ENVIRONMENT & TRANSPORT CABINET COMMITTEE

Tuesday, 29th June, 2021

10.00 am

Online

AGENDA

ENVIRONMENT & TRANSPORT CABINET COMMITTEE

Tuesday, 29 June 2021 at 10.00 am
Online

Ask for: **Ann Hunter**
Telephone: **03000 416287**

Membership (16)

Conservative (12):	Mr S Holden (Chairman), Mr Baker, Mr C Beart, Mr T Bond, Mr N J Collor, Mr D Crow-Brown, Mr M Dendor, Mrs S Hudson, Mr R C Love, OBE, Ms Parfitt-Reid and Mr D Watkins
Labour (2):	Ms M Dawkins, Mr B H Lewis
Liberal Democrat (1):	Mr I S Chittenden
Green and Independents (1):	Mr M Baldock

UNRESTRICTED ITEMS

(During these items the meeting is likely to be open to the public)

1 Introduction/Webcast announcement

2 Apologies and Substitutes

To receive apologies for absence and notification of any substitutes present

3 Declarations of Interest by Members in items on the Agenda

To receive any declarations of interest made by Members in relation to any matter on the agenda. Members are reminded to specify the agenda item number to which it refers and the nature of the interest being declared.

4 Election of Vice-Chair

5 Minutes of the meeting held on 18 March and 27 May 2021 (Pages 1 - 14)

To consider and approve the minutes as a correct record.

6 Performance Dashboard (Pages 15 - 30)

7 Risk Register Annual Update (Pages 31 - 56)

8 21/00046 - A229 Blue Bell Hill Improvement Scheme (Pages 57 - 68)

9 21/00045 - Vision Zero - The Road Safety Strategy for Kent 2021-2026 (Pages 69 - 114)

10 Decision taken between meetings - 21/00043 - Statutory Notice for Enhanced Partnership for Buses (Pages 115 - 118)

11 21/00048 - A228/B2017 and B2017/B2160/Mascalls Court Road, Paddock Wood Junction Improvements (Pages 119 - 134)

12 21/00047 - Dover Fastrack - Compulsory Purchase Order (Pages 135 - 142)

13 Bath Street, Gravesend - Fastrack Infrastructure Scheme (Pages 143 - 156)

14 Public Sector Decarbonisation Scheme Update (Pages 157 - 164)

15 Kent area pathways to Net Zero 2050 (Pages 165 - 172)

16 21/00028 - Adoption of Highways Asset Management Plan 2021/22 to 2025/26 (Pages 173 - 554)

17 Work Programme (Pages 555 - 558)

To consider and agree a work programme for 2021/2022.

EXEMPT ITEMS

(At the time of preparing the agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public)

Benjamin Watts
General Counsel
03000 416814

Monday, 21 June 2021

KENT COUNTY COUNCIL

ENVIRONMENT & TRANSPORT CABINET COMMITTEE

MINUTES of a meeting of the Environment & Transport Cabinet Committee held in the Online on Thursday, 18 March 2021.

PRESENT: Mr S Holden (Chairman), Mr R C Love, OBE (Vice-Chairman), Mr M A C Balfour, Mr A Booth, Mr T Bond, Mr A H T Bowles, Mr D L Brazier, Mr I S Chittenden, Mr A Cook, Mr N J Collor, Mr A R Hills, Mr A J Hook, Mr B H Lewis, Mr J M Ozog, Mr H Rayner and Mr M E Whybrow

ALSO PRESENT: Miss S J Carey (Cabinet Member for Environment) and Mr M D Payne (Cabinet Member for Highways and Transport)

IN ATTENDANCE: Mrs B Cooper (Corporate Director of Growth, Environment and Transport), Mrs S Holt-Castle (Interim Director of Environment, Planning and Enforcement) and Mr S Jones (Director of Highways, Transportation and Waste)

UNRESTRICTED ITEMS

333. Introduction
(Item 1)

The chairman made members aware of the urgent item on the meeting's agenda, 'Development of the Climate Change Risk and Impact Assessment for Kent and Medway, and Adaptation Programme and Implementation Plan,' which was provided as a supplement. The item had been included in the agenda as it could not reasonably be delayed to the next meeting of the cabinet committee in June. It was agreed that the item be considered following Item 10 and that Item 18, 'Decisions taken between Cabinet Committee Meetings' be taken following Item 9.

334. Declarations of Interest by Members in items on the Agenda
(Item 3)

1. Mr Balfour declared pecuniary interests in Items 7 and 8, family ownership of mineral deposits in Kent were cited and non-pecuniary interests in Items 11 and 12, as vice chairman of the Kent Downs Area of Outstanding Natural Beauty Joint Advisory Committee.

2. Mr Rayner declared pecuniary interests in Items 11 and 12, as a Director of A. L. Betts Limited and Kent Downs Dairy Limited, both farmers within the Kent Downs Area of Outstanding Natural Beauty.

335. Minutes of the meeting held on 19 January 2021
(Item 4)

RESOLVED that the minutes of the meeting held on 19 January 2021 be approved as a correct record and that they be signed by the Chairman.

336. Verbal Updates by Cabinet Members and Corporate Director
(Item 5)

1. Miss Carey gave a verbal update. She confirmed that KCC and its subsidiary local authority trading companies had been independently assessed and highly commended for their environmental practices and measures. The results of a public household waste recycling survey carried out in January and February 2021 were delineated, Members were informed that 95% felt satisfied and safe at recycling centres, 97.5% found the experience easy and 93% were happy for the booking system to be retained.

2. Miss Carey confirmed that, following the committee's previous request, she had written to the Secretary of State for Environment, Food and Rural Affairs and his counterparts in the 11 European countries which had licensed the use of neonicotinoids. It was noted that the use of neonicotinoids in East Anglia had not gone ahead due to recent weather conditions.

3. Mr Payne gave a verbal update. It was confirmed that the 2021/22-2025/26 highways asset management Forward Works Programme had been published, 16 March. He addressed key areas in the programme, which included: highway resurfacing, road traffic analysis, street lighting and safe systems. The need to engage effectively with residents and haulage operators, to improve road safety, was noted.

4. Mr Hook requested clarification from Mr Payne on the use of the Young Person's Travel Passes and recent service developments. Mr Payne agreed to meet with the member and Mr Lightowler, Head of Public Transport, following the committee meeting to discuss the matter further.

5. Mr Chittenden asked Mr Payne whether the new schemes outlined in the Forward Works Programme had been funded from the County Council's 2021/22 budget or additional central government grants. Mr Payne confirmed that the schemes were funded from the budget and had been accounted for.

6. Mr Jones confirmed that KCC's response to the Department for Transport 48 tonne Intermodal Freight Trial Consultation, which had taken account of the committee's comments, had been submitted and awaited a formal response.

RESOLVED that the verbal updates be noted.

337. EU Transition Update (Presentation)
(Item 6)

1. Mrs Cooper gave a presentation, a copy of which is an appendix to these minutes. It was confirmed that, when compared to the previous year, a lower number of HGVs had travelled through Kent during the beginning of 2021, though the figure had begun to increase. Members were reminded that there was no correlation between trade and lorry numbers, as empty HGVs returning to Europe had a sizeable impact on vehicle numbers. The committee was informed that a change to French testing requirements had resulted in lower levels of Covid testing in Kent. Mrs Cooper confirmed that the majority of enforcement actions had occurred in the Dover and Ashford districts, whilst enforcement powers extended to 7 of Kent's 12 districts. It

was noted that the 'Keep Dover Clear' plan had progressed as part of a multi-agency response to the traffic issues highlighted in late 2020.

2. Future developments were addressed by Mrs Cooper. It was confirmed that operations at Manston would be stood down, though available if required until June 2021. It was planned that all HGVs using Eurotunnel and the Port of Dover would use the M20, Mrs Cooper acknowledged that there was a risk of temporary congestion during implementation. Broader traffic management plans were outlined. Import control developments were detailed, national import controls had been delayed by 6 months, all construction at the Sevington site was expected to finish by August 2021, with the Special Development Order for the Dover White Cliffs site expected by late April 2021 and construction expected to finish by March 2022.

3. Mr Lewis asked whether all employees at the Manston site had been stood down permanently. Mrs Cooper confirmed that the Department for Transport had the contract with the site operator and reassured the committee that in any event the site could be mobilised until June 2021, at which point the lease on the site ended.

RESOLVED that the update be noted.

338. 21/00026 - Update of the Kent Minerals and Waste Safeguarding Supplementary Planning Document - Outcome of Consultation and Adoption *(Item 7)*

Mr Balfour was not in attendance for this item.

Sharon Thompson (Head of Planning Applications Group) was in attendance for this item.

1. Miss Carey gave an overview of the updated Kent Minerals and Waste Safeguarding Supplementary Planning Document. She confirmed that the document constituted supplementary guidance rather than a new Council policy. It was noted that the impetus for the update had been to increase clarity and address issues raised in the public consultation.

2. Mrs Thompson provided a detailed breakdown of the proposed changes to the document. It was confirmed that 23 representations had been received from: mineral and waste operators; the Environment Agency; Historic England; planning consultants; the Port of London Authority and district, borough and city councils. Members were informed that broad support for the proposed updates and approach to safeguarding had been received from respondents.

3. Mr Rayner asked whether the proposed clarifications upheld the safeguarding of protected minerals, when built development was considered. Mrs Thompson confirmed that the supplementary planning document did not change KCC's policy on protected minerals and that priority was still given to safeguarding protected minerals.

4. Mr Brazier asked whether residential developments would be effectively safeguarded against the negative impact of nearby aggregate handling wharfs. Mrs Thompson reassured the committee that, whilst there was no simple solution, the policies in the document provided an effective mechanism to balance competing interests.

RESOLVED to:
a) note the summary of the comments received on the consultation draft of the updated Supplementary Planning Document and the Council's proposed response to them;
b) note the content of the updated Supplementary Planning Document proposed for adoption;
c) endorse the proposed decision to adopt the updated Supplementary Planning Document as guidance for the county on mineral and waste safeguarding; and
d) delegate powers to the Corporate Director for Growth, Environment & Transport to approve any minor modifications to the text of the Supplementary Planning Document, in consultation with the Cabinet Member for Environment, which may be needed, in order to publish the Document.

339. 21/00029 -Outcome of Consultation and Adoption of Statement of Community Involvement: Minerals and Waste Planning Policy and Planning Applications - Minerals and Waste and County Council Development
(Item 8)

Mr Balfour was not in attendance for this item.

Sharon Thompson (Head of Planning Applications Group) was in attendance for this item.

1. Miss Carey outlined the outcome of the public consultation, which had been undertaken from December 2020 to January 2021. She confirmed that all public responses had been considered and had contributed towards updating the way public engagement was carried out in relation to Minerals and Waste Planning Policy and Planning Applications, through the Statement of Community Involvement.

2. Mrs Thompson confirmed that the results of the consultation had indicated significant public support for the approach taken in the Statement of Community Involvement. She reminded members that if endorsed and when decided upon by the Cabinet Member, the Statement would become Council policy.

RESOLVED to:
a) note the summary of the comments received on the consultation draft of the updated Statement of Community Involvement (SCI) and the Council's proposed response to them;
b) note the content of the updated Statement of Community Involvement proposed for adoption; and
c) endorse the proposed decision.

340. Maidstone Heat Network Project
(Item 9)

Steve Baggs (Energy Programmes Manager) and Jonathan White (Projects and Operations Manager) were in attendance for this item.

1. Miss Carey gave an overview of the Maidstone Heat Network project timeline. She said the project was multi-year and acknowledged that the majority of project progress had been made over the past year. Tributes were paid to Mr Balfour for

aiding cooperation between KCC and the Ministry of Justice to include Maidstone Prison in the project, as well as to the project's officers for winning significant central government funding.

2. Mr Baggs gave a presentation which outlined the project scope and developments, a copy of which is an appendix to these minutes. It was explained that: a new energy centre would be built; each property in the network would be linked by pipes; the River Medway would be used as the network's water supply; and gas backup boilers would be operated if necessary. A breakdown of the properties benefitting from the project was given and the overall project aim, to create a renewable heat centre for Maidstone explained. It was noted that the decarbonisation of KCC's heat network was an important factor for achieving carbon net zero by 2050. Members were reassured that the project met new government criteria set out as part of the Public Sector Decarbonisation Scheme (PSDS). Mr Baggs confirmed that KCC had been awarded £20.6m from the scheme and received a further £1.2m for KCC schools.

3. Mr Booth asked whether a tariff had been negotiated for the use of water from the River Medway. Mr Baggs confirmed that the project was not currently at the point of negotiating tariffs with the Environment Agency.

4. Members asked to what extent heat extraction affected water temperature in the River Medway and whether there would be an impact on biodiversity. Mr Baggs verified that the water returning to the River Medway would be 3°C cooler and would not affect the overall temperature of the river. Further assurance was given that safeguarding advice from the Environment Agency would be sought and considered, despite existing studies indicating a negligible impact on biodiversity.

5. Mr Whybrow asked what proportion of the buildings heating requirements were met by the proposed heat network and for the scope of expansion. Mr Baggs stated that modelling had indicated that 75% of heating requirements would be covered by the low carbon source. It was confirmed that an extension of the network north and south was possible and that local partners had cooperated.

6. Mr Brazier asked whether the local electricity supply required an upgrade and who would fund the upgrade if needed. Mr Baggs confirmed that a minor local electricity upgrade would be required and was to be provided from the solar scheme.

7. Mr Baggs agreed to circulate future project updates to Members and provide briefings if requested.

RESOLVED that the progress of the Maidstone Heat Network and initial steps being undertaken to secure funding for the project via two large capital grants be noted.

341. Decisions taken between Cabinet Committee Meetings (21/00034)
(Item 18)

1. Miss Carey gave the justification for the Public Decarbonisation Fund - Section 31 Award urgent decision. She confirmed that KCC had received the grant offer from the Department for Business, Energy, and Industrial Strategy on 15 February 2021 and that the offer stipulated it had to be accepted within ten days of receipt.

2. Miss Carey added that the £20.6m awarded to KCC and £1.2m to KCC schools had to be spent by September 2021 and that additional project management support was required to ensure timely delivery.

RESOLVED that the decision be noted.

342. Nature Based Solutions to Climate Change
(Item 10)

Elizabeth Milne (Natural Environment and Coast Manager) was in attendance for this item.

1. Miss Carey introduced the report and stressed that its motivation was to heal nature with natural solutions. She added that due consideration needed to be taken when implementing natural solutions, tree planting was used as an example, it was noted that whilst most tree planting had an environmental benefit, planting without due consideration could cause environmental damage.

2. Mrs Milne provided a detailed overview of the report and gave examples of natural solutions which included: expanding woodlands and wetlands; urban trees and parks and protecting and restoring coastal nature. It was noted that natural solutions provided greater opportunities for carbon capture and would improve biodiversity. Future aims were set out alongside an acknowledgement that natural solutions needed to be embedded alongside Environment Bill requirements.

3. Mr Balfour commented that the rural environment should not be considered purely aesthetically and emphasised the need to work constructively with land managers and rural businesses.

RESOLVED that the report be noted.

343. Development of the Climate Change Risk and Impact Assessment for Kent and Medway, and Adaptation Programme and Implementation Plan
(Item 22)

Christine Wissink (Environmental Projects Manager) was in attendance for this item.

1. Miss Carey introduced the report, the importance of understanding the difference between environmental adaptation and mitigation were highlighted, as the areas had often been misunderstood.

2. Mrs Wissink gave a detailed overview of the report. She confirmed KCC's obligations under the Climate Change Act 2008 and said that the requirement to lower emissions related to the authority's own operations as well as those of the geographical area as a whole. It was noted that the Risk and Impact Assessment links to the Council's net zero action plan and the adaptation programme will see to achieve resilience for the county in line with carbon net zero targets by 2050.

RESOLVED that the findings of the Climate Change Risk and Impact Assessment be noted.

344. 21/00027 - Kent County Council Adoption of the third revision of the Kent Downs Area of Outstanding Natural Beauty Management Plan 2020-2025
(Item 11)

Mr Rayner was not in attendance for this item.

1. Miss Carey provided a verbal overview of the Management Plan, the timeline of the plan, consultation and previous comments of the committee were acknowledged. She commended the Kent Downs Area of Outstanding Natural Beauty Unit for ensuring the continued physical and operational success of the area.

2. Mrs Holt-Castle addressed recent public feedback given to the Kent Downs Area of Outstanding Natural Beauty Unit, it was confirmed that changes had been implemented to balance public use with sustainability.

3. Mr Bowles noted the importance of the Area of Outstanding Natural Beauty, given the positive impact of exercise on mental health. The member added that stronger powers were required to preserve Areas of Outstanding Natural Beauty as working landscapes.

RESOLVED to endorse the proposed decision of the Cabinet Member for Environment to approve the adoption of the revised Kent Downs Area of Outstanding Natural Beauty Management Plan 2020-2025.

345. 21/00036 Department for Environment, Food and Rural Affairs (Defra) Grant Funding - Farming in Protected Landscapes
(Item 12)

Mr Rayner was not in attendance for this item.

Nick Johannsen (Director, Kent Downs AONB Unit) was in attendance for this item.

1. Miss Carey introduced the report and confirmed that the proposed decision involved KCC receiving grant funding from the Department for Environment, Food and Rural Affairs on behalf of the Area of Outstanding Natural Beauty.

2. Mr Johannsen outlined the expected scope and scale of the grant. He confirmed that the grant would support businesses and communities in working landscapes within the Kent Downs Area of Outstanding Natural Beauty. It was stated that the scheme is planned to last for three years and is expected to value in excess of £1m.

RESOLVED to endorse the proposed decision of the Cabinet Member for Environment to:
a) accept a Grant from the Department for Environment, Food and Rural Affairs (Defra) ‘Farming in Protected Landscapes’ funding; and
b) delegate authority to Corporate Director of Growth, Environment and Transport to take relevant actions, including but not limited to, entering into contracts and other legal agreements, as necessary to implement decisions to spend the grant be endorsed.

346. 21/00037 Low Carbon across the South and East (LoCASE)
(Item 13)

Christine Wissink (Environmental Projects Manager) was in attendance for this item.

1. Miss Carey introduced the report which asked the cabinet committee to consider and endorse or make recommendations on a proposed decision to approve the delivery of the Low Carbon across the South and East Programme. She made Members aware of the work undertaken by Low Carbon across the South and East (LoCASE), which included advising businesses on decarbonisation and raising awareness of green initiatives and opportunities. The economies of scale which resulted from the proposed wider area of operation were noted.

2. Mrs Wissink provided further detail of LoCASE's scope of operation: to reduce the environmental impact of business and make companies greener; summarised previous achievements and addressed targets. It was confirmed that LoCASE was constituted of 16 partner authorities and institutions including county and unitary councils as well as universities.

RESOLVED to endorse the proposed decision of the Cabinet Member for Environment to approve the delivery of the 'Low Carbon across the South and East Programme'.

347. HGV Parking and Enforcement Update
(Item 14)

Tim Read (Head of Transportation) and Neil Edwards (Traffic Manager) were in attendance for this item.

1. Mr Payne justified KCC's enforcement powers in 7 of Kent's 12 districts. He confirmed that the Department for Transport had given KCC powers as part of central government's traffic management plans for the EU-exit transition period. It was noted that the enforcement powers came into effect from 1 January 2021 and sought, in addition to traffic management, to protect residents and businesses from anti-social HGV fly parking.

2. Mr Edwards provided an operational update and outlined enforcement statistics. He said the powers to clamp and issue fixed penalty notices in the 7 districts were enforced directly by KCC. It was noted that the M20 corridor comprised the main area of enforcement activity to date. It was confirmed that enforcement officers had operated 24 hours a day, more than two thirds of clamping had taken place overnight and 82% of offenders were foreign HGVs and 18% domestic HGVs. The committee was reminded that the enforcement scheme continued to 30 June 2021.

3. Members discussed the impact of HGV fly parking on residents and highway infrastructure. Legislation and subsequent enforcement were cited as effective means of protecting local interests, comparisons were made with the domestic traffic management policies of other European states.

4. Mr Jones said that KCC had written to the Department for Transport with a request to extend enforcement powers to the Tonbridge and Malling district. A

response had not been received at the time of the meeting. Mr Jones agreed to follow up the matter with the Department.

5. An explanation of the enforcement process, as well as an indication of how quickly enforcement officers were able to react to public information submitted via the Country Eye app, was sought by Mr Whybrow. Mr Edwards confirmed that following the submission of information, transportation officers made a judgement on whether enforcement was viable, before passing the information to enforcement officers for action. It was added that district councils submitted information directly to KCC on HGV enforcement matters.

6. Mr Lewis asked for confirmation that the enforcement scheme operated at a financial loss. Mr Jones said that under the enforcement arrangement KCC operated as an agent of the Department for Transport and confirmed that the scheme was both self-funded and relied on a certain level of clamping to become cost neutral. Mr Jones added that the forecasts to June 2021 outlined in the report were based on figures from the first six weeks of the scheme. He noted that the enforcement powers provided secondary financial benefits when the reduction of highway network risk was considered.

7. Mr Rayner proposed, and Mr Brazier seconded a motion that: **"The Environment and Transport Cabinet Committee agree to note the update and recommend that the Cabinet Member for Highways and Transport writes to the Secretary of State for Transport to extend the period of enforcement powers and include those Boroughs in north and west Kent not currently included in the scheme."**

8. Members agreed unanimously.

RESOLVED that the Environment and Transport Cabinet Committee agree to note the update and recommend that the Cabinet Member for Highways and Transport writes to the Secretary of State for Transport to extend the period of enforcement powers and include those Boroughs in north and west Kent not currently included in the scheme.

348. Department for Transport (DfT) Consultation: Night Flight Restrictions
(Item 15)

Joseph Ratcliffe (Transport Strategy Manager) and Nola Cooper (Principal Transport Planner) were in attendance for this item.

1. Mr Payne summarised the draft response to the Department for Transport Night Flight Restrictions Consultation. He noted that the draft response focused on London Gatwick Airport, as the airport contributed the majority of night flights over Kent. Mr Payne said that, given the reduction in the number of night flights in the last year, it was the right time for the case to be made to government for a significant permanent reduction, given the disturbance caused to Kent's residents.

2. Mr Ratcliffe provided further detail on the draft response and relevant policy. He confirmed that the Department for Transport proposal had been to extend the current Night Flight Restrictions policy by two years, to be followed by a new policy from 2024. He advised the committee that the draft response recommended that the

number of permitted night flights from Gatwick be lowered to fall in line with London Heathrow, which had a considerably lower rate.

3. Members were reminded that subject to the committee's endorsement and comments the formal consultation response would be sent by the Cabinet Member following the meeting.

4. In response to a question from Mr Lewis, Mr Ratcliffe confirmed that the policy applied specifically to London's three designated airports: Heathrow, Gatwick and Stansted, and that other regional airports set their own night flight policy.

5. Mr Balfour mentioned the noticeable reduction in disturbance over the past year and commented that the lower volume of night flights over West Kent had a positive impact on residents' mental health.

6. Clarification was sought by Members regarding the meaning of "so that communities across the South East can benefit from future additional capacity," which was written in the of the draft response. Mr Ratcliffe confirmed that the passage referenced the predicted reduction in night flights in the event that a third runway was approved at Heathrow. Members offered to meet with the Cabinet Member following the meeting to agree a rewording of the highlighted clause.

7. Mr Lewis did not endorse the draft KCC response to the Department for Transport Night Flight Restrictions Consultation and he abstained in the vote.

RESOLVED that the draft KCC response to the Department for Transport Night Flight Restrictions Consultation be endorsed.

349. Shared Outcomes Fund - Trees Outside Woodland - Progress Update
(Item 16)

Robin Hadley (Soft Landscape Asset Manager), Barry McKenna (Contracts Manager) and Louise Butfoy (Shared Outcomes Fund Project Officer) were in attendance for this item.

1. Mr Payne began the update by saying that the Trees Outside Woodland project was overseen by the Department for Environment, Food and Rural Affairs and that KCC led on urban tree establishment and the alternate management of roadsides.

2. Mr Hadley gave an overview of the project timeframe, confirming that the Shared Outcomes Fund had run for six months and would run until March 2023. The extent of funding and partners involved in the project were delineated. He said that despite supply delays related to the pandemic, overall project progress had been positive.

3. Mr McKenna and Miss Butfoy provided information on urban tree establishment. Mr McKenna noted that three areas had been targeted: planned new developments, major retrofit re-planting and small-scale replanting. He confirmed that the project forward plan would include a best practice guide on urban planting. Miss Butfoy added that to date six native woodland plots had been created: 3 in

Maidstone, 2 in Swale and 1 in Tonbridge and Malling, the plots ranged from 100 to 150m² and would be monitored quarterly until March 2023.

4. Members gave their support to the project and encouraged the project officers to work with local charities wherever possible.

RESOLVED to endorse the project approach and deliverables the County Council will undertake as part of the Shared Outcomes Fund – Trees Outside of Woodland project.

350. 21/00030 - Proposed Inland Border Facility at White Cliffs, Dover
(Item 17)

1. Mr Payne introduced the report which asked the cabinet committee to consider and endorse or make recommendations on a proposed decision to approve the acceptance of the Section 31 Grant award from the Department for Transport to procure and manage the Inland Border Facility and Border Control Post works at White Cliffs, Dover. He said that the proposed decision permitted the procurement of the Inland Border Facility site and confirmed that KCC would oversee construction on behalf of the Department for Transport. Mr Jones added that the decision was not related to site planning, which had been managed by the Department for Transport.

2. Mr Hook raised concern about the possible negative impact of the project on local communities and the environment, and stressed the need for more comprehensive environmental impact analysis and public consultation.

3. Mr Bond said that KCC's management of site construction was likely to minimise environmental damage and improve community engagement, given the authority's local expertise when compared to direct management by the Department for Transport.

4. Members voted on the recommendation to endorse the proposed decision of the Cabinet Member for Highways and Transport to approve the acceptance of the Section 31 Grant award from the Department for Transport (DfT) to procure and manage the Inland Border Facility and Border Control Post works at White Cliffs, Dover.

5. The voted passed by 6 votes to 5.

RESOLVED to endorse the proposed decision of the Cabinet Member for Highways and Transport to approve the acceptance of the Section 31 Grant award from the Department for Transport (DfT) to procure and manage the Inland Border Facility and Border Control Post works at White Cliffs, Dover.

351. Performance Dashboard
(Item 19)

Rachel Kennard (Chief Analyst) was in attendance for this item.

1. Mrs Kennard gave an overview of the report. She said that twelve of the eighteen KPIs in the Growth Environment and Transport directorate had achieved target and were RAG rated green.

2. Miss Carey addressed Key Performance Indicator WM01 by saying that recycling and composting continued to be negatively affected by an overall reduction in the volume of materials processed, a trend that had persisted throughout the pandemic. She said kerbside collections of recyclable materials had increased and that Household Waste Recycling Centres were able to operate at capacity despite social distancing requirements.

RESOLVED that the report be noted.

352. Work Programme 2021-22
(Item 20)

1. In response to a question from Mr Rayner, Mr Jones said the North West Maidstone Transfer Station project was unlikely to be sufficiently developed to warrant a report to the meeting of the cabinet committee scheduled for 24 June but that it would be considered by the committee at the appropriate time.

2. Mr Payne thanked the chairman and the committee members for their contributions and recommendations. He paid tribute to those committee members leaving the Council following the May 2021 election.

3. The chairman thanked committee members for their work over the previous four years.

RESOLVED that the Work Programme be agreed.

353. Dates of Environment and Transport Cabinet Committee Meetings in 2021/22
(Item 21)

RESOLVED that the future meeting dates be noted.

ENVIRONMENT & TRANSPORT CABINET COMMITTEE

MINUTES of a meeting of the Environment & Transport Cabinet Committee held in the Mote Hall Leisure Centre, Maidstone, Kent, ME15 7RN on Thursday, 27 May 2021.

PRESENT: Mr N Baker, Mr M Baldock, Mr C Beart, Mr T Bond, Mr I Chittenden, Mr N Collor, Mr D Crow-Brown, Ms M Dawkins, Mr M Dendor, Mr S Holden, Ms S Hudson, Mr B Lewis, Mr R Love, OBE, Ms L Parfitt-Reid, Mr D Watkins

IN ATTENDANCE: Mr J Cook (Democratic Services Manager)

UNRESTRICTED ITEMS

354. Election of Chair
(Item 3)

It was proposed and seconded that Mr Holden be elected chair of the committee.

RESOLVED that Mr Holden be elected chair of the committee.

This page is intentionally left blank

From: David Brazier, Cabinet Member for Highways and Transportation

Susan Carey, Cabinet Member for Environment

Simon Jones, Interim Corporate Director for Growth, Environment and Transport

To: Environment & Transport Cabinet Committee – 29 June 2021

Subject: Performance Dashboard

Classification: Unrestricted

Summary:
The Environment and Transport Cabinet Committee Performance Dashboard shows progress made against targets set for Key Performance Indicators (KPIs). The latest Dashboard includes data up to March 2021.

Thirteen of the eighteen KPIs achieved target and are RAG rated Green. Four KPIs were below target but did achieve the floor standard and are RAG rated Amber. One KPI is no longer reported.

Recommendation(s):
The Environment and Transport Cabinet Committee is asked to NOTE the report for Quarter 4 of 2020/21, and COMMENT on proposed KPIs for 2021/22.

1. Introduction

1.1. Part of the role of Cabinet Committees is to review the performance of the functions of the Council that fall within the remit of the Committee. To support this role, Performance Dashboards are regularly reported to each Cabinet Committee throughout the year, and this is the fifth and final report for the 2020/21 financial year.

2. Performance Dashboard

2.1. The Dashboard provides a progress report on performance against target for the Key Performance Indicators (KPIs) for 2020/21. These KPIs, activity indicators and targets came before the Cabinet Committee for comment in July 2020. The current Environment and Transport Cabinet Committee Performance Dashboard is attached at Appendix 1.

2.2. The current Dashboard provides results up to the end of March 2021.

2.3. KPIs are presented with RAG (Red/Amber/Green) alerts to show progress against targets. Details of how the alerts are generated are outlined in the Guidance Notes, included with the Dashboard in Appendix 1.

2.4. Three out of the five KPIs in Highways & Transportation achieved or exceeded target and were RAG rated Green. Emergency incidents attended to within 2 hours missed target by one percentage point across the year, with performance impacted in part by

contractor staff self-isolating due to Covid symptoms throughout the year. Performance for streetlights, illuminated signs and bollards repaired in 28 calendar days failed to reach target for the year having been significantly impacted in August by a technical fault (where some lights were working but had stopped communicating with the Central Management System), and resource impacts both to staff and materials due to Covid-19.

2.5. Two of the Waste Management indicators exceeded target, namely Municipal waste converted to energy. Municipal waste recycled and composted remains below target due to less waste being taken to Household Waste Recycling Centres (HWRCs). Waste diverted from landfill continues to be slightly under the 99% target. This is partly due to capacity reduction at the Allington Energy from Waste Facility due to maintenance work in September and October, where some of the waste which could not be treated went to landfill. The plant still took over 75% of its usual volume of waste during those two months. Between January and March 2021, 99.8% has been diverted from landfill.

2.6. For digital take-up, all seven indicators met or exceeded target and were RAG rated Green as more people switched to completing transactions online.

2.7. For Environment, Planning and Enforcement, as expected, emissions have continued to reduce sharply, due in part to the impact of Covid-19 restrictions, resulting in a 44% reduction in emissions compared to the 2015 baseline. This exceeds the stretch target of 38% reduction to be achieved by March 2021.

3. Recommendation(s):

The Environment and Transport Cabinet Committee is asked to NOTE the report for Quarter 4 of 2020/21, and COMMENT on proposed KPIs for 2021/22.

4. Contact details

Report Author: Rachel Kennard
Chief Analyst
Strategic and Corporate Services - Analytics
03000 414527
Rachel.Kennard@kent.gov.uk

Relevant Director: Simon Jones
Interim Corporate Director, Growth, Environment and Transport
03000 411683
Simon.Jones@kent.gov.uk

Environment and Transport Performance Dashboard

Financial Year 2020/21

Results up to March 2021

Produced by Strategic and Corporate Services - Analytics

Publication Date: June 2021

Guidance Notes

Data is provided with monthly frequency except for Waste Management and Greenhouse Gases where indicators are reported with quarterly frequency and as rolling 12-month figures to remove seasonality.

RAG RATINGS

GREEN	Target has been achieved
AMBER	Floor Standard* achieved but Target has not been met
RED	Floor Standard* has not been achieved

*Floor Standards are the minimum performance expected and if not achieved must result in management action

Activity Indicators

Activity Indicators representing demand levels are also included in the report. They are not given a RAG rating. Instead they are tracked within an expected range represented by Upper and Lower Thresholds. The Alert provided for Activity Indicators is whether they are in expected range or not. Results can either be in expected range (**Yes**) or they could be **Above** or **Below**.

Key Performance Indicators Summary

Highways and Transportation	Year RAG
HT01 : Potholes repaired in 28 calendar days (routine works not programmed)	GREEN
HT02 : Faults reported by the public completed in 28 calendar days	GREEN
HT04 : Customer satisfaction with service delivery (100 Call Back)	GREEN
HT08 : Emergency incidents attended to within 2 hours	AMBER
HT12 : Streetlights, illuminated signs and bollards repaired in 28 calendar days	AMBER

Waste Management (Rolling 12 months)	Year RAG
WM01 : Municipal waste recycled and composted	AMBER
WM02 : Municipal waste converted to energy	GREEN
WM01 + WM02 : Municipal waste diverted from landfill	AMBER
WM03 : Waste recycled and composted at HWRCs	GREEN
WM04 : Percentage of customers satisfied with HWRC services	N/a

Digital Take up	Year RAG
DT01 : Percentage of public enquiries for Highways Maintenance completed online	GREEN
DT03 : Percentage of concessionary bus pass applications completed online	GREEN
DT04 : Percentage of speed awareness courses booking completed online	GREEN
DT05 : Percentage of HWRC voucher applications completed online	GREEN
DT06 : Percentage of Highway Licence applications completed online	GREEN
DT15 : Percentage of KCC travel Saver applications completed online	GREEN
DT16 : Percentage of 16+ Travel Saver applications completed online	GREEN

Environment, Planning and Enforcement	Year RAG
EPE14 : Greenhouse Gas emissions from KCC estate (excluding schools)	GREEN

Service Area	Director	Cabinet Member
Highways & Transportation	**Simon Jones**	**David Brazier**

Key Performance Indicators

Ref	Indicator description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Full Year	Year RAG	Target	Floor
HT01	Potholes repaired in 28 calendar days (routine works not programmed)	90%	92%	95%	90%	90%	**94%**	GREEN	90%	80%
HT02	Faults reported by the public completed in 28 calendar days	89%	89%	89%	91%	91%	**92%**	GREEN	90%	80%
HT04	Customer satisfaction with service delivery (100 Call Back)	*	88%	95%	97%	93%	**95%**	GREEN	85%	70%
HT08	Emergency incidents attended to within 2 hours	99%	98%	96%	95%	96%	**97%**	AMBER	98%	95%
HT12	Streetlights, illuminated signs and bollards repaired in 28 calendar days	94%	84%	90%	93%	95%	**86%**	AMBER	90%	80%

* No surveys due to prioritisation of other work by the contact centre

HT08 – Emergency callouts put pressure on both KCC Incident Response Officers and Amey crews during the working day as well as out of hours with close to 3,000 emergency incidents attended this year. The service was impacted by the weather event in February where continuous snow response led to a loss of over 2,000 productive hours due to stand-down periods whilst crews rested from winter salting. In addition, both Amey and their supply chain had staff and operatives self-isolating due to Covid symptoms throughout the year. Overall for the year, the target was missed by 1 percentage point.

HT12 – This KPI was significantly impacted in August by a technical fault (where some lights were working but had stopped communicating with the Central Management System), and from resource impacts during the year both to staff and materials due to Covid-19. However, performance improved towards the year end and from January through to March with the target being met or exceeded in each of those months.

Service Area	Director	Cabinet Member
Highways & Transportation	**Simon Jones**	**David Brazier**

Activity Indicators

Ref	Indicator description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Full Year	In expected range?	Expected Range Upper	Expected Range Lower
HT01b	Potholes repaired (as routine works and not programmed)	929	1,130	249	1,577	2,083	**12,778**	Yes	14,100	9,300
HT02b	Routine faults reported by the public completed	4,057	4,097	2,960	5,076	7,735	**48,780**	**Below**	61,700	49,700
HT06	Number of new enquiries requiring further action (total new faults)	6,392	5,678	8,447	9,629	8,508	**77,818**	**Below**	111,900	92,700
HT07	Work in Progress (enquiries waiting for action) - end of month snapshot	5,512	5,869	6,448	7,474	**6,681**	N/a	**Below**	8,600	7,600

HT02b – There was a reduction in customer reporting of routine faults during the early stage of Covid-19, but this has picked up as residents returned to using the network. The lower number in January reflects lower reporting over the Christmas period and Tier 4 restrictions resulting in less road use and lower reporting. Despite the continued lockdown, demand returned to a more normal level in March.

HT06 – The total number of enquiries raised for action saw a reduction during the early stage of Coronavirus at around 3,000 per month but this increased to be closer to normal levels towards the end of year.

HT07 – The snow in February saw work in progress increase to its highest level since the start of the pandemic, although this did reduce as the weather improved in March and finished the year below expected levels.

Service Area	Interim Director	Cabinet Members
Waste Management	**Stephanie Holt-Castle**	**Tony Hills**

Key Performance Indicators (Rolling 12 months)

Ref	Indicator description	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	RAG	Target	Floor
WM01	Municipal waste* recycled and composted	47%	46%	46%	46%	**46%**	AMBER	50%	45%
WM02	Municipal waste* converted to energy	52%	54%	53%	52%	**52%**	GREEN	49%	44%
01+02	Municipal waste diverted from landfill	99.3%	99.6%	99.3%	98.6%	**98.7%**	AMBER	99%	95%
WM03	Waste recycled and composted at Household Waste Recycling Centres (HWRCs)	65%	62%	64%	67%	**70%**	GREEN	65%	60%
WM04	Percentage of customers satisfied with HWRC services (Annual Indicator)	98%	N/a	N/a	N/a	**	N/a	96%	85%

* This is waste collected by Districts, and by KCC via HWRCs.
** This survey ended in 2019/20. A different survey conducted in March 2021 found 95% overall satisfaction.

WM01 – Recycling and composting continue to be impacted by a reduction in volumes taken to HWRC sites since the start of the pandemic. The volume of kerbside collections of recyclable and compostable materials has increased by 14% in the past 12 months, but the increase in non-recyclable materials has been slightly greater.

WM01+02 – The Allington Waste from Energy facility was impacted by maintenance work in September and October, but still processed over 75% of its usual volume of waste for those two months. The remainder was diverted to a number of alternative processing destinations, but some additional waste also went to landfill resulting in the target being missed by less than 1 percentage point. Between January and March 2021, 99.8% has been diverted from landfill.

WM03 – A retrospective review of Suppliers data has now been concluded by Waste Management and, as a result, HWRC figures have been revised for 2020/21 to take into account elements of bulky waste that have been recycled in line with contractual obligations, and materials such as street sweepings that are reprocessed to their constituent parts and then re-used. The revised figures are a more accurate account of recycling rates in the county.

Service Area	Interim Director	Cabinet Members
Waste Management	**Stephanie Holt-Castle**	**Tony Hills**

Activity Indicators (Rolling 12 months)

Ref	Indicator description	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	In expected range?	Expected Range Upper	Expected Range Lower
WM05	Waste tonnage collected by District Councils	541,645	558,469	573,257	587,851	**602,744**	**Above**	550,000	530,000
WM06	Waste tonnage collected at HWRCs	142,931	101,163	86,232	79,993	**73,002**	**Below**	160,000	140,000
05+06	Total waste tonnage collected	684,576	659,632	659,489	667,844	**675,746**	Yes	710,000	670,000
WM07	Waste tonnage converted to energy at Allington Waste to Energy Plant	324,625	327,954	323,622	323,123	**327,984**	Yes	340,000	280,000

WM05 – Volumes of all kerbside waste have increased as people continue to spend more time at home and will include some diverted from HWRCs. March saw the highest volume of Waste ever processed at the Allington Energy from Waste plant.

WM06 – Reductions in the volume of non-household waste collected at HWRCs is partly due to the shutdown of sites between April and mid-May due to Coronavirus. Volumes for the 12 months to March were just over half of what they were the previous year.

Service Area	Director	Cabinet Member
Highways, Transportation and Waste	**Simon Jones**	**David Brazier, Tony Hills**

Digital Take-up indicators

Ref	Indicator description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Year to Date	YTD RAG	Target	Floor
DT01	Percentage of public enquiries for Highways Maintenance completed online	58%	58%	63%	64%	61%	**57%**	GREEN	55%	45%
DT03	Percentage of concessionary bus pass applications completed online	64%	65%	76%	79%	75%	**72%**	GREEN	45%	30%
DT04	Percentage of speed awareness courses bookings completed online	82%	74%	85%	86%	87%	**84%**	GREEN	80%	65%
DT05	Percentage of HWRC voucher applications completed online	98%	99%	99%	99%	96%	**99%**	GREEN	95%	85%
DT06	Percentage of Highway Licence applications completed online	97%	96%	98%	99%	98%	**95%**	GREEN	90%	75%
DT15r	Percentage of KCC Travel Saver applications completed online (Rolling 12 months)	97%	98%	98%	99%	**99%**	N/a	GREEN	80%	60%
DT16r	Percentage of 16+ Travel Saver applications completed online (Rolling 12 months)	99%	100%	100%	100%	**100%**	N/a	GREEN	80%	60%

Division	Director	Cabinet Member
Environment, Planning and Enforcement	**Stephanie Holt-Castle**	**Tony Hills**

Key Performance Indicator (reported quarterly in arrears)

Ref	Indicator description	Dec 19	Mar 20	Jun 20	Sep 20	Dec 20	RAG	Target	Floor
EPE14	Greenhouse Gas emissions from KCC estate (excluding schools) in tonnes	30,267	29,926	28,152	26,908	25,817	GREEN	28,400	29,800

As expected, emissions have continued to reduce sharply due in part to the impact of Covid-19 restrictions, resulting in a 44% reduction in emissions compared to the 2015 baseline. This exceeds the stretch target of 38% reduction to be achieved by March 2021. Net Zero monitoring commences from April 2021 with first quarter data due in early Autumn.

This page is intentionally left blank

Appendix 2

Proposed KPIs and Activity indicators for 2021/2022

Highways and Transportation

Key Performance Indicators

Ref	Indicator description	2020/21 Latest	2021/22 Floor	2021/22 Target
HT01	Potholes repaired in 28 calendar days	94%	80%	90%
HT02	Routine faults/enquiries reported by the public completed in 28 calendar days	92%	80%	90%
HT04	Customer satisfaction with routine Highways' service delivery (100 Call back survey)	95%	70%	85%
HT08	Emergency incidents attended to within 2 hours	97%	95%	98%
HT12	Streetlights/illuminated signs/bollards repaired in 28 calendar days	86%	80%	90%

Activity indicators

Ref	Indicator description	Threshold	Q1	Q2	Q3	Q4
HT01b	Potholes repaired (as routine works and not programmed)	Upper	4,300	2,600	3,000	4,200
		Lower	3,100	1,400	1,800	3,000
HT02b	Routine faults reported by the public completed	Upper	13,700	14,600	14,900	18,500
		Lower	10,700	11,600	11,900	15,500
HT06	Number of new enquiries requiring further action (faults)	Upper	26,000	27,000	27,000	34,000
		Lower	21,000	21,000	22,000	28,000
HT07	Work in Progress (outstanding enquiries waiting action)	Upper	7,300	6,900	7,500	8,600
		Lower	6,300	5,900	6,500	7,600
HT13	Number of Street Word permits	Upper	36,800	35,000	34,800	39,100
		Lower	30,100	29,000	28,800	33,100

Digital Take-up

Ref	Indicator description	2020/21 Latest	2021/22 Floor	2021/22 Target
DT01	Percentage of public enquiries for Highways' maintenance reported online	57%	45%	55%
DT03	Percentage of concessionary bus pass applications completed online	72%	60%	70%
DT04	Percentage of speed awareness courses bookings completed online	84%	75%	85%

Ref	Indicator description	2020/21 Latest	2021/22 Floor	2021/22 Target
DT06	Percentage of Highway Licence applications completed online	95%	85%	95%
DT15	Percentage of KCC Travel Saver applications completed online (rolling 12 months)	99%	80%	90%
DT16	Percentage of 16+ Travel Saver applied for online (rolling 12 months)	100%	80%	90%

Environment and Waste

Key Performance Indicators – rolling 12 months

Ref	Indicator Description	2020/21 Latest	2021/22 Floor	2021/22 Target
WM01	Municipal waste recycled and composted	46%	45%	50%
WM02	Municipal waste converted to energy (including conversion to refuse derived fuel)	52%	44%	49%
WM01+2	Diversion from landfill	98.7%	95%	99%
WM03	Percentage of waste recycled and composted at HWRCs	70%	65%	70%
WM08	Overall score for mystery shopper assessment of Household Waste Recycling Centres	96%	85%	96%

Other Key Performance Indicators

Ref	Indicator description	2020/21 Latest	2021/22 Floor	2021/22 Target
EPE14	GHG emissions (KCC estate/services and Traded Companies) in tonnes, to measure progress towards Net Zero by 2030	New Indicator	TBC	TBC
EW1	Percentage of statutory planning consultee responses submitted to the local planning authority within 21 days: • surface water drainage in major developments • ecology in new developments • mineral and waste safeguarding matters	New Indicator	85%	76%
DT05	Percentage of HWRC voucher applications completed online	97%	85%	95%

Appendix 2

Activity indicators (rolling 12 months)

Ref	Indicator description	Threshold	Annual
WM05	Waste tonnage collected by district councils	Upper	550,000
		Lower	530,000
WM06	Tonnage managed through HWRC	Upper	150,000
		Lower	130,000
WM05+ 06	Total Waste Tonnage	Upper	700,000
		Lower	660,000
WM07	Waste tonnage converted to energy at Allington Waste to Energy Plant	Upper	340.000
		Lower	320,000

This page is intentionally left blank

From: David Brazier, Cabinet Member for Highways and Transport

Susan Carey, Cabinet Member for Environment

Simon Jones, Corporate Director for Growth, Environment & Transport

To: Environment and Transport Cabinet Committee – 29 June 2021

Subject: **Risk Management: Growth, Environment and Transport Directorate**

Classification: **Unrestricted**

Past Pathway of Paper: None

Future Pathway of Paper: None

Electoral Division: All

Summary: This paper presents the strategic risks relating to the Environment and Transport Cabinet Committee, comprising of two risks featuring on the Corporate Risk Register for which the Corporate Director is the designated 'Risk Owner' on behalf of the Corporate Management Team; plus a summary of key risks from within the directorate.

Recommendation(s):
The Cabinet Committee is asked to consider and comment on the risks presented.

1. Introduction

1.1 Risk management is a key element of the Council's internal control framework and the requirement to maintain risk registers ensures that potential risks that may prevent the Authority from achieving its objectives are identified and controlled.

1.2 Directorate risks are reported to Cabinet Committees annually and contain strategic or cross-cutting risks that potentially affect several functions across the Growth, Environment & Transport directorate, and often have wider potential interdependencies with other services across the Council and external parties.

1.3 Corporate Directors also lead or coordinate mitigating actions in conjunction with other Directors across the organisation to manage risks featuring on the Corporate Risk Register.

1.4 The majority of these risks, or at least aspects of them, will have been discussed in depth at the relevant Cabinet Committee(s) throughout the year, demonstrating that risk considerations are embedded within core business.

1.5 The assessment scores given to individual risks help to prioritise risks in order to make clear which risks are most important to the Directorate and requires an understanding by senior managers of:

- The likelihood of each threat occurring.
- The impact of each threat if it did occur.

The process adopted by KCC follows guidance provided to practitioners in the Management of Risk.

2. Growth, Environment and Transport led Corporate Risks

2.1 The Corporate Director for the Growth, Environment and Transport directorate is the lead Director for two of the council's corporate risks. A brief summary of changes over the past year are outlined below, with full details contained in the risk register attached at appendix 1. The risks are regularly reviewed by directorate and divisional management teams.

Risk Reference	Risk Description	Current Score	Target
CRR0003	Securing resources to aid economic recovery and enabling infrastructure	20 (High)	16 (High)
The scope of the risk has broadened since the coronavirus pandemic, as the Authority, working with partners, seeks to fully understand both short and longer term Covid-19 impacts. The Kent and Medway Economic Partnership has produced a comprehensive Economic Renewal and Resilience Plan to aid local recovery, which has 5 key workstreams, including the establishment of a Kent and Medway Employment Task Force and Action Plan. It is acknowledged that given the continued uncertainty and Covid-19 related restrictions, the plan and associated actions will require continual review. An active pipeline of local projects is in place for potential funding announcements, which KCC also submitted responses to Government consultations for reform of the planning system, which would have significant infrastructure related impacts for the county. Central Government has since announced that elements of these reforms are being reviewed.			
CRR0042	Post UK/EU Transition border systems, infrastructure and regulatory arrangements	20 (High)	12 (Medium)
KCC, working with both national and local partners, has worked hard to prepare for the end of the UK/EU Transition period, in order to minimise disruption to local communities and to keep the county open for business. As well as leaving the EU single market and customs union, the coronavirus pandemic means anyone leaving the UK must have a negative COVID-19 test within 72 hours of travelling. KCC continues to support partners with the ongoing requirements for a negative COVID-19 test for all travellers to France before they can access Kent's ports.			

3. Growth, Environment and Transport Directorate risk profile

3.1 The current risks in the GET Directorate risk register are shown below. Risks are presented in order of significance (highest first).

Risk Reference	Risk Description	Current Score	Target
GT0001	Health, Safety and wellbeing considerations for public, contractors and staff	20 (High)	10 (Medium)
During the previous year a greater focus has been on the welfare of our own staff, and a Health and Safety plan has been developed and is being implemented across the directorate. The Coronavirus pandemic has introduced significant additional risk considerations in relation to the safe operation of the directorate's services, many of which are 'frontline' in nature. This is in addition to potential impacts on workforce health, safety and wellbeing. These are being mitigated by regular risk assessments, taking specialist advice where necessary, and analysing directorate results of the recent KCC staff survey to look for learning points and development of actions. The risk level has increased due to the numbers of staff working from home and concerns relating to staff wellbeing.			

Risk Reference	Risk Description	Current Score	Target
GT0004	Skills shortage and capacity issues to apply for funding and manage contracts and projects	16 (High)	6 (Low)
As part of the external bidding process officers have to submit suitable business cases, which requires staff with the appropriate skill set to manage contracts, projects and for planning applications. It is possible that the directorate would be unable to attract or retain suitably trained project managers as the private sector remains competitive in this area. A workforce strategy and action plan has been developed and is regularly reviewed, aiming to address key skills gaps. Emphasis has been placed on raising the standards of project management, while succession planning is another mitigation.			

Risk Reference	Risk Description	Current Score	Target
GT0025	Capital Investment and Asset Management	15 (Medium)	9 (Medium)
This is a new risk on the directorate risk register relating to capital funding for Highway Asset Management. At the time of writing, internal and DfT funding was not yet confirmed for 2021/22.			

Risk Reference	Risk Description	Current Score	Target
GT0008	Ash Dieback. Destruction of the Ash species and associated costs to KCC.	12 (Medium)	12 (Medium)
The degree of spread has caused concerns over the future of Ash trees in the County as well as cost implications regarding the management of the disease. Mitigations involve multi-agency monitoring and subsequent action as appropriate, as well as the publication of information to the general public.			

Risk Reference	Risk Description	Current Score	Target
GT0003	Directorate preparedness for, and management of, severe weather incidents	12 (Medium)	9 (Medium)
This is a directorate-focused version of the corporate emergency response and resilience risk. The number of severe weather events affecting the county has increased in the past few years, which can have a significant impact on all GET services, businesses and the Kent community. Services within the directorate continue to play an important role in planning for, responding to, and recovering from these events. This risk has been updated to reflect the current risk of concurrent emergencies.			

Risk Reference	Risk Description	Current Score	Target
GT0026	Net Zero and Insufficiency of Funding	12 (Medium)	9 (Medium)
This is a new risk which has been raised due to the investment needed in order to meet the 2030 Net Zero objective. Funding has not yet been identified in the capital programme.			

Risk Reference	Risk Description	Current Score	Target
GT0021	Internal services provided to the Directorate do not meet an acceptable standard	12 (Medium)	9 (Medium)
The Directorate Management Team is continually liaising with KCC commissioners on any issues that arise regarding performance of service providers (e.g. KCC Local Authority trading companies or outsourced services), and the directorate's services are increasingly being involved as key stakeholders in matters of strategy and service design. This is in addition to liaising with corporate services to ensure they can provide expert advice at the right time.			

Risk Reference	Risk Description	Current Score	Target
GT0024	Information Governance. Management of personal data.	12 (Medium)	6 (Low)
This risk replaced a previous Directorate risk relating to the implementation of the General Data Protection Regulations and relates to the management of increasing amounts of personal data within the Directorate. Mitigation primarily relates to training and learning of staff across the Directorate. More recently, the Coronavirus pandemic has meant that services have had to swiftly adapt to new operating models and new ways of working for staff, which introduces new risks that require careful management.			

Risk Reference	Risk Description	Current Score	Target
GT0019	Delivery of in-year budget targets.	Medium (12)	Low (4)
At the time of most recent reporting to Cabinet, the GET directorate was forecasting a revenue variance of -£0.3m. This excluded Covid-19 related additional expenditure.			

Risk Reference	Risk Description	Current Score	Target
GT0020	Identification, planning and delivery of Medium-Term Financial Plan targets.	12 (Medium)	4 (Low)
The directorate is required to make its contribution to the challenging savings targets required by the council over the medium term. There is a reduced ability for the directorate to mitigate year-on-year, but the Directorate participates fully in financial monitoring processes and has developed savings and income proposals that have been fed into the MTFP. Key projects are overseen by the GET Portfolio Board where they are monitored. The risk rating has been reduced to a score of 12 (Medium). The current year settlement is positive and therefore the level of risk is reduced, however uncertainty regarding Government funding for the next 3-5 years remains.			

4. Key Divisional Risks

4.1 The Corporate and Directorate risks are underpinned by risks at a divisional level that are typically more operational in nature. The Directorate Management Team has regular oversight of significant divisional risks, which currently includes those relating to:

- Ensuring services continue to comply with significant policy changes at national level and meet service delivery standards in challenging financial context and impact of Covid-19;
- EU Transition and associated risks;
- Sufficiency of capital funding for highway asset management;
- Connectivity and Technology requirements;

- Operational risks such as health and safety concerns in household waste recycling centres.

5. Recommendation

The Cabinet Committee is asked to **consider** and **comment** on the risks presented in this report.

6. Background Documents

6.1 KCC Risk Management Policy and associated risk management toolkit on KNet intranet site. http://knet/ourcouncil/Management-guides/Pages/MG2-managing-risk.aspx

Contact details

Report Author:
Jody Catterall, Risk Manager
Jody.catterall@kent.gov.uk

Relevant Corporate Director:
Simon Jones, Corporate Director, Growth, Environment and Transport
Simon.Jones@kent.gov.uk

APPENDIX 1

KCC Corporate Risk Register:

GET-led Corporate Risks

May 2021 – FOR PRESENTATION TO ENVIRONMENT & TRANSPORT CABINET COMMITTEE – 25th June 2021

Corporate Risk Register - Summary Risk Profile

Low = 1-6	Medium = 8-15	High =16-25

Risk No.	Risk Title	Current Risk Rating	Target Risk Rating	Direction of Travel since Jan 2020
CRR0003	Securing resources to aid economic recovery and enabling infrastructure	20	16	⇧
CRR0042	Post-Transition UK/EU border systems, infrastructure and regulatory arrangements	20	12	⇧

NB: Current & Target risk ratings: The 'current' risk rating refers to the current level of risk taking into account any mitigating controls already in place. The 'target residual' rating represents what is deemed to be a realistic level of risk to be achieved once any additional actions have been put in place. On some occasions the aim will be to contain risk at current level.

The overall risk score is derived from multiplying the likelihood and impact scores.

Likelihood & Impact Scales					
Likelihood	Very Unlikely (1)	Unlikely (2)	Possible (3)	Likely (4)	Very Likely (5)
Impact	Minor (1)	Moderate (2)	Significant (3)	Serious (4)	Major (5)

Risk ID	CRR0003	Risk Title	Securing resources to aid economic recovery and enabling infrastructure		
Source / Cause of Risk	**Risk Event**	**Consequence**	**Risk Owner**	**Current Likelihood**	**Current Impact**
The Coronavirus pandemic is impacting on the economy in Kent & Medway. This is likely to become more severe in the latter part of 2020, particularly as the Govt furlough scheme ends, and the impacts could be disproportionate across the county (e.g. in coastal areas). To gain an understanding of the implications, an impact assessment has been conducted, which has led to the preparation and launch of an 18-month local economic renewal and resilience plan, which aims to act as a stimulus for improvement. The Council actively seeks to secure the resources/funding necessary to provide the infrastructure required to support growth, which often need to be bid for in very tight timescales and are increasingly subject to the drive to deliver economic impact, housing and employment outputs. EU structural funds are set to be	The inability to fully secure sufficient funding, including contributions from development, to deliver the infrastructure necessary to support growth may require gap funding in order for KCC to fulfil its statutory duties.	Key opportunities for growth missed. The Council finds it increasingly difficult to fund services across Kent and fully mitigate the overall impact of housing growth on KCC services and, therefore, communities. Kent becomes a less attractive location for inward investment and business. Our ability to deliver strategic / enabling infrastructure becomes constrained. Reputational risk associated with delayed delivery of infrastructure required. Additional revenue costs incurred due to infrastructure delays e.g. Home to School transport costs.	Simon Jones, Corporate Director Growth, Environment and Transport (GET) **Responsible Cabinet Member(s):** On behalf of Cabinet: Derek Murphy, Economic Development David Brazier, Highways & Transport	V. Likely (5) **Target Residual Likelihood** Likely (4)	Serious (4) **Target Residual Impact** Serious (4)

replaced by UK funds, with further detail awaited. At a local level there is often a significant gap between the overall costs of the infrastructure required and the Council's ability to secure sufficient funds through the current funding systems, including S106 contributions, Community Infrastructure Levy and other growth levers.	
Control Title	**Control Owner**
Growth and Infrastructure Framework for Kent and Medway sets out the infrastructure needed to deliver planned growth	Stephanie Holt-Castle, Director Growth and Communities
Kent and Medway Renewal and Resilience Plan Economic Impacts Evidence Base sets out a high-level assessment of the impacts of the Covid-19 crisis on the Kent and Medway economy to inform the Renewal and Resilience Plan for the next 12-18 months.	Rachel Kennard, Senior Intelligence Analyst
Government consultations on proposals for reform on the planning system in England considered and responded to.	Tom Marchant, Head of Strategic Planning & Policy
Economic Recovery Dashboard in place.	Rachel Kennard, Senior Intelligence Analyst
Teams across the Growth, Environment and Transport directorate work with each individual District on composition of local infrastructure plans including priorities for the CIL and Section 106 contributions, to articulate needs for the demands on services	Stephanie Holt-Castle, Director Growth and Communities
Single Monitoring System (SMS) is used to track individual s106 planning obligations from the Council's initial request for developer contributions through to the issue of invoice for payment.	Stephanie Holt-Castle, Director Growth and Communities
Strong engagement of private sector through Kent and Medway Economic Partnership (KMEP), Business	David Smith

Advisory Board and Kent Developer Group		
Strong engagement with South East LEP and its Local Industrial Strategy with central Government to ensure that KCC is in a strong position to secure resources from future funding rounds		David Smith
Local Transport Plan 4 produced and approved by County Council		Tom Marchant, Head of Strategic Planning & Policy
Officers are working on bids to secure funding as appropriate, including Local Growth Fund, Housing Infrastructure Fund, Major Roads Network		Joe Ratcliffe, Transport Strategy Manager
Multi-agency Kent and Medway Employment Task Force has been set up and regular meetings have been scheduled.		David Smith
Active pipeline in place of projects for potential funding arrangements.		David Smith
Action Title	**Action Owner**	**Planned Completion Date**
Contribute to implementation of the Kent and Medway Economic Partnership's local Economic Renewal and Resilience Plan, key delivery principles of which are: • Greener Futures (building a sustainable, lower carbon economy • Open and Productive (supporting long term productivity growth in an economy that welcomes investment and trade) • Better Opportunities, Fairer Chances (ensuring that people are supported through recession and stand to gain from a more resilient economy in the return to growth). Participation on the Renewal and Resilience Group Plan group and the Employment Taskforce plans are being scoped to support key delivery principles.	David Smith	December 2021
Kent and Medway Business Fund, KMBF Recovery Fund and Capital Growth Fund (first round), has been concluded and the majority of funding (circa £3m) has been defrayed to the successful businesses. Discussions are taking place to agree the Guidance Notes for the second round to	David Smith	July 2021

support the reopening of the KMBF Business Fund and the Innovation Loan.		
Workstreams include Government Relations, Infrastructure Priorities, Joint Planning, Delivery modelling, KCC Support of Housing Growth, Governance and Infrastructure Proposition Bid.	Simon Jones, Corporate Director Growth, Environment and Transport (GET)	TBC

Risk ID CRR0042	**Risk Title** Post Transition period border systems, infrastructure and regulatory arrangements				
Source / Cause of risk	**Risk Event**	**Consequence**	**Risk Owner**	**Current Likelihood**	**Current Impact**
On 1 January 2021 the transition period with the European Union ended, and the United Kingdom will operate a full, external border as a sovereign nation. This means that controls will be placed on the movement of goods between Great Britain and the EU. To afford industry extra time to make necessary arrangements, the UK Government has taken the decision to introduce the new border controls in three stages up until 1 January 2022. KCC is working with partners at a local and national level to assess potential implications for the county and prepare for various scenarios. KCC is reliant on	That the implementation period agreed between the UK and EU is insufficient to develop the personnel, procedures, systems and physical infrastructure in time to support post-transition border arrangements. That the Government does not provide sufficient capital and revenue financial support to departments, agencies, local authorities and other infrastructure stakeholders necessary to address the personnel, procedures and physical infrastructure to support post-Transition border arrangements. Government interventions to ensure smooth transition not ready by 1st January leading to confused freight and delays at crossing.	Significant slowdown in the existing flow of goods and people through the Kent Ports leads to long delays in accessing Dover Ports and Eurotunnel. Impacts on major traffic routes to support Operation Brock and other mitigations for port delays and the consequential increase in local and pan-Kent road journey times, impacting on local residents and businesses. Significant detrimental impact on county's economic competitiveness, attractiveness for inward investment and quality of life for Kent residents.	Simon Jones, Corporate Director Growth, Environment & Transport **Responsible Cabinet Member(s):** David Brazier, Highways & Transport Mike Hill, Community & Regulatory Services	Likely (4) **Target Residual Likelihood** Possible (3)	Major (5) **Target Residual Impact** Serious (4)

coherent, coordinated governance and information across Government to aid the Local Authority and partners locally in planning their contingency arrangements and responding appropriately.	
Control Title	**Control Owner**
Regular engagement with senior colleagues in relevant Government Departments on the impacts and implications of transition on KCC's regulatory responsibilities relating to Trading Standards and the resilience of Kent highways.	Simon Jones, Corporate Director GET
KCC membership of the Delivery Models Operational Group and associated working groups such as Emergency Planning, Infrastructure, etc.	Steve Rock, Head of Trading Standards
KCC membership and support to the Kent Resilience Forum	Mike Overbeke, Head of Public Protection
Operation Fennel strategic plan in place	Simon Jones, Corporate Director GET
KCC involvement in Operation Fennel Strategic and Tactical Groups (multi-agency planning groups for potential disruption at Port of Dover and Eurotunnel). KCC to chair SCG planning group until such time Response is stood up for Transition.	Simon Jones, Corporate Director GET
KCC contribution to multi-agency communications in the 'response' phase, and leadership of communication in the 'planning' and 'recovery' phases.	Christina Starte, Head of Communications
KCC cross-directorate Resilience Forum reviews latest situation regarding transition preparedness	Stephanie Holt-Castle, Director

		Growth and Communities
KCC services are continually reviewing business continuity arrangements, taking potential scenarios into consideration (cross-reference to CRR0004), with coordination via Directorate Resilience Groups.		Service Managers / Directorate Resilience Group Chairs
Several training exercises took place in advance of January 1st 2021 to prepare for various scenarios.		Simon Jones, Corporate Director GET
Action Title	**Action Owner**	**Planned Completion Date**
KCC continues to make a case for further funding from the Ministry of Housing, Communities and Local Government (MHCLG) and Department for Transport (DfT) for direct impact costs of Transition preparedness in the county.	Simon Jones, Corporate Director GET	Ongoing

This page is intentionally left blank

APPENDIX 1

KCC Corporate Risk Register:

GET-led Corporate Risks

May 2021 – FOR PRESENTATION TO ENVIRONMENT & TRANSPORT CABINET COMMITTEE – 25th June 2021

Corporate Risk Register - Summary Risk Profile

Low = 1-6	Medium = 8-15	High =16-25

Risk No.	Risk Title	Current Risk Rating	Target Risk Rating	Direction of Travel since Jan 2020
CRR0003	Securing resources to aid economic recovery and enabling infrastructure	20	16	⇧
CRR0042	Post-Transition UK/EU border systems, infrastructure and regulatory arrangements	20	12	⇧

NB: Current & Target risk ratings: The 'current' risk rating refers to the current level of risk taking into account any mitigating controls already in place. The 'target residual' rating represents what is deemed to be a realistic level of risk to be achieved once any additional actions have been put in place. On some occasions the aim will be to contain risk at current level.

The overall risk score is derived from multiplying the likelihood and impact scores.

Likelihood & Impact Scales					
Likelihood	Very Unlikely (1)	Unlikely (2)	Possible (3)	Likely (4)	Very Likely (5)
Impact	Minor (1)	Moderate (2)	Significant (3)	Serious (4)	Major (5)

Risk ID	CRR0003	Risk Title	Securing resources to aid economic recovery and enabling infrastructure		
Source / Cause of Risk	**Risk Event**	**Consequence**	**Risk Owner**	**Current Likelihood**	**Current Impact**
The Coronavirus pandemic is impacting on the economy in Kent & Medway. This is likely to become more severe in the latter part of 2020, particularly as the Govt furlough scheme ends, and the impacts could be disproportionate across the county (e.g. in coastal areas). To gain an understanding of the implications, an impact assessment has been conducted, which has led to the preparation and launch of an 18-month local economic renewal and resilience plan, which aims to act as a stimulus for improvement. The Council actively seeks to secure the resources/funding necessary to provide the infrastructure required to support growth, which often need to be bid for in very tight timescales and are increasingly subject to the drive to deliver economic impact, housing and employment outputs. EU structural funds are set to be	The inability to fully secure sufficient funding, including contributions from development, to deliver the infrastructure necessary to support growth may require gap funding in order for KCC to fulfil its statutory duties.	Key opportunities for growth missed. The Council finds it increasingly difficult to fund services across Kent and fully mitigate the overall impact of housing growth on KCC services and, therefore, communities. Kent becomes a less attractive location for inward investment and business. Our ability to deliver strategic / enabling infrastructure becomes constrained. Reputational risk associated with delayed delivery of infrastructure required. Additional revenue costs incurred due to infrastructure delays e.g. Home to School transport costs.	Simon Jones, Corporate Director Growth, Environment and Transport (GET) **Responsible Cabinet Member(s):** On behalf of Cabinet: Derek Murphy, Economic Development David Brazier, Highways & Transport	V. Likely (5) **Target Residual Likelihood** Likely (4)	Serious (4) **Target Residual Impact** Serious (4)

replaced by UK funds, with further detail awaited. At a local level there is often a significant gap between the overall costs of the infrastructure required and the Council's ability to secure sufficient funds through the current funding systems, including S106 contributions, Community Infrastructure Levy and other growth levers.	
Control Title	**Control Owner**
Growth and Infrastructure Framework for Kent and Medway sets out the infrastructure needed to deliver planned growth	Stephanie Holt-Castle, Director Growth and Communities
Kent and Medway Renewal and Resilience Plan Economic Impacts Evidence Base sets out a high-level assessment of the impacts of the Covid-19 crisis on the Kent and Medway economy to inform the Renewal and Resilience Plan for the next 12-18 months.	Rachel Kennard, Senior Intelligence Analyst
Government consultations on proposals for reform on the planning system in England considered and responded to.	Tom Marchant, Head of Strategic Planning & Policy
Economic Recovery Dashboard in place.	Rachel Kennard, Senior Intelligence Analyst
Teams across the Growth, Environment and Transport directorate work with each individual District on composition of local infrastructure plans including priorities for the CIL and Section 106 contributions, to articulate needs for the demands on services	Stephanie Holt-Castle, Director Growth and Communities
Single Monitoring System (SMS) is used to track individual s106 planning obligations from the Council's initial request for developer contributions through to the issue of invoice for payment.	Stephanie Holt-Castle, Director Growth and Communities
Strong engagement of private sector through Kent and Medway Economic Partnership (KMEP), Business	David Smith

Advisory Board and Kent Developer Group		
Strong engagement with South East LEP and its Local Industrial Strategy with central Government to ensure that KCC is in a strong position to secure resources from future funding rounds		David Smith
Local Transport Plan 4 produced and approved by County Council		Tom Marchant, Head of Strategic Planning & Policy
Officers are working on bids to secure funding as appropriate, including Local Growth Fund, Housing Infrastructure Fund, Major Roads Network		Joe Ratcliffe, Transport Strategy Manager
Multi-agency Kent and Medway Employment Task Force has been set up and regular meetings have been scheduled.		David Smith
Active pipeline in place of projects for potential funding arrangements.		David Smith
Action Title	**Action Owner**	**Planned Completion Date**
Contribute to implementation of the Kent and Medway Economic Partnership's local Economic Renewal and Resilience Plan, key delivery principles of which are: • Greener Futures (building a sustainable, lower carbon economy • Open and Productive (supporting long term productivity growth in an economy that welcomes investment and trade) • Better Opportunities, Fairer Chances (ensuring that people are supported through recession and stand to gain from a more resilient economy in the return to growth). Participation on the Renewal and Resilience Group Plan group and the Employment Taskforce plans are being scoped to support key delivery principles.	David Smith	December 2021
Kent and Medway Business Fund, KMBF Recovery Fund and Capital Growth Fund (first round), has been concluded and the majority of funding (circa £3m) has been defrayed to the successful businesses. Discussions are taking place to agree the Guidance Notes for the second round to	David Smith	July 2021

support the reopening of the KMBF Business Fund and the Innovation Loan.		
Workstreams include Government Relations, Infrastructure Priorities, Joint Planning, Delivery modelling, KCC Support of Housing Growth, Governance and Infrastructure Proposition Bid.	Simon Jones, Corporate Director Growth, Environment and Transport (GET)	TBC

Risk ID CRR0042	**Risk Title** Post Transition period border systems, infrastructure and regulatory arrangements				
Source / Cause of risk	**Risk Event**	**Consequence**	**Risk Owner**	**Current Likelihood**	**Current Impact**
On 1 January 2021 the transition period with the European Union ended, and the United Kingdom will operate a full, external border as a sovereign nation. This means that controls will be placed on the movement of goods between Great Britain and the EU. To afford industry extra time to make necessary arrangements, the UK Government has taken the decision to introduce the new border controls in three stages up until 1 January 2022. KCC is working with partners at a local and national level to assess potential implications for the county and prepare for various scenarios. KCC is reliant on	That the implementation period agreed between the UK and EU is insufficient to develop the personnel, procedures, systems and physical infrastructure in time to support post-transition border arrangements. That the Government does not provide sufficient capital and revenue financial support to departments, agencies, local authorities and other infrastructure stakeholders necessary to address the personnel, procedures and physical infrastructure to support post-Transition border arrangements. Government interventions to ensure smooth transition not ready by 1st January leading to confused freight and delays at crossing.	Significant slowdown in the existing flow of goods and people through the Kent Ports leads to long delays in accessing Dover Ports and Eurotunnel. Impacts on major traffic routes to support Operation Brock and other mitigations for port delays and the consequential increase in local and pan-Kent road journey times, impacting on local residents and businesses. Significant detrimental impact on county's economic competitiveness, attractiveness for inward investment and quality of life for Kent residents.	Simon Jones, Corporate Director Growth, Environment & Transport **Responsible Cabinet Member(s):** David Brazier, Highways & Transport Mike Hill, Community & Regulatory Services	Likely (4) **Target Residual Likelihood** Possible (3)	Major (5) **Target Residual Impact** Serious (4)

coherent, coordinated governance and information across Government to aid the Local Authority and partners locally in planning their contingency arrangements and responding appropriately.	
Control Title	**Control Owner**
Regular engagement with senior colleagues in relevant Government Departments on the impacts and implications of transition on KCC's regulatory responsibilities relating to Trading Standards and the resilience of Kent highways.	Simon Jones, Corporate Director GET
KCC membership of the Delivery Models Operational Group and associated working groups such as Emergency Planning, Infrastructure, etc.	Steve Rock, Head of Trading Standards
KCC membership and support to the Kent Resilience Forum	Mike Overbeke, Head of Public Protection
Operation Fennel strategic plan in place	Simon Jones, Corporate Director GET
KCC involvement in Operation Fennel Strategic and Tactical Groups (multi-agency planning groups for potential disruption at Port of Dover and Eurotunnel). KCC to chair SCG planning group until such time Response is stood up for Transition.	Simon Jones, Corporate Director GET
KCC contribution to multi-agency communications in the 'response' phase, and leadership of communication in the 'planning' and 'recovery' phases.	Christina Starte, Head of Communications
KCC cross-directorate Resilience Forum reviews latest situation regarding transition preparedness	Stephanie Holt-Castle, Director

		Growth and Communities
KCC services are continually reviewing business continuity arrangements, taking potential scenarios into consideration (cross-reference to CRR0004), with coordination via Directorate Resilience Groups.		Service Managers / Directorate Resilience Group Chairs
Several training exercises took place in advance of January 1st 2021 to prepare for various scenarios.		Simon Jones, Corporate Director GET
Action Title	**Action Owner**	**Planned Completion Date**
KCC continues to make a case for further funding from the Ministry of Housing, Communities and Local Government (MHCLG) and Department for Transport (DfT) for direct impact costs of Transition preparedness in the county.	Simon Jones, Corporate Director GET	Ongoing

This page is intentionally left blank

From: **David Brazier – Cabinet Member for Highways and Transport**

Simon Jones – Interim Corporate Director for Growth, Environment and Transport

To: **Environment and Transport Cabinet Committee - 29 June 2021**

Subject: **A229 Blue Bell Hill Improvement Scheme**

Decision No: 21/00046

Classification: **Unrestricted**

Past Pathway of report: None

Future Pathway of report: For Cabinet Member Decision

Electoral Division: Maidstone Rural North - Paul Carter
Maidstone North East – Ian Chittenden
Malling North East – Andrew Kennedy

Summary: The A229 Blue Bell Hill is a strategically important link providing the shortest route between the M2 and M20 and connecting both the County town of Maidstone and the conurbation of Medway. The congestion and safety of A229 Blue Bell Hill along with its key junctions, has long been a concern. DfT Large Local Majors funding programme offers KCC an opportunity to undertake a significant major project that addresses the issues and provides for future growth.

Recommendation(s):
The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways & Transport on the proposed decision, and indicated on the proposed decision sheet included in Appendix A, as follows to give approval to:

i) the feasibility design options for A229 Blue Bell Hill Improvement Scheme to be developed and further explored to establish a preferred option which best meets the objectives for the scheme;

ii) to progress the preferred option through the next stages of development and delivery including any ancillary works such as drainage and environmental mitigation;

iii) to submit a planning application/development consent order for the scheme, following completion of the outline design process and public consultation;

iv) take all steps necessary to obtain and implement all Statutory Orders and approvals or consents required for the schemes;

v) all acts required to acquire the land and rights for the carrying out and completion of the A229 Blue Bell Hill Improvement Scheme, including by means of a compulsory purchase order;

vi) to enter into Agreements to allow the County Council to design and deliver a scheme on Highways England and Network Rail (High Speed 1) infrastructure;

vii) to enter into Large Local Majors funding, developer funding and other such funding Agreements subject to the approval of the Corporate Director for Finance;

viii) to enter into construction contracts as necessary for the delivery of the scheme, subject to the approval of Strategic Commissioning;

ix) the Corporate Director of Growth, Environment & Transport, under the Officer Scheme of Delegations, to take further or other decisions as may be appropriate to deliver the A229 Blue Bell Hill Improvement Scheme in accordance with these recommendations.

1. Introduction

1.1 The A229 Blue Bell Hill is a section of dual carriageway which runs between Junction 6 of the M20 in Maidstone and Junction 3 of the M2 at Blue Bell Hill village. This section of road is a key link between the M20 and M2, and between Maidstone and Medway.

