



City of Westminster

Cabinet Member Report

Meeting or Decision Maker:	Cabinet Member for City Management – Councillor James Spencer
Date:	16 February 2022
Classification:	General Release
Title:	Planned Preventative Maintenance (PPM) programme for 2022/23 in respect of Highways, Public Lighting & Bridges and Structures
Wards Affected:	City wide
City for All/Policy Context:	The planned programmes support the ‘City for All’ vision in delivering a well-managed, high quality sustainable streetscape whilst protecting and enhancing Westminster’s unique heritage.
Key Decision:	Yes
Financial Summary:	<p>The overall gross expenditure in respect of the proposed PPM work contained in this report is £16,863,000 for which financial approval is sought.</p> <p>The net expenditure is £16,163,000 and is fully contained within the council’s approved capital programme for 2022/23.</p> <p>Income totalling £700,000 is made up from Contributions from Statutory Undertakers in respect of work on the pipe subway network.</p>
Report of:	Director of City Highways

1. Executive Summary

- 1.1 This report seeks approval for the proposed 2022/23 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 2023/24 programme.

2. Recommendations

- 2.1 That the Cabinet Member for City Management approves the following recommendations.
- 2.2 That the detailed proposals for the **Highways PPM programme** for 2022/23 at an estimated gross cost of **£8,730,000** as detailed in Section 5.1 and Appendix A be approved.
- 2.3 That the detailed proposals for **Public Lighting PPM programme** for 2022/23 at an estimated gross cost of **£ 6,648,000**, 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 2022/23 at an estimated gross cost of **£1,485,000**, as detailed in Section 5.2 be approved.
- 2.5 That the gross capital expenditure of **£16,863,000 (net capital expenditure of £16,163,000)** for 2022/23.
- 2.6 That the Cabinet Member for City Management delegates to the 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 2022/23.
- 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 and support the City for All agenda.

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 third-party 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 2022/23 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 2022 so that they know the outcome of the nominations they have submitted and will at that point open up nominations for the 2023/24 PPM programme.
- 5.1.4 The Footway and Carriageway programmes contained in this report in Appendix A are the proposed programmes for 2022/23 and the provisional programme for 2023/24. The 2023/24 programme will also be used as the reserve list for the 2022/23 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 2022/23.
- 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 May and November of 2021. 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 22/23 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 An initial programme for delivery will be provided to the Cabinet Member in April 2022.

5.1.10 The following table sets out the proposed PPM expenditure for Highways for 2022/23. Appendix A provides the detailed list of schemes in the 2022/23 programme 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.

5.1.11 The proposed PPM expenditure for Highways, including the 2022/23 and initial designs for the 2023/24 programme is summarised in the following table.

Highways	
Description	Estimated Cost
Carriageway Improvements	
Core carriageway schemes (including cycle friendly gullies + skid resistance)	£2,630,000
CCTV and remedial drainage	£375,000
Capitalisation of CAT 2 repairs	£205,000
Client fees (Inc. Compliance and Audit)	£209,000
Design (incl. TTO's)	£350,000
Topo, Coring, Cellar Surveys for 22/23 programme	£166,000
SUB-TOTAL	£3,935,000
Minor Works Programme	
Carriageway & Footway works	£500,000
Client fees (Inc. Compliance and Audit)	£30,000
Design (incl Technical Analysis of ACS)	£95,000
SUB-TOTAL	£625,000

Highways (Continued)	
Description	Estimated Cost
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	£140,000
Topo, Coring, Cellar Surveys for 22/23 programme	£156,000
SUB-TOTAL	£2,182,000
Surface Water Management Programme	
Drainage Improvement Sites including Deep Drainage and Standing Water defects	£1,200,000
SUDS investigation and delivery	£200,000
Drainage Strategy & Inventory	£80,000
Client Fees (Inc. Compliance and Audit)	£120,000
SUB-TOTAL	£1,600,000
Street Nameplates Programme	
Street nameplates	£93,000
Client Fees (Inc. Compliance and Audit)	£6,000
SUB-TOTAL	£99,000
Asset Management	
Asset Management (Including Life Cycle Planning)	£90,000
Value Management for 2023/24 programme development	£26,000
Annual Condition Surveys for 23/24 programme	£78,000
SCRIM survey	£15,000
Network Condition Assessment/Analysis for 23/24 programme	£80,000
SUB-TOTAL	£289,000
Highways Total	
	£8,730,000

5.1.12 The total (gross) costs of the Highways PPM programmes in the table above is **£8,730,000** for which financial approval is sought. The current Highways budget provision in the approved capital programme is **£8,730,000**.

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 has been 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 either because they are damaged and in need of repair. Some schemes will necessitate large scale excavations where 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.
- **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.
- **SUDS investigation and delivery** - To help improve the city's resilience for flood events it is proposed to investigate the use of Sustainable Urban Drainage Systems (SUDS). SUDS should enable us to slow down water flow into the drainage system. A budget line has been allocated to the investigation and delivery of this in 22/23 and officers will also pursue central government funding to assist with this initiative.

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. To date we have surveyed around 60% of the network.

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.

5.2.4 The programme of prioritised Programmed Maintenance for Bridges & Structures in 2022/23 for which financial approval is sought is as follows:

Bridges and Structures PPM 2022/23	
Description	Estimated Cost
Structural	
Pipe Subway – Brickwork Repairs Phase 2 of 4	£50,000
Pipe Subway - Access Improvements - CARBON EFFICIENT SCHEME	£35,000
Pipe Subway - Utilities Bracket Improvements – Immediate Works – Phase 3 of 4	£77,000
Carbon Friendly – Charing Cross Nosing Replacement	£115,000
Pipe Subway – Piccadilly Deep level Access Improvements	£64,000
Bishops Bridge Corrosion	£15,000
Sub-Total	£356,000
Non-Structural	
Pipe Subway – LED Lighting Upgrade - Phase 4 of 6	£102,000
Harrow Road retaining walls/ arches – Feasibility Investigations	£40,000
Pipe Subway – Ventilation Improvements – Design Works	£45,000
Pipe Subway – Kingsway Steel carriageway troughs and beam anti corrosion and water management injection Phase 1 of 3	£150,000
Pipe Subway – Piccadilly Pipe Subway – Corrosion and Resin Water management injections	£130,000

Pipe Subway – Handrails and Hop Overs	£45,000
Kingsway Tram Tunnel Access, Security and M&E Upgrades	£79,000
Carbon Friendly - Strand Underpass Access, Security and M&E Upgrades	£57,000
Carbon Friendly – WCC Infrastructure Asset Monitoring and Integration Feasibility	£40,000
Sub-Total	£688,00
Other costs (split between lines as detailed below)	
Client Costs (including Compliance & Audit costs)	£90,000
Design & Management Costs	£98,000
Risk & Contingency	£115,000
Asset Management – Improvements to BridgeStation	£32,000
Assets of Unknown Origin	£106,000
Sub-Total	£441,000
Bridges and structures Total	1,485,000

5.2.5 The total (gross) costs for the above proposed programmes of work is estimated at **£1,485,000** for which financial approval is sought.

