphalts which require less energy to produce making significant carbon savings. Incorporating recycled asphalt material of up to 50% also helps to reduce carbon emissions.
- 8.9 The intention is that over the next few years leading up to 2030, the entire annual PPM programme will be delivered to the low carbon operating model along with routine and ad-hoc maintenance activities, and capital schemes delivered by the public realm team.

- 8.10 In 2023/24, officers intend to make calculating a baseline carbon figure for the work carried out by FM Conway in 2022/23 across all aspects of highway maintenance and improvements the focus of their attention. FM Conway have developed a carbon calculator which is linked to their ordering system, every material item ordered for Westminster works will automatically calculate the carbon associated with material. It will also calculate fuel consumption associated with items of plant such as lorries, excavators, vans etc.
- 8.11 The intention is that 2022/23 will become the baseline year, and as programmes of work transition to the new low carbon operating model, reductions in carbon emissions will be demonstrated year on year. Once the 2022/23 baseline is calculated, emissions reduction targets will be set up to 2030 to measure out actual versus planned emissions targets.

#### 9. Consultation

- 9.1 The 2023/24 forward programmes have been developed following consultation with the Highways Review Panel and exercises with Ward Members, Amenity Societies, highway inspectors and key stakeholders.
- 9.2 The results of the consultation have been reviewed and, where justified, included in the list of scheme proposals contained in this report.
- 9.3 In respect of the individual schemes Public Notices will be used to advertise the proposed works in a given location and would give the outline details of works. In addition, a letter-drop to affected households will be made outlining details of the scheme with a plan and contact details of appropriate contractor/client officers.

#### 10. Crime and Disorder Act 1998

10.1 It is recognised that good street lighting has a deterrent effect on street crime and burglaries etc. All street lighting improvement schemes within the capital programme, take into account the need for better lighting. The Lighting against Crime programme is specifically targeted at crime hot-spots identified using information relating to crime and developed in liaison with the police. The change to the use of white light sources is having beneficial effects on the quality of the night-time CCTV and for individuals to be able to recognise friend or foe more easily.

#### 11. Health and Safety Issues

11.1 All works undertaken will be closely monitored and carried out to the requirements of the Health & Safety at Work Act 1974 and the Construction (Design and Management) Regulations 2015.

# 12. Impact on Health and Wellbeing

- 12.1 The proposals identified in this report are considered to have a minimal impact on the health and wellbeing of the community. Whilst some low level negative impacts may be experienced during the construction phase (associated with dust and noise nuisance), overall the works are expected to produce benefits for the community associated with the highway improvements.
- 12.2 Its more likely that Health and Wellbeing would be impacted if funding was not agreed.

# 13. Equalities Implications

- 13.1 Under the Equalities Act 2010 the council has a "public sector equality duty". This means that in taking decisions and carrying out its functions it must have due regard to the need to eliminate discrimination, harassment, victimisation and any other conduct prohibited by the 2010 Act;
  - to advance equality of opportunity between persons who share a relevant protected characteristic (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation) and those who do not share it; and to
  - foster good relations between persons who share a relevant protected characteristic and those who do not share it.
- 13.2 The City Council is also required to have due regard to the need to take steps to take account of disabled persons' disabilities even where that involves more favourable treatment; to promote more positive attitudes toward disabled persons; and to encourage participation by disabled persons in public life. The 2010 Act states that "having due regard" to the need to promote equality of opportunity involves in particular having regard to:
  - the need to remove or minimise disadvantages suffered by persons sharing a protected characteristic;
  - take steps to meet the needs of persons sharing a protected characteristic that are connected with it:
  - take steps to meet the needs of persons who share a protected characteristic that are different from those who do not; and
  - encourage persons with a protected characteristic to participate in public life or any other activity in which participation by such persons is disproportionately low.
- 13.3 The courts have held that "due regard" in this context requires an analysis of the issue under consideration with the specific requirements set out above in mind. It does not require that considerations raised in the analysis should be

- decisive; it is for the decision-maker to decide what weight should be given to the equalities implications of the decision.
- 13.4 The equalities impacts of Planned Preventative Maintenance (PPM) programme for 2023/24 in respect of Highways, Public Lighting & Bridges and Structures on the users of the various Council assets which are the subject of this report have been considered in the creation of this report.

If you have any queries about this Report or wish to inspect any of the Background Papers, please contact:

Mark O'Leary

moleary@westminster.gov.uk

#### **APPENDICES**

**Appendix A -** Carriageways Improvement Programme

Appendix B - Footways Improvement Programme

**Appendix C – Minor Works Programme** 

**Appendix D –** Street lighting Programmes

**Appendix E –** Drainage Works Programme

**Appendix F –** Highways Review Panel Statement

NB: For individual Cabinet Member reports only

For completion by the Cabinet Member City Management & Air Quality

#### **Declaration of Interest**

I have <<u>no interest to declare</u> / to declare an interest> in respect of this report

Signed:	Palbintony	Date:	16/12/2022
NAME:	Councillor Paul Dimoldenberg		
State natur	re of interest if any:		
	u have an interest, you should se decision in relation to this matter		whether it is appropriate
For the rea	asons set out above, I agree the r	recommendatio	n(s) in the report entitled
	Preventative Maintenance (PPM options which are referred to but		•
Signed:			
	Pal Dinke any		
Cabinet M	Nember for City Management & A 16/12/2022	air Quality	
If you have	e any additional comment which y	ou would want	actioned in connection

If you have any additional comment which you would want actioned in connection with your decision you should discuss this with the report author and then set out your comment below before the report and this pro-forma is returned to the Secretariat for processing.

Additional comment:

If you do <u>not</u> wish to approve the recommendations, or wish to make an alternative decision, it is important that you consult the report author, the Director of Law, City Treasurer and, if there are resources implications, the Director of People Services

(or their representatives) so that (1) you can be made aware of any further relevant considerations that you should take into account before making the decision and (2) your reasons for the decision can be properly identified and recorded, as required by law.

Note to Cabinet Member: Your decision will now be published and copied to the Members of the relevant Policy & Scrutiny Committee. If the decision falls within the criteria for call-in, it will not be implemented until five working days have elapsed from publication to allow the Policy and Scrutiny Committee to decide whether it wishes to call the matter in.

# **Other Implications**

- 1. Resources Implications
- 2. Business Plan Implications
- 3. Risk Management Implications
- 4. Health and Wellbeing Impact Assessment including Health and Safety Implications See Section 11
- 5. Crime and Disorder Implications See section 10
- 6. Impact on the Environment
- 7. Equalities Implications See section 13
- 8. Staffing Implications See section 13
- 9. Human Rights Implications
- 10. Energy Measure Implications
- 11. Communications Implications
- 12. Counter Terrorism and Security Implications

Note to report authors: If there are particularly significant implications in any of the above categories these should be