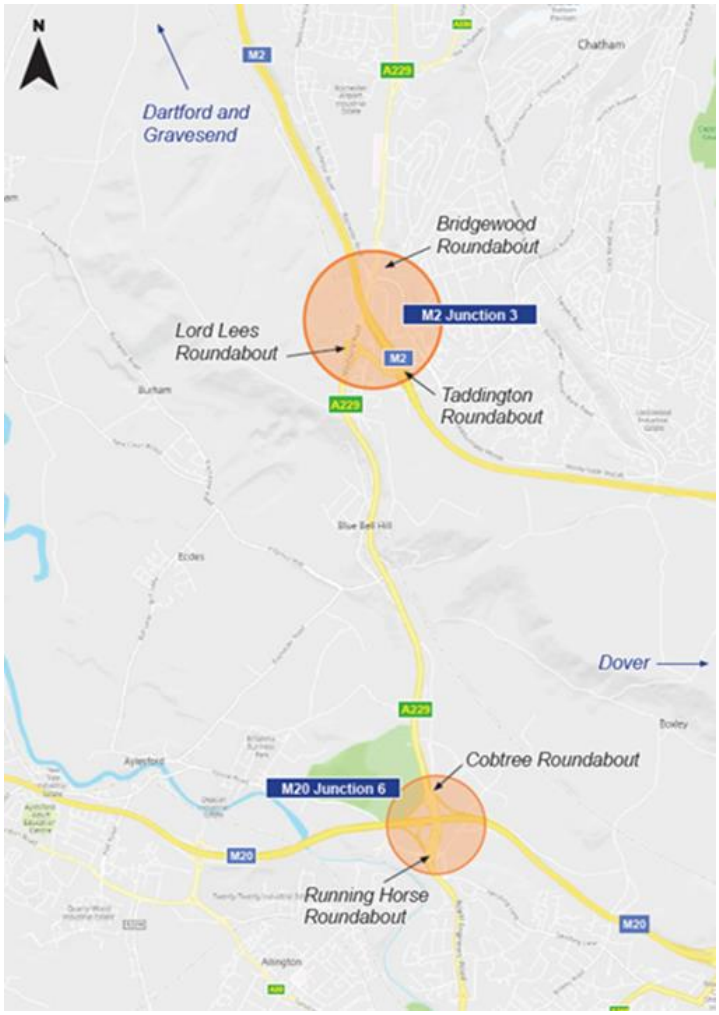


Figure 1 - Plan showing the location of the proposals

1.2 A feasibility study was undertaken to assess the key routes in Kent against the objectives of the Major Road Network. This study ranked the A229 as the second worst section of A road in the county against criteria of traffic levels, delays, collisions, and journey time reliability. It also determined that the M20 and M2 junctions have a significant role in the delays and collisions on Blue Bell Hill.

1.3 Road users of Blue Bell Hill have long experienced high volumes of traffic which result in significant congestion issues and concerns about road safety. These congestion issues are likely to be made worse by future housing developments in the surrounding area and the new Lower Thames Crossing, which will both generate additional traffic.

1.4 Proposals that have been developed previously have not been sufficient to impact on the existing issues and therefore more significant improvements to Blue Bell Hill are required to improve journey time reliability, reduce delays, and improve road safety across this section of the road network.

1.5 A bid has been submitted to the Department for Transport at Strategic Outline Business Case stage for funding from the Large Local Majors programme.

1.6 This report provides and overview of the project and recommendations for the required decisions to allow the scheme to be progressed through the next stages of development.

2. Scheme Description and Delivery

2.1 The overall aim of the scheme is to improve journey time reliability and road safety. This will allow the road to accommodate an increase in future traffic, expected as a result of the Lower Thames Crossing and proposed local developments, while providing suitable routes and facilities for public transport, pedestrians and cyclists.

2.2 The aim of the scheme is supported by a set of objectives, agreed by the key stakeholders:

- To improve journey time reliability at M2 Junction 3 and M20 Junction 6 interchanges of the A229
- To reduce congestion along the route
- To enable the local area to develop in accordance with population and housing growth predicated under Local Plans
- To reduce the impact of additional traffic from the Lower Thames Crossing (LTC) and allow LTC to maximise potential benefits it can provide for the Kent area
- To improve road safety and address known collision hotspots
- To make best use of existing assets including land and highways
- To provide suitable routes and facilities for public transport
- To provide safe and improved routes for pedestrians and cyclists
- To improve air quality, particularly in the Air Quality Management Area (AQMA)
- To protect and enhance the local environment.

2.3 An optioneering process has been followed to establish the two options that were submitted as part of the Strategic Outline Business Case. The process involved ideas generation workshops with stakeholders followed by a sifting process (making use of traffic modelling) to determine the potential impact of these different ideas on traffic levels. The works were also assessed against a number of criteria as laid out by the DfT.

2.4 The ideas that scored best against the criteria were combined into three options which were taken through to a public consultation exercise.

2.5 As a result of further work and the results of the public consultation option 3 was dropped from further development. Whilst option 3 provided a number of benefits, these were outweighed by the significant impacts on the M20 and the local area.

2.6 The remaining options 1 and 2 can be viewed on drawing numbers 60633526-ACM-HML-A229_SW_ZZ_ZZ-DR-CH-0025 P04.2 (Appendix C) and 60633526-ACM-HML-A229_SW_ZZ_ZZ-DR-CH-0026 P04.2 (Appendix D) and a summary and comparison of the options is provided below:

Table 1 - Summary and Comparison of works for Options 1 and 2

	Option 1	Option 2
Northern end of Blue Bell Hill		
Improvements to the slip road onto the A229 southbound at Lord Lees Roundabout	✓	✓
Increase the road width between Taddington and Lord Lees Roundabouts to four lanes	✓	
A new slip road onto the M2 (westbound) from the A229 immediately after Lord Lees Roundabout	✓	✓
Upgrade of the current signalised junction at Taddington Roundabout allowing traffic travelling from the M2 eastbound to A229 via a new bridge over the M2	✓	
A new separate left turn lane from the M2 westbound to the A229 at Taddington Roundabout	✓	✓
A new slip road from the M2 eastbound to a new junction arrangement at Bridgewood Roundabout		✓
Southern end of Blue Bell Hill		
Enlarge the Running Horse Roundabout to the west	✓	✓
Improve the slip road onto the M20 eastbound from Cobtree Roundabout	✓	✓
A new grade separated junction, where the existing Forstal Road bridge is currently located		
Along the length of Blue Bell Hill		
Widen the A229 to three lanes when travelling southbound towards Maidstone (between Lord Lees and Cobtree Roundabouts)	✓	✓

2.7 Further details of the design options can be found in the Consultation Brochure in Appendix E.

2.8 The scheme is at a very early stage and the options will need to be developed further through more detailed modelling and additional design work before a preferred scheme can be determined.

2.9 An assessment of the options at this stage has not demonstrated that either would be more preferable to the other. Benefits and disbenefits have been reviewed against a number criteria to make the assessment.

2.10 This preferred scheme would then be progressed in more detail followed by further public consultation and Statutory Consents and Orders.

2.11 KCC will work very closely with Highways England to meet their requirements to allow for the sections of the scheme on the Strategic Road Network to be progressed.

2.12 KCC plan deliver the Improvement Scheme prior to the opening of Lower Thames Crossing.

2.13 The scheme supports the policy objectives of supporting existing businesses and implementation will support the Council in meeting its Strategic outcome for "Kent Communities to feel the benefits of economic growth by being in work, healthy and enjoying a good quality of life". This will be achieved through the schemes aiming to improve the operation of key transport networks, as well as helping support growth by enabling new residential development.

2.14 The key priorities are set out in the County Council's Local Transport Plan 4 'Delivering Growth without Gridlock' in terms of providing additional highway capacity, improving accessibility, and reducing congestion will also be benefit aims. The improvements, which are noted in LTP4 will set out to provide improved growth and economic prosperity through having an efficient highway and transport infrastructure.

2.15 Programme for delivery

- Submission of the next stage of the business case to the Department of Transport including details of the preferred scheme – Summer 2022
- Planning permission and consents – Spring 2022 to Summer 2023
- Further detailed design – Summer 2022 to Summer 2024
- Submission of full business case to the DfT – Winter 2024
- Construction to begin – Spring 2025
- Completion of scheme – Summer 2027 (this is to be completed before the Lower Thames Crossing opens to traffic)

3. Financial Implications

3.1 Initial feasibility work has been undertaken to allow the Strategic Outline Business case to be submitted to the DfT. The work has also included discussions with Highways England and other key stakeholders. A public consultation took place in Autumn 2020.

3.2 KCC is currently forward funding £1.6m from its feasibility reserve capital line for the development cost of the scheme and this will be reimbursed through developer contributions and other external funding should the DfT funding be secured and the scheme progress. If the funding bid is not successful, the feasibility costs to date will be abortive and a cost to KCC.

3.3 Should KCC be successful with the funding bid to DfT, the costs for developing the scheme through the next stages will be covered by the grant. The DfT will contribute 85% of the total scheme costs.

3.4 The scheme is expected to cost a maximum of £199m (based on estimations within the Strategic Outline Business Case). The funding request from DfT is for £169m (85%) with the remaining £30m (15%) due to come from developer contributions (s106) and other external funding sources. Opportunities for these additional funding sources are being pursued. There is a risk that insufficient funds could be available from s106 and other sources and KCC may have to underwrite the match funding element to ensure that the 85% Government grant funding is secured.

3.5 The project is currently within the existing KCC budget book (Row 60 Page 57 section 5 – Capital Investment Plans) at £99m based on the Pre-strategic Outline Business Case costing. This figure was based on a very basic scheme design Following further scheme development, a thorough exploration of the possible options for the scheme and traffic modelling, the scheme scope has needed to increase and therefore the project is now expected to cost £199m.

4. Legal implications

4.1 There are no immediate legal implications. The purpose of the report and recommendations are to secure appropriate legal authorities to develop and progress the scheme and allow the funding agreement to be entered into with DfT and other parties to enable that development to happen.

4.2 Legal advice is being sought from Legal Services as required.

5. Equalities implications

5.1 An initial Equalities Impact Assessment has been prepared and approved and is included in Appendix B. This will be regularly reviewed as the scheme develops and the design is progressed.

6. Other corporate implications

6.1 The construction of new highway will require ongoing maintenance and will become an additional maintenance liability to KCC. The costs of maintenance will be calculated and form part of an asset management plan going forward, which is not currently funded.

7. Governance

7.1 The recommendations include for delegation to the Corporate Director for Growth, Environment and Transport to take further or other decisions as appropriate.

8. Conclusions

8.1 The congestions and safety of A229 Blue Bell Hill along with its key junctions, has long been a concern but proposals to date have been insufficient to make any noticeable impact. The DfT Large Local Majors funding programme offers KCC an opportunity to undertake a significant major project that addresses the issues and provides for future growth.

8.2 The DfT grant will cover 85% of the project costs with the remaining 15% being sourced from developer contributions or other external funding sources.

8.3 The scheme is at an early stage and much work needs to be done with key stakeholders and other parties to develop a preferred scheme.

8.4 It is expected that this scheme will be in place prior to the opening of Lower Thames Crossing.

8.5 This report and recommendations are to provide the relevant authorities to allow the scheme to progress.

9. Recommendation(s)

Recommendation(s):

The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways & Transport on the proposed decision, and indicated on the proposed decision sheet included in Appendix A, as follows to give approval to:

i) the feasibility design options for A229 Blue Bell Hill Improvement Scheme to be developed and further explored to establish a preferred option which best meets the objectives for the scheme;

ii) to progress the preferred option through the next stages of development and delivery including any ancillary works such as drainage and environmental mitigation;

iii) to submit a planning application/development consent order for the scheme, following completion of the outline design process and public consultation;

iv) take all steps necessary to obtain and implement all Statutory Orders and approvals or consents required for the schemes;

v) all acts required to acquire the land and rights for the carrying out and completion of the A229 Blue Bell Hill Improvement Scheme, including by means of a compulsory purchase order;

vi) to enter into Agreements to allow the County Council to design and deliver a scheme on Highways England and Network Rail (High Speed 1) infrastructure;

vii) to enter into Large Local Majors funding, developer funding and other such funding Agreements subject to the approval of the Corporate Director for Finance;

viii) to enter into construction contracts as necessary for the delivery of the scheme, subject to the approval of Strategic Commissioning;

ix) the Corporate Director of Growth, Environment & Transport, under the Officer Scheme of Delegations, to take further or other decisions as may be appropriate to deliver the A229 Blue Bell Hill Improvement Scheme in accordance with these recommendations.

10. Background documents

Appendix A – Proposed Record of Decision
Appendix B – Equalities Impact Assessment
Appendix C - Option 1 Drawing number 60633526-ACM-HML-A229_SW_ZZ_ZZ-DR-CH-0025 P04.2

Appendix D -Option 2 Drawing number 60633526-ACM-HML-A229_SW_ZZ_ZZ-DR-CH-0026 P04.2
Appendix E -Consultation Brochure
Appendix F - Consultation Report

11. Contact details

Report Author:

Victoria Soames
Project Manager, Major Capital Programme Team
A229bluebellhill@kent.gov.uk

Relevant Director:

Simon Jones, Interim Director of Growth, Environment and Transport

Simon.jones@kent.gov.uk

This page is intentionally left blank

KENT COUNTY COUNCIL – PROPOSED RECORD OF DECISION

DECISION TO BE TAKEN BY:	DECISION NO:
David Brazier, Cabinet Member for Highways & Transport	21/00046

For publication

Key decision: YES /

Subject Matter / Title of Decision

A229 Blue Bell Hill Improvement Scheme

Decision:

As Cabinet Member for Highways and Transport, I agree to:

i) the feasibility design options for A229 Blue Bell Hill Improvement Scheme to be developed and further explored to establish a preferred option which best meets the objectives for the scheme;

ii) to progress the preferred option through the next stages of development and delivery including any ancillary works such as drainage and environmental mitigation;

iii) to submit a planning application/development consent order for the scheme, following completion of the outline design process and public consultation;

iv) take all steps necessary to obtain and implement all Statutory Orders and approvals or consents required for the schemes;

v) all acts required to acquire the land and rights for the carrying out and completion of the A229 Blue Bell Hill Improvement Scheme, including by means of a compulsory purchase order;

vi) to enter into Agreements to allow the County Council to design and deliver a scheme on Highways England and Network Rail (High Speed 1) infrastructure;

vii) to enter into Large Local Majors funding, developer funding and other such funding Agreements subject to the approval of the Corporate Director for Finance;

viii) to enter into construction contracts as necessary for the delivery of the scheme, subject to the approval of Strategic Commissioning;

ix) the Corporate Director of Growth, Environment & Transport, under the Officer Scheme of Delegations, to take further or other decisions as may be appropriate to deliver the A229 Blue Bell Hill Improvement Scheme in accordance with these recommendations.

Reason(s) for decision:
Report to the Environment & Transport Cabinet Committee 29/06/2021 refers.

Decisions required to allow scheme development to progress.

Cabinet Committee recommendations and other consultation:
Any alternatives considered and rejected: N/A
Any interest declared when the decision was taken and any dispensation granted by the Proper Officer:

....

signed date

From: David Brazier, Cabinet Member – Highways & Transport

Simon Jones, Corporate Director – Growth, Environment & Transport

To: Growth, Environment & Transport Cabinet Committee – 19 January 2021

Decision No: 21/00045

Subject: **Vision Zero - The Road Safety Strategy for Kent 2021 - 2026**

Classification: **Unrestricted**

Past Pathway of Paper: Environment and Transport Cabinet Committee – 19 January 2021

Future Pathway of Paper: For Cabinet Member Decision

Electoral Division: All electoral divisions

Summary: This paper updates Members on the draft Vision Zero - The Road Safety Strategy for Kent 2021 – 2026 which aims to reduce Road Casualties in Kent. The Strategy has been developed following extensive research into national and international best practice and in discussion with partners and stakeholders. It went to a full public consultation between January and March which was very positive, showing 75% - 80% support for the vision, approach, and most of the actions, for which full details can be seen in the Consultation Report.

Recommendation(s):
The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways and Transport to formally adopt Vision Zero – The Road Safety Strategy for Kent 2021 – 2026 for subsequent development of delivery plans and pilots as shown at Appendix A.

1. Introduction

1.1 Keeping our roads as safe as they can be and tackling death and injury is a key priority for KCC. We have a statutory duty to promote road safety and to act to reduce the likelihood of road casualties occurring (Section 39, Road Traffic Act 1988). In addition, reducing casualties also serves to prevent long term disability and ill health. Road safety, and the feeling of safety, is one of the main community concerns expressed by Kent's residents.

1.2 The vision for this strategy is to reduce road fatalities in Kent to zero by 2050. We aim to reach this target through a reduction in fatalities measured over five-year periods**.** Experience across the UK clearly shows the benefits of having a target for road casualties.

1.3 The Safe Systems Approach is based on the acceptance that humans make mistakes, and therefore we must design a system that aims to significantly reduce the risk of human error resulting in fatal or life changing injuries.

1.4 Safe Systems brings together a set of inter-dependent strands, encompassing safe speed, safe vehicles, safe behaviour, and safe streets.

1.5 The achievement of Vision Zero will require collaboration, coordination and cooperation across all KCC departments, with our partners, stakeholders and crucially with our residents and businesses. The five-year strategy is based on proactive, local level engagement to address our communities' concerns about road safety and incorporates six key elements as outlined below.

1.6 We will be proactive in working with Kent's Communities and our approach to local engagement will be through the 'Community CIRCLE' detailed below.

Community Concern - align injury collisions with factors that strengthen the case for intervention, such as concerns about speed, air quality & noise.
Injury reduction priority but feeling safe and quality of life are also important.
Research & pilot - safety camera criteria to include community demand - pilot average speed camera corridor for evaluation.
Common responsibility for safety - road users, local community, highway authority.
Localise campaigns focus on casualty cluster sites.
Engagement with community at cluster sites - discuss solutions together.

1.7 Research shows attitudes towards road safety measures such as safety cameras have shifted and are now net supportive. Changing attitudes and behaviours are, however, two different things.

1.8 In 2004, the World Health Organisation concluded that "… when used in isolation education, information and publicity generally do not deliver tangible and sustained reductions in deaths and serious injuries."

1.9 Research published in the Handbook of Road Safety Measures, by Rune Elvik, shows however that local, personally directed campaigns show by far the biggest effect on road collisions. Publicity and education will therefore be localised as much as possible part of the Community CIRCLE approach. We will work with parish councils and through schools to engage with communities.

1.10 The WHO report also confirmed that publicity and education were able to influence behaviour when used in conjunction with legislation and law enforcement. Thus, there will continue to be a focus on combining education with enforcement, engineering and new regulations such as promoting new vehicle technology and freight vehicle accreditation schemes.

2. Financial Implications

2.1 We will collaborate with partners and KCC departments to seek cost savings from joint working, such as working with the public health team, making travel both feel and be safer, promoting healthier lifestyles and reducing obesity rates and working with fleet managers to improve both the safety and emissions of vehicle fleets.

2.2 The Department for Transport estimates the cost of dealing with a fatal crash is £2.2m. The cost of injuries can in the long run be even more expensive for

local councils as some injuries can require 24-hour care which can cost up to £2000 per week.

2.3 The revenue budget for the Casualty Reduction Team for staff and education, training and publicity, transport intelligence, safety camera partnership, safer mobility and road crossing patrols currently stands at £1,810k pa. This does not include the capital budgets required for engineering works.

2.4 There are therefore no direct immediate financial implications for this strategy, as it outlines a new approach which can be tailored to available funding. In the longer term the adoption of this strategy will enable KCC to lever higher levels of funding for safer roads and streets from central government and charities.

2.5 The Department for Transport makes it clear that future budgets will be allocated according to building an evidence base and following the Safe Systems Approach, both of which are core to this strategy.

DfT Road Safety Statement 2019
"We... encourage use of the safe systems approach. Future investment in vehicle technology, in infrastructure, and in our evidence-base are all part of the building blocks of future success."

3. The Policy Framework for Vision Zero

3.1 This strategy reflects key relevant themes in the Local Transport Plan for Kent 2016-2021 'Growth without gridlock'. Traffic collisions cause congestion and smooth flowing traffic at a regular speed limit is safer, produces less emissions and reduces congestion. The Active Travel Strategy (2013) and whole systems approach to reducing obesity, would be supported by safer roads and streets, as local and national surveys show that fear of road danger is one of the principal barriers to more walking and cycling.

4. The Strategy

4.1 The proposed Vision Zero Road Safety Strategy is presented at **Appendix 1.** In summary the strategy will be:

Proactive
We will engage locally with communities to listen to their road safety concerns and while quantifiable data on safety will be required, we will take local community concerns on board to strengthen the case for intervention.

Data Led:
We will use existing data sources such as statistics on collisions, speed and traffic volumes. We will use advanced traffic analytics to identify roads in Kent where re-engineering is needed most urgently.

Coordinated:
A key success factor will be the coordination of education, engineering and enforcement resources from KCC and partners.

Promoted:
We will raise public awareness of our Vision Zero objectives and safety advice, along with enforcement campaigns to make offenders aware that they face a real risk of being caught.

Collaborative:
We will work with partners and stakeholders across Kent to achieve Vision Zero. This will include working with Highway England's Driving for Better Business (DfBB) programme to promote safer, cleaner vehicles to fleet managers throughout Kent.

Based on Real Time Evaluation:
Evaluation is at the heart of the Safe Systems approach. We will use technologies such as pneumatic loops, cameras and algorithms to record the impact of interventions.

4.2 By adopting this approach, we will produce an evidence base for further actions based on an improved understanding of road safety techniques and strategies that work in different areas, and which can be shared countywide and nationally. This will help to raise awareness of our road safety aims and build relationships with local communities.

5. The Consultation

5.1 The formal consultation ran from Tuesday 26th January to Tuesday 16th March 2021. We held four stakeholder workshops with over 200 participants. We had over 760 complete consultation responses which showed very strong support for the vision, approach and proposed actions.

5.2 A Consultation report summarising the results of the public consultation is submitted alongside this report.

5.3 The EQIA is attached in Appendix 3 and was also consulted on as part of this process.

5.4 While the overall feedback has been very supportive, many organisations and individuals took the time to provide very detailed commentary, and amendments have therefore been made to the final draft report.

These include:

- Rewording some of the actions for clarification.
- Strengthening of the ambition for reduction in level of serious injuries.
- Adoption of the 'UN decade of action on road safety' target of a 50% reduction in fatalities by 2030 – supplementing the vision for zero deaths by 2050.
- Inclusion of the assessment of alternative accreditation schemes for the safety of heavy goods vehicles such as but not exclusively FORS, DVSA Earned Recognition and ISO39001.
- Assess the potential expansion of the listed key performance indicators.

6. Conclusions

6.1 Reducing death and injury on Kent's roads is a continuing priority, and the concern of not feeling safe is a frequent community concern expressed to Kent County Council as the Local Highway Authority. As technology advances, road safety is the responsibility not only for the Highway Authority, but for a wide variety of stakeholders including schools, workplaces, fleet operators, visitor attractions, town and district councils, the blue light services, hospitals, the NHS and every road user in Kent. We aim to engage locally to deliver the safer roads and streets, safer speeds, safer vehicles, and better behaviour that Kent's communities deserve. This draft strategy is the first step on that journey.

7. Recommendation(s)

Recommendation(s):
The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways and Transport to formally adopt Vision Zero – The Road Safety Strategy for Kent 2021 – 2026 for subsequent development of delivery plans and pilots as shown at Appendix A.

8. Background Documents

- Appendix A – Proposed Record of Decision
- Appendix 1 – Full Strategy Document
- Appendix 2 – Consultation Report and appendices:
- Report: https://democracy.kent.gov.uk/documents/s104096/FVisionZeroConsultationReport.pdf
- Appendices: https://democracy.kent.gov.uk/documents/s104101/GVisionZeroConsultationReportAppendices.pdf
- Appendix 3 – EQIA: https://democracy.kent.gov.uk/documents/s104098/HVisionZeroStrategyEqIA.pdf
- Appendix 4 – Data Pack: https://democracy.kent.gov.uk/documents/s104099/IVisionZeroforKentdatapackFINAL.pdf

9. Contact details

Report Author

- Rory McMullan
- 07913 938 913
- rory.mcmullan@kent.gov.uk

Relevant Director:

- Simon Jones
- Simon.jones@kent.gov.uk

This page is intentionally left blank

Vision Zero

The Road Safety Strategy for Kent

30 year vision to 2050

Five year strategy 2021 – 2026
Delivering safer roads, towns and villages in Kent

kent.gov.uk/visionzero

Kent County Council
kent.gov.uk

Contents

Foreword 3

The Vision and Strategy 4

Chapter One – Introduction, Safe System and Community Circle 5

Chapter Two – Data and Risk 10

Chapter Three – Safe Roads and Streets 13

Chapter Four – Safe Speed 18

Chapter Five – Safe Behaviour 21

Chapter Six – Safe Vehicles 24

Chapter Seven – Collision Response 28

Chapter Eight – Governance and Monitoring 29

Glossary of terms 31

Appendix 1 – National and Regional Safe System Strategies 33

Appendix 2 – Data Pack 34

Appendix 3 – Full Summary of Action Plans 34

Foreword

David Brazier, Cabinet Member for Highways and Transport, Kent County Council

Kent County Council continues to ensure that highway safety is one of its top priorities. Indeed, much progress has been made in this regard across Kent Highways in recent years to improve road safety. With an average of forty-five fatalities on our roads each year, as well as many hundreds of serious injuries, there remains more to be done. To strengthen its efforts, Kent County Council has adopted a target of zero fatalities by 2050.

Some people might say that achieving zero road fatalities is impossible. If they were to see each fatality as a human being, or even a member of their own family, rather than simply just a statistic, would they still not wish to set zero fatalities as the ambition? Surely zero is the only sensible target to strive towards and therefore, over the next thirty years, we will endeavour to get as close to it as possible. The response to COVID-19 has also shown that, with the right ambition, and by working together, a great deal can be achieved.

Vision Zero for Kent will only be possible if all of us, whether we are travelling in Kent, managing a fleet of vehicles, teaching at school or managing the highway network share a responsibility to reduce road danger, the fear it creates and the casualties that result. Surveys of public opinion show that the residents of Kent support safer roads and safer speeds where they live, together with the enforcement of speed limits.

Kent County Council commits to lead the Vision Zero concept and promote it across the whole of Kent. This includes the ambition for continuous improvement in the way that Kent Highways and Transportation promote road safety and provide improvement schemes, to ensure that Kent County Council does all that it can to make the roads, streets, towns and villages of our wonderful county safer for everyone.

Tim Read, ***Chair of Kent and Medway Casualty Reduction Partnership and Head of Transportation, Kent County Council***

This document outlines a shared approach of the Partnership* to meet Vision Zero objectives. The Partners will all follow the ‘Safe System Approach’, which is designed with the human being at its core, accepting that even the most conscientious person will make a mistake at some point. The goal of Safe System is to ensure that these mistakes do not lead to a crash or, if a crash does occur, it is sufficiently controlled to not cause a death or a life-changing injury.

Responsibility for the system is shared by everyone. Policy makers, planners, engineers, vehicle manufacturers, fleet managers, enforcement officers, road safety educators, health agencies, schools, and the media, to name a few, are all accountable for the system’s safety. Meanwhile, every road user, whether they drive, cycle or walk, is responsible for complying with the system’s rules.

Safe System is considered best practice in road safety by the World Health Organisation (WHO) and the Organisation of Economic Cooperation and Development (OECD), and in the UK is supported by Royal Society for the Prevention of Accidents (ROSPA). The approach has been adopted by Highways England and is endorsed by the DfT.

The approach we are taking will require input and support from teams throughout Kent County Council. Most of all it will require the support of Kent’s residents to work together towards Vision Zero.

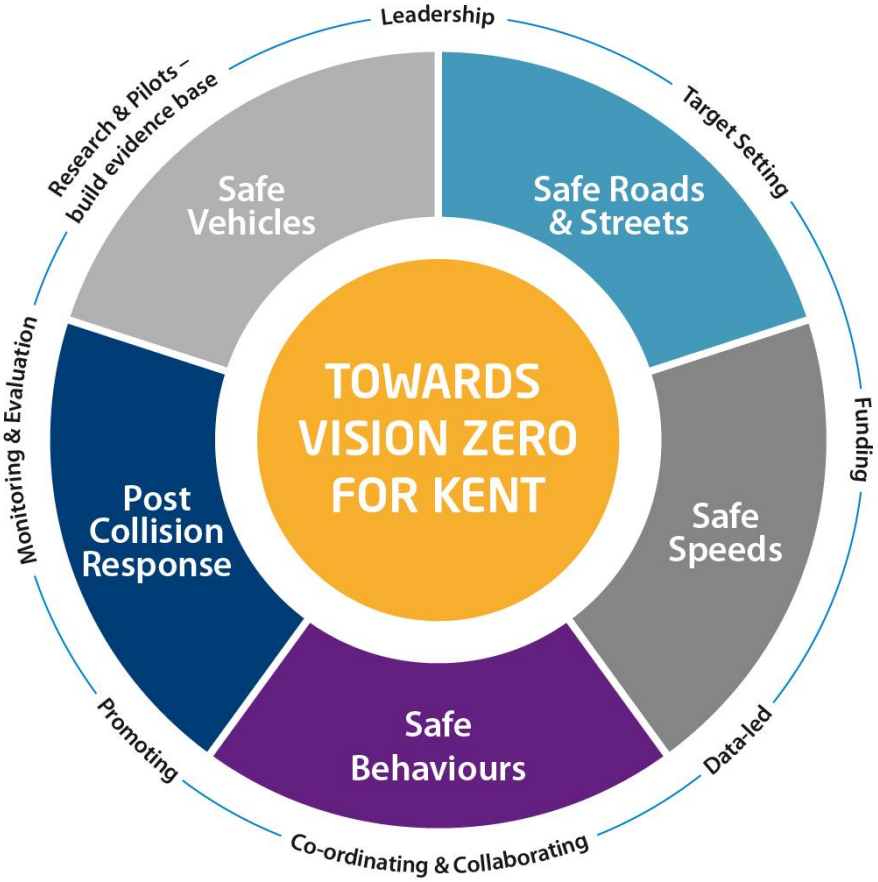
**Kent and Medway Casualty Reduction Partnership includes Kent County Council, Medway Council, Kent Police, Kent Ambulance Service and Kent Fire and Rescue Service*

The Vision – 2050

- Zero, or as close as possible, road fatalities or life-changing injuries
- Safe System is the norm
- Walking and cycling is a safe and easy choice
- Kent at the forefront of road safety innovation

The Strategy - the next five years (2021 - 2026)

- Reduce fatalities, serious injuries, number, and severity of collisions
- Develop an evidence base, including research and trials, monitoring of existing approaches and developing toolkits and programmes
- Improve collaboration between partners and stakeholders
- Embed the Safe System approach
- Promote Vision Zero to Kent's public
- Increase levels of safety for walking and cycling



Chapter One – Introduction

1.1 Vision Zero 2050

The ambition of this strategy is to make Kent the best place to live and work in the UK. Through partnership working, an evidence-led approach and by combining engineering, education and enforcement, we will make Kent's roads, streets, towns and villages feel and be safer for all, with the aspiration of reducing road fatalities to zero by 2050.

While zero deaths is the only ethical long-term goal, reaching absolute zero should not be an obsession. Vision Zero is about the commitment, the sense of direction and recognition that deaths and life changing injury on the road are not an acceptable price to pay for mobility.

We will embed the Safe System Approach and engage with partners, stakeholders and Kent's public and promote Vision Zero objectives. We will work with Kent Police to reduce driver behaviour that puts themselves and others at risk, such as distraction, impairment, inappropriate speed and other socially unacceptable behaviour.

We will incorporate innovative technologies into the transport network, promote safer driving technology to fleet managers and design our roads and streets to be forgiving in the event of mistakes being made. People should rightly expect to drive, walk and ride safely in well-connected communities with the minimum of congestion and pollution, thereby promoting the health and safety of all.

1.2 Our approach – Safe System

Safe System is an approach to road safety and traffic management that starts with the idea that everyone has the right to be safe on the highway network. This is rooted in the belief that every traffic death reflects a failure in the system, and that none are acceptable. It is a methodology that sees all aspects of the system interacting with each other and looks at network risks to prioritise interventions.

The Safe System Approach is a proactive methodology to achieve zero deaths. This approach comprises the following themes:

- Safe roads and streets – designing our highway network to reduce the chances and consequences of collisions.
- Safe speeds – designing roads and enforcing speed limits appropriate to the usage and environment.
- Safe behaviour – education, training, publicity, engineering, enforcement, and technology to improve the way people use Kent's roads and streets.
- Safe vehicles – ensure the vehicles on the Kent network are as safe as they can be by promoting safer technology for car and goods vehicle fleets.
- Post collision response – react as quickly as possible to crashes, study the causes of the most serious collisions, and provide support for the victims of road crashes.

1.3 Community Circle

Proactive community engagement is at the heart of this strategy; if Vision Zero is to succeed it will depend on Kent's public sharing Kent County Council's ambition. Community Circle is our approach to help achieve Vision Zero in Kent and it includes:

- **C**ommunity concerns aligned with injury collision data, such as concerns about speed, air quality and noise.
- **I**njury reduction remains the priority but feeling safe and quality of life are also important.
- **R**esearch and pilot new approaches including average speed camera corridors and other initiatives.
- **C**ommon responsibility for safety including road users, local community and highway authority.
- **L**ocalise campaigns to focus on casualty cluster sites.
- **E**ngagement with community at cluster sites to discuss solutions together.

1.4 Shared responsibility

Everyone shares a responsibility for their own and others' safety. As the Highway Authority, our target is to create the safest road network possible and to achieve zero fatalities and the most seriously injured, we work in partnership with Kent Fire and Rescue and Kent Police to achieve this goal.

However, it is essential that those using the road network also understand their responsibilities, and our programme of education, training and publicity aims to reinforce this requirement.

All road users must obey the law and rules of the road, but to eliminate road fatalities we must go further. Those driving the heaviest vehicles should look out for those more vulnerable than themselves, this includes goods vehicle drivers being considerate to people cycling but also people cycling being considerate to those walking. We must aim towards having empathy towards each other to create a more forgiving environment. We should also look out for the very old or young or people with a disability, giving the space and time to help them navigate the road safely.

1.5 Links to public health

In Kent, almost two-thirds of adults, over a third of Year 6 (10-11yr old) and a quarter of reception (4-5yr old) children are overweight or obese. This has negative impacts on mental and physical health as well as economic impacts due to increased absenteeism and low productivity. Building regular walking and cycling into everyday life is one of the most effective ways to address obesity.

There are several 'safety' challenges that must be addressed to facilitate higher levels of activity:

- The perceived danger in the environment
- Walkability of the living environment
- Dominance of motor transport
- Risk of harm for walkers and cyclists
- Availability of facilities/infrastructure for unmotorised transport
- Degree to which motorised transport dominates other ways of transport

We will work with Kent County Council's Public Health team to address these safety barriers to walking and cycling. Regular physical activity improves heart health and mental wellbeing. Just taking more regular physical activity reduces the risk of premature mortality by 30%. A recent study of 16,749 UK patients in hospital with COVID-19 found that obesity was linked to a higher risk of dying (around a 37% increase in risk of death). Figures for Kent show that 20% of adults aged 19 and over were physically inactive and 24.7% of Year R (reception) students were overweight or obese in 2018/19 compared with an average of 22.6% for England. Physical inactivity is responsible for one in six UK deaths (equal to smoking) and is estimated to cost the UK £7.4bn annually **(£176m pa for Kent)**.

1.6 Links to walking and cycling

It is Kent County Council's (KCC) ambition to make walking and cycling an attractive and realistic choice for short journeys. Alongside the health and wellbeing benefits of walking and cycling, we can also see improvements to air quality and benefits to the local economy.

With perceived safety acting as a barrier to the uptake of walking and cycling in Kent, we expect to see a marked increase in walking and cycling levels as Vision Zero develops. A safer highway network, with mutual consideration and cooperation between users, will lead to walking and cycling for short journeys, or as part of longer ones, becoming a more realistic and natural choice. In countries like the Netherlands, with high cycling levels, we see a lower cyclist fatality rate (Pedalling Towards Safety, European Transport Safety Council, 2012).

It is important to integrate walking and cycling into planning to increase safety. High quality segregated cycle lanes and footpaths as well as improved road crossings and junctions will make roads safer for the most vulnerable users. Where these improvements are not possible, and cycles are sharing road space with cars, we will consider targeted campaigns for raising awareness and in some cases reducing the speed limit. Working with local communities will be imperative in achieving compliance with new limits.

1.7 Costs of road safety to Kent

Each death and life changing injury on Kent's Highways is a personal tragedy, and that is why we have a target of zero deaths. Serious injuries also have very high social costs, 24-hour home care can cost up to £2000 per week. Other costs include clearing the scene, emergency services and resulting congestion.

The Department for Transport estimates the average value of prevention of each reported casualty, which estimates a value for all human and public costs as follows:

Fatal: £1,958,303 Serious: £220,058 Slight: £16,964

In 2019 Kent's combined prevention value of all collisions was over £263m, including over £70m for fatalities and over £143m for serious injuries.

Net Zero meets Vision Zero

KCC has signed up to achieve Net Zero emissions by 2050. It is often the case that low emission vehicles often also have safety features, such as automatic braking, emergency stability control and intelligent speed adaptation.

Initiatives aimed at promoting zero emission vehicles might therefore be aligned with promoting safer vehicles. Cheaper in town parking and residential parking permits for electric cars might be aligned with promotion of in-car safety features. We will therefore seek to collaborate with fleet teams to work towards safer and cleaner vehicle fleets.

Action	Deliverable
1	Promote 'Vision Zero' objectives to stakeholders and the public.
2	Collaborate with Highways, Transport and Waste, Public Health, Active Travel, Fleet, Education and other teams within KCC where road safety can help deliver objectives.

Chapter Two – Data and Risk

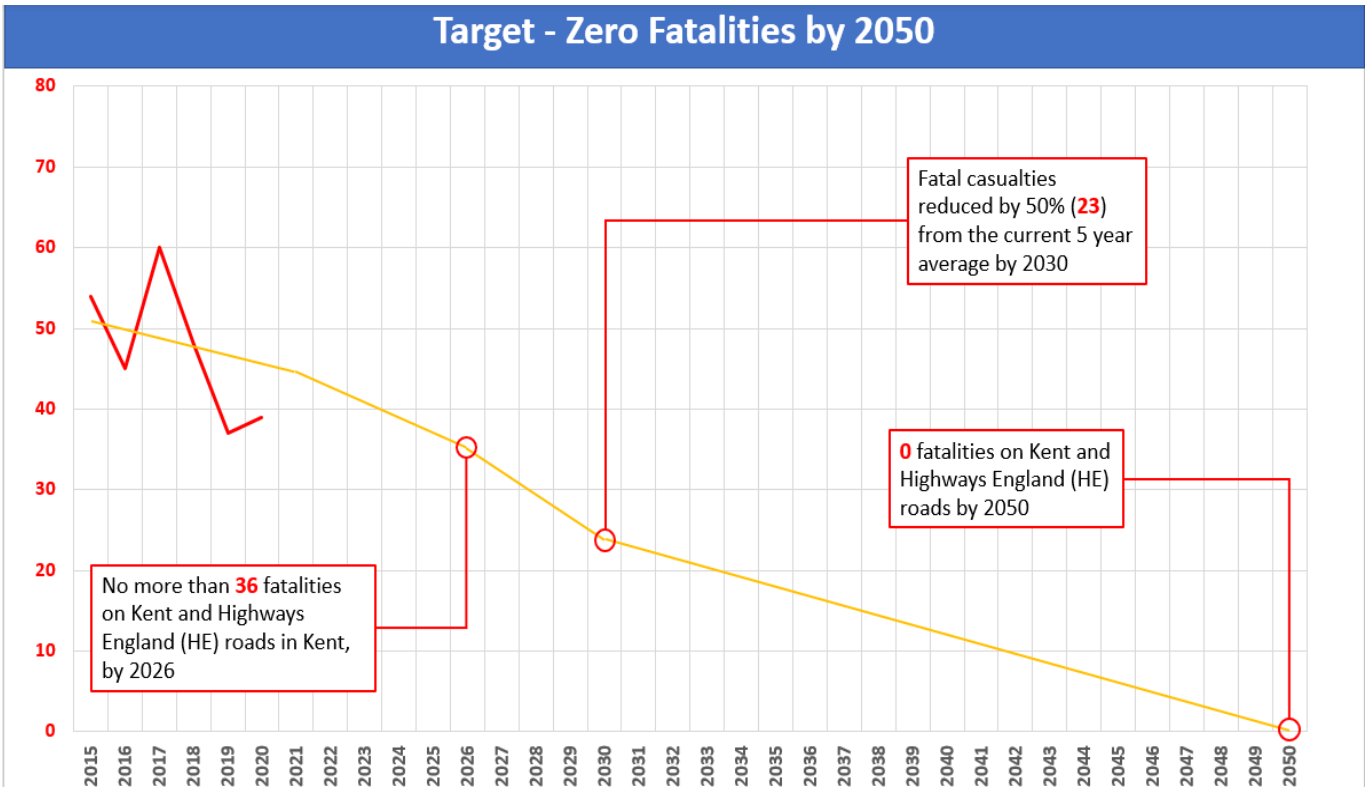
2.1 Introduction

An accurate analysis of crashes and collisions that take place on the highway is essential if we are to deliver Vision Zero.

To prioritise our resources, we must be intelligence led so that safety interventions are led by research and analysis of data. Our priority and investment are currently targeted at locations with a history of traffic collisions resulting in injury. This prioritises the investigation and implementation of measures to reduce injury at these known locations. There are 120 of these locations across Kent each year. We will continue to address these problem sites through a combination of engineering, community engagement, behaviour change and enforcement.

Whilst we will continue to react to personal injury data, we will also develop a more 'proactive' approach to prioritise investment in line with the Safe System Approach. This means we will seek to understand the risks of injury that are posed to road users by the environment and seek to minimise those risks before they become problem locations that result in injury. We will investigate emerging technologies, trial methodologies and engage in research to develop this approach.

Targets



Over the past five years the Kent and Highways England network in Kent has seen an average of over 45 fatalities a year. The target for this strategy is to follow a linear reduction in fatalities towards zero fatalities in 2050. This gives a target of no more than 36 fatalities a year by 2026,

the end date of this strategy. The UN Decade of Action on road safety sets a target of reducing fatalities by 50% by 2030 which is included in the chart. Annual killed or serious injury targets will be monitored and are detailed in 8.2 Safety Performance Indicators for this strategy.

2.2 Risk analysis

Looking closely at road crashes or collisions that have taken place on our roads is useful in understanding where and why collisions occur and who is involved. Using data built up over several years will continue to be the main way we prioritise where in the county we can introduce measures to help reduce collisions occurring.

Our data team draws up a list of 'hotspot' locations of collision 'clusters' (those centred around a 50-metre diameter of a specific location on the road) for further investigation. This helps us to identify where road safety education, engineering and enforcement is needed.

As well as specific 'cluster' locations we also look at lengths or sections of roads with the highest risk. We can do this through looking at collision data in relation to the length of the network (crash density) and the volume of traffic (crash rates). This enables us to compare the risk across all routes on our local road network. Looking at speed data alongside these calculations will give a greater insight of the risks posed to road users on the network. A 'RAG' rating (Red, Amber or Green) is then applied to highlight the areas of greatest risk on our network and provide a robust method for prioritising where our interventions could help.

However, a more 'proactive' approach is essential to deliver Vision Zero. We cannot rely solely on casualty data to determine locations for intervention. The focus must shift to also analyse information that is potentially signposting conditions or situations that if not addressed may result in serious injury. Analysing the likelihood and potential severity of situations is clearly not as straightforward as assessing incidents that have already taken place.

A wide range of information such as community concern, near misses, damage only crashes, the nature of a route, survivability thresholds, the condition of our roads and signs or lining on them (known as asset condition information), as well as traffic flow and speeds can all be used to help identify locations where there may be a risk of serious or fatal injury occurring. We will attempt to bring together both new and existing data sets in our analysis. However, this is a new and emerging way of helping reduce crashes and injury on our roads so this will be a continuous journey for the next few years.

Other defined methodologies for assessing risk more proactively are also emerging across the industry. Road assessment tools such as those developed by iRAP (International Road Assessment Programme) provide the opportunity to look at the risk to road users of collisions based on the road environment itself and how drivers interact with it. In addition, new technologies are being developed to use computers and so called 'machine learning' and statistical analysis to predict collisions. This modelling can help to identify potential locations for intervention. We will continue to champion the use of these new and emerging industry tools to be at the forefront of technological advances.

As we develop our approach, we will work with industry organisations such as the Road Safety Foundation, Parliamentary Advisory Council for Transport Safety and ROSPA.

Data and Risk Action Plan

Action	Deliverable
3	Delivery of annual trend, route and cluster site analysis to identify high-risk locations on the network.
4	Develop existing processes to incorporate community concern factors to strengthen the case for intervention.
5	Research and deliver a proactive methodology for identifying risk before injury is realised.

Chapter Three – Safe Roads and Streets

3.1 Engineering – Vision Zero principles

To achieve Vision Zero by 2050, we will need to explore ways of more effectively designing in safety across our road network. The ideal road system is one where the human tolerance for Kinetic Energy (the force released in a crash) is not exceeded.

$$KE = 0.5 * m * v^2 \text{ (Kinetic Energy = ½ x Mass x Velocity}^2\text{)}$$

We recognize that people sometimes make mistakes. Our aim is to design a forgiving network where making a mistake is not fatal.

3.2 Designing streets for walking and cycling

Half of fatalities on Kent's 30mph road network are people walking or cycling. The fear of road danger is a major barrier to people choosing to walk or cycle. A survey in May 2020 found that 12% of Kent residents felt unsafe walking in their local area and over half felt the traffic was too fast for cycling. To resolve the real and perceived danger we will require a programme of engineering combined with education and enforcement.

3.3 Safer Junctions Programme

We will review the design of the junctions with the most crashes to address why collisions happened and make them as safe as possible for all users. More than half of injury collisions in Kent's towns happen at junctions, so we will analyse relative safety of different designs in different contexts as part of a Safer Junctions Programme for Kent.

We will seek to reduce the chance of collisions occurring through measures aimed at slowing down traffic at crash hotspots.

The programme will initially involve research, with the aim of providing a prioritisation process, outlining different design solutions, options and costs.

3.4 Safer rural roads and villages

57% of fatal collisions in Kent occur in rural areas, and 41% on single carriageway rural roads with a speed limit of 50mph or above. Most of these collisions are not at a junction, suggesting inappropriate speed is a factor. We are therefore proposing a research programme into the relative merits of reducing the national speed limit on single carriageway roads. Both impacts on casualties and journey times, as well as local community and business feedback will be considered. Changes to the national speed limit would need to be made by central government, so should our research show net benefits and public support, we would present our findings to the Department for Transport.

We will continue to work with Kent Police to amplify speed enforcement activities and the fear of getting caught. We will also support local communities to encourage compliance with appropriate speeds on rural roads.

Kent's villages (rural roads with a 30 or 40mph limit) witness 15% of Kent's fatal collisions and deserve special attention because they are home to a high proportion of our rural population. Solutions to road danger on the rural network are not easy; we are therefore proposing a programme of research and pilots to identify appropriate treatments to address specific routes.

Some of the common issues we must seek to address include:

- Prevention of head on collisions

We will look at measures to reduce the chance of vehicles crossing the centre line. Central reservations are not possible on much of Kent's network so innovative use of road markings and other measures to warn road users, especially powered two-wheeler riders which are disproportionally involved in fatal rural collisions, will be researched to seek to reduce head on collisions.

- Prevention of collision with roadside objects

We will develop an approach to 'forgiving roads' for Kent. We will build in the concepts of passive safety into our engineering approaches. Consideration will be given to the protection of the natural habitat as well as the safety imperatives.

- Vulnerable road users

We will implement a programme to reduce collisions involving vulnerable road users. Powered two-wheelers are over-represented in rural road fatal and serious collisions. We will work with powered two-wheeler industry bodies and community groups to implement a policy to reduce collisions involving riders.

Pedestrians and cyclists are also involved in injury on rural roads. We will research common locations and contributory factors and pilot schemes to reduce this toll.

About 25% of rural collisions occurred on 30mph roads, which are in village settlements. We will work with our Parish Councils to deliver improved safety for Kent's villages.

- Motorways

We will continue to work with our partners at Highways England to promote safer driving on motorways and support all projects enhancing the safety on the Strategic Road Network. Some sections of the SRN in Kent have been upgraded to 'Smart Motorways'. We will maintain a dialogue between Kent's communities and Highways England on the use of these sections.

3.5 Safer powered two-wheelers (Motorbikes, mopeds and powered scooters)

In the past five years motorcycle and moped riders (powered two wheelers) represented 25% of fatal collisions and 23% of Serious Collisions on Kent's highway network. This far exceeds the percentage of people travelling by this mode, and to meet Vision Zero objectives we must address the issues that lead to death or serious injury.

To address the issue of powered two-wheeler collisions is more than just an engineering issue, so it will require cross working between engineering, enforcement and education. We will establish a working group that includes associations representing riders to work together towards solutions.

New powered two-wheeler categories, such as e-scooters currently being trialled in Kent, will also be monitored for their safety.

3.6 Safer walking and cycling

In 2020, the Department for Transport published Gear Change – a bold vision for cycling and walking. This sets out an ambition to increase levels of physical activity in everyday life. Designing streets, towns and villages to be and feel safe will play a major role. A YouGov survey of Kent residents in May 2020 showed that 63% of people would like to see more cycle lanes in their local areas and 56% feel traffic is too fast to cycle safely on the road.

In addition to the Safer Junctions Programme, we will also establish a Safer Walking and Cycling programme to identify where the demand for more walking and cycling is greatest and what interventions are required to support this safely. We will strive to follow the Cycle Infrastructure Design Guidance LTN 1/20 for cycling schemes and national guidance such as Manual for Streets for walking schemes.

3.7 Safer children and young people

The safety of children is paramount to this strategy. We want our children to travel as safely and actively as possible.

All children in Kent are offered cycle training through the Bikeability scheme. Our education team encourages parents to teach children how to cross the road. We provide walking buses and our School Crossing Patrols to support children in getting to school safely. We want to go further and work to develop a programme to maintain the safety of children:

- Forge partnerships with schools to work together to make the journey to school safer for walking and cycling.
- Safe Routes to School – identify barriers to walking or cycling to school with a view to improving safe access.
- School Streets – pilot school streets where the street outside a school is closed to traffic during pick up and drop off times working with districts on parking strategy outside schools.
- Road Safety Education and Training – we will continue to deliver education and training targeted at children, parents and carers, while also influencing drivers around schools to watch out and slow down.

Safe Streets Action Plan

Action	Deliverable
6	Develop a Safer Junctions Programme for Kent's urban area.
7	Develop a Safer Rural Network Programme (roads and villages).
8	Develop a Safer Powered Two-wheeler Programme.

9	Develop a Safer Walking and Cycling Programme.
10	Develop a Safer Young People Programme, e.g. School Streets, Safe Routes to School.

3.8 Highways asset management

A change in processes will result in better co-ordination of highways maintenance and management with road safety and walking and cycling objectives. There are over 300 resurfacing schemes a year and incorporating warning lines at casualty hotspots as well as advisory cycle lanes would be relatively inexpensive.

Outcomes we hope to achieve:

- Reactive input to highways schemes
- Planned work – identify where road safety issues may raise priority for resurfacing
- Improved training – allow all teams to understand opportunities and their roles

We will review all Highways Assets to consider where safety can be improved.

Action	Deliverable
11	Establish processes so Highways teams can better incorporate road safety and walking and cycling measures into maintenance programmes at low cost.

3.9 Combining hard and soft factor interventions

Experience shows that ‘soft’ behavioural interventions, such as campaigns, are most effective when combined with ‘hard’ measures, such as new infrastructure changes. Likewise, engineering schemes tend to have more public support and impact where accompanied by a public information and engagement campaign.

We will therefore engage with communities near collision cluster sites using campaigns and behaviour change measures to reinforce safer behaviour. This will mean explaining to stakeholders what road safety measures we are introducing and why. We will engage with the public and stakeholders to ensure all schemes are supported, intended objectives understood and road users make use of them as safely as possible.

Action	Deliverable
12	Engagement with communities at cluster sites where there are concentrations of traffic collisions and fatalities to improve compliance and support for Vision Zero.

New Developments

We will continue to design low speed environments within residential areas and ensure that our streets are safe for everyone, not just motor vehicles, through integrated and inclusive design.

The Kent Design Guide is applied to guide and inform developer proposals to ensure they meet the above criteria.

Chapter Four - Safe Speed

Appropriate speed is at the heart of the Safe System approach.

Our objective is to create a network where fewer mistakes occur, and to ensure that mistakes will not lead to a death. Improving compliance to speed limits, appropriate speeds for a location and in some instances reducing speed limits will be central to achieving this objective.

4.1 Engineering

We will continue to improve compliance with speed limits by changing the appearance of our streets to encourage lower speeds and reinforce speed limits, particularly where there is a history of collisions. We will help motorists to understand the appropriate speeds for the environment and continue to use signs, lines, vehicle activated signs, variable messaging signs and other visual cues to slow down traffic approaching collision hotspots.

Re-engineering all of Kent's highways to help vehicles keep to safer speeds is a huge task, so collaboration between education and enforcement to support the process is essential.

4.2 Enforcement

Excessive speed often results in the most serious injuries, but habitual speeders tend to only respond to the 'fear of getting caught'.

A recent survey shows that 54% of people in Kent support the use of road safety cameras to enforce speed limits. The most popular of these are average speed cameras.

Kent County Council works in the Kent and Medway Safety Camera Partnership with Medway, Kent Police and Highways England for the deployment of safety camera vans, fixed speed, average speed and red-light cameras. We will work with this group to ensure cameras are deployed in the most appropriate sites. We will seek ways to allow expansion of the deployment of speed cameras.

The decision on where to deploy cameras is based on Department for Transport (DfT) Circular 01/2007, which states, "whilst the primary objective for camera deployment is to reduce KSIs at known collision locations, cameras can also be beneficial where there is community concern." We will continue to prioritise collision hotspots but also seek to be proactive to support Kent's residents tackle inappropriate speed with cameras, and mobile van cameras that can be quickly deployed.

Average Speed

As regards Average Speed camera deployment, DfT Circular 01/2007 states, "average speed camera enforcement has the effect of calming the speed over a longer distance and can be used at sites where a significant number of collisions are scattered along a length of road." We will explore the opportunity to pilot a route-based approach for average speed cameras, for example between the entry to and exit from a village. A wide range of data will be analysed including number of injuries, reported near misses and the 85% percentile (the speed at which 85% of people drive, which tends to be the highest safest speed for that road).

Community Speed Watch

Enforcement of speed limits also includes Community Speed Watch, where members of the public work with police support to measure traffic speeds. While this does not lead to penalties, motorists found to be travelling above the posted speed limit are sent a letter, which for serial offenders is delivered by a police officer by hand. This has proven to be an effective deterrent. Technology now exists for this process to be automated with ANPR speed detection devices mounted to street furniture, which can be used where a safe location cannot be found for manual speed checks.

The data gathered from Community Speed Watch can also be used to monitor traffic speed and support the case for further speed reduction measures, if required. We will actively encourage and support Kent residents to participate in Community Speed Watch schemes as a first step when traffic speed is reported as an issue. We will evaluate the potential for the number of these groups and the data they provide to be included as one of the Safety Performance Indicators for this strategy.

Roads Policing

We will continue to work closely with Kent Police through the Kent and Medway Casualty Reduction Partnership and Safety Camera Partnership to share data on where to focus mobile camera vans and collaborate on promoting enforcement campaigns to amplify their effectiveness.

Parish Councils will be approached to seek community participation in amplifying speed compliance and enforcement messages in their local areas.

4.3 Implementing 20mph limits

A pedestrian is five times more likely to die if hit at 30mph rather than 20mph. Kent has a history of implementing 20mph zones and limits with over 1500 roads and streets in place. Kent has recently implemented 20mph town wide limit pilots in Faversham and Tonbridge.

A recent survey shows that almost 70% of residents in Kent support a 20mph limit where they live. However, the same survey shows that a similar percentage of residents think the limit is ineffective because of non-compliance. Effective compliance with speed limits will require community support as well as enforcement, although Intelligent Speed Assistance will be fitted on all new cars from 2022, which will help automate compliance.

The first trial of a 20mph limit is underway across almost all roads in Faversham town and Tonbridge town in 2020 as part of the COVID-19 Emergency Active Travel Fund. We will study the impacts of this scheme to understand the potential for implementation in other towns in Kent.

Kent County Council will subsequently consider proposals from town, district and parish councils to introduce lower speed limits in urban areas and villages where there is an identified demand for safer travel for vulnerable road users.

4.4 Rural road limits

The 60mph rural road network sees 45% of all fatal collisions in Kent. This is greatly disproportionate compared to the volume of traffic. A YouGov survey showed a majority of rural

residents in Kent support slower rural speed limits. However, impacts on business and travel times must be considered. We therefore propose to research the impacts of lowering rural speed limits on safety, journey times and economic impact. This research will look at roads with the national speed limit, which is currently 60mph.

To replace every sign to 40mph or 50mph would be both a huge cost and, in many circumstances, encourage faster traffic. Therefore, should our research show a net-benefit Kent County Council would present the findings to central government, calling for a national change to the default national speed limit.

4.5 Visible enforcement

The visible presence of police officers on the beat, either on foot or in vehicles, helps to control speed. As the police cannot be everywhere all the time, we will work in partnership sharing collision data – identifying known locations, problems, times and road users – to target high-risk areas.

Safe Speed Action Plan

Action	Deliverables
13	Research the criteria for installing new safety camera systems to include community demand, so cameras can be used where the community feels speeding is an issue, rather than just reacting to collisions that cause injury. We will pilot an average speed camera corridor along a stretch of road for evaluation.
14	Evaluate and learn from the pilot 20mph speed limit towns (Faversham and Tonbridge) and analyse impacts and success of measures to improve compliance.
15	Research impacts of reducing the rural national speed limit to seek to reduce speeds on rural roads.
16	Research and pilot measures to slow traffic around schools where traffic speed is a reported problem.
17	Work with Kent Police to enhance the ‘visible presence’ of enforcement at crash hotspots and with local communities to support Community Speed Watch groups.
18	Support Kent Police enforcement activities with campaigns that target the highest risk areas and motorists

Chapter Five - Safe Behaviour

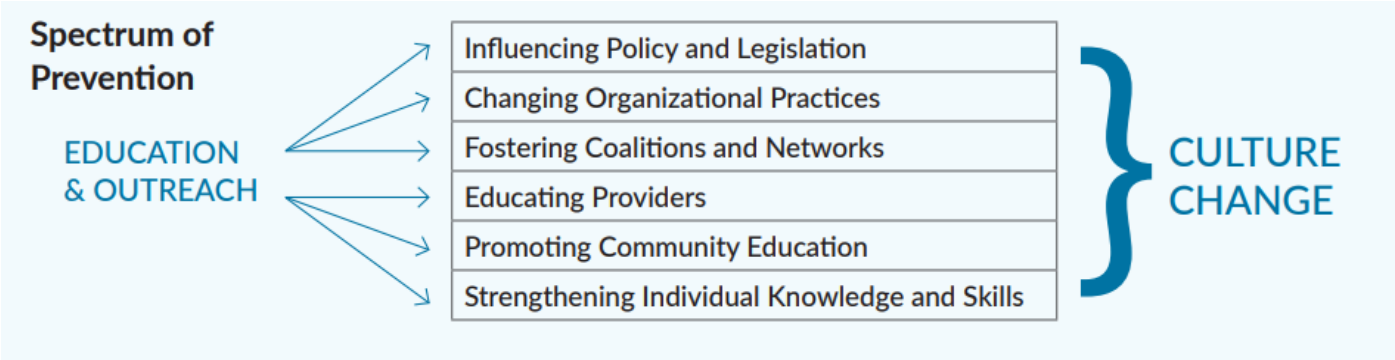
5.1 Vision Zero promotion

Communicating effectively to advance road safety is not new, but Vision Zero brings greater urgency and critical thinking to this need. It also brings together a wider and more diverse range of stakeholders. The language of Vision Zero itself -- with the goal to eliminate all traffic fatalities - communicates a more ambitious approach and rests on the basic understanding that these serious losses are preventable. A key function of communications is education, sharing information that will not only raise awareness about Vision Zero but spur individuals and institutions to change their behaviour. It is essential to create a strong brand for Vision Zero, to provide consistency in all messaging.

5.2 Culture change

Crafting an effective communications campaign that leads to real behaviour change is complicated. We need to gain a deep understanding of what steps people and communities take in shifting their perceptions and actions. Through our current work, we have built a foundation of organisational contacts throughout Kent, our first step will be to expand this network through an engagement programme.

The San Francisco Municipal Transportation Agency which launched Vision Zero in 2014 found it helpful to understand the Spectrum of Prevention (see graphic below), a framework developed by the Prevention Institute. It emphasizes that the culture of community norms and behaviour is not driven by individual decisions alone. It is the result of a web of influences from policy to organisational practices to community education.



We will harness the knowledge we have from previous behaviour change campaigns in Kent to develop an effective strategy that aims to embed an awareness of Vision Zero across the county and move towards actions that re-enforce safer behaviour, such as training. We will develop a 5-year plan with the aim of brand awareness and organisational engagement.

Engagement locally with communities, with businesses, fleet managers, charities, road user groups, educational and health establishments will be a vital component of developing this plan.

5.3 Motorised training

In Kent, mini-bus drivers must receive training before they are allowed to transport school children. The HASTE (Hazard, Awareness, Space, Time, Eco driving) training course is open to all drivers that hold a full driving licence. The effect of introducing this course was to reduce the number of crashes by more than two thirds in the first five years. We therefore recommend the expansion of training courses to a wider range of KCC and other fleet drivers.

5.4 Non-motorised training

Kent County Council's Small Steps scheme gives children practical roadside instruction by trained volunteer instructors. Thousands of children in Kent receive Bikeability training every year. This helps children develop a set of invaluable skills to help them stay safe when cycling on roads. Cycle training is also provided to adults throughout the county. We will continue to work with Explore Kent to produce and distribute cycle maps detailing the safest routes.

5.5 Enforcement

In 2004 the World Health Organisation concluded that road safety campaigns were able to influence behaviour when used in conjunction with legislation and law enforcement. However, the report also states that "… when used in isolation education, information and publicity generally do not deliver tangible and sustained reductions in deaths and serious injuries."

Publicity and education programmes will be focussed on combining with enforcement, engineering and new regulations such as promoting new vehicle technology and freight vehicle accreditation schemes. Publicity and education will also be used to enhance enforcement activities on the Fatal Four: speed, distraction, drink and drugs and seat belt use. We will also work with communities to get support for local amplification, such as setting up Community Speed/Road Watch groups.

5.6 Age group focus

We will continue to support people with training and education designed to maintain safe mobility. This is provided at different life stages, from training infant school children to safely cross the road, primary school children learning to safely ride a bicycle, teenagers learning to ride a moped and to start driving safely, through to mature driver courses. Our training and information will include alternatives to driving, as well as safer driver training and be updated to mirror changes in vehicle technology.

5.7 Local focus

Research published in the Handbook of Road Safety Measures, by Rune Elvik, shows that local, personally directed campaigns show by far the biggest effect on road collisions.

Campaigns and education will therefore be localised as much as possible part of the Community CIRCLE approach. We will work with Parish Councils and through schools to engage with communities.

5.8 People, not just data

It is important that road casualties are not just viewed as data, but as people. We will work with charities and Kent Police to develop communications that showcase the human cost of road danger in a sensitive way.

Safe Behaviour Action Plan

Action	Deliverables
19	Produce a 5-year behaviour change delivery plan aligned with walking, cycling and public health requirements and responsibilities. Localise campaign messaging.
20	Produce a promotional process for use when new engineering schemes (such as a new pedestrian crossing) are introduced to tell people what and why it is being done, and how to use it.
21	Support all people with training and education designed to maintain safe mobility, that includes alternatives to driving as well as driver training.
22	Research and test the impact of new road infrastructure and in car technology, such as road signs and Intelligent Speed Assistance on driver behaviour.

Chapter Six - Safe Vehicles

Up to a third of all road collisions involve vehicles being driven for work purposes, so working with partners such as Highways England to engage with fleet managers to ensure the management processes, vehicle design and driver training are as safe as possible, is an important aspect of this plan.

6.1 Kent driver policy

Influencing organisations throughout Kent to purchase the safest vehicles and encourage their employees to drive as safely as possible, is a key part of this strategy. As Kent County Council manages a fleet of vehicles, it provides an ideal pilot study for what works best.

We will therefore update our driver policy for Kent County Council drivers. Kent County Council's fleet vehicles are fitted with a telematics system, so we can review the impact of interventions on the driving habits of our staff.

Our policy will detail a range of training opportunities such as our HASTE courses and additional in-car coaching for those who need their driving behaviour and skills to be improved. Interventions will be based on telematics monitoring from in-vehicle tracking.

We will consult with our fleet managers, telematics account managers and insurance companies with the objective of improving safety and lowering insurance premiums. We will seek to work within the Highways England programme, Driving for Better Business to engage with fleet managers throughout Kent to share our experience and encourage other businesses to adopt good practice.

6.2 New technology research and engagement

Vehicle technology is developing at a fast pace, and we must ensure we are at the forefront of using the changes to help enhance safety.

Levels of automation already exist in vehicles, and in-vehicle technology is likely to continue to advance. It is estimated that 95% of road collisions involve human error, so the shift towards autonomous vehicles could be significant in reaching Vision Zero.

We will research all new technology and engage with key industry players to better understand what is happening and how we can make use of it to inform safety measures. We will liaise with Kent Commercial Services (KCS) to advise on vehicle choices when our vehicles are up for renewal or replacement, to ensure we are at the forefront of vehicle safety and technology in Kent. We will also seek to influence fleet managers throughout Kent to purchase the safest vehicles.

Demonstration project: A2M2 Connected Corridor

Kent County Council is working in partnership with Highways England, Department for Transport and Transport for London to pilot a connected road corridor on a section of road between Dover and London.

Trial vehicles will be fitted with onboard technology that will link communication between the car and the roadside wirelessly. This will relay information to the vehicle relating to road works, road

conditions, temporary speed limits and the time remaining before a traffic light turns to green. The information could then be used by the vehicle to vary speed.

6.3 Safer Freight

Goods vehicles are up to seven times more likely to involved in fatal collisions than cars, proportional to their numbers on the road. Kent will continue to support robust enforcement of existing regulations supporting DVSA and Traffic Commissioners Office, to ensure all Goods Vehicles over 3.5t must have an O Licence, regulating drivers hours and vehicle road worthiness.

With major construction projects such as the Lower Thames Crossing proposed for Kent, we will therefore implement a research programme on how to manage construction logistics using an accreditation scheme such as CLOCS, this will enable Kent County Council to reduce the impact on communities by stipulating the routes and timings for construction vehicles.

We will also research the most appropriate accreditation scheme for fleet operators making deliveries to construction sites, such as ISO39001, FORS, and DVSA Earned Recognition. These schemes audit the safety processes, such as vehicle design and driver training.

We will work with partners to improve the safety of all goods vehicles operating in Kent and champion safer vehicle technology, design and driving standards.

6.4 Telematics and vehicle tracking

Telematics systems gather data including vehicle location, driver behaviour, engine diagnostics and vehicle activity. They will allow us to detect unsafe practices and address them quickly. We can also use it for location tracking to provide emergency assistance directly to the exact site if needed. Monitoring data from the telematics systems such as speeding, harsh cornering and braking will enable us to identify drivers who might require additional training or coaching. We will also reward those who are consistently demonstrating excellent driving behaviour.

KCC's Highways, Transportation and Waste Teams are currently using the Navman telematics system in all fleet vehicles. We develop a rewards and training programme based on the data and monitor its success.

We will also seek to promote the use of telematics to other fleet operators and seek to get data from these systems to help us identify roads in Kent where harsh braking, cornering, and speeding are regularly occurring. This information will be compared against data from additional sources to help make key decisions regarding safer streets.

6.5 Safer vehicle design

The safety of vehicle design has improved considerably over the past 20 years. The Euro NCAP (New Car Assessment Programme) star rating system helps advise consumers on the relative safety of cars. Thatcham Research tests the relatively safety of UK models and works closely with insurance companies to set premiums based on this research.

Throughout the period of this strategy, we will promote safer vehicle technology and the Euro NCAP rating systems to fleet managers and the Kent public, to help people choose the safest

car possible. As half of all new cars are bought by fleets, we will work with partners at Driving for Better Business to encourage safer fleet vehicles.

Examples of recently developed in-car safety features:

Electronic stability control

Since 2012 all new vehicles must have Electronic Stability Control (ESC). This works to steer a car while braking, to avoid spinning out of control. There has been an observed 25% - 33% reduction in single vehicle collisions where ESC has been fitted.

Automatic sensing to detect imminent collisions

Autonomous emergency braking (AEB) is included in Euro NCAP 2014 and from 2016 it includes sensitivity to pedestrians, then from 2018 sensitivity to cyclists. AEB is estimated as providing a 38% reduction in front to rear passenger car collisions.

Passive Safety test

Euro NCAP has introduced a passive safety test to estimate relative safety of different vehicles should they hit a pedestrian. Some manufacturers have introduced pedestrian air bag technology.

Whiplash

Studies show that seat design has a significant impact on reducing whiplash.

Intelligent Speed Assistance

ISA helps drivers keep to the speed limit and is fitted as standard on models such as the new Ford Focus. It works by resistance on the accelerator if drivers drive above the limit. It will be fitted on all new cars by 2022.

6.6 Safer vans

The number of vans is growing. As home deliveries rise, we are likely to see increasing numbers of collisions involving vans as they drive in residential areas where many people walk and cycle. This is a growing issue across the UK, so we will work in partnership with national organisations to support national initiatives which support safer deliveries. NCAP has recently been developed for vans, so we will work with partners to develop policies which encourage fleet managers in Kent to purchase the safest vehicles.

6.7 Public Transport

Public transport is the safest form of transport, so working with Kent's public transport team to promote public transport where it offers an alternative to driving. We will also engage with operators to monitor driver training procedures.

Safe Vehicles Action Plan

Action	Deliverables
23	Update Kent County Council's driver policy rules, procedures, and training processes.
24	Promote safer driving technologies such as Intelligent Speed Assistance (ISA) to fleet managers and Kent's public.
25	Research opportunities to implement Construction Logistics and Community Safety (CLOCS) standards, or equivalent, that stipulates construction logistics plans and minimum vehicle safety standards for KCC led construction projects.
26	Develop a rewards and training programme to increase the impact on driver behaviour of the telematics system monitoring Kent County Council drivers. Research opportunities to extend vehicle telematics monitoring processes.
27	Work with Highways England's Driving for Better Business to promote the safest vehicles and safest driving techniques to all fleet managers in Kent and promote Euro NCAP (New Car Assessment Programme) safer car information to fleet managers and the Kent public.
28	Update Kent County Council's procurement to ensure new vehicles meet NCAP 5* standards.

Chapter Seven – Collision Response

7.1 Maintain fast collision reaction times

Getting to a collision quickly can be the difference between life and death. We will continue to work through the Kent and Medway Casualty Reduction Partnership (KMCRP) to support a swift collision response.

7.2 Post collision response

When a fatality or a serious injury occurs, we follow processes to review the causes through the Kent and Medway Casualty Reduction Partnership. We will continue to work in partnership to audit all collision sites and contributory factors to implement the mitigation measures where required.

7.3 Support for victims

It is essential that road deaths in Kent are not seen as a statistic but as a personal tragedy. Appropriate partners should work with bereaved families to help them through the process and do everything possible to ensure their deaths will help inform a safer future. We will engage with organisations such as Brake / Road Peace on the best approaches to take.

Action	Deliverables
29	Work with the CRP Casualty Reduction Partnership (Kent Police, Ambulance, Fire and Rescue Services) to support swift post-collision response process.
30	Work with partners to improve our post KSI (killed or seriously injured) auditing process by assessing behaviour, enforcement, and road layout to prevent further casualties.
31	Work with partners to ensure victims of road collisions get support.

Chapter Eight – Governance and Monitoring

To achieve the ambition of Vision Zero in Kent will take decades. We will aim to pilot new approaches and technologies. We must put in place monitoring and evaluation to guide us.

Although surveys suggest broad support for interventions that make roads and streets safer for all, this will not always translate on to specific schemes. It is therefore essential that we seek the best advice and have the right political and officer governance, together with public engagement in place to deliver schemes, some of which may face opposition.

8.1 Launch event and Steering Group

A Vision Zero launch event is proposed, due to the current pandemic situation this is likely to take the form of a media event.

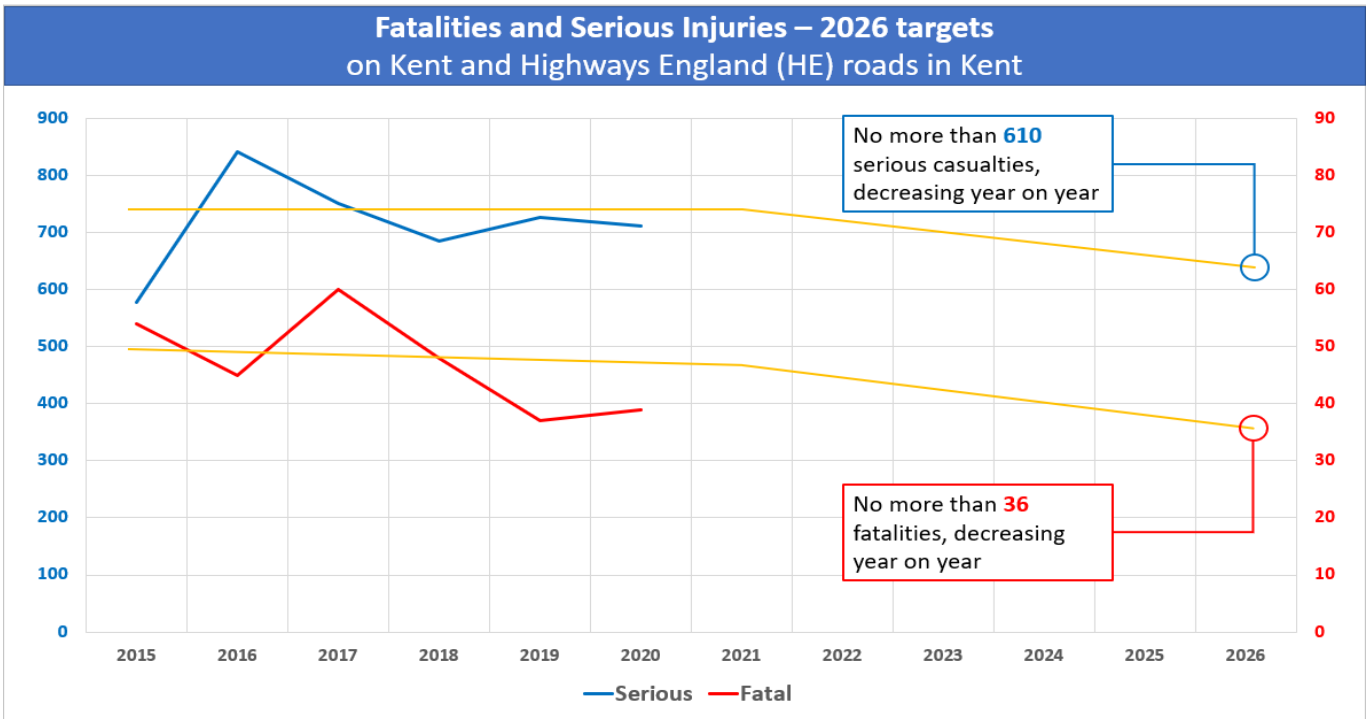
We will also bring together an expert steering and advisory group to advise officers, stakeholders and Members on delivery of this strategy according to national best practice.

8.2 Safety Performance Indicators (SPI) for this Plan

Monitoring and evaluation of this Strategy and ensuing Delivery Plans is essential.

We will continue to monitor crash statistics to assess performance against targets for reduction in fatalities and serious injuries. The targets for implementation over the next five years of this strategy are displayed in the graph below.

Targets for this Strategy – 2021 – 2026



The targets for this strategy include both fatal and serious collisions, both decreasing year on year.

Review of Safety Performance Indicators

A full monitoring and evaluation plan will be prepared as part of a Vision Zero Delivery Plan. Collisions do not paint a complete picture of a safe system, so other indicators will be measured. A review of potential SPIs will be carried out to determine the ideal indicators to measure.