5.2.6 The costs associated with the Pipe Subway Network total **£700,000** (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.

5.2.7 The total income in 2022/23 is expected to be **£700,000**, the overall net cost to the city council is therefore **£785,000** for which provision of **£785,000** exists within the current capital programme.

5.2.8 A simple narrative of the requirements of each scheme in the programme of work is provided below.

Pipe Subway Works – Various Works

5.2.9 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 from the utility services. In 2022/23 financial approval is sought of **£700,000** (Inclusive of risk and contingency etc. The works required are described in more detail in the narrative below.

5.2.10 These costs are fully rechargeable to the utility companies with equipment in the affected pipe subway.

5.2.11 Work proposed in the Pipe Subway Network in 2022/23 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.
- Option study to determine the effect of condensation on the steel pipes belonging to the utility companies within the pipe subway in particular gas and water. Ways to increase ventilation within the network and reduce condensation. Reducing condensation will reduce the risk to the utility assets within the network.
- Corrosion and resin water management injection works to the Piccadilly pipe subway.

5.2.12 The total cost of implementing all of the above is **£700,000 (including risk & contingency and fees)**. The costs are 100% reimbursable from the utility companies occupying the pipe subway network.

Charing Cross Tread and Riser Refurbishment – Carbon Friendly

5.2.13 The existing treads on the steps to Charing Cross Underground station from Villers Street are worn and have a number of damaged nosings. There are a number of treads that are damaged and loose. The treads have exceeded lifespan and require replacement.

5.2.14 Financial approval of **£153,100** (inclusive of all fees, risk & contingency etc.) is sought in 2022/23 to implement this scheme.

Harrow Road retaining walls/arches – Feasibility Study

5.2.15 The retaining wall along Harrow Road has brick arches that support a brick parapet wall at the back of the footways. The condition of the arches is unknown, a liability to the highway. The scheme will include investigations on the ownership of the arches. If ownership of the arches is proven to Westminster, then specialist surveys and vault condition surveys will be carried out with a report and recommendations for addressing the liability. The scheme also includes vegetation clearance.

5.2.16 Financial approval of **£29,500** (inclusive of all fees, risk & contingency etc.) is sought in 2022/23 to implement this scheme.

Kingsway Tram Tunnel access, security and M&E

5.2.17 Following the successful restoration of the power to Kingsway Tram Tunnel, London Borough of Camden is opening their section to the public. As a result the scheme is to secure the area with new security shutter doors. The scheme

will update the access and upgrade the lighting and power outlets. The scheme will be operated as a carbon efficient project using the learnings from the 2020 Kings Street carbon efficient trial scheme and the 2021 Parliament Street Subway scheme.

- 5.2.18 Financial approval of **£91,000** (inclusive of all fees, risk & contingency etc.) is sought in 2022/23 to implement this scheme.

Strand Underpass access, security and M&E

- 5.2.17 The Strand Underpass is a road tunnel taking a single lane of traffic from Waterloo Bridge under the Strand/Aldwych onto the Kingsway. The road underpass has various systems which need to be in a good condition to allow the safe operation of the underpass including, lighting, ventilation, drainage, fire alarms etc.
- 5.2.18 The existing plant room requires a new security door as the existing door has been damaged due to a break in. The scheme will include an upgrade to LED lighting within the plant room.
- 5.2.19 Financial approval of **£67,700** (inclusive of all fees, risk & contingency etc.) is sought in 2022/23 to implement the scheme.

Bishops Bridge Corrosion works

- 5.2.20 Bishops Bridge spans the railway and canal in Paddington, the City Council is responsible for two spans of the bridge over the Grand Union Canal, the remainder of the bridge is the responsibility of Network Rail, the bridge was constructed in 2006. Recent inspections have noted visible corrosion to a main beam near the canal side pier.
- 5.2.21 The scheme will involve an investigation of the cause of the corrosion and possible solutions. This scheme will include sealing of inspection covers and treatment and repair of the corroded steel.
- 5.2.22 Financial approval of **£17,800** (including all fees and risk & contingency) is sought in 2022/23 to implement this scheme.

WCC Infrastructure & asset monitoring and integration feasibility

- 5.2.23 Following a feasibility report of the existing Supervisory Control and Data Acquisition (SCADA) management system currently monitoring the Strand Road Underpass. It was recommended that the system be updated to allow the use of a mobile app that will send alerts to our service provider. This would also allow remote monitoring of other assets for example the pipe subway network and Piccadilly Underpass.
- 5.2.24 The scheme also enables further coverage of the various service tunnels accesses and hatches with sensors and CCTV, with the aim of creating a

control centre for the WCC structures assets. This would assist with the security management and monitoring of the assets.

- 5.2.25 Financial approval of **£40,000** (Including all fees and risk & contingency is sought to implement this scheme.

Asset Management

- 5.2.26 Financial approval of **£ 32,000** (including all fees and risk & contingency) is sought in 2022/23 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 brick arch in Headfort Place and the stone walls in Princes Gate, 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 **£106,000** is sought in 2022/23 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

- 5.3.1 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.
- 5.3.2 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.

- 5.3.3 The following table summarises the proposed 2022/23 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	£1,949,000
Aged Expired Equipment	£495,000
Cherished Column Replacement	£200,000
Load Testing	£212,000
Structurally Critical Columns	£2,772,000
Illuminated Sign Replacement	£150,000
Lighting PPM Total	£ 5,778,000
Electrical work	
Gas replacements	£870,000
Total (including Gas replacement)	£ 6,648,000

- 5.3.4 The total cost for the above proposed PPM programmes of work is estimated at **£6,648,000** (Inclusive of all fees, risk and contingency and design costs), for which financial approval is sought. This includes **£870,000** from the Gas replacement capital budget and **£5,778,000** from the PPM Lighting capital budget. Provision for this expenditure exists within the approved capital programme for 2022/23.

Lighting Improvements

- 5.3.5 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.
- 5.3.6 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.