As part of this review, we will consider a wide range of options including:

Percentage of traffic complying with speed limits, of drivers who do not drive after consuming alcohol, drugs or while using a mobile phone, and of car occupants using a seat belt. Percentage of new passenger cars with highest Euro NCAP safety rating and of roads with appropriate safety ratings. Percentage of emergency medical services arriving at scene within 18 minutes of notification. The Number of Community Speed Watch schemes and the levels of safe walking and cycling.

While we recognise there is a case to measure all the proposed SPIs, in some cases the resources required to measure an indicator may outweigh the benefits.

8.3 Collaboration

Kent County Council will engage with stakeholders to adopt a Safe System approach. We will research, review and share. We will identify best practice, not just in the Kent but also, regionally, nationally and globally. We will also work to identify where gaps are and where interventions can be improved to ensure we are all delivering to the best of our ability towards the same aspiration of Vision Zero.

Kent County Council will take the lead as local highway authority as it holds the statutory duty for road safety, especially for education and engineering functions. KCC cannot achieve Vision Zero alone and we will need to work with other agencies, not least the enforcement of road traffic law by the police.

As recognised by the Audit Commission in 2008, the benefits of collaboration between the statutory duty holders and other stakeholders ensures not only the effective use of public money but also increased access to wider experience and resources. To properly benefit from a coordinated and collaborative approach, informed leadership is required.

Kent and Medway Casualty Reduction Partnership

The Casualty Reduction Partnership was established as a collaboration between Kent Police, Kent Fire and Rescue Service, HE, Medway and KCC. It is proposed that this group should continue to provide a supervisory role on the delivery of this strategy, supporting collaboration and advising on programmes. A communications plan will be developed for this group to help promote its work to the public.

Kent and Medway Safety Camera Partnership – Safer Speed Partnership

In conjunction with the Casualty Reduction Partnership, the Safety Camera Partnership focuses on camera enforcement, but has an expanded remit to include delivery of Safer Speed and include input from traffic engineers and community road watch. It is proposed that stronger links are established between the two partnerships, and both are promoted from a single website.

Governance and Monitoring Action Plan

Action	Deliverables
32	Organise a launch event and form an expert steering group to advise on delivery and best practice.
33	Produce a Monitoring and Evaluation Plan establishing how the Safety Performance Indicators will be measured
34	Work within the Casualty Reduction Partnership (CRP) framework.
35	Expand the remit of the Safety Camera Partnership (KMSCP) to include community speed watch. KMSCP will report to the Casualty Reduction Partnership.

Glossary of terms

Active travel - Travel and transport by physically active modes of transport such as cycling, walking or scooting.

Bikeability scheme – cycle training scheme aimed at young people in schools to provide practical skills and understanding on how to cycle on today's roads.

Brake – road safety charity who aim to stop road deaths and injuries, support people affected by road crashes and campaign for safe and healthy mobility for all.

Construction, Logistics and Community Safety (CLOCS) – a set of standards that form best practice from a number of standards, policies and codes of practice to provide one industry standard that can be implemented by regulators, clients, principal contractors and fleet operators.

Cluster site – identification of a site for potential road safety engineering using the following criteria: Urban area (towns) – Six or more personal injury collisions within a 50-metre diameter. Rural area – Four or more personal injury collisions within a 50-metre diameter.

Driving for Better Business – a Highways England programme to raise awareness of the significant benefits that employers in both the private and public sectors can achieve from managing work-related driving more effectively.

Emergency Active Travel Fund – the Department for Transport (DfT) announced a £250 million Emergency Active Travel Fund To help local authorities to restart local transport as part of the Government's Covid-19 recovery roadmap. The two key aims of the funding are to enable more people to walk and cycle and to support safe social distancing.

Euro NCAP – provides consumer information on the safety of new cars.

Fleet vehicles – are groups of motor vehicles owned or leased by a business, government agency or other organisation, rather than by an individual or family.

Fleet Operator Recognition Scheme (FORS) – is a voluntary accreditation scheme for fleet operators which aims to raise the level of quality within fleet operations, and to demonstrate which operators are achieving exemplary levels of best practice in safety, efficiency, and environmental protection.

Gear Change – the Department for Transport's vision for walking and cycling in England.

Intelligent Speed Assistance (ISA) – is a vehicle safety feature that builds on traffic sign recognition technology. ISA informs drivers of the current speed limit and, when needed, acts as a speed limiter, automatically reducing a vehicle's speed by limiting engine power.

International Road Assessment Programme (iRAP) – a road safety charity and the umbrella programme for Road Assessment Programmes (RAPs) worldwide.

Kent and Medway Casualty Reduction Partnership – a collaboration between Kent Police, Kent Fire and Rescue Service, HE, Medway and KCC. The group provides a supervisory role on the delivery of strategy, supporting collaboration and advising on programmes related to road casualty reduction across Kent.

Kent and Medway Safety Camera Partnership (KMSCP) – comprising Kent County Council, Medway Council, Highways England and Kent Police, the KMSCP is responsible for the operation of speed, red light and average speed safety cameras within Kent and Medway. Its main commitments are influencing, educating and encouraging motorists on the roads in Kent

and Medway to slow down, stay within the speed limit and help reduce the number of speed-related crashes and casualties through the combination of education, publicity and enforcement.

Net Zero – Achieving net-zero carbon emissions by deeply cutting emissions, with remaining emissions offset by removal from the atmosphere (e.g., by trees or technology).

Road Peace – is the national charity for road crash victims in the UK. They provide information and support services to people bereaved or seriously injured in road crashes and engage in evidence-based policy and campaigning work to fight for justice for victims and reduce road danger.

Road Safety Team – KCC's team who work in road safety Education, Training and Publicity aims to contribute to and achieve reductions of people killed and seriously injured on Kent's roads.

Route based approach – analysing collision rates along routes as well as at clustered locations.

Rural Roads – major roads and minor roads outside urban areas and having a population of less than 10,000 (excluding motorways).

Safe System – a road safety approach encompassing safe roads and streets, safe speeds, safe behaviour, safe vehicles and post collision response to ensure everyone has the right to be safe on the highway network and any death reflects a failure in the system.

Safer Junctions Programme – a programme aimed at improving the safety at junctions.

Schemes Engineering Team – KCC team responsible for the management of engineering schemes on Kent's roads and streets.

Small Steps Scheme – a project aimed at Year Two children and involves parents, teachers and project staff working together to help make children safer pedestrians. The children are taught essential skills of how to establish both safe and dangerous roadside situations and how to effectively deal with them.

Telematics – Telematics systems gather data through GPS and a vehicle's onboard computer, including vehicle location, driver behaviour, engine diagnostics and vehicle activity, allowing detection of unsafe practices. It can also be used for location tracking to provide emergency assistance directly to an exact site if needed.

Urban roads – all major and minor roads within an urban area with a population of 10,000 or more (excluding motorways).

Vision Zero – a target of zero road fatalities.

Appendix 1 –

National / Regional Safe System Strategies

National Police Chiefs Council - Policing our roads Together – 2018 - 2021

The 'fatal 4' offences will be prioritised in all that we do and our own objectives for policing will be organised under each of the following strands:

Safe Roads; Safe Speeds; Safe Vehicles; Safe Road Users and an additional 5th strand of Post Crash Response.

http://library.college.police.uk/docs/appref/Policing-our-Roads-Together-partners-copy.pdf

Transport for the South East – Draft Strategy moots Vision Zero by 2050

A network that promotes walking, cycling and active lifestyles to improve our health and wellbeing.

A safely planned, delivered and operated transport network with no fatalities or serious injuries among transport users, workforce or the wider public.

https://transportforthesoutheast.org.uk/wp-content/uploads/2019/10/TfSE-Draft-Transport-Strategy-v24.0.pdf

DfT Road Safety Statement 2019 – A Lifetime of Road Safety

"We will conduct a qualitative process evaluation of the Safer Roads Fund which will inform future targeted funding for roads investment and other interventions to encourage use of the safe system approach."

Conclusion: Future road safety must look beyond road users and interventions which support changes in behaviour. Future investment in vehicle technology, infrastructure, and our evidence base are all part of the building blocks of future success.

Highways England Delivery Plan 2015-2020

"Working towards the goal of bringing the number of people killed or injured on the network as close as possible to zero by 2040."

Related Strategies:

Vision Zero Action Plan – London, TfL

Vision Zero and the Safe System – New Zealand, Ministry of Transport

Vision Zero on the move – Swedish Transport Administration

Related KCC Transport Strategies:

LTP – Growth without Gridlock - "Walking and cycling can easily be incorporated into our busy lives. Health and road safety are interlinked, and reducing casualties caused by vehicular traffic is a constant priority."

Growth and Infrastructure Framework (GIF) - £10bn for transport in Kent to accommodate 178,600 additional homes (24% growth), 396,300 additional people 2011-2031 (23% growth), and 170,300 additional jobs. To provide growth without negative impacts on road safety will require significant work.

Appendix 2 – Data pack – see additional document

Appendix 3 – Full Summary of Action Plans

Strategic Actions

1. Promote 'Vision Zero' objectives to stakeholders and the public.
2. Collaborate with Highways, Transport and Waste, Public Health, Active Travel, Fleet, Education and other teams within KCC where road safety can help deliver objectives.

Data and Risk Actions

3. Delivery of annual trend, route and cluster site analysis to identify high-risk locations on the network.
4. Develop existing processes to incorporate community concern factors to strengthen the case for intervention.
5. Research and deliver a proactive methodology for identifying risk before injury is realised.

Safe Roads and Streets Actions

6. Develop a Safer Junctions Programme for Kent's urban areas.
7. Develop a Safe Rural Network Programme (roads and villages).
8. Develop a Safer Powered Two-wheeler Programme.
9. Develop a Safer Walking and Cycling Programme.
10. Develop a Safer Young People Programme, e.g. School Streets, Safe Routes to School.

Highways and Asset Management Action

11. Establish processes so Highways teams can better incorporate road safety and walking and cycling measures into maintenance programmes at low cost.

Combining Hard and Soft Factor Intervention Action

12. Engagement with communities at cluster sites, where there are concentrations of traffic crashes and fatalities, to improve compliance and support for Vision Zero.

Safe Speeds Actions

13. Research the criteria for installing new safety camera systems to include community demand, so cameras can be used where the community feels speeding is an issue, rather than just reacting to collisions that cause injury. We will pilot an average speed camera corridor along a stretch of road for evaluation.
14. Evaluate and learn from the pilot 20mph speed limit towns (Faversham and Tonbridge) and analyse impacts and success of measures to improve compliance.
15. Research impacts of reducing the rural national speed limit to seek to reduce speeds on rural roads.
16. Research and pilot measures to slow traffic around schools where traffic speed is a reported problem.

17. Work with Kent Police to enhance the 'visible presence' of enforcement at crash hotspots and with local communities to support Community Speed Watch groups.
18. Support Kent Police enforcement activities with campaigns that target the highest risk areas and motorists.

Safe Behaviour Actions

19. Produce a five-year behaviour change delivery plan aligned with walking, cycling and public health requirements and responsibilities. Localise campaign messaging.
20. Produce a promotional process for use when new engineering schemes (such as a new pedestrian crossing) are introduced to tell people what and why it is being done, and how to use it.
21. Support all people with training and education designed to maintain safe mobility, that includes alternatives to driving as well as driver training.
22. Research and test the impact of new road infrastructure and in car technology, such as road signs and Intelligent Speed Assistance on driver behaviour.

Safe Vehicles Actions

23. Update Kent County Council's driver policy rules, procedures, and training processes.
24. Promote safer driving technologies such as Intelligent Speed Assistance (ISA) to fleet managers and Kent's public.
25. Research opportunities to implement Construction Logistics and Community Safety (CLOCS) standards, or equivalent, that stipulates construction logistics plans and minimum vehicle safety standards for KCC led construction projects.
26. Develop a rewards and training programme to increase the impact on driver behaviour of the telematics system monitoring Kent County Council drivers. Research opportunities to extend vehicle telematics monitoring processes.
27. Work with Highways England's Driving for Better Business to promote the safest vehicles and safest driving techniques to all fleet managers in Kent and promote Euro NCAP (New Car Assessment Programme) safer car information to fleet managers and the Kent public.
28. Update Kent County Council's procurement processes to ensure new vehicles meet NCAP 5* standards.

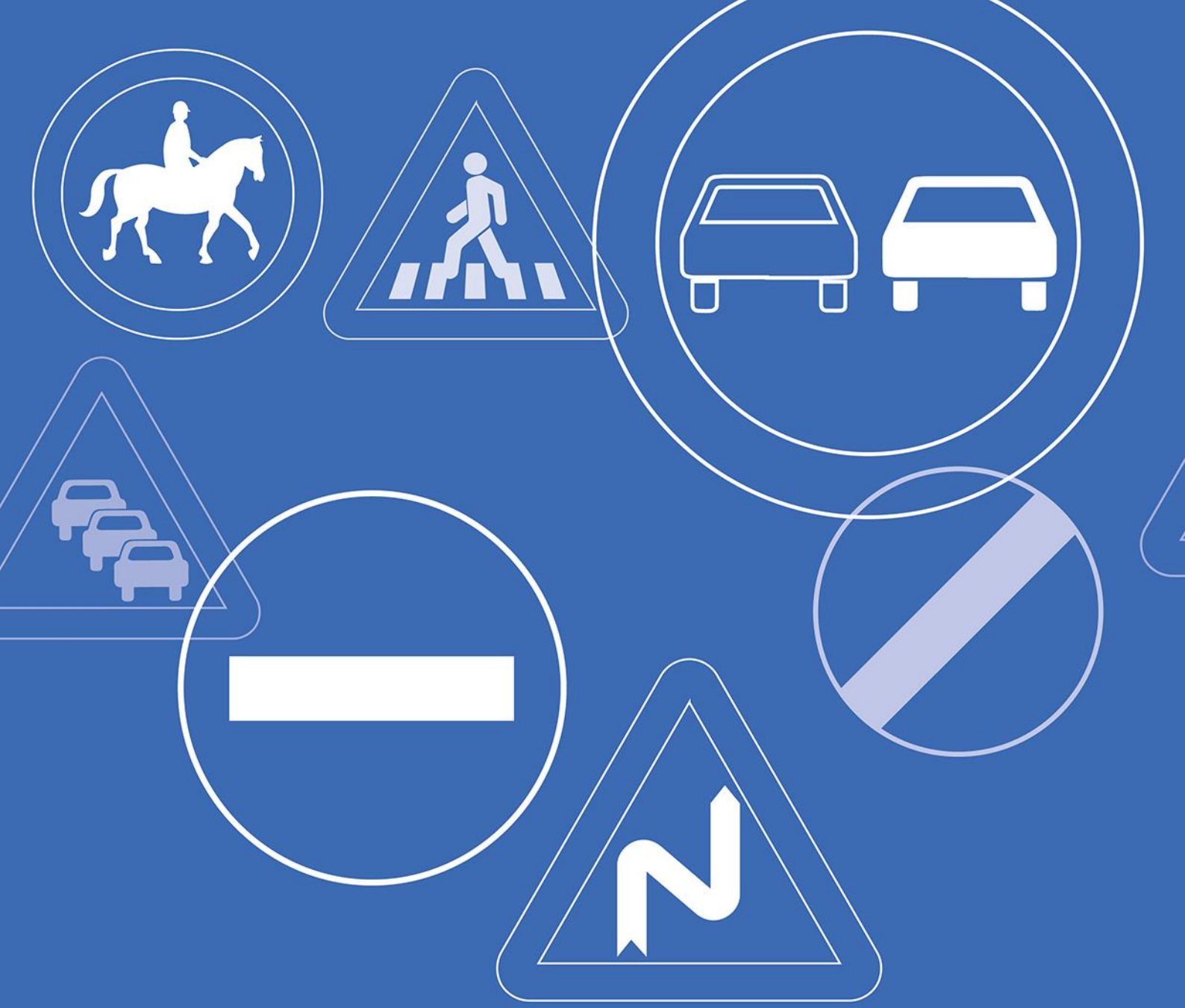
Collision Response

29. Work with the Casualty Reduction Partnership (Kent Police, Fire and Ambulance Services) to support swift post-collision response process.
30. Work with partners to improve our post KSI (killed or seriously injured) auditing process by assessing behaviour, enforcement, and road layout to prevent further casualties.
31. Work with partners to ensure victims of road collisions get support.

Governance and Monitoring Actions

32. Organise a launch event and form an expert steering group to advise on delivery and best practice.
33. Produce a Monitoring and Evaluation Plan establishing how the Safety Performance Indicators will be measured.

34. Work within the Casualty Reduction Partnership (CRP) framework.
35. Expand the remit of the Safety Camera Partnership (include Community Road Watch) and report to the Casualty Reduction Partnership.



Contact:
visionzero@kent.gov.uk

kent.gov.uk/visionzero

Kent County Council
kent.gov.uk

KENT COUNTY COUNCIL – PROPOSED RECORD OF DECISION

DECISION TO BE TAKEN BY:	DECISION NO:
David Brazier, Cabinet Member for Highways & Transport	21/00045

For publication

Key decision: YES

Subject Matter / Title of Decision Vision Zero - The Road Safety Strategy for Kent 2021 - 2026

Decision:

As Cabinet Member for Highways and Transport, I agree to formally adopt Vision Zero – The Road Safety Strategy for Kent 2021 – 2026 for subsequent development of delivery plans and pilots.

Reason(s) for decision:
Keeping our roads as safe as they can be and tackling death and injury is a key priority for KCC. We have a statutory duty to promote road safety and to act to reduce the likelihood of road casualties occurring (Section 39, Road Traffic Act 1988).

Cabinet Committee recommendations and other consultation:
A formal consultation was undertaken between Tuesday 26th January to Tuesday 16th March 2021. Four stakeholder workshops were held with over 200 participants. Over 760 complete consultation responses were received.

The proposed Strategy will be formally discussed by members of the Environment and Transport Cabinet Committee at their meeting on 29 June.

Any alternatives considered and rejected:
KCC has a Statutory Duty to promote Road safety

Any interest declared when the decision was taken and any dispensation granted by the Proper Officer:

....
signed date

This page is intentionally left blank

From: David Brazier, Cabinet Member, Highways and Waste

Simon Jones, Interim Corporate Director, Growth, Environment & Waste

To: Environment & Transport – 29 June 2021

Decision No: N/A **–** For information only

Subject: **Decisions taken between Cabinet Committee Meetings**

Classification: **Unrestricted**

Past Pathway of Paper: Cabinet Member Decision

Future Pathway of Paper: N/A

Electoral Division: County-wide

Summary: The attached decision was taken between meetings of the Environment and Transport Cabinet Committee as it could not be reasonably deferred to the next programmed meeting of the Cabinet Committee for the reasons set out in paragraph 2.3 below.

Recommendation:
The Environment and Transport Cabinet Committee is asked to note that the following decision was taken between meetings of the Cabinet Committee in accordance with the process set out in the Council's constitution:

21/00043: Enhanced Bus Partnerships

1. Introduction

1.1 The Cabinet Member for Highways and Transport has taken decision 21/00043 to agree to publish the statutory notice of KCC's intention to form an Enhanced Partnership (EP) for bus services in Kent with local bus operators.

1.2 The decision was taken between meetings of the Environment and Transport Cabinet Committee, as it could not reasonably be deferred due to the reasons set out in paragraph 2.3.

2. Background to decision

2.1 On 15 March, the Department for Transport published its National Bus Strategy, "*Bus Back Better*". The Strategy acknowledges the role the bus can play in achieving a net zero emission society and commits national government to supporting bus and bus rapid transit schemes.

2.2 The Strategy is aimed at seeing passengers benefiting from “more frequent, more reliable, easier to use, easier to understand, better coordinated and cheaper bus services” and sets out an ambitious timetable for delivery.

2.3 Under the Strategy, to maintain access to current funding and access future funding opportunities, KCC as the Local Transport Authority was required to commit to the introduction of Enhanced Partnerships with local bus operators by 1 July 2021. It is this timetable, and the potential impact on current funding that has required the decision to be taken before discussion by this Cabinet Committee.

2.4 Enhanced Partnerships were introduced under the Bus Services Act 2017 and will take the form of an agreement between Local Transport Authorities (LTAs) and bus operators to work together to improve bus services through a Bus Service Improvement Plan. (BSIP). At the time of writing no guidance has been published on what a BSIP is required to contain.

2.5 The decision to issue the required statutory notice of the intention to form an Enhanced Partnership does not commit KCC to any financial implications whilst the BSIPs are being developed**.** The BSIP must be published by the end of October 2021 and will be subject to a further key decision before submission to the DfT who will then advise Kent’s funding allocation. Further papers will be submitted to Cabinet Committee at appropriate stages including those that include proposals for investment by KCC.

2.6 As set out in paragraph 2.3, in signing up to a partnership, KCC will be able to maintain receipt of current bus funding and gain access to new funding. Current funding to the bus industry comprises Bus Services Operator’s Grant (BSOG) and Covid-19 Bus Services Support Grant (CBSSG). The latter is support funding being provided by government to operators to ensure the future provision of a full bus network, whilst demand is subdued by the pandemic.

2.7 KCC receives £1.1m BSOG annually which is used to support supported bus services/public transport projects If KCC did not to commit to establishing an enhanced partnership, the financial risk is the annual BSOG of £1.1m and CBSSG funding of £1.6m.

2.8 If the funding reduction was also applied to operators by national government, then a further annual BSOG of £5.9m is at risk plus an unknown sum of CBSSG.

3. Recommendation(s)

The Environment and Transport Cabinet Committee is asked to note that the following decision was taken between meetings of the Cabinet Committee in accordance with the process set out in the Council’s constitution:

21/00043: Enhanced Bus Partnerships

4. Background Documents

- Record of Decision**:** 21/00043: Enhanced Bus Partnerships; **https://democracy.kent.gov.uk/ieDecisionDetails.aspx?ID=2488**

Contact details Report Author Theresa Warford, Staff Officer Theresa.warford@kent.gov.uk 03000 417192	Relevant Director Simon Jones Interim Corporate Director, Growth, Environment and Transport 03000 411683

This page is intentionally left blank

From: **David Brazier – Cabinet Member for Environment & Transport**

Simon Jones – Interim Corporate Director of Growth, Environment & Transport

To: **Environment & Transport Cabinet Committee – 29 June 2021**

Decision No: 21/00048

Subject: **A228/B2017 and B2017/B2160/Mascalls Court Road, Paddock Wood Junction Improvements**

Classification: **Unrestricted**

Past Pathway of Paper: None

Future Pathway of Paper: For Cabinet Member Decision

Electoral Division: Tunbridge Wells Rural – Cllr Sarah Hamilton

Summary: This report seeks approval to act as delivery authority to take the projects outlined in the report through detailed design, planning, statutory approvals and to enter into construction contracts.

Recommendation(s):

The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways & Transport on the proposed decisions as follows and as indicated on the proposed decision sheet attached at Appendix A.

i) Approval to progress the proposed junction improvements as indicatively shown on drawings SK26 Rev P4; and SK49 Rev A and SK50 Rev B through surveys, design, and construction;

ii) Approval for the proposed junction improvements shown on drawings SK26 Rev P4; and SK49 Rev A and SK50 Rev B to be used for Land Charge disclosures and development control;

iii) Approval to take a transfer of land for the improvements from an adjacent housing development under a S106 planning obligation and acquire other land and rights as necessary;

iv) Approval to progress all statutory approvals and consents required for the schemes including detailed planning consent, drainage and environmental consents and securing temporary use of land for a construction site compound;

v) Approval to enter into construction contracts as necessary for the delivery of the schemes subject to any internal approval process required to the proposed procurement strategy;

vi) Approval for any further decisions required to allow the schemes to proceed through to delivery to be taken by the Interim/Corporate Director of Growth,

Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member.

1. Introduction

1.1 Paddock Wood is a housing growth area within the Tunbridge Wells Local Plan. Three developments at Mascalls Court Farm, Mascalls Farm and Church Farm were given planning consent in 2018. Development progress is at various stages but has started at all three sites and together they will deliver nearly 1,000 new homes. As part of the traffic mitigation to accommodate these new developments, improvements were identified for the A228 Maidstone Road/B2017 Badsell Road (A228 roundabout) and the B2017 Badsell Road/B2160 Maidstone Road/Mascalls Court Road (B2160 junction) junctions. See location plan of the three development areas and the two junctions in Appendix C.

1.2 The proposed improvement of the A228 roundabout is for an enlarged roundabout within the existing highway boundary to provide a larger diameter, wider entries, and more circulating space. See drawing SK26 Rev P4 in Appendix D. The proposed improvement of the B2160 junction is to locally realign Badsell Road to change the current staggered priority junction into a traffic signal-controlled crossroads together with pedestrian crossing facilities. See drawings SK 49 Rev A and SK50 Rev B in Appendix E.

1.3 As three developments are involved with no individual development willing to take overall responsibility or liability to implement the works under a S278 agreement, the former Leader of the County Council decided in 2014 that KCC would deliver the junction improvements and the S106 agreements were completed on that basis.

1.4 The cost of both junction improvements was estimated at £3.695m in 2015 and this matches the total of the contributions that were requested in the three S106 agreements that were completed in 2018.

2. Financial Implications

2.1 The scheme is fully funded by the S106 developer contributions. The estimated cost of the improvements was determined by independent cost consultant's commissioned by KCC and includes a substantial contingency and risk provision, which is considered robust. The likelihood of the final costs exceeding the contributions is considered remote, but cannot be ignored, particularly as the financial implications on the construction industry become clearer as we emerge from Covid. The scheme costs will therefore be kept under regular review.

2.2 Summary of S106 contributions:

Development	**S106 Base Contributions** **£m**	**S106 Contributions with Indexation** **£m**
Church Farm (300 homes)	0.841	1.113
Mascalls Court Farm (375 homes)	1.861	2.365
Mascalls Farm (309 homes)	0.993	1.311
Total	**3.695**	**4.789**

3. The Report

3.1 The S106 agreements also covered a scenario of a reduced scale of 'Minor' improvements and consequently lesser contributions if not all the developments proceeded. However, as all three developments are consented and proceeding the focus is on delivery of the proposed improvements defined as 'Major' improvements.

3.2 The S106 agreements have intervention triggers but there was an over-riding longstop date of 1 April 2021 whereby KCC was obliged to notify the developers of its intent to progress either the 'Minor' or 'Major' improvements. Following approval from the Capital Officers Group meeting on 22 March 2021, the Notices were issued on 29 March 2021 and this has triggered the full or progressive payment of the contributions that will have all been received in full by January 2022. There is also an obligation to transfer a small area of land required for the B2160 junction scheme.

3.3 The contributions have increased in line with the BCIS All In Tender Price Index from 4Q 2015 until the midpoint of the scheme's construction period which has been agreed with the developers as being Q3 2023 – see following paragraph 3.4.

3.4 KCC has a 'reasonable endeavours' obligation to complete the improvements by 1 April 2023. However, while Officers are proceeding diligently, surveys are required before detailed design can proceed, public engagement will need to be carried out and the B2160 junction proposal will require planning consent. It is therefore unlikely that construction will be able to start before spring 2023. One agreement also has an obligation to return the contribution if the improvements have not started within 5 years (by April 2026). The construction period is estimated to last about 9 months and hence this risk is considered minor.

3.5 The proposed improvement of the A228 roundabout is constrained by the existing highway boundary and is relatively modest in scale. It should be noted that this junction has previously been identified through external funding bids as the starting point of a future A228 Colts Hill Bypass. In developing the design and subject to costs, consideration will therefore be given to the potential for an enhanced design for the roundabout and if the associated third-party voluntary land acquisition would be viable.

4. Policy Framework

4.1 The schemes support Economic Challenge set out in the Strategic Reset Plan by improving the operation of key transport networks in Tunbridge Wells, as well as helping support growth by enabling new residential development.

4.2 The key priorities set out in the County Council's Local Transport Plan 4 'Delivering Growth without Gridlock' in terms of providing additional highway capacity, improving accessibility, and reducing congestion will also be benefit aims. These schemes, which are included in LTP4 will set out to provide improved growth and economic prosperity through having an efficient highway and transport infrastructure.

5. Legal implications

5.1. KCC has signed S106 Agreements with the three developers.

5.2. KCC will commission Invicta Law for the land transfer from the Mascalls Farm developer for the Badsell Road/B2160 junction improvement.

5.3. No further legal implications have been identified.

6. Equalities Implications

6.1 An initial equalities impact assessment has been carried out for the scheme and is included in Appendix B. This identified no adverse impacts or discrimination against any person with a protected characteristic.

7. Conclusions

7.1 These are two important junction improvements to help offset the highway implications of three major housing development sites in Paddock Wood that are together delivering nearly 1,000 new homes.

7.2 The S106 agreements put a legal obligation on KCC to deliver these junction improvements. The schemes are fully funded and contributions are being received following the publication of the Notices prior to the trigger date of 1 April 2021. No additional KCC funding will be used to deliver these schemes and officer time will be capitalised against the S106 contributions.

8. Recommendation(s)

Recommendation(s):

The Environment and Transport Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways and Transport on the proposed decisions as follows and as indicated on the proposed decision sheet attached at Appendix A.

i) Approval to progress the proposed junction improvements as indicatively shown on drawings SK26 Rev P4; and SK49 Rev A and SK50 Rev B through surveys, design, and construction;

ii) Approval for the proposed junction improvements shown on drawings SK26 Rev P4; and SK49 Rev A and SK50 Rev B to be used for Land Charge disclosures and development control;

iii) Approval to take a transfer of land for the improvements from an adjacent housing development under a S106 planning obligation and acquire other land and rights as necessary;

iv) Approval to progress all statutory approvals and consents required for the scheme including detailed planning consent, drainage and environmental consents and securing temporary use of land for a construction site compound;

v) Approval to enter into construction contracts as necessary for the delivery of the scheme subject to any internal approval process required to the proposed procurement strategy;

vi) Approval for any further decisions required to allow the scheme to proceed through to delivery to be taken by the Interim/Corporate Director of Growth,

Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member.

9. Background Documents

Appendix A – Proposed Record of Decision.

Appendix B – Equalities Impact Assessment :
https://democracy.kent.gov.uk/documents/s104093/SignedEqIAforPaddockWoodv013621.pd

Appendix C – Location Plan.

Appendix D – SK26 Rev P4 A228/B2017 roundabout scheme plan.

Appendix E – SK49 Rev A & SK50 Rev B B2017/B2160 crossroads traffic signal scheme plan.

Contact details

Report Author:	Relevant Director:
John Farmer Major Capital Programme Team Project Manager	Simon Jones Interim Director of Growth, Environment and Transport
john.farmer@kent.gov.uk	simon.jones@kent.gov.uk

This page is intentionally left blank

KENT COUNTY COUNCIL – PROPOSED RECORD OF DECISION

DECISION TO BETAKEN BY:	DECISION NO:
David Brazier, Cabinet Member for Highways & Transport	21/00048

For publication *[*

Key decision: YES

Subject Matter / Title of Decision: A228/B2017 and B2017/B2160 Paddock Wood Junction Improvements

Decision:

As Cabinet Member for Highways & Transport, I agree to give:

i. Approval to progress the proposed junction improvements as indicatively shown on drawings SK26 Rev P4; and SK49 Rev A and SK50 Rev B through surveys, design and construction;
ii. Approval for the proposed junction improvements shown on drawings SK26 Rev P4; and SK49 Rev A and SK50 Rev B to be used for Land Charge disclosures and development control;
iii. Approval to take a transfer of land for the improvements from an adjacent housing development under a S106 planning obligation and acquire other land and rights as necessary;
iv. Approval to progress all statutory approvals and consents required for the scheme including detailed planning consent, drainage and environmental consents and securing temporary use of land for a construction site compound;
v. Approval to enter into construction contracts as necessary for the delivery of the scheme subject to the approval of the Infrastructure Commissioning Board to the recommended procurement strategy; and
vi. Approval for any further decisions required to allow the scheme to proceed through to delivery to be taken by the Corporate Director of Growth, Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member.

Reason(s) for decision:
The decisions are required to allow scheme development to progress, statutory approvals and contract procurement and scheme construction to be carried out.

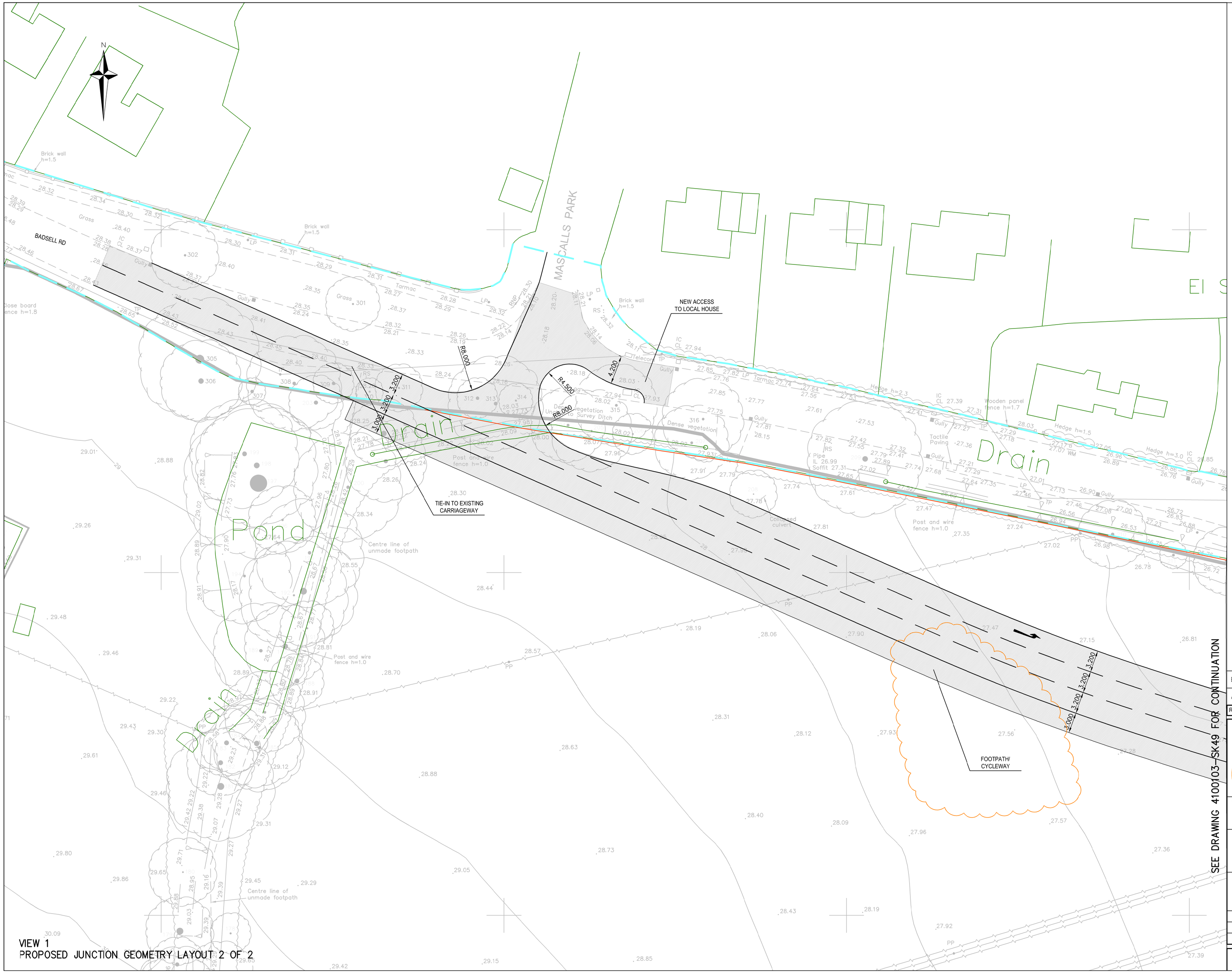
Cabinet Committee recommendations and other consultation:
The proposed decision will be discussed by Members of the Environment and Transport Cabinet Committee at their meeting on 29 June.

Any alternatives considered and rejected:
None

Any interest declared when the decision was taken and any dispensation granted by the Proper Officer:

....

signed date



VIEW 1
PROPOSED JUNCTION GEOMETRY LAYOUT 2 OF 2

KEY

- EXISTING SURVEY
- EXTENT OF PAVEMENT WORKS
- EXISTING HIGHWAY BOUNDARY
- SITE BOUNDARY
- EXISTING SCHOOL BOUNDARY
- NEW ROAD LAYOUT
- NEW ROAD MARKING & SIGNALS

Rev.	Description	Date	Chkd
B	ANNOTATION ADDED	18/03/16	HBG
A	GENERAL ISSUE	16/12/15	HG

Glanville
575 - 599 Maxted Road,
Hemel Hempstead, Herts. HP2 7ED
Tel: (01442) 202600 Fax: (01442) 212599
postbox@glanvillegroup.com www.glanvillegroup.com

Client : BERKELEY STRATEGIC

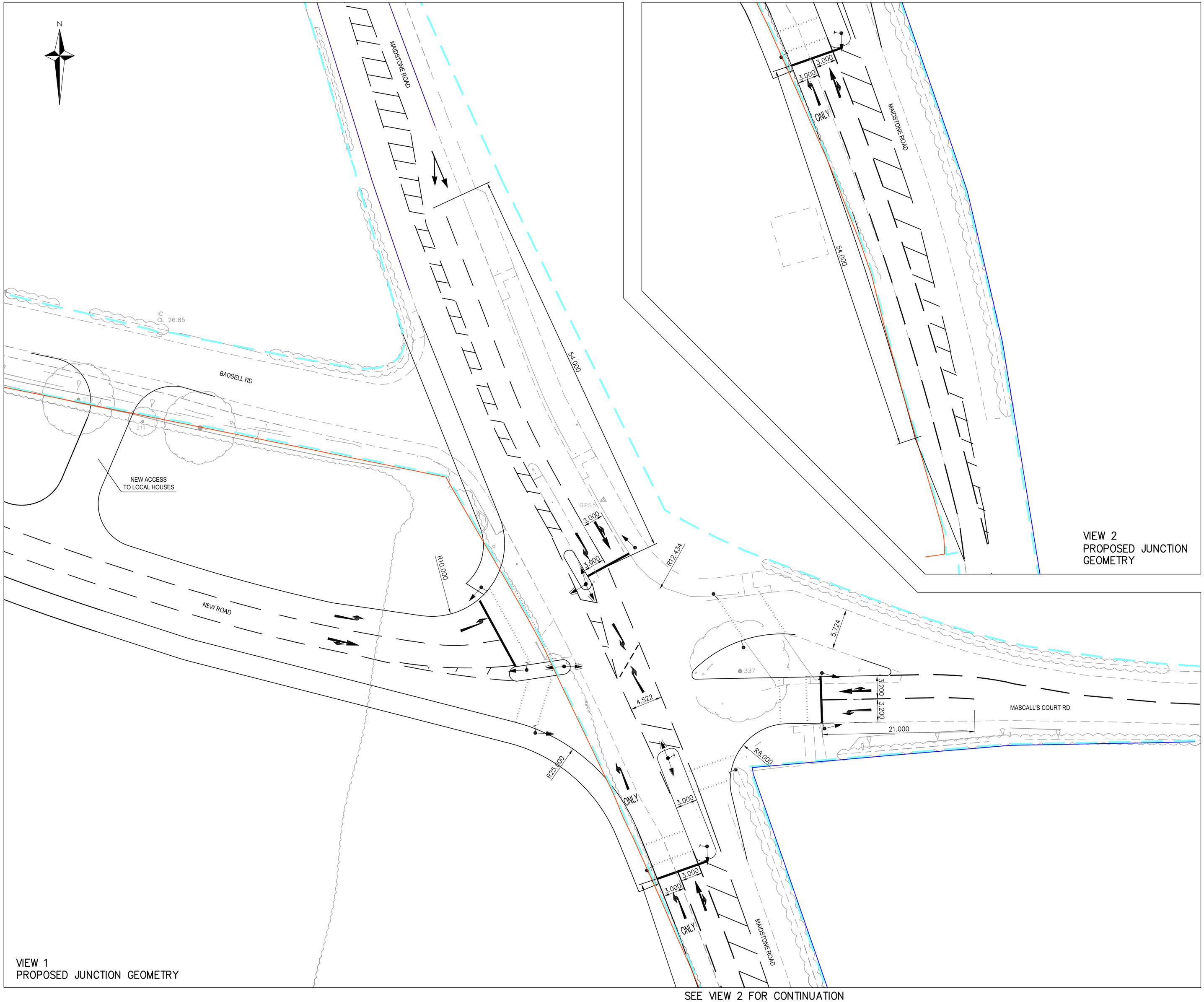
Project : LAND AT BADSELL ROAD, PADDOCK WOOD

Title : PROPOSED IMPROVEMENTS MAIDSTONE ROAD /BADSELL ROAD 2OF2

Project Engineer :	H.B.G	Scale :	1:250 @ A1
Project Director :	H.G	Date :	Nov-2015
Status :	PRELIMINARY		

Drawing No. 4100103-SK50 Rev B

This page is intentionally left blank



KEY

- EXISTING SURVEY
- EXISTING HIGHWAY BOUNDARY
- SITE BOUNDARY
- EXISTING SCHOOL BOUNDARY
- NEW ROAD LAYOUT
- NEW ROAD MARKING & SIGNALS

Rev.	Description	Date	Chkd
A	LEFT TURN LANE ADDED TO MASCALL'S COURT LANE	06/11/15	HG

Glanville
575 - 599 Maxted Road,
Hemel Hempstead, Herts. HP2 7ED
Tel: (01442) 202600 Fax: (01442) 212599
postbox@glanvillegroup.com www.glanvillegroup.com

Client : BERKELEY STRATEGIC

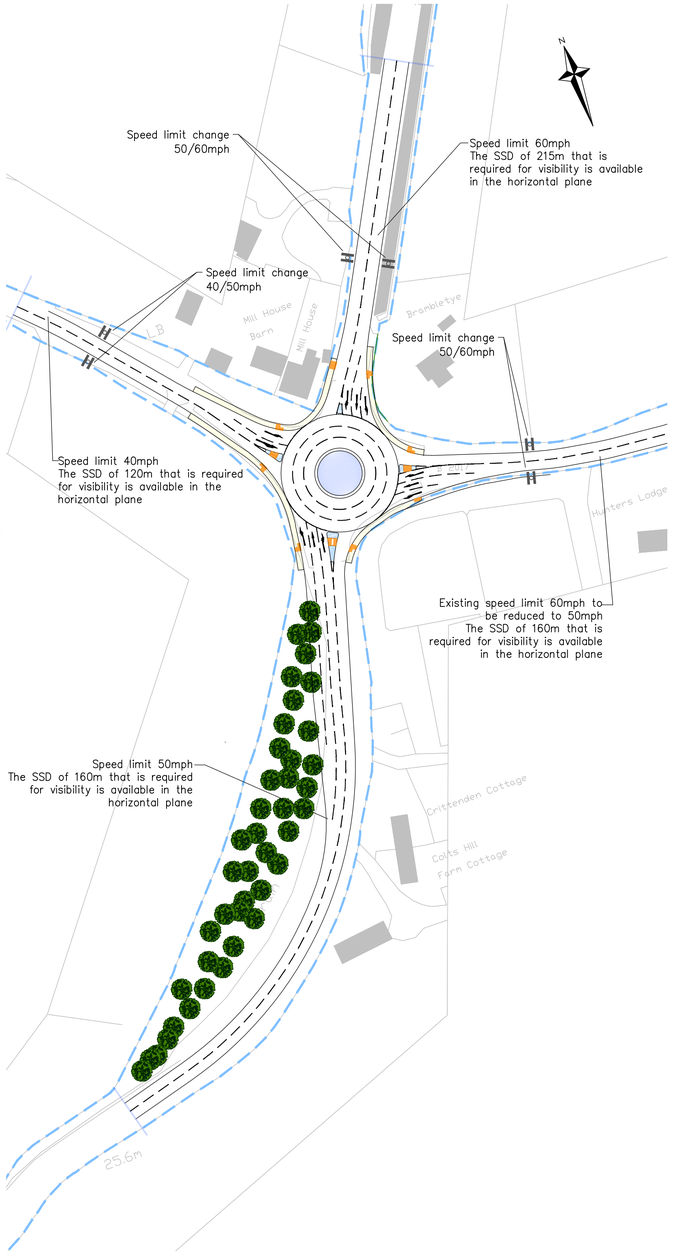
Project : LAND AT BADSELL ROAD, PADDOCK WOOD

Title : PROPOSED IMPROVEMENTS MAIDSTONE ROAD /BADSELL ROAD

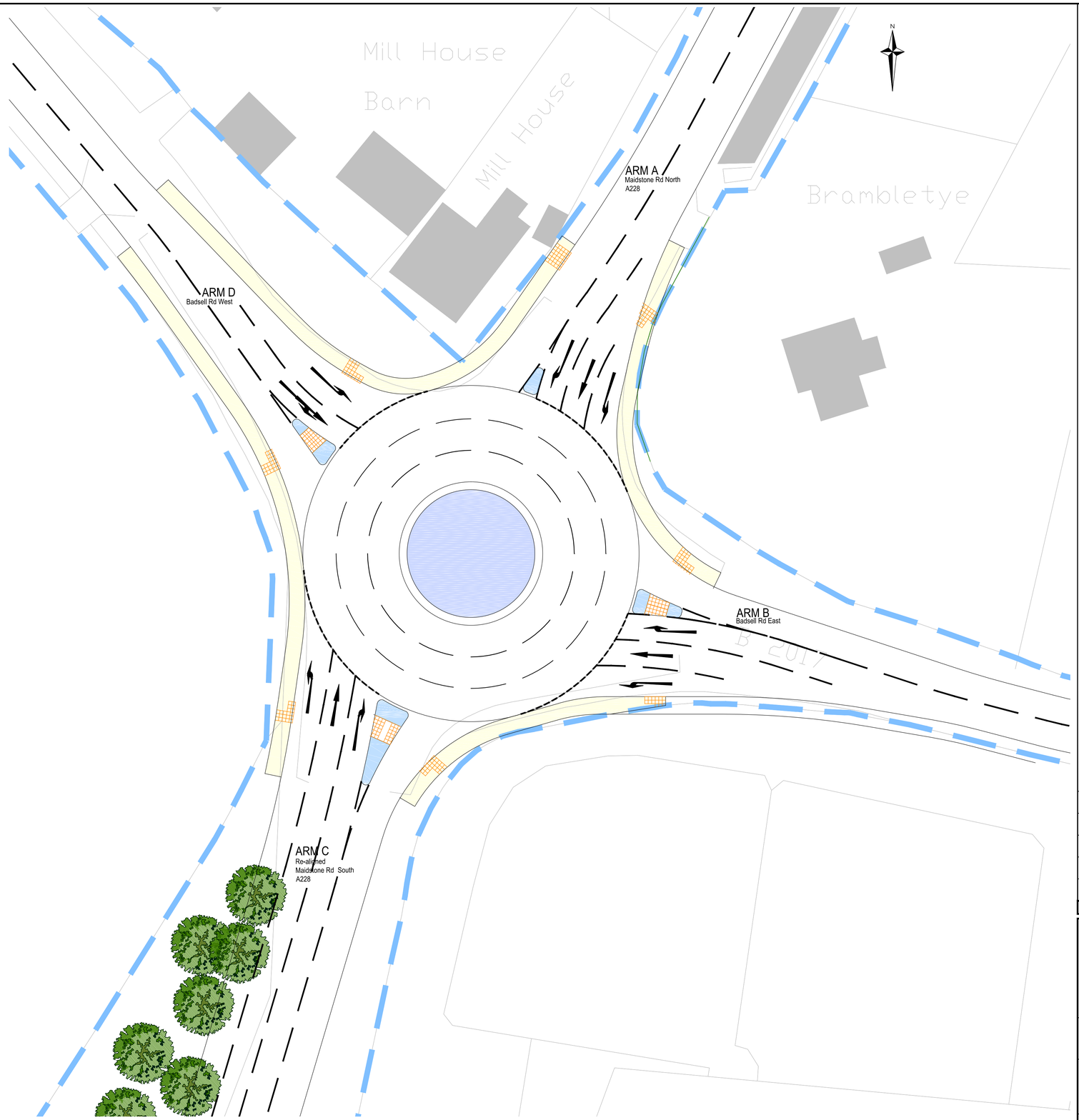
Project Engineer :	H.B.G	Scale :	1:250 @ A1
Project Director :	H.G	Date :	Nov-2015
Status :	PRELIMINARY		

Drawing No. 4100103-SK49 Rev A

This page is intentionally left blank



PROPOSED JUNCTION APPROACH VISIBILITY
Scale 1:1000



PROPOSED ROUNDABOUT GEOMETRY
Scale 1:250

KEY

- EXISTING OS
- EXISTING HIGHWAY BOUNDARY
- NEW ROAD LAYOUT
- NEW ROAD MARKING
- EXISTING SPEED LIMIT CHANGE SIGN (APPROX. LOCATION)

Rev.	Description	Date	Chkd
P4	SPEED LIMIT SIGNS ADDED	08/12/16	HG
P3	SPEED LIMIT ANNOTATIONS FOR ARMS B AND D CORRECTED	02/12/16	HG
P2	ICD INCREASED BY 0.2M	16/09/15	HG
P1	UPDATED TO SUIT NEW PROPOSED TRAFFIC FLOWS	01/06/15	HG
–	FIRST ISSUE	18/07/12	HG

Glanville
575 - 599 Maxted Road,
Hemel Hempstead, Herts. HP2 7ED
Tel: (01442) 202600 Fax: (01442) 212599
postbox@glanvillegroup.com www.glanvillegroup.com

Client : BERKELEY STRATEGIC

Project : LAND AT BADSELL ROAD, PADDOCK WOOD

Title : COLTS HILL ROUNDABOUT IMPROVEMENTS - OPTION 1

Project Engineer :	H.B.G	Scale :	A1 : AS SHOWN
Project Director :	H.G	Date :	Mar 2012
Status :	PRELIMINARY		

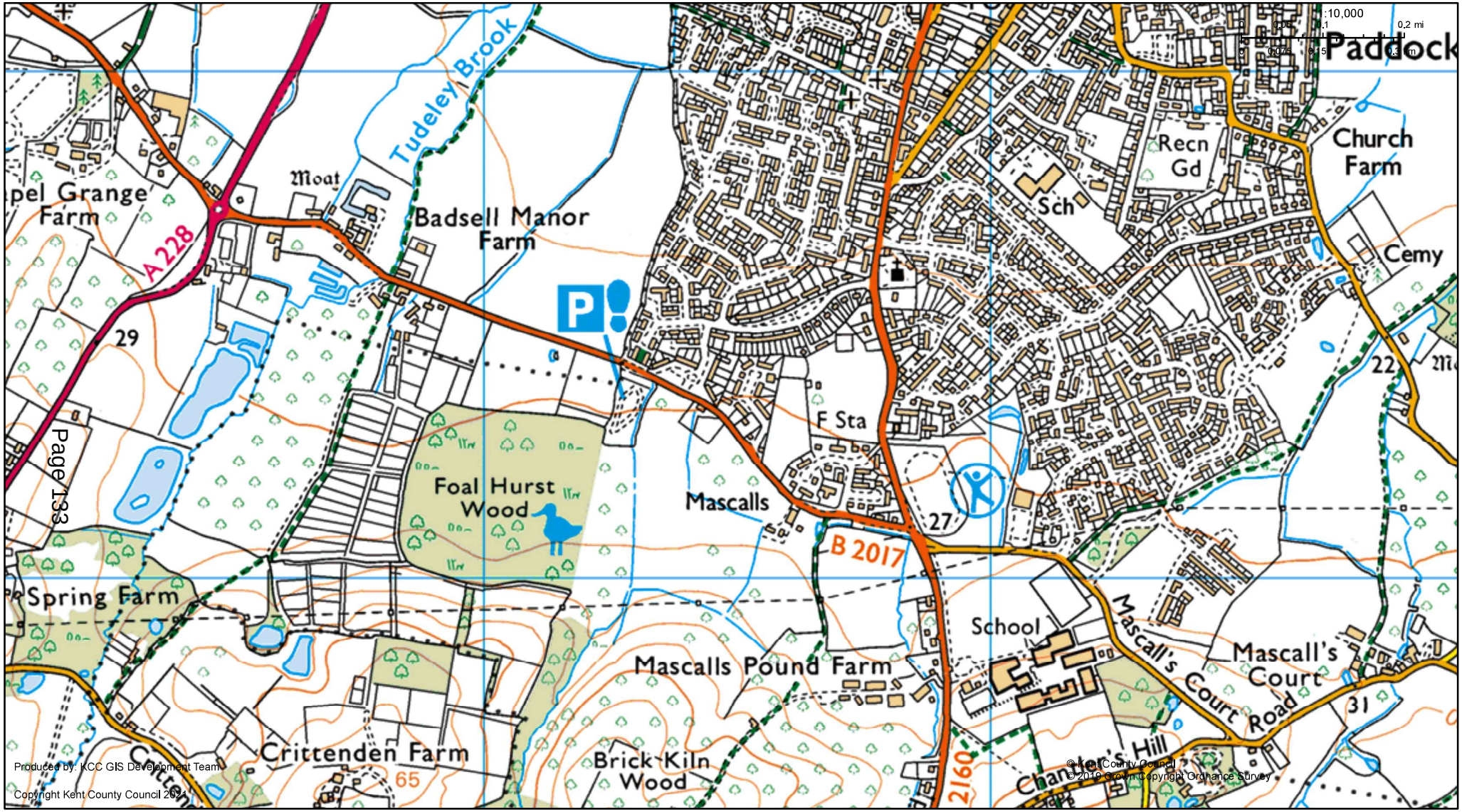
Drawing No. 4100103-SK26 Rev P4

This page is intentionally left blank

Appendix 1 – Location Plan

Kentview

March 15, 2021



This page is intentionally left blank

From: **David Brazier – Cabinet Member for Environment & Transport**

Simon Jones – Interim Corporate Director of Growth, Environment & Transport

To: **Environment & Transport Cabinet Committee – 29 June 2021**

Decision No: 21/00047

Subject: **Dover Fastrack – Compulsory Purchase Order**

Classification: **Unrestricted**

Past Pathway of Paper: None

Future Pathway of Paper: None

Electoral Division: Dover West, Dover North, and Dover Town

Summary: Approval to use of compulsory purchase to secure the land and rights required for the scheme and to give programme certainty.

Recommendation(s):

The Environment and Transport Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways and Transport on, the proposed decision as follows and as indicated on the proposed decision sheet attached at Appendix D.

i) to approve all acts required to carry out and complete the Dover Fastrack scheme;

ii) to approve all acts required to acquire the land and rights for the carrying out and completion of the Dover Fastrack scheme, including by means of a compulsory purchase order;

iii) to approve the delegation to the Interim/Corporate Director of Growth, Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member, any further or other decisions as may be appropriate to deliver the Dover Fastrack scheme;

iv) to confirm that other decisions in Record of Decision 19/00053 remain extant.

1. Introduction

1.1 Dover Fastrack will provide a high quality and reliable public transport service for 5,750 new homes that are part of the Whitfield Urban Expansion, the White Cliffs Business Park, and other housing development at Connaught Barracks, to link with Dover Town Centre and the high-speed rail services at Dover Priory Station.

1.2 Previously known as Dover Bus Rapid Transport, the project has been renamed Dover Fastrack as it will form a key part of the Fastrack service building on the successful system operating in north Kent. Fastrack is a key component of Kent's Bus Strategy.

1.3 Dover Fastrack will provide essential transport infrastructure to support the delivery of Whitfield Urban Expansion identified in Dover District's Local Plan Core Strategy 2010 that identified the need to provide 14,000 new homes across the District. The continuing need for this infrastructure is endorsed in the current review of the Local Plan that covers the period up to 2040.

1.4 Housing build out has been slower than expected but development is underway for Phase 1 of the Whitfield Urban Expansion and planning permission has recently been granted for 300 homes at Connaught Barracks.

1.5 The overall Fastrack route will mainly be delivered through provision of new roads within the housing developments. Part of the route will utilise the existing highway network. Junction improvements at Castle Hill Road will be delivered as part of the proposed Connaught Barracks Development which is owned by Homes England. However, new infrastructure specific to the scheme will also be required as follows:

a) New A2 overbridge for bus/ pedestrian and cycle access.
b) New dedicated bus link through White Cliffs Business Park to Dover Road.
c) Localised widening of Dover Road.

1.6 Dover District Council carried out extensive public engagement to raise public awareness when the Local Plan was developed which includes policies specific to Whitfield Urban Expansion. They also recently consulted on a proposed revision to the Local Plan. There was specific public engagement on the Dover Fastrack scheme in summer 2020, in advance of submitting the planning application, and as part of that process an overview of the project was given in a leaflet that is included in Appendix A.

1.7 Considerable progress has been made and the off-line sections involving a link from Dover Road to White Cliffs Business Park and then from the Business Park over the A2 and then running within future phases of development, to link with roads constructed as part of the first phase of development received planning permission in March 2020.

1.8 The County Council is working closely with Dover District Council who were awarded funding by Homes England to deliver infrastructure specific to the scheme. Dover District Council is therefore the lead authority for the overall project, and with the County Council as delivery body for the specific infrastructure and also the commissioning body for the Fastrack services.

1.9 The estimated cost of the new infrastructure was originally estimated at £16.1m but this was based on an assumption that development of Whitfield Urban Expansion would come forward more quickly than has occurred to date. A revised estimate of £21m is now under consideration by Homes England for further grant support from the Housing Infrastructure Fund. Dover District Council is contributing £1.42m towards

the cost. The County Council will have no financial liability other than the normal ongoing operational and maintenance liability associated with new adopted highway infrastructure.

1.10 Dover District Council own some land and has recently secured options on two further significant parcels of land. Most of the remaining land required is owned by the developer of Phase 1 of the Whitfield Urban Expansion. Dover District Council has commenced negotiations that they hope will be successful, but a compulsory purchase order under the Highways Act 1980 is required to give land and programme certainty. Both factors are requirements of the funder, Homes England.

1.11 At the outset of the project, a Report to this Committee in July 2019 led to a range of decisions in Record of Decision 19/00053, to enable the scheme to proceed. While this contained implicit authority to proceed with compulsory purchase, the use of compulsory purchase is a strong power available to a local authority and it is appropriate to seek an updated and explicit authority to publish and implement a compulsory purchase order.

2. The Report

2.1 The proposed areas of land to be included in the compulsory purchase order are shown on the plan in Appendix B.

2.2 In addition to the principal area required through the future phases of development, it also includes existing roads – Richmond Way and Red Kite Way – through the first phase of development to achieve a connection to Archers Court Road. These roads are not yet fully completed or offered yet for adoption, with no planning obligation date. While it is hoped that these roads will be completed by the developer before the Fastrack services begin to operate, the roads will be included in the compulsory purchase order to cover the risk of a situation where the County Council would be required to intervene. Similarly, Richmond Way from the A256 has also been included to ensure that we have a right of access for Fastrack construction vehicles.

2.3 At the eastern end of the scheme there is some unregistered land that may be owned by Network Rail, as the land sits over a railway tunnel, and other small areas in unknown ownership. A compulsory purchase order is an appropriate procedural mechanism for the County Council to secure title to such areas.

2.4 The Fastrack route will use Dover Road that is already used by existing bus services. There are a few places where the road width is narrower than desirable and the intention is to carry out local widening. Some minor land acquisition is required and voluntary negotiations have commenced. The owners are commercial and utility organisations and there is confidence that the land will be secured by agreement. However, even if the land cannot be secured, the Fastrack service can still operate and that is why these small parcels of land will not be included in the compulsory purchase order.

3. Legal & Policy Tests for use of Compulsory Purchase

3.1 The use of compulsory purchase is a strong power available to a local authority and justification for its use must satisfy numerous legal and policy tests. It is considered that, in the stringent development of the scheme, these tests are met. The details will be included in the Statement of Reasons that will be published with the Order but are summarised in the paragraphs that follow.

3.2 The circa 6,000 new homes at Whitfield to be served by a bus rapid transport system – Dover Fastrack – is a key element within Dover District Council's currently adopted Local Plan and emerging Local Plan review.

3.3 The proposed route through White Cliffs Business Park and the Whitfield Urban Expansion is aimed to ensure all employees and residents are conveniently within 400m of a bus stop. There is no other option that can provide the same level of service and penetration without the acquisition of land.

3.4 Early implementation is important so that new residents have the opportunity and incentive to move away from the traditional reliance on car use. The scheme planning permission and Homes England funding are also time limited, together requiring construction to start as soon as practicable.

3.5 The land and rights that will be included in the Order are the minimum that will be necessary to deliver the scheme and have been determined by design and engineering standards, the requirements of statutory bodies and sustainable surface water drainage measures. The compulsory purchase is essential to the successful implementation of the Dover Fastrack scheme. Simply put, the scheme could not be delivered by any means which do not involve the compulsory purchase of the land and rights proposed to be acquired.

3.6 All necessary management, consultancy, contractor, and funding resources will be available to deliver the scheme within a reasonable timescale.

3.7 Apart from an area of land in unknown ownership, the scheme only requires commercially held development land. The Order will include some yet to be completed or adopted estate roads within the development required for construction access and/or the Dover Fastrack service. However, within the housing land that has so far been developed, the residents have acquired their new homes, on the expectation of these roads being completed and adopted as public highway. Taken together, the use of compulsory purchase is fair and justified and the benefits of Dover Fastrack outweigh any interference with human rights, which would be limited. The substantial public benefits of the scheme would clearly outweigh the limited private loss involved, especially when the availability of compensation is taken into account.

3.8 The development of the scheme, including the proposals for compulsory purchase, has correctly followed all statutory procedures to date and in particular with the development of the Dover Fastrack concept and route within the Local Plan and more recently with the grant of planning permission.

3.9 There are no foreseeable physical or legal impediments to implementation of the scheme and more than a reasonable prospect of the scheme going ahead. An agreement with Highways England is being prepared giving authority for the scheme to bridge over the A2 and, as with many highway related schemes, there will be a need for some operational traffic regulation orders. No problems in delivering these are anticipated.

3.10 Dover District Council has commenced negotiations with the primary landowner and an offer has been made but no formal response has been received to date. The District Council has agreed to pay the landowner's reasonable fees to allow them to consider a valuation. Even if terms are ultimately agreed, the formal completion of the legal aspects are often lengthy and the District Council has no control over this timetable or certainty of completion. Reasonable steps have to date been taken to acquire the necessary land and rights by agreement, but the point has been reached where, as a last resort, compulsory purchase appears necessary.

4. Financial Implications

4.1 There are no financial implications for the County Council. The estimated costs include all items of cost including a commuted sum to Highways England in respect of the new bridge over the A2. The scheme is just normal highway with no specific high-cost features. As with any new highway the costs of ongoing inspection and maintenance will just be part of the ongoing management of the County wide highway asset.

4.2 The County Council is drawing down monthly payments from Dover District Council to allow the scheme development to proceed. A formal Delivery Agreement has been drafted with Dover District Council which will be finalised once the project budget has been agreed with Homes England which in turn depends in part on the County Council approving the use of compulsory purchase powers. The County Council will not publish the compulsory purchase order until the Delivery Agreement has been completed

5. Policy Framework

5.1 The scheme supports the Strategic Statement Outcome 2 by reducing congestion, improving the highway infrastructure to provide more reliable journey times and improved public transport links and accessibility, to support Kent business and housing growth and encourage economic activity to benefit the local and wider communities.

6. Equalities Implications

6.1 An updated Equalities Impact Assessment has been carried out and is included in Appendix C.

7. Local Member Consultation

7.1 Local Members have been consulted and understand the situation and need for the use of compulsory purchase.

8. Conclusions

8.1 Good progress has been made and now the Fastrack scheme has received planning permission, the next step is to secure all the land required to allow the scheme to be implemented.

8.2 It is hoped that land can be secured by voluntary agreement but this can take time and then further time to make contractually binding, and hence a compulsory purchase order is required to ensure land availability and programme certainty. The proposed compulsory purchase under the Highways Act 1980 is necessary in the public interest and there is a compelling public interest case for making and implementing a compulsory purchase order now.

9. Recommendation(s)

Recommendation(s): The Environment and Transport Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways and Transport on the proposed decision as follows and as indicated on the proposed decision sheet attached at Appendix D.

i) to approve all acts required to carry out and complete the Dover Fastrack scheme;

ii) to approve all acts required to acquire the land and rights for the carrying out and completion of the Dover Fastrack scheme, including by means of a compulsory purchase order;

iii) to approve the delegation to the Interim/Corporate Director of Growth, Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member, any further or other decisions as may be appropriate to deliver the Dover Fastrack scheme;

iv) to confirm that other decisions in Record of Decision 19/00053 remain extant.

9. Background Documents

- Appendix A – Public Consultation Overview Leaflet: https://democracy.kent.gov.uk/documents/s104091/DoverFastrackPublicConsultationLeafletSummer2020byDDCbutnamingKCC.pdf
- Appendix B – Draft Compulsory Purchase Order plan: https://democracy.kent.gov.uk/documents/s104092/DVFTWSP12XXDRDI000120CPOplansP040draft9321.pdf
- Appendix C – Equalities Impact Assessment: https://democracy.kent.gov.uk/documents/s104090/DoverBRTEqIAv1050719.pdf
- Appendix D – Proposed Record of Decision.
- Appendix E - Record of Decision 19/00053: https://democracy.kent.gov.uk/ieDecisionDetails.aspx?ID=2277

10. Contact details

Report Author
John Farmer - Project Manager, Capital Programme Team
john.farmer@kent.gov.uk

Relevant Director:
Simon Jones, Interim Corporate Director of Growth, Environment and Transport
simon.jones@kent.gov.uk

This page is intentionally left blank

From: Cabinet Member for Highways & Transport

Simon Jones – Interim Corporate Director of Growth, Environment and Transport

To: Environment and Transport Cabinet Committee
29th June 2021

Subject: **Bath Street – Fastrack Infrastructure Scheme**

Decision Number:

Classification: **Unrestricted**

Past Pathway of Paper: N/A

Future Pathway of Paper: For Cabinet Member Decision

Electoral Division:

Northfleet and Gravesend West – Cllr Conrad Broadley and Cllr Dr Lauren Sullivan

Summary:
This report seeks Member approval for a fully funded scheme to provide a key Fastrack bus link between the Northfleet Embankment East development and Gravesham Town Centre in the form of a contraflow bus lane in Bath Street.

The purpose of the scheme is to improve journey times for Fastrack passengers by up to four minutes. The scheme will provide a short walk to access Fastrack for occupants and workers at the Northfleet Embankment East, Clifton Slipways and The Charter developments.

The total budget for this scheme is £5.52m and is fully externally funded by a capital grant from Ebbsfleet Development Corporation. No KCC funding will be used to deliver the scheme.

Recommendation(s):
The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Environment & Transport on the proposed decision to accept the capital grant from Ebbsfleet Development Company and to take the Bath Street scheme through the stages of development and delivery as indicated on the proposed decision sheet attached at Appendix A and specifically for:

i. Formal ratification of funding agreement with EDC following the approval of the Corporate Director of Finance, Corporate & Strategic Services

ii. Approval to undertake the detailed design and surveys for the Bath Street Scheme.

iii. Approval to progress all statutory approvals or consents required for the scheme, including any transfer of land and rights;

iv. Approval to carry out any additional consultation required for the scheme;

v. Approval to enter into construction contracts as necessary for the delivery and future maintenance of the scheme subject to a review of the procurement strategy by the Capital Officer Group;

vi. Approval for any further decisions required to allow the scheme to proceed through to delivery to be taken by the Corporate Director of Growth, Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member.

1. Introduction

1.1 The Bath Street scheme proposes to implement a key Fastrack link between the Northfleet Embankment East development and Gravesham Town Centre in the form of a contraflow bus lane in Bath Street.

1.2 The scheme is part of the overall Fastrack programme, which comprises 28 individual projects across Dartford, Gravesham and Ebbsfleet. Fastrack operates via congestion-free routes across a 40km network extending from Dartford to Gravesham. It is a combination of dedicated Fastrack busways, bus priority lanes and on-street running with priority at all signalled junctions.

1.3 The purpose of the scheme is to improve journey times for Fastrack passengers and facilitate additional bus stops for existing residents and those from new developments such as Clifton Slipways, The Charter and Northfleet Embankment.

2. Financial Implications

2.1 The total budget for this scheme is £5.52m (Table 1). Full funding for this scheme has been identified and will require no additional contributions from KCC.

Table 1: Capital Costs and funding sources for the Bath Street Scheme (£m at 2020 prices)

£000s	2020-21	2021-22*	2022-23	2022-23	Total
Gross Cost	£936,000		£1,880,000	£1,600,000	£4,416,000
Budget Risk	£234,000		£470,000	£400,000	£1,104,000
Total Cost	**£1,170,000**		**£2,350,000**	**£2,000,000**	**£5,520,000**
EDC Grant	£1,170,000	£0	£2,350,000	£2,000,000	£5,520,000
Total Funding	**£1,170,000**	**£0**	**£2,350,000**	**£2,000,000**	**£5,520,000**

* No funding allocation 2021-22; capital funding carried over from 2020/21

2.2 The scheme will be fully funded through a capital grant from Ebbsfleet Development Corporation (EDC) that has been approved as a separate future year commitment by the The Ministry of Housing, Communities and Local Government (MHCLG).

2.3 Conditions of the grant agreement include taking the Fastrack development designated S106 from the Northfleet Embankment East development as a contribution (circa £0.99m) but without risk to KCC if the funding does not come forward.

2.4 There is no revenue or capital exposure to KCC in the delivery of this project and the project estimate includes sufficient risk allowance. KCC Officer time required for the delivery of the programme will be capitalised.

2.5 The risk allowance for the scheme has been increased to £5.52m to reflect the early development stage of this project. This figure has been included in the KCC Capital Investment Plan. As an additional measure, there will be a pause after the detailed design stage of the project to ensure it is still viable within the current budget.

3. The Report

Fastrack Context

3.1 This project is part of the overall Fastrack programme, which comprises 28 individual projects across Dartford, Gravesham and Ebbsfleet. Fastrack operates via congestion free routes across a 40km network extending from Dartford to Gravesham. It is a combination of dedicated Fastrack busways, bus priority lanes and on-street running with priority at all signalled junctions.

3.2 The Fastrack Route A will extend from Ebbsfleet International through Northfleet Embankment, on to Gravesend Bus Hub, via the Bath Street contraflow bus lane, as is proposed through this scheme.

3.3 Continual improvements to the Fastrack road network are required to achieve the modal shift target of 20% of journeys using public transport, and vital to this success is the high uptake in patronage from new residents within current and future developments. This requires an attractive, effective, fast service that rivals the private car for efficiency.

Bath Street Scheme

3.4 The Bath Street scheme (Appendix C) includes widening a section of the existing carriageway to incorporate a southbound bus lane. The proposed bus lane (Figure 1) will connect to West Street to the north at the West Street/Bath Street/Church Street Roundabout and the new Bus Hub on Garrick Street to the south via New Road. This new route will facilitate the extension of the Fastrack Route A service to Gravesend. Without the Bath Street bus lane Fastrack would need to be routed via Overcliffe as shown in Figure 2.

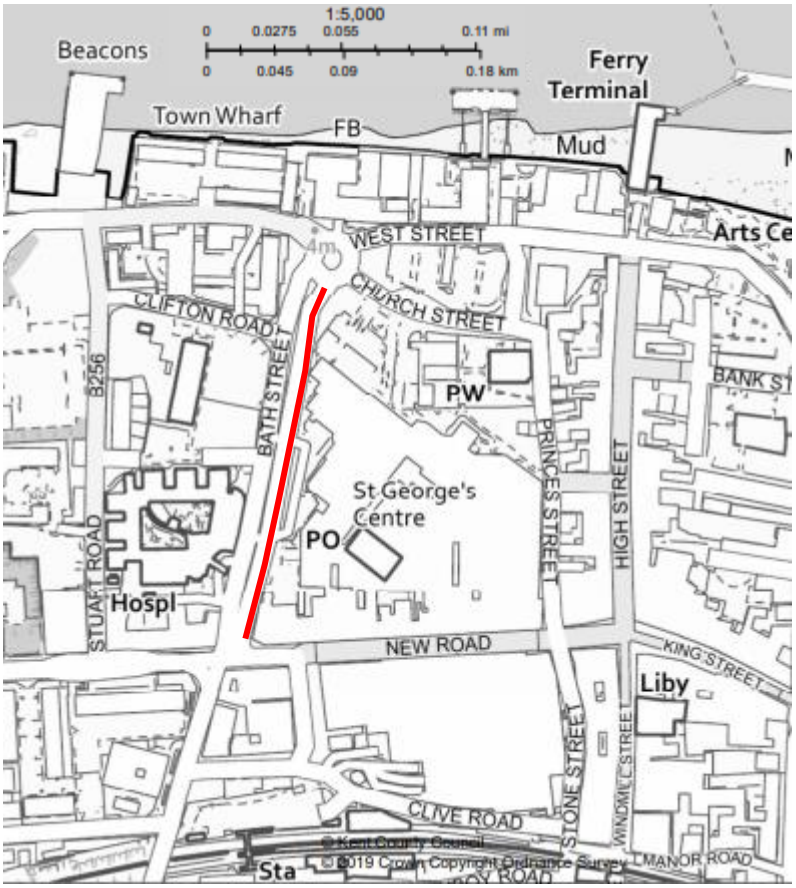


Figure 1: Location of Bath Street Scheme

3.5 The scheme will improve journey times for Fastrack users and also facilitate additional bus stops to service existing residents and those from new developments such as Clifton Slipways, The Charter and Northfleet Embankment. These significant improvements to journey time and route would enhance Fastrack's reputation as a premium service.

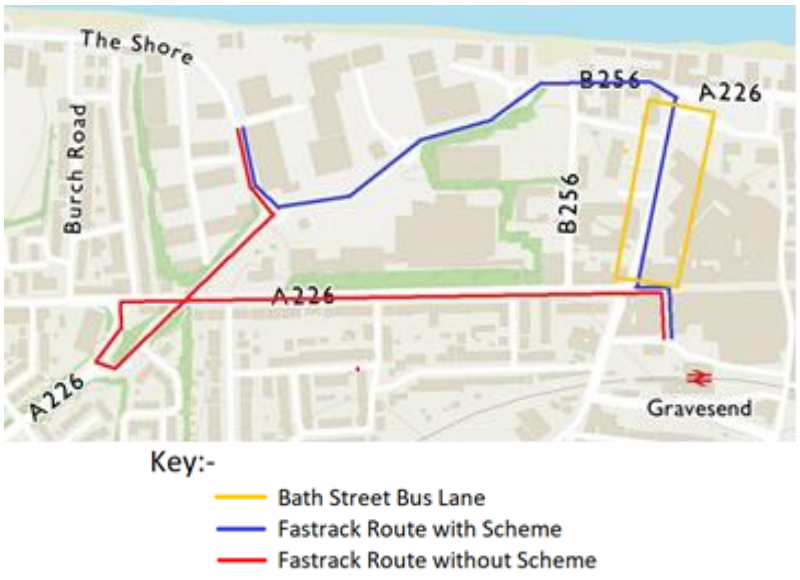


Figure 2: Bath Street Bus Lane location and Fastrack Routes

3.6 Should approval to proceed be given, the forecasted programme dates for the scheme are as follows:

- Outline design: Jan 21 - May 21
- Detailed design: June 21 - Mar 22
- Engagement: Summer 2022
- Procurement: Apr 22 - July 22
- Construction: August 22 - July 23

4. Policy Framework

4.1 This scheme aligns with the key outcomes of Local Transport Plan 4: Delivering Growth without Gridlock. In particular, Fastrack promotes *affordable, accessible and connected transport to services* and delivers integrated infrastructure that encourages modal shift and reduces congestion.

4.2 The Bath Street scheme will reduce congestion and improve accessibility through the delivery of a fully integrated sustainable Fastrack network, making sustainable transport a real alternative to the private car, particularly residents in new developments including Northfleet Embankment East. This will improve access to education and employment for Kent's residents supporting Kent's economic growth.

4.3 Furthermore, continual improvements to the Fastrack network are required to achieve the Ebbsfleet area target of 20% of journeys using public transport, and vital to this success is the high uptake in patronage from new residents within current and future developments

4.4 The delivery of approximately 9,000 new homes by 2026 is expected in Gravesham. Key development sites include Gravesend town centre and Canal Basin and Northfleet Embankment. Gravesham's existing road network is already operating at close to maximum capacity during peak periods. Continuing modal shift to Fastrack services is therefore crucial if future levels of housing and economic growth are to be accommodated.

5. Legal implications

5.1 KCC will be entering into a funding agreement with Ebbsfleet Development Corporation which will detail the conditions of the grant funding.

5.2 No further legal implications have been identified.

6. Equalities implications

6.1 An initial equalities impact assessment has been carried out for the scheme. This identified no adverse impacts or discrimination against any person with a protected characteristic. In addition, those members of the public who regularly use or rely exclusively on public transport should experience more reliable journey times by better functioning of Fastrack route junctions.