5.3.7 The councils LED/CMS rollout in 2019-2021 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.

5.3.8 2021/22's asset inventory update is also expected to provide 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

5.3.9 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.

5.3.10 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

5.3.11 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

5.3.12 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.

5.3.13 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.

5.3.14 Records from previous testing programmes help build up 'deterioration profiles' of the asset types and life characteristics.

5.3.15 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

- 5.3.16 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'.
- 5.3.17 Due to three column failures in the last four years it has been 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 there is an enhanced structural critical budget to replace all 925 wornums over this age in the next 2 years. A list of roads having these replaced is included in the appendices.
- 5.3.18 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

- 5.3.19 The Council will focus 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
- 5.3.20 Where 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

- 5.3.21 Westminster City Council are the custodians of an historic catalogue of Cherished and Listed lighting furniture with some 300 assets dating back to 1807, our records show that 139 of these are listed. While these assets are of historical value, they are costly to maintain and there is a sole supplier for the equipment related to gas lighting who have been unable to commit to delivery dates leaving some lights out for lengthy periods of time including waits of 8 months for cost estimates for mains replacements.
- 5.3.22 Along with delays and costly repairs, a large carbon impact of gas usage and very poor lighting levels fail to meet the City for All's objectives to make the city cleaner and greener and encourage vibrant communities by providing adequate lighting during the evenings. Published increases in the cost of gas power also add to concerns over gas lightings remaining availability.
- 5.3.23 Surveys were undertaken in 2019/20 to show gas supply mains locations. Lighting designs were also completed to meet current lighting standards. The designs were required following community and police requests to improve

lighting levels on several of these roads due to crime and anti-social behaviour.

- 5.3.24 Plans to upgrade Westminster's historic gas lights are being paused while the City Council engages with residents and local groups about the proposed gas mimics.
- 5.3.25 The Council is planning to engage local residents, conservation groups and businesses on the transformation programme. The planned programme has been paused while discussions progress. The exception being if urgent public safety requirements necessitate an immediate fix.
- 5.3.26 Following surveys, designs, and manufacturer costs has estimated budgets to undertake gas removal, full electrification and LED "gas effect" lanterns of £2,990,000 is advised. Financial approval for works in 2022/23 of **£870,000** of this funding is required to continue with Gas electrification programme including the majority of gas pipe removals from the carriageway. This work will be subject to the completion of the engagement exercise referenced above. This budget will also enable us to carry out any safety critical works that arise.

Parks and Gardens

- 5.3.27 The City Council have instigated the migration of Parks and Gardens lighting assets into Contract B's asset management system and maintenance regime. Budget provisions of £250,000 for Parks and Gardens to collect Inventory data, undertake inspections in line with GN22, undertake electrical tests of assets in line with BS7671, ensure private cable networks are mapped and correctly labelled on site and to ensure these assets are brought up to council specification.
- 5.3.28 Financial approval of the remaining **£70,000** budget for 2022/23 is currently required due to delays with Covid-19. No further funds are required at this stage.

Isolated Pitches & Market Electrics

- 5.3.29 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.
- 5.3.30 The budget is for investigation and improvements to the existing infrastructure only and to bring up to current standards.
- 5.3.31 Financial approval of £1,100,000 was provided in 2019/20 and this work will continue into 2022/23 due to further delays with Covid-19 with **£230,000** for Market electrical improvements and **£400,000** of Isolated Pitch improvements required. No further funds are required at this stage.

6 Financial Implications

- 6.1 The total gross expenditure in 2022/23 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 **£16,863,000** for which financial approval is sought.
- 6.2 Taking into consideration, income statutory undertakers for work on the pipe subways totalling £700,000, the overall net cost to the City Council in 2022/23 will be **£16,163,000**
- 6.3 Budget provision of **£16,163,000** for PPM across Highways, Lighting and Bridges and Structures is contained within the current approved capital programme.
- 6.4 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.
- 6.5 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 Council's highway and highway assets (including lighting), and that they remain safe and effective.
- 7.2 The Director of Legal Services has considered this report and is satisfied programmes set out in this report help discharge the City Council's duty in this respect.

8. Carbon Impact

- 8.1 Following the council's declaration of a climate emergency in September 2019 a small Carbon Working Group was set up in March 2020 which included colleagues from the Council's Highways Service Providers (FM Conway and WSP) to review the services the council provides to maintain and improve the public highway and how to jointly reduce carbon across all aspects of the 'Highways' service over the next 10 years.
- 8.2 This led to the King Street Carbon Efficient Scheme which was delivered in the 2020/21 PPM programme.
- 8.3 The 6 week scheme to replace the paving slabs in King Street was planned to reduce carbon by:-

- Using All electric plant and equipment
- Using low carbon concrete paving slabs
- Fully electric welfare units on site
- 100% of arisings from site re-cycled
- Use of HVO powered lorries servicing site
- Minimising people travel by working from home or using carbon friendly modes of transport where travel cannot be avoided.

8.4 The King Street trial scheme was compared to a similar scheme carried out at Marlborough Hill in St John's Wood. Both Schemes were completed in October/November 2020 and the carbon reduction impact is summarised below;

	Marlborough Hill	King Street
Duration on site (Days)	31	40
Distance Travelled, inc labour, supervision & deliveries (Miles)	7540	9394
Plant usage, inc welfare (Hours)	71.5	114.8
Square meterage of paving laid	306.46m ²	268.33m ²
Operational Carbon Footprint (KgCO ₂ e)	5.95t	1.74t
Operational Average Carbon Footprint per day	0.19t	0.04t
Embodied Carbon Footprint (KgCO ₂ e)	40.69t	17.93t
Embodied Carbon Footprint per m ²	0.13t	0.07t
Total Carbon Footprint (KgCO ₂ e)	46.64t	19.67t
Total Carbon Footprint per m ²	0.15t	0.07t

	Tonnes saved	Percentage saved
Total operational carbon savings against comparison site	4.21t	71%
Operational carbon savings per day	0.15t	79%
Total embodied carbon savings against comparison Site	22.76t	56%
Embodied Carbon savings per m ²	0.06t	46%
Total carbon savings against comparison site	26.97t	58%
Total carbon savings per m ²	0.08t	53%

8.6 Total carbon savings of 58% were achieved on the King Street scheme in comparison with the Marlborough Hill works

- 8.7 Alongside the work done on a Highways Carbon Calculator this scheme was successful in winning the Chartered Institute of Highways and Transport (CIHT) Climate Change award.
- 8.8 Following the success of this scheme we rolled out a further 7 schemes in 21/22 across City Highways using a similar model to see what efficiencies could be found on multiple schemes which would enable equipment sharing and other operational efficiencies.
- 8.9 Those works are in progress and the outcomes will be evaluated to ascertain the carbon savings and cost implications of multiple schemes. This will then inform how much of the 22/23 programme we will be able to deliver using this low-carbon methodology.

9. Consultation

- 9.1 The 2022/23 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.

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 2022/23 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:

Dan Perks

dperks@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**

Declaration of Interest

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

Signed: _____ Date: _____
NAME: **Councillor James Spencer**

State nature of interest if any:

(N.B: If you have an interest, you should seek advice as to whether it is appropriate to make a decision in relation to this matter)

For the reasons set out above, I agree the recommendation(s) in the report entitled

Planned Preventative Maintenance (PPM) programme for 2022/23 in respect of Highways, Public Lighting & Bridges and Structures and reject any alternative options which are referred to but not recommended.

Signed: _____

Cabinet Member for City Management

Date: _____

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 not 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.

Appendix A – Provisional Carriageways Improvement Programme

Programme	Road Name	Location / Extents	Ward	VM Score	VM Rank	CMR Value
Programme	Road Name	Location / Extents	Ward	VM Score	VM Rank	CMR Value
Core Carriageway	Grosvenor Street	New Bond Street to No 22 & from No 32 to No 35	West End	95.00	3	£76,000.00
Core Carriageway	Old Park Lane / Grantham Place	Piccadilly to Brick Street	West End	95.00	3	£29,000.00
Core Carriageway	Ebury Bridge Road	Chelsea Bridge Road to St Barnabas Street	Churchill	91.25	11	£80,000.00
Core Carriageway	Binney Street / Weighouse Street	Brook Street to Oxford Street	West End	90.00	14	£34,000.00
Core Carriageway	Brick Street	Down Street to Old Park Lane	West End	90.00	14	£21,000.00
Core Carriageway	Chester Row	Bourne Street to South Eaton Place	Knightsbridge	90.00	14	£43,000.00
Core Carriageway	Essex Street	Strand to End	St Jamess	90.00	14	£32,000.00
Core Carriageway	Mount Row	Carlos Place to Davies Street	West End	90.00	14	£42,000.00
Core Carriageway	South Audley Street	Mount Street to Curzon Street	West End	90.00	14	£131,000.00
Core Carriageway	Upper Grosvenor Street	Park Lane to Park Street	West End	90.00	14	£40,000.00
Core Carriageway	Holles Street	Oxford Street to Cavendish Square	West End	86.30	34	£43,000.00
Core Carriageway	Claverton Street	Grosvenor Road to Lupus Street	Tachbrook	86.25	34	£159,000.00
Core Carriageway	Piccadilly	Off slip to Hyde Park Corner roundabout	St James's	86.25	34	£88,000.00
Core Carriageway	St Georges Square	Lupus Street to Grosvenor Road East side	Tachbrook	86.25	34	£100,000.00
Core Carriageway	St Georges Square	Lupus Street to Grosvenor Road West side	Tachbrook	86.25	34	£103,000.00
Core Carriageway	Devonshire Place	Devonshire Street to Marylebone Road	Marylebone High Street	86.25	34	£79,000.00

Core Carriageway	Eccleston Place	Eccleston Street to Elizabeth Street	Warwick	85.00	37	£55,000.00
Core Carriageway	Great Portland Street	New Cavendish Street to Mortimer Street	West End	85.00	37	£88,000.00
Core Carriageway	Chepstow Place / Dawson Place	Rede Place to Dawson Place & Dawson Place to Hereford Road	Bayswater	82.50	43	£55,000.00
Core Carriageway	Bruton Lane	Berkeley Square to Bruton Street	West End	82.50	43	£48,000.00
Core Carriageway	Courtneil Street	Talbot Road to Artesian Road	Bayswater	82.50	43	£42,000.00
Core Carriageway	Winchester Street	Warwick Way to Sussex Street to Sutherland Row	Warwick	82.50	43	£118,000.00
Core Carriageway	Woods Mews	Park Street to Park Lane	West End	82.50	43	£37,000.00
Core Carriageway	Eamont Street	Allitsen Road to Prince Albert Lane	Regents Park	82.50	43	£52,000.00
Core Carriageway	Carlton Hill	Abbey Road to Marlborough Hill	Abbey Road	81.25	63	£102,000.00
Core Carriageway	Vincent Square	Rochester Row to Elverton Street	Vincent Square	81.25	63	£59,000.00
Core Carriageway	George Street	Thayer Street to Spanish Place & Baker Street to Manchester Street	Bryanston	62.50	72	£63,000.00
Core Carriageway	Boston Place	Taunton Place to Property No 34	Bryanston	57.50	83	£47,000.00
Core Carriageway	George Street	Forset Street to Seymour Place	Bryanston	57.50	83	£48,000.00
Core Carriageway	Kendal Street	Edgeware Road to End	Hyde Park	57.50	83	£79,000.00
Core Carriageway	Down Street	Piccadilly to Hertford Street	West End	57.50	83	£34,000.00
Core Carriageway	Palace Court	Moscow Road to Property No 13	Lanaster Gate	57.50	83	£70,000.00
Core Carriageway	Stratford Place	Oxford Street to End	Marylebone High Street	57.50	83	£35,000.00
Core Carriageway	Perkins Rents	Old Pye Street to Great Peter Street	St James's	57.50	83	£24,000.00
Core Carriageway	St Matthew Street	Great Peter Street to Old Pye Street	St Jamess	57.50	83	£22,000.00

Core Carriageway	New Cavendish Street	Cleveland Street to Portland Place	West End	57.50	83	£130,000.00
Core Carriageway	Star Street	Norfolk Place to Edgware Road	Hyde Park	53.75	139	£83,000.00
Core Carriageway	John Princes Street	Margaret Street to Great Castle Street inclusive	West End	53.75	139	£31,000.00
Core Carriageway	Shrewsbury Road	Westbourne Park Road to Talbot Road	Westbourne	53.75	139	£49,000.00
Core Carriageway	Portman Square (North Arm)	Gloucester Place to Baker Street	Marylebone High Street	52.50	155	£41,000.00
Core Carriageway	Connaught Street	Hyde Park Street to Connaught Square	Hyde Park	32.50	709	£118,000.00

Appendix A2 – Provisional Reserve List for Carriageways Improvements (22/23 Provisional Programme) -

The below reserve list schemes are subject to re-evaluation and re-assessment during the 2022/2023 period.