7. Conclusions

7.1 The Bath Street scheme is a fully funded scheme which will provide a key bus link to the Fastrack route in Gravesham and forms part of the wider Fastrack A

route. No additional KCC funding will be used to deliver the scheme and officer time will be capitalised against the grant provided by EDC.

7.2 Implementing this scheme will directly improve journey times for Fastrack users. The scheme will reduce congestion and improve accessibility through the delivery of a fully integrated sustainable Fastrack network, making sustainable transport a real alternative to the private car, particularly residents in new developments including Northfleet Embankment East.

8. Recommendation(s):

8.1 The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Environment & Transport on the proposed decision to accept the capital grant from Ebbsfleet Development Corporation and to take the Bath Street scheme through the stages of development and delivery as indicated on the proposed decision sheet attached at Appendix A and specifically for:

i. Formal ratification of funding agreement with EDC following the approval of the Corporate Director of Finance, Corporate & Strategic Services

ii Approval to undertake the detailed design and surveys for the project.

iii. Approval to progress all statutory approvals or consents required for the scheme, including any transfer of land and rights;

iv. Approval to carry out any additional consultation required for the scheme;

v. Approval to enter into construction contracts as necessary for the delivery and future maintenance of the scheme subject to a review of the procurement strategy by the Capital Officer Group;

vi. Approval for any further decisions required to allow the scheme to proceed through to delivery to be taken by the Corporate Director of Growth, Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member.

9. Background Documents

Appendix A Proposed Record of Decision
Appendix B EqIA:
https://democracy.kent.gov.uk/documents/s104315/JBathStreetEqIAv1210621.doc.pdf
Appendix C Bath Street Outline Design

10. Contact details

Report Author:	Relevant Director:
Graham Killick	Simon Jones
Major Capital Programme Team	Interim Director of Growth, Environment
Project Manager	and Transport

03000 419369
graham.killick@kent.gov.uk

03000 410236
simon.jones@kent.gov.uk

This page is intentionally left blank

KENT COUNTY COUNCIL – PROPOSED RECORD OF DECISION

DECISION TO BETAKEN BY:	DECISION NO:
David Brazier, Cabinet Member for Highways & Transportation	21/XXXXX

For publication *[Do not include information which is exempt from publication under schedule 12a of the Local Government Act 1972]*

Key decision: YES / ~~NO~~

Key decision criteria. The decision will:

a) *result in savings or expenditure which is significant having regard to the budget for the service or function (currently defined by the Council as in excess of £1,000,000); or*
b) *be significant in terms of its effects on a significant proportion of the community living or working within two or more electoral divisions – which will include those decisions that involve:*
   - *the adoption or significant amendment of major strategies or frameworks;*
   - *significant service developments, significant service reductions, or significant changes in the way that services are delivered, whether County-wide or in a particular locality.*

Subject Matter / Title of Decision
Bath Street – Fastrack Infrastructure Scheme

Decision:

As Cabinet Member for Highways & Transportation, I agree to:

i. Formal ratification of funding agreement with EDC following the approval of the Corporate Director of Finance, Corporate & Strategic Services
ii. Approval to undertake the detailed design and surveys for the Bath Street Scheme.
iii. Approval to progress all statutory approvals or consents required for the scheme, including any transfer of land and rights;
iv. Approval to carry out any additional consultation required for the scheme;
v. Approval to enter into construction contracts as necessary for the delivery and future maintenance of the scheme subject to a review of the procurement strategy by the Capital Officer Group;
vi. Approval for any further decisions required to allow the scheme to proceed through to delivery to be taken by the Corporate Director of Growth, Environment & Transport under the Officer Scheme of Delegations following prior consultation with the Cabinet Member.

Reason(s) for decision:
The Bath Street scheme will provide a key Fastrack bus link between the Northfleet Embankment East development and Gravesham Town Centre in the form of a contraflow bus lane in Bath Street.

The scheme will improve journey times for Fastrack passengers and provide a short walk to access Fastrack for occupants and workers at the Northfleet Embankment East, Clifton Slipways and The Charter developments.

The decision is required to allow scheme development to progress including funding, statutory

DRAFT

approvals, contract procurement and scheme construction delivery to be carried out.
Cabinet Committee recommendations and other consultation:
Any alternatives considered and rejected: The Fastrack A service will be extended to Gravesend. Initial scoping of the route included an option to route the service via Overcliffe. This was considered and rejected as this route would be longer and less direct. The proposed scheme will improve journey times for Fastrack users and facilitate additional bus stops to service existing residents and those from new developments such as Clifton Slipways, The Charter and Northfleet Embankment.
Any interest declared when the decision was taken and any dispensation granted by the Proper Officer:

....

signed date

This drawing should not be scaled. Dimensions to be verified on site.
Any discrepancies should be referred to the Engineer prior to work being put in hand.

This drawing is the property of Waterman Infrastructure & Environment Limited, and the drawing is issued on the condition that it is not copied reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the consent in writing of Waterman Infrastructure & Environment Limited,
Pickfords Wharf, Clink Street, London SE1 9DG t 020 7928 7888 f 03333 444 501

GENERAL NOTES

Key:

- Soft Verge/Landscaping
- Carriageway
- Footway/Central Island
- Red Tactile
- Buff Tactile
- Bus lane
- Proposed Kerb Alignment
- Existing Kerb Alignment
- Gully
- Lighting Column
- Traffic Signal
- Pedestrian Guardrail
- Existing Tree
- Proposed Tree

Corduroy paving & signage to indicate start/end of shared area.

National Cycle Route 1 goes along north footway of Clifton Road where cyclist cross to the south and use the toucan crossing on Bath Street to continue heading east along West Street.

Proposed dedicated bus lane southbound on Bath Street.

Proposed toucan crossing for pedestrians and cyclists using the National Cycle Route.

Corduroy paving & signage to indicate start/end of shared area.

Corduroy paving & signage to indicate start/end of shared area.

Potential location for proposed tree. Dependant on review of underground stats.

Potential location for proposed tree. Dependant on review of underground stats.

CUT-LINE SHEET 1

Rev	Date	Description	By
P01	20:05:21	FIRST ISSUE	UF

Amendments

Project
BATH STREET GRAVESEND

Title
GENERAL ARRANGEMENT
SHEET 2 OF 2

Client
Kent County Council
kent.gov.uk

Waterman
Crown House 2 - 8 Gloucester Road Redhill Surrey RH1 1FH
t 01342 893800 f 03333 444 501
mail@watermangroup.com www.watermangroup.com

Status
PRELIMINARY

Designed By	Checked By	Waterman Ref
BS	SP	WIE17873-100
Drawn By	Date	Scale
UF	JAN 21	1:250@A1 / 1:500@A3

Project - Originator - Volume - Level - Type - Role - Number	Revision
17873-100-WIE-ZZ-XX-DR-C-900102	P01

1:250 @A1
1:500 @A3
0 5m 10m 15m 20m 25m

1:1 @A1 0 10 20 30 40 50 60 70 80 90 100
@A3 0 10 20 30 40 50

X-A1 WIE PORTRAIT, X-GA, X-HATCH PROPOSED, X-KEYS & NOTES, X-OS-HOLE, X-ROAD MARKINGS, X-SITE LOCATION, X-TOPO 2D

File Path
File Name C:\Users\RLBS\AppData\Local\Temp\AcPublish_13625\

This page is intentionally left blank

of underground stats.

CUT-LINE SHEET 2

This drawing should not be scaled. Dimensions to be verified on site.
Any discrepancies should be referred to the Engineer prior to work being put in hand.

This drawing is the property of Waterman Infrastructure & Environment Limited, and the drawing is issued on the condition that it is not copied reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the consent in writing of Waterman Infrastructure & Environment Limited,
Pickfords Wharf, Clink Street, London SE1 9DG t 020 7928 7888 f 03333 444 501

GENERAL NOTES

Key:

- Soft Verge/Landscaping
- Carriageway
- Footway/Central Island
- Red Tactile
- Buff Tactile
- Bus lane
- Proposed Kerb Alignment
- Existing Kerb Alignment
- Gully
- Lighting Column
- Traffic Signal
- Pedestrian Guardrail
- Existing Tree
- Proposed Tree

Taxi waiting area. Taxis are called forward using a traffic light system (sign/lights indicating whether taxi bay is free, to be located and of a type to not confuse drivers of priority at give way line). Detectors in the surfacing at the taxi layby will turn the signal green when a space is free.

Relocated pedestrian crossing forming part of the junction signalisation.

Stand-alone pedestrian crossing (not linked to junction signalisation)

Rev	Date	Description	By
P01	20:05:21	FIRST ISSUE	UF

Amendments

Project
BATH STREET GRAVESEND

Title
GENERAL ARRANGEMENT
SHEET 1 OF 2

Client
Kent County Council
kent.gov.uk

Waterman

Crown House 2 - 8 Gloucester Road Redhill Surrey RH1 1FH
t 01342 893800 f 03333 444 501
mail@watermangroup.com www.watermangroup.com

Status
PRELIMINARY

Designed By	Checked By	Waterman Ref
BS	SP	WIE17873-100
Drawn By	Date	Scale
UF	JAN 21	1:250@A1 / 1:500@A3

Project - Originator - Volume - Level - Type - Role - Number: 17873-100-WIE-ZZ-XX-DR-C-900101

Revision: P01

1:250 @A1 / 1:500 @A3: 0, 5m, 10m, 15m, 20m, 25m

1:1 @A1: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

1:1 @A3: 0, 10, 20, 30, 40, 50

File Path C:\Users\RLBS\AppData\Local\Temp\AcPublish_13625\
File Name

X-A1 WIE PORTRAIT, X-KEYS & NOTES, X-OS, X-SITE LOCATION

This page is intentionally left blank

From: **Susan Carey, Cabinet Member for Environment**

Stephanie Holt-Castle, Director, Growth and Communities

To: **Environment and Transport Cabinet Committee – 29 June 2021**

Decision No: N/A

Subject: **Public Sector Decarbonisation Scheme – Section 31 Award**

Classification: **Unrestricted**

Past Pathway of Paper: **n/a**

Future Pathway of Paper: **n/a**

Electoral Division: County-wide

Summary: This paper seeks to provide an update on the agreement with the Department of Business, Energy, and Industrial Strategy (BEIS) for a Section 31 grant of £20.6m to deliver a number of energy projects within the KCC estate and a further £1.2m for school site energy projects that was accepted in March 2021 and which will help KCC meet its target of achieving net-zero carbon emissions by 2030.

Recommendation(s):
The Cabinet Committee is asked to note the progress update including the current programme activity and associated risks, as outlined in section 6, of the Public Sector Decarbonisation Scheme Grant.

1. Introduction

1.1 In response to emerging evidence, the UK government revised the Climate Change Act 2008 in 2019. This introduced into law the UK target of net-zero carbon emissions by 2050. This Act requires local authorities to act to reduce emissions both from their own operations and their geographical area. In May 2019, KCC recognised the climate emergency, and in July 2020, Kent County Council set an accelerated target of net-zero emissions by 2030 for its corporate estate and traded companies.

1.2 Under the framework of the Kent Environment Strategy (KES) and the Energy and Low Emissions Strategy (ELES), the Sustainable Business and Communities Team has been leading KCC's response to achieving the net-zero target. There is a KCC Environment Board overseeing this work, chaired by the Corporate Director for Growth, Environment and Transport, and attended by senior officers across all four directorates.

1.3 In Autumn 2020, the Department of Business, Energy, and Industrial Strategy and Salix* announced £1bn of grant funding which aligned with the Department of Business, Energy, and Industrial Strategy's new mission and priorities

including tackling climate change. KCC applied for £20.6m of projects for its own estate, plus a further £1.2m for schools-based projects.

* (Salix are a non-departmental body owned wholly by the Government who provide funding to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills)

1.4 On 16 February 2021, KCC was informed by Salix that both funding applications were approved subject to KCC agreeing to the Grant conditions by 1 March 2021.

1.5 On 1st March 2021 a Key Decision (decision number 21/00034) was taken by Susan Carey – Cabinet Member for Environment to accept the Section 31 Grant of £20.6m for KCC energy projects and £1.2m for school sites energy projects as this could not reasonably be delayed until the next meeting of the Environment and Transport Cabinet Committee. Approval to accept the funds under a Section 151 agreement was issued by Zena Cooke, KCC's Corporate Director for Finance and Section 151 Officer.

1.6 On 18th March 2021, the Environment and Transport Cabinet Committee resolved that the decision to accept the Section 31 Grant be noted and the full Grant funds were subsequently received.

2. Financial Implications

2.1 Modelling by Laser Energy (a department of KCC's Commercial Services) estimates that investment in the region of £27m will be needed to enable KCC to meet the net-zero target for its own estate by 2030. The Grant awarded is for up to £20.6m and therefore represents a significant funding contribution to help meet this target. It is forecast that the projects will produce a substantial surplus to KCC over the next 30 years and modelling is underway to establish the forecast surplus considering maintenance and running costs. The projects will significantly reduce KCC's carbon footprint on its own estate and will also mitigate cost avoidance should the Government impose penalties for non-compliance with carbon reduction activity. Any surplus income generated from the projects will be complemented by the annual £1m contribution to the Climate Change Fund reserve which is being used to fund smaller initiatives both of which will help to deliver the accelerated Net Zero 2030 ambition

2.2 The key constraints of this funding at the time of the grant award were:

- Projects should be completed, and funding spent by September 2021.
- Funding was awarded within the Grant for specific energy projects as per the technical assessment that was provided prior to the grant award and were based on both carbon reduction figures and costs.

2.3 At the point that the grant award was accepted none of the projects under consideration had been included in the capital programme due to the timing and speed of the bid process and grant award. Individual projects needed to be developed and proposed to be added to the capital programme. Normally new or additional projects that are 100% grant funded (some of the Public Sector Decarbonisation Scheme projects are not 100% grant funded) are included for approval on to the KCC capital programme that is approved at County Council in February each year.

2.4 Due to the tight timescale for acceptance of the Public Sector Decarbonisation Scheme, individual decisions to proceed with projects and inclusion in the capital programme was agreed in accordance with the Scheme of Delegation and Financial Regulations. These decisions have identified financial implications and risks where projects may not be completed in accordance with the September 2021 deadline and other grant conditions.

2.5 With programme and internal constraints identified, the programme team have sought flexibilities from Salix to enable project delivery to be achieved and to mitigate the key constraints outlined in 2.2. Flexibility in timescales, project allocation and budget have been confirmed in principle, pending the establishment of a formal project change process through Salix. Flexibilities will be applied for and agreed on a case-by-case basis. The current programme also highlights the risk in some projects not being taken forward and decarbonisation funding refunded back to the Department of Business, Energy, and Industrial Strategy and this is confirmed in more detail in section 5.

3. Policy Framework

3.1 The environment is one of the five main Challenges set out in the Interim Strategic Plan that KCC is facing over the next 18 months. Tackling the climate emergency is identified as an urgent priority.

3.2 In response to the UK Climate Emergency, KCC has committed to reducing carbon emissions to net-zero from its own estate and traded companies (excluding schools) by 2030.

3.3 The projects which will be supported by the grant will help deliver against this challenge and underline KCC's leadership role in tackling climate change.

4. Funding Allocation Details

4.1 KCC has received Section 31 funding of £20.6m for energy projects within the KCC estate plus a further £1.2m for school site energy projects from BEIS Public Decarbonisation Scheme which is being administered by Salix.

4.3 Cumulatively, it is anticipated that the projects will reduce carbon emissions from KCC's estate by 40%, some 7,097 tonnes of CO2 (based on the current LASER Energy figure of 17,660 tonnes to September 2020), and enable delivery towards its net-zero carbon emissions target.

4.4 Alongside delivery of the net-zero target, the proposed projects will reduce KCC's energy costs by £225,948 and provide an income to KCC from two solar parks; stimulate the low carbon economy in Kent and create jobs as well as set up key development infrastructure to meet future energy challenges such as security of supply.

4.5 Each project will have its own governance including where applicable specific key decisions to take projects forward to be taken by the Cabinet Member for Environment. The Major Energy Projects Board will have formal oversight of the grant's application across all projects.

4.6 BEIS have confirmed the project level funding that has been allocated and this has been organised into 11 workstreams by the programme team as shown in Table 1 below:

Table 1: Workstream, Project Detail and Associated Funding Allocations for the BEIS Public Sector Decarbonisation Section 31 Grants

Workstream	Workstream Value	Project	Project Value
1: West End Solar Park (Thanet)	£14million	Construction of a 22MW solar farm	£14million
2: Kings Hill Solar Park	£2.58millon	Construction of a 3MW solar farm	£2.58million
3: Connection to the Maidstone District Heat Network	£1.3million	Connection of Invicta House, Sessions House and the Kent History and Library Centre	£800k
		Installation of an additional water source heat pump	£500k
4: Digital Autopsy Building	£157.5k	Installation of an air source heat pump to the DA building	£120k
		Installation of solar PV to the DA building	£37.5k
5: Turner Contemporary	£104.5k	LED lighting (Phase 1)	£104.5k
6: Paddock Wood Community Centre	£97.5k	Installation of an air source heat pump	£65.5k
		Installation of solar PV	£30.7k
7: Oakwood House	£1.49million	Ground source heat pump	£235.5k
		Energy upgrade works	£35k
		Building management system	£202.5k
		Hot water distribution improvements	£125k
		Pipe insulation	£78k
		Purchase of ventilation fans	£135k
		Ventilation distribution system	£333k
		Electricity supply upgrade	£250k
		LED lighting	£96k
8: LED Lighting in KCC buildings	£89k	Brook House (Whistable)	£43.5k
		Ashford Highways Depot (Phase 1)	£45.5k
9: Installation of Heat Pumps on KCC buildings	£415.5k	Air source heat pump at Ashford Highways Depot	£260k
		Ground source heat pump at the Swattenden Outdoor Centre (Tunbridge Wells)	£155k
10: Installation of Solar PV on 5 KCC buildings	£407.5k	Brook House (Whitstable), Ashford MASH, Swanley Link, The Sunrise Centre (Tunbridge Wells) and Kent Scientific Services	£407.5k
11. Schools Programme	£1.2million	Cobham Primary ground source heat pump	£105k
		Southborough Primary oil to gas heating	£169.5k
		Palace Wood Primary (Maidstone) oil to gas heating	£140k
		Wickhambreaux Primary double glazing	£50k
		The Archbishops School (Canterbury) double glazing	£250k
		St Anthony's School (Margate) double glazing	£250k
		West Kingsdown Primary insulation and double glazing	£75k
		Kemsing Primary insulation and double glazing	£35k
		Herne Bay High solar PV	£125k
		Briary Primary (Herne Bay) solar PV	£18k

5. Risks

5.1 The timescale for delivery of projects is still ambitious. Even with flexibility to extend funding deadlines past the original September 2021 deadline the funding has to be spent by 31st March 2022 and some of the larger or more complex projects are on very tight timelines in order for this to be met and there is very little slack if events, such as significant winter weather, impact on construction.

5.2 The market for specialist equipment, such as solar panels and specialist contractors to install the technology, has been saturated nationally by local authorities all with Salix funding to spend within the same timescales and this may potentially cause costs to rise or there to be long lead times for materials or equipment that may impact on the timelines for delivery. If there are significant cost increases as a result of this there is no additional Salix funding available in addition to the already approved grant award and it will therefore fall to KCC to fund any difference.

5.3 There are currently no approved contractors on the KCC framework that can deliver ground source heat pump construction and procurement frameworks are required to enable speedy contract awards. Project teams are working with colleagues in strategic commissioning, legal and finance to overcome these issues and whilst confident that frameworks will be developed this has added to the delivery timescale risk on some projects. Collaborative support of the issues created by the short delivery timescales on this grant award is required from all parties to ensure they are delivered at pace.

5.4 The main Maidstone Heat Network project currently has a significant funding gap. Whilst the Public Sector Decarbonisation funded elements are deliverable within the grant conditions the dependency on the scheme as a whole being delivered is obvious and if the main scheme stalls it may not be possible to retain the £1.3m funding currently allocated to this project.

5.5 A suite of potential underspend projects with varying lead times is being developed so that identified underspend can be utilised with additional projects being brought online, subject to the relevant approval from Salix. However, these underspend projects are impacted by the same lead time and procurement issues as those in the main scheme and therefore the ability to deliver largescale or complex underspend projects within the funding deadline still remains a risk. If underspend is realised too late to enable additional projects to be brought online and delivered within the timescales, then the underspend may have to be returned to the Department of Business, Energy, and Industrial Strategy.

5.6 Governance oversight of projects will be undertaken by the Major Energy Projects Board; however, this meets every two months and decisions may be required with shorter timescales to allow the projects to deliver at pace. This risk has been mitigated by utilising the KCC Capital Officers Group as a regular monitoring and oversight function in addition to the main Project Board.

6. Equality and data protection implications

6.1 EqIAs and DPIAs will be undertaken for the projects that have been identified against the grant award and updated as required throughout.

7. Legal Implications

7.1 Legal Agreements for specific individual projects will be needed and will be subject to the review and agreement as part of the project management governance arrangements. Legal work has been actioned for projects with known legal implications.

8. Conclusion

8.1 KCC has received Section 31 funding of £20.6m for energy projects within the KCC estate plus a further £1.2m for school site energy projects from BEIS Public Decarbonisation Scheme. This funding will provide a significant investment in tackling climate change and reducing carbon emissions across KCC's estate as well as providing additional benefits to the economy by creating new jobs and infrastructure.

8.2 The project and programme teams are working at pace to ensure these schemes are delivered within the grant conditions specified and have negotiated agreement in principle for some flexibilities to be applied to support this.

8.3 Formal change requests are still to be processed that will provide absolute clarity on the delivery conditions that must be met by each project and will enable the programme team to provide a comprehensive delivery timeline.

9. Recommendation(s)

The Cabinet Committee is asked to note the progress update including the current programme activity and associated risks, as outlined in section 6, of the Public Sector Decarbonisation Scheme Grant.

10. Contact details

Report Author:

Helen Shulver,
Programme Manager for the Public Sector Decarbonisation Scheme
Phone: 03000 417711
Email: helen.shulver@kent.gov.uk

Relevant Director:

Stephanie Holt-Castle
Director for Growth and Communities
Phone: 03000 412064
Email: stephanie.holt-castle@kent.gov.uk

This page is intentionally left blank

From: Susan Carey, Cabinet Member for Environment

Simon Jones, Interim Corporate Director of Growth, Environment and Transport

To: Environment & Transport Cabinet Committee – 29 June 2021

Subject: Kent area pathways to Net Zero 2050

Classification: Unrestricted

Electoral Division: All

Summary: This report presents the findings of the Kent and Medway Emissions Analysis and Pathways to Net Zero 2050 report. The report was commissioned to understand the optimum pathway for achieving the Kent and Medway Energy and Low Emissions Strategy's target of Net Zero by 2050. It recommends an evidence-based carbon budget[1] for Kent and Medway; future emissions pathways defined by a range of interventions; and highlights the scale and speed of implementation needed.

Recommendation(s):
The Environment and Transport Cabinet Committee is asked to note the findings of the Kent and Medway Emissions Analysis and Pathways to Net Zero report and make recommendations to the Cabinet Member for Environment on the proposed approach.

1. Introduction

1.1. In response to emerging data, the UK government revised the Climate Change Act 2008 in 2019. This introduced into law a target for the UK to reduce greenhouse gas emissions to Net Zero by 2050. In support of this target, Kent County Council, in partnership with Medway Council and the 12 District/Borough Councils, has led the development of the Kent and Medway Energy and Low Emissions Strategy (ELES), which was approved by the Environment & Transport Cabinet Committee on 17 July 2020. The Energy and Low Emissions Strategy sets a target for emissions from the geographic area of Kent to be reduced to Net Zero by 2050.

1.2. To better understand the optimum pathway for reaching Net Zero by 2050, Kent County Council commissioned Anthesis to undertake an analysis of Kent & Medway's emissions and intervention pathways. Anthesis are specialist consultants who were funded by the Department for Business, Energy, and Industrial Strategy to develop SCATTER; a free tool for local authorities to

[1] A carbon budget is the total amount of carbon dioxide (and other greenhouse gases), that can be released into the atmosphere over a specified period of time. Like a financial budget, if we "spend" too much carbon, we will need to "save" carbon elsewhere to balance the budget. See paragraph 2.4 for more information.

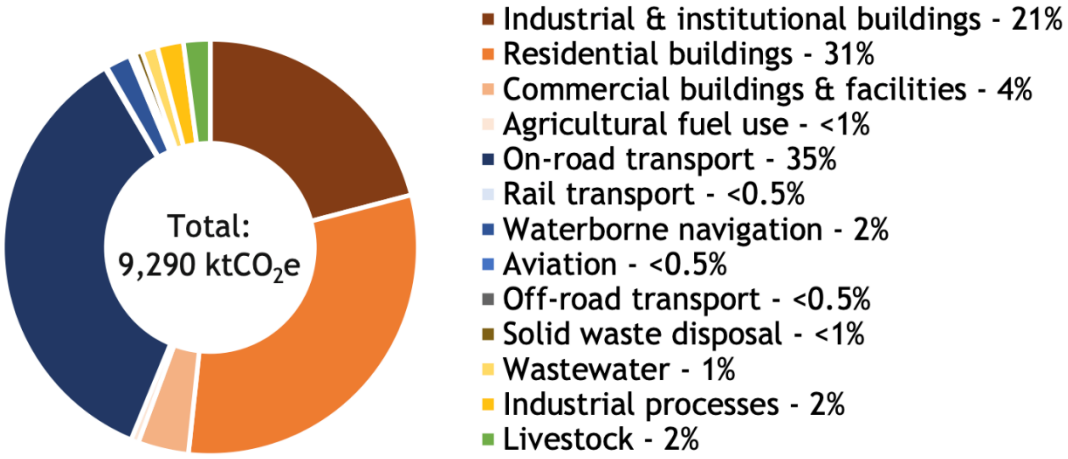
generate greenhouse gas inventories and model emissions reduction pathways. The resulting analysis and report provide:

- The current emissions profile in Kent and Medway.
- An evidence-based carbon budget for Kent and Medway based on academic research at the Tyndall Centre for Climate Change Research.
- Future emissions pathways defined by a range of measures and interventions across the energy system.
- The scale and nature of these interventions and the speed of implementation needed.
- Further in-depth analysis of Kent and Medway's domestic housing, transport, and land use emissions.

1.3. This paper summarises the key findings from the Anthesis report. It is important to note that the report is based on currently available emissions factors, current legislation, and government policy, published emission scenarios and proven technologies. Future changes to legislation, such as the Future Homes Standard and Environment Bill, emerging technologies such as those relating to hydrogen, as well as the long-term impact of COVID-19 on behaviours and the economy have not been modelled or factored into this analysis.

2. Current emissions profile and allocated carbon budget

2.1. Kent and Medway's current greenhouse gas emissions profile was calculated using the Anthesis SCATTER Tool. It estimated that in 2017, Kent and Medway's emissions totalled 9,290 kilotons of carbon dioxide equivalent ($ktCO_2e$). The majority of emissions are from buildings (56%) and transport (38%), with smaller contributions from waste disposal (2%), industrial



processes (2%) and livestock (2%).

2.2. Land use acts as a net carbon sink for the county, sequestering 333 $ktCO_2e$ from the local environment; equivalent to 4% of the gross total.

2.3. The calculation includes all emissions arising from sources within Kent and Medway (excluding emissions associated from in-boundary energy

generation, i.e., power stations, to prevent double counting), as well as emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the county. All emissions related to out-of-boundary activities have been excluded (e.g., embodied carbon of products and services).

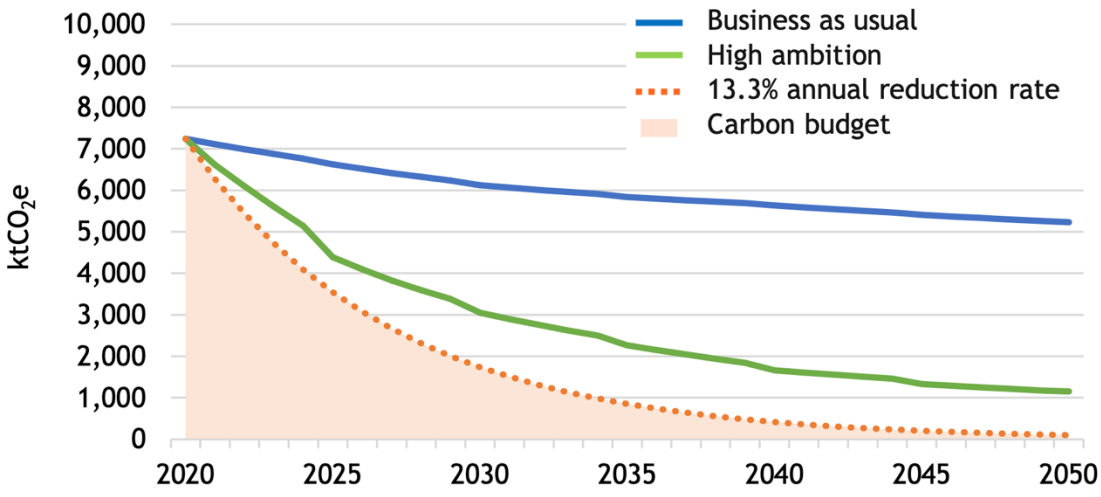
2.4. Carbon budgets set by the government place a restriction on the total amount of greenhouse gases the UK can emit over a 5-year period. Under a system of carbon budgets, every tonne of greenhouse gas emitted between now and 2050 will count. Where emissions rise in one sector, the UK will have to achieve corresponding falls in another. This is to ensure the UK plays its part in limiting global warming to 1.5 degrees Celsius, in line with the Paris Agreement.

2.5. The Tyndall Centre for Climate Change Research, based at the University of Manchester, has scaled down the UK carbon budgets into regional budgets for local authorities. They have allocated Kent and Medway a budget of 57,700 $ktCO_2e$ for the period 2020-2050. In order to remain in budget, the county must achieve an average annual emissions reduction rate of 13.3%. To put this in context, the county's average annual reduction rate since 2005 has been just over 3.5%. If reduction rates stay the same, the county will exceed its allocated carbon budget within seven years.

3. Pathways to Net Zero

3.1. The SCATTER Pathways tool makes it possible to model future emissions based upon a set of user-defined interventions across various sectors and activities within Kent and Medway. The pathways are intended to act as a line in the sand; focusing on 'what' needs to happen, rather than 'how' we make it happen; and to assist in prioritising interventions that are locally influenceable and necessary to deliver the required reductions in emissions.

3.2. Two pathways for Kent and Medway were considered in the report: The business-as-usual pathway (blue line), projects a 44% reduction in emissions by 2050 against 2017 levels. The high ambition pathway (green line), projects an 88% reduction by 2050 against 2017 levels.



3.3. The scale of interventions required by 2050 to meet the High Ambition pathway are listed in Appendix 1. Example activities include:

- **Buildings:** thermal efficiency improvements to new-builds and through retrofit of existing buildings, switching away from gas technologies for heating and cooking, energy efficient appliances and lighting.
- **Transport:** travelling less often and over shorter distances in all vehicles, switching to electric vehicles, modal shift away from private vehicles, improving freight emissions.
- **Renewable energy supply:** scaling up the installed capacity of renewable technologies such as solar and wind.
- **Waste and industry:** producing less waste, recycling more and shifting away from carbon-intensive fuels for industrial processes.
- **Agriculture and land use:** increasing tree coverage and carbon sequestration, improving land and soil management, shifting to less carbon-intensive livestock management.

3.4. Under the high ambition pathway, the emissions profile of Kent and Medway is predicted to change significantly but will still not reach carbon neutrality by 2050. It is estimated that annual emissions will be around 1,155 ktCO_2e, with the bulk of emissions at that time coming from domestic buildings (50%) and the industrial and commercial sector (39%). Just 11% of emissions will come from transport; largely freight transport. As noted in paragraph 1.3, unless, and until further technological interventions currently not identifiable become viable, further activities will be needed to inset these residual emissions.

4. Financial Implications

4.1. This paper relates to the findings of the Kent and Medway Emissions Analysis and Pathways to Net Zero report and not any costed actions that may be developed in the future as a result of the findings. As projects that Kent County Council are involved in are developed, the supporting evidence and any cost implications will be identified, and the business case developed through the appropriate governance processes.

5. Policy Framework

5.1. This paper and the activity within it are directly linked to the Interim Strategic Plan, in particular, the priority to tackle the climate emergency and protect and enhance our natural environment. It is also relevant to the Kent and Medway Growth and Infrastructure Framework, Kent and Medway Economic Renewal and Resilience Plan, Kent and Medway Infrastructure Proposition, Kent Waste Disposal Strategy, Kent Health and Wellbeing Strategy and informs the emerging Local Transport
Plan 5.

5.2. Developing this approach is an action within the Kent and Medway Energy and Low Emissions Strategy, which forms part of the Kent Environment Strategy and its Implementation Plan.

6. Equalities Impact Assessment

6.1. An Equalities Impact Assessment was undertaken on the Energy and Low Emissions Strategy. Individual projects and programmes agreed as part of the Strategy will conduct their own Equalities Impact Assessment.

7. General Data Protection Regulation Considerations

7.1. A Data Protection Impact Assessment is not needed as the Net Zero approach does not require the processing of personal data.

8. Conclusion

8.1. The Kent and Medway Emissions Analysis and Pathways to Net Zero report highlights the scale and speed of action required across all sectors in order to reach our Net Zero target for the area. It recommends five-yearly carbon budgets for the county and identifies the preferred combination of activities required to achieve our targets.

8.2. Under the framework of the Kent Environment Strategy and the Energy and Low Emissions Strategy, the KCC Sustainable Business and Communities Team is now working with key stakeholders to ensure our priority activities align with the recommended pathways and to identify resource gaps and opportunities. The pathways were also used to inform the Kent and Medway Energy and Low Emissions Strategy Implementation Plan, which was published in May 2021.

8.3. The report is intended to form the basis for deeper conversations and to further support the development of sector specific pathways and action plans. It is critical that key stakeholders continue to be engaged throughout the process, as our targets can only be met through strong partnership working. We must also continue to identify activities that our outside of our direct control or influence, where our leadership role, and ongoing sector engagement and lobbying can be harnessed to encourage meaningful and permanent change.

9. Recommendation(s)

Recommendation(s):
The Environment and Transport Cabinet Committee is asked to note the findings of the Kent and Medway Emissions Analysis and Pathways to Net Zero report and make recommendations to the Cabinet Member for Environment on the proposed approach.

Background Documents

- Kent and Medway Energy and Low Emissions Strategy – https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/environmental-policies/kent-and-medway-energy-and-low-emissions-strategy

- Kent and Medway Emissions Analysis and Pathways to Net Zero (Executive summary) - https://www.kent.gov.uk/__data/assets/pdf_file/0011/122897/Kent-Emissions-Pathway-Report-Executive-Summary.pdf
- Kent and Medway Emissions Analysis and Pathways to Net Zero (full report) – https://www.kent.gov.uk/__data/assets/pdf_file/0003/122898/Kent-Emissions-Pathway-Report.pdf

10. Contact details

Christine Wissink, Interim Head of Sustainable Business and Communities, 03000 413482

Lucy Breeze, Environment Strategy Programme Manager, 03000 422077

Relevant Director: Stephanie Holt-Castle, Director for Growth and Communities, 03000 412064

Appendix 1: High ambition interventions at 2050

The following table describes the scale of interventions required by 2050 in order to meet the High Ambition Pathway for Kent & Medway. All reductions are against a 2017 baseline except where stated otherwise. The degree to which these interventions can feasibly be achieved at this scale is not considered in the modelling; rather these figures are a demonstration of what needs to be done to meet the High Ambition Pathway.

Sector	Measure	2050 intervention
Domestic buildings	More energy efficient homes & new builds	• 75,700 “medium” retrofit • 605,900 “deep” retrofit • 181,300 new builds to PassivHaus standard
Buildings	Reduced energy demand for heating, cooling & hot water	• Domestic: 43% reduction • Non-domestic: 40% reduction
	Reduced energy demand for appliances, lighting, and cooking	• Domestic: 73% reduction • Non-domestic: 25% reduction
	Switching from gas heating systems	• Domestic: 100% of heating systems are electrified • Non-domestic: 80% of heating systems are electrified, remaining 20% supplied by CHP systems
	Shifting from gas to electric cookers	• Domestic: 84% increase in electric fuel usage for cooking • Non-domestic: 33% increase in electric fuel usage for cooking
Transport	Travelling shorter distances	• 25% reduction in the average number of passenger miles travelled per person
	Driving less	As a percentage of passenger mileage: • 10% active transport • 25% public transport • 65% private vehicle
	Switching to electric vehicles	• 100% of private vehicles, buses and trains are electric (though this transition is heavily frontloaded)

Sector	Measure	2050 intervention
Freight transport	Improving freight emissions	• 28% increase in waterborne freight mileage • 22% decrease in road freight mileage • 75% decrease in energy used per mile travelled • 234% increase in fuel use at UK ports for *international* shipping
Waste	Producing less waste	• 57% reduction in the volume of waste
	Increased recycling rates	• 85% recycling rate
Industry	Switching from fossil fuels	• 15% reduction in oil fuel usage • 2% increase in electricity consumption • 38% increase in the use of natural gas
	More efficient processes	Process emissions reduced: • 30% for chemicals • 21% for metals • 25% for minerals • 80% for other industries
Renewable energy supply	Wind	• Local wind: 550 MW installed capacity • Large installations (on- and off-shore): 1,466 MW installed capacity
	Solar PV	• Local PV: 4,171 MW installed capacity • Large scale PV: 242 MW installed capacity
	Biomass	• Declining usage, having displaced fossil fuel sources in power stations
	Other renewables	• Local hydro: 69 MW installed capacity • Large-scale hydro: 47 MW installed capacity
Agriculture & land use	Forest coverage & tree planting	• Increase in lone tree coverage to around 40 lone trees per hectare • 24% increase in forest coverage
	Land & livestock management	• 48% decrease in livestock numbers • 7% decrease in grassland; 1% decrease in cropland

From: David Brazier, Cabinet Member, Highways and Transport

Simon Jones, Interim Corporate Director, Growth, Environment and Transport

To: Environment and Transport Cabinet Committee – 29 June 2021

Subject: Highways Asset Management Plan 2021/22-2025/26 – an Investment Strategy and Action Plan for the next five years

Key decision 21/00028

Classification: **Unrestricted**

Past Pathway of report: None

Future Pathway of report: None

Electoral Division: Affects all divisions

Summary: This report concerns the proposed adoption of a new single Highways Asset Management Plan which replaces several other documents the County Council has published in recent years and sets out our approach to highways asset management over the next five years.

Recommendation(s):
The Environment and Transport Cabinet Committee is asked to consider and endorse or make recommendations to the Cabinet Member for Highways and Transport on the proposed decision to adopt and publish a single Highways Asset Management Plan document that sets out our approach to highways asset management over the next five years, as attached at Appendix D.

1. Introduction

1.1 This report and associated papers set out our approach to highways asset management over the next five years, including asset condition forecasts, service levels and risk assessments, and a five-year forward works programme based on the continuation of current funding levels. Importantly, they seek to move towards treating highway maintenance as a multi-year endeavour, supported by consistency of approach and an understanding of broad levels of funding.

1.2 The new document is an Investment Strategy and Action Plan for the next five years, its vision being to deliver a fully integrated, dynamic, efficient, and effective highways asset management service to provide a safer, more sustainable, and more resilient highway network that supports Kent's recovery from the COVID-19 pandemic and delivers on Kent's longer-term strategic objectives.

2. Discussion

2.1 Over the past five years, we have significantly developed and improved our approach to highways asset management enabling KCC to maximise Department for Transport (DfT) funding. As part of this work, KCC has formally adopted various key documents, as below.

- Our Approach to Asset Management in Highways
- Implementing Our Approach to Asset Management in Highways
- Developing Our Approach to Asset Management in Highways

2.2 We have also introduced various measures to implement the Well-managed Highway Infrastructure (WMHI) code of practice, considered national best practice, again resulting in the adoption and publication of a range of documents, as below.

- Applying the Code of Practice in Kent
- Implementing the Code of Practice in Kent
- A Risk Based Approach – Service Level Risk Assessments

2.3 As a result, we have been able to demonstrate consistently that we are a Band 3 authority to maximise DfT Incentive Fund resource, make the case for additional funding, and optimise our ability to defend claims. Collectively, these published documents form our existing Highways Asset Management Plan (HAMP).

2.4 Despite making significant progress in recent years, we, like other highways authorities, are in an increasingly challenging environment, with deteriorating assets, increasing traffic volumes, uncertainty around future funding and, more recently, facing the impacts of the global pandemic. It is therefore timely to develop a new single and updated HAMP document, to identify a clear investment strategy and associated action plan for the future that is fit for purpose and recognises the challenges and opportunities ahead.

2.5 The new document is a forward-looking document covering the next five years which:

- includes a **vision statement** (Part 6)
- sets out how highways asset management, as a key enabling service, contributes to achieving **strategic outcomes** and delivering Kent's interim strategic plan (Part 1)
- describes how we go about **asset management** and risk-based decision-making (Part 3)
- explains what we know about the **condition of our assets** both now and going forward based on various investment levels (Part 4 and Appendix A)
- sets out our **service levels** in terms of what we do and what we do not, alongside an assessment of associated **risks** (Appendix B)
- outlines our asset management and WMHI **improvements and achievements** in recent years (Part 5)
- includes a five-year **forward works programme** for specific asset groups (Appendix C), and

- lists the **future actions** we will implement to further improve our approach to asset management, maximise asset lifespans, reduce lifecycle cost and improve future maintainability, in order to deliver on our vision and strategic outcomes (Part 6).

2.6 In addition to being an asset management plan for highways, the document is an Investment Strategy and Action Plan for the next five years. Crucially, it seeks to move towards treating the management and maintenance of our highway assets as a multi-year endeavour, rather than an annual one. In that respect, the document highlights the importance of consistency of (broad levels of) funding and approach over that longer period, to enable us to deliver a more efficient service with better condition outcomes.

2.7 For the first time, in March, we published a multi-year forward works programme, based on broad levels of current funding continuing. This programme is an integral part of the proposed HAMP document. It includes details of the planned maintenance we intend carrying out during at least the next two years and in some cases, this is extended to five years. This programme will be reviewed annually and will be expanded upon in the coming years. It provides members and the public with some certainty of future maintenance.

2.8 The forward works programme for roads includes around 7.5 million square metres of surfacing over the next five years. In addition, it will deliver around 275,000 square metres of footway improvement in the next two years and around 100 drainage improvements. This programme, together with our annual Pothole Blitz campaigns, will significantly reduce pothole formation in the coming years.

Maintenance Hierarchies

2.9 The document also proposes new maintenance hierarchies for our roads (pages 43-44) and footways (pages 60-61), following detailed work during the last year in which we examined a number of options. The preferred hierarchies are based on those recommended in WMHI, as these provide sufficient granularity for our use given the scale and varied make-up of Kent's network. For roads, we have adjusted the WMHI hierarchy to include our Resilient Highway Network as a new top category. The proposed hierarchies also enable us to dynamically adjust our future inspection and maintenance approach, for example to move some resource away from little used or impassable country tracks so that higher risks can be targetted.

Funding

2.10 Funding of highway maintenance comes from three sources - capital grant funding from the Department for Transport, along with the Council's revenue budget and capital borrowing.

2.11 During the six years to 2020/21, with the exception of the Pothole Fund award of £15m in 2020/21, DfT capital funding has largely remain static, and is insufficient to maintain a multi-asset highway network as large and complex as that in Kent. In addition, funding has not increased with inflation, nor to reflect traffic and network growth. This has in turn led to the rate at which local roads,

footways and other highway assets deteriorate exceeding the rate of investment. KCC has regularly lobbied the DfT on this matter.

2.12 Given the impacts of the coronavirus pandemic, the Government announced in October 2020 that it would be conducting a one-year spending review to prioritise its response to the pandemic. Following that, in mid-February, the DfT wrote to local authorities to say that there would be a single year capital settlement for 2021/22. The table below shows the amounts awarded to Kent compared to the last two financial years. These allocations are, in real terms, around 20% lower than in 2020/21. KCC was able to maintain existing budget levels overall in 2021/22 using one-off funding from a variety of sources but decisions will need to be made for 2022/23 and beyond if this diminution in funding is confirmed as permanent.

£millions	**2019/20**	**2020/21**	**2021/22**
Maintenance Block Grant	21.949	21.949	15.137
Incentive Fund	4.571	4.571	3.784
Integrated Transport Block	6.681	6.681	6.934
Pothole Funds	1.464	16.434	15.137
TOTAL	**34.665**	**49.815**	**40.972**

2.13 The DfT has not provided details of capital funding levels beyond 2021/22 nor of any regime it may follow to allocate that resource, though it is thought that if the pandemic and economic recovery allows it, a multi-year allocation will be adopted, most likely based on a developed and expanded Incentive Fund mechanism. We are aware that the DfT is developing an evidence-based business case for HM Treasury, and we intend to lobby for more investment, for medium term certainty and for funding to be based on network and traffic growth.

2.14 In the past few years, KCC has recognised the challenge of highway maintenance and has significantly increased annual highway maintenance investment by £30m, largely through borrowing. This, on top of additional capital to address high-risk problem sites, has already had a positive effect and slowed down deterioration, particularly in respect of road assets, but significant challenges remain. The modelling used to inform the HAMP document assumes that this broad level of additional capital funding will continue.

2.15 The HAMP document sets out in detail what the continuation of current funding levels would buy in terms of highway asset condition, the services we provide (and equally those we do not), and the level of risk associated with that balance. It also illustrates how changes in our budgets would affect future asset condition.

2.16 In the event that available DfT and KCC capital resource over the next five years is considerably different from the broad levels of funding assumed in our analyses, the HAMP document provides detailed information to enable informed decisions to be made about how we prioritise investment going forward, and how we may adjust the services we provide given an understanding of the associated risks. The HAMP document confirms our approach to asset management and how funding is allocated, which is particularly important in the event that funding reduces.

Incentive Fund and Sustainability

2.17 For the first time since its introduction, the questionnaire we were required to submit to determine the amount of Incentive Fund resource Kent is allocated for 2021/22 included a number of additional questions relating to sustainability and climate change challenges. For 2021/22 these questions did not affect funding levels; however, in our view it is likely that this will change going forward. In recognition of this, and given Kent's environmental commitments, the HAMP document includes a number of actions to meet our climate change and sustainability aims.

3. Financial Implications

3.1 Adopting this plan does not have direct financial implications. However, the document does include an assessment of the effect of current funding levels in terms of the services we provide, associated risks levels, and also forecast trends in asset condition. In the event that funding over the next five years were to be significantly different, it would be necessary for the Executive to understand, record and accept the effect on service levels, risks, and future asset condition.

4. Legal implications

4.1 Whilst there is no specific legal obligation for KCC to publish a highways asset management plan, adoption of this document, setting out our carefully considered approach to highway maintenance, helps us demonstrate we are a competent highway authority and are fulfilling our duty under the Highways Act 1980 to maintain a safe network. As the document also includes a detailed risk assessment of our services, it also makes the authority better prepared to defend claims.

5. Equalities implications

5.1 An Equality Impact Assessment screening has been carried out and it is judged that the proposals do not disproportionately affect protected groups. Indeed, the approach outlined in the document better enables KCC to target resource, for example on footway maintenance in areas with higher populations of older and disabled residents.

6. Other corporate implications

6.1 The adoption of the HAMP document enables Kent County Council to demonstrate how its approach to highways asset management supports Kent's recovery from the COVID-19 pandemic and delivers on Kent's longer-term strategic objectives including environmental, active travel and road safety priorities.

7. Governance

7.1 Not applicable

8. Conclusions

8.1 Kent has made significant progress in its approach to highways asset management in recent years, and this has enabled us to maximise DfT maintenance funding, secure additional DfT and KCC resource and defend claims. This has also led to some positive signs of a slowing down in asset deterioration, particularly in respect of our roads. However, given the considerable challenges that remain around funding uncertainty, deteriorating assets, increasing traffic volumes, sustainability, active travel, road safety and, more recently, the COVID-19 pandemic and its aftermath, we need a robust, multi-year asset management strategy and action plan that is fit for purpose and recognises the challenges and opportunities ahead.

9. Recommendation(s):

9.1 The Environment and Transport Cabinet Committee is asked to consider and endorse or make recommendations to the Cabinet Member for Highways and Transport on the proposed decision to adopt and publish a single Highways Asset Management Plan document that sets out our approach to highways asset management over the next five years, as attached at Appendix D.

10. Appendices and Background Documents

- Appendix A Summary of Asset Condition
- Appendix B Service Levels
- Appendix C Five-year forward works programme
- Appendix D Proposed Record of Decision

- Equality Impact Assessment: **https://democracy.kent.gov.uk/documents/s104088/HAMPEqIA.doc.pdf**

- Our Approach to Asset Management in Highways
- Implementing Our Approach to Asset Management in Highways
- Developing Our Approach to Asset Management in Highways
- Applying the Code of Practice in Kent
- Implementing the Code of Practice in Kent
- A Risk Based Approach – Service Level Risk Assessments.

These documents can be found via the following link - https://www.kent.gov.uk/about-the-council/strategies-and-policies/transport-and-highways-policies/managing-highway-infrastructure.

11. Contact details

Report Author:
Alan Casson, Strategic Asset Manager
03000 413563
alan.casson@kent.gov.uk

Relevant Director:
Simon Jones, Director – Highways, Transportation and Waste
03000 411683
simon.jones@kent.gov.uk

This page is intentionally left blank

Highways Asset Management Plan 2021/22 to 2025/26

An Investment Strategy and Action Plan for the next 5 Years

Version	Author	Date	Comment
1.0	Alan Casson	27/5/21	Draft for Corporate Board

Contents

Foreword

Executive Summary

Introduction

Part 1 – Background and Context

Part 2 - Implementing *Well-managed Highway Infrastructure: A Code of Practice*

Part 3 - Implementing Asset Management Principles in Highways

Part 4 – Applying Asset Management Principles to Each of Our Asset Groups

- Roads
- Footways and Cycle Tracks
- Drainage
- Structures
- Crash Barriers
- Tunnels
- Street Lighting
- Intelligent Traffic Systems
- Soft Landscape
- Signs and Lines

Part 5 – Asset Management Improvements and Achievements

Part 6 – Our Future Approach and Action Plan

Appendix A - Summary of Asset Condition

Appendix B – Service Level Risk Assessments

Appendix C – Forward Works Programme

Foreword

Our local highway network is the most valuable asset we own in Kent, with a replacement value of around £24 billion. It plays a vital part in delivering council objectives by enabling safe and reliable journeys around and through the county. In doing so, it supports social wellbeing and economic prosperity. It is also essential for emergency services to execute their work: policing, healthcare, fire, and emergency response provision all require an effective highway network. These services are a key part of a functioning society and cannot exist without well-maintained and well-managed highway assets.

It has long been accepted that the rate of highway asset deterioration has far exceeded the rate of investment from central government both in terms of capital grant and revenue support. Whilst that is a national issue affecting the majority of local authorities, arguably it affects our county disproportionately given that we have one of the largest networks including a high proportion of classified or urban roads, difficult geology, a large population, and high volumes of heavy goods vehicles and other traffic as a result of our proximity to London and our position as the gateway to Europe. Our road maintenance backlog alone is £464 million.

Against that challenging backdrop, we have made some significant advances in our management and delivery of highway maintenance in recent years. We have improved our knowledge of our highway assets, their condition, and how they perform over their lifecycle. This has meant that we are able to make better-informed decisions around service levels, priorities, risks, and our future approach, so that resource is allocated appropriately. It has also meant that we can evidence the need for additional Department for Transport funding, including around £8 million of Challenge Fund resource that we were awarded in 2020.

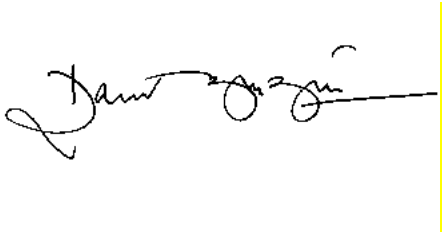
Using the same data, we have also been able to evidence the need to invest more of our own resource in this key enabling service, and have significantly increased capital funding for planned maintenance, addressing high-risk problem sites and increasing our annual Pothole Blitz campaign. Much of this has been focussed on road maintenance, resulting in a significant slowing down of deterioration. As a key part of this, our Pothole Blitz campaign now carries out larger, mechanical repairs which last longer than smaller hand-laid repairs. All this is good news for reducing potholes, which we know are a major concern for Kent's residents.

We have also introduced a new technical approvals process for works such as highway improvement schemes and new developments that add assets to our network and made improvements to the Kent Design Guide, both seeking to get designers to think at an early stage about the lifespan, lifecycle cost and maintainability of new assets. The aim is to ensure that these vital improvements and developments are more affordable to maintain, and will therefore look more attractive and fulfil their purpose for longer.

However, there are further improvements to make to enable us to deliver a fully integrated, efficient and optimised highway asset management service that supports Kent's recovery from the COVID-19 pandemic in the short- to medium-term, and delivers on Kent's longer-term strategic objectives. These include further work to improve our knowledge of our highway assets and our ability to forecast the effect of different investment levels and approaches. They also include actions to further explore how we can improve lifespans, reduce costs and improve future maintainability of new or improved highway assets when they are added to the network.

This Highways Asset Management Plan, which replaces various documents we have published in recent years, seeks to set out our approach to highways asset management over the next five years. It is important to consider this function as a multi-year activity rather than an annual one. Whilst we live in uncertain financial times, certainty of approach and of the broad levels of funding will enable us to deliver a more efficient and planned service, resulting in assets that are in better condition than otherwise would be the case. As such, the various parts and appendices of the document set out what we know about our assets' current condition; what the future might look like if current levels of funding are maintained, increased or reduced; what our service levels are, including a full explanation of those services we provide given existing resource levels and those we do not, and detailed risk assessments on those service levels; and a five year forward works programme.

I am confident that this Investment Strategy and Action Plan for the next five years will deliver a more efficient highway maintenance service with better outcomes, and enable us to deliver a safer, more sustainable and more resilient highway network.



David Brazier
Cabinet Member for Highways and Transport, Kent County Council.

Executive Summary

In Kent County Council we have significantly developed our approach to asset management in highways in recent years, including introducing measures to implement the Well-managed Highway Infrastructure code of practice. As a result we have been able to maximise Department for Transport Incentive Fund resource, secure additional funding, and continue successfully defending claims.

Despite making substantial progress in recent years, we recognise we are in an increasingly challenging environment, with deteriorating assets, increasing traffic volumes, uncertainty around future funding and, more recently, coronavirus impacts.

We have therefore developed this comprehensive Highways Asset Management Plan. This is a forward-looking document covering the next five years which:

- includes a vision statement
- sets out how asset management contributes to achieving strategic outcomes, including environmental, active travel and road safety priorities
- describes how we manage our assets and make decisions based on risk
- explains what we know about current and predicted asset condition
- sets out our service levels alongside an assessment of associated risks
- outlines our significant improvements and achievements
- includes a five-year forward works programme, and
- includes an action plan to further improve our approach to asset management, contributing to achieving environmental, active travel and road safety objectives.

This document should also be seen as an Investment Strategy and Action Plan for the next five years. Importantly, it seeks to move towards treating the management and maintenance of our highway assets as a multi-year endeavour and highlights the importance of consistency of funding and approach over that longer period, to enable us to deliver a more efficient service with better condition outcomes.

This document also sets out in detail what the continuation of current funding levels would buy in terms of highway asset condition, the services we provide (and equally those we do not), and the level of risk associated with that balance. It also illustrates how changes in our budgets would affect future asset condition.

If that available resource over the next five years is considerably different to the broad levels of funding assumed in our analyses, the new document provides detailed information to enable informed decision-making around how we may prioritise investment going forward, and how we may adjust the services we provide understanding associated risks.

Introduction

Kent County Council (hereafter 'we') maintains around 5,400 miles of highway network and associated assets including bridges and other structures, gullies and drains, street lights, traffic signals, trees, grass verges, signs and road markings.

Asset	**Quantity**	**Estimated Value**[i] (The cost of a like for like replacement)
Roads	5,400 miles (8,700 kilometres) of roads	£6,400 million
Footways	4,000 miles (6,400 kilometres) of footways	£1,200 million
Drainage	275,000 roadside drains 41,250 chambers/manholes 3,850 miles (6,200 kilometres) of gully leads and carrier lines 8,500 soakaways 250 ponds and lagoons 15 pumping stations 346 small culverts	£3,700 million
Structures	1,100 bridges and viaducts 570 large culverts 450 other structures 2 tunnels and an underpass	£1,300 million
Crash Barriers	160 miles (250 kilometres) of safety barriers	£61 million
Street Lighting	122,500 street lights 17,700 illuminated signs 4,100 illuminated bollards	£175 million
Intelligent Traffic Systems	740 sets of permanent traffic signals 470 electronic information signs 170 CCTV cameras	£54 million
Signs and Lines	196,400 unlit signs 80 miles (130 kilometres) of pedestrian guardrail 9,200 miles (14,800 kilometres) of road markings 700,000 cats' eyes	£42 million
Soft Landscape	505,000 trees 3,200,000 m^2 of urban grass verges 2,900 miles (4,600 kilometres) of rural grass verges 572,200 m^2 of conservation verges	*These are not currently included in the valuation estimate*

[i] Figures from the 2019/20 valuation prepared for Whole of Government Accounts

Land	28 square miles (73 square kilometres)	£11,600 million

Our highway network is the most valuable asset we own, with an estimated like-for-like replacement value of over £24.4 billion, and we have statutory obligations under the Highways Act 1980 and other legislation to maintain the highway in an appropriately safe and functioning condition.

Highways asset management describes a common sense, systematic approach to designing, constructing, maintaining, modifying and replacing assets in the most cost-effective manner whilst also taking into consideration the performance of the asset and the risks involved in managing it. Asset management has been widely accepted by central and local government as a way of using knowledge and forward planning to manage the highway network efficiently and effectively, and whilst we have always taken a largely asset management-based approach to maintaining our highway assets, the introduction of the Department for Transport's Incentive Fund and of *Well-Managed Highway Infrastructure: a Code of Practice* several years ago required us to take a fresh look at our polices and processes and to document and develop them.

Whilst we are very confident that we continue to meet the requirements for an Incentive Fund Band 3 (top-ranked) authority, we recognise that this is dependent on continually monitoring and developing the ways in which we embed asset management principles in the management of our highway network, and we are committed to doing this in order to best meet the current and future needs of our residents, businesses, visitors and communities.

This document, which replaces the suite of documents *Our Approach to Asset Management in Highways, Implementing Our Approach to Asset Management in Highways*, *Developing Our Approach to Asset Management in Highways*, *Applying the Code of Practice in Kent, Implementing the Code of Practice in Kent and A Risk Based Approach – Service Level Risk Assessments*, sets out our approach to highways asset management over the next five years, specific actions to further improve that approach and a multi-year investment plan. It comprises six parts:

Part 1: Background and Context describes the background to our adoption of highways asset management principles and sets it in the context of our legal obligations and strategic objectives.

Part 2: Implementing *Well-managed Highway Infrastructure: A Code of Practice* describes the introduction of a new Code of Practice for highway maintenance and our subsequent implementation of key components of it.

Part 3: Implementing Asset Management Principles in Highways sets out how we are implementing highways asset management principles.

Part 4: Applying Asset Management Principles to Each of Our Asset Groups takes a detailed look at what our approach to asset management means for each of our asset groups, and what that means for each group over the next five years.

Part 5: Asset Management Improvements and Achievements lists our main improvements and achievements in highways asset management over the last two years.

Part 6: Our Future Approach and Action Plan sets out our Five-Year Vision, describes our strategic approach to highways asset management over the next five years and lists specific actions we will be carrying out in the coming years to further improve how we manage highway assets.

Part 1: Background and Context

Background

Our highway network enables safe and reliable journeys to be made around and through the county, and in doing so supports social wellbeing and economic prosperity. It is also essential for emergency services to execute their work: policing, healthcare, fire, and emergency response provision all require an effective highway network. Furthermore, the highway network is critical to the NHS emergency medical response, and enables patients, medical supplies and equipment to be transported quickly and safely. These services are a key part of a functioning society and cannot exist without well-maintained and well-managed highway assets.

We are committed to excellent management of our highway network, not only in order to meet the present needs of our residents, businesses, visitors and communities, but also taking into account the needs of future generations. Despite significant investment over the years, our highway assets are continuing to deteriorate. An ever-increasing number of repairs, renewals and improvements are required and the countywide maintenance backlog for our roads alone is estimated to be £464 million[i].

Funding of highway maintenance

Funding of highway maintenance comes from three sources. The majority is through capital grant funding from the Department for Transport (DfT), along with the council's revenue budget and capital borrowing.

During the six years to 2020/21, DfT capital funding has largely remain static, and is insufficient to maintain a multi-asset highway network as large and complex as Kent's. In addition, funding has not increased with inflation, nor to reflect traffic and network growth.

Given the impacts of the coronavirus pandemic, the government announced in October 2020 that it would be conducting a one-year spending review to prioritise its response to the pandemic. Following that, in mid-February, the DfT wrote to local authorities to say that there will be a single year capital settlement for 2021/22, and confirmed allocations. These allocations are, in real terms, 20% lower than in 2020/21 though higher than in 2019/20. The DfT has not provided details of future funding levels or any regime they may follow to allocate that resource, though a multi-year allocation is expected, most likely based on a developed and expanded Incentive Fund mechanism with an increased focus on sustainability.

[i] Value from the 2020/21 modelling

Against this backdrop, it is vital that we invest the budget we have in the most effective way we can for the benefit of our customers now and in the future. In recent years, our approach to delivering highway maintenance has evolved dramatically as we have sought innovation and efficiency, undertaken intelligent commissioning and procurement exercises and built productive and positive working relationships with partner organisations.

It is recognised by national commentators that in the past few decades government funding for local highway maintenance has been insufficient. This has in turn led to the rate at which local roads, footways and other highway assets deteriorate exceeding the rate of investment. Whilst we regularly lobby the government on this matter, we have recognised the challenge of highway maintenance and in the past couple of years have significantly increased highway maintenance investment. This has already had a positive effect and slowed down deterioration, but significant challenges remain. These are discussed later in this document.

The Department for Transport (DfT) Incentive Fund

In 2016 the DfT changed the way it funded highway maintenance through a phased introduction of the Incentive Fund, the aim being to encourage local authorities to embed the use of asset management principles into their management of their highway network and to clearly link investment and budget decisions with an understanding of their outcomes and associated risks.

Up until 2020/21, authorities were required to assess themselves against 22 questions covering asset management, resilience, customers, operational delivery, benchmarking and efficiency, leading to an overall score from Band 1 (the lowest) to Band 3 (the highest). The completed questionnaire is submitted annually to DfT and the score achieved determined the level of funding received during the following financial year. In mid-February, the DfT confirmed that we are required to submit a completed questionnaire for 2021/22.

Whilst we have always taken a largely asset management-based approach to maintaining our highway assets, the introduction of the Incentive Fund required us to document and develop our policies and processes. In a trial run early in 2016, we conservatively rated ourselves as a Band 1 authority, but during 2016 policy and strategy documents were developed and lifecycle planning for roads and footways introduced with the result that we were able to evidence Band 2. Further work in 2017 meant that by January 2018 we were able to evidence Band 3, and we have remained at that top level ever since.

In 2020/21, a little over 15% of our capital maintenance grant from DfT was dependent on being able to demonstrate that we are practicing good, risk-based asset management. Whilst we remain very confident that we are a Band 3 authority, we recognise that in order to continue evidencing this we need to be able to

demonstrate that the use of good practice is being continually monitored and developed.

The extent to which we have so far implemented asset management principles varies across our asset groups. For some, such as roads, we have comprehensive data, a detailed understanding of the asset lifecycle, and the tools needed to model different maintenance strategies and investment scenarios. For these assets, we are continuing to develop and refine a more sophisticated approach to asset management. For other asset groups, such as signs, lines and drainage, whilst there have been significant improvement in the last two years, the information we hold is more limited and although we have a good understanding of the asset lifecycle, we are still developing our ability to carry out detailed modelling of different performance or service levels. For these asset groups a simpler but valid approach has been adopted. The approach taken for each asset group is described in more detail in Part 4 of this document.

Well-managed Highway Infrastructure: A Code of Practice

In October 2016, the UK Roads Liaison Group published *Well-Managed Highway Infrastructure.* This code of practice is non-statutory; however, it will be deemed to be guidance of best practice by the courts. To comply with the code of practice we are required to demonstrate a robust decision-making process and an understanding of the consequences of those decisions and of how the associated risks are managed to ensure highway safety.

The code of practice is designed to promote the adoption of an integrated asset management approach to highway infrastructure based on the establishment of local levels of service through risk-based assessment. It recognises that the delivery of a safe and well-maintained highway network relies on good evidence and sound engineering judgement. A risk-based approach to highway maintenance needs to be founded on information that is sufficiently robust to enable decisions on levels of service, delivery methods and priorities for improvements can be taken and reviewed over time. Our asset information strategy details how information to support a risk-based approach to highway maintenance is collected, managed and made available in ways that are sustainable, secure, meet statutory obligations and facilitate transparency for network users.

Well-managed Highway Infrastructure provides guidance to support the development of approaches to highway maintenance that are in accordance with local needs, priorities and affordability. In the interest of route consistency for highway users, all authorities are encouraged to collaborate in determining levels of service, especially across boundaries with neighbours responsible for strategic and local highway networks. Moreover, the principles set out in *Well-managed Highway Infrastructure* are intended to influence the ongoing development and evolution of the approach taken to asset management in highways. In accordance with asset management

principles, the highway network should be considered as an integrated set of assets with due consideration given to the need to balancing the needs and interdependencies of different asset groups.

Well-managed Highway Infrastructure states that “Where authorities elect in the light of local circumstances to adopt policies or approaches different from those suggested by the Code, it is essential that they are identified, together with the reasoning for such differences, be approved by the authority’s Executive and published.” However, our Constitution states that “The Leader and Cabinet Members should…(d) participate in the approval by the full Council of Kent-wide policies and budgets; (e) lead the development of policies for the delivery of services to the whole community of Kent” [Article 2(2)]. Therefore, in addition to approving any deviations from the code of practice, the adoption of the principles of the code of practice and any fundamental changes to existing policies or service standards will be subject to Executive approval and publication.

This document outlines how we apply the principles in the Code of Practice to the way we work and measure our success to ensure continuous improvement and a focus on our Strategic Outcomes. Details of our approach will be actively communicated through engagement with stakeholders in setting requirements, making decisions and reporting performance.

Our Legal Obligations

We have legal obligations to keep public highways available and safe for the passage of the travelling public. Our statutory duties are outlined in several pieces of legislation including:

The Highways Act 1980 - outlines our duty of care to maintain the highway in a safe condition and protect the rights of the travelling public to use the highway.

The Traffic Management Act 2004 - conveys a network management duty whereby we are required to facilitate and secure the efficient movement of traffic on the highway network.

The New Roads & Street Works Act 1991 - requires us to co-ordinate road works and to protect and make best use of the existing network.

The Road Traffic Act 1991 - describes our statutory responsibility to promote road safety and take measures to prevent collisions.

Traffic Signs Regulations and General Directions 2016 - prescribes the design and conditions of use of traffic signs on or near roads in England, Scotland and Wales.

The Construction (Design and Management) Regulations 2015 - details our duties to ensure that the work we do is designed and built competently and that

risks to the work force and road users are properly considered and effectively managed throughout the lifecycle of a highway asset. These regulations places controls on how and when works are carried out.

The Equality Act 2010 – created the public equality duty which requires us to have due regard for advancing equality by removing or minimising disadvantage, encouraging participation and taking steps to meet the needs of all people from protected groups where these are different from the needs of other people.

Town and Country Planning Act 1990 – provides planning protection to trees in conservation areas or protected by Tree Preservation Orders (TPOs).

The Wildlife & Countryside Act 1981 – details the environmental legislation that we need to follow to ensure that we minimise our impact on local biodiversity whilst carrying out highway asset maintenance.

Public Nuisance – an action without lawful cause or excuse which causes anger, injures health or damages property.

A systematic, asset management and risk-based approach contributes to our ability to meet our legal obligations and to deliver and develop our services.

Our Strategic Objectives

In summer 2019, we began developing a new five-year strategic plan which would replace KCC's previous strategic statement, *Increasing Opportunities, Improving Outcomes*, which covered 2015-20. The new plan, *Kent's Future, Our Priority*, covering 2020-25 was to be approved at the County Council meeting in March 2020, but this meeting was cancelled as the country entered the first national COVID-19 lockdown. Further work on the plan was halted given the need to focus efforts of responding to the pandemic.

It was later decided that, given the severe impacts of the pandemic, a new interim strategic plan was needed. This plan, *Setting the Course*, was agreed at the December 2020 County Council meeting. It explains the immediate challenges Kent is facing and the actions KCC will prioritise to lead Kent through the next eighteen months. Development of a new 5 Year Plan to set KCC's longer-term priorities and ambitions for the county will begin later in 2021.

Our interim strategic plan *Setting the Course* recognises the importance of efficient highways asset management and the role this plays in both our short- to medium-term recovery from the effects of the pandemic and our long-term economic prosperity. This Highway Asset Management Plan document outlines our approach over the next five years to managing our highway assets, including our improvement action plan, investment strategy and forward works programme. This is centred around improving our knowledge of our assets, and having consistency of funding and approach, recognising that highway maintenance is a multi-year activity.

Following this approach will, over the period, improve quality, efficiency, and value for money, resulting in a highway network that is better able to support Kent's recovery from the pandemic and improve social and economic wellbeing.

Whilst Kent County Council's next five-year strategic plan will likely differ from the version that was to be agreed at the March 2020 County Council meeting, many of the themes and outcomes included in *Kent's Future, Our Priority* are likely to remain relevant to how and why we maintain our highways. As this Highways Asset Management Plan document covers the next five years, we have used these themes to illustrate below how our approach to highways asset management and planned improvements support the people, services and businesses of Kent. In the event that the next five-year strategic plan differs significantly in terms of outcomes we will review this analysis.

Enterprise and investment

A well-managed highway network is essential to attracting business enterprise and investment and to making the county a great place to live and work. In support of this outcome we will:

- Ensure, through reviewing our highway maintenance hierarchy and refining our scheme identification process, that we prioritise maintenance of key routes essential for the movement of goods and people within and through the county, including our Resilient Highway Network.
- Recognise that the way we manage our highway network has a role to play in creating places where people choose to live and work, and liaise with developers and district councils to encourage the design of residential developments and town centre enhancements which will continue to look good and serve their intended purpose well into the future.
- Support economic growth with a focus on deprived communities by ensuring that those parts of the county which have suffered economic hardship are not disadvantaged by the way we manage our highway network, including prioritising such areas where appropriate.
- Encourage a culture of innovation in the way we manage our highway network, including supporting the Live Labs project and continuing to develop our process for trialling and adopting new or alternative materials and technologies including the use of waste materials.

Securing sustainable infrastructure

We will work with developers, district and borough councils and others to:

- Develop and share best practice on the design of highway assets through the Kent Design Guide and supplementary technical guidance including a new Kent Pavement Construction and Maintenance Manual.

- Continue to roll out and refine our Technical Approval Process for new and renewed highway assets, encouraging designers to consider lifecycle costs, embedded carbon and maintainability early in the design process.
- Recognise the need for transport infrastructure to adapt to such diverse issues as climate change, electric and autonomous vehicles, and the county's ageing demographic, and review the impact of such changes on the way in which we manage our highway network.

Connected transport and communities

Following on from successful projects to introduce an asset management approach and implement the code of practice *Well-managed Highway Infrastructure* (WMHI), we will further improve the way highway maintenance is managed to make our highways safer, more sustainable and more resilient by:

- Continuing to develop our knowledge of our highway assets and their lifecycle cost and performance, including improving the ways in which we survey our roads, footways and cycle tracks and use relevant IT systems to analyse the data and model investment strategies.
- Implementing new highway maintenance hierarchies based on WMHI recommendations and assessing each road or other asset against the new categories.
- Optimising our risk-based approach to highway maintenance with the aim of re-focussing finite resource towards higher risks, looking at the full range of highways asset management services and considering the scope for introducing risk-based investigatory levels based on our maintenance hierarchies.
- Publishing a five-year Forward Works Programme to facilitate forward planning and cooperation, minimising the disruption caused by roadworks and keeping our residents and businesses informed about works which may affect them.

A cleaner and greener Kent

The ways in which we manage our highway network have an important part to play in improving quality of life, health and wellbeing for our residents, and in protecting the environment for future generations. Going forward, we will:

- Support the promotion of viable alternatives to the car and encourage active travel by increasing the priority which we give to our footway and cycle track network, including launching a targeted programme to improve the quality of our footways, and reviewing and developing our network of cycle routes.
- Introduce a programme of tree planting to address the loss of street trees and improve the quality of our urban environments, and continue to improve the

ways in which we manage our grass verges and other soft landscaped areas to support biodiversity.

- Consider the environmental impact of the ways in which we manage and maintain our highway assets and seek to identify, trial and implement changes which will reduce our carbon footprint.

Stronger and safer Kent communities

We recognise that the quality and condition of our highway network impacts on people's perception of the area in which they live, and on their ability to travel safely and actively engage with their local community.

We will support the development of schemes to tackle speeding and improve road safety to ensure that any additional maintenance costs are proportionate to the benefits achieved, and that such schemes are designed to remain fit for purpose well into the future.

Opportunities for children and young people

We recognise that the quality and condition of our highway network impacts on the ability of children and young people to access education, health and leisure opportunities.

When reviewing the ways in which we manage our highway network we will consider the specific needs of children and young people, including seeking to improve our network of cycle routes so that as far as practicable they are suitable for use by unaccompanied older children.

Quality health, care and support

We recognise that the quality and condition of our highway network impacts on the ability of people to travel to health and care services, to receive support in their homes, and to engage in leisure activities which promote good mental and physical health.

In particular, we are aware that the condition of footways can have a disproportionate impact on disabled and older people, a demographic continually increasing both in size and as a proportion of Kent's population, and we intend to review the way we prioritise footway maintenance to take into account areas used by a higher proportion of older or disabled people.

Local Transport Plan 4: Delivering Growth without Gridlock 2016–2031

Highway maintenance and asset management are included in our current Local Transport Plan (LTP4) *Delivering Growth without Gridlock 2016-2031*. The evidence base for this plan is the *Growth Infrastructure Framework* (GIF), a document we developed with the twelve districts and Medway Council to identify infrastructure requirements up to 2031.

In March 2017, as a sister document to LTP4, we adopted our *Active Travel Strategy*, which has the vision to 'make active travel an attractive and realistic choice for short journeys'. The condition, maintenance and management of existing walking and cycle routes is a central feature of this strategy and outlines the importance of maintaining highways assets that enable alternatives to travel by motor vehicles.

Since LTP4 was adopted, the policy, economic and social context in which we are operating has substantially changed. We are therefore planning to prepare a new Local Transport Plan to respond to the challenges and opportunities that come from this new context.

Whilst the policy direction and proposals are yet to be determined, the inevitable outcome is that our highway assets remain as important than ever. We will not be able to respond to emerging policy on walking and cycling, or create an environment for future forms of mobility that can help decarbonise the transport sector and improve people's health if the condition of the highway network's assets cannot provide a fit-for-purpose level of service. As such the continued priority that a new plan will champion is the need for securing a sustained and sufficient investment in asset maintenance as set out in this document.

An Expanding Highway Network

The highway network increases in size year on year and so too do the number of assets we maintain.

Although we are not obliged to adopt new roads, the Highways Act 1980 gives us the power to adopt highways by Agreement. In doing so, we support economic growth and can ensure that the roads and other highway assets constructed are installed to an acceptable standard that will benefit the residents, businesses, local communities and public/emergency/health services. When a new section of highway is adopted, a commuted sum is paid for some assets to fund future maintenance.

In some instances, developers choose not to enter into an Agreement with us and these streets remain under private ownership. Equally, if the developer fails to construct the adoptable highway assets to the required standard it will not be adopted.

Funding and Approach

Highway assets typically have a serviceable life of many years, in some case several decades, though this is affected by factors such as traffic loadings, weather, utility openings, and third-party damage. Given this and the scale of the highway network in Kent, it is important to recognise that highway maintenance is a multi-year activity, rather than an annual one. The current focus on annual budgets, forecasts and programmes, together with a lack of funding and approach certainty means that the service delivered is less efficient and optimised than it could be, ultimately resulting in poorer asset condition.