Programme	Road Name	Location / Extents	Ward	VM Score	Rank	CMR Value
Core Carriageway	Upper Brook Street	Park Street to Grosvenor Square	West End	95.00	3	£28,000.00
Core Carriageway	Eastcastle Street	Newman Street to Gt Titchfield Street	West End	90.00	14	£90,000.00
Core Carriageway	Berners Street	Oxford Street to Eastcastle Street	West End	80.00	66	£32,000.00
Core Carriageway	Norfolk Place	Sussex Gardens to St Michael's Street	Hyde Park	62.50	72	£35,000.00
Core Carriageway	Kilburn Lane	Buller Road to Regent Street	Queens Park	58.75	79	£31,000.00
Core Carriageway	Mortimer Street	Wells Street to Langham Place	West End	57.50	83	£76,000.00
Core Carriageway	Buckingham Palace Road	Bressenden Place to Property No. 4	St James's (P)	57.50	83	£109,000.00
Core Carriageway	Beak Street	Lexington Street to Regent Street	West End	41.30	512	£46,000.00
Core Carriageway	Whitcomb Street and Orange Street	Pall Mall East to Orange Street and Haymarket to Whitcomb St.	St James's	36.30	570	£47,000.00
Core Carriageway	Porchester Place	Kendal Street to Norfolk Crescent	Hyde Park	31.25	762	£27,000.00

Appendix B – Provisional Footways Improvement Programme

Programme	Road Name	Location / Extents	Ward	VM Score	Rank	CMR Value
Footway Improvements	Buckingham Gate	Wilfred Street to No. 40 (SW side) and Petty France to Barracks gate	St James's	100.00	1	£50,000.00
Footway Improvements	Eccleston Street	Buckingham Palace Road to Eaton Square (NE side)	Knightsbridge	100.00	1	£40,000.00
Footway Improvements	Ebury Street	Property No 225 to Cundy Street (both sides) & South Eaton Place to Property No. 122	Churchill	95.00	14	£79,000.00
Footway Improvements	Knightsbridge	Brompton Road to Knightsbridge property No. 159	Knightsbridge	95.00	14	£30,000.00
Footway Improvements	Savoy Street	Strand to Victoria Embankment (mastic f/ws only)	St James's	95.00	14	£61,000.00
Footway Improvements	Ashmore Road	Marban Road to Shirland Road	Queen Park	91.25	37	£70,000.00
Footway Improvements	Prince Consort Road	Royal School of Music entrance to end of building (west)	Knightbridge	91.25	37	£76,000.00
Footway Improvements	Cavendish Avenue	Property No 20 to Wellington Place	Regents Park	90.00	45	£41,000.00
Footway Improvements	Eccleston Place	Eccleston Street to Elizabeth Street	Warwick	90.00	45	£37,000.00
Footway Improvements	Rutland Gate West	Property No 49 to Property No. 65 (west side)	Knightsbridge	80.00	60	£42,000.00
Footway Improvements	Oxford Road	School Boundary to side road opposite No.22	Maida Vale	88.00	60	£29,000.00
Footway Improvements	Portnall Road	Shirland to Marban from property 150 to end & 187 to Marban Road	Queen Park	87.50	60	£40,000.00
Footway Improvements	Rutland Gate East	Property No 47 to Eresby House (east side)	Knightsbridge	88.00	60	£45,000.00
Footway Improvements	Sutherland Place	Talbot Road to Artesian Road (both sides)	Bayswater	88.00	60	£106,000.00
Footway Improvements	Walterton Road	Warlock Road to Shirland Road SE side	Harrow Road	88.00	60	£63,000.00
Footway Improvements	Dean Bradley Street	Horseferry Road to Smith Square West side	St James's	72.50	126	£60,000.00
Footway Improvements	Westbourne Park Road	Chepstow Road to Shrewsbury Road south side	Bayswater	62.50	139	£30,000.00
Footway Improvements	Great Western Road	Elkstone Road to Tavistock Road & opposite Tavistock Road	Westbourne	57.50	233	£135,000.00
Footway Improvements	Eaton Gate	Eaton Square to Eaton Terrace	Knightsbridge	58.00	233	£29,000.00
Footway Improvements	Droop Street	Sixth Avenue to Third Avenue	Queens Park	53.75	475	£106,000.00
Footway Improvements	Beak Street	Lexington Street to Warwick Street	West End	53.00	552	£82,000.00
Footway Improvements	Warrington Crescent	Warrington Gardens to property No 17 east side	Little Venice	43.75	1452	£43,000.00
Footway Improvements	Whitcomb Street	St Martin's St to Orange St (east side) & Property No. 21 to Orange Street (west side)	St James's	41.00	1485	£27,000.00
Footway Improvements	Kilburn Park Road	Carlton Vale to property No 135	Maida Vale	40.00	1661	£94,000.00
Footway Improvements	Montagu Square	West side	Bryaston	33.75	2217	£70,000.00
Footway Improvements	Morshead Road	Essendine Road to Grantully Road both sides	Maida Vale	28.75	2843	£115,000.00

Appendix B2 – Provisional Reserve List for Footway Improvements (23/24 Provisional Programme)

The below reserve list schemes are subject to re-evaluation and re-assessment during the 2022/2023 period.

Programme	Road Name	Location / Extents	Ward	VM Score	Rank	CMR Value
Footway Improvements	St Georges Drive	Denbigh Place to Denbigh Street NE side	Tachbrook / Warwick	91.00	37	£58,000.00
Footway Improvements	Warwick Way	Winchester Street to Warwick Place North (both sides)	Warwick	68.00	129	£138,000.00
Footway Improvements	Abbey Road	Bleinheim Road to Carlton Hill	Abbey Road	46.00	1040	£43,000.00

Appendix C – Minor Works Programme

The proposed programme includes both footway and carriageway schemes for 2022/23 and are presented in the table below.

Programme	Road Name	Location / Extents	Ward	Type of Works	CMR Value
Minor Works	Artillery Row	Victoria Street to Greycourt Place	Vincent Square	Carriageway	£20,000.00
Minor Works	Frith Street	Soho Square to Bateman Street	West End	Carriageway	£23,000.00
Minor Works	Junction Place	Praed St to St Michaels St	Hyde Park	Carriageway	£6,000.00
Minor Works	York Street	Baker Street to Gloucester Place	Bryanston	Carriageway	£23,000.00
Minor Works	Homer Street	Old Marylebone Road to Crawford Street	Bryanston	Carriageway	£24,000.00
Minor Works	Formosa Street	Castellain Road and Warrington Crescent	Little Venice	Carriageway	£14,000.00
Minor Works	Hertford Street	Down Street to property No 7 (south side)	West End	Footway	£18,000.00
Minor Works	Fernhead Road	Property No. 139 to Property No. 143	Harrow Road	Footway	£8,000.00
Minor Works	Carlton Vale	Property No. 20 to Property No.40	Maida Vale	Footway	£16,000.00
Minor Works	Porchester Place	Kendal Street to Norfolk Crescent NE side	Hyde Park	Footway	£23,000.00
Minor Works	Chichester Street	Rodney House Entrance to Claverton Street	Tachbrook	Footway	£24,000.00
Minor Works	Chesterfield Gardens	Curzon Street to end (West side)	West End	Footway	£20,000.00
Minor Works	North Row	North Audley Street to Balderton Street (North side)	West End	Footway	£13,000.00
Minor Works	Bruton Lane	Berkeley Square to Bruton Street	West End	Footway	£22,000.00
Minor Works	Bulinga Street	John Islip Street to Herrick Street	Vincent Square	Footway	£25,000.00
Minor Works	Corlett Street	Penfold Place To Bell Street (both sides)	Church Street	Footway	£21,000.00
Minor Works	Cuthbert Street	Adpar Street to Hall Place (playground side)	Little Venice	Footway	£9,000.00
Minor Works	Sussex Place	Hyde Park Gardens Mews to Strathearn Place	Hyde Park	Footway	£25,000.00
Minor Works	Artillery Row	Victoria Street to Greycourt Place	Vincent Square	Carriageway	£20,000.00

Appendix D – Street lighting programmes

Core Lighting Improvements

A Value Management prioritisation process is used to develop the list of schemes presented in the table below. The process is based on an aggregated score of structural risk, energy efficiency, local factors, performance rating, and efficiency management.

Street	Ward	Existing Assets	Source	Proposed Improvements	Estimated Cost
Grove End Road	Abbey Road	39	VM Score	Replace existing columns, reuse existing LED lanterns	£116,865
Chepstow Road	Bayswater	17	VM Score	Replace existing columns and lanterns with Large Grey Wornums	£70,940
Lisson Grove	Church Street	38	VM Score	Replace existing columns, reuse existing LED lanterns	£113,870
Chippenham Road	Harrow Road	22	VM Score	Replace existing columns with double door columns, reuse existing LED lanterns on brackets	£65,930
Fernhead Road	Harrow Road	38	VM Score	Replace existing columns, reuse existing LED lanterns on brackets	£113,870
Shirland Road	Harrow Road	55	VM Score	Replace existing columns with double door columns, reuse existing LED lanterns on brackets	£230,110
Castellain Road	Little Venice	24	Nomination	Conversion of existing functional lanterns to heritage Large Grey Wornums lanterns	£101,920
Ashmore Road	Queens's Park	34	VM Score & Nomination	Replace existing Small Grey Wornum columns	£101,882
Carey Street	St James's	15	VM Score & Nomination	Replace existing Small Grey Wornum columns	£62,560
Great Western Road	Westbourne/Harrow Road	47	VM Score	Replace existing columns and lanterns with Large Grey Wornums	£190,837
Pedestrian Crossing Improvements	Various		Nomination	Improve several pedestrian crossing lighting levels in line with lighting guidance	£100,000
All	All			Design, Auditing, Asset Management Costs	£300,216
All	All			Enabling works for 2023/24	£235,000
Localised Schemes				Including Lighting Against Crime, noted below	£145,000
Total					£1,949,000

Localised Schemes

The schemes in the table below are for small ad-hoc schemes of a localised nature. A public concern is street crime and fear/perception of crime, where lighting has been shown to reduce this. Note that the full budget has not been allocated to allow for ad-hoc interventions that may be required throughout the year based on budget and if new nominations are received in adequate time.

Street	Ward	Existing Assets	Source	Proposed Improvements	Estimated Cost
Porteus Close	Little Venice	6	Nomination	Additional footway lights from complaints about lighting levels due to trees	£4,000
Sutherland Avenue	Little Venice	52	Nomination	Additional footway lights from complaints about lighting levels due to trees	£25,000
Warrington Crescent	Little Venice	20	Nomination	Additional footway lights from complaints about lighting levels due to trees	£10,000

Age Expired Schemes

The various components of street lighting deteriorate at differing rates. Typically, columns have an assumed life of 40 years, whereas the assumed life of lanterns is 20 years. In line with the LED rollout completion, the age expired programme this year focuses on investing in heritage areas by replacement age expired functional lanterns on heritage columns to unify the streetscape.

Street	Ward	Existing Assets	Source	Proposed Improvements	Estimated Cost
Lisson Green Path (Grand Union Canal)	Church Street	12	Nomination	Replace existing columns with fold down columns, standard LED lanterns and replacing cabling	£97,000
Edinburgh Gate	Knightsbridge & Belgravia	8	Nomination	Convert wall lights	£25,000
Wellington Place	Regent's Park	9	Nomination	Harmonise column & lantern types with Small Grey Wornum columns and enhance existing lighting levels	£37,650
Allsop Place	Regent's Park	7	Asset age	Replace existing Large Grey Wornum columns and additional infills	£68,800
Cockspur Street	St James's	10	Asset age	Replace Large Grey Wornum columns and lanterns	£53,000
Denbigh Street	Warwick	16	VM Score	Replace Large Grey Wornum columns and lanterns	£84,000
Conduit Street/Bruton Street	West End	18	Nomination	Harmonise column and lantern type to match Lighting Master Plan using Large Grey Wornums	£65,000
Old Park Lane	West End	5	Nomination	Change to Large Grey Wornum lanterns	£23,000
Aldridge Road Villas	Westbourne	9	Nomination	Replace existing Small Grey Wornum columns	£41,550
Total					£495,000

Cherished Schemes

The cherished column replacement programme deals with unique street furniture that is of historic value. Many of Westminster's assets are protected as 'listed' items of street furniture and therefore protected by the law. The cherished column status allocated to this equipment helps protect not only the asset but the street scene of which it is an integral part.

Street	Ward	Existing Assets	Source	Proposed Improvements	Estimated Cost
Ranelagh Road	Churchill	2	Nomination	LED optic change or columns infill following successful trial holes	£30,000
Whitehall Court	St James's	2	Nomination	LED optic change or columns infill following successful trial holes	£30,000
Alderney Street	Warwick	15	Nomination	Improve lighting levels with infill MacKenzie Moncur lighting	£80,000
Hay's Mews	West End	5	Nomination	Additional infills of MacKenzie Moncur columns or wall lights and wayleaves	£60,000
Total					£200,000

Structural Critical

An enhanced replacement programme of Large Grey Wornums up to 70 years old.