Part 2: Implementing *Well-managed Highway Infrastructure: A Code of Practice*

The Highway Network

Network Hierarchies

There are several classifications and hierarchies used for the planning and prioritisation of highway inspections, maintenance, renewals, improvements and new installations:

- **Road Classifications** (and reclassifications) are administered by local authorities, following the Department for Transport's statutory guidance on road classification and the primary route network. To the user, the road network is a single entity. In order to help road users navigate from one place to another, and to help with effective management of the network, there are three systems through which roads are organised and classified nationwide - the strategic road network, the primary route network and roads classification.
- **The Resilient Highway Network** is "the portion of our highway network that is vital to maintaining economic activity and access to key services during extreme weather emergencies and other major incidents". The purpose of defining this network is to identify the most important routes and associated critical highway assets, such as bridges, so that planned whole asset maintenance on that part of the network may be prioritised so that they are more resilient. Details of our Resilient Highway Network are published on our website.
- **Maintenance Hierarchies** are used to prioritise planned and reactive maintenance and safety inspections.
- **Critical Highway Infrastructure** is considered to be those assets where failure would result in significant impact to the local, and potentially the national, economy. Critical infrastructure assets form a crucial part of the highway network.
- The **Winter Network** is divided into primary and secondary routes and provides a minimum essential service to the public which includes links to the strategic network, access to key facilities and local communities. Precautionary salting of these routes is undertaken in accordance with the Winter Service Policy which is published on our website and reviewed annually.
- **Flooding Hotspots** are defined as 'flood prone sections of the highway network' and are identified using drainage and flooding enquiry data. They are used to prioritise drainage maintenance, renewals and improvement works, where appropriate.

Whilst it is inevitable that different asset types might have their own hierarchies, all should be related such that each asset type can be considered in relation to others and to the whole highway network.

Defining our Integrated Highway Network

The system of road classification used by the government does not necessarily reflect local needs or actual use now and in the future.

It is important that hierarchies are defined and published for all elements of the local highway network. The inherent links between some asset groups such as signs, lines and roads may mean that these network groupings are subsumed into a single hierarchy. Where asset hierarchies differ, they will all be founded on the principle of highway functionality and the desirability for a consistent approach with a view to achieving a high degree of compatibility.

A particular issue which we are seeking to address by the introduction of a specific hierarchy for our footways is that of footways alongside main roads outside of urban areas. Whereas the road hierarchy may attribute a higher priority to these sections due to the nature of the road, in truth the accompanying footways are often not of the same importance, but are disproportionately costly to maintain. Formally placing such little-used footways in a lower category and maintaining them accordingly would enable more of the budget to be spent in town centres and other areas where footways are regularly used, and where we have higher populations of older or disabled people.

A further issue we are intending to tackle, as a result of our review of the main maintenance hierarchy, is that of little used rural lanes. There are several of these that are used infrequently, sometimes impassable and given their condition would be disproportionately costly to maintain. The current hierarchy categorises all minor roads the same, when in reality this category of road includes a wide range of road types, uses and construction.

Specific considerations will be dependent on the nature of the asset type. However there will be consistent themes that underpin the hierarchy definition, as below:

- **Importance** – this may include key routes between towns, connecting the strategic road network and main routes to critical infrastructure such as hospitals, schools and power stations
- **Environment** - rural, urban, busy shopping streets, residential streets, country lanes etc.
- **Usage** – this may include factors such as the volume and type of users, designations as traffic sensitive, diversion or ceremonial routes and the character and volume of traffic on the adjoining road
- **Site history** - this may include factors such as historic casualty data, historic flooding data and crime statistics

- **Asset specific considerations** – this may include factors such as height or weight restrictions, historic structures, construction materials or the position with respect to the road, footway or cycleway.

Risk Based Approach

Context

As an organisation concerned with service provision and the social and economic development of the county, efficient and effective risk management is essential. By implementing sound management of our risks and the consequential threats and opportunities, we will be in a stronger position to deliver our business objectives, services that reflect local needs and achieve better value for money. Risk management is therefore at the heart of good management practice and corporate governance arrangements. Our approach to risk management is proactive and enables decisions to be based on properly assessed actions and events that balance risk and reward with a view to ensuring that the right actions are taken at the right time.

It is not possible to eliminate all risk. Whilst some mitigation is often possible, it is important to understand the degree of risk and the potential consequences. These can then be balanced against the cost of reducing or eliminating the risk and the benefits of accommodating the risk.

We have a mandatory approach to risk management called the Risk Management Policy & Strategy 2020-2023 which is published on our website.

Risk Management in Highways

Meaningful risk management is an intrinsic part of the management of our highway infrastructure. Inspections, maintenance, renewals and improvements present extensive choices and therefore it is vital that the impact of implementation and the consequences of failure are fully understood. In addition, there is a variety of external influences which impact on the performance of the highway network. Weather, budget, political direction and demand from other service areas also need to be considered when determining the approach to maintenance and investment.

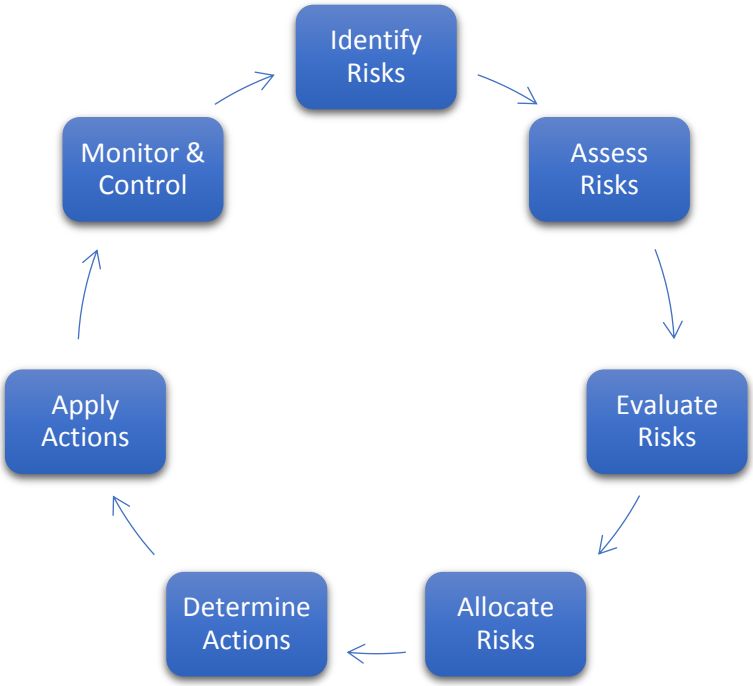
Adopting a risk-based approach has facilitated the establishment and implementation of levels of asset condition and service standards that are appropriate to their circumstances.

We have adopted a risk-based approach for all aspects of highway infrastructure maintenance, including setting levels of service, inspections, response, resilience, priorities and programmes. The management of current and future risks has been embedded within our approach to asset management and service delivery.

Strategic, tactical and operational risks have been included as have appropriate mitigation measures.

Risk Management

We have adopted a risk management approach which aligns with the Office of Government Commerce recognised best practice guidance – Management of Risk: Guidance for Practitioners. The approach is an iterative process to enable continuous improvement and is summarised below:



Identify Risks

Identifying risks is a crucial opportunity to ensure that risks are visible throughout the organisation. At this point risks are considered in their unmitigated state to allow for later prioritisation. Issues to be considered as part of the risk identification process may include:

- What are the risks to achieving the asset management strategy and levels of service?
- What is the source of each risk?
- What might happen?
- What would the effect be?
- When, where, why and how are these risks likely to occur?
- Who might be involved or impacted?
- What controls presently exist?
- What could cause the control to not have the desired effect on the risk?

A common approach is to commence the risk identification at a high level to obtain an assessment for the level of overall risk exposure. This may then be followed by a detailed assessment of more specific risks where critical assets, critical failure modes and high-risk areas can be defined and analysed in greater detail.

Assess Risks

Having identified the risks it is important to understand the potential consequences, positive or negative, and the likelihood of that impact being realised.

Consequence is the outcome of an event, such as increased journey times, isolation of local communities or a drop in public perception of the service provided. It can have positive or negative effects and can be expressed qualitatively or quantitatively. The consequences associated with an event leading to failure or service reduction may include:

- **Safety** – including fatalities and personal injuries
- **Functionality** – impact of a loss or reduction in service at route, asset or component level, such as weight restrictions on a bridge
- **Cost** – increased costs due to bringing forward or delaying work, repair costs, fines or litigation costs and loss of income or income potential
- **Sustainability** – any impact on future use of highway infrastructure assets
- **Environment** – environmental impacts, such as pollution caused through traffic delay or contamination from spillages, the sensitivity of the route/area, etc
- **Reputation** – public confidence in organisational integrity, and
- **Community costs** – damage to property or other third-party losses, which may include business impacts, traffic delays, etc.

Likelihood is the chance of an event such as an asset failure or a fatality on the highway happening. It can be measured objectively, subjectively, qualitatively or quantitatively depending on the level of information available. However, there are several issues that need to be considered, including the following:

- changes in policy and funding
- current and historic performance (severity and extent) of the asset
- rate of deterioration and/or current age of the asset
- asset type, material type, mode of failure, extent of failure, etc.
- exposure to incidents of all types
- human behaviour and workmanship
- vulnerability to climate change
- quality of asset management approach and systems.

The likelihood of physical failure of an asset is related to the current condition of the asset, hence the importance of accurate condition assessment. The likelihood of

natural events is determined less easily but scientific studies are usually available. The likelihood of other events, such as poor work practices or planning issues can be difficult to ascertain. We have an established matrix-based approach for determining risk levels.

Risk Rating Matrix			Impact				
			1	2	3	4	5
			Minor	Moderate	Significant	Serious	Major
Likelihood	1	Very Unlikely	1 Low	2 Low	3 Low	4 Low	5 Low
	2	Unlikely	2 Low	4 Low	6 Low	8 Medium	10 Medium
	3	Possible	3 Low	6 Low	9 Medium	12 Medium	15 Medium
	4	Likely	4 Low	8 Medium	12 Medium	16 High	20 High
	5	Very Likely	5 Low	10 Medium	15 Medium	20 High	25 High

Our Standard for Determining Risk Levels

The target residual rating for a risk is “medium” or lower.

Evaluate Risks

All identified risks need to be evaluated against the risk appetite, and risk tolerance provides an assurance of a consistent approach to the measurement of risk and appropriate management and escalation. We recognise that risk is inherent in delivering and commissioning services, including highways services, and aims to have an open approach to risk, appropriately balancing risk against reward, with risks managed in a proportionate manner.

With increasing spending demands, a higher level of risk may need to be accepted in the future. This will require an approach that allows flexibility and support for well-informed and considered risk taking, promoting transparency and effective risk management, while maintaining accountability.

Allocate Risk

It is important that risks are suitably allocated to a stakeholder who is best placed to take ownership and manage them effectively. For example, the risk of a critical asset failure is best allocated to the asset manager who has the level of understanding to determine potential actions and the consequences of those actions, the authority to apply the selected action and the information and knowledge to monitor and control the risk in both the short and longer term.

Determine Actions

Mitigation options need be identified for all risks assessed to be unacceptable and there will often be many options to reduce the likelihood and/or consequence. It is therefore important that a logical approach to determining appropriate, proportionate and viable solutions to eliminate, reduce or control risk and enhance opportunities is established.

Some risks can be addressed more easily and effectively than others and costs may range significantly. Therefore, analysis of the costs of risk reduction against different options will facilitate identification of the optimum solution. It should be noted that in addition to the financial implications, the potential actions need to be considered in the wider context of our strategic objectives and legal obligations i.e. the most cost-effective action is not appropriate if it contradicts our strategic objectives, breaches our legal obligations or could significantly damage our reputation.

Apply Actions

Prior to applying actions, the assessment and evaluation stages need to be revisited to determine the residual risk and therefore the effect of the risk action. Having confirmed that this is satisfactory, the Action Owner is confirmed as are the appropriate reporting arrangements. For example, if the action involves significant service reductions, or significant changes in the way that services are delivered, approval by the Cabinet Member, Cabinet or Leader will be required. Moreover, if significant service changes are being made due to efficiency, economy or effectivity then formal consultation will be necessary.

Monitor and Control

Risks are not static and external and internal events can alter the likelihood and impact of risks. It is essential to continue reviewing risks and checking that actions to manage them are progressing to plan. All highway risks are routinely reviewed alongside other business management activities such as performance and financial reporting. Moreover, when emerging events or emergencies occur new and existing risks are assessed and responded to.

Inspections and Surveys

We are not statutorily obliged to carry out inspections of all highway elements but are strongly advised to undertake safety inspections in accordance with the principles of *Well-managed Highway Infrastructure*. Inspection and survey regimes should be planned using a risk-based approach to provide increased levels of scrutiny to areas or assets deemed to be of higher risk.

An effective regime of inspection, survey and recording is the most crucial component of highway infrastructure maintenance and intrinsic to the management

of risk. It provides basic information for addressing the core objectives of highway maintenance namely:

- network safety
- network serviceability
- network sustainability

The characteristics of the regime are defined following an assessment of the relative risks associated with potential circumstances of location, agreed level of service and condition. For example, an eighty-year-old bridge carrying a main road over a live railway line has greater risks associated with it than a new footbridge over a ditch on a rural footpath. The former may require two-yearly visual inspections and six-yearly detailed inspections supported by detailed reporting to reflect the complex nature of the structure. For the latter, it may be sufficient to carry out two-yearly visual inspections with a “check list” style report and no detailed inspections if the simplistic nature of the structure means that all components are easily accessed and visible.

Regardless of the specifics of the regime, it is crucial that they are applied systematically and consistently. Moreover, it is important to recognise that all information recorded, even if not primarily intended for network safety purposes, may have implications for safety. As such these records may be relevant to legal proceedings and consequently have to be made available for public inspection and reference.

We undertake a range of inspections and surveys with respect to the highway and its components:

Safety Inspections

The safety inspection regime forms a key aspect of our approach to managing liabilities and risks. A countywide team of inspectors is tasked with the identification of all defects likely to create danger or serious inconvenience to users of the network or the wider community. The risk of danger is assessed on site and the defect identified with an appropriate priority response. The regime has been developed using a risk-based approach and provides a practical and reasonable approach to the risks and potential consequences identified. Moreover, it takes account of potential risks to all users, particularly the most vulnerable.

The processes and standards that underpin this regime are detailed in the Safety Inspections Manual and are reviewed annually.

Service-specific Inspections

The inspection requirements of different asset groups can vary significantly due to their composition and the way in which they function. Service inspections are tailored to the requirements of specific highway assets and elements to ensure that

they meet requirements for serviceability. Examples of these types of inspections include electrical testing of lit signs and structural testing of street lighting columns. These inspections also include inspections for network integrity and for regulatory purposes intended to maintain network availability and reliability.

Condition Surveys

Condition surveys are primarily intended to identify asset deterioration which, if untreated, are likely to adversely affect long term performance, serviceability and safety. The data collected can be used to forecast life expectancy, to determine when intervention may be appropriate, to model the impact of different intervention strategies and to compare the likely costs. In addition, the information collected informs government indicators and the annual valuation of the highway network.

We will continue to implement asset condition surveys based on asset management need and in accordance with our statutory reporting requirements.

Structural Assessments

Structural Assessments are carried out on a targeted basis to determine the capacity of a structure to carry the loads which are imposed upon it and increases in load that may be reasonably expected in the foreseeable future.

Reactive Inspections

We proactively encourage our customers to report highway defects via our Online Fault Reporting Tool and a dedicated highways line to our Contact Point.

Reports from members of the public provide a further source of knowledge on the condition of the highway network. To maximise the value of this information, appropriate quality assurance measures are needed. As such, a regime of reactive inspections is in place to support the validation of reports, ensure duplicate reports are identified and combined, and to maintain auditability of information. It is not always necessary to inspect a defect to determine the required response but the decision to inspect or not, and the outcome of any inspection should be recorded systematically and consistently.

In order to maximise the benefits of the risk-based approach prescribed by WMHI and ensure so far as is practicable the safety of road users, we have developed and continue to improve our approach to identifying and resolving defects on the highway. This is now embedded in our works asset management system which records the relevant risk and timeframe for resolution including mitigating or aggravating factors. These principles extend to all asset groups.

Defect Recording and Repair

All defects observed during service, safety, condition and reactive inspections need to be recorded and the type and speed of response determined on the basis of a risk assessment.

Defects that require urgent attention should be corrected or made safe at the time of the inspection, if reasonably practicable. In this context, making an asset safe may constitute displaying warning notices or fencing off to protect the public from the defect. If it is not possible to correct or make safe the defect at the time of inspection, repairs of a permanent or temporary nature should be carried out as soon as possible. If temporary repairs have been used, permanent repair should be carried out within a reasonable period.

Defects that do not represent an immediate or imminent hazard or risk of short-term structural deterioration may have safety implications, although of far less significance than those which are considered to require urgent attention. They are more likely to have serviceability or sustainability implications. If repairs are to be undertaken these are likely to be within a planned programme of works with their priority determined by risk assessment. For example defects in highway trees may be identified during condition inspections and if the defect does not present an immediate safety threat, works will be ordered to reduce the risk of failure, eliminate the hazard or improve life expectancy of the tree. Access requirements, other works on the network, traffic levels, and the desirability of efficient traffic management, should also be considered as part of prioritising and scheduling the works.

We have developed and implemented a risk-based defect repair regime for all highway assets.

Managing the safety and other risks associated with the delivery of highway infrastructure maintenance requires effective and co-ordinated information systems to record inspections, defect reports, condition assessment and activity. The accuracy and quality of information recorded is crucial to the effective management of the service and to demonstrating that we are a competent highway authority.

All information obtained from inspections and surveys, together with the nature of response, including nil returns, should be consistently recorded. It is important that the data from inspections and surveys can be reviewed and analysed both independently and in conjunction with other information to enable a holistic understanding of the future maintenance need, asset condition and trends related to network characteristics and use.

We have developed and implemented mechanisms for recording all inspections and subsequent activities to justify decisions made, inform future decision making and protect us from unjustified or fraudulent claims.

Competence and Training

To ensure that inspections, risk assessments and the analysis of the resulting information is meaningful and valid, appropriate competencies for all staff are required. Continued professional development is key to this and should be embedded in the annual Learning and Development cycle.

We will ensure that the appropriate competency required for asset maintenance and management is identified and that training is provided where necessary. This will include an eLearning module currently being developed.

All Highway Stewards and Inspectors are trained in compliance with the CIHT Highway Inspector Competence Framework and registered on the National Register of Highway Inspectors, additionally specialist training is delivered on topics such as basic arboriculture to equip them fully to competently inspect and ensure the safety of the highway.

Resilience and Sustainability

Kent, which provides key transport links between the capital and the continent, has some of the most intensively used roads in the country. Any disruption to the network has an immediate impact on road users, the economy, and services. Ensuring these roads are as resilient and sustainable as is practicable must be a priority.

Managing Highways for Resilience

Resilience as defined by the Cabinet Office is the “ability of the community, services, are or infrastructure, to detect, prevent and if necessary, to withstand, handle and recover from disruptive challenges”. Resilience in the context of highway infrastructure is the ability of a highway network to withstand not only the impacts of extreme weather (snow, ice or flooding) but also industrial action, major incidents and other local risks. The level of resilience sought for any length of highway needs to be commensurate with its intensity of use, economic or social importance and the availability of alternatives. The more intensively used and economically or socially important a route is, the shorter the disruption that is acceptable.

We have long had robust systems in place to respond effectively to severe weather emergencies and we already take a hierarchical approach to the management of our 5,400 miles of highway network. In September 2017, this approach was enhanced further when The Environment & Transport Cabinet Committee endorsed the *Definition of the Resilient Highway Network in Kent*.

In addition to the physical resilience of highway infrastructure, the management of disruption and speed of recovery are also key. There are several potential situations which could have a significant effect on the highway including inclement weather, subsidence, landslip or collapses, oil spills or local events such as Operation Stack.

We have operational plans and procedures in place with respect to winter service, severe weather events, unforeseen events, and civil emergencies. These plans have been developed in consultation with partner organisations and include roles, responsibilities and contingency plans and procedures to enable timely and effective response. Clear communication plans are also in place to ensure that weather and flood forecasts are received by operational teams and disseminated to staff, contractors and our customers.

Responses to severe weather, emergency exercises and actual response are used to identify training opportunities and potential improvements to operational plans and procedures. Where appropriate, reviews are carried out in consultation with multiple parts of the council and other responding organisations impacted by the event.

Critical Infrastructure

Critical Infrastructure refers to routes and assets where failure would result in a significant impact to the local, and potentially the national, economy, and affect the ability of public/emergency/health services to carry out their responsibilities. Critical infrastructure assets form a crucial part of the highway network and can be divided into two types. Firstly, the critical infrastructure that we maintain, for example strategic routes such as the Thanet Way. Secondly, the critical infrastructure that others maintain but that is reliant on highway assets, for example Ramsgate Port is heavily reliant on access via the Ramsgate Tunnel. There are many potential risks and threats to the function of critical infrastructure, such as climate change, including impacts from flooding, rising temperature, changing sea levels, high winds and drought.

We need to ensure the adequate management of critical assets, including appropriate investment to ensure that they are sufficiently resilient to cope with potential threats.

We have identified our critical assets and understand both their current performance and the impact of their failure. This knowledge informs our maintenance priorities and investment decisions. The document *Definition of Kent's Resilient Highway Network* details not only the critical network but also how it was derived and how it is treated.

Climate Change and Adaptation

The Climate Change Act 2008 established a statutory framework for climate change mitigation and adaptation and set in place a five-year cycle for government carbon budgets, to report on the risk to the UK of climate change and to publish a programme setting out how these impacts will be addressed. In 2019, the government increased its ambition and declared its commitment to achieve net-zero carbon emissions by 2050, incorporating this target within the Act.

We have also committed to achieving net-zero carbon emissions by 2030 for our own estate and operations and working with partners by 2050 for the county. This commitment extends to our contracted services and requires providers to:

- Confirm their own organisational commitment to working towards net-zero emissions for services they provide to us
- Identify and apply innovative approaches to avoid or minimise carbon emissions/embedded carbon from materials, equipment, vehicles and working practices
- Report on progress towards net-zero carbon emissions at least annually, providing a breakdown of data to identify scope 1, 2 and 3 emissions.

The government released the second National Adaptation Programme in 2018 containing a series of objectives and associated actions, most notably with regards to highway infrastructure. These actions included:

- To ensure infrastructure is located, planned, designed, and maintained to be resilient to climate change, including extreme weather events.
- To better understand the vulnerabilities facing local infrastructure from extreme weather and long-term climate change to determine actions to address the risks.
- To consider adaptation pathways and holistic lifecycle planning of assets to accommodate development in uncertainty and future changes.

As such, it is important that due consideration is given to how the impacts of climate change, such as intense or prolonged rainfall, hotter temperatures and higher windspeed will impact on the types of highway assets that we manage over the course of the asset's lifetime. Some of the risks may have the potential to be reduced by mitigation action and options for mitigating the greatest risks should be explored with a view to prioritising those measures that will provide the greatest return on investment in terms of reduced risk.

We are continually assessing the risk of extreme weather events on highway infrastructure and identifying ways to mitigate the impacts, and this has led to real change already. This has naturally focussed on flooding and drainage assets. For example, we are now pre-inspecting highway gullies on our main roads and cleansing flooding hotspot locations every six months. We are trialling the use of gully sensors in strategic locations and have mapped our flooding hotspots for areas which require drainage system renewal or enhancement using capital resource so that these may be prioritised.

We are moving towards implementing an asset management system to plot our drainage assets, in order to develop a smarter, evidence- and risk-based maintenance regime.

We are considering the effect of temperature rises on road surface material selection, both during contract awards and also in technical specifications that we are developing.

It needs to be recognised that some of the solutions to reduce the environmental impact of maintaining highway infrastructure are likely to be more expensive than current materials and methods, and this extra cost is currently not funded.

Sustainability

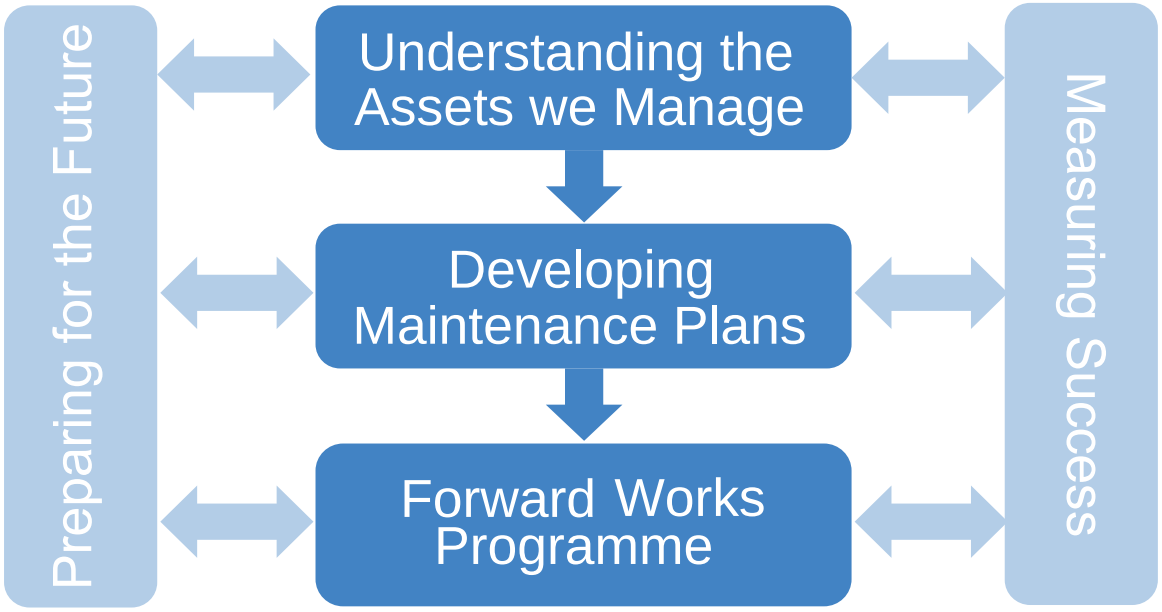
We have an important role in ensuring our residents and businesses benefit from sustainable growth and a competitive, innovative and resilient economy. This should be balanced with protecting and improving our natural and historic assets, for their unique value and positive impact on our society, economy, health and wellbeing. Materials and treatments used for highway maintenance can have a positive contribution to the public realm. There are a wide range of options, some of which are obligatory, but many of which provide for sympathetic application in particular circumstances. For example, the selection of appropriate vegetation and trees during the planning stage of new schemes can bring environmental, drainage and social benefits.

We will endeavour to balance the character of the area as well as whole life cost, environmental impact and sustainability when determining materials, products and treatments.

The management and maintenance of highway infrastructure have an inevitable impact on the environment and we therefore have a responsibility to make sure environmental risks and opportunities are managed positively and our use of natural resources is minimised for the benefit of future generations. Our Environmental Policy outlines the actions and objectives that underpin our approach. In accordance with this policy statement highway verges, trees and landscaped areas are managed with regards to their nature conservation value and biodiversity principles as well as highway safety and serviceability.

The Incentive Fund questionnaire, which determines a portion of highway maintenance capital grant the DfT provides authorities for 2021/22, includes a number of additional questions relating to sustainability and climate change challenges. For 2021/22 these questions do not affect funding levels but, in our view it is likely that this will change going forward. As such, this document includes a number of specific actions to meet our climate change and sustainability aims.

Part 3: Implementing Asset Management Principles in Highways



Understanding the Assets We Manage

The highway network is made up of a diverse range of assets including around 5,400 miles (8,700 kilometres) of roads, more than 2,500 structures, 250,000 roadside drains, 500,000 trees, 120,000 streetlights as well as 4,000 miles (6,400 kilometres) of footways and over 700 traffic lights. The replacement value of these assets is estimated to be in the region of £24 billion.

We understand different assets have different characteristics and so need to be managed differently.

Asset Information

Understanding both our assets and the effect they have on each other is central to effective asset management and informed decision making. We therefore do not consider the asset groups in isolation but as an integrated whole.

The information we need can be broken down into three categories:

Inventory and Condition Information

This data describes the full extent of an asset and can include location, age, size, construction, and details of previous maintenance. Examples of how we collect this data include digitalisation of historic records and data collection exercises included as part of routine maintenance works.

Inventory and condition information helps us to plan maintenance activities and communicate with the public. It also helps us to understand the cost of replacing our assets with equivalent new assets.

Performance Information

This is the data we use to determine whether assets are doing what we need them to do to keep the highway safe, reliable, and meeting the needs of our residents, businesses, visitors, and local communities. Examples of how we collect this data include condition surveys, routine inspections and testing, customer enquiries, third party claims, crash records, traffic flows and energy bills.

This data helps us to understand where we need to carry out maintenance activities, where our assets are going to need replacing now or in the future and where we need to think about changing, adding or removing assets. It also helps us to understand the cost of replacing an asset with its modern equivalent, less deductions for all physical deteriorations.

Financial Information

This is the data we use to assess cost: for example, how much it will cost to maintain or replace an asset or how much it will cost to deliver a certain level of service. Our schedule of rates for different maintenance activities is one example of this kind of data.

Collection of Asset Information

We continually collect information about our new, replacement and improved assets. It is important that the data we collect is accurate, reliable, and useful but data collection can be expensive. We therefore take a risk-based approach to the collection of information, prioritising high risk assets and information that will support our approach to asset management.

The quality, appropriateness and completeness of our asset data are reviewed regularly by our asset managers, as part of the Asset Information Plan, to ensure that it fully supports our approach to asset management.

Storage of Asset Information

We store all collected asset data, for each asset group, in an appropriate asset management system in a cost effective and appropriate format to ensure it is readily available to those that need it. Effective asset management relies on systems that can be used to support decision making at all levels.

Our asset inventory, condition and defect data are currently stored and interpreted in a number of ways.

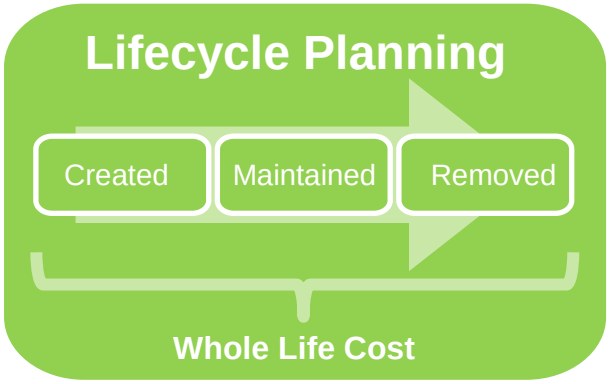
Asset Group	Systems Used
Roads and Footways	Works and Asset Management System (WAMS) and Horizons, a specialist pavement asset management system
Drainage	WAMS and Map 16
Bridges, Tunnels & Highway Structures	WAMS and AMX, a specialist database with details of inspection records
Street Lighting (including lit signs/bollards)	WAMS and Central Management System
Intelligent Traffic Systems	Information Management for Traffic Control (IMTRAC)
Soft Landscape	WAMS
Safety Barriers	WAMS
Unlit Signs, Lines & Cats' Eyes	We do not record details of this asset group but do undertake regular inspections and respond to customer requests to carry out ad-hoc visits to specific locations.

The systems that we use are also regularly reviewed and monitored by Asset Managers through the *Asset Information Plan*. This enables us to ensure that they are providing reliable information in a format that can be used to inform the delivery of our highway maintenance, renewals, and improvements effectively.

Developing Maintenance Plans

We have a three-step approach to developing maintenance plans for each asset group:

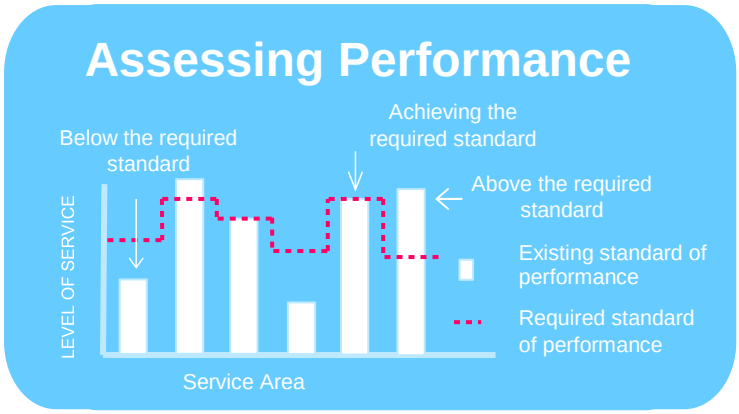
Lifecycle Planning



Firstly, we need to understand the 'lifecycle' of our assets.

All our assets are created, maintained, and eventually replaced or removed. We need to understand what is involved at each stage, when it needs to happen and how much it will cost. If we understand the lifecycle of our assets we can calculate the whole life cost, i.e. how much the asset will cost to create, maintain throughout its life span and finally decommission. We can also predict the impact of different maintenance strategies and determine whether we can afford them.

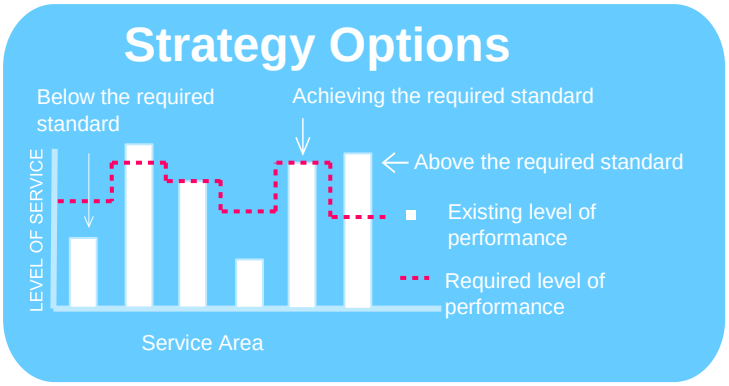
Assessing Performance



Secondly, we need to understand whether we are already delivering our required standard of service or performance. We can do this by measuring performance at three different levels:

Type of Performance Measure	**What are we measuring?**	**Example**
Strategic Performance	A snapshot of overall performance which tells us whether or not we are delivering the intended benefits to the county's residents, businesses, visitors and communities	**We want to**: deliver services that are shaped by the needs of the county's residents, businesses, visitors and communities. **Strategic Performance Measure**: we report key measures to Cabinet and use surveys such as the NHT public satisfaction survey and CQC efficiency network surveys to do this.
Asset Performance	More detailed information that tells us which asset groups are succeeding or failing to deliver the intended benefits to the county's residents, businesses, visitors and communities.	**We want to**: deliver services that are shaped by the needs of the county's residents, businesses, visitors and communities. **Asset Performance Measure**: we use condition data from a variety of asset specific surveys to understand if our assets are performing in accordance with our asset management plans. Key metrics are also included in Highways and Transportation's Divisional Operating Plan, and monitored in regular performance review meetings.
Operational Performance	Operational information that tells us why a specific asset group is succeeding or failing to deliver the intended service standards/ benefits to the county's residents, businesses, visitors and communities	**We want to**: deliver services that are shaped by the needs of the county's residents, businesses, visitors and communities. **Operational Performance Measure**: we use monthly measures to ensure we are delivering our published service standards such as 'the average time taken to fix a pothole'.

Defining a Maintenance Strategy



Finally, once we know where we are and where we want to be, we need to decide on our maintenance strategy.

- **Reduce the level of performance:** If the level of performance exceeds the required standard or is unaffordable it should be reduced. For example, the frequency of maintenance might be reduced, or the intervention level might be increased.
- **Sustain the current level of performance:** If the level of performance meets the required standard and is affordable it should be sustained.
- **Enhance the level of performance:** If the level of performance is below the required standard, investment to enhance the performance should be found. For example, the frequency of maintenance might be increased, or the intervention level might be reduced.

We must work within the constraints of our budget, particularly during difficult financial times, so it is also important to identify the most efficient and affordable way of delivering services.

- **Minimising whole life cost:** When considering different maintenance strategies, it is important to think about the future and keep costs to a minimum for the whole life of the asset. For example, repairing potholes might be cheaper than surface dressing a road in the short term but not if a consequence of this strategy is that the road deteriorates faster and needs to be reconstructed and resurfaced in five years' time.

  When required levels of performance are not financially viable it is important that we know the risks and prioritise accordingly:

- **Managing risk**: We need to understand and document the risks associated with different maintenance strategies and manage them effectively. For example, increasing the investigatory level for a road pothole from 50mm to 100mm will save money but would increase the safety risk, perhaps to an unacceptable level.

- **Enhance priority areas of the service**: Where it is not financially viable to enhance the level of performance across all assets within an asset group, key areas should be prioritised. For example, the frequency of maintenance on main roads might be increased whilst the current frequency is maintained or reduced on minor roads.

We publish information about how and when we do maintenance on our website. This lets members of the public see how we look after our assets, the levels of performance they can expect and when the work will be carried out.

Forward Works Programmes

Forward works programmes provide an effective and efficient way of delivering maintenance, repairs and improvements. They enable prioritisation and optimisation of schemes to meet available budgets.

Developing a works programme is a five-stage process:

Identification

Potential schemes may be identified from a range of sources including inspections, surveys, local knowledge, customer enquiries, complaints and wider transport or corporate objectives. These schemes are collated into an initial works programme for each asset group.

Prioritisation

The following things are considered when prioritising schemes:

- the maintenance hierarchy of the road
- the safety of road users
- the impact on the movement of traffic if the asset fails
- value for money
- the cost of bringing forward or delaying works
- the lifecycle cost of our highway asset
- the impact on future use of the highway
- the environmental impact
- the impact on the community including damage to property or impacts on local businesses

Selection

The lists of schemes for each asset group are combined, costed and listed in priority order. The “cut off” point is then determined by totalling up the cost to the point where the budget is fully utilised.

Programming & Optimisation

Selected schemes are optimised within the works programme, based on many factors including deliverability. This is done by coordinating or combining works to minimise both cost and disruption.

Delivery

Finally, a multi-year works programme is confirmed and delivered from the available budget.

We publish our programmes of work on our website, so that members of the public can see where and when we plan to do works. Our Forward Works Programme for the next five years is attached at Appendix C.

Measuring Success

We follow an asset management approach to deliver the following benefits:

- a service that is shaped by the needs of our residents, communities, visitors and businesses now and in the future
- a service that makes best use of the available resources, maximising efficiency to meet with our legal obligations
- a service that is resilient and able to respond to changes and financial challenges.

It is important that we record and demonstrate that these benefits are being delivered. We can do so at a number of levels and in a number of ways:

Monitoring Outcomes

We need to ensure that our approach is being implemented as planned and is delivering the intended outcomes. For example, if our maintenance strategy for roads is to ensure that 85% of our main roads are in good or very good condition, we need to carry out condition assessments to determine whether or not this is being achieved.

By routinely monitoring outcomes and reporting on their delivery we can ensure that we remain focused on the needs of our residents, businesses, visitors and communities, meeting with our legal obligations and responding to changes and financial challenges. Whilst our approach to highways asset management and our forward works programme should be considered multi-year activities, the delivery of outcomes is reviewed and reported on annually through a number of channels.

Performance Measures and Targets

We use a range of metrics and targets to monitor our performance against our levels of service and determine how well we are delivering the intended benefits.

Examples of these measures and targets include national indicators such as the Bridge Condition Index which measure the overall condition of our assets, the percentage of residents satisfied with street lighting repairs, and the number of damage and personal injury claims upheld against us.

By reviewing performance we can ensure that we are continuously improving the way we work. We routinely review the performance of the service, identify areas where performance is not where we would like it to be and understand why this is the case. Having recognised opportunities for improvement, options to address any issues are identified and implemented. Performance is reported on a regular basis to key decision makers, elected representatives and members of the public.

Benchmarking

By comparing our service with the services provided by others, we can identify better ways of working at all levels. For example, we might compare the outcomes we are achieving using asset management with the outcomes other councils are achieving. Equally we might compare two of our own services, for example residents might be more satisfied with the street lighting service than they are with the drainage service. By comparing the two, lessons can be learnt and improvements can be implemented.

For several years, until 2017, we commissioned an annual Highways Tracker Survey to help understand residents' perception of the highway service we deliver. This survey enabled us to compare the satisfaction levels from different parts of the service but being unique to Kent did not allow comparisons to be made with other councils.

In 2018 we joined the National Highway and Transport (NHT) Network, a performance improvement organisation that enables members to measure, share and compare performance in order to identify areas for improvement. This is done through 26 key benchmark indicators, divided between six highway and transport themes. Currently over a hundred councils are members of the NHT network.

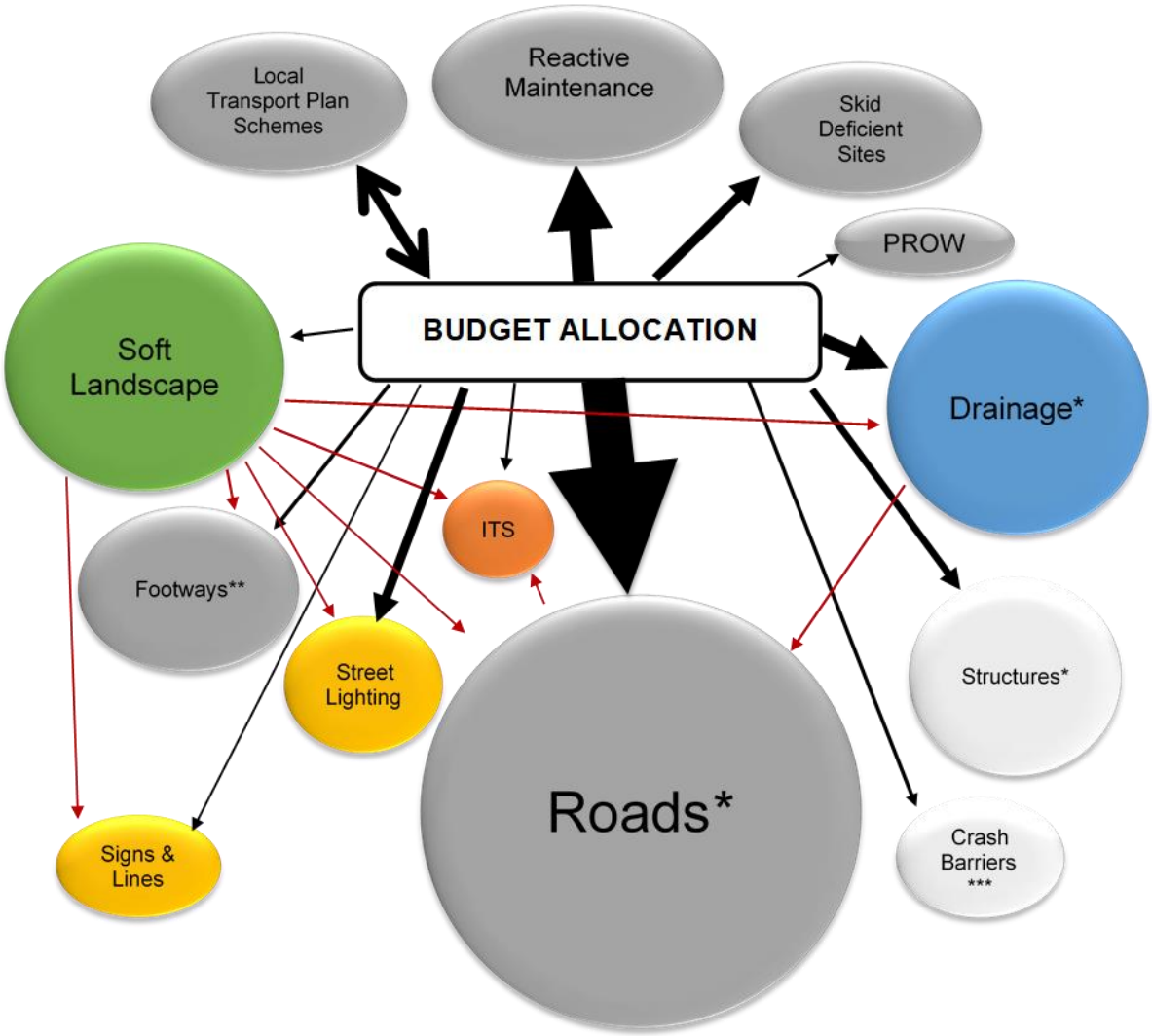
As well as allowing us to make a year on year comparison of public satisfaction with the service we provide it also enables us to compare the levels of satisfaction with our services to those achieved by other councils. A summary report on the latest surveys can be found on our website.

The NHT Network has also developed a consistent way of measuring and comparing efficiency within and between highway authorities. This is achieved in a balanced and objective way by providing a basis for assessment of performance by combining views of customers, from the NHT Public Satisfaction Survey, with quality and cost data provided by each individual member. We can then identify and implement service improvements. A summary report on the latest survey can also be found on our website.

Part 4: Applying Asset Management Principles to Each of Our Asset Groups

Overview

We recognise that although the highway network is made up of individual asset groups, each managed by a separate team, the assets do not operate in isolation and we therefore consider them as an integrated set, as illustrated indicatively below.



Key Asset Interdependencies

Notes:
The black lines represent the relative size of the allocation
The red lines show the interdependencies between asset groups.
* includes critical assets on the Resilient Highway Network
** asset with most impact on Equality Act duties
*** safety critical asset

Although the complexity of our approach to asset management varies across the asset groups, the same principles have been applied in all areas of the highway service.

The Asset

It is important to understand the type, quantity and value of the assets we maintain as well as their purpose and the effect their condition has on the condition and performance of other assets. For example, roads are our largest and most valuable asset and by comparison, our bridges, tunnels and highway structures make up a much smaller asset group with a much smaller financial value, but they form essential links that connect our roads and footways and are therefore intrinsic to the roads asset fulfilling its purpose.

By understanding the type, quantity, value and purpose of each asset group we can identify key interdependencies and make informed decision about the extent to which we need to develop our approach to asset management in respect to that asset group.

The condition and hence maintenance need of any asset is not only influenced by the use it gets but also by its original condition and that of other assets around it.

As can be seen above we consider soft landscaping and drainage have the greatest potential to adversely affect the performance and condition of other highway assets. Both of these are predominantly revenue activities, a funding stream that is supported by the government and that has seen the most significant budget reductions in recent years.

Condition Assessments and Inspections

All of our asset groups are subject to condition assessments and/or inspections. The information collected is used to identify the maintenance and improvement works needed to meet the required service standard and, with varying degrees of accuracy, to estimate maintenance backlogs and future investment needs.

The frequency and complexity of condition assessments and inspections is determined by the quantity, value, and most importantly the criticality of the asset. For example, our road network is our largest highway asset and consequently we invest significant resources into understanding its condition, but we do not take a ‘one size fits all’ approach. We carry out mechanical condition surveys on our main roads and visual surveys on our minor roads. Similarly, higher risk areas such as high-speed roads and main roads are inspected by our team of highway inspectors more often than minor roads because the likelihood of risk to safety is greater should a defect occur. This principle applies to all of our asset groups, with priority given to understanding the condition of our highest risk assets

Prioritisation of Investment

All assets are important, and we have a statutory duty to ensure that the highway is safe. We also endeavour to make sure our highway network is resilient and can support economic growth and local communities. However, we have to work within an overall budget and therefore, during fiscally challenging times and given increasing customer expectations, we need to prioritise investment effectively.

The methodology used to prioritise investment varies between the asset groups but in all cases, the approach to deciding where to spend our money is primarily risk based. Consideration is also given to the extent of the work required, whether or not the existing arrangement is meeting the needs of highway users, the impact on other highway assets, and the practicalities of future maintenance.

Finally, having assessed the investment needs for each asset group, we consider this in the wider context of the whole highways service as we endeavour to undertake the right repairs at the right time in the lifecycle of all our assets.

This is how we currently allocate capital resource.

Standards of Service or Asset Performance

The accuracy with which we can assess the cost and impact of providing various levels of asset performance or standards of service varies depending on the quality of information and tools available to us. For example, in the case of roads we have excellent condition data, a good understanding of deterioration and the technology to model the impact of differing levels of investment. For drainage, we do not have the same level of information or modelling capability, so a simpler approach based on past experience and engineering judgement has historically been adopted.

In the past, our approach to managing the condition of our highway assets has been based on an assessment of the backlog of maintenance: for roads, this means an estimate of the value of surfacing schemes that have been identified as a result of our condition surveys. The principal limitation of this approach is that it only provides a snapshot in time; it does not enable us to consider the effect of funding decisions on the whole life cost of assets. For example, a reduction in funding in one year may have the effect of increasing the total cost of maintenance over the life of an asset.

The introduction of the DfT Incentive Fund several years ago led us to review this approach, and to introduce lifecycle planning for many asset groups. This has improved the accuracy of modelling data and our estimate of the backlog.

When determining standards of service and asset performance, we consider up to four options in the context of our statutory obligations, Strategic Objectives, customer expectations and the available budget:

Asset Performance or Service Standard Enhancement

An approach that fulfils our statutory obligations and enables the overall condition of the asset group to be enhanced. Interventions such as maintenance, asset renewals and improvements are undertaken on a planned, prioritised basis with a view to increasing the proportion of the asset group in a very good or good condition.

Steady State

A standard of service or asset performance and investment that fulfils our statutory obligations and preserves the overall condition of the asset in its current state. Interventions such as maintenance and asset renewals are undertaken on a planned, prioritised basis with a view to keeping the same proportions of the asset group in a very good, good, poor and very poor condition. Any investment less than this would mean that a steady state condition or existing service could not be achieved.

Asset Performance or Service Standard Reduction

A standard of service or asset performance that fulfils our statutory duties and facilitates a more controlled approach. Interventions such as maintenance and asset renewals are undertaken on a planned, optimised basis.

Statutory Minimum

The minimum standard of service or asset performance that fulfils our statutory duties. Asset condition is allowed to decline with interventions such as maintenance and asset renewals undertaken on a reactive basis if and only if they are necessary to fulfil our legal obligations. This is an extremely inefficient approach and will cost us more over the lifecycle of our assets and therefore cannot be recommended.

Using asset appropriate data with lifecycle and deterioration modelling, we have modelled some of these outcomes and associated required investment levels. The results of this modelling are included in the following sections of this document.

The modelling we have undertaken assumes normal deterioration rates and no allowance as been made for any significant damage caused by severe weather. There has also been no allowance made for significant single projects requiring large investment.

The Roads Asset

	Road Classification				
	A	**B**	**C**	**U**	**Total**
miles	616	279	1,171	3,329	5,395
kilometres	991	449	1,885	5,358	8,683

The primary objective of our road assets is to enable residents, businesses and visitors to make vehicular and cycle journeys safely and efficiently. To achieve this our road assets need to:

- transfer vehicle weights from the road surface through to the underlying ground without deformation of the road surface
- maintain an acceptable level of skid resistance
- maintain their structural integrity and maximise their lifespan to provide maximum value for money from investment.

The majority of our roads are of bituminous construction, of varying age and specification. In rural areas many of our unclassified roads have not been designed but have 'evolved' over many years of use, presenting us with particular maintenance challenges. We also have around 300 miles (480 kilometres) of roads that are either of concrete or covered concrete construction, most of which are unclassified roads in residential areas.

For maintenance purposes the network is currently split into the following priorities:

- Major Strategic – routes, or parts of routes, linking major urban centres where these are not linked by trunk roads
- Other Strategic – routes or part of routes, between other urban centres or centres of industry/commerce
- Locally Important – routes or part of routes, of local importance in distribution of goods or people
- Minor Roads – all other routes, including estate roads and rural lanes.

However, following a detailed review, we have recently decided to implement a new maintenance hierarchy. This is based on that suggested in *Well-managed Highway Infrastructure*, though with the addition of a new top category comprising Kent's Resilient Highway Network. Over the coming years, we will review the current network against this hierarchy. The new hierarchy is as below.

Category	Type of Road	Description
Resilient Highway Network	Principally main roads that are vital to protecting economic activity in and through the county, access to key services and access to key infrastructure.	The portion of our highway network that is absolutely vital to maintaining economic activity and access to key services during extreme weather emergencies and other major incidents.
Strategic Route	Principally A class roads between Primary Destinations	Routes for fast-moving, long-distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.
Main Distributor	Major Urban Network and Inter-Primary Links Short – medium distance traffic	Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.
Secondary Distributor	B and C class roads and some unclassified urban routes carrying bus, HGV and local traffic with frontage access and frequent junctions	In residential and other built up areas these roads have 20 or 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons. In rural areas these roads link the larger villages, bus routes and HGV generators to the Strategic and Main Distributor Network.
Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	In urban areas these are residential or industrial interconnecting roads with 20 or 30 mph speed limits, random pedestrian movements and uncontrolled parking. In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two-way traffic.
Local Access Road	Roads serving limited numbers of properties carrying only access traffic	In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or cul-de-sacs.
Minor road	Little used roads serving very limited numbers of properties	Locally defined roads.

Condition Assessments and Inspections

We check our roads on a regular basis, using both mechanical and visual means. We carry out two types of check, condition surveys and safety inspections.

Condition Surveys

Our condition surveys conform to national standards and are processed using accredited systems. The surveys establish key characteristics of the network including ride quality, rutting, surface texture, and skid resistance. We survey our classified roads every year, and our unclassified roads every two years.

Safety Inspections

Our team of highway inspectors carry out visual checks to make sure highway assets are in a safe condition. This includes checking for defects in the road surface that present a safety concern. We carry out this kind of check at least once every twelve months.

We also carry out reactive inspections in response to enquiries and raise orders for ad-hoc and emergency works, for example repairing potholes and other surface failures.

Prioritisation of Investment

Investment decisions are made based on a robust understanding of their effect on the future condition of the asset and the whole-life cost of maintaining it. Within the funds available for planned road maintenance, we prioritise the works we do to ensure that they will have the greatest benefit, taking a whole-county approach rather than apportioning funds by district. To do this we consider the condition of each road, the amount and type of traffic it carries, its importance to our economy, and any safety hazards that may be present, as well as the cost of the optimum treatment identified by our pavement management system and its effect on lifespan and the whole-life cost of maintaining the asset.

Other Significant Factors Affecting Road Maintenance

The Geology of Kent

Every year, we have to deal with a number of major failures in roads. These are often caused by underlying geological features such as landslips, deneholes, sink holes and other subsidence and can result in significant unfunded pressures. Kent's geological make-up is highly variable and while these geological features are more common in certain areas, much of the county is susceptible to some type of failure and they cannot be predicted before they occur.

Road failures are often also caused or exacerbated by damaged or failed utility apparatus. To reduce the financial impact, all major failures are now managed in a consistent manner to protect our position. This ensures that utility companies are held to account and that they pay for damage their failed equipment has caused to our assets. For example, we recently recovered £1.3m in relation to a serious road collapse in Leeds.

Utility Works

Utility companies have statutory rights to lay, maintain and improve their apparatus within our highway network in order to provide water, sewerage, gas, electricity, and telecommunications services to our residents, visitors, businesses and public services. Our role as highway authority is to ensure that these works are coordinated and managed in a way that minimises inconvenience and disruption.

In line with national guidance we also carry out a substantial programme of inspections each year to ensure that our roads are properly reinstated after works have been completed in order to minimise damage to our network. The statutory amount of inspections is 30%, though to improve and sustain the quality of street works and reinstatements we check around 40% of all utility works, with above 90% passing these inspections. We also have an ongoing core testing programme looking at the thickness and quality of material used in reinstatements. The pass rate for the tests has risen steadily to in excess of 80%. This work has led to a significant improvement in the quality of reinstatements.

Notwithstanding our inspection and testing regime, any works which involve cutting into an unbroken and otherwise sound road surface, even if carried out to a high standard, will affect a road's structural integrity. This will accelerate its deterioration and shorten its life, resulting in the need for premature maintenance which increases the pressure on highway budgets. It should also be recognised that many of the highway maintenance issues linked to utility works relate to reinstatements carried out many years ago.

Heavy Goods Vehicles

One of the challenges of economic growth and Kent's position as the gateway to Europe is an increase in the number of heavy good vehicles using Kent's roads. This is particularly a challenge in rural areas where many of our roads have 'evolved' over many years rather than having been specifically designed for modern use.

Applying Asset Management Principles to the Roads Asset

We have excellent condition data on our roads asset, and a good understanding of how the asset deteriorates, based to a large extent on past deterioration rates. The data has been collected over many years. Originally the primary driver for this data collection was to develop evidence-based maintenance programmes; however, due to its comprehensive nature, the data can also be used for lifecycle planning and for modelling the effects of different levels of investment.

Our current pavement management system is Yotta's 'Horizons'. We have moved to this system over the last year and it represents a significant improvement in our ability to accurately understand and forecast the condition of our road network.

This software enables us to assess the current condition of our road network, to develop works programmes, and to model the effects of various investment strategies on the future condition of our network. Using this system we are able to do this in more detail than ever before. Unlike some other systems, the future forecasting and the scheme identification models are intrinsically linked. This allows the outputs from one element to be checked against the other to increase accuracy and confidence in the results.

Horizons selects optimum treatments based on a range of user defined interventions and triggers. When the deterioration of a road, as measured by our condition surveys, reaches predetermined trigger levels, Horizons identifies the most appropriate treatment, and can be used to rank maintenance schemes on either a 'worst-first' or an economic basis. This list is sense-checked on site by our pavement engineers before being used to develop our forward works programme, which also takes into account local needs through liaison with our highway and district managers. Our forward works programme now includes a wider variety of maintenance methods and is a balance between preserving existing roads to extend their life, and renewing assets. It also increasingly includes specialist repairs and for the first time a specific programme to maintain our concrete roads.

Planned and Reactive Road Maintenance

The figures below relate primarily to proactive, planned capital investment in our road network, predominantly in the form of road renewal such as resurfacing, or preservation treatments such as micro asphalt or surface dressing. They do not include the sums we spend each year on reactively repairing road defects, including work carried out as part of Pothole Blitz campaigns, although in forecasting the future condition of our roads asset some allowance has been made for this.

Whilst surface defects will always occur, and are made worse by extreme weather events such as those which the county has experienced over the past decade, they are primarily a symptom of a lack of planned investment in the network. Put simply, the less resource invested in planned maintenance, the more surface defects such as potholes will occur. Reactive repairs are, on average, twice as expensive per square metre as planned resurfacing and do not last as long, so while they are essential to keep the highway safe, they represent a less cost-effective use of our budgets.

It is very difficult to model accurately the relationship between road condition and the number and cost of surface defects that will occur. However, investment less than that modelled to achieve a steady state condition will result in an increase in defects, increasing the pressure on revenue and capital funds and in turn reducing the amount of capital funding that can be spent on planned maintenance.

Typically, we spend £8-12 million per year on reactive road surface repairs, including our annual Pothole Blitz campaigns. These reactive repairs do not deliver the same

improvement in the condition of our roads as our planned maintenance. Also some of the improvement it does generate will not last as long because it does not involve the deep structural repair more likely to be part of planned maintenance.

However, there is still a positive impact that can be measured. In recent years, significant progress has been made in delivering larger and higher quality repairs through the Pothole Blitz programme. As a result we would expect about £4 million of Pothole Blitz works to deliver the same impact as £2-3 million of planned maintenance works.

Understanding the Current Condition of our Roads Asset

To understand the condition of our roads we use the nationally-recognised Road Condition Index (RCI). This includes three categories for our classified network:

Green roads which are in a good state of repair

Amber roads where some deterioration is apparent

Red roads in poor condition and likely to require maintenance within the next twelve months.

And two for our unclassified network

Green roads which are in a reasonable state of repair

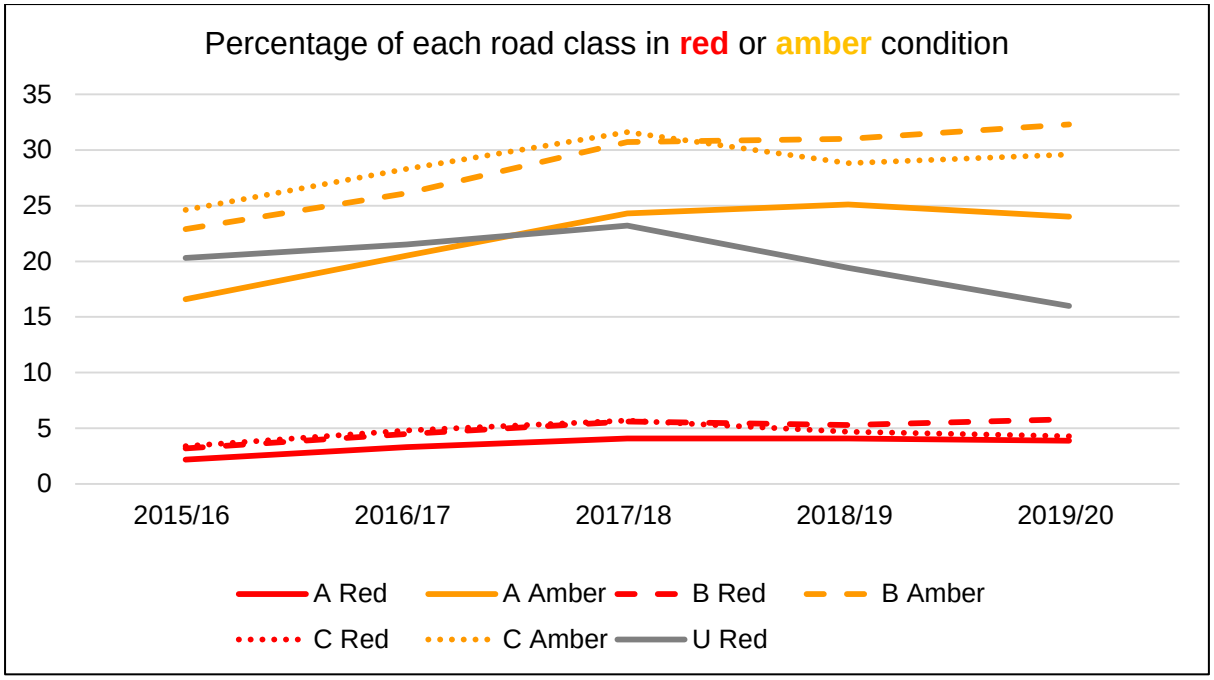
Red roads in poor condition which likely require maintenance within the next twelve months.

Following completion of the 2019/20 road condition surveys, the percentage of our road network in **red** condition is: 3.9% of A roads, 5.8% of B roads, 4.3% of C roads and 16% of unclassified roads.

The following table and graph compare these percentages with those for the previous years.

Road Class	Year				
	2015/16	2016/17	2017/18	2018/19	2019/20
A roads - red	2.2%	3.3%	4.1%	4.1%	3.9%
A roads - amber	16.6%	20.5%	24.3%	25.1%	24%
B roads - red	3.2%	4.5%	5.6%	5.3%	5.8%
B roads - amber	22.9%	26.1%	30.7%	31%	32.3%
C roads - red	3.4%	4.8%	5.7%	4.7%	4.3%
C roads - amber	24.6%	28.3%	31.6%	28.8%	29.6%
U roads - red	20.3%	21.5%	23.2%	19.4%	16%

Percentage of each road class in red and amber condition 2015/16 - 2019/20



Percentage of each road class in red and amber condition 2015/16 - 2019/20

These figures reflect past levels of investment in our road network, though there is some lag between investment and recorded change in condition due to the survey regime. For example, maintenance undertaken during year 1 may not be surveyed until year 2 or 3, so the full effect across the network of changes in investment will not show immediately.

The budgets for 2015/16 and 2016/17 were the lowest we have seen for many years at £16 million and £13 million. This is reflected in a rise in the percentage of roads which are showing deterioration, or are in poor condition, between 2015/16 and 2017/8.

Since 2017/18 we have received substantial additional investment, both in planned maintenance and also in higher quality reactive repairs through the Pothole Blitz programme. This is reflected in the most recent condition data (2019/20), which shows that overall our network is still deteriorating but this has slowed considerably compared to five years ago. Indeed, we have managed to maintain the percentage of classified roads in poor condition at a near steady state in the last couple of years. However, this has not addressed the fact that the overall condition of classified roads has continued to deteriorate as shown by the percentage in amber condition illustrated in the table and chart above. The growing percentage of classified roads in amber condition may result in a significant maintenance challenge in the next five years.

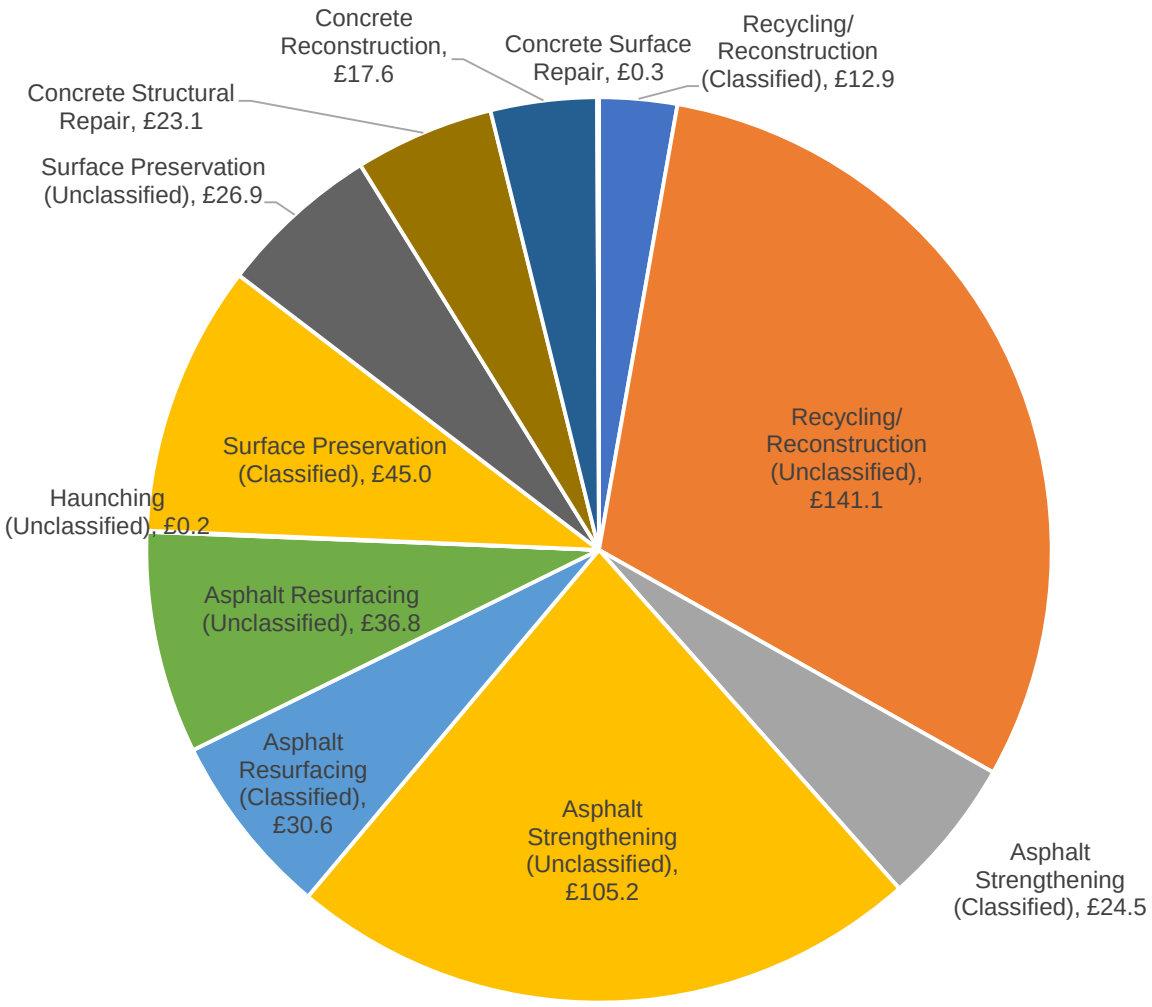
The data shows an apparent improvement in the condition of unclassified roads. Whilst a portion of this improvement may be attributed to our larger surface treatment programme and improved Pothole Blitz campaigns in recent years, we

have some concerns about the accuracy of this data and intend to investigate this further.

Current Maintenance Requirements

Before we can look at what different levels of funding will deliver in terms of the condition of our road network, we must first understand the volume of maintenance works needed to bring the network up to a good condition and the cost of this.

Our asset management system has identified a backlog of £464 million. This figure is less than that reported in previous years. However, this does not represent a real-world reduction in the backlog. Instead, this is due to the improvement in modelling accuracy.

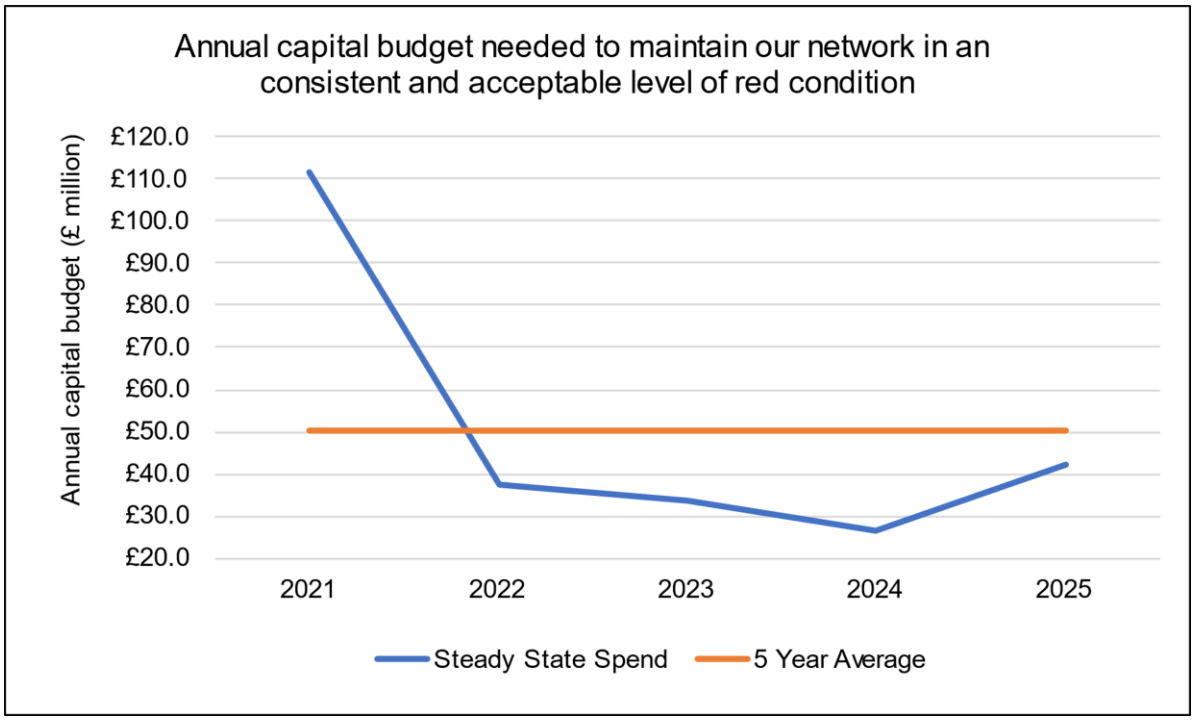


Current maintenance backlog by treatment type (£ million)

Treatment	Value (£ million)
Recycling/ Reconstruction (Unclassified)	£141.1
Asphalt Strengthening (Unclassified)	£105.2
Surface Preservation (Classified)	£45.0
Asphalt Resurfacing (Unclassified)	£36.8
Asphalt Resurfacing (Classified)	£30.6
Surface Preservation (Unclassified)	£26.9
Asphalt Strengthening (Classified)	£24.5
Concrete Structural Repair	£23.1
Concrete Reconstruction	£17.6
Recycling / Reconstruction (Classified)	£12.9
Concrete Surface Repair	£0.3
Haunching (Unclassified)	£0.2

Current maintenance backlog by treatment type

We have also modelled the annual capital budget needed to maintain our network in a consistent and acceptable level of red condition over the next five years. This shows that we would need to deliver an average of £50.3 million of maintenance works each year to maintain steady state condition over the next five years.



Year	Modelled Steady State Spend (£ million)	5 Year Average (£ million)
2021	£111.8	£50.3
2022	£37.3	£50.3
2023	£33.5	£50.3
2024	£26.7	£50.3
2025	£42.2	£50.3

Annual capital budget needed to maintain our network in a consistent and acceptable level of red condition

In 2019/20 we invested around £40 million in planned road maintenance works. For the purposes of this document, we are assuming that similar levels of funding will continue. Alongside this we are also spending around £10 million annually on Pothole Blitz works, which delivers a similar impact to about £5-7.5 million of additional planned maintenance. This means we are spending the equivalent of £45-47.5 million on maintenance works. This appears to indicate that we are only around £2.5-5.0 million away from the funding level needed to maintain our road network in steady state condition.

Beyond this, it would only take a relatively small further increase in budget to enable us to begin addressing the backlog of deterioration which has built up over years of underinvestment in our road network, and prevent an increase in pothole numbers.

We have analysed national condition data which records the percentage of classified roads in poor condition, and we compare acceptably with other authorities in the south east whose networks are of comparable size and use to ours. In our view, an acceptable level of A roads in red condition is around 4-5% and for B and C roads it is around 6-7%. As such, the percentage of our network in poor condition is not at an unacceptable level. Any significant increase above this range would be cause for concern.

A further key consideration is whether we should focus on our classified or unclassified networks. Our classified network has traditionally been prioritised, as it carries significantly more traffic, is used by more people and is often far more sensitive to the impact of reactive works. As such, classified roads should be maintained to a higher standard.

While we have focussed on the classified network, this has not been to the exclusion of the unclassified network. We believe that this approach remains the appropriate one for our network.

Forecasting the Future Condition of our Roads Asset

To understand the longer-term results that can be expected from various levels of funding we have undertaken modelling based on the following three funding scenarios:

- Scenario 1 - Current budget
- Scenario 2 - Budget reduction
- Scenario 3 - Additional investment

Scenario 1 – Current Budget

We have modelled the effect of our planned maintenance works on road condition if we continue with our current annual investment level of £40 million of planned works and £10 million of reactive works through the Pothole Blitz contract, for the next five years.

Road Class	Year				
	2021	2022	2023	2024	2025
A Roads	3.8	4.7	4.9	5.1	5.2
B&C Roads	4.5	5.4	5.7	6.2	6.6
U Roads	17.3	17.4	17.6	17.9	18.0

The forecast % of road requiring maintenance soon.

With a continuation of the current investment levels, the amount of our network requiring maintenance will continue to increase slowly over the next five years. This will lead to an increase in potholes and other defects. However, this increase is expected to be slight and manageable.

Scenario 2 – Budget Reduction

We have modelled the effect of a £10 million reduction in our current budget, to £30 million, whilst assuming a continuation of the current £10 million spend on reactive works.

Road Class	Year				
	2021	2022	2023	2024	2025
A Roads	3.8	5.5	6.2	6.6	6.8
B&C Roads	4.5	7.1	9.3	10.1	10.3
U Roads	17.3	17.6	17.9	18.5	18.7

The forecast % of road requiring maintenance soon with scenario 2

The reduction in the investment levels will result in network that is in poorer condition than Scenario 1. The number of potholes will increase significantly over the coming years, although it is not anticipated that they will quickly reach unmanageable levels. It will become harder for us to fulfil our statutory duties under the Highways Act and the demands on our reactive budget especially may increase towards unsustainable levels.

Scenario 3 – Current Budget plus additional investment for Years 1 to 5

The only way to improve the overall condition of our road network and reduce the number of potholes in the long term, is to tackle the backlog in maintenance works. While this is too large to tackle in a short period of time, a sustained period of investment above steady state levels of funding would begin to bring this down and deliver a real improvement in the condition of our network. We have modelled the effect of an increase in our budget to £10million above steady state (£60.3million)

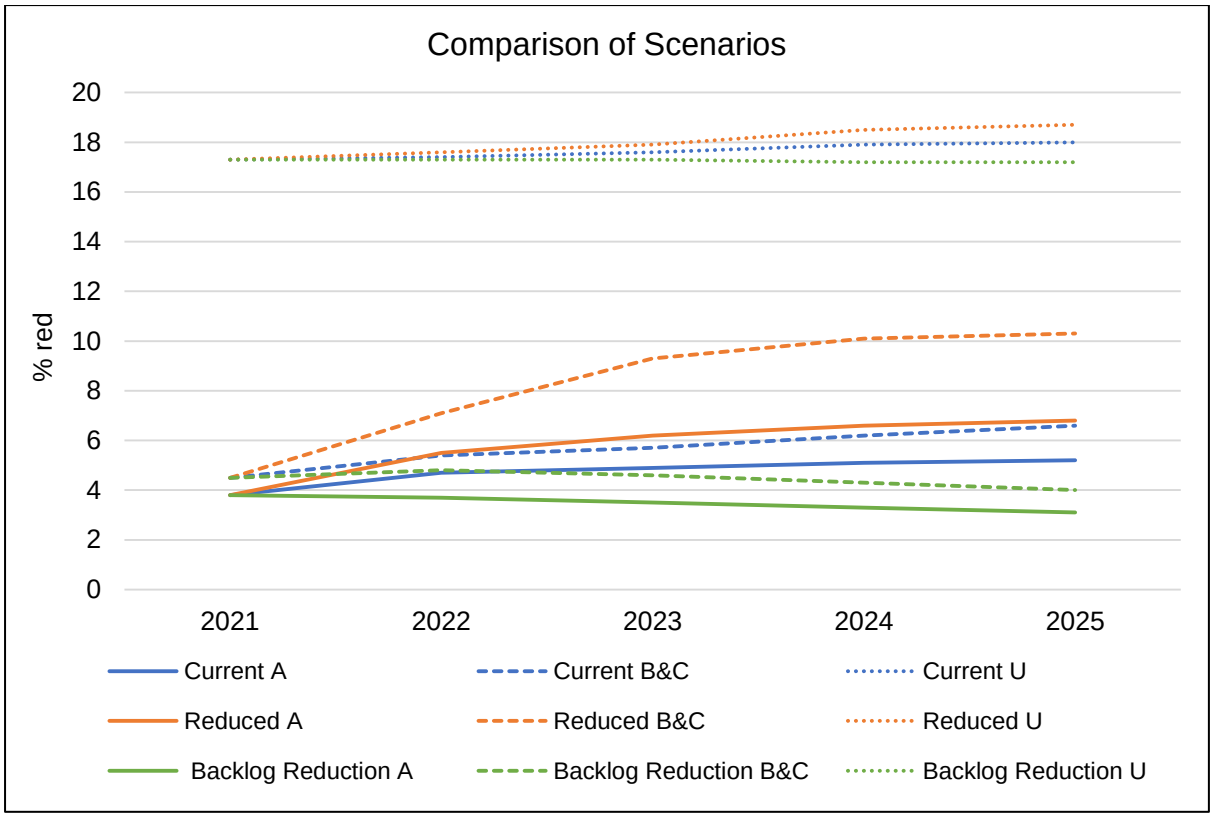
Road Class	**Year**				
	2021	**2022**	**2023**	**2024**	**2025**
A Roads	3.8	3.7	3.5	3.3	3.1
B&C Roads	4.5	4.8	4.6	4.3	4.0
U Roads	17.3	17.3	17.3	17.2	17.2

The forecast % of road requiring maintenance soon with scenario 3.

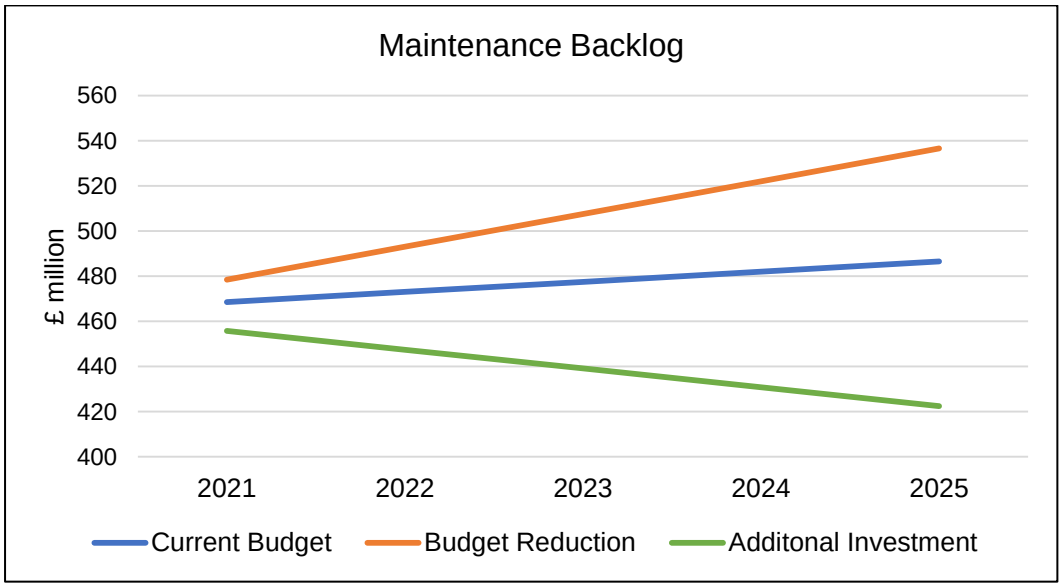
This strategy would deliver a real improvement in the condition of our highway network. In five years, the maintenance backlog would be reduced by over 10% and we would expect the number of potholes to reduce.

Comparison of Forecasts

Condition



Maintenance Backlog



	Backlog £ million				
	2021	**2022**	**2023**	**2024**	**2025**
Current Budget	468.5	473	477.5	482	486.5
Budget Reduction	478.5	493	507.5	522	536.5
Additional Investment	455.7	447.4	439.1	430.8	422.5

The Footways and Cycle Tracks Asset

Footway Type	Bituminous	Slabs	Block Paved	Concrete	Total
Miles	3565	253	130	73	4021
kilometres	5705	405	207	117	6434

This asset group includes footways and a number of cycle tracks that are alongside a road or footway. It does not include Public Rights of Way (PRoW), which are managed separately, or any footpaths and alleyways which are managed by borough or district councils.

The footway and cycle track asset group has recently been extended to include segregated cycle tracks that are publicly maintainable. These segregated cycle tracks have been generally constructed for use by cyclists and are not alongside a road or footway, though they may connect to them. We do not currently have detailed knowledge of the extent of segregated cycle tracks or their condition, though are commissioning work to address this during the coming years.

The primary objectives of our footway and cycle track assets are to:

- enable our residents, businesses, and visitors to travel the county on foot, in wheelchairs and mobility scooters, or by cycle safely and efficiently, thereby contributing to improving outcomes and opportunities for our people and businesses
- withstand normal usage by pedestrians and, where appropriate, cyclists and vehicles (via appropriately constructed vehicle crossings) by transferring loads through to underlying ground without deformation of the surface, maintaining safety and minimising nuisance
- maintain their structural integrity and maximise their lifespan to provide maximum value for money from investment.

The majority (89%) of our footways are of bituminous construction of varying age and specification. However, we also have footways that have slab (6%), block paving (3%) and concrete (2%) surfaces. Around 70 miles (112 kilometres) of our footway asset is classified as high usage.

Condition Assessments and Inspections

Condition Surveys

Our footway network is a substantial highway asset and consequently we have historically invested significant resource into understanding its condition and likely future deterioration. Over a period of three years we inspected our entire footway network. This was carried out similarly to the way we survey roads.

The data collection methodology conformed to national standards and the data was processed using accredited systems. This data has been used to assess the condition of the entire network, calculate the percentage of the network requiring maintenance, estimate the maintenance backlog and produce accurate whole government accounts. We also use this data to aid with lifecycle and deterioration modelling.

The condition assessment criteria for segregated sections of our cycle track network are currently being developed.

Safety Inspections

In addition to the condition surveys we carry out safety inspections.

- Our team of highway inspectors carry out visual checks to make sure the highway assets are in a safe condition. This includes checking for defects in the footway surface that present a safety concern. We carry out this kind of check at various frequencies dependant on the nature of the section of footway concerned. These frequencies could be either monthly, quarterly or annually.
- Reactive inspections are carried out in response to enquiries from the public or other stakeholders and generate ad-hoc and emergency works, for example repairing footway potholes and other surface failures.

Prioritisation of Investment

As well as our statutory duty to ensure our footways are safe, we also need to maintain the confidence and positive perceptions of the travelling public using our asset. We also need to ensure our footway network is maintained to protect against insurance claims resulting from injuries or damage caused by incidents on our network.

To ensure the most benefit to our footway network we seek, where possible, to address sites of local need, and we do so via our district highway managers who liaise closely with local elected representatives and other groups.

Our engineers assess and verify identified schemes by the type of defects present and then prioritise high-usage footways and cycle tracks as well as targeting resource on those areas with larger populations of older and disabled people. In this way we help to deliver our active travel strategy and ensure that these more vulnerable groups are not disproportionately affected by a deteriorating asset condition.

Budgets are not allocated on a district or regional basis.

Our approach to footway and cycle track asset management is a balance between asset renewal, where such assets have reached the end of their serviceable life, and

asset preservation, where we apply a treatment to seal the surface and extend the life of footway assets that would otherwise need replacement as considerable higher. In broad terms, around 25% of our annual budget is spent on preservation treatments, which significantly slows down overall network deterioration.

Other Significant Factors affecting Footway Maintenance

Parking

Our substantial footway network is increasingly becoming a concern in maintenance terms, principally because of parking and vehicle over-run issues. This particularly affects older residential urban areas that were not designed to accommodate the number of vehicles per household that is now typical. The narrow nature of many of these locations does lead to residents parking either wholly or partly on the footway.

This type of parking accelerates the normally slow rate of footway deterioration (in comparison to roads). It also disproportionally affects people with visual or mobility impairments, those assisted by guide dogs, families with pushchairs and wheelchair and mobility scooter users.

To make the footways a safer environment the government launched a consultation on pavement parking in August 2020. The consultation is the government's latest step to deliver on commitments to make transport equally accessible for all users by 2030, as set out in the Inclusive Transport Strategy.

The three options proposed in the consultation are improving the traffic regulation order process to make it easier for councils to prohibit pavement parking in their areas, giving councils powers to fine drivers who park on paths, and a London-style nationwide ban on pavement parking.

The principal risk on footways is from trip hazards, particularly in high footfall locations. However, where vehicles do regularly park on or traverse our footways even small defects can escalate quickly. This both increases the replacement costs and shortens the life of the asset.

Applying Asset Management Principles to the Footways and Cycle Tracks Asset

As discussed above, in previous years footway condition surveys collected comprehensive sets of condition data. This data has been used to complete the Whole of Government Accounts (WGA), giving details of the size of our network along with information on its current condition. Subsequently, these nationally recognised surveys can then be reviewed and analysed further to assist with future predictions of the condition of the asset.

Unlike roads, due to the nature of the survey data required, our current software is not capable of comprehensively producing forecasts of future conditions or calculating the maintenance backlog of the asset.

Currently, to effectively produce this information, the Highways Maintenance Efficiency Programme (HMEP) footway toolkit is being used in conjunction with the WGA valuations. This allows for the creation of forecasts based on the current asset condition, producing predicted future deteriorations (or improvements) for the asset based on various funding and treatment scenarios. It also enables us to calculate the funding required to maintain our footway network in a 'steady state'.

Footway Survey Review

The condition survey which has been carried out over a number of years has successfully allowed for network condition reporting and strategic modelling. This has demonstrated the need for additional funding, and has brought about a year-on-year increase of the proportion of the capital budget being attributed to the footway network. However, whilst we need our future surveys to continue to serve this purpose, we also need to evolve the way in which we collect survey data to allow a more versatile manipulation and interrogation of the outputs.

To understand how best to achieve this we are carrying out a thorough review of our current survey regime. This review is also comprehensively looking at national best practice, the outcomes we require, and other types of survey available, in order to identify the type of survey which would best meet our needs going forward. This review will ensure that any future surveys commissioned will be shaped to meet our requirements and to produce a thorough, adaptable set of survey data that will enable us to carry out:

- assessment of overall footway condition
- lifecycle and deterioration modelling
- identification of a programme of schemes, including suggested treatment type, taking into account factors such as hierarchy, usage, and areas with high populations of older or disabled people.

We have also reviewed the hierarchy we use to manage our footway network, and have decided to adopt the hierarchy proposed in *Well-managed Highway Infrastructure*, as shown in the table below:

Category	**Description**
Prestige Walking Zones	Very busy areas of towns and cities with high public space and street scene contribution.
Primary Walking Routes	Busy urban shopping and business areas and main pedestrian routes.

Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.
Link Footways	Linking local access footways through urban areas and busy rural footways.
Local Access Footways	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.
Minor Footways	Little used rural footways serving very limited numbers of properties.

Whilst the hierarchy is unlikely to affect the condition survey itself, it is crucial to the success of using the data to develop works programmes and lifecycle plans.

Reacting to Surface Defects

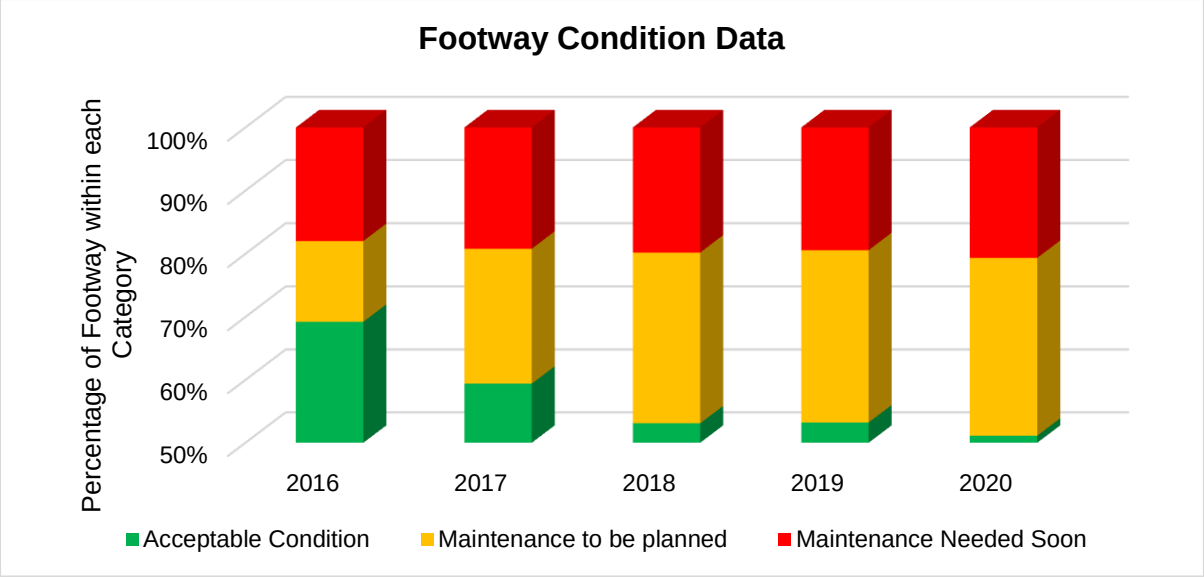
The figures used below only relate to proactive, planned investment in our footway network. They do not include any allowance for the funds spent each year to reactively repair footway surface defects. In 2019/20 we spent around £1.6 million on this activity. In recent years, the annual average spend has been around £1.4 million.

It is difficult to forecast accurately how much we will need to spend on reactively fixing surface defects each year; however, we can assume that, as footways deteriorate given lack of investment, the number of defects will increase. This will lead to an increasing amount of resource being spent on such repairs. If that resource is taken from that used for planned maintenance, the problem would be exponentially exacerbated.

Current Condition

The table and graph below illustrate the change in condition of the network from 2017 – 2020. Over this period there have been a range of deterioration and improvements over the three categories, and this a reflection of the work undertaken each financial year.

	2016	2017	2018	2019	2020
Maintenance needed soon	18.0%	19.2%	19.8%	19.43%	20.66%
Maintenance should be planned	12.8%	21.4%	27.1%	27.35%	28.23%
Acceptable condition	69.3%	59.4%	53.1%	53.23%	51.12%



As set out earlier, it needs to be recognised that whilst the data-led approach has led to an increase in the capital budget allocated to the footway network, this increase may not immediately result in a visible slowing of the decline. This is due to the survey taking place over a three-year period, with roughly a third of the county's footways being surveyed each year. If works are carried out in an area that has recently been surveyed, the change from "maintenance needed soon" to "acceptable condition" will not be recognised until the next survey in that area has been completed and assessed.

Also, the type of work which needs to be undertaken in a financial year has a marked effect. When footway condition deteriorates, the material type and construction dictate the work required, and this can alter the figures quite dramatically if areas that consist of expensive materials are focused on more than those of cheaper construction. For example, block paving can typically cost around £70 per square metre in comparison to bituminous materials with a cost of around £38 per square metre. Across the network block paving only accounts for 3% of our footway asset, with bituminous footways currently accounting for 89%. With this in mind, as the cost of block paving is almost double that of bituminous footways, if there is a focus on repairing areas of block paving it immediately decreases the number of schemes that can be completed due to the cost, with a knock-on negative effect on overall network condition and more potholes.

Condition Forecasts

We have undertaken modelling of the asset condition over a ten-year period based on four funding scenarios:

Scenario 1 – no budget (no planned maintenance, reactive maintenance only)

Scenario 2 - £3.5 million per year (the current budget)

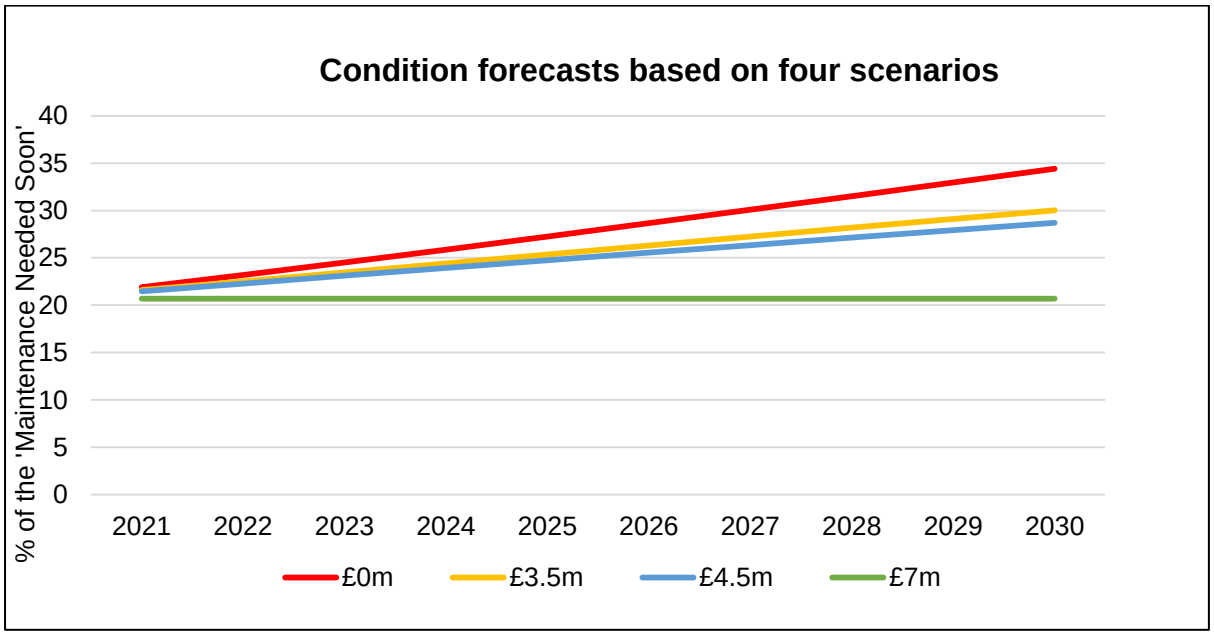
Scenario 3 - £4.5 million per year (a £1 million increase on the current budget)

Scenario 4 - £7 million per year (the budget required to maintain steady state)

The table and graph below demonstrate the deterioration modelling that has been completed. It suggests that in order to achieve a steady state of condition throughout the network for the next ten years, £7 million per year is required to be spent across the network. These scenarios are adjusted to take into account the latest condition data as well as the annual increase in unit rate costs attributed to the various treatment types for both preservation techniques and asset renewal.

		Percentage of footway in need of immediate maintenance		
Scenario	**Budget**	**2021**	**2030**	**Difference**
Scenario 1	£0m	21.9%	34.4%	12.5%
Scenario 2	£3.5m	21.6%	30.0%	8.44%
Scenario 3	£4.5m	21.5%	28.7%	7.22%
Scenario 4	£7m	20.7%	20.7%	0%

Condition forecasts based on four scenarios



Budget required to maintain steady state condition

The deterioration modelling illustrates the impact on the 'percentage of footway in need of immediate maintenance' for each scenario across a ten-year period. There

would be a 12.5% increase if there is no money spent on this part of the asset, compared to an 8.4% increase if current funding levels are maintained. To maintain a steady state condition over the next decade, an annual investment of £7 million is required.

Maintenance Backlog

We estimate that it would cost in the region of £102 million to address the part of the footway network that our condition surveys have identified as “maintenance needed soon”.

In general terms, investment in planned footway maintenance had fallen behind that for roads. That is principally because the previous lack of condition data and deterioration modelling made it difficult to support and inform investment decisions. Also, road maintenance has understandably been prioritised given that the safety implications of not maintaining roads are more significant than for footways.

However, since the introduction of the full footway network survey and lifecycle modelling and planning, we can now better understand the condition of our footway network and demonstrate the outcomes of various funding scenarios. The other benefit is a more accurate determination of the entire maintenance backlog of this asset group. This has, in recent years, had the effect of successfully proving the need for a greater part of the capital budget to be allocated to the footway network.

Since 2017/18, when the budget was around £1 million for planned maintenance, we have seen a year-on-year increase in investment. In 2020/21 the budget for this type of work had increased to £3.5 million, which is an increase of 250% from 2017/18. This has allowed for a dramatic increase in the number of footway schemes being delivered. It has also allowed us to focus on some of the more difficult areas that have been due for replacement for some time, but where works had previously been put on hold due to lack of funding.

This positive additional capital investment has meant that we have, with good prioritisation, been able to considerably slow the increase in the percentage of the footway network where maintenance is needed soon, although our current budget is not yet in line with the funding required to maintain steady state.

It is anticipated that with the work being carried out by the footway survey review, the data-led targeted scheme identification will also have a significant positive impact on reducing the rate of deterioration going forward.

The Drainage Asset

Asset	Quantity
Roadside drains	275,000
Ponds and lagoons	250
Pumping stations	15
Soakaways	8,500
Culverts below 0.9m span	346
Headwalls	692
Gully leads	4,125,000 metres
Carrier lines	2,062,500 metres
Chambers/manholes	41,250

These figures are indicative following reviews of historical data and recent inspections. Therefore, they are likely to increase.

The drainage asset's primary objectives are:

- removal of highway surface water (from our roads) to maintain road safety and minimise nuisance
- effective sub-surface drainage to prevent damage to the structural integrity of the highway and maximise its lifespan, and
- minimise the impact of highway surface water on the adjacent environment, including properties.

The number of drainage assets is currently increasing each year due to new housing and business developments.

Condition Assessments and Inspections

There are two types of checks carried out on the drainage system: planned inspections and reactive inspections.

Planned Inspections

Planned inspections include highway safety inspections and condition checks carried out as part of our cyclical maintenance regime:

- Our team of highway inspectors carry out visual checks to make sure that highway assets are in a safe condition. This includes checking that drain covers are not blocked, broken or missing. We carry out this kind of check at least once every twelve months.
- Our drainage cleansing crews look at the condition of the drains on main roads and test each one by filling it with water and checking that it is able to

flow away. We carry out these kinds of checks at least once every twelve months.
- Our pumping stations are serviced annually to check they are working properly and ensure that any faults or damage are repaired quickly.

We do not undertake planned inspections on our other drainage assets (underground pipes, culverts, soakaways, ponds, lagoon and ditches). These are all checked on a reactive basis.

Reactive Inspections

Reactive inspections are carried out in response to enquiries and generate ad-hoc and emergency works, for example, cleaning blocked drains that are causing the road to flood and repairing collapsed road drains. They may also result in us serving notice under the Highways Act 1980 requesting the landowner maintain their ditch or prevent water flowing from their land onto the highway. Where this is not completed in the required time we may undertake the work and seek to recover the costs from the landowner.

Prioritisation of Investment

As with all our assets, we take a risk-based approach to deciding where to invest our funding and some of the things we consider for this asset group include:

- What is the risk to road users if the road floods?
    - Is the road a high-speed or Resilient Highway Network road, a main road, an estate road or a country lane?
    - Is the road used by high volumes of traffic?
    - Does the road layout increase risk, for example, is the flooding on a blind bend?
    - Does the speed of traffic increase risk?
- How much disruption is caused if the road floods?
    - Is the road a high-speed or Resilient Highway Network road, a main road, an estate road or a country lane?
    - Is the road used by high volumes of traffic?
    - Are there suitable alternative routes available to road users?
    - Is access to critical infrastructure such as powers stations or hospitals affected?
- How are homes and businesses affected by the flooding?
    - Are buildings being internally flooded?
    - Are businesses prevented from operating?

Investment is prioritised where the risk is highest.

We then consider how to invest our budget.

It is also important to understand whether our assets are doing their job effectively and the practicalities of maintenance in both the short and longer term. If an asset is in the wrong place or is the wrong size there is no point simply patching it up or replacing it like-for-like. We also endeavour to undertake the right repairs at the right time in the lifecycle of our drainage assets.

Having assessed each site, we collate a prioritised list of works which are included in forward works programmes.

We do not undertake works to mitigate minor nuisance factors. We prioritise works at locations where highway surface water presents a risk to highway safety or a risk of internal flooding to inhabited areas of property.

Other Significant Factors affecting Drainage Maintenance

Damaged and Ageing Infrastructure

Much of the County's drainage infrastructure was installed when the roads were originally constructed, some of which date back to late 1800s/early 1900s. Over time settlement, ingress of tree roots and roadworks by third parties has caused widespread deterioration and damage. Years of under-investment have exacerbated this problem.

Limited Capacity

In recent years prolonged and heavy rainfall events appear to have become a more frequent occurrence. Development and changes in land use have also resulted in increased volumes of surface water being discharged into the drainage system which is designed to cope with moderate to heavy rainfall. In many places drainage systems are now running at capacity.

Where capacity is insufficient the only options are to divert the highway drainage elsewhere or install an entirely new, larger system. This requires significant investment and in the past cost had tended to make this kind of scheme unaffordable. Instead, the impact of flooding has been managed by installing permanent warning signs, increasing the height of kerbs and re-profiling the road to divert water elsewhere.

Reliance on Third Party Infrastructure

In many places the highway is drained into public sewers, which are owned and maintained by the sewerage authority, or privately-owned third-party assets such as ditches or ponds. In these instances, our influence over maintenance regimes and improvements is limited.

Land Drainage

Water being discharged from adjacent land onto the road is also becoming an increasingly common cause of highway flooding. A more stringent enforcement process utilising our Highways Act powers has been developed. However, to date the vast majority of cases have been resolved via constructive discussion with the land owner.

Reductions in other services

A frequent cause of highway flooding is debris obstructing drain covers, particularly during autumn and winter. The need for financial savings has necessitated reductions in services such as street sweeping, delivered by district and borough councils, and soft landscaping services. These have resulted in increased debris collecting on the highway and finding its way to the roadside drains.

Revenue Budgets

Revenue funding pressures affect the lifecycle performance of drainage assets where we are unable to carry out pro-active maintenance on all assets.

Keeping our existing drainage assets operational and effective will help to reduce the risk of flooding occurring. It is vital to ensure that maintenance and drainage improvements are focussed on priority locations and that operational maintenance and enhancements are undertaken when and where it is needed.

We have been exploring ways to improve the maintenance of the drainage network. As part of the ‘Live Labs’ project, information about how the drainage system is constructed and performs is being collected. This information will provide intelligence on how various drainage assets fail and the speed of failure to be collected. Armed with this knowledge new intervention regimes can be developed so that only those gullies, pipes and the like that need intervention are addressed.

Applying Asset Management Principles to the Drainage Asset

Highway drainage assets are critical to the operation of the highway network and ensuring that customers can use the network safely. If failures occur to the drainage assets there are significant effects to road safety, residential and commercial property, other asset groups and customer dissatisfaction if not addressed in a timely manner. Therefore, improved management of this asset group is a priority for us.

It is evident that an increasing frequency of severe flooding events is impacting upon on our infrastructure. Highway drainage is a key factor to providing network resilience, and the safe movement of goods, people and services around the county.

Our major challenge is asset deterioration due to historical under-investment. In addition, the location and condition of this asset in roads, footways or third-party land has been poorly recorded.

As a result, we have a system which is outdated and that we hold very little information on. This has resulted in a lack of prioritised investment and has reduced our ability to target maintenance effectively. Our existing practice to maintaining this asset is mainly reactive, which is costly and does not address the issue of understanding where to invest to halt deterioration of the asset or reduce the risk of flooding from surface water.

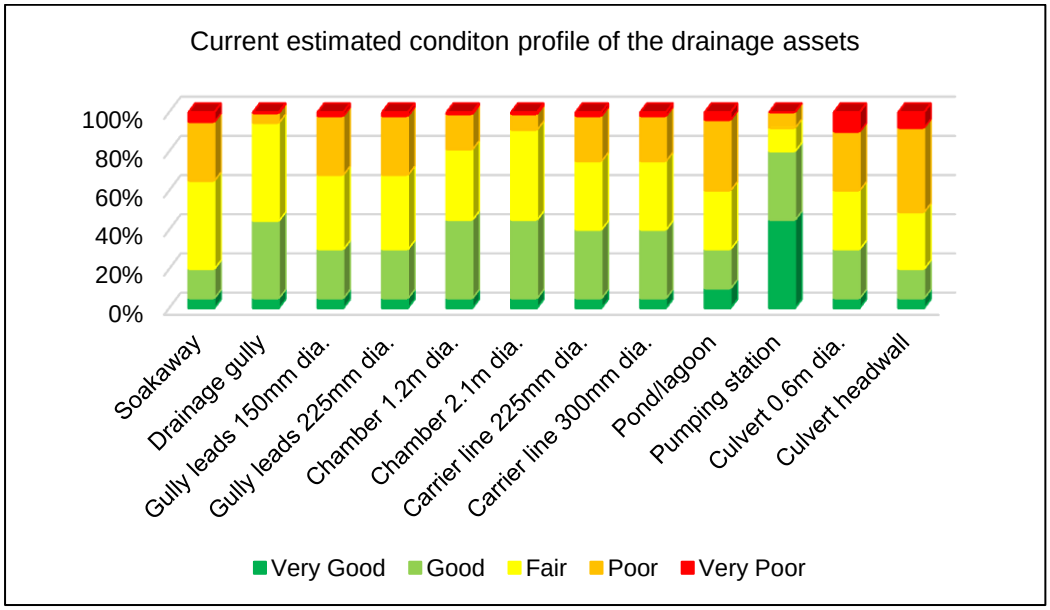
We have a good understanding of the lifecycle of drainage assets, and have invested in live data capture technologies which enables asset data capture on site as part of routine maintenance works. This will support a better understanding of the asset inventory over time. This will also aid us in complying with Recommendation 22 of *Well Managed Highway Infrastructure*:

"Drainage assets should be maintained in good working order to reduce the threat and scale of flooding. Particular attention should be paid to locations known to be prone to problems, so that drainage systems operate close to their designed efficiency."

We have undertaken lifecycle modelling of known assets and made necessary assumptions of unknown drainage asset information including all underground highway drainage assets, which have identified that an investment of £40.2 million would be required, followed by an annual budget averaging at £23.8 million if we had no budgetary constraints and were able to replace all assets in a very poor condition.

This assumption was made on the estimated lifecycle of different drainage asset groups. Although investment has shown benefits to other asset groups, if we do not maintain the highway drainage assets in a steady state condition this will have adetrimental effect on the lifecycle of the other asset groups.

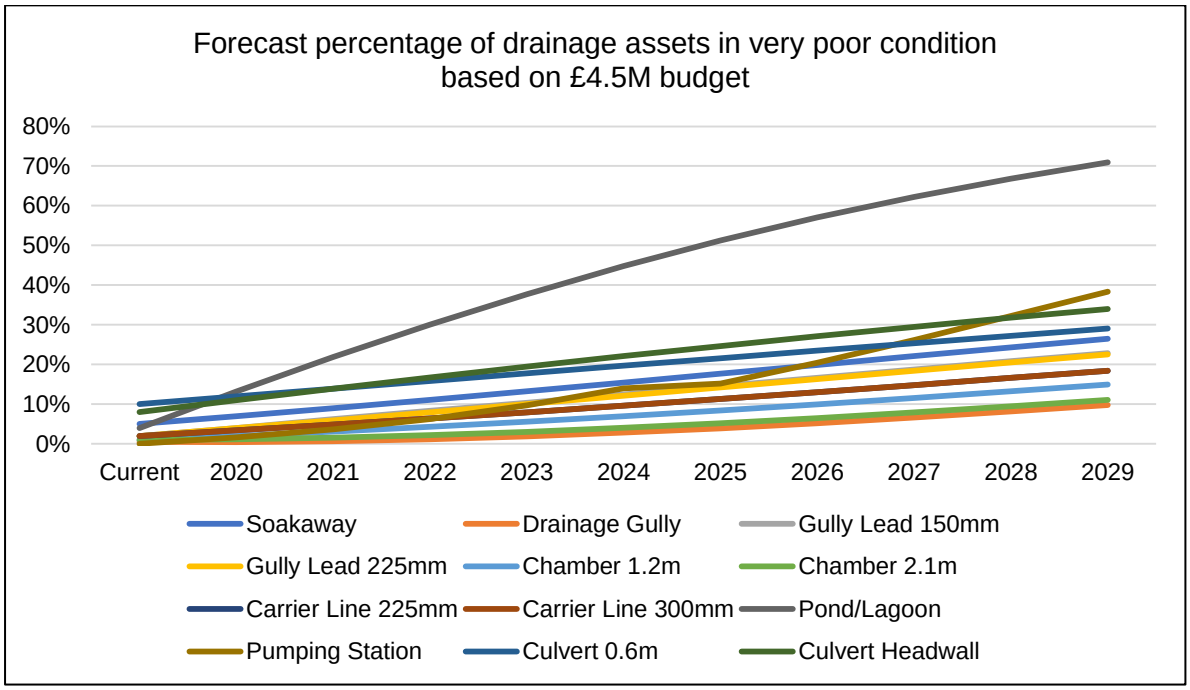
Our current estimated condition of drainage assets is shown in the chart and table below:



	Percentage in each Condition Band				
	Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Soakaway	5%	15%	45%	30%	5%
Drainage gully	5%	40%	50%	5%	1%
Gully leads 150mm dia.	5%	25%	38%	30%	2%
Gully leads 225mm dia.	5%	25%	38%	30%	2%
Chamber 1.2m dia.	5%	40%	36%	18%	1%
Chamber 2.1m dia.	5%	40%	46%	8%	1%
Carrier line 225mm dia.	5%	35%	35%	23%	2%
Carrier line 300mm dia.	5%	35%	35%	23%	2%
Pond/lagoon	10%	20%	30%	36%	4%
Pumping station	45%	35%	12%	8%	0%
Culvert 0.6m dia.	5%	25%	30%	30%	10%
Culvert headwall	5%	15%	29%	43%	8%

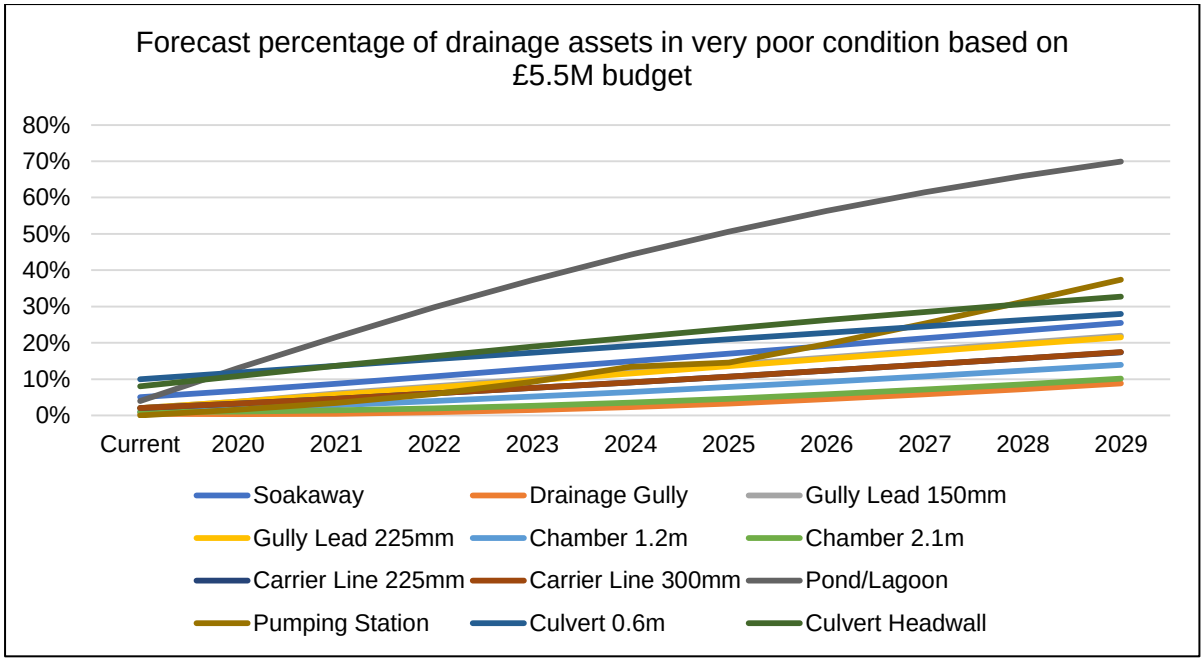
Current estimated condition profile of the drainage assets

Our current budget is £4.5 million per year which currently shows a managed decline in the assets being defined as being in a very poor condition over a ten-year period.



	Forecast percentage of drainage assets in very poor condition based on £4.5 million budget										
	Cur-rent	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Soakaway	5%	7%	9%	11%	13%	15%	18%	20%	22%	24%	26%
Drainage Gully	1%	0%	1%	1%	2%	3%	4%	5%	7%	8%	10%
Gully Lead 150mm	2%	4%	6%	8%	10%	12%	15%	17%	19%	21%	23%
Gully Lead 225mm	2%	4%	6%	8%	10%	12%	14%	16%	18%	20%	23%
Chamber 1.2m	1%	2%	3%	4%	6%	7%	8%	10%	12%	13%	15%
Chamber 2.1m	1%	1%	2%	2%	3%	4%	5%	7%	8%	9%	11%
Carrier Line 225mm	2%	3%	5%	6%	8%	10%	11%	13%	15%	17%	18%
Carrier Line 300mm	2%	3%	5%	6%	8%	10%	11%	13%	15%	17%	18%
Pond/Lagoon	4%	13%	22%	30%	38%	45%	51%	57%	62%	67%	71%
Pumping Station	0%	2%	4%	6%	10%	14%	15%	20%	26%	32%	38%
Culvert 0.6m	10%	12%	14%	16%	18%	20%	22%	23%	25%	27%	29%
Culvert Headwall	8%	11%	14%	17%	19%	22%	25%	27%	29%	32%	34%

With a modelled budget of £5.5 million per year there is only a 1% improvement over a ten-year period to drainage assets in a very poor condition compared to the £4.5 million as shown below, however as stated above there could be a decline as a result of revenue budget uncertainties.



	Forecast percentage of drainage assets in very poor condition based on £5.5 million budget										
	Cur-rent	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Soakaway	5%	7%	9%	11%	13%	15%	17%	19%	21%	23%	25%
Drainage Gully	1%	0%	0%	1%	1%	2%	3%	4%	6%	7%	9%
Gully Lead 150mm	2%	4%	6%	8%	10%	12%	14%	16%	18%	20%	22%
Gully Lead 225mm	2%	4%	6%	8%	10%	12%	14%	16%	18%	20%	22%
Chamber 1.2m	1%	2%	3%	4%	5%	6%	8%	9%	11%	12%	14%
Chamber 2.1m	1%	1%	1%	2%	3%	4%	5%	6%	7%	9%	10%
Carrier Line 225mm	2%	3%	5%	6%	8%	9%	11%	12%	14%	16%	17%
Carrier Line 300mm	2%	3%	5%	6%	8%	9%	11%	12%	14%	16%	17%
Pond/Lagoon	4%	13%	22%	30%	37%	44%	51%	56%	61%	66%	70%
Pumping Station	0%	2%	3%	6%	9%	13%	15%	20%	25%	31%	37%
Culvert 0.6m	10%	12%	14%	16%	17%	19%	21%	23%	25%	26%	28%
Culvert Headwall	8%	11%	14%	16%	19%	21%	24%	26%	28%	31%	33%

The Structures Asset

Asset	Quantity
Bridges	985
Viaducts	4
Footbridges	96
Culverts	568
Gantries	10
Retaining walls	315
Pedestrian subways	31
Special structures	109

Bridges and other highway structures form essential links in the highway network; their purpose is to connect roads and footways to facilitate safe and efficient travel around the county.

This asset group is particularly complex and varied in composition when compared with other asset groups, and this makes accurate modelling challenging. Unlike other asset groups the age range of the assets is vast, ranging from medieval bridges to modern day structures. Structures comprise numerous types and construction forms, from simple timber and masonry structures to complex steel and post-tensioned concrete multi-span structures.

Condition Assessments and Inspections

There are two types of checks, planned inspections and reactive inspections.

Planned Inspections

Planned inspections are carried out as part of our cyclical maintenance regime:

- **General Inspections**: Visual inspection of the asset based on a two-year rolling programme.
- **Principal Inspections**: Detailed inspection of the main assets based on a rolling programme with each structure having a risk assessed inspection period between six and twelve years
- **Underwater Inspections**: Annual inspection of those bridges which are sensitive to scour action.
- **Trackside Inspections**: Biennial visual inspection of our structures that cross Network Rail lines and cannot be fully seen as part of the general inspection programme
- **Boat Inspections**: Biennial inspection of our structures that require access via a boat. These inspections are done alternately with Trackside Inspections.

The result of these inspections is captured in our database and this data is analysed to determine the condition of each individual asset and the overall condition of the asset stock. This information is used to identify the maintenance and repair works required for each individual structure and creates the forward programme.

Reactive Inspections

Reactive inspections are carried out in response to enquiries and generate ad hoc and emergency works, for example repairs to brickwork and parapets following a road traffic collision.

Prioritisation of Investment

We take a risk-based approach to decide where to invest our money and use the asset information we have about the bridges and highway structures to do this. Some of the things we consider include the following:

- Where is the defect? Is a “critical element” (a part of the asset that is vital to its structural integrity) affected?
- What is the risk to highway users? Does the structure carry/support a Resilient Highway Network road, high-speed road, main road, minor road or footway? Does the structure span a high-speed road, main road, minor road or footway? Does the structure carry high volumes of traffic? Are there suitable alternative routes if the structure fails?
- What is the risk to third party assets? Does the structure support or span a railway, river, watercourse or other third-party asset? Is access to critical infrastructure such as powers stations or hospitals affected?

Investment is prioritised where the risk is highest.

We also consider how to invest our budget based on the condition of our assets. This enables us to determine how much work is needed to restore them and whether it is more cost effective to replace them completely. In many cases we can protect our bridges and highway structures and maximise their lifespan by undertaking minor maintenance, cleaning, painting and waterproofing them. This work requires a commitment to repeat investment but can significantly reduce costs in the longer term. Nevertheless, in some instances the asset has been damaged beyond repair or simply reached the end of its useful life. In these instances, renewal is the only option.

Finally, we need to consider our investment in the wider context of the highways service.

Having assessed each site, we are able to collate a prioritised list of works.

Applying Asset Management Principles to the Structures Asset

There is an extensive inventory database and well established, nationally recognised inspection regimes for structures. This has resulted in a wealth of information on this asset group which until recently has been held on a bespoke database. A recent review of data collection and management within this asset group concluded that while the data collection regimes were fit for purpose, the data management systems no longer were. As a result, work was undertaken to established what was now required from a structures management system and a new Asset Management eXpert for Bridges and Structures (AMX) database has been procured. Data migration has now been completed although further development of the system is still required to achieve full implementation of the new structures management system.

The following forecasts of asset condition have been determined from the new AMX database and modelled using the Structures Asset Valuation and Investment (SAVI) Tool. It should be noted that these results are not directly comparable to those obtained previously using the HMEP ancillary assets toolkit populated with Kent-specific data. Therefore, the current condition provided below is not directly comparable with the comparison results provided for earlier years and should be regarded as a new baseline.

Maintenance Backlog

Based on the condition information collected at each inspection, a work bank of repairs and maintenance works is held for each structure. As part of the development and full implementation of the AMX database, the current work bank is being checked and reviewed to provide a more accurate picture of the structures maintenance backlog. The total value of the work bank currently stands at approximately £20 million although this it is considered to be a significant underestimate and it will increase as we improve our analysis. In addition to the review of the current work bank, planned improvements to our asset management approach e.g. accelerating structural reviews and assessments together with improved inspection coverage for our most difficult to access structures, will increase the maintenance back log assigned at an individual structure level.

Future Management of the Structures Asset

Following the procurement and migration of existing data to the new AMX database we are currently developing the software in conjunction with the supplier to implement new asset management processes. This will enable us to take advantage of the enhancements available within the AMX database.

During the AMX database implementation phase, a number of anomalies with the existing data have become apparent and it will be necessary to re-populate these data fields for each structure. This would require significant extra resources if this

were carried out as a stand-alone exercise so it has been decided that data will be collected and input into the database over the next two-year cycle of general inspections.

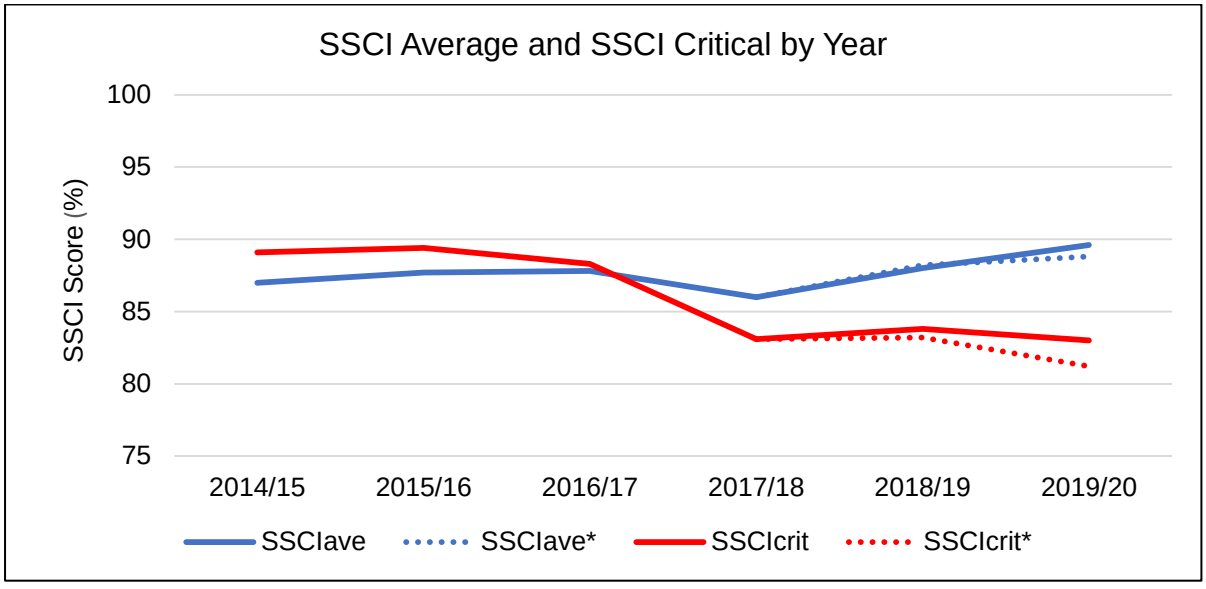
Once the new structures management system has been updated to reflect our current processes and the data anomalies corrected, the AMX database should enable us to model budgetary requirements in greater detail to provide forecast condition outcomes and maintenance backlogs for a number of intervention and investment scenarios.

Current Condition

The current and recent condition of our structures assets can be best represented by a plot of the overall Structure Stock Condition Index (SSCI) as reported as part of the Whole Government Accounts (WGA).

SSCI Average is an aggregate condition score of all parts of each structure regardless of type and provides a good measure of the overall state of the structures stock.

SSCI Critical is an aggregate condition score of the most important parts of each structure only and provides a better measure of increasing risk of failure and the need for urgent repairs or maintenance to ensure ongoing safety of the structure for road users.



Year	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Number of Structures Reported under Whole Government Accounts (WGA)	1557	1557	1520	1554	1711 *	1779 *
SSCI Average	87	87.7	87.8	86	88	89.6
SSCI Average*				86	88.2	88.8
SSCI Critical	89.1	89.4	88.3	83.1	83.8	83
SSCI Critical*				83.1	83.2	81.2

* The basis of our annual WGA valuation was changed for 2018/19 to include around 220 smaller diameter culverts which had not previously been reported. These additional culverts have distorted the recent worsening trends of both SSCI Average and SSCI Critical due the typically higher values (92.0% and 98.5% respectively in 2019/20) recorded for these often difficult to access inspections. Revised figures for SSCI Average and SSCI Critical with the culverts removed have been calculate and shown in the table and chart above.

Forecasting the Future Condition of our Structures Asset

To understand the longer-term results that can be expected from various levels of funding we have undertaken modelling based on the following three funding scenarios:

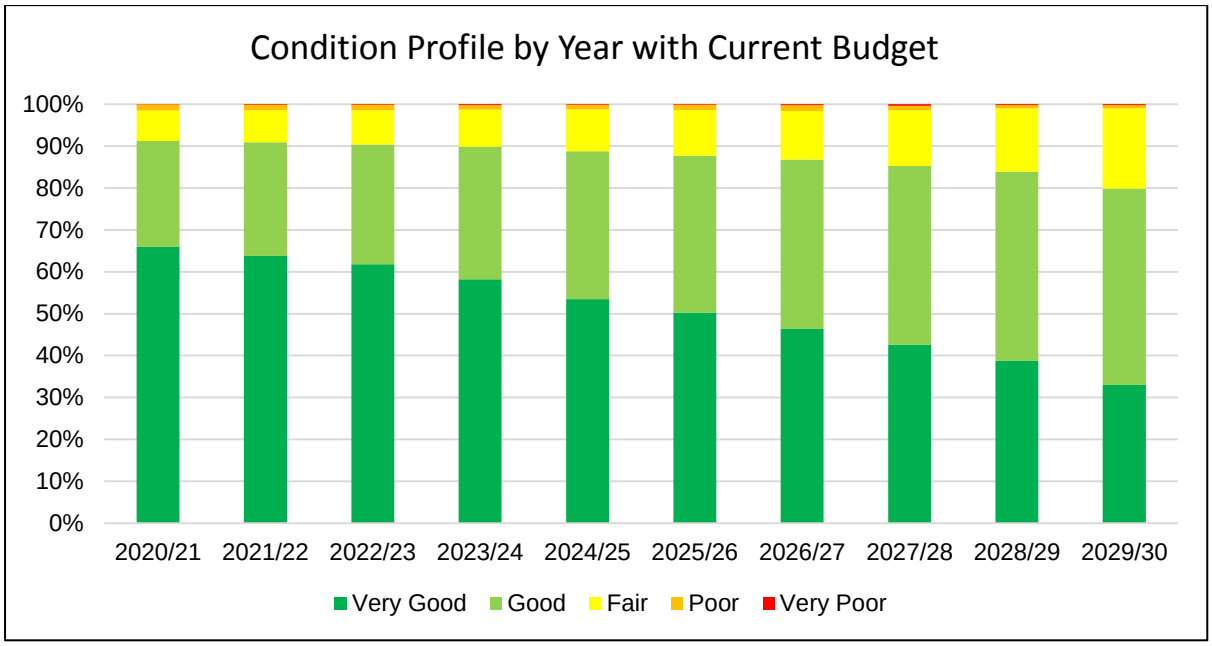
- Scenario 1 - Current budget
- Scenario 2 - Budget reduction
- Scenario 3 - Forecast budget required to maintain current overall condition profile

Scenario 1 - Current Budget

The current annual budget for planned structures asset management is £4.5m. We have modelled the effect on the condition of our structures if this current level of funding remains unchanged.

Condition Band	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	2028/ 29	2029/ 30
Very Good	1172	1134	1099	1035	950	894	824	757	688	587
Good	449	481	507	562	627	664	718	758	803	832
Fair	129	136	145	157	179	195	206	236	269	341
Poor	26	24	24	19	19	21	25	20	13	13
Very Poor	1	2	2	4	2	3	4	6	4	4

Forecast Number of Structures in each Condition Band with Current Budget



Condition Band	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	2028/ 29	2029/ 30
Very Good	66%	64%	62%	58%	53%	50%	46%	43%	39%	33%
Good	25%	27%	29%	32%	35%	37%	40%	43%	45%	47%
Fair	7%	8%	8%	9%	10%	11%	12%	13%	15%	19%
Poor	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Very Poor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

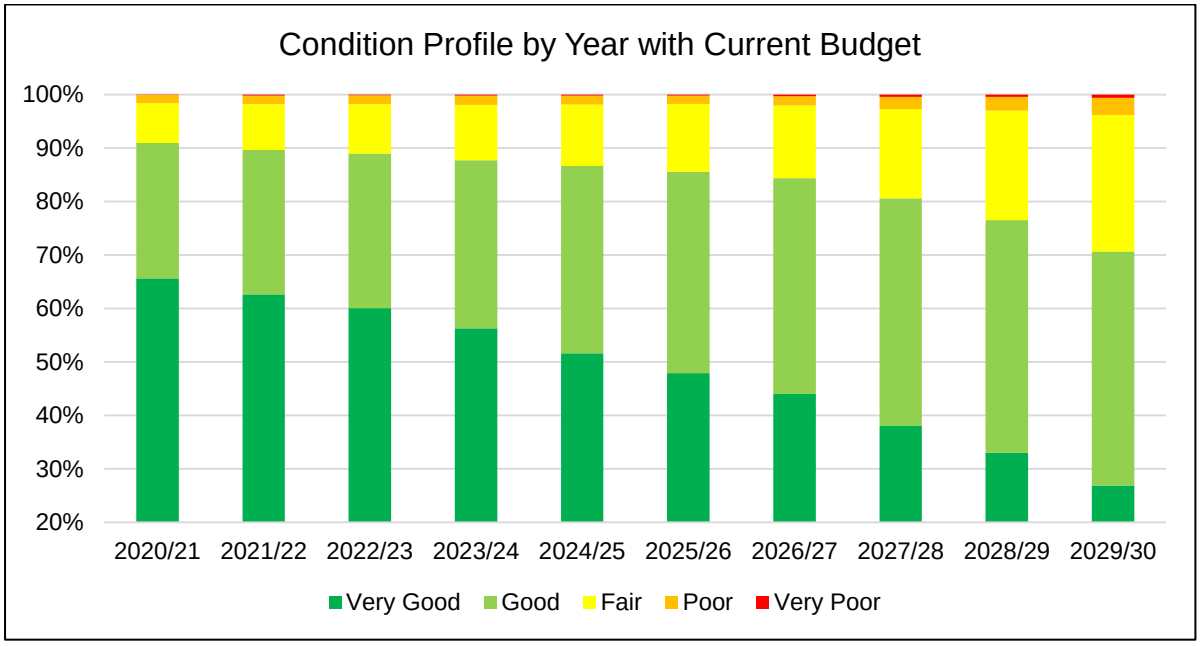
Forecast Percentage of Structures in each Condition Band with Current Budget

Scenario 2 – Budget Reduction

We have modelled the effect of a £2 million reduction in our current budget, to £2.5 million.

Condition Band	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	2028/ 29	2029/ 30
Very Good	1166	1113	1067	1000	917	851	782	676	586	478
Good	450	480	514	559	623	669	717	756	774	777
Fair	132	152	164	184	204	226	241	297	364	454
Poor	28	29	30	30	29	28	31	40	45	57
Very Poor	1	3	2	4	4	3	6	8	8	11

Forecast Number of Structures in each Condition Band with Reduced Budget



Condition Band	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	2028/ 29	2029/ 30
Very Good	66%	63%	60%	56%	52%	48%	44%	38%	33%	27%
Good	25%	27%	29%	31%	35%	38%	40%	43%	44%	44%
Fair	7%	9%	9%	10%	11%	13%	14%	17%	20%	26%
Poor	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
Very Poor	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%

Forecast Percentage of Structures in each Condition Band with Reduced Budget

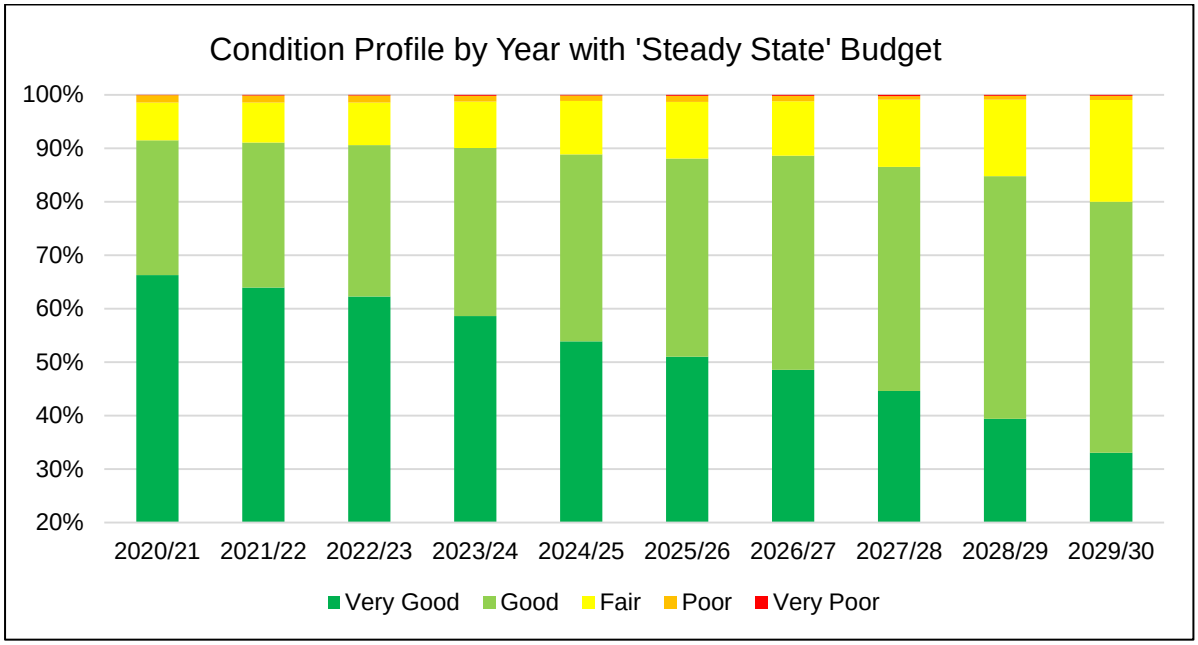
Scenario 3 - Forecast Budget Required to Maintain Current Overall Condition Profile

Using these modelling forecasts, it has been estimated that the annual average budget needed to maintain the current overall condition profile would be £5 million.

It should be noted that it is not possible to get a true steady state across the condition bands, due to the complexity of the stock and the limitations of the SAVI modelling. The graph and table show limited change over time of the poor and very poor condition bands.

Condition Band	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	2028/ 29	2029/ 30
Very Good	1178	1136	1106	1042	958	907	863	793	700	587
Good	448	482	504	558	621	658	712	744	806	834
Fair	125	133	141	154	177	188	180	224	255	339
Poor	25	24	24	19	19	21	18	11	12	13
Very Poor	1	2	2	4	2	3	4	5	4	4

Forecast Number of Structures in each Condition Band with 'Steady State' Budget



Condition Band	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	2028/ 29	2029/ 30
Very Good	66%	64%	62%	59%	54%	51%	49%	45%	39%	33%
Good	25%	27%	28%	31%	35%	37%	40%	42%	45%	47%
Fair	7%	7%	8%	9%	10%	11%	10%	13%	14%	19%
Poor	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Very Poor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Forecast Percentage of Structures in each Condition Band with ‘Steady State’ Budget

The Crash Barriers Asset

This asset group includes approximately 250 kilometres of barrier with the majority on our strategic road network. It is an important element in maintaining the safety of road users on our highway network.

The main purpose of crash barrier is to prevent vehicles impacting hazards. A high percentage of crash barrier is located within the central reserve and ensures segregation between traffic travelling in opposite directions, preventing high-speed head-on crashes. Additionally, objects next to the road can present a significant hazard to the road user and there is a clear need to ensure that they are reasonably protected. Examples of such objects would be structures, large signs, lamp posts, or where there is a large difference in level near to the road edge.

The crash barriers asset has been split between legacy and proprietary systems. Legacy crash barrier systems are older systems and a significant percentage are non-compliant to current standards.

Condition Assessments and Inspections

There are two types of checks, planned inspections and reactive inspections.

Planned Inspections

Planned inspections include general highway safety inspections and are carried out as part of our cyclical maintenance regime:

- Our team of highway inspectors carry out visual safety checks to make sure the highway assets are in a safe condition. This includes visually checking that the barrier is not damaged or missing. We carry out this kind of check at least once every twelve months.
- Our Highway Structures Team carry out cyclic inspections of highway structures and inspect crash barriers which are adjacent to the structure, for the purpose of the protection of that structure.
- Our contractor undertakes five yearly principal inspections of the crash barriers on A and B roads. This information is collated and barriers are graded from one to five (very poor) to five (very good) for priority repair.

Reactive Inspections

Reactive inspections are carried out in response to enquiries and generate ad-hoc and emergency works orders for repair. These enquiries may be initiated by colleagues within partner organisations such as the Police or Highways England and from members of the general public.

Prioritisation of Investment

When deciding where to spend our money we think about the risks posed to the road users, including:

- If the crash barrier fails, does it create a hazard to road users?
- If the barrier is breached, is there likely to be a secondary event, i.e. a structure, another road or railway?
- Serviceability of the crash barrier system.
- Compliance of the crash barrier system.

We also consider:

- The type of road, for example, whether it is a high-speed or Resilient Highway Network road, a main road, an estate road or a country lane.
- The volume of traffic that uses the road, for example is it a main route in and out of a town or is it a minor road only used by a handful of drivers each day?
- The crash history of the road.

By knowing the condition of our assets, we can determine how much work is needed to get them to an acceptable condition or whether it is more cost effective to replace them. It is important to understand whether it is still required and fit for purpose before repairing a crash barrier.

We assess each site using a risk-based approach and have a prioritised list of improvements. This is compared with the lists for other asset groups and is used to allocate budgets and compile forward works programmes.

Other Significant Factors affecting Crash Barrier Maintenance

Proportion of asset at end of life

Crash barriers, like many assets, have not historically been asset managed and as a result, a significant proportion could be considered life-expired or no longer compliant. There will be crash barrier assets on the network that could be in excess of 45 years of age, especially on the lower classification of roads. As part of the ongoing upgrade programme, sections of life-expired legacy crash barriers on the strategic road network have been replaced, including the majority of the crash barrier on A229 Blue Bell and A228 Hale Street Bypass.

RTC damage and non-recoverable costs

Damage by third parties accounts for the majority of reactive repairs. Significant efforts are made to recover costs from third parties where driver details are available. There are, however, crashes where the barrier keeps vehicles on the road and drivers are able to leave the site without police or our involvement.

High Speed Roads

The most critical crash barriers are on the high-speed strategic road network. This network is difficult to access without creating local congestion and therefore the majority of repair and upgrade works are undertaken at night, which has a cost implication. We operate an annual high-speed road programme as a series of planned closures, to undertake works on this part of the network, however, each closure offers limited time to undertake any significant repairs. This programme is used to undertake the majority of the required re-tensioning.

Applying Asset Management Principles to the Crash Barriers Asset

Crash barriers fulfil a critical role and their failure to perform as designed has serious implications for highway safety.

There has been an improvement in the management of the crash barrier asset with principal inspections being undertaken by specialist contractors. A survey of the non-strategic roads was undertaken in 2017 and the strategic roads in 2018, with the next survey planned for 2023.

The 2017 and 2018 surveys were the first time that a systematic approach has been used to collect the asset information, such as location, type, extents and both the serviceability and compliance of the barrier. The barrier was graded from one (very poor) to five (very good) with the data uploaded into an asset inventory system.

The asset inventory system can be used to visualise the barrier information which enables a targeted approach when selecting upgrades. As sections of barrier are upgraded, the information within the system is amended.

Prior to the 2017/2018 surveys, the information collected was of poor quality and we have no reliable information to determine deterioration rates of the asset and we have therefore used the existing grading information, in conjunction with the HMEP Ancillary Assets Toolkit, to forecast future replacement needs for this asset group. This approach has its limitations, mainly due to the age of the data, but it will still allow us to estimate the size of the problem we already know we have with ageing assets.

Re-tensioning of tensioned barrier systems is on a two-year cycle, based on a current annual cost of £100,000; and a current annual budget of £250,000 for non-recoverable damage repair. The amount allocated to be spent on non-recoverable damage repairs has been reduced from £450,000 in previous years due to the improvement in claims recovery.

Maintenance Backlog

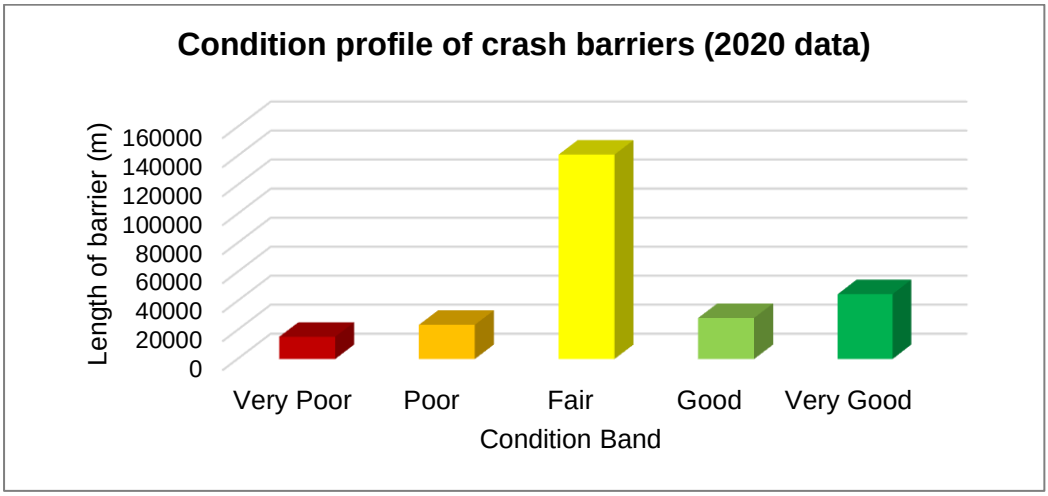
It is estimated that the lack of maintenance investment in this asset in the past has resulted in over 12% of the asset needing total replacement.

Future Management of the Crash Barrier Asset

We recognise that until recently there has been limited asset management, including condition surveying of crash barriers. When the network is resurveyed in 2023 it will enable us to determine the rate of deterioration and this will help us improve the management of this asset.

When we have the data and tools in place, we will be carrying out the same analysis as other asset groups. This will enable us to determine more robustly the maintenance backlog, the effect on asset condition of various funding scenarios and enable us to produce an evidence-based forward works programme.

Current Condition



	Length of Asset in Each Condition Band (m)					
	Total	**Very Poor**	**Poor**	**Fair**	**Good**	**Very Good**
Total Crash Barrier	252,919	15,361	23,559	140,941	28,356	44,702
Legacy Crash Barrier	203,687	14,258	22,406	142,581	22,405	2,037
Proprietary Crash Barrier	49,232	0	0	492	6,400	42,3340

Condition Profile of Crash Barriers (2020 data)

Based on the finding of the previous asset management plan (2018), unfunded capital budget was secured for the upgrade of the legacy crash barrier on the strategic road network and this is starting to improve the asset condition. However, this does not take account of the legacy crash barrier that will be non-compliant, due to its age.

Approximately 45% of the very poor and poor crash barrier is located on the non-strategic road network. Capital funding has been secured to improve its condition over the next few years.

An issue that needs to be resolved is the ownership of the approach and departure crash barrier local to Highways England (HE) bridge parapets. The maintenance/ replacement of these barriers has been neglected due to a lack of agreement over responsibility. A new guidance document has been agreed between ADEPT and HE.

Condition Forecasts

Current budget

After allowing for re-tensioning and damage repair, the current annual core budget for replacement and upgrading this asset is £735,000, with £250,000 allocated for crash repairs.

In addition to the core capital budget an additional capital budget was secured in 2018 of £3.7 million (2019 – 2021) to upgrade the crash barrier asset on the strategic network. The table below shows the improvement in the asset condition to date.

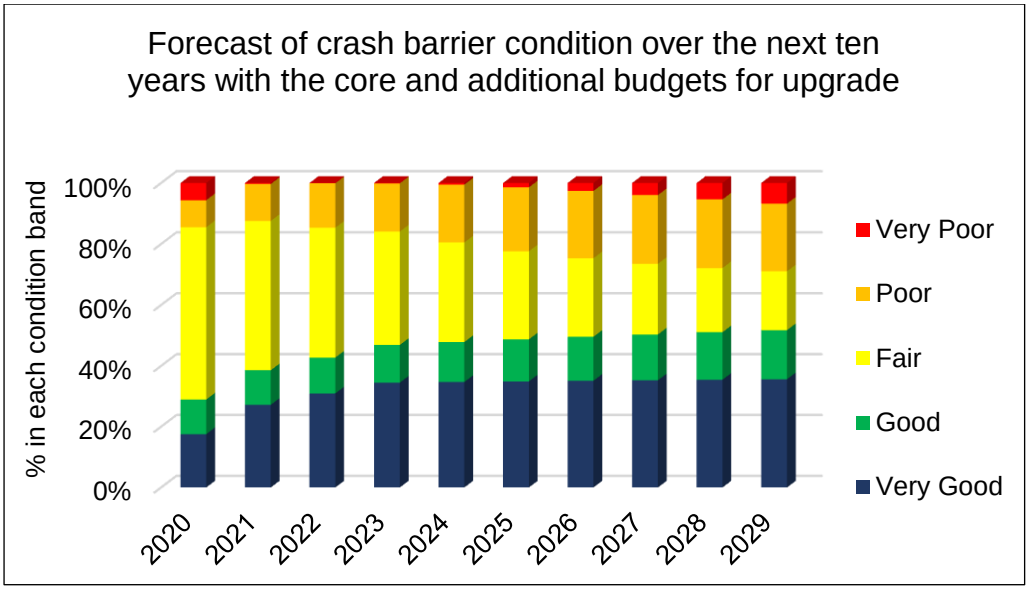
	Year	Very Poor	Poor	Fair	Good	Very Good
Percentage crash barrier in each band	2017/18	10	8	57	12	13
	2020	6	9	57	11	18

In 2019, a further £3.6 million (2020-23) was secured to upgrade crash barrier on the non-strategic road network. These works are currently being prioritised.

The core and additional capital budgets will significantly reduce the percentage of poor and very poor assets on our road network. The capital budgets used in the following assessment are as follows:

- 2020/21 - £3,994,465
- 2021/22 - £1,935,000
- 2022/23 - £1,935,000
- 2023/30 - £735,000 (current baseline budget)

We estimate that the replacement/upgrade backlog by 2030 will be £11.3 million based on the current budget allocations.



	Crash Barrier – percentage in each condition band										
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Very Good	18	27	31	34	35	35	35	35	35	36	36
Good	11	11	12	12	13	14	14	15	16	16	17
Fair	57	49	43	37	33	29	26	23	21	19	18
Poor	9	12	15	16	19	21	22	23	23	22	22
Very Poor	6	0	0	0	1	1	3	4	5	7	8

Forecast of Crash Barrier Condition over the next ten years with the core and additional budgets for upgrade

Condition Forecast

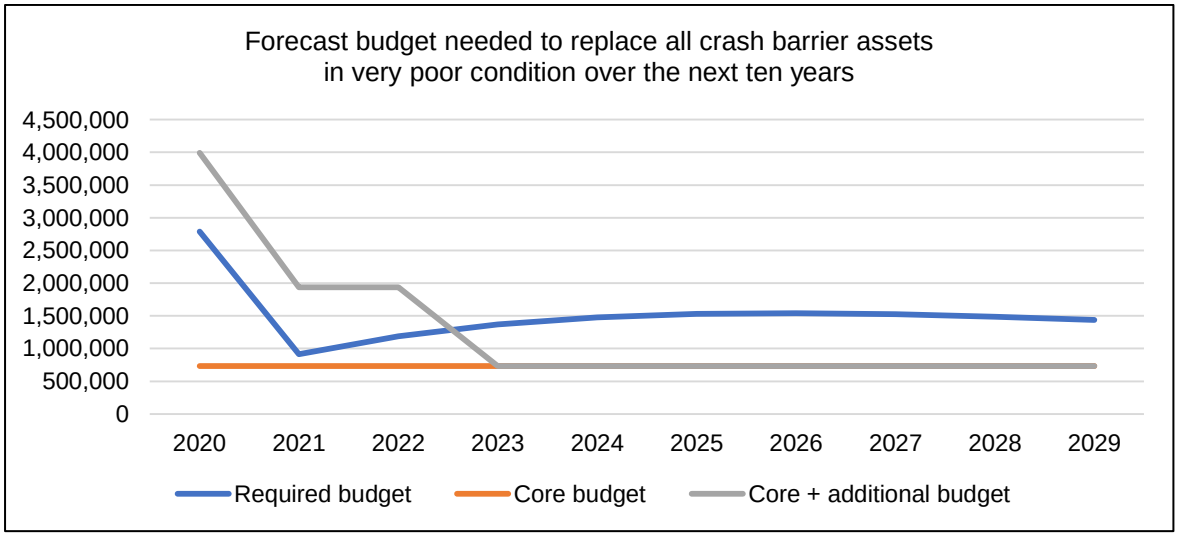
The two tables below show the percentage split between the older legacy crash barrier and newer proprietary crash barrier systems. All upgrades of legacy crash barrier will automatically become proprietary crash barrier, as shown in table in the below.

	Legacy Systems – percentage in each condition band										
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Very Good	1	0	0	0	0	0	0	0	0	0	0
Good	9	8	8	8	9	9	9	10	10	11	11
Fair	56	49	42	36	32	28	24	21	19	17	15
Poor	9	12	15	16	19	21	22	22	22	21	21
Very Poor	6	0	0	0	1	1	3	4	5	7	8

	Proprietary Systems – percentage in each condition band										
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Very Good	17	27	31	34	35	35	35	35	35	36	36
Good	3	3	4	4	5	5	5	5	5	6	6
Fair	0	0	1	1	1	1	2	2	2	2	3
Poor	0	0	0	0	0	0	0	0	1	1	1
Very Poor	0	0	0	0	0	0	0	0	0	0	0

Budget required to maintain steady state condition

The modelling forecasts an annual average replacement budget of £1.5 million to maintain the percentage of crash barriers in very poor condition at the current level.



	Forecast Budget (£ million)									
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Required Budget	2.788	0.913	1.190	1.371	1.478	1.531	1.546	1.525	1.487	1.436
Core Budget	0.735	0.735	0.735	0.735	0.735	0.735	0.735	0.735	0.735	0.735
Additional Budget	2.259	1.200	1.200							
Total Budget	3.994	1.935	1.935	0.735	0.735	0.735	0.735	0.735	0.735	0.735

Forecast budget needed to replace all crash barrier assets in very poor condition over the next ten years

The Tunnels Asset

We have a number of other structures assets that require additional reviews due to their nature. These include the following all of which are on the A299 and are considered critical assets and part of our Resilient Highway Network:

a) Ramsgate Tunnel on the approach road to Ramsgate port was opened in 2000. It is an 800m long bi-directional traffic flow tunnel.
b) Chestfield Tunnel, between Whitstable and Herne Bay was opened in 1998. It is a 315m long dual carriageway tunnel.
c) Cliffsend Underpass was opened in 2012 as part of the East Kent access route. It is a 128m long dual carriageway underpass. Whilst this is not technically classified as a tunnel it contains some substantial mechanical and electrical (M&E) equipment.

These highway structures form essential links in the highway network; their purpose is to connect roads to facilitate safe and efficient travel around the county.

The tunnels and underpass consist of a number of key assets:

- The actual structure itself
- Mechanical components such as pumps, fans, lighting, CCTV
- Electrical components such as the computer systems that drive the mechanical components, lighting and the wiring that links the mechanical components together

Each of these assets has completely different drivers for their maintenance and replacement. The fabric of the tunnels and underpass has a design life of 120 years whilst the M&E components have design lives of between twenty and fifty years but with appropriate maintenance these can be extended.

Currently there is an overall annual revenue budget of around £670,000 for maintaining the Chestfield and Ramsgate tunnels in a serviceable state. This is made up as shown in the table below.

There is no specific revenue budget for Cliffsend underpass. It is anticipated that this will require funding in the region of £50,000 per year to cover wall cleaning, general serviceability maintenance of the lighting and pumps.

Description of spend	Makeup of costs	Revenue Budget
Tunnel Maintenance	• costs of closures • cost of employing specialist contractors for the different components of tunnels • cleaning tunnel walls	£325,000

Tunnel Management	• the provision of an external Tunnel Operations and Maintenance Manager • 24/7 manning of control building at Ramsgate	£345,000

The above figures do not include for capital replacement of major components of the tunnels. These are currently being addressed through the capital bid process.

Condition Assessments and Inspections

The Design Manual for Roads and Bridges (DMRB) classifies the maintenance inspections as periodic as defined below.