Street	Ward	Existing Assets	Source	Proposed Improvements	Estimated Cost
Seymour Place	Bryanston & Dorset Square	6	Asset age	Replace columns	£28,800
Ebury Bridge	Churchill	5	Asset age	Replace columns	£24,000
Ebury Bridge Road	Churchill	20	Asset age	Replace columns	£96,000
Lyall Street	Knightsbridge	9	Asset age	Replace columns	£43,200
Eccleston Square	Knightsbridge & Belgravia	5	Asset age	Replace columns	£24,000
Eccleston Street	Knightsbridge & Belgravia	21	Asset age	Replace columns	£100,800
Charing Cross	St James's	3	Asset age	Replace columns	£14,400
Drury Lane	St James's	9	Asset age	Replace columns	£43,200
Greycoat Place	St James's	9	Asset age	Replace columns	£43,200
Kingsway	St James's	8	Asset age	Replace columns	£38,400
Millbank	St James's	6	Asset age	Replace columns	£28,800
Northumberland Avenue	St James's	17	Asset age	Replace columns	£81,600
Charlwood Street	Tachbrook	8	Asset age	Replace columns	£38,400
Belgrave Road	Warwick	25	Asset age	Replace columns	£120,000
St George's Square	Warwick	4	Asset age	Replace columns	£19,200
Old Compton Street	West End	7	Asset age	Replace columns	£33,600
St Margaret Street	West End	4	Asset age	Replace columns	£19,200
Upper Brook Street	West End	9	Asset age	Replace columns	£43,200
Wardour Street	West End	20	Asset age	Replace columns	£96,000
Glentworth Street	Bryanston & Dorset Square	1	Asset age	Replace columns	£4,800
Westmoreland Terrace	Churchill	1	Asset age	Replace columns	£4,800
Clarendon Place	Hyde Park	6	Asset age	Replace columns	£28,800
Chesham Place	Knightsbridge & Belgravia	14	Asset age	Replace columns	£67,200
Cliveden Place	Knightsbridge & Belgravia	3	Asset age	Replace columns	£14,400
Eaton Square	Knightsbridge & Belgravia	28	Asset age	Replace columns	£134,400
Halkin Place	Knightsbridge & Belgravia	1	Asset age	Replace columns	£4,800
Hobart Place	Knightsbridge & Belgravia	11	Asset age	Replace columns	£52,800
Kensington Gore	Knightsbridge & Belgravia	7	Asset age	Replace columns	£33,600
Kensington Road	Knightsbridge & Belgravia	6	Asset age	Replace columns	£28,800
Knightsbridge	Knightsbridge & Belgravia	9	Asset age	Replace columns	£43,200
Blandford Street	Marylebone	6	Asset age	Replace columns	£28,800
Fitzhardinge Street	Marylebone	3	Asset age	Replace columns	£14,400
Marylebone Lane	Marylebone	4	Asset age	Replace columns	£19,200
Allsop Place	Regent's Park	6	Asset age	Replace columns	£28,800
St John's Wood High Street	Regent's Park	16	Asset age	Replace columns	£76,800
Abingdon Street	St James's	14	Asset age	Replace columns	£67,200
Arlington Street	St James's	2	Asset age	Replace columns	£9,600
Arundel Street	St James's	11	Asset age	Replace columns	£52,800
Broadway	St James's	10	Asset age	Replace columns	£48,000
Caxton Street	St James's	4	Asset age	Replace columns	£19,200
Charles II Street	St James's	3	Asset age	Replace columns	£14,400
Endel Street	St James's	1	Asset age	Replace columns	£4,800
Great George Street	St James's	11	Asset age	Replace columns	£52,800
Haymarket	St James's	2	Asset age	Replace columns	£9,600
Lancaster Place	St James's	4	Asset age	Replace columns	£19,200
Palace Street	St James's	14	Asset age	Replace columns	£67,200
Parliament Square	St James's	6	Asset age	Replace columns	£28,800

Regency Place	St James's	2	Asset age	Replace columns and privately feed from new feeder pillars	£21,600
St Martin's Place	St James's	3	Asset age	Replace columns	£14,400
Strand	St James's	8	Asset age	Replace columns	£38,400
The Mall Approach	St James's	1	Asset age	Replace columns	£4,800
Wellington Street	St James's	1	Asset age	Replace columns	£4,800
William IV Street	St James's	3	Asset age	Replace columns	£14,400
Atterbury Street	Vincent Square	7	Asset age	Replace columns	£33,600
Bulinga Street	Vincent Square	2	Asset age	Replace columns	£9,600
Cambridge Street	Warwick	4	Asset age	Replace columns	£19,200
Churton Street	Warwick	4	Asset age	Replace columns	£19,200
Elizabeth Bridge	Warwick	5	Asset age	Replace columns	£24,000
Gloucester Street	Warwick	9	Asset age	Replace columns	£43,200
Grosvenor Gardens	Warwick	8	Asset age	Replace columns	£38,400
Upper Tachbrook Street	Warwick	3	Asset age	Replace columns	£14,400
Albemarle Street	West End	6	Asset age	Replace columns	£28,800
Berkeley Square	West End	12	Asset age	Replace columns	£57,600
Berkeley Street	West End	11	Asset age	Replace columns	£52,800
Brick Street	West End	2	Asset age	Replace columns	£9,600
Broadwick Street	West End	3	Asset age	Replace columns	£14,400
Burlington Gardens	West End	1	Asset age	Replace columns	£4,800
Chesterfield Street	West End	1	Asset age	Replace columns	£4,800
Culross Street	West End	8	Asset age	Replace columns	£38,400
Davies Street	West End	12	Asset age	Replace columns	£57,600
Dover Street	West End	9	Asset age	Replace columns	£43,200
Golden Square	West End	10	Asset age	Replace columns	£48,000
Grafton Street	West End	4	Asset age	Replace columns	£19,200
Great Scotland Yard	West End	3	Asset age	Replace columns	£14,400
Green Street	West End	11	Asset age	Replace columns	£52,800
Hamilton Place	West End	4	Asset age	Replace columns	£19,200
Hay Hill	West End	3	Asset age	Replace columns	£14,400
Newman Street	West End	9	Asset age	Replace columns	£43,200
North Row	West End	3	Asset age	Replace columns	£14,400
Princes Street	West End	2	Asset age	Replace columns	£9,600
Soho Square	West End	1	Asset age	Replace columns	£4,800
Soho Street	West End	1	Asset age	Replace columns	£4,800
Total		575			£2,772,000

Provisional Lighting Improvement Programme 23/24

The Lighting Improvement Reserve Schemes in the list below will be used should it not be possible to deliver schemes in the main programme. In addition to the below list the current LVMM process is changing and the below list is subject to change once the new LVMM process has been implemented and the LED roll out has progressed which may also impact the list for locations below.