Periodic Inspections

Planned inspections are carried out as part of our cyclical maintenance regime:

- **Superficial Inspections**: regular, informal visual inspections to identify deficiencies and defects which can lead to accidents or unnecessarily high maintenance costs based on regular driven, CCTV monitoring and reports from the public. These should be no longer than weekly.
- **General Inspections**: visual inspections of all accessible parts of the road tunnel and its M&E equipment. The frequency is every 24 months for the structure and twelve months for M&E.
- **Principal Inspections**: a review of all relevant as-built drawings, wiring diagrams, operation manuals for maintenance and inspection for the road tunnel, followed by close and detailed examinations of all accessible parts of the tunnel, and can involve removal of cladding, casings, mountings to fans etc. The frequency is 72 months for the structure and 36 months for the M&E. The underpass frequency is in line with other bridges with the structure inspection frequency being six years and thirty-six months for the M&E.
- **Special Inspections**: close examination and investigations (including testing) of a particular area of a defect which is of structural or operational concern. These are carried out when identified from other inspections.

The result of these inspections is captured in various systems but a review of a more centralised system is needed that would give greater understanding of the individual asset and the overall condition of the asset.

Maintenance

Routine maintenance on the tunnels and their associated equipment is undertaken as follows:

- Ramsgate Tunnel has quarterly single day time closures from 8am to 6pm.
- Chestfield Tunnel have two consecutive night closures every quarter from 8pm to 6am.

- Cliffsend Underpass does not follow a formal maintenance schedule but is being reviewed to bring it in line with the tunnels. Currently any maintenance is carried out under the high-speed road closure programme.

Tunnel maintenance is organised and carried out by tunnel specialists and is based upon the operating recommendations made by the manufacturers of the equipment.

Investment

Whilst we take a risk-based approach to deciding where to invest our money we rely heavily on the manufacturer's recommendations with regards to their end of life replacement. This is then reviewed regularly based upon the maintenance and observations regarding any increasing ad-hoc maintenance and its impact on its replacement. Some of the things we consider include the following:

- Where is the defect?
  - Is a "critical element" (a part of the asset that is vital to its structural/operational integrity) affected?
- What is the risk to highway users?
  - What is the impact in the event of an accident in these structures?
  - Do the tunnels and underpass carry high volumes of traffic?
  - Are there suitable alternative routes if the structure/equipment fails?
- What is the risk to third party assets?
  - Is access to critical infrastructure such as powers stations or hospitals affected?
  - What risk is there to the police/ambulance/fire brigade in attending an accident?

Investment is prioritised where the risk is highest.

We also consider how to invest our budget which is done by knowing what condition our assets are in. This enables us to determine how much work is needed to restore them and whether it is more cost effective to replace them completely. In many cases we can protect our tunnels and underpass and maximise their lifespan by cleaning, painting, carrying out manufacturers regular specified maintenance (such as replacing filters, greasing components etc). This work requires a commitment to repeat investment but can save more significant costs in the longer term. Nevertheless, in some instances the asset has been damaged beyond repair or simply reached the end of its useful life. In these instances, renewal is the only option.

The long-term condition of the two tunnels and Cliffsend Underpass are assessed and recorded in accordance with BD53/95 Inspection and Records for Road Tunnels (DMRB 3.1.6). The benefit of regular maintenance intervals for such an asset improves the overall performance, longevity and avoids any unscheduled closures for emergency repairs.

Although the tunnels and the underpass have provided years of undisrupted service to the public and businesses, it will require targeted investment on key assets such as the lighting infrastructure.

Immediate Actions

Using an asset management approach to understanding these assets, their condition and lifecycle performance. Produce evidence of the levels of investment needed, in order to evidence need for funding for future cycles of maintenance.

Review the full inventory of all M&E components within the Tunnels for maximised efficiency in maintenance.

Future Priorities

To continue to keep the tunnels and underpass in constant serviceability for public use and safety.

Continue expanding the lifespan of the tunnels and underpass assets through a methodical asset management approach.

Look at structures data base or Confirm to determine if this can be used for logging all the assets and their maintenance history.

Applying Asset Management Principles to the Tunnels Asset

Whilst there is good knowledge about the maintenance of the tunnel and underpass assets they are not contained in a centralised database and there is no effective way of doing long-term analysis of future needs. A full review is needed to identify a suitable database that could help in future asset management principles.

Maintenance Backlog

Currently we do not have a database for the individual components that make up these structures which means that most judgements on the maintenance and their future replacement are based upon experience and knowledge. Whilst this works well it means the information is centred on one person and provides no business continuity.

Currently it is believed the yearly maintenance with major refurbishment of parts or all of the asset has produced an overall well-maintained asset which has allowed the design life of the assets to be extended. An assessment of the extended life of the assets has been undertaken together with estimated replacement values. This has highlighted the critical components and the timing of their replacement.

Although we have condition information on the tunnels and underpass that informs the programme of maintenance works, the modelling we are currently able to undertake for this asset group is at the strategic level only. This modelling, based on

the overall condition of asset as determined by the whole government accounts process, provides us with information that informs the budget allocation process across all highway asset groups.

Future Management of the Tunnels Asset

Following a review of both the data held on this asset and the processes employed in its management, we recognised that due to the complexity of the individual components of this asset group, the processes and software we are using are no longer fit for purpose. Having determined what is required, a new structures management system has been procured that will also provide information at an operational level.

The Street Lighting Asset

Asset	Quantity
Street Lights (including subways, wall and pole mounted)	122,541
Illuminated Signs	17,695
Belisha Beacons	677
Refuge Beacons	1,447
Illuminated Bollards	4,072

Street lighting assets form a highly visible and vital part of the streetscape. Whilst there is no legal requirement to provide street lighting, it is considered important in enabling the safe use of the highway for road users and pedestrians. Street lighting also helps to promote strong and safe communities. Since 2016 we have converted most of our street lights to light-emitting diode (LED) units controlled by a central management system (CMS).

This asset base is increasing by approximately 1% annually through new developments and improvements to the existing road network.

Condition Assessments and Inspections

Where street lighting is provided, we must take reasonable action to ensure that lighting assets do not pose a risk to the highway user. There are two types of checks: planned inspections and reactive inspections.

Planned Inspections

Planned inspections include structural and electrical testing and night patrols:

- **Structural testing** -There is a robust annual structural testing programme of street lighting columns and illuminated sign posts via non-destructive testing (NDT). The testing results classify the structural integrity of each asset into a lighting column index (LCI) which incorporates the structural condition of a column with non-structural factors picked up via a visual inspection. This gives a full picture of the condition of the asset.

  The scores are split into three bands and those assets with a higher score (red) are considered to be in need of immediate attention and these assets are included in the replacement programme for the current year. As the LCI banding is quite wide and covers a range of defects, the structural testing dashboards in our asset management system are being refined so that the records can be used for lifecycle planning in the future. In this way, the LCI will be used to forecast future budget needs based on the predicted number of assets that will require replacing.

The aim for 2021-22 is to include Belisha beacons and refuge beacons in the structural testing programme.

- Electrical testing is carried out every six years. Lanterns replaced under the LED conversion project all have a valid electrical test certificate. Renewal of these will need to commence in 2022.
- Night patrols are visual checks, carried out on a monthly basis, to ensure that street lighting assets that are not included in the central management system are operational and safe.
- Our team of highway inspectors carry out visual safety checks to make sure the highway assets are in a safe condition. This includes visually checking that the lighting column is not damaged or the door loose or missing. We carry out this kind of check at least once every twelve months.

The results of these inspections are captured in our asset management system and the data analysed to determine the condition of the asset stock. This information is used to identify the maintenance and repair works required for each individual asset.

Reactive Inspections

Reactive inspections are carried out in response to enquiries and emergencies and generate ad-hoc works, for example lantern or bollard replacements. Every time the asset is visited under these circumstances, a visual survey is carried out and information about its condition is reported back.

Prioritisation of Investment

When deciding where to spend our money, we think about the risk to road users and residents and if there is still a requirement for the asset:

- If the asset fails will it create a hazard to road users or residents?
- If the asset fails will it cause a lot of disruption?
- Is the existing asset energy efficient?
- Is the existing asset still needed?
- Does the existing lit sign or bollard still need to be lit?

We prioritise works at locations where there is a risk to safety and do not undertake works to mitigate nuisance factors.

We also consider where the risk to road users and residents is the highest by thinking about the following:

- The type of road, for example, whether it is a high-speed road, a main road, an estate road or a country lane.
- The amount of traffic that uses the road at night time. For example, is it a main route in and out of a town or is it a minor road only used by a handful of drivers each night?

- The impact if the road is closed. For example, the road might only be used by a handful of people, but it may be the only route to get to their homes.
- Road safety statistics
- Requirements of the Traffic Signs Regulations and General Directions (TSRGD) 2016.

Using data from the structural testing programme combined with lifecycle and deterioration modelling, we forecast the number of assets likely to need replacement each year for the next ten years. We also calculate the budget required to meet these forecasts. We assess each site using a risk-based approach and have a prioritised list of improvements which is used when allocating budgets and compiling the forward works programmes.

We think about the ongoing and future maintenance of the asset. We therefore try to standardise on materials used and encourage third parties, such as developers, to use our approved materials. Approved materials now include a suite of LED luminaires which will reduce future maintenance and energy costs.

Other Significant Factors affecting Street Lighting Maintenance

Ageing Infrastructure

Our robust structural testing programme resulted in the provision of additional capital funding for the replacement of life-expired steel street lights in the three years to 2016. This enabled us to make sure that this type of street light now poses a low risk of failure. However, the on-going programme of testing will identify further steel assets which will require replacing.

Following a recent review of our testing programmes, the scope of the structural testing was extended and now includes illuminated signs and we will include Belisha beacons and refuge beacons in the structural testing programme starting in 2021. Previously there was little information on these assets, and they were maintained on a reactive basis.

Energy and Carbon Emissions

The cost of energy is the subject of concern for all councils. Whilst increases in the cost of energy have steadied in recent years, the future is not predictable.

In 2016 a project to convert all of our lights to LED with a central management system was commenced. Over 120,000 lights have been converted to LED. This has provided a much more energy efficient light source and the ability to remotely control the lights through the CMS. To ensure we keep control of energy consumption and carbon emissions we constantly assess our asset and look to remove surplus lights where they are no longer required. We also look to apply adaptive lighting via the CMS which defines the operation of lighting at different levels during periods of darkness. This may include adjusting the lighting class based upon highway use at

certain times of the night (dimming), making lights come on later or go off earlier (trimming), or part-night lighting.

Our objective is to provide the most efficient lighting solution possible to promote the concept of ‘right light, in the right place, at the right time’.

The CMS also enables actual energy consumption to be monitored and we will no longer pay for energy based on unmetered supply calculations.

Non-recoverable damage by third parties.

Damage by third parties occurs frequently and recovery of costs is an increasing challenge. Damage to a street light as a result of a road traffic collision frequently results in significant damage to the vehicle involved which means there is often the opportunity to recharge the cost of replacement. However, this is not the case for lit signs and bollards. The street lighting team spends in excess of £200,000 per year on replacing these assets that have been damaged by third parties.

Adoption of assets

Whilst we own most of the street lights there are approximately 13,000 which are owned by district, parish and town councils. These assets are typically in poor condition, not having benefitted from a planned inspection regime or replacement programme. There is increasing pressure from these councils for us to adopt these lights which, if progressed, will add to the financial pressure to ensure that the assets are in an appropriate condition.

Ashford Borough Council has recently completed an upgrade programme of their street lights to an adoptable standard and it is anticipated that approximately 550 of their assets will be adopted onto our inventory in 2021. Other District Councils are also reviewing their street lights with a view to us adopting them in the next few years.

Applying Asset Management Principles to the Street Lighting Asset

We have an extensive inventory and condition database of its Street Lighting asset group and this has been used in conjunction with lifecycle modelling to forecast future asset replacement needs.

Maintenance Backlog

The calculation of the maintenance backlog for the street lighting assets is different to some other highway assets, such as roads and footways. The latter will continue to operate safely in a deteriorated state and it is possible to apply differing levels of treatment at various stages of deterioration to restore the condition of the road and extend its life, without the need for total replacement. This isn’t the case with street lighting assets. While there are a limited number of preventative treatments that we could apply, such as painting, there are no treatments to improve their structural

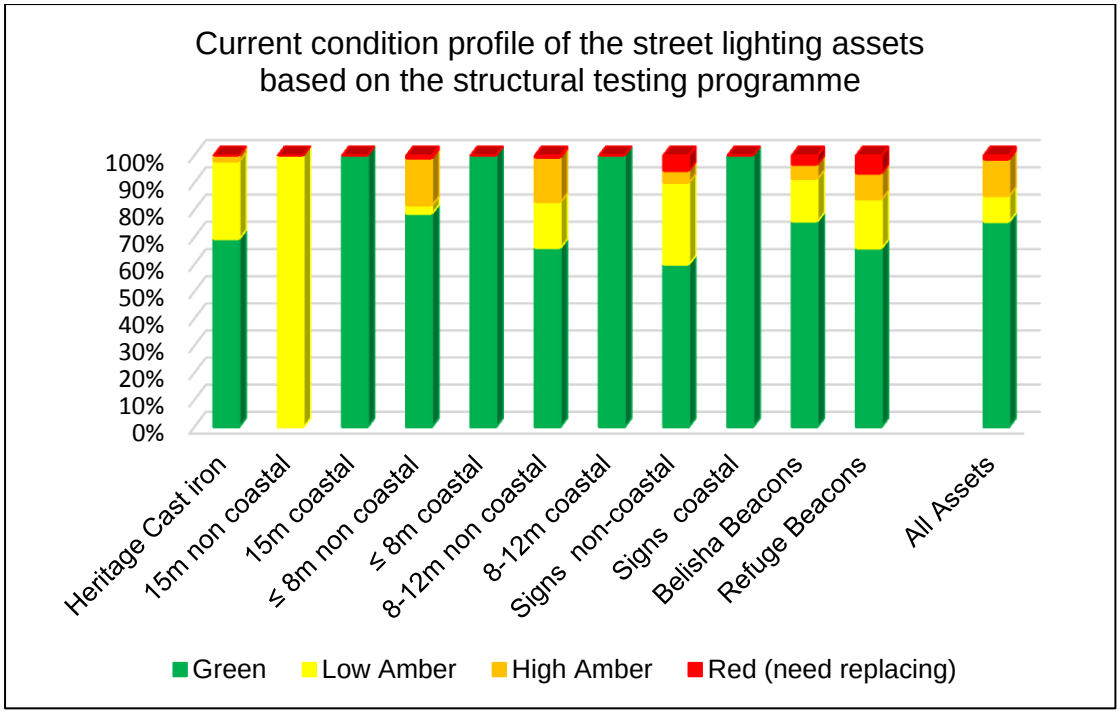
integrity. To ensure the safety of road users, once an asset has been deemed structurally unsound it must be removed. This could either be permanently or by being replaced with a new asset, depending on the available budget. Similarly, replacing the asset before it nears this end of life condition is undesirable as it's full value will not be realised.

Although it would be possible to have a backlog of columns in need of replacement following completion of the annual structural testing programme, we do not let this happen on safety grounds. If future budgets are insufficient to replace all of these assets each year we will need to implement a programme of permanent asset removal to fulfil our duties under the highways act of maintaining the network in a safe condition.

Current Condition

The current condition profile is based on the results of the most recent annual structural testing programme completed in March 2020.

	Percentage in each Condition Band			
	Green	**Low Amber**	**High Amber**	**Red** (need replacing)
Columns - heritage cast iron	69%	28%	2%	0%
Columns - 15m non coastal	0%	100%	0%	0%
Columns - 15m coastal	100%	0%	0%	0%
Columns - ≤ 8m non coastal	79%	3%	17%	1%
Columns - ≤ 8m coastal	100%	0%	0%	0%
Columns - 8-12m non coastal	66%	17%	16%	1%
Columns 8-12m coastal	100%	0%	0%	0%
Signs - non-coastal	60%	30%	4%	6%
Signs - coastal	100%	0%	0%	0%
Belisha beacons	76%	16%	5%	3%
Refuge beacons	66%	18%	10%	7%
All Assets	76%	9%	13%	1%



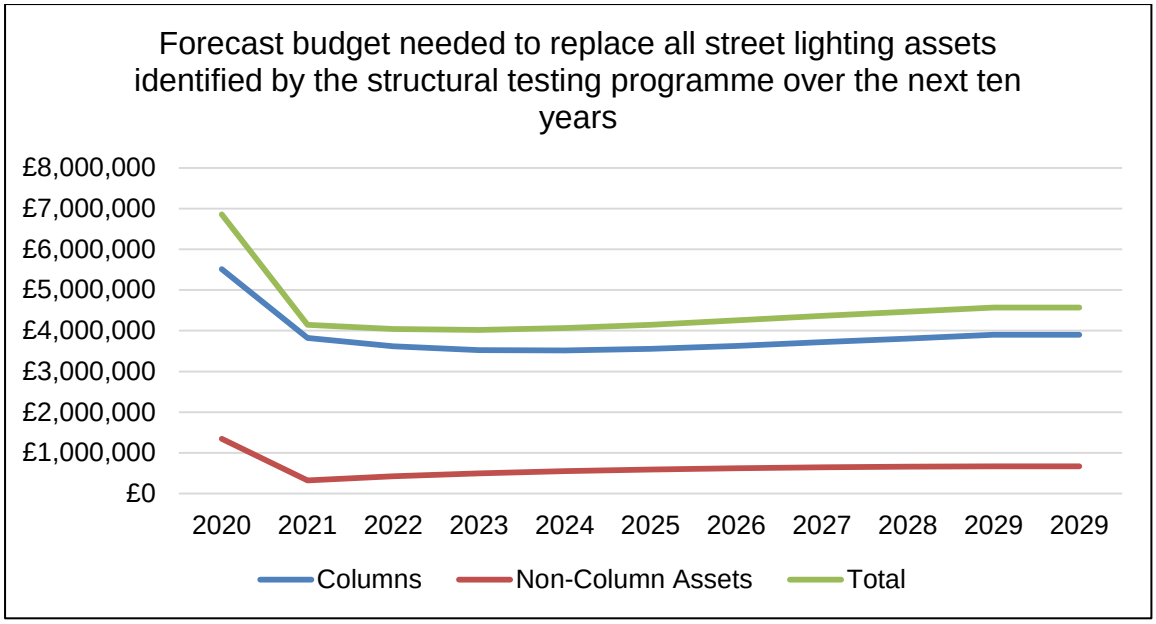
Budget Forecasts

These budget forecasts are based on the number of street lighting assets predicted to be classified as 'Red' from each year's structural testing programme. This means the risk of columns failing is considered too high for them not to be included in the replacement programme for the respective year. If the available budget becomes insufficient to replace the required number of assets a programme to permanently remove these failed assets will need to be implemented.

The table and graph below show the expected budget that will be needed to replace columns and other street lighting assets as they reach the end of their useful life. It is estimated that the average annual budget required to replace these assets is around £4.5 million. The high proportion of non-column assets forecast to need replacement in the next few years is the result of their recent inclusion in the structural testing programme. Previously there was no information on these assets, and they were maintained on a reactive basis.

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2029
Columns	5.51	3.82	3.62	3.52	3.51	3.55	3.63	3.72	3.81	3.90	3.90
Non-Column Assets	1.35	0.32	0.42	0.49	0.55	0.59	0.62	0.65	0.66	0.67	0.67
Total	6.86	4.15	4.04	4.02	4.07	4.15	4.25	4.36	4.47	4.57	4.57

Forecast budget needed to replace all street lighting assets identified by the structural testing programme over the next ten years (£ million)


Forecast budget needed to replace all street lighting assets identified by the structural testing programme over the next ten years
£8,000,000
£7,000,000
£6,000,000
£5,000,000
£4,000,000
£3,000,000
£2,000,000
£1,000,000
£0
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2029
Columns
Non-Column Assets
Total

.

The Intelligent Traffic Systems (ITS) Asset

The purpose of ITS assets is to monitor, manage and control vehicle movements on the highway network. This asset currently comprises around 350 signalled junctions, 390 signalled crossings, 170 CCTV cameras and over 500 other interactive warning, bus real time information and electronic message signs. The number of ITS assets is currently increasing annually due to new housing and business developments as well as third party requests for safety schemes.

Condition Assessments and Inspections

There are two types of checks, planned inspections and reactive inspections.

Planned Inspections

Planned inspections include highway safety inspections and condition checks carried out as part of our cyclical maintenance regime:

- Our team undertakes **visual checks** to make sure the ITS assets are in a safe condition. This includes checking that interactive warning signs are facing the correct direction and pedestrian crossing push buttons are working. We aim to carry out this kind of check at least once every four months.
- Our term maintenance contractor carries out an **electrical safety test** of all ITS assets once every twelve months.

Reactive Inspections

Reactive inspections are carried out in response to enquiries and generate ad hoc and emergency works, for example fault repairs, replacement of traffic lights damaged by third parties during a road traffic crash, or modifications to signal timing plans. During each visit by our maintenance contractor to an asset, a site check is carried out upon completion to minimise repeat fault reports.

Prioritisation of Investment

When deciding where to spend our money, we think about the risk that system failures pose to road users and residents, including:

- What do we need to do to make sure that the ITS equipment does not fail?
- If it fails, does it create a hazard to road users?
- If it fails, does it cause congestion/disruption?

We also consider:

- The type of road; for example, whether it is a high-speed road, a main road, an estate road or a country lane and the risk presented by the volume of conflicting traffic movements, including pedestrians.

- The amount of traffic that uses the road; for example, is it a main route in a town or is it a minor road only used by a limited volume of traffic each day.
- The impact if the road is closed; for example, the road may only be used by a low number of people but might be the only route to get to their homes.
- The number of pedestrians affected; for example, if the traffic signal crossings fail is there a safe alternative route with provision for vulnerable users.

When deciding which assets need to be prioritised for maintenance, fault rates, asset condition, equipment age and the impact on vulnerable users are taken into consideration. It is also important we understand whether or not the asset is doing its job effectively and in the correct location. By considering all of these factors we can determine how much work is needed to repair the asset and whether or not it will be more cost effective to replace it completely.

We continually manage issues from the Highway Management Centre using data available to us through our central control systems, CCTV images and live fault reporting tools. These range from significant congestion problems affecting busy roads through to faulty roadside message signs that fail to provide drivers with information on highway incidents.

Whilst we know we need to react and fix dangerous situations promptly, this is not a cost-effective way of working, as we have to send engineers specifically to these locations and more time is spent travelling between sites rather than dealing with the issues. We can clearly achieve more with our budget if we plan the work that needs to be done to minimise unproductive travel time.

Other Significant Factors affecting ITS Maintenance

Ageing Infrastructure

As technology advances, older equipment becomes obsolete and is no longer supported by the manufacturer. Some components can be repaired or replaced which will prolong the effective life of the asset, but this is not always possible. However, during any site refurbishment any re-usable equipment is salvaged and made available for use in routine maintenance to extend the life of other signals.

Limited Capacity

With the demand for additional housing and the increasing population there are additional pressures put on the highway network. Modifications are often made to existing assets to accommodate pedestrians or buses which can impact on the efficiency and capacity of signalised junctions. Where there is a significant impact on the network there may be the potential to mitigate this by implementing a revised method of signal operation. However, with multiple developments in a limited area,

consideration must also be given to the effects on the wider network requiring greater financial contributions to provide more comprehensive improvements.

Reliance on Third Party Infrastructure

The ITS asset may require equipment to be installed that has an impact on another asset, e.g. detector loops in the road surface. When these ITS assets fail, alternatives are considered to separate the issue and avoid a repeat situation, but it is not always possible to implement such systems due to constraints with safety requirements.

External Factors

There are short notice demands made of the ITS team from external third parties which can potentially divert limited resources and disrupt maintenance plans. When considering third party requests for equipment, such as interactive warning signs, these will be assessed based on their safety benefits, maintenance requirements and likely whole lifecycle costs. This may result in some proposals being rejected at the concept stage and alternative engineering measures being promoted.

Specialist materials

We minimise the use of specialist equipment or materials which can be expensive to install and costly to maintain. During the design and approval stage the location, quantity and type of traffic signal detection equipment is scrutinised to minimise the long-term maintenance liabilities, some of which may affect other asset groups. New technologies and equipment will always become available and these will be assessed by limited trials as per the agreed process.

Applying Asset Management Principles to the ITS Asset

We have excellent inventory and condition data on this asset group that has been built up over many years which is continually checked and updated. Modelling of the asset condition and renewal needs for the next ten years has been developed but will be reviewed to represent the binary nature of traffic signal equipment more accurately.

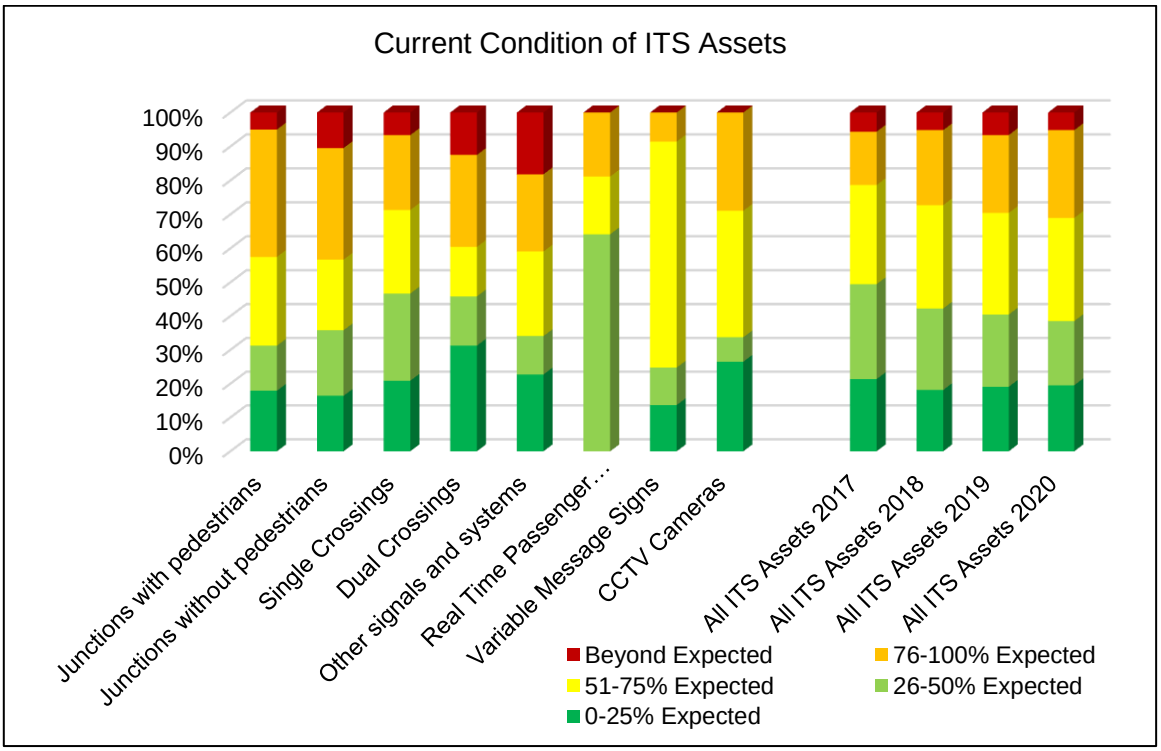
The current approach to modelling is based solely on asset age which has limitations. Due to the relatively low number of assets, compared to other asset groups, and the limited treatment options available at high cost this modelling approach needs further consideration. In practice, the determination of refurbishment priorities is not based on age alone but includes other criteria such as fault rates, equipment maintenance and third-party contributions. There are also a number of other measures than can be used to extend the life of an asset, rather than total asset replacement. These need to be considered within the model and an assessment made of the benefits for each.

Maintenance Backlog

We have excellent data on the age of all our ITS assets and currently calculate the maintenance backlog based on how much it will cost to replace any asset at the end of its expected life. As fault rates and other factors are also used when determining which assets should be repaired or replaced we recognise that in future we need to refine our backlog calculations by also taking these into consideration.

There will also be other lower cost treatment options to consider, e.g. replacement of obsolete controller types but without renewing heads, cables and posts. Each intervention will have to be determined on a site-by-site basis and the impact on the life span assessed. This may ease the current financial pressures but potentially at the expense of further difficulties in the future.

Current Age Profile of the ITS Asset



	Total No. of Assets	Condition Band (% of Expected Life)				
		0-25	26-50	51-75	76-100	>100
Junctions with pedestrians	240	43	32	63	90	12
Junctions without pedestrians	67	11	13	14	22	7
Single Crossings	345	72	89	85	76	23
Dual Crossings	48	15	7	7	13	6
Other signals and systems	44	10	5	11	10	8
Real Time Passenger Information	53	0	34	9	10	0
Variable Message Signs	117	16	13	78	10	0
CCTV Cameras	166	44	12	62	48	0
All ITS Assets 2020	**1080**	**211**	**205**	**329**	**279**	**56**

Percentage of ITS asset sub-groups in each condition band

It is estimated this current asset condition represents a renewal backlog of £4.18M.

Age Profile Forecasts

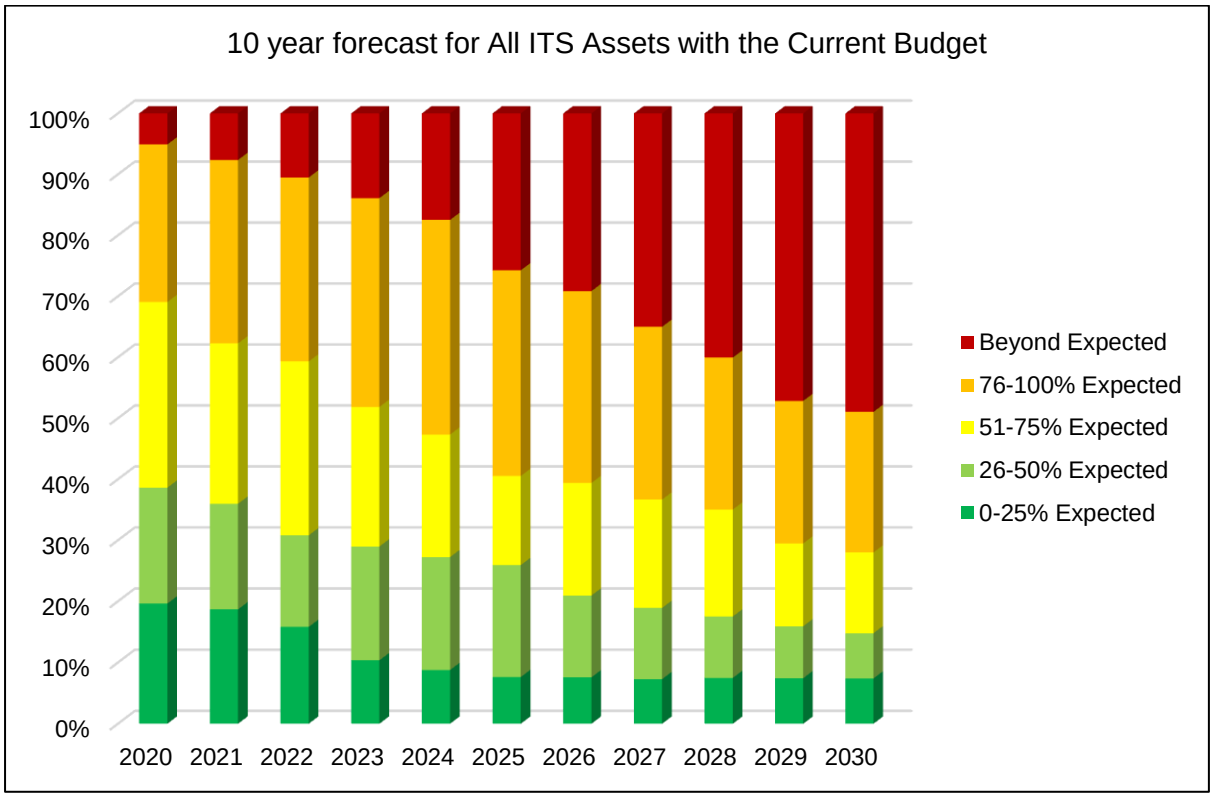
The above information has been used to model the budget requirements, and the age profile of the asset to forecast expected outcomes from three scenarios:

- The condition over the next ten years based on the current budget
- The budget required to keep the asset at a steady state over the next ten years
- The budget required to clear the current backlog over the next ten years

Current Budget

The age profile of the ITS asset has been modelled for the next ten years using the current annual renewal budget of £678,000. It is estimated this will result in a decline of the asset condition and create a renewal backlog of around £30.8m by 2030.

An asset that has reached the end of its expected life is unlikely to stop working immediately. However, at this point in the lifecycle it is likely to develop faults more frequently which will require more expensive reactive type maintenance with a dwindling number of suitable components due to equipment obsolescence.



Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0-25% of expected life	212	203	173	114	97	85	85	82	85	85	85
26-50% of expected life	205	188	164	205	204	204	150	131	114	97	85
51-75% of expected life	329	286	312	252	222	163	207	200	199	155	152
76-100% of expected life	279	327	330	377	389	376	353	319	283	267	265
Beyond expected Life	55	83	115	153	193	287	327	394	455	539	563

Steady State

Over the past 20 years there has been a significant increase in the use of ITS to mitigate the impact of housing developments and manage increased vehicle flows on the highway network. This has led to a growth in the number of traffic systems and signals installed every year, which outpaces the number of interventions/ refurbishments that can be completed within the current budget allocation. Whilst the number of assets that can be renewed each year has remained broadly constant, there is an increasing number exceeding their expected lifespan which results in an increasing backlog. We have estimated the budget profile over the next ten years needed to maintain the same level of backlog for ITS assets beyond their expected life, and address an increasing number of assets every year. It is estimated that this amounts to an additional £26.6 million of unfunded works up to 2030, which equates to an average annual renewal budget of around £3.3 million to retain the existing backlog at £4.18 million.

Clear Backlog

In order to address the current backlog by 2030, a further £4.18M is required during the period, which equates to an average annual renewal budget of around £3.8M.

The Soft Landscape Asset

Trees and vegetation play an important role in the landscape and help make Kent's roads and footways a more attractive place. In addition to their visual role, trees. shrubs and hedges can remove a range of atmospheric pollutants, provide shelter and shade, reduce glare, stabilise banks, reduce perception of noise and contribute to ecological diversity. Grass verges soften the hard look of roads provide amenity value and have widespread benefits for pollinators and wildlife.

It is our aim to maintain and keep our soft landscape assets safe through a programmed and adaptive management regime which improves the asset's sustainability and biodiversity, and increases the overall tree canopy coverage for the whole of the county.

Asset Inventory

The table below identifies the larger groups within the soft landscape asset.

Asset	Quantity
Individual Street Trees	55,000
Groups of Trees or Tree Belts	450,000
Urban Grass	3.2million m²
Visibility Verges	734,000 m^2
Rural Verges	4,600 km
Conservation Verges	572,200 m^2
Shrub beds	242,000 m^2
Hedges (Rural & Urban)	110 km
Weeding	4,700 km
Off Road Cycle Routes	116 km

Condition Assessments and Inspections

We undertake two types of checks or inspections on our soft landscape asset, planned and reactive:

Planned Inspections

Planned inspections include general highway safety inspections and one, three and five yearly tree safety inspections:

- Our team of highway inspectors carry out driven and walked highway inspections. They have a basic understanding of arboriculture and check for trees that are clearly leaning towards the highway and may cause a hazard, identify visible loose branches and encroachment onto roads and footways, obstructions and trip hazards. They also inspect grass, shrubs and hedges

for encroachment and obstruction which may affect visibility and safe use of the highway network. The frequency of inspections is dictated by road category ranging from annual for minor roads to monthly for major roads.

- Planned inspections of trees in the highway take place on a one, three or five-year cycle dependant on classification and are carried out by qualified arboriculturists. Our tree assets are recorded in our highway database and the inspector will update the asset details including the tree condition at each inspection. When we carry out planned tree inspections, we also take note of private trees within falling distance of the highway. This is a ground level, basic visual inspection undertaken from the confines of the highway boundary only and therefore limited in its scope.

We do not undertake planned inspections on our other soft landscape assets (grass, hedges and shrubs) as they are subject to planned maintenance activity which is then subject to a sample quality control inspection.

Part of every procurement includes a check of the assets included and the accuracy of data that has been gathered previously. Asset data is then gathered through the life of the contract and added to our mapping systems to ensure that we always have an up to date asset register.

Reactive Inspections

Reactive inspections of trees, grass verges, shrubs and hedges are carried out in response to customer enquiries. They may generate ad-hoc or emergency works or result in us serving notice under Section 154 of the Highways Act 1980 requesting the landowner to trim or deal with a vegetation issue. Where this is not completed in the stated time, we will undertake the work and seek to recover the costs from the landowner.

Prioritisation of Investment

When we are deciding where to spend our money, we think about the risks posed to road users and residents, the impact on the surrounding environment and the age and condition of the asset:

- Is the tree or vegetation creating a hazard to road users or residents?
- Is the tree or vegetation having an adverse effect on the surrounding environment?
- Is the tree or vegetation damaged, diseased or dying?
- Is the tree or vegetation adversely affecting adjacent highway assets?

Trees are the highest risk assets within the soft landscaping group of assets. Some trees are given a higher priority because of their size, age, history or legal status.

When prioritising where we spend our money we also consider the type of road, its speed, location and its use by both vehicles and pedestrians.

For example, a damaged tree near a pavement may present an immediate risk to pedestrians. Within two hours of becoming aware of the problem we will make the site safe and put barriers around the area with signs to warn people of the hazard. Minor die back to a tree within a large open space with no risk to the highway may be programmed for works within one to three months dependent on size.

We regularly manage issues through our fault management system. These range from safety critical problems affecting busy roads to nuisance and quality of life complaints. Whilst we know we need to react and fix dangerous situations quickly, this is not a cost-effective way of working as we have to send landscape officers specifically to these locations and more time is spent travelling rather than fixing. We can clearly get more done for our budget if we plan the work that needs to be done in advance.

We assess each site using a risk-based approach and have a prioritised list of improvements.

Other Significant Factors affecting the Soft Landscape Asset

Pest and Disease

Soft Landscape assets are natural living organisms in their own right. As such, they grow and are subject to disease or even death. Where this occurs on a large scale there can be unforeseen impacts on maintenance budgets. A good example of this is Ash dieback (*Hymenoscyphus fraxineus*) which affects tree populations.

Private Trees and Vegetation

There are a large number of trees, hedges and shrubs located on private land adjacent to our public highway. These are privately owned and we work with the local community to encourage landowners to maintain them appropriately. In law, the courts have accepted the principle that people with responsibility for trees, whether owners, tenants or agents should inspect their trees and vegetation at regular intervals. If following an inspection, symptoms of ill-health or unusual growth are observed, expert advice should be sought. Failure to obtain or act upon such advice could lead to claims of negligence or failure to comply with their ‘Duty of Care’. If necessary, we have powers under the Highways Act to notify landowners of their responsibilities. If they do not carry out necessary maintenance work, we may exercise our powers to carry out the works and recover costs from the landowner.

Environmental matters

Climate change has meant that more flooding is seen through Autumn to Spring with hotter dryer summers. This impacts the ability of native species to grow and thrive in the local environment as well as increasing growth rates for grass and other vegetation. Imbalance in this regard has the potential to impact on landscape “safe useful life expectancy” and “lifecycle planning” when installing new landscape assets

such as trees and shrubs. The above factors all need to be balanced with available funding when planning future schemes, services and frequency of maintenance.

Weed Treatment

We currently undertake our programmed weed sprays using the herbicide glyphosate to keep the highway safe and to reduce road and footway asset deterioration. There is concern within the public that the usage of glyphosate should be reduced on environmental and health grounds despite its approval by the Health and Safety Executive.

As part of our continuous review of the products we use within the highway we have explored alternatives to the use of glyphosate. One of these involved the use of hot foam to control weeds as well as cultural methods such as burners and brushes.

These alternatives do not currently accomplish a similar level of weed control without increasing costs and in some cases may well increase CO_2 emissions as well. DEFRA guidance published in 2015 estimated a cost increase of up to eight times for non-chemical control over glyphosate. To remove glyphosate completely from our current programmes could therefore create a significant unfunded revenue pressure on our budgets.

We will continue to review how we manage weeds within the highway, investigating alternative methodologies to glyphosate as and when they arise, and will present options to elected members when available.

Interaction with other Highway Infrastructure

The condition of the soft landscape assets and its ability to negatively impact adjoining assets is also directly associated with the level of maintenance provided.

Adoption of assets

As development increases and more residential properties are built more assets are added to our asset inventory. This inevitably leads to financial pressure on our budgets. There are also instances where the quality of the asset adopted could be improved or designed more efficiently for maintenance, both have an impact on the assets long term future.

Recognising the Values of the Tree Asset.

Damage by third parties and removal of our tree asset is quite common. A system of valuing trees based on the Capital Asset Valuation of Amenity Trees (CAVAT) system has been included within our fees and charges register. However, there is still more education required to inform people of the value of mature trees and their contribution to the street scene. Recovery of costs associated with utility damage, developments or third-party damage is still quite challenging.

Applying Asset Management Principles to the Soft Landscape Asset

We have collected extensive data on our soft landscape asset but due to the nature of the asset and type of maintenance involved we consider a forecast of service levels for different funding scenarios to be more appropriate than the lifecycle planning approach taken for other asset groups.

Maintenance Frequencies

Maintenance frequencies are reviewed periodically in accordance with available funding. We are aware that both the current and proposed frequencies fall short of what is required to prevent both medium and long-term asset deterioration. We also understand that the long-term deterioration of landscape assets can impact on surrounding assets. Established weed growth and tree roots in hard surfaces can cause hundreds of thousands of pounds worth of damage in subsequent repairs to ensure a safe highway. Moreover, unmaintained overhanging vegetation can block street lighting, visibility at junctions, obstruct the safe passage of vehicles and pedestrians and obscure the visual condition surveys of crash barriers. Some of these issues have safety implications for road users and others have the potential to become legal claims from third parties.

Previous Maintenance Frequencies

The table below gives an overview of the history of soft landscape maintenance frequencies. The notable reductions since 2009/10 are a result of ongoing financial pressures.

Service Provision	**Maintenance Frequency**		
	(2009/2010)	(2016/17)	(2020/21)
Urban Grass Cutting	10-16	8	6
Conservation verges	N/A	1	1
Shrub Bed Maintenance	2-12	1	1
Urban Hedges	2	1	1
Weed Spraying (Hard surface)	2-3	1	1
Rural Swathe Cutting	2-3	1	1
Visibility cuts	3	3	3
Rural Hedge Cutting	1-2	1	1
High Speed Road (HSR)	2	1	1
Bus Routes	Ad-Hoc Safety Critical Work		
Tree Maintenance	Ad-Hoc Safety Critical Work		

Forecasts of Maintenance Frequencies (Revenue Budget)

The table below summarises the forecast maintenance frequencies for three levels of revenue funding.

Service Provision	Steady State Service (£4.42m)	Current Budget Reduced Service (£3.42m)	Statutory Minimum Service (£2.42m)
Urban Grass Cutting	8	6	1-3
Conservation verges	1(increase qty)	1	0
Shrub Bed Maintenance	2	1	0
Urban Hedges	2	1	0
Weed Spraying (Hard surface)	2	1	0
Rural Swathe Cutting	2	1	1
Visibility cuts	3	3	3
Rural Hedge Cutting	1 - 2	1	every other year
High Speed Road (HSR)	2	1	1
Bus Routes	Safety & amenity	Safety critical only	
Tree Maintenance	Safety, amenity & nuisance	Safety critical only	

Environmental Focus

With the recognition of climate change there has been an increased focus on the highway soft landscape asset and how this can deliver the environmental benefits necessary to reach both the council's and government's targets regarding biodiversity.

The table below represents the current asset register which is being managed for the benefit of biodiversity.

Environmental Asset	Number of sites	Number of roads/paths	Area (m²)
Roadside Nature Reserves (RNR)	123	108	101,000
Sites of Scientific Interest (SSSI)	55	279	318,000
Bee Roads	3	39	145,000
Conservation Verges (urban)	17	17	5,000

As part of our approach to managing this asset we will do the following:

- Provide verge management regimes that actively encourage and enhance biodiversity for pollinators and wildlife.
- Manage the tree asset to deliver canopy coverage increases within the urban environment to provide gains in carbon sequestration, pollution removal, thermal cooling, avoided runoff through rainwater interception and biodiversity for a sustainable future.

Wildlife Verges and Bee Pollinators

As part of our approach to asset management we identify sites within our asset registers that are best suited to this type of management routine. Knowing our asset and what can be achieved has allowed us to develop the following environmental assets:

- Enhancing Bee Pollinator Verges in line with our bee pollinator strategy by delaying cutting to later in the year. This allows flowers to bloom, provide nectar sources and seed before being cut.
- Improving Roadside Nature Reserves through collaborative work with our Kent Wildlife Trust stakeholders and detailed auditing, which has increased this asset and improved the biodiversity of the highway natural environment.
- Defining our Sites of Special Scientific Interest and working with Natural England to provide more detail on the management of these sites and the ecology present.
- Working with highway inspectors as part of our continual asset audit of rural roads that may be suitable for alternative management regimes.

There is a shortfall in the funding required to meet these initiatives and as part of the continual refinement of our asset knowledge we will quantify the benefits and costs of the above to present funding scenarios for the council's long-term plans regarding biodiversity.

Canopy Coverage

All of the trees within Kent are now mapped on a Geographic Information System (GIS) canopy layer detailing the size and extent of the overall tree asset. This detail will be refined to determine where future trees are replanted and will influence our future strategies for increasing canopy coverage within the tree asset. The table below illustrates the canopy coverage for the whole of the county compared with that for which we are responsible.

	Canopy Area (ha)	**Canopy Cover %**
County	373,942.60	17%

KCC	354,739.45	18%

As part of wider initiatives to increase the tree canopy within Kent this data could be used to set some clear aims regarding canopy coverage which is specific to the highway tree asset. The average canopy coverage across England's towns and cities is 16%. The Urban Forestry and Woodland Advisory Committee suggest that 20% canopy coverage is a good aspiration to as part of a long-term strategy whilst the government has set targets of 19% for the UK by 2050.

Our approach to targeted tree planting should take into account landscape character, road hierarchy, existing tree stock, and local demographics to maximise the potential for our tree assets to deliver real benefits to the residents of Kent.

Tree Planting (Capital Budget)

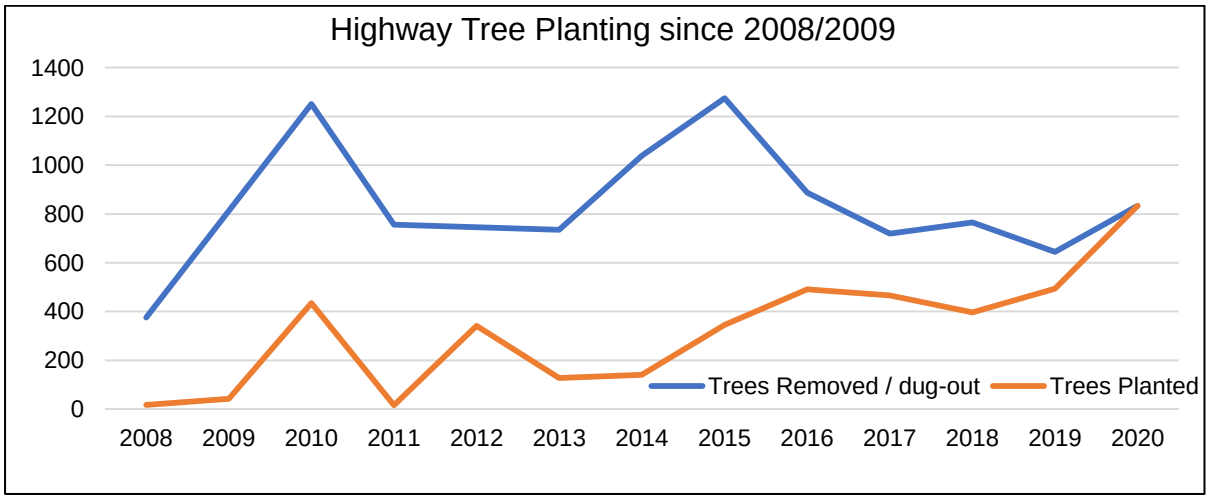
Since 2009 there has been no capital funding for general tree replacement with only those trees that are protected by a Tree Preservation Order (TPO) being replanted within 2 years of removal using the revenue budget. This is a statutory requirement and will continue to be funded by the revenue budget.

The absence of capital funding for this asset has meant that since 2009 tree numbers have declined as more trees are removed than replanted.

In 2019 a £75k capital budget was provided to allow for larger tree planting schemes to be undertaken to improve the tree asset. In 2020 this budget was increased to £200k to allow for the tree planting numbers to match the number of those trees that were removed.

Steady State Tree Stock

The graph below illustrates the rate of planting since 2009 and shows that the gap between removal and replanting has been closed in 2020 with the current level of funding.



Year	Trees Removed/ dug out	Trees Planted
2008	375	17
2009	812	42
2010	1,251	434
2011	756	16
2012	746	342
2013	735	128
2014	1,038	140
2015	1,274	345
2016	887	491
2017	719	466
2018	765	396
2019	645	493
2020	833	833

Highway Tree Planting since 2008/2009

This is the steady state situation where the previous trend of declining tree stock has been reversed but not exceeded.

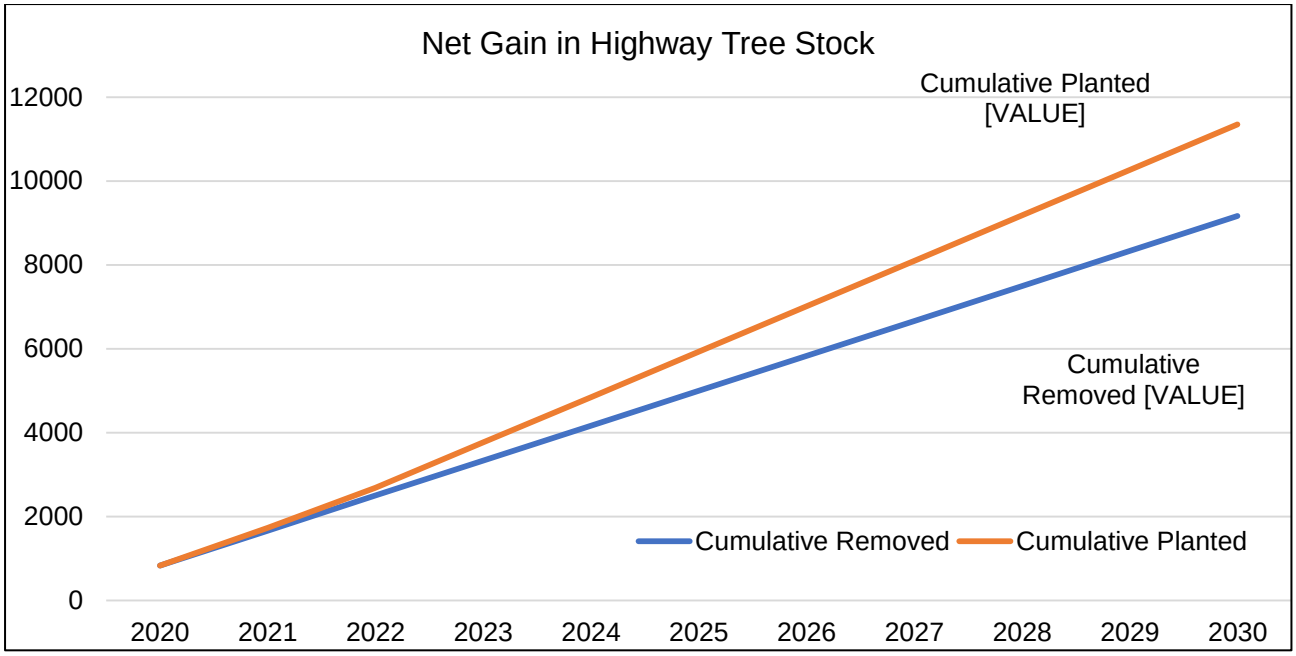
Net Gain in Tree Stock

Both Kent County Council and government have ambitious targets to increase the amount of tree planting beyond the steady state. To improve the asset and to address the deficit built up since 2009, further planting would be required.

However, our asset management approach to tree planting should provide a sustainable future for our tree stock and should consider prevailing diseases such as Ash Die Back. It is essential to have a long-term plan to implement tree planting. The risk of dramatically increasing planting in a short time period would lead to a tree stock that reached maturity at a broadly similar time reducing resilience and storing up issues for the future.

Planting costs in a highway environment can range from £300 in a soft verge to £700 in hard surfaces due to the increased need for civils works. The average cost of planting a tree is £400, meaning that for each additional £100k of funding a further 250 trees may be planted.

The following graph outlines the effect that this additional funding would have on the tree asset numbers for the next 10 years working on an average tree cost of £400.



Year	Cumulative Trees Removed	Cumulative Trees Planted
2020	833	833
2021	1,666	1,733
2022	2,499	2,683
2023	3,332	3,766
2024	4,165	4,849
2025	4,998	5,932
2026	5,831	7,015
2027	6,664	8,098
2028	7,497	9,181
2029	8,330	10,264
2030	9,163	11,347

Net Gain in Highway Tree Stock 2020 to 2031

Forecasts of Tree Numbers (Capital Budget)

The table below summarises the forecast maintenance frequencies for three levels of capital funding.

Service Provision	Improving Service (£300k)	Steady State Service (£200k)	Statutory Minimum Service (£0)
Tree Planting Schemes	Net Gain in Tree Stock	No net loss of Tree Stock	Rapidly declining tree stock

The Signs & Lines Asset

This asset group comprises unlit traffic signs (lit signs are managed as part of the street lighting asset group), road markings and cats' eyes, and pedestrian guard rail.

The Unlit Traffic Signs Asset

Traffic Signs are categorised into four types; warning, regulatory, direction and information, and are provided to convey messages to highway users including equestrians, cyclists and pedestrians. The message must be clear and at the right time for users travelling at the normal speed for the road, footway or cycle track facility. They are therefore sited at appropriate distances for the speed of the road and the message they convey and should be reflective or lit as required.

All signs are designed and installed in accordance with Traffic Signs Regulations and General Directions (TSRGD) 2016 and amendments thereof. We have set up a departmental working group to review the recent changes to TSRGD and how these changes can be implemented to improve effective and efficient management of the signs asset. In 2010 we also produced a guidance document *KCC Signs Technical Directive 2010* showing any adopted variances and to assist engineers and practitioners in achieving a consistent approach throughout the county.

Partner agencies are also responsible for some signing on our highway network, and we liaise closely with Highways England, district and borough councils to influence a consistent approach within the county.

We are mindful that redundant signs and street furniture work against inclusive mobility in the street environment and can cause access problems for pedestrians. There is a commitment to rationalising existing signing on the highway to reduce clutter where possible. Removal of unnecessary signing is carried out as part of the assessment when reviewing plans for new developments to optimise what is required.

As with many councils, we do not hold any inventory or condition data for unlit signs and there is currently no dedicated maintenance budget for this asset group, with repairs undertaken using general reactive revenue funds.

We do not have a record of the location for all the unlit road signs in the county but using the 'Hertfordshire' model in the Whole Government Accounts (WGA) valuation process we estimate there are around 190,000 of them.

The Road Markings & Cats' Eyes Assets

The primary objectives of road markings and cats' eyes are to:

- Assist with the safe movement of traffic on the highway network.
- Protect highway users by guiding, warning, directing and informing them

- Define features on the highway such as junctions, road edges and traffic lanes.

This is achieved through the use of:

- Centre line white lane markings (extrusion)
- White edge lines (extrusion)
- Rib edge lining (spray for refresh sites)
- Pedestrian crossing and junction markings (screed)
- Yellow box junction markings (screed)
- Lettering and arrow markings (screed)
- Cats' eyes (milled, stick on and intelligent road studs)

We do not hold any specific inventory or condition data for road markings or cats' eyes but using some broad assumptions we estimate this asset includes around 4,000 miles (6,500 kilometres) of centre line white lane markings, 1,800 miles (3,000 kilometres) of junction markings, 240,000 letters and arrows marked on the road and over 700,000 cats' eyes.

The Pedestrian Guard Rail Asset

The main purpose of pedestrian guard rail is to pedestrians away from crossing the road at an inappropriate place or from straying into the road inadvertently. It can also be used to keep pedestrians away from the swept path of large vehicles such as buses and heavy goods vehicles. It should be noted that pedestrian guard rail is not intended to protect pedestrians from vehicles.

As with many other councils, we do not hold any specific location or condition data for pedestrian guard rail due to the low value and limited extent of the asset, but using the 'Hertfordshire' model in the Whole of Government Accounts (WGA) valuation process we estimate there is in the region of 130 kilometres of it. There is currently no dedicated maintenance budget for this asset group and repairs are currently undertaken using general reactive revenue funds.

Condition Assessments and Inspections

We carry out two types of checks to assess the condition of our signs, lines, cats' eyes and pedestrian guard rail assets: planned inspections and reactive inspections.

Planned Inspections

Planned inspections are carried out as part of our cyclical maintenance regime. This involves visual checks by our team of highway inspectors to make sure all highway assets are in a safe condition.

For unlit signs this includes visually checking that signs are not broken, missing or faded and that posts are in a sound, stable condition. We carry out this kind of check at least once every twelve months, with major routes being checked monthly.

For road markings this includes checking that the markings are sufficiently visible during the day time and if applicable that cats' eyes are present. We carry out this kind of check at least once every six months.

For pedestrian guard railing, this includes visually checking that barrier components are not broken or missing. We carry out this kind of check at least once every twelve months.

For cats' eye, our highway inspectors visually check that they are sufficiently visible.

Reactive Inspections

Reactive inspections are carried out in response to enquiries we receive from members of the public or from partner organisations such as district councils. Site visits may also be prompted by reports received from the Police or from teams investigating injury crashes.

For road markings, we survey the surrounding area so that any other road markings that require refreshing can be included for more efficient delivery. We also assess the condition of road markings when travelling to and from sites.

In all cases, we use a risk-based approach to determine whether ad-hoc or emergency works are appropriate.

Prioritisation of Investment

Traffic Signs

Due to budget pressure, sign maintenance has long been a reactive process with little or no proactive approach in relation to preventative or cyclic maintenance. In many circumstances wholesale replacement is more cost effective than repairing the existing sign unit.

In the absence of asset specific condition data, decisions on where we need to spend money on unlit signs are based on dealing with situations picked up by routine inspections and public enquiries, rather than performance of the asset itself.

When deciding where to spend money on our defective signs we think about the risks to safety and the benefit the sign provides, including:

- Is the sign in a safe condition?
- Is the sign sufficiently visible to drivers?
- Is the sign communicating the correct message effectively?

- Is the sign needed to warn highway users of a potential danger or traffic restriction?
- Will a new sign improve highway safety?

We also consider the type of road/footway/cycle track, the amount and speed of traffic, cyclists and pedestrians using it, and the surrounding environment.

It is also important that we understand whether or not the sign is still doing its job effectively. If it is in the wrong place or is not providing correct, easily understood information, there is no point in simply replacing it. It may also be that the sign is no longer needed and therefore it can be removed completely to reduce the amount of sign clutter.

We assess each site using a risk-based approach and prioritise repairs on the basis of safety.

Road Markings and Cats' Eyes

When deciding where to spend our money on road markings and cats' eyes, we think about the risk associated with the condition of the asset to ensure it provides highway users with sufficient guidance, warning, direction and information.

We use the following questions as part of our risk assessment matrix to prioritise our response:

- What do we need to do, such as road sweeping, to make sure that the road markings and cats' eyes are sufficiently visible before they should be considered for refreshing?
- Is there a need to replace the existing road markings/cats' eyes?
- If the road markings and cats' eyes are not reflective, does it increase the hazard to drivers?

We also consider:

- The type of road, for example, whether it is a high-speed road, a main road, an estate road or a country lane.
- The amount of traffic that uses the road. For example, is it a main route in and out of a town or is it a minor road only used by a handful of drivers each day?
- High risk areas, such as pedestrian crossings and 'STOP' lines.
- For lining on footways and cycle tracks, whether these are in areas of high use or high risk

We assess each site using a risk-based approach and have a prioritised list of renewal works. This list is used when determining budget allocations and compiling forward works programmes.

Pedestrian Guard Rail

In the absence of asset specific condition data, decisions on where we need to spend money on this asset is based on our response to dealing with situations, rather than performance of the asset itself. We also think about the risks posed to the road users and pedestrians. If the pedestrian guard rail fails, are pedestrians more likely to cross the road in an inappropriate place, to stray into the road, or to trip or fall within the highway?

As with all assets we also consider the type of road and the amount of vehicular and pedestrian traffic using it and whether or not the asset is doing an effective job.

Other Significant Factors affecting Maintenance of the Signs & Lines Asset

Traffic Signs

Damaged and Ageing Asset

Although traffic signing is now designed with the environment in mind, including the need to reduce unnecessary street clutter and the use of weather resistant materials, past practice has left the county with many ageing and deteriorating signs. Plastic coated signs and posts were developed in the 1950s, and were widely used across the county. Due to problems of internal rusting many are now in a poor or unknown condition.

Passive Sign Post Assessment

Passive posts are designed to minimise damage to vehicles that leave the road and strike them. Their use can have a very high initial cost but there can be longer term cost benefits, for example where foundations do not have to be replaced. By selecting products appropriately from a wide range of materials available, passive posts can offer a long and maintenance free life, as well as safety benefits at locations where collisions are likely. The type and specification of passive posts is not always obvious at the location and therefore continuity can be problematic between initial installation and future maintenance.

Increased theft/collision damage and non-recoverable costs

Damage by third parties is common, with cost recovery increasing all the time. Street graffiti also requires an immediate response for some regulatory and warning signs. This increases the burden on existing highway budgets and reduces cyclic and preventative maintenance, such as cleaning.

Ownership of Sign Strategies

There has been a number of signing strategies across the county that deal with cross-district and agency issues (HGV management etc.). There is a risk that ownership of these strategies is lost and their effectiveness diminishes over time.

This in turn can then work against the county's aspiration of LTP4, growth without gridlock.

Reductions in other services

With the reduction in rural verge maintenance, signs in these areas can become significantly overgrown and fall into disrepair. Warning signs can become obscured causing increased risk of collisions.

External/political pressure

With the focus on safety critical repairs we can be under greater external and political pressure to respond to damaged non-safety critical signing such as village gateways. However, this is not a funded activity.

Road Markings and Cats' Eyes

Life of the Asset

Thermoplastic road markings in a location that is constantly over-run can last as little as eighteen months before it requires refreshing. This is a particular problem in busy town centres especially on transverse lining such as junctions and zebra crossing markings. Small patching and pothole repairs often require relining and this leads to sections of road having lining of varying condition.

Traffic Management

High speed roads are considered the highest risk as they carry the highest volumes of traffic at speeds in excess of 50mph. This network is difficult to access without creating local congestion and can be costly. We operate an annual high-speed road maintenance programme which involves a series of planned closures that allows work to be undertaken on this part of the network. However, each closure offers limited time to undertake any significant lining works.

Strategic Approach

Other than following our road surfacing works, when all lining is renewed, the asset is currently only maintained on a reactive basis and there are no strategic plans in place to cyclically refresh the network. This means that lining works are difficult to programme and deliver effectively on an ad hoc basis.

New methods and materials are available on the market and opportunities to explore these are limited without a countywide strategy.

Heavy Goods Routes

Cats' eyes are more likely to be removed by the constant overrunning of heavy goods vehicles. Routes with a high proportion of heavy goods vehicles are likely to require frequent replacement. Alternative forms of increasing road visibility are

considered before cats' eyes are replaced at these locations, especially in locations likely to be over-run.

Noise

Cats' eyes in locations which are frequently over-run, particularly by heavy and large goods vehicles, can create a significant noise nuisance to residents. Placement of cats' eyes within 30mph urban environments is only allowed if there is a clear safety need.

Pedestrian Guard Rail

Proportion of asset at end of life

The maintenance of pedestrian guard rail has not hitherto been proactively managed using asset management methodology, and as a result a significant proportion of the asset is considered to be at the end of its life.

Collision damage and non-recoverable costs

Damage by third parties accounts for the majority of reactive repairs and it is difficult to recover these costs.

Removal of pedestrian guard rail

In the 1960s and 1970s pedestrian guard rail was used extensively as urban highways were developed and expanded. There was no guidance at the time on where it should be used and this has left a legacy of over-use of this asset. The Department for Transport recognised this in 2009 and published guidance (LTN 2/09) which provided an assessment framework to reduce the need for pedestrian guard rails on the highway network. We undertook a full assessment of town centre pedestrian guard rail across the county but local concerns about residual safety meant that the majority of local Joint Transportation Boards decided against removal.

In order to support both the amenity value of the highway network, particularly in town centres, and the desire to balance pedestrian and vehicular traffic through shared spaces and well-designed streets, Local Transport Note 2/09 should be fully implemented.

Applying Asset Management Principles to the Signs & Lines Asset

Due to their relatively low value and the generally reactive nature of their maintenance, we have very little data on these assets. However, we have made estimates of their respective numbers. This has been done to help us quantify the likely levels of condition or serviceability that can be expected with different levels of funding.

Estimated Extent of the Assets

Asset		Road Classification				
		A	B	C	U	All
Type	**Sub Group**					
Unlit Signs (No.)	Warning	6,946	5,199	15,993	19,084	47,222
	Regulatory	7,801	3,638	10,070	35,426	56,935
	Directional	6,659	3,127	6,993	8,952	25,731
	Information	1,142	295	842	7,165	9,444
	Boundary	1,001	817	2,934	26,153	30,905
	Parking Directional	284	73	6	280	643
	Other	712	810	2,578	21,442	25,542
	Total	24,546	13,959	39,416	118,503	196,422
Pedestrian Guard Rail (Lin. metre)		53,306	12,396	13,133	52,142	130,977
Road Markings (Linear metre)	Centre line[1]	986,160	448,490	1,885,620	3,021,984	6,342,254
	Edge line[2]	891,814	531,160	2,866,700	-	4,289,674
	Rib edge line[3]	382,206	-	-	-	382,206
	Pedestrian crossings[4]	75,000	31,000	-	-	106,000
	Junction markings[5]	1,000,000	1,000,000	500,000	500,000	3,000,000
	Yellow box junctions[6]	140,000	-	-	-	140,000
	Lettering & Arrows[7]	240,000	240,000	-	-	480,000
	Total	3,715,180	2,250,650	5,252,320	3,521,984	14,740,134
Cats' eyes[8] (No.)		187,053	79,674	430,006	-	696,734

Assumptions made in estimating the size of this asset:

- Centre line[1] – all A, B, C & urban U roads, no rural U roads
- Edge line[2] – all rural A, B & C roads minus rib edge lining
- Rib edge lines[3] – on 30% of rural A roads
- Pedestrian crossings[4] – estimate 400 signal-controlled crossings & 2,000 zebra crossings, assume 15 metres of line per signal-controlled crossing and 50m of line per zebra crossing (including zig-zags) = (400 x 15) + (2,000 x 50) = 106,000 metres of lining
- Junction markings[4] – estimate 200,000 junctions at 15 metres each = 3,000,000 metres

- Yellow box junctions[6] – estimate 350 at 400 metres each = 140,000 metres
- Lettering and arrows[7] – Twelve districts have an estimate of 20,000 letters and arrows each = 240,000 markings; estimate of 2 metres each marking = 480,000 metres of marking
- Cats' eyes[8] – estimate 1 for every 2 metres of centre line for 60% of all classified roads
- The number of unlit signs has been estimated from the 'Hertfordshire' model in the Whole of Government Accounts valuation process.

Current Levels of Funding

The current level of funding on these assets is:

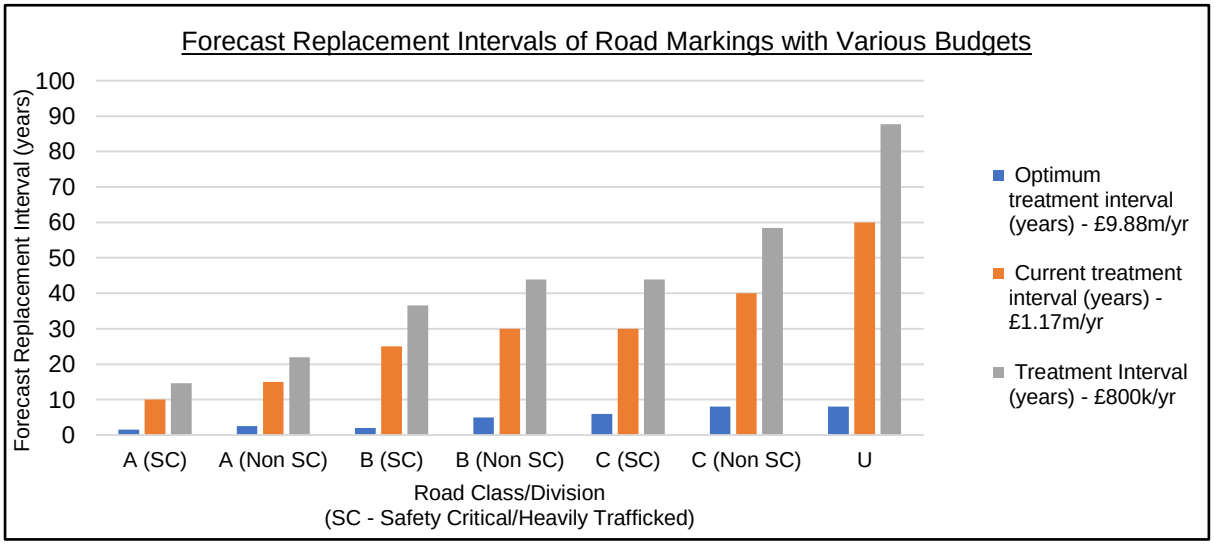
Asset	Total Funding	Capital/Planned Funding	Revenue/Reactive Funding*
Road Markings & Cats' eyes	£608,000	£400,000	£208,000
Pedestrian Guard Rail	£95,000	-	£95,000
Unlit Signs	£1,780,000	£400,000	£1,380,000

*- this is not from the budget allocated to these assets but the actual spend from reactive budgets in 2018/2019.

Treatment/Replacement Intervals and Condition Forecasts

Based on the current treatment/replacement costs and our estimates of the size and extent of these assets we have forecast the likely replacement intervals or condition that various levels of funding will support.

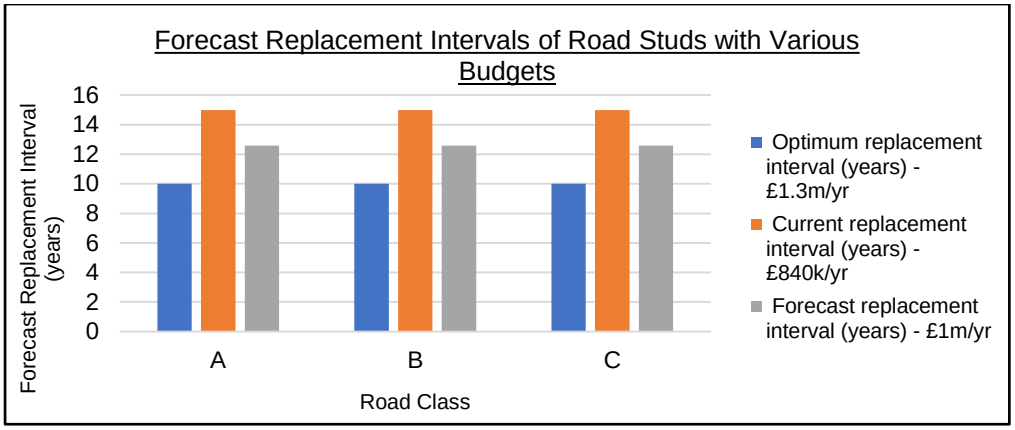
Road Markings



		Road Class/Division SC = Safety Critical/Heavily Trafficked						
Treatment scenario	**Annual budget**	**A (SC)**	**A (non SC)**	**B (SC)**	**B (non SC)**	**C (SC)**	**C (non SC)**	**U**
Optimum treatment interval	£9.88m	1.5	2.5	2	5	6	8	8
Current treatment interval	£1.17m	10	15	25	30	30	40	60
Reduced service treatment interval	£800k	15	22	37	44	44	58	88

Forecast replacement intervals in years for road markings under three budget scenarios

Cats' Eyes

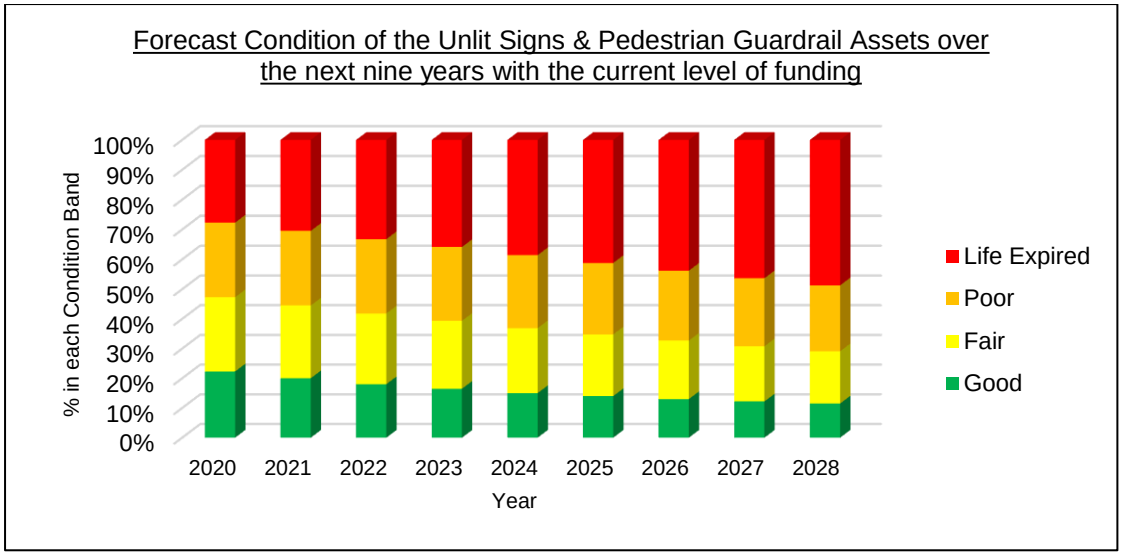


		Road Class		
Treatment scenario	**Annual budget**	**A**	**B**	**C**
Optimum treatment interval	£1.3m	10	10	10
Current treatment interval	£840k	15	15	15
Improved service treatment interval	£1m	13	13	13

Forecast replacement intervals in years for road markings under three budget scenarios

Unlit Signs and Pedestrian Guard Rail

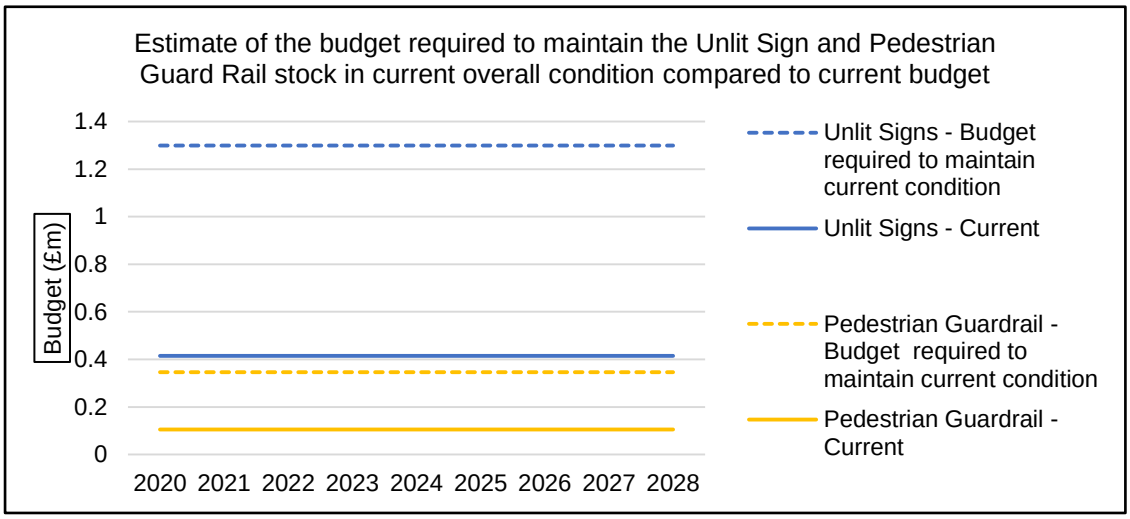
We do not routinely collect condition information these assets. However, by making the same assumptions as the WGA valuation process we have used the HMEP Ancillary Assets Lifecycle Planning toolkit to predict the effect the current level of funding will have on the overall condition of these asset groups, over the next ten years.



	Forecast percentage in each condition band								
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Good	22.3	20	18	16.5	15	14	13	12.2	11.5
Fair	25	24.5	23.8	22.9	21.9	20.8	19.7	18.6	17.6
Poor	25	25	24.9	24.8	24.5	24	23.5	22.9	22.2
Life expired	27.7	30.45	33.2	35.9	38.6	41.2	43.8	46.3	48.7

Forecast condition of the unlit signs and pedestrian guard rail assets over the next ten years with the current level of funding

We have also used this method to predict the budget required to maintain the current overall condition of these asset groups.