Street	Category	Ward	Source	Proposed Improvement
CIRCUS ROAD	Age Expired	Abbey Road	VM	Column Replacement
LOUDOUN ROAD	Age Expired	Abbey Road	VM	Column Replacement
WESTBOURNE PARK ROAD	Age Expired	Bayswater/ Westbourne	VM	Column Replacement & heritage lanterns
FERMOY ROAD	Age Expired	Harrow Road	VM	Column Replacement
CHILWORTH STREET	Age Expired	Hyde Park	VM & Nomination	Column Replacement & heritage lanterns
WESTBOURNE TERRACE	Age Expired	Hyde Park	VM	Column Replacement
KENSINGTON GARDENS SQUARE	Age Expired	Lancaster Gate	VM	Column Replacement
LEINSTER GARDENS	Age Expired	Lancaster Gate	VM	Column Replacement
SUTHERLAND AVENUE	Age Expired	Little Venice	VM	Column Replacement
MARYLEBONE LANE (Wigmore-Oxford Street)	Age Expired	Marylebone	VM	Column Replacement & heritage lanterns
HARROW ROAD (Torquay Street to Warwick Crescent)	Age Expired	Queen's Park	VM	Column Replacement
HARROW ROAD (Warwick Crescent to Edgware Road)	Age Expired	Queen's Park	VM	Column Replacement
PICCADILLY (Hyde Park Corner to Berkeley Street)	Age Expired	St James's	VM	Column Replacement
AYLESFORD STREET	Age Expired	Tachbrook	VM	Column Replacement
BESSBOROUGH STREET	Age Expired	Tachbrook	VM	Column Replacement
DRUMMOND GATE	Age Expired	Tachbrook	VM	Column Replacement
OSBERT STREET	Age Expired	Vincent Square	VM	Column Replacement
REGENCY STREET	Age Expired	Vincent Square	VM	Column Replacement
LUPUS ROAD	Age Expired	Warwick	VM	Column Replacement
CURZON STREET	Age Expired	West End	VM	Column replacement and heritage columns previous PPM delayed due to developments
CHICHESTER ROAD	Age Expired	Westbourne	VM	Column Replacement

Appendix E – Drainage

Item	Road Name	Ward	No. of Locations	Works Required
1	Eccleston Place	Warwick	4	Full Gully Replacement
2	Westbourne Street	Hyde Park	1	Full Gully Replacement
3	Tavistock Road	Westbourne	1	Full Gully Replacement
4	Clifton Gardens	Little Venice	1	Full Gully Replacement
5	Rathbone Street	West End	1	Full Gully Replacement
6	Seymour Place	Bryanston & Dorset Square	1	Full Gully Replacement
7	Torquay Street	Westbourne	1	Full Gully Replacement
8	Monmouth Road	Bayswater	8	Full Gully Replacement
9	Old Palace Yard	St James's	1	Full Gully Replacement
10	New Bond Street	West End	1	Full Gully Replacement
11	New Cavendish Street	West End	3	Full Gully Replacement
12	Luxborough Street	Marylebone High Street	1	Full Gully Replacement
13	Garrick Street	St James's	1	Full Gully Replacement
14	Chippenham Mews	Harrow Road	4	Full Gully Replacement
15	Marlborough Hill	Abbey Road	1	Full Gully Replacement

Item	Road Name	Ward	No. of Locations	Works Required
16	Westbourne Crescent	Hyde Park	2	Full Gully Replacement
17	Lancaster Terrace	Lancaster Gate	1	Full Gully Replacement
18	Hallfield Estate	Lancaster Gate	8	Full Gully Replacement
19	Bryanston Place	Bryanston & Dorset Square	1	Full Gully Replacement
20	Churchill Gardens Road	Churchill	5	Full Gully Replacement
21	Old Compton Street	West End	3	Full Gully Replacement
22	Waverton Street	West End	1	Full Gully Replacement

Schemes are also identified throughout the year following CCTV surveys.

Appendix F – Highways Review Panel Statement

LAY PANEL STATEMENT.

The Lay Panel of the Highways Review Panel attended two meetings in the year 2021/22. The lay members represent five of the most active amenity societies in Westminster. Among our numbers the lay members have a good mix of technical highways experience, detailed community involvement of long standing, as well as offering more generalist observations and business skills.

We have provided observations to officers on;

The process of preparing the annual highways PPM programme from the Council's Highways Inspector's assessments of engineering condition and nominations from them, and nominations from Councillors, amenity societies, and members of the public.

The value management scoring process.

Visual inspection by a member of the panel of all listed schemes to provide another layer of assessment as to the condition and prioritisation of each scheme.

Overall we greatly appreciate the openness and collaborative attitude with which officers have approached engaging with the panel.

Whilst not to advocate for works in any particular area each lay member also fed scheme nominations into the planning process on behalf of their amenity societies. This was helpful in giving insight into how schemes are selected for the annual programme.

Specific observations.

The panel considers that the process of changeover from placing emphasis on the Annual Condition Survey carried out by an independent company, particularly with regards to carriageways, to a reliance on data provided by Council's own highways inspectors regarding engineering condition is yet to be proven to be the most reliable barometer of the true condition of the assets. We would like to think that this process is subject to review if thought necessary.

There is some concern over the use of the Minor Works Programme to carry out works which are well above the costing threshold, and which should have been included in the main works programme. Hopefully this will be addressed with a reduction in the budget for MWP in future years

It does appear that the concept of the 3 year programme has now been abandoned, following the decision this year to provide only next years list, along with a reserve list which will form a starting point for the following years programme.

This year there has been a keenness to not only encourage us to inspect potential schemes, but also a willingness to join in on site inspections so decisions can be made about site limits etc whilst on site. Also there has been (apart from one or two inevitable exceptions) an overall agreement on all sides concerning the selection of schemes. This has been very encouraging.

After the process of some challenge, review and adjustment we are now confident that the final agreed list for 2022/23 is a realistic programme based on needs and priorities.

The Lay Panel thanks the officers for their openness and collaboration. The existence and functioning of the panel reflects extremely well on the Council in terms of willingness to engage with the residents. We look forward to continue to contribute in the coming years.