	Forecast percentage in each condition band								
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Unlit signs – 'steady state' budget (£m)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Unlit signs – current budget (£m)	0.415	0.415	0.415	0.415	0.415	0.415	0.415	0.415	0.415
Pedestrian guard rail – 'steady state' budget (£m)	0.346	0.346	0.346	0.346	0.346	0.346	0.346	0.346	0.346
Pedestrian guard rail – current budget (£m)	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105

Estimate of the annual budget required to maintain the unlit signs and pedestrian guard rail stock in current overall condition ('steady state') compared to current budget

Forecast Levels of Service Outcomes

With the current level of funding:

Road Markings and Cats' Eyes

- Safety critical lining and cats' eyes can be maintained on 20% of the A road network and 15% of the B road network, as reactive repairs.
- No non-safety critical lining and cats' eyes can currently be maintained.

Pedestrian Guard Rail

- We are able to remove, repair or make safe all damaged pedestrian guardrail which is assessed as being safety critical, as reactive repairs.

Unlit Signs

- We have to carefully consider what safety critical signs we replace on all parts of the network.
- Unlit safety critical signs can be maintained on 25% of the A road network, where we prioritise the high-speed road network, and 20% of the B road network, as reactive repairs.
- No non-safety critical signing is currently maintained.

Part 5: Asset Management Improvements and Achievements

Since the Department for Transport introduced its Incentive Fund several years ago, we have successfully implemented a considerable range of measures to embed the use of Asset Management (AM) methodology into our approach to highway maintenance. This has enabled us to secure and retain an Incentive Fund Band 3 rating, thereby maximising Department for Transport funding. We have also successfully implemented key components of the new non-statutory code of practice for highway maintenance, *Well-managed Highway Infrastructure* (WMHI). These workstreams are already paying dividends in the way we manage and maintain our highway assets.

The constituent parts of this document and appendices bring together these improvements, enabling us to set out a medium-term plan and investment strategy for highway maintenance that is both efficient and fit for purpose. Funding over the next few years is uncertain, but assuming that current levels are broadly maintained, they remain insufficient to maintain highway assets in steady state condition. The investment strategy for the coming years we have set out in this document is based on an improved knowledge of our assets and on an understanding of service levels and associated risks, managing highway assets as a collective whole and optimised to delivered a balanced efficient service.

Appendix A sets out a summary of asset condition and service outcomes over the next five years based on current levels of funding. If funding levels are significantly higher or lower than assumed, either overall or in respect of individual asset areas, these forecasts will need to revised.

Appendix B sets our service levels and risk assessments for the next five years based on current funding levels. If funding is significantly reduced or increased, either overall or in respect of individual asset areas, these will need to be reviewed and any changes signed off by the Executive, ensuring that the effect on service levels and risk is fully understood. This requirement is a core element of *Well-managed Highway Infrastructure*.

Appendix C sets out our five year Forward Works Programme. It reflects the need to move away from annual programmes and to consider asset management activity a multi-year one. It is in two parts: the first concerns the next two financial years, and most of the sites included have already been verified by our engineers. The second part relates to years three to five of our five-year programme, and is largely based on data from our asset management systems, so may be subject to more changes as the schemes are verified. Any schemes involving the potential use of non-standard materials, for example in conservation areas, or requiring detailed design will remain

in the second part until those elements have been resolved and agreed, so that there is cost certainty prior to delivery on the ground.

Our main improvements and achievements over the last two years are outlined below.

General improvements and achievements

- We have improved our knowledge of our assets and their lifecycle, including improving our ability to model their future deterioration and to cost treatment options, enabling us to make informed decisions when prioritising investment in our highway assets.
- We have introduced risk-based decision making, as recommended in WMHI, and have moved from managing each asset group separately towards treating our highway assets as an overall integrated asset.
- Our improved knowledge of our highways assets and their future condition has enabled officers to submit robust business cases for additional resource, leading to a significant increase in capital funding in recent years.
- Given our implementation of WMHI and the introduction of risk-based management and assessment, we have continued to be well placed to defend claims.
- We have introduced a technical approval process giving asset managers more influence over the design of new assets to be added to the highway network, as they have experience of maintaining these assets.
- As part of the overall review of the Kent Design Guide, we have revised the sections on highway assets to encourage an earlier and greater focus on asset management considerations when designing new developments or highway improvements.
- We have introduced a formal process for trialling new or alternative highway materials and technologies to encourage innovation and share best practice. This ensures that lessons are learned and recorded, that there is a clear understanding of how such trials will be evaluation and that any decision to adopt new materials or technologies is clearly evidenced.
- We have developed new maintenance hierarchies for roads and footways, based on WMHI models whilst also, in the case of roads, recognising the priority of our Resilient Highway Network.
- We have started work to produce a rolling five-year Forward Works Programme and Investment Strategy for all asset groups based on informed outcomes.

- We have used data to successfully apply for around £8m of DfT Challenge Fund resource to deliver major structural and infrastructure improvements to the A299 Thanet Way. These improvements will be delivered in 2021/22.

Asset specific improvements and achievements

Roads

- We have completed a thorough review of asphalt material and contract specification to ensure we are getting the best lifecycle performance and cost from our new Road Asset Renewal Contract.
- We have re-procured the Road Asset Renewal Contract through a robust commissioning process to achieve value for money, low whole life costs and excellent performance from our contractor. The new contract started in January 2021.
- We have explored the effect of various road treatment strategies on whole life costs.
- We have implemented scheme identification for both renewal and preservation schemes which is directly linked to the forecast models.
- We have commissioned a new condition survey contract to achieve excellent value for money and implemented Horizons as our pavement management system.
- We have commissioned a Kent Pavement Construction and Maintenance Manual to improve lifecycle performance and work to develop this is well underway.
- We have improved our knowledge of relevant legislation in order to assert our rights and hold utility companies to account when their assets fail. This includes recovering losses we incur when damage their asset failure causes highway damage. In recent years, we recovered around £1.3m in relation to a serious road collapse in Leeds, and we have commenced action to recover around £1.5m of losses resulting from a similar collapse on the A26 Tonbridge Road in Maidstone. Recovering these losses maximises our investment in highway maintenance, improving overall network condition.

Footways and Cycle Tracks

- Funding for the period of 19/20 was increased to £3.5 million, a significant improvement from the previous year, which has enabled us to successfully complete our largest footway preservation and renewal programme in recent years.

- We have carried out a thorough review of national best practice for footway condition survey data collection which will help to guide and inform decisions when designing our future survey regime.

- We have started work on commissioning a survey of cycle routes in Kent which will help determine those sections which are publicly maintainable so that they may be reflected in our Forward Works Programme.

Drainage

- We have implemented a system that allows us to view information on the location and status of our gullies, updated directly by the cleansing teams, through our Map16 software. In addition to gully location, information is collected about the gully condition and silt level. Recording of silt levels in highway gullies provides statistics to help focus, support and inform a new risk-based cyclical maintenance approach in the future, providing relevant information so we can make informed decisions.

- We have introduced a new process of pre-inspecting gullies on the annual scheduled cleansing programme prior to work being undertaken. This has identified a large backlog of repairs, including defective covers and completely blocked gullies. These are being programmed for repair throughout the year. Once repairs have been completed, on average each district only requires 30% of the gullies to be cleansed each year.

- Following the allocation of additional capital funding for drainage repairs and improvements, the size of the drainage planned works team has doubled. This is supported by a Drainage Capital Works Framework Contract running from April 2020 for eighteen months, which will provide us with greater resources for capital funded repairs and improvements.

- We have collated and mapped our records of flooding data from the previous five years using a geographic information system (GIS). This data has enabled the development of a two-year programme of drainage improvement schemes based upon identified hotspots of highway flooding or properties damaged by surface water flooding.

- We have been building relationships with our Flood Risk Management Team and have been assisting them in their review of Surface Water Management Action Plans. Furthermore, we have been and will be working closely with them in delivering actions identified within the Local Flood Risk Management Strategy. Together we are developing an analysis of the impacts of climate change upon highway flooding and local flood risks using GIS analysis of existing data. This will inform more proactive, targeted inspections and capital funded repairs or improvements in Years 3 to 5 of the Forward Works Programme.

- We have enhanced our asset management approach in responding to drainage defects identified from routine cleansing or asset surveys. Where these were considered to present a low risk, repairs were not previously actioned, with action only being taken where defects presented a high risk to highway safety or appeared likely to cause internal property flooding. By addressing drainage defects once identified, we expect to reduce urgent or emergency works and future longer-term deterioration of the highway asset.

- We have increased our awareness of the importance of land drainage and are undertaking necessary enforcement where maintenance responsibility lies with third parties.

- We have achieved increased collaboration between asset groups including, for example, drainage remedial works being prioritised ahead of machine resurfacing work. This avoids the need to excavate in relatively new road surfaces, maximising their lifespan.

- We have been opening dialogue and working with developers to improve/upgrade the existing highway drainage network, resulting in an overall betterment of the highway asset and reduction in flood risk to the area.

- We have focused on collaborative working with Environment Agency, Southern Water, local flood forums and community groups, particularly where a co-ordinated response to flooding emergencies is possible.

- We have engaged with the Environment Agency and Southern Water to address water management issues and share information/data to achieve shared objectives. Working closely with internal and external stakeholders has enabled us to identify opportunities for external funding for drainage improvements and asset replacement, for example of main river culverts.

Structures

- We have implemented a new structures management system and migrated the data.

- We have commenced software development in conjunction with the supplier to follow the new management processes we are creating, so we can fully take advantage of the enhancements available over our old, outdated database.

- We have initiated a programme of structural reviews and assessments initiated to make sure sub-standard structures can be identified and managed to ensure their continue safety for road users.

Crash Barriers

- We have introduced a data asset management system (Map16) with a Geographic Information System (GIS) interface.
- We have developed a risk assessment process to determine the appropriate response time following a crash barrier impact.

Tunnels

- We have used asset data to demonstrate a need for additional investment in the infrastructure at Ramsgate Tunnel to prepare for Brexit using DfT funding.
- We have procured a new structures database, which will maintain a record of our tunnels and underpass and their structural condition, and thus give future benefits in the asset management of our structures.
- We have used asset data to demonstrate an economic and lifecycle need to replacing aged Chestfield tunnel lighting with LED lighting, and have secured DfT Challenge Fund resource to deliver this in 2021/22.

Street Lighting

- We have upgraded our street lights to LED with a central management system.
- We have started using the results of the structural testing programme and asset condition, rather than asset age, to forecast future budget needs.
- We have implemented the use of the lighting column index and have included this in our asset inventory.
- The range of assets included in the forecasting has been extended to include illuminated signs.
- We have completed the upgrade of pole mounted equipment (excluding lanterns) where defective equipment was identified as part of the LED conversion programme.
- We have completed a programme to replace all of our concrete columns alongside the LED conversion programme. This has not only improved the asset, but has increased safety for operatives working on assets where structural integrity was previously in question.

Intelligent Traffic Systems

- We have removed legacy analogue communications equipment and upgraded to IP-addressable systems for traffic signals.

- We have replaced road detector loops with above ground detection systems where practicable.
- We have converted legacy Pelican crossings to the latest Puffin design standards with Extra Low Voltage (ELV) equipment.
- We have replaced some obsolete traffic signal controllers with new systems to ease the maintenance burden.
- We have reviewed our prioritisation process for ITS asset renewals to optimise our budget at the most critical sites, including giving consideration to adjacent third-party schemes which can offset our liability or supersede any planned works.

Soft Landscaping

- We have developed an understanding of the environmental benefits that our Tree Asset provides through the implementation of iTree reports.
- We have introduced the CAVAT (Capital Asset Value for Amenity Trees) method of valuing our tree asset. At the strategic level this helps us to put a value on the countywide tree stock. It also enables us to calculate an evidenced value to assess claims for trees that are removed or damaged.
- We have enhanced our risk-based approach to highway tree surveying, incorporating industry best practice to deliver efficiencies in tree safety inspections and a greater focus on the network hierarchy.
- We have implemented the iTree software model which calculates the benefits and ecosystem services that trees provide and values them in monetary terms. This provides an evidence-based approach in the development of informed urban forestry programmes, management plans and projects.
- We have developed our canopy coverage data for the tree asset by implementing the National Tree Map to provide benchmark information on the county's canopy coverage, and are using this to influence tree planting programmes and to set targets for canopy coverage in the future.
- We have conducted trials of alternative weed control methods, particularly hot foam, and determined the scalability and feasibility of this method.
- We are working with Kent Wildlife Trust for a habitat audit of all Roadside Nature Reserves to assess their current condition and the opportunities for improvements to biodiversity.

Signs, Lines, Cats' Eyes and Pedestrian Guard Rail

- We have refined our estimate of the quantity of these assets, and started exploring ways to make predictions of condition outcomes and budget requirements.
- We have started developing processes for assessing the condition of road markings and cats' eyes which will:
    - improve our knowledge of these assets, and
    - inform a more robust, evidence-based forward works programme.

Part 6: Our Future Approach and Action Plan

Our Five-Year Vision

To deliver a fully integrated, dynamic, efficient and effective highways asset management service to provide a safer, more sustainable and more resilient highway network that supports Kent's recovery from the COVID-19 pandemic and delivers on Kent's longer-term strategic objectives including environmental, active travel and road safety priorities.

Our future strategy

We shall deliver on this vision by:

- having certainty of approach and broad levels of funding over the next five-years to enable greater efficiency and planning
- treating highways asset management as a multi-year activity rather than an annual one
- implementing further measures to maximise the lifespan of new or improved highway assets, reduce their lifecycle cost and make them easier to maintain.
- further improving our knowledge of our highway assets and their lifecycle cost and performance, including improving data capture and analysis
- regularly reviewing our highway maintenance service levels and associated risks
- regularly updating our five-year forward works programme

Action Plan

Whilst we have made good progress in respect of Asset Management (AM) and *Well-managed Highway Infrastructure* (WMHI) workstreams, as outlined in Part 5 of this document, we recognise that we need to continue exploring new ways of improving the lifespan of our highway assets, reducing their whole-life costs and improving their future maintainability.

This principle applies both to renewed/life-extended assets and to new assets, whether adopted as part of new developments or constructed/installed as part of our own highway improvement schemes or public realm projects. These new highway assets are to be welcomed in that they bring significant benefits to Kent's residents and businesses; however, we need to strike the right balance between those benefits and our ability to maintain these assets over their lifecycle, not least so that these improvement fulfil their purpose for longer.

To address this we have developed a number of inter-related actions. The overarching aim of these is to further improve the ways in which we deliver highway maintenance and improvements, making our highways safer, more sustainable and more resilient so that our highway network continues to contribute to the delivery of

our strategic outcomes (including environmental, active travel and road safety priorities) as a key enabler of services.

Specific future actions are outlined below.

General actions

General

1.1 Further improving our knowledge of our highway assets and their lifecycle cost and performance, including improved data capture and analysis.

1.2 Optimising our risk-based approach in highways with the aim of re-focussing finite resource towards higher risks. This work will look at the full range of highways asset management services and also consider the scope for introducing risk-based investigatory levels based on our new maintenance hierarchies.

1.3 Developing and expanding our rolling five-year Forward Works Programme and Investment Strategy based on informed outcomes.

1.4 Reviewing our Technical Approvals Process for new and renewed highway assets to ensure that lifespans are maximised, whole-life costs are minimised and future maintainability is optimised, so that overall network condition is improved. Extending this process to include district/borough schemes which include new or enhanced highway assets.

1.5 Using our improved knowledge of our highway assets to influence procurement of the next Highway Term Maintenance Contract, enabling our strategies and priorities to be implemented throughout the county.

1.6 Ensuring that our investment decisions are evidence based, including continuing to identify unfunded schemes to enable us to bid for additional capital funding and meet the requirements for DfT funding. This will include the identification of future risks such as the risks to the resilient and strategic road networks arising from climate change.

1.7 Carrying out work to model the economic benefits of investing in our asset management approach to highway maintenance.

1.8 Analysing a cross section of highway improvement schemes and new developments delivered over the last five years to identify any lessons learned in terms of design, lifecycle performance and maintenance.

1.9 Reviewing our approach to all areas of highways asset management business to create an action plan for contributing to council environmental objectives such to Net Zero and Kent's Plan Bee.

1.10 Considering how the adoptions process may be developed to influence design choices towards increasing asset lifespans, reducing lifecycle costs and improving future maintainability.

1.11 Analysing data concerning spend on mechanical and electrical components across asset groups to identify how this may be delivered more efficiently going forward.

1.12 Continuing to explore ways in which we can improve how we gather, use and share asset and other data.

1.13 Continuing with our work on innovations such as the Live Labs programme and our internal trials, and ensuring that decisions to adopt any are evidence-based.

1.14 Reviewing maintenance regimes across asset groups to reflect known accident cluster sites.

1.15 Establish processes to incorporate road safety and active travel measures into maintenance schemes at low cost.

1.16 Exploring how as-built records and other technical information should be stored and made available across highway teams.

1.17 Completing work with district conservation teams to refine and finalise the Kent Highways Heritage Protocol, to ensure that we strike the right balance between conservation, affordability, lifecycle cost and future maintainability considerations in highway maintenance.

Asset-specific actions

Roads, Footways and Cycle Tracks

2.1 Finalising a new Kent Pavement (road, footway and cycle track) Construction and Maintenance Manual, in conjunction with the Kent Design Guide updates, with the aim of maximising lifespans, reducing lifecycle costs and improving future maintainability.

2.2 Implementing our new maintenance hierarchies for pavement (road, footway and cycle track) assets based on WMHI recommendations.

2.3 Commissioning specialist pavement (road, footway and cycle track) asset renewal and preservation services based on maximising asset performance and reducing potholes.

Roads

3.1 Continuing to improve our understanding of the effects of various treatment strategies on whole life costs.

3.2 Investigating the possibility of a correlation between overall road condition and accident rates.

3.3 Comparing past condition predictions against actual results to verify accuracy and robustness of modelling methodology.

3.4 Continuing to develop lifecycle modelling to improve confidence in forecasting.

3.5 Developing our use of modelling to forecast future pothole quantities and cost, based on different investment scenarios.

3.6 Exploring the use of low temperature asphalts and other innovative materials to reduce our carbon footprint.

Footways and Cycle Tracks:

4.1 Investigating and developing, through lifecycle planning, different treatment strategies for our footways and cycle tracks.

4.2 Designing and completing footway and cycle track condition survey trials, and verifying results to ensure that our surveys will deliver the required outcomes.

4.3 Plotting age and disability data so that this can be used to improve scheme prioritisation.

4.4 Prioritising active travel routes in our forward works programme.

4.5 Plotting our cycle tracks/routes/paths and ascertaining ownership and the size of the network.

4.6 Assessing our segregated cycle track network to develop a condition survey regime.

4.7 Developing an asset management approach for our cycle tracks.

Drainage

5.1 Improving our knowledge of our highway drainage assets, their location and condition to improve our maintenance of them.

5.2 Prioritising our capital investment using a risk-based approach.

5.3 Improving network resilience through designing, constructing and managing drainage assets to meet both current and future needs in a changing environment whilst making effective and efficient use of limited budgets.

5.4 Promoting stakeholder engagement and communication to work more closely with other risk management authorities.

5.5 Implementing computer-based modelling techniques to assess a variety of cleansing and maintenance strategies.

5.6 Ensuring reports of flooding are correctly logged and mapped to support where future spending is targetted on.

5.7 Developing a mapping system to record key or critical highway drainage asset details following the completion of our own improvement schemes, as well as new adoptable highway drainage assets from development.

5.8 Continuing to work with partners to introduce more sustainable urban drainage features, such as swales, on new developments.

Structures

6.1 Fully implementing the new structures management system to enable more robust lifecycle modelling, particularly for different treatment strategies.

6.2 Completing overdue structural reviews and assessments.

6.3 Reviewing the management of post-tensioned and other high-risk structures.

Crash Barriers

7.1 Developing the use of the data management system to improve asset condition forecasting.

7.2 Commissioning a survey regime to establish deterioration rate of assets to enable full implementation of asset management.

7.3 Undertaking risk assessments on very poor and poor graded barriers on the non-strategic roads, to determine if they need replacement or if they can be removed due to the hazard no longer being present.

Tunnels

8.1 Investigating the use of the structures database or other system to help with recording the maintenance and condition of individual components such as jet fans and drainage and to help in forecasting future asset management requirements.

Street Lighting

9.1 Refining the structural testing dashboards in our asset management system so that the records can be used for lifecycle planning including predicting the number of assets that will require replacing.

9.2 Refining the deterioration rates used in the forecasting based on previous results of the structural programme.

9.3 Extending our forecasting further to include Belisha and refuge beacons.

9.4 Exploring how street lighting assets can act as the platform for digital and telecommunication technologies which enable other assets and services to be monitored.

9.5 Exploring the potential use of street lights as electric vehicle charging points.

Intelligent Traffic Systems

10.1 Continuing to move to more flexible and modular signal design, as technology allows, which will further enable partial site refurbishments and individual component changes to be made to extend asset life, i.e. above ground detection systems.

10.2 Developing deterioration modelling and our understanding of faults rates and patterns, to enable us to model and deliver a wider range of asset treatments, as an alternative to full asset renewal.

10.3 Analysing the impact of developments and other schemes on adjacent sites, to enable us to seek ITS asset improvements.

10.4 Investigating new products and innovations which may be of benefit to maintaining the asset and reducing the impact on other asset groups, such as detection systems.

Soft Landscaping

11.1 Developing the use of Capital Asset Valuation of Amenity Trees (CAVAT) by making other highway teams and partners aware of the value of tree stock and the importance of protecting this asset.

11.2 Developing a rationale for implementing tree improvement schemes following CAVAT recovery of tree losses, including defining the benefit of replacement trees and being explicit about time taken for mitigation measures to meet the benefits of the original tree(s).

11.3 Continuing to explore ways of quantifying the effect this asset has on other asset groups.

11.4 Developing current data held on this asset to facilitate the use of asset management methodology, enabling us to introduce a more tailored approach to each work type dependant on requirement, location and cost.

11.5 Using an improved detailed knowledge of the asset to influence the procurement of subsequent tenders enabling our environmental strategies to be implemented throughout the county.

Signs, Lines, Cat's Eyes and Pedestrian Guard Rail

12.1 Developing a fully evidenced five-year cyclic maintenance programme for the high speed and strategic routes.

12.2 Introducing a condition survey process for the entire network, to understand the condition of these assets and make informed decisions about future maintenance regimes.

12.3 Developing technical guidance for these assets and embedding this within the Kent Design Guide.

12.4 Identifying how these assets can support the emerging environmental policy particularly in terms of sustainable transport.

12.5 Exploring the use of smart materials, and emerging asset collection technology to collect asset information.

12.6 Exploring using our lines and signs assets to support Driverless Vehicles and SMART City aspirations.

Appendix A

Summary of Asset Condition

Introduction

This Appendix summarises the current valuation, estimated backlog, current and steady state budget for each asset group, and includes key forecasts of asset condition over the next five years based on current levels of funding.

These figures are subject to revision as we develop our knowledge of our highway assets. In addition, if funding levels are significantly higher or lower than assumed, the condition forecasts will need to revised.

Valuation, backlog and current and steady state budgets

Asset Group	**Valuation** (£ million)	**Estimated backlog** (£ million)	**Current annual budget** (£ million)	**Annual steady state budget** (£ million)
Roads	£6,400	£464	£45	£50.3
Footways and Cycle Tracks	£1,200	£102	£3.5	£7
Drainage	£3,700	£40.2	£4.5	£23.8
Structures including Tunnels	£1,300	£20	£4.5	£5
Crash Barriers	£61	£11.3	£1	£1.5
Street Lighting	£175	£6.9	£3.5	£4.5
Intelligent Traffic Systems (ITS)	£54	£4.2	£0.7	£3.3
Soft Landscape	see notes			
Signs & Lines	£42	see notes	£0.8	£2
TOTAL		£648.6	£63.5	£97.4

Notes:

All figures are rounded to the nearest £0.1 million**.**

Valuation: taken from the 2019/20 valuation prepared for Whole of Government Accounts.

Estimated backlog: an estimate of the one-off cost of bringing all assets into a good or acceptable condition.

Current annual budget: the core capital budget for 2020/21, not including revenue funding or additional capital funding awarded over one or more years through internal or external bidding processes.

Annual steady state budget: an estimate of the annual budget needed to maintain all assets in their current condition, without further deterioration but without reducing the current backlog.

Roads: the current annual budget figure includes an allowance for Pothole Blitz funding, which for every £10m of spend is estimated to deliver improvements approximately equivalent to £5.0-7.5 million of planned maintenance.

Structures including Tunnels: the backlog figure is understood to be a considerable under-estimate and is currently being reviewed. No separate capital budget is provided for tunnel assets: their routine maintenance is funded from revenue budgets, with structural repairs and the replacement of equipment funded through the capital bidding process.

Crash Barriers: the backlog figure represents the forecast backlog as of 2030 given current levels of funding including additional capital funding allocated for 2020-2023.

Soft Landscape: the value of this asset is not included in the Whole of Government Accounts valuation, and its maintenance is funded from revenue budgets.

Signs & Lines: we do not have a current estimate of the backlog value, but are working to develop our knowledge and understanding of this asset.

Budget allocation

Budgets are allocated based on a number of interrelated factors, including those set out in the above table (asset value, the relative size of backlogs and steady state funding levels). This includes:

- whether assets are considered critical assets on Kent's Resilient Highway Network
- where assets in poor condition are more likely to adversely affect the condition of other assets
- the potential of asset groups, if in poor condition, to disproportionately affect those protected under the Equality Act
- asset groups in which the majority of maintenance spend is revenue
- asset groups that are especially safety critical if failure occurs

The table below illustrates this analysis.

Asset Group	RHN Critical	Affects other assets	Equality Act	Revenue Activity	Safety Critical
Roads	**Y**	**Y**			
Footways and Cycle Tracks			**Y**		
Drainage	**Y**	**Y**		**Y**	
Structures including Tunnels	**Y**				
Crash Barriers					**Y**
Street Lighting					
Intelligent Traffic Systems (ITS)			**Y**		
Soft Landscape		**Y**		**Y**	
Signs & Lines					

Asset condition over the next five years based on current levels of funding

Asset Group	Condition Band	2021	2025
Roads	% classified A roads in 'red' condition[1]	3.8	5.2
	% classified B&C roads in 'red' condition[1]	4.5	6.6
	% unclassified roads in 'red' condition[1]	17.3	18.0
Footways	% footway assets in very poor condition	21.6	25.4
Cycle Tracks	*No relevant data currently available*		
Drainage	% drainage gullies in very poor condition[3]	0.5	1.9
	% soakaways in very poor condition	5.0	13.3
	% ponds/lagoons in very poor condition	4.0	41.8
	% pumping stations in very poor condition	0.0	9.7
	% small culverts in very poor condition	10.0	17.8
Structures	% structures in very good condition	66	53
	% structures in good condition	25	35
	% structures in fair condition	7	10
	% structures in poor condition	1	1
	% structures in very poor condition	0	0
Crash Barriers	% crash barriers in very good condition	27	35
	% crash barriers in good condition	11	14
	% crash barriers in fair condition	49	29
	% crash barriers in poor condition	12	21
	% crash barriers in very poor condition	0	1
Tunnels	*No relevant data currently available*		
Street Lighting	% street lighting assets in poor condition[4]	<1	<1
Intelligent Traffic Systems (ITS)	% ITS assets beyond expected life	8	26
Soft Landscape	*No relevant data currently available*		
Signs & Lines	% unlit signs and pedestrian guard railing in 'life expired' condition	30.5	41.2

[1] Based on Road Condition Index (RCI): red = roads in poor overall condition and likely to require maintenance within the next twelve months

[2] Other drainage assets (pipework and chambers) show similar condition and deterioration levels

[3] For safety reasons, street lighting assets in poor condition are either replaced or removed

Appendix B

Service Level Risk Assessments

Contents

Statutory Obligations, Strategic Objectives and Business Priorities 3

Service Standard Risk Assessment 4

Road Asset Management 5

Footway and Cycle Track Asset Management 8

Drainage Asset Management 10

Structures Asset Management 14

Crash Barriers Asset Management 18

Street Lighting Asset Management 22

Intelligent Traffic Systems (ITS) Asset Management 25

Soft Landscape Asset Management 28

Non-lit Highway Signs Asset Management 38

Pedestrian Guardrail Asset Management 41

Road Markings and Cats' Eyes Asset Management 43

Highway Improvements 45

Winter Service 49

Highway Routine and Reactive Maintenance Management 52

Highways Asset Management – A Risk Based Approach

"We inspect, repair and maintain our highways to keep them safe and provide the best highway service we can to Kent's residents, visitors and businesses, whilst co-ordinating activities on the highway to minimise disruption to road users and facilitate utility services. We do this by balancing asset management principles, local operational needs and available resource."

Statutory Obligations:	**The Highways Act 1980** - Duty of Care to maintain the highway in a safe condition and protect the rights of the travelling public to use the highway. **Road Traffic Act 1984** – Legislation providing powers to control the movement and usage of roads through traffic regulation orders. **Road Traffic Act 1998** – Duty to promote road safety and act to reduce the likelihood of road casualties from occurring. **Climate Change Act 2008** – Obliges us to reduce greenhouse gas emissions and prepare to adapt to longer term climate change. **Traffic Signs Regulations and General Directions 2016** – Legislation that sets out the conditions and standard for traffic signs and road markings. **The Traffic Management Act 2004** – Requirement to facilitate and secure the efficient movement or traffic on the highway network. **The Equalities Act 2010** – Invokes the Public Equality Duty[1]. **Public Nuisance** – An action without lawful cause or excuse which causes anger, injures health, or damages property. **The Construction (Design & Management) Regulations 2015** – To ensure that health and safety issues are properly considered during a project's life. **New Roads and Street Works Act 1991** – Code of practice for local authorities who have a duty to co-ordinate works on the highway. **Wildlife and Countryside Act 1981** – Protects animals, plants, and habitats within the UK. **Town and Country Planning Act 1990** – Provides planning protection to trees in Conservation Areas or protected by Tree Preservation Orders (TPOs). *Note: this is not an exhaustive list of applicable legislation*
Strategic Objectives:	Given the severe impacts of the COVID-19 pandemic, in December 2020 Kent County Council agreed an interim strategic plan covering the next eighteen months, *Setting the Course*. This recognises the importance of efficient highways asset management and the role it plays both in our short- to medium-term recovery from the effects of the pandemic and our long-term economic prosperity. Looking further forward, KCC will begin developing a new five-year strategic plan in 2021. Part 1 of this overall document describes the likely main themes of any future plan, and how good highways asset management helps to deliver those outcomes.
Business Priorities:	Fewer people killed or seriously injured on Kent's roads. Customer satisfaction by providing 'the right services in the right way for the right people' Maximising lifespan and minimising lifecycle costs of the highway and its assets and improving maintainability by embedding asset management principles into everything we do. Growth and economic prosperity through an efficient highway and transport infrastructure. Everyone can choose to travel safely, efficiently, and pleasantly to employment, education, social, and cultural opportunities.

[1] Public Equality Duty requires us to have due regard for advancing equality by removing or minimising disadvantage, encouraging participation, and taking steps to meet the needs of all people from protected groups where these are different from the needs of other people.

Service Standard Risk Assessment:

Risk Rating Matrix			Impact				
			1	2	3	4	5
			Minor	Moderate	Significant	Serious	Major
Likelihood	1	Very Unlikely	1 Low	2 Low	3 Low	4 Low	5 Low
	2	Unlikely	2 Low	4 Low	6 Low	8 Medium	10 Medium
	3	Possible	3 Low	6 Low	9 Medium	12 Medium	15 Medium
	4	Likely	4 Low	8 Medium	12 Medium	16 High	20 High
	5	Very Likely	5 Low	10 Medium	15 Medium	20 High	25 High

As stated in The KCC Risk Management Policy & Strategy (2018-21), the target residual rating for a risk is expected to be 'medium' or lower. Risks rated as 'high' will be deemed to have exceeded tolerance levels and will be subject to escalation to the Divisional Management Team for review and consideration for action.

It is important to recognise that 'high' risks are not a measure of specific dangers on the highway, but rather a general assessment of overall risk to the network in terms of likelihood and impact. Our statutory and ad-hoc inspection regimes enable us to identify locations that present a danger to road users so that we can take action to maintain the highway in safe condition.

The above scoring methodology is used throughout and so is not repeated in each section below.

We recognise that it is important that due consideration is given to how the impacts of climate change, such as intense or prolonged rainfall, hotter temperatures and higher windspeed will affect the way we manage our highway assets. Our current risk assessments do not fully take into consideration these impacts, as further work is required. As we take this work forward in the coming years it is likely that climate change and other environmental matters will have a significant effect on our assessment of risk.

Service Definition Sheet

Asset Group/Service: **Road Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Making safe road void/collapse sites (including those involving KCC drainage assets) within two hours ▪ Investigation and commissioning of appropriate repairs where there is a void/collapse (Not specifically funded). Funding therefore considered on a case-by-case basis, and potentially resulting in planned renewal or preservation works being postponed to later years.) ▪ Mechanical surveys of A, B, and major C roads to detect areas of low grip/texture ▪ Targeted maintenance of skid deficient sites on A, B, and major C roads, in accordance with KCC's Skid Resistance Strategy, where there is a risk of further accidents due to low grip levels ▪ Road coring and testing to identify condition and data of existing network ▪ Mechanical surveys on A, B and C roads to gain condition data ▪ Visual surveys on U roads to gain condition data ▪ Assessing the condition of the roads with the data obtained and identifying the locations where renewal or preservation works are needed and/or will deliver the best long-term economic value and using this to produce multi-year forwards works programmes ▪ Renewal of sections of road which have reached the end of their service life ▪ Preservation of sections of road to extend their service life	▪ Maintenance of private or un-adopted roads ▪ Actions to reduce road noise or vibration unless caused by a safety defect such as a pothole or defective cover ▪ Use of coloured, specialist high friction surfacing except where only demonstrably justified by safety assessments; where this is not the case, planned maintenance schemes and the repair of potholes and other defects in coloured areas will be carried out using black materials. ▪ Reprofiling of roads to address minor flooding ▪ Reprofiling of roads to address minor dips and bumps ▪ Renewal of roads for aesthetic reasons (e.g. overlaying concrete roads) ▪ Repair of verges unless for safety reasons or if they structural integrity of other highway assets is threatened. ▪ Condition surveys of non-paved areas of highways such as embankments ▪ KCC recognises the importance of conservation but given resource challenges we cannot routinely agree to meet conservation requirements. We therefore liaise with conservation officers on planned maintenance works in conservation areas, and consider conservation issues alongside other factors such as affordability, lifecycle cost and maintainability, before deciding what works we will do and materials we will use

Service Standard Risk Assessment:

Defect Type:	Low road grip or texture	**Means of assessment**:	Regular mechanical surveys

Potential Risks:

- Reduced highway safety due to low texture (grip) [Safety]
- Delayed movement of traffic due to accidents [Traffic]
- Increased disadvantage to people with limited mobility due to delays [Equality]
- Detrimental effect on other highway assets due to accident [Damage]

Scenario: **Unaddressed grip/texture deficiency leads to more collisions and injuries/fatalities**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Main Roads	20	6	1	9	Schemes to resolve grip/texture deficiency identified, investigated, and commissioned	5	3	1	3
Minor Roads					Road classification assessed and considered to be low risk				

Defect Type:	Structural deterioration of roads	**Means of assessment**:	Regular condition surveys

Potential Risks:

- Increase in injuries and fatalities [Safety]
- Decline in roads condition leads to increase in the parts of the network which are at the end of their service life [Damage]
- Increase in safety critical defects requiring urgent intervention [Damage]
- Increase in reactive maintenance costs and additional revenue budget pressures [Damage]
- Increased disadvantage to people with limited mobility due to delays [Equality]
- Reduced highway safety due to condition deterioration [Safety]
- Delayed movement of traffic due to more defects and road closures [Traffic]

Scenario: **Decline in road condition leads to more safety critical defects**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Roads	20	12	6	15	Data analysis to determine the most appropriate renewal and preservation methods and the timescale for delivery.	15	9	6	12
Locally Important Roads	16	9	6	12		12	8	6	9
Minor Roads	16	6	6	9		12	6	6	9

Defect Type:	Road Collapse	**Means of assessment**:	Ad-hoc inspection

Potential Risks:

- Reduced highway safety due to void [Safety]
- Delayed movement of traffic due to closure [Traffic]
- Increased disadvantage to people with limited mobility due to delays [Equality]
- Detrimental effects on other highway assets [Damage]

Scenario: **Road collapse**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Roads	15	15	12	15	Road closure, cause identified, and remedial action commissioned (funded on a case-by-case basis)	6	6	6	2
Locally Important Roads	12	12	12	12		4	4	4	4
Minor Roads	10	8	15	9		8	2	2	6

Service Definition Sheet

Asset Group/Service: **Footway and Cycle Track Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Making safe footway and cycle track void/collapse sites (including those involving KCC drainage assets) within two hours ▪ Investigation and commissioning of appropriate repairs where there is a high/medium risk void/collapse (Not specifically funded. Funding therefore considered on a case-by-case basis and resulting in planned renewal or preservation works being postponed to later years.) ▪ Analyse and investigate condition data from surveys alongside local needs to identify future schemes ▪ Producing a forward works programme of priority asset renewal and protection maintenance schemes	▪ Maintenance of private or un-adopted footways and cycle tracks ▪ Use of coloured surfacing and High Friction surfacing where demonstrably justified by safety assessments. Where this is not the case, planned maintenance schemes and repairs of potholes and other defects in coloured areas will be carried out using black material. ▪ Reprofiling of footways and cycle tracks to address minor flooding ▪ Reprofiling of footways and cycle tracks to address minor dips and bumps ▪ Renewal of footways and cycle tracks for aesthetic reasons ▪ KCC recognises the importance of conservation but given resource challenges we cannot routinely agree to meet conversation requirements. We therefore liaise with conservation officers on planned maintenance works in conservation areas, and consider conservation issues alongside other factors such as affordability, lifecycle cost and maintainability, before deciding what works we will do and materials we will use ▪ Investigation of low-risk voids or collapses in the footway or cycle track ▪ Visual surveys of segregated cycle tracks to gain condition data ▪ Cyclic siding out of footways and cycle tracks ▪ Condition surveys of the footway and cycle tracks to gain condition data (though we are designing a new bespoke regime that we will roll out in coming years)

Service Standard Risk Assessment:

Defect Type:	Footway/Cycle Track Collapse	**Means of assessment**:	Ad-Hoc inspections

Potential Risks:

- Reduced highway safety [Safety]
- Delays to movement of traffic due to traffic management requirements aiding pedestrian/cyclist movement [Traffic]
- Increased disadvantage to people with limited mobility [Equality]
- Detrimental effects on other highway assets [Damage]
- Restricting Active Travel in Kent [Equality]

Scenario: **Investigate and repair a "made safe" high/medium risk significant footway or cycle track collapse**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
All foot-ways/ cycle tracks	12	6	12	9	Make immediate area safe within two hours. Identify cause, and commission appropriate remedial action for its high use (funded on a case-by-case basis)	5	3	6	4

Defect Type:	Structural deterioration of footways/cycle tracks	**Means of assessment**:	Scheduled and ad-hoc inspections

Potential Risks:

- Increase in trip injuries [Safety]
- Increase in the number of insurance claims being registered.
- Increased disadvantage to people with limited mobility [Equality]
- Increase in the amount of safety critical defects occurring [Damage]
- Increase in reactive maintenance costs and additional revenue budget pressures [Damage]
- A decline in footway/cycle track condition leading to increase in the length of the network which are at the end of their service life [Damage]
- Restricting Active Travel in Kent [Traffic]

Scenario: **Decline in footway/cycle track condition leads to more safety critical defects**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High use	12	9	16	12	Within funds provided, use good asset management practices and a risk-based approach.	9	9	12	9
Low use	8	9	12	12		8	9	9	9

Service Definition Sheet

Asset Group/Service: **Drainage Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Emergency response where there is deemed to be an immediate or imminent risk to highway safety or of internal property flooding from the highway ▪ Pre-inspection and cyclic maintenance of highway gully pots on main roads including jetting of outlets [yearly] and all highway drainage assets at defined flooding hotspots [twice yearly] ▪ Targeted maintenance of all other highway drainage assets identified via reports of defects or flooding and where there is a high risk to highway safety and/ or the risk of internal property flooding ▪ Investment for investigation and remedy of drainage defects via a like-for-like repair prioritised according to the risk to highway safety and/ or the risk of internal property flooding, impact on disruption for all highway users, impact on other asset groups and available capital investment / budget ▪ Capital investment for drainage renewals and improvements where there is a medium or greater risk to highway safety and/ or the risk of internal property flooding or where there is significant risk of regular disruption for all highway users or to other asset groups as a direct result of flooding or asset deterioration ▪ Enforcement of drainage and highway rights where there is a high or greater risk to highway safety and the risk of internal property flooding ▪ Making safe asset failures relating to KCC highway drainage systems outside of the highway boundary (i.e. collapse around soakaways)	▪ Maintenance of any drainage asset serving non-highway land, sewers, or property even if it drains the highway ▪ Maintenance of highway drainage serving private streets or un-adopted roads ▪ Action to investigate or remediate minor ponding on the highway ▪ Drainage renewals and improvements where there is a less than medium risk to highway safety and the risk of internal property flooding ▪ Provision of highway drainage to drain water from land other than the adopted highway ▪ Provision of property level protection to prevent flooding from the highway or any other source ▪ Installation of additional drainage to compensate for undulations in road or altered profiles ▪ Installation of additional drainage assets to accommodate flows of water from private land, springs or failed third party assets such as water mains or down pipes ▪ Enforcement of drainage and highway rights where there is a medium or low risk to highway safety and the risk of internal property flooding.

Service Standard Risk Assessment:

Defect Type:	Blocked drainage and/or highway flooding	**Means of assessment**:	Visual inspection

Potential Risks:

- Reduced highway safety due to standing water/ice [Safety]
- Delayed movement of traffic due to flooded/impassable roads [Traffic]
- Increased disadvantage to non-vehicular highway users, particularly those with limited mobility therefore discouraging participation and active travel in Kent [Equality]
- Detrimental effect on/risk to other service groups and asset condition [Damage]
- Current funding levels do not allow service to upgrade/renew all high priority locations or invest in the prevention of flooding where the current risk is below the investigation criteria.

Scenario: **Drainage asset management failed or under capacity causing regular flooding**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	20	12	16	Engineer inspection (28 days) and site flood risk assessment to determine whether the matter is in highway authority control, whether it meets service level investigation criteria and propose further work to resolve the matter. Drainage improvement schemes (where required) will be brought into the HAMP Forward Works Programme and delivered according to available budgets.	12	12	6	12
Main Roads	20	16	12	16		12	12	6	12
Urban Minor Roads	16	12	12	16		8	6	4	9
Rural Minor Roads	16	12	12	16		8	6	4	12
Private Property			20	20				16	16

Scenario: **Flooding of up to half the road**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	20	16	9	9	Flood clearance [2 hours] and gully cleansing [2 hours - 7 days]	6	6	4	4
Main Roads	16	12	9	9	Flood warning signs [2 hours] and gully cleansing [7 days – 28 days]	6	6	4	4
Urban Minor Roads	12	6	12	9	Gully cleansing [28 days – 90 days]	6	4	6	6
Rural Minor Roads	9	4	9	12	Gully cleansing [90 days]	6	3	6	6
Private Property			9	9				6	6

Scenario: **Flooding of over half the road**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	20	12	12	Road closure, flood clearance and gully cleansing [2 hours]	6	6	4	4
Main Roads	20	16	12	9	Flood warning signs and / or flood clearance [2 hours] and gully cleansing [7 days]	6	6	4	4
Urban Minor Roads	16	12	16	9	Flood warning signs [2 hours] and gully cleansing [7 days – 28 days]	4	4	6	6
Rural Minor Roads	12	9	12	12	Flood warning signs [2 hours] and gully cleansing [28 days]	4	3	6	6
Private Property			12	12	Gully cleansing [28 days]			6	6

Scenario: **Flooding making the road impassable and causing internal property flooding**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	20	12	16	Road closure, flood clearance and gully cleansing [2 hours]	6	6	4	4
Main Roads	20	16	12	12	Flood warning signs and / or flood clearance [2 hours] and gully cleansing [7 days]	6	6	4	4
Urban Minor Roads	16	12	16	12		4	4	6	6
Rural Minor Roads	12	9	12	16	Flood warning signs [2 hours] and gully cleansing [7 days]	4	3	6	6
Private Property			16	16	Flood clearance [2 hours] and gully cleansing [2 hours - 7 days]			6	6

Scenario: **Repeated flooding over half the road/ making the road impassable and/ or causing internal property flooding**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	20	12	16	Engineer inspection [28 days] and site flood risk assessment to determine whether the matter is in highway authority control, whether it meets service level investigation criteria and propose further work to resolve the matter.	6	6	4	4
Main Roads	20	16	12	12		6	6	4	4
Urban Minor Roads	16	12	16	12		4	4	6	6
Rural Minor Roads	12	9	12	16		4	3	6	6
Private Property			16	16				6	6

Service Definition Sheet

Asset Group/Service: **Structures Asset Management**

Service Scope

Service Provided:

- Routine surveillance at the frequencies defined in the KCC Highway Inspectors Manual
- 2-yearly General Inspections of all KCC owned highway structures
- 2-yearly safety inspections of targeted non-KCC owned highway structures
- Ad hoc safety inspections of highway structures following damage reports or extreme events
- 6-12 yearly Principal Inspections of KCC owned highway structures (bridges and culverts spanning >900mm and sign gantries)
- Special inspections of highway structures planned and programmed on a targeted basis
- Structural reviews and assessments of KCC owned highway structures planned and programmed on a targeted basis
- General maintenance - prioritised based on the risk to safety and programmed on a targeted basis:
  - Impact damage repairs
  - Drainage cleansing
  - Removal of vegetation
  - Culvert cleansing
  - Removal or obliteration of obscene and/or offensive graffiti
- Preventative maintenance - prioritised based on the risk of accelerated deterioration:
  - Repointing
  - Painting
  - Minor defect repairs
  - Repairs of waterproofing
- A targeted approach to the management of substandard structures
- A targeted approach to component renewal, prioritised based on the risk to safety and the risk of accelerated deterioration
- A targeted approach to upgrading and asset replacement, prioritised based on the risk to safety and of accelerated deterioration
- Management of low height bridges together with remedial works to bridge signing and liaison with Network Rail and other bridge owners following bridge strikes
- Technical approval of new highway structures including those promoted by developers
- A planned approach to the management of substandard structures

Service Not Provided:

- General Inspections of non-KCC owned highway structures
- Principal Inspections of bridges and culverts spanning <900mm, retaining walls, pedestrian subways, certain inaccessible structures or any non-KCC owned highway structures
- Routine/ cyclic structural reviews and assessments
- Cyclic programmes of general and preventative maintenance
- Maintenance and renewals for aesthetic reasons
- Removal or obliteration of non-obscene or non-offensive graffiti
- Cyclic component renewal
- Widening and headroom improvements

Service Standard Risk Assessment:

Defect Type:	Deterioration/failure of KCC -owned Highway Structure	**Means of assessment**:	Visual inspection or Structural Review/Assessment

Potential Risks:

- Reduced highway safety resulting from asset condition [Safety]
- Delayed movement of traffic due to traffic management measures prior to repair [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]

Scenario: **Non-structural defect but with the potential to increase the rate of asset deterioration**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Routes	8	8	2	10	Repairs to be added to work bank with low priority and monitored for further deterioration at subsequent routine inspections. Repairs to be completed with a low priority or in conjunction with other works planned at the structure.	4	4	2	5
Locally Important Routes	6	6	3	8		3	3	3	4
Minor Routes	6	6	3	8		3	3	3	4
Other (N/A) Routes	6	6	3	8		3	3	3	4

Scenario: **Minor defect/deterioration of a non-critical structural element**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Routes	12	12	4	15	Repairs to be added to work bank with low priority and monitored for further deterioration at subsequent routine inspections. Repairs to be completed with a low priority or in conjunction with other works planned at the structure.	4	4	4	10
Locally Important Routes	9	9	6	12		3	3	6	8
Minor Routes	9	9	6	12		3	3	6	8
Other (N/A) Routes	9	9	6	12		3	3	6	8

Scenario: **Minor defect/deterioration of a critical structural element**										
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Routes	16	16	6	16	Make safe repairs completed and ongoing monitoring arranged as appropriate. Repairs to be added to work bank with medium priority. Repairs to be prioritised against works at other structures and planned for completion within two years subject to available resources and funding	8	8	4	12
Locally Important Routes	12	12	9	12		6	6	6	9
Minor Routes	12	12	9	12		6	6	6	9
Other (N/A) Routes	12	12	9	12		6	6	6	9

Scenario: **Significant defect/deterioration of a non-critical structural element**										
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Roads	20	16	6	16	Make safe repairs completed and ongoing monitoring arranged as appropriate. Repairs to be added to work bank with medium priority. Repairs to be prioritised against works at other structures and planned for completion within two years subject to available resources and funding.	12	8	4	12
Locally Important Routes	16	12	9	12		8	6	6	9
Minor Routes	16	12	9	12		8	6	6	9
Other (N/A) Routes	16	12	9	12		8	6	6	9

Scenario: **Significant defect/deterioration of a critical structural element**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Routes	20	20	8	20	Make safe repairs completed and ongoing monitoring arranged as appropriate. Repairs to be prioritised and completed as high priority subject to available resources and funding.	12	12	4	15
Locally Important Routes	16	16	12	16		8	8	6	12
Minor Routes	16	16	12	16		8	8	6	12
Other (N/A) Routes	16	16	12	16		8	8	6	12

Scenario: **Structure classed as sub-standard following Structural Inspection requiring replacement (Principal Bridge Inspections)**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Major Strategic Routes	25	25	15	25	Structure to be managed in accordance procedures for sub-standard structures including provision of interim measures, regular monitoring, and ongoing reviews. Repairs, or asset replacement, to be prioritised as appropriate	15	15	9	15
Other Strategic Routes	25	25	15	25		15	12	9	15
Locally Important Routes	20	20	25	20		12	12	15	12
Minor Routes	16	16	22	16		8	8	12	8
Other (N/A) Routes	16	16	25	16		8	8	15	8

Scenario: **Total failure of asset**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Routes	25	25	15	25	Urgent / emergency measures instigated to make safe as appropriate. Repairs, or asset replacement, to be prioritised and completed as very high priority subject to available resources and funding.	15	15	9	15
Locally Important Routes	20	20	25	20		12	12	15	12
Minor Routes	16	16	22	16		8	8	12	8
Other (N/A) Routes	16	16	25	16		8	8	15	8

Service Definition Sheet

Asset Group/Service: **Crash Barriers Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Safety inspections as part of the wider highway inspection regime and targeted inspections informed by fault reports from customers ▪ Impact damage repairs ▪ Re-tensioning of tensioned corrugated beam safety barriers on a 2-yearly frequency ▪ Service inspections on a 5-yearly frequency and subsequent renewal/replacement of crash barrier on a priority/life cycle planning basis ▪ Updating of crash barrier inventory information on an ad hoc basis with a detailed review every 5 years ▪ Management of road-rail incursion risks ▪ Assessment of future crash barrier provision in response to queries from customers, regular service inspections and proposed changes to the highway network	▪ Provision of crash barrier to protect private property ▪ Provision or maintenance of crash barrier on private streets or highways not maintainable at public expense ▪ Maintenance of crash barrier not owned by KCC ▪ Routine cleaning of crash barrier ▪ Non-structural cosmetic damage repairs to crash barrier ▪ Painting of crash barrier

Service Standard Risk Assessment:

Defect Type:	Damaged or missing crash barrier	**Means of assessment**:	Visual inspection

Potential Risks:

- Reduced highway safety due secondary incidents [Safety]
- Delayed movement of traffic due to traffic management measures prior to repair [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]

Scenario: **Deformed beams and deflected posts but beam generally intact and mounted at correct height**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Routes	10	5		5	Damage to be repaired alongside other safety barrier in the location at next available opportunity	8	4		4
Locally Important Routes	8	3		3		6	2		2
Minor Routes	8	3		3		6	2		2
Other (N/A) Routes	6	2		2		4	1		1

Scenario: **Damaged crash barrier to limited number of posts but beam generally intact and mounted at correct height**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Strategic Routes	15	15		10	Damage to be repaired within 28 days	10	10		5
Locally Important Routes	12	12		8	Damage to be repaired within 56 days	8	8		4
Minor Routes	12	12		8		8	8		4
Other (N/A) Routes	9	9		6		6	6		3

Scenario: **Damaged crash barrier where beams no longer intact and generally mounted at correct height but without additional risk factors**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Major Strategic Routes	20	20		15	Damaged area protected by cones (as TM permits) and repaired within 28 days	12	12		8
Other Strategic Routes	20	16		12		12	10		6
Locally Important Routes	16	12		9		10	8		6
Minor Routes	16	8		8		8	6		4
Other (N/A) Routes	16	4		6		8	3		4

Scenario: **Damaged crash barrier on verge where beams no longer intact and generally mounted at correct height together with additional risk factors**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Major Strategic Routes	25	25		16	Damaged area protected by cones (as TM permits) and repaired within 28 days	15	15		8
Other Strategic Routes	25	20		12		15	12		6
Locally Important Routes	20	15		12		12	9		6
Minor Routes	16	10		8		8	6		4
Other (N/A) Routes	16	5		8		8	3		4

Scenario: **Damaged crash barrier on verge where beams no longer intact and generally mounted at correct height together with additional risk factors and moderate concerns over possible effects of further incidents prior to repair of damage OR damaged crash barrier on central reserve where beams no longer intact and generally mounted at correct height together with additional risk factors**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Major Strategic Routes	25	25		20	Damaged area protected by cones (as TM permits) and repaired within 7 days	15	15		10
Other Strategic Routes	25	20		16		15	12		8
Locally Important Routes					Scenario N/A				
Minor Routes									
Other (N/A) Routes									

Scenario: **Damaged crash barrier where beams no longer intact and generally mounted at correct height together with additional risk factors and significant concerns over possible effects of further incidents prior to repair of damage**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Major Strategic Routes	25	25		25	Damaged area protected by cones (as TM permits) OR lane closure and/or speed restriction implemented asap, and damage repaired within 2 days	15	15		15
Other Strategic Routes	25	20		20		15	12		12
Locally Important Routes	20	15		15	Damaged area protected by cones (as TM permits) and repaired within 7 days	12	9		9
Minor Routes	16	10		10		8	6		6
Other (N/A) Routes	16	5		8		8	3		4

Service Definition Sheet

Asset Group/Service: **Street Lighting Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Emergency response where there is deemed to be an immediate or imminent risk to highway safety ▪ Cyclic electrical and structural testing of street lighting assets ▪ Reactive maintenance of street lighting assets identified via reports of defects ▪ Night scouting of assets not on the central management system ▪ Monitoring of performance and energy consumption via a central management system ▪ Street lighting asset renewals and improvements where it is a high risk to highway safety or asset is coming to the end of its life ▪ Provision of general maintenance to some non-KCC owned lights on behalf of the district/borough councils ▪ Assessment of requests for attachments to KCC owned street lighting assets ▪ Assessment and approval of new developments and schemes where lighting assets are included ▪ Works for third parties involving KCC owned street lighting assets ▪ Work for third parties involving their street lighting assets	▪ Maintenance of street lighting assets on non-highway land or non-authority roads with the exception of district lighting maintained by KCC on their behalf ▪ Provision of additional lighting. ▪ Removal of inoffensive graffiti from street lighting assets ▪ Painting of street lights unless in a conservation area ▪ Installation of ornate/heritage style luminaires unless in a conservation area ▪ We only adopt private street lights if the adoption criteria are met in full

Service Standard Risk Assessment:

Defect Type:	Damage to equipment	**Means of assessment**:	Visual Inspection

Potential Risks:

- Reduced highway safety due to structural integrity of asset [Safety]
- Delayed movement of traffic due to structural failure of asset [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]

Scenario: **Low risk faults: e.g. single asset not working in a road**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	1	1	1	1	Attendance at next high-speed road closure	1	1	1	1
Main Roads	1	1	1	1	Attendance within 21 days	1	1	1	1
Urban Minor Roads	1	1	1	1		1	1	1	1
Rural Minor Roads	1	1	1	1		1	1	1	1

Scenario: **Multiple lights in a road not working**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	2	2	1	1	Attendance in 2 days	1	1	1	1
Main Roads	6	2	2	1		1	1	1	1
Urban Minor Roads	6	2	6	1		1	1	1	1
Rural Minor Roads	6	2	4	1		1	1	1	1

Scenario: **Higher risk faults e.g. light at a zebra crossing or conflict area not working**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	3	2	1	1	Attendance in 2 days	1	1	1	1
Main Roads	8	2	8	1		1	1	1	1
Urban Minor Roads	8	2	10	1		1	1	1	1
Rural Minor Roads	8	2	8	1		1	1	1	1

Service Definition Sheet

Asset Group/Service:	Intelligent Traffic Systems (ITS) Asset Management

Service Scope

Service Provided:	Service Not Provided:
▪ Emergency response where there is deemed to be an immediate or imminent risk to highway safety ▪ Cyclic inspection of all installations [up to three times per year] ▪ Targeted maintenance of all installations identified via reports of defects or damage and where there is a high risk to highway safety. ▪ Investigation of defects where there is a high risk to highway safety ▪ Traffic signal renewals and improvements where there is a high risk to highway safety or obsolete equipment ▪ Technical Approval of all traffic signal designs to ensure compliance with standards. ▪ Advice and approval of suitable sites for electronic speed warning devices on the highway network	▪ Maintenance of any signal installation on non-highway land or non-authority roads ▪ Investigation of any signal installations on non-highway land or non-authority roads ▪ Enforcement of traffic signals under The Traffic Management Act 2004 ▪ Routine replacement of non-statutory and non-safety critical assets ▪ Painting of traffic signal poles, controller cabinets or any other ITS assets ▪ Removal of non-offensive graffiti ▪ KCC recognises the importance of conservation but given resource challenges we cannot always agree to meet conversation requirements but will liaise with conservation officers on new schemes in such areas to consider minor adjustments alongside other factors such as cost, lifecycle, and maintenance

Footnote:

Traffic systems assets are binary in nature: they are either on and working safely, or off and inactive. The various components at a site can be replaced or repaired independently of other elements in order to extend the life of the overall asset. This means that once any faults, damage or other issues have been addressed that the residual risk returns to the minimal level of the original design. The biggest long-term risk to the equipment is the obsolescence of the technology with sufficient availability of spare components.

Service Standard Risk Assessment:

Defect Type:	Asset faulty or damaged	**Means of assessment**:	Visual inspection or system alert

Potential Risks:

- Reduced highway safety due to reduced information to users [Safety]
- Delayed movement of traffic due to lack of co-ordination [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]

Scenario: **Communications failure** (reduces network efficiency but the lights continue to function)

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	8	12	6	6	Engineer to attend site within 2 hours and repair within 4 hours of attendance	2	2	4	4
Main Roads	12	16	6	6		2	2	4	4
Urban Minor Roads	6	9	6	6	Engineer to attend site within 48 hours and repair as soon as possible	2	2	6	6
Rural Minor Roads	6	2	6	6		2	2	6	6

Scenario: **Lamp Fault** (integral safety systems ensure safe operation is maintained or automatically switched off)

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	20	16	8	6	Engineer to attend site within 4 hours and repair within 4 hours of attendance	2	2	4	4
Main Roads	20	16	8	6		2	2	4	4
Urban Minor Roads	12	6	6	6	Engineer to attend site within 48 hours and repair as soon as possible	2	2	6	6
Rural Minor Roads	9	4	6	6		2	2	6	6

Scenario: **Detector fault** (affect network efficiency but may be either above ground detector or carriageway loops)									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	12	25	12	12	Engineer to attend site within 4 hours and repair within 4 hours of attendance	6	6	4	4
Main Roads	12	25	12	9		6	6	4	4
Urban Minor Roads	9	20	12	9	Engineer to attend site within 48 hours and repair as soon as possible	4	6	6	6
Rural Minor Roads	9	12	6	6		4	6	6	6

Scenario: **Road traffic collision damaging ITS assets** (will be made safe and require urgent follow up visit)									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	25	16	16	Engineer to attend site within 2 hours and repair as soon as possible	6	6	4	4
Main Roads	25	20	16	12		6	6	4	4
Urban Minor Roads	20	16	16	12	Engineer to attend site within 2 hours and repair as soon as possible	4	4	6	6
Rural Minor Roads	16	16	12	12		4	4	6	6

Scenario: **Asset condition and technology availability** (prioritised based on age, fault rate and availability of spare parts)									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	15	20	15	20	Assessed for inclusion in annual refurbishment programme	10	15	10	15
Main Roads	15	20	20	15		10	15	15	10
Urban Minor Roads	10	15	15	10		5	10	10	5
Rural Minor Roads	10	15	15	10		5	10	10	5

Service Definition Sheet

Asset Group/Service: **Soft Landscape Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Emergency response where there is deemed to be an immediate or imminent risk to highway safety from tree defects and vegetation ▪ Cyclic professional safety inspections of highway trees [every 5 years] following the approach contained within “Highway Trees – Our Approach to Asset Management” ▪ Cyclic maintenance of: – Shrubs, urban hedges, rural swathe, rural hedges, weed treatment, high speed roads (1 pa) – KCC off-road cycle routes (2 pa) – Autumn cut of Conservation, RNR, SSSI and Bee Road verges – Visibility splays (3 pa) – Urban grass (6 pa) – Tree pollarding and epicormic growth ▪ Cyclic management of highway noxious weeds which have the potential to cause a risk to highway safety and/or invoke a statutory conflict ▪ Targeted maintenance of all other highway soft landscape assets identified via reports of defects or where there is a high risk to highway safety and/ or a risk of property damage ▪ Investigation of tree defects where there have been reports of a high risk to highway safety, members of the public or a risk of damage to property ▪ Provision of replacement tree planting for trees within conservation areas or those covered by TPOs ▪ Provision of tree asset improvement schemes based on available Capital Funding ▪ Investigation of bus route tree and vegetation issues and enforcement of notices where there is a high risk to highway safety ▪ Soft landscape renewals and improvements where there is a high risk to highway safety or significant benefit to the asset and wider community ▪ Targeted collaborative maintenance of the soft landscape asset to benefit other highway asset teams	▪ Maintenance of non-highway trees or vegetation ▪ Maintenance of highway trees and soft landscape assets within private streets or un-adopted roads ▪ Investigation of tree reports which are nuisance issues and are low risk ▪ Provision of replacement tree planting outside of conservation areas or those not covered by TPOs ▪ Enforcement of highway rights for non-highway soft landscape assets ▪ Soft landscape enhancements ▪ Clearance of fruit or berry fall, leaves or minor branches ▪ Cutting back of trees or soft landscape for utility cables, TV reception or solar panel issues ▪ Cutting back of trees or soft landscape to abate private shading or right to light issues ▪ Cutting back of highway trees or soft landscape vegetation overhanging private property ▪ Removal of trees or soft landscape to prevent falling leaves, seeds, sap or insect or birds’ droppings ▪ Maintenance of trees or soft landscape for aesthetic reasons ▪ Reduction in height of trees or soft landscape which is perceived as being too large or tall ▪ Removal of dead weeds following programmed weed treatment ▪ Removal of grass cuttings or arisings following programmed works ▪ Litter collection during programmed works. ▪ Carrying out privately funded works to highway trees or vegetation to abate nuisance issues. ▪ Selective weed treatment of grass verges or shrub beds

Service Standard Risk Assessment:

Defect Type:	Overgrown weeds, grass verge, shrubs, or hedges	**Means of assessment**:	Visual inspection

Potential Risks:

- Reduced highway safety due to obstructions/visibility/environmental risks [Safety]
- Delayed movement of traffic due to restricted roads and footways [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]
- Build-up of litter i.e. plastic waste [Environmental]

Scenario: **Encroachment of weeds, grass, shrubs, or hedges onto other highway assets causing degradation**

	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	16	15	9	16	9	Annual maintenance visit [12months] or 28-day response	15	12	6	12	4
Urban Main Roads	15	12	12	16	9	Programmed urban maintenance visits [5 weeks] or Swathe [once per year] or 28-day response	12	9	9	12	4
Rural Main Road	12	9	12	16	8		9	6	9	12	3
Urban Minor Roads	12	8	12	16	8		8	4	9	12	4
Rural Minor Roads	9	9	9	16	8		6	4	6	12	4
Off Road Cycle Routes	8	8	8	15	8	Programmed maintenance visits [twice per year] or 28-day response	6	3	6	10	4

Scenario: **Weeds, grass, shrubs, or hedges obstructing road, footway or cycle track preventing pedestrians, cyclists and/or vehicles using highway**											
	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	16	16	12	12	9	Annual maintenance visit [12months] or 28-day response	12	12	9	9	6
Urban Main Roads	16	12	16	12	9	Programmed urban maintenance visits [5 weeks] or Swathe [once per year] or 28-day response	12	9	12	9	6
Rural Main Roads	16	12	16	12	8	Programmed urban maintenance visits [5 weeks] or swathe [once per year] or 28-day response	12	9	12	9	6
Urban Minor Roads	12	8	12	9	8		9	6	9	8	6
Rural Minor Roads	9	8	12	9	8		6	4	9	8	6
Off Road Cycle Routes	8	8	9	8	8	Programmed maintenance visits [twice per year] or 28-day response	6	4	6	6	6

Scenario: **Weeds, grass, shrubs, or hedges causing visibility issue**											
	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	25	20	16	12	9	Annual maintenance visit [12months] or 28-day response	12	12	12	9	4
Urban Main Roads	20	16	16	12	9	Programmed urban maintenance visits [5 weeks] or visibility cut [three times per year] or 28-day response	12	12	12	9	6
Rural Main Roads	16	12	16	9	8		12	9	12	8	6
Urban Minor Roads	16	12	16	9	8		12	9	12	6	4
Rural Minor Roads	12	9	12	9	8		9	6	9	6	4
Off Road Cycle Routes	9	8	9	8	8	Programmed maintenance visits [twice per year] or 28-day response	6	3	6	6	4

Scenario: **Grass cuttings and or verge catching fire posing risk to public, damaging property and highway asset**											
	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	25	20	16	16	12	Annual maintenance visit [12months] or 28-day response	9	8	8	8	4
Urban Main Roads	20	16	16	16	12	Programmed urban maintenance visits [5 weeks] or visibility cut [three times per year or swathe [once pa] or 28-day response	15	12	12	12	6
Rural Main Roads	16	16	16	16	12		12	12	12	12	6
Urban Minor Roads	16	12	16	16	9		12	9	12	12	6
Rural Minor Roads	12	9	12	12	9		9	6	9	9	6
Off Road Cycle Routes	9	4	9	9	9	Programmed maintenance visits [twice per year] or 28-day response	6	3	6	6	6

Defect Type:	Invasive or noxious weeds within highway boundary	**Means of assessment**:	Visual inspection

Potential Risks:

- Reduced highway safety due to obstructions/visibility/environmental risks [Safety]
- Delayed movement of traffic due to restricted roads and footways [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]
- Build-up or litter i.e. plastic waste [Environmental]
- Biodiversity risks from invasive noxious weeds [Environmental]
- Statutory obligation to prevent spread of weeds onto third party property [Equality]

Scenario: **Noxious weeds such as hogweed or Japanese knotweed growing into highway**

	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	12	12	9	20	16	Annual treatment programme or 28-day response	9	9	6	9	9
Urban & Rural Main Roads	20	16	9	16	16		9	12	6	8	9
Urban Minor Roads	20	16	9	16	16		9	12	6	8	9
Rural Minor Roads	16	12	9	12	16		9	9	4	6	9
Off Road Cycle Routes	16	9	9	9	16		9	6	4	6	9

Defect Type:	Defective trees	**Means of assessment**:	Visual inspection

Potential Risks:

- Reduced highway safety due to tree defect in highway [Safety]
- Delayed movement of traffic due to restricted roads and footways [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]
- Biodiversity risks from introduction of pests and diseases from outside of the UK [Environmental]
- Poorly managed trees and planned tree works can have a detrimental effect on wildlife due to unforeseen failure and/or timing of works [Environmental]

Scenario: **Imminently dangerous trees at risk of causing personal injury/damage to the highway/damage to private property/traffic delays.**

	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	25	25	15	25	8	2 hour emergency response	6	6	4	4	3
Urban Main Roads	25	25	12	25	12		6	6	4	6	12
Rural Main Roads	20	20	12	20	8		6	6	4	6	3
Urban Minor Roads	20	16	8	20	12	2 hour/24 hour emergency response dependent on risk. Low traffic volume roads will be temporarily closed	6	6	4	6	12
Rural Minor Roads	16	16	8	16	8		4	3	4	6	3
Off Road Cycle Routes	16	8	8	8	8		4	4	4	4	3
Private property	20		9	16	8		6		4	4	1

Scenario: **Tree defects discovered on programmed (max 5 years) professional inspections and/or discovered on ad-hoc inspections and in relation to customer enquiries.**											
	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	20	20	15	20	8	Driven survey by professional tree inspectors [annually]. Asset inspection [every 3 years] Defects actioned according to level of risk - 2 month default period.	6	6	4	4	3
Urban Main Roads	20	20	12	20	12	Walked survey by professional tree inspectors [max every 5 years]. Defects actioned according to level of risk - 2 month default period.	6	6	4	6	12
Rural Main Roads	16	16	12	16	8	Driven survey by professional tree inspectors [max every 5 years]. Defects actioned according to level of risk - 2 month default period.	6	6	4	6	3
Urban Minor Roads	16	16	8	16	12	Walked survey by professional tree inspectors [every 5 years]. Defects actioned according to level of risk - 2 month default period.	6	6	4	6	12
Rural Minor Roads	16	16	8	16	8	Driven survey by professional tree inspectors [every 5 years]. Defects actioned according to level of risk - 2 month default period.	4	3	4	6	3
Off Road Cycle Routes	15	8	8	8	8	Cycled survey by highway inspector to identify imminently dangerous trees only [every 2 years]. Defects actioned according to level of risk - 2 month default period.	4	4	4	4	3

Scenario: **Trees requiring cyclic pruning (removal of basal & epicormic growth or re-pollarding) maintenance to prevent visibility issues, obstructions to the highway and/or damage to private property.**											
	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads											
Urban Main Roads	20	20	12	20	12	Defects actioned in response to maximum acceptable extent of re-growth. Range from [1-7 years].	6	6	4	6	6
Rural Main Roads	16	16	12	16	8		6	4	4	6	3
Urban Minor Roads	16	16	12	16	12		6	6	4	6	6
Rural Minor Roads	16	15	8	16	8		4	3	4	6	3
Off Road Cycle Routes											

Defect Type:	Tree Stump	**Means of assessment**:	Visual inspection

Potential Risks:

- Tree stumps within the highway can be a trip hazard and/or cause damage to vehicles when parking. Stumps will ultimately decay and fail potentially leaving unguarded openings in highway [Safety]
- Delayed movement of traffic due to restricted roads and footways [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]
- Excess deadwood below ground can increase the likelihood of honey fungus proliferation and subsequent damage to private woody vegetation and/or highway assets (trees and shrubs). [Damage, Environmental]

Scenario: **Tree stump remaining in highway following tree felling.**

	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads	6				6	Tree stumps left at approx. 1 metre height to avoid trip hazard. Tree stumps removed in 'soft site verges' to reduce the overall quantity of below ground deadwood and likelihood of honey fungus proliferation. Stumps also removed to meet planning obligations where applicable and in 'hard sites' where advanced stage of decay may result in failure. We do not remove tree stumps on segregated cycle tracks.	2				2
Urban Main Roads	12	6	12	12	12		9	4	9	12	12
Rural Main Roads	6	3	6	6	6		2	1	2	2	2
Urban Minor Roads	12	6	12	12	12		9	4	9	12	12
Rural Minor Roads	6	3	6	6	6		2	1	2	2	2

Defect Type:	Impact from loss of highway tree asset	**Means of assessment**:	Visual inspection

Potential Risks:

- Increased disadvantage to people with breathing disabilities therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]
- Urban tree cover plays an important role in moderating the 'urban heat island effect', which poses threats to human health due to substantially increased temperatures relative to rural areas. The Office of National Statistics (ONS) predicts a 3-fold increase in the number of heat related deaths by 2050. [Environmental]
- The ONS has predicted the NHS in Kent and Medway saved roughly £24 million in avoided health damage costs due to tree cover. Increase in urban sprawl and air pollution met with declining urban tree cover will result in reduction of the benefits currently provided and increased cost to the UK economy. [Environmental]
- Urban tree cover plays an important role intercepting rainfall and reducing surface water flood potential. [Environmental]

Scenario: **New highway trees have not been planted in significant numbers since the 1950s and 60s. The distribution of age classification is now predominated by late middle aged and mature trees nearing the end of their safe useful life expectancies. The highway tree asset is not being replaced at a sufficient rate to maintain urban tree cover.**

	Initial Risk					Mitigating Actions	Residual Risk				
	Safety	Traffic	Equality	Damage	Env		Safety	Traffic	Equality	Damage	Env
High Speed Roads			8		12	Replacement trees are planted to meet obligations under Town & Country Planning Act 1980. Otherwise, felled trees are not replaced due to financial constraints. Wider tree asset improvement schemes to provide local benefits based on available funding in urban areas			8		12
Urban Main Roads			20		20				9		9
Rural Main Roads			8		12				8		12
Urban Minor Roads			20		20				9		9
Rural Minor Roads			8		12				8		12
Off Road Cycle Routes											
Private property			8		8				8		8

Service Definition Sheet

Asset Group/Service: **Non-lit Highway Signs Asset Management**

Service Scope

Service Provided:

- Cyclic condition inspections as part of the wider highway inspection regime and targeted inspections informed by fault reports from customers
- Emergency response where there is deemed to be an immediate or imminent risk to highway safety
- Replacement of the following safety critical signing only where hazard is still present and risk assessment identifies as safety critical. Current funding covers approximately 25% of the A network and 20% of the B road network:
    - Warning signs such as junction ahead signs, bend ahead signs and zebra crossing ahead signs
    - Regulatory signs – Those signs which place a restriction on the highway such as speed limits, width restrictions and keep left signs Safety Camera signing
    - Route directional signing
- Installation of new non-lit signs as part of a crash remedial or improvement scheme
- Licence attachment of traffic survey equipment to non-lit signs
- Targeted non-lit sign cleaning current budget provides for approximately 5% of the A road network for cleaning
- Removal of clutter in the form of defunct or redundant signs and posts where there is an identified safety risk to the highway user, where there is an obstruction to inclusive mobility or where signing can be rationalised as part of development or a new highway scheme.
- Enforcement action to remove any non-highway signing within the highway where it poses a significant safety risk to highway users
- Vegetation clearance around safety critical signing where there is an identified significant risk to the safety of highway users
- Review of lorry signing strategies
- Installation of tourist destination signing funded by 3rd party

Service Not Provided:

- Replacement of warning signs and regulatory signs on 75% of the A road network, on 80% of the B road network or on the C or unclassified network with current funding levels.
- Replacement of any non-safety critical signing on any part of the network including:
    - Information signs such as no through road signs or unsuitable for lorries signing
    - Non-primary route direction signing
    - Village signs
- Maintenance of any signs which are not highway signs owned by KCC – This includes parking signs which are part of the managed parking services managed by the boroughs or districts
- Maintenance of any signs which are located on private streets or un-adopted roads.
- Installation of any new signs which are not standard highway signs relating to messages for the users of the highway
- Cyclic cleaning of all highway signs
- Removal of non-offensive graffiti
- Cyclic renewal of aging sign stocks not considered to be a risk to the highway user or safety critical.
- Replacement of any non-standard or non-safety critical signing such as village gateways
- Provision of specialist conservation style signing

Service Standard Risk Assessment:

Defect Type:	Damaged/missing non-lit sign	**Means of assessment**:	Visual Inspection

Potential Risks:

- Risk due to hazardous obstruction in the carriageway or footway [Safety]
- Risk to highway users due to lack of warning of mandatory or regulatory restrictions on the highway [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental affect effect on/risk to highway asset condition [Damage]

Scenario: **Damaged safety critical highway sign**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	20	20	9	9	Emergency 2 hour attendance to make safe / remove. Repair within 28 days. Consider repair in line with available funding	16	16	8	8
Main Roads	16	16	12	9		12	12	12	6
Urban Minor Roads	16	12	12	6	Emergency 2 hour attendance to make safe / remove. Unlikely to repair with current funding	16	12	12	6
Rural Minor Roads	16	12	4	4		16	12	4	4

Scenario: **Missing or obscured safety critical highway sign**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	20	16	9	9	Emergency 2 hour attendance to make safe. Repair within 28 days. Consider repair in line with available funding	16	12	9	8
Main Roads	16	12	9	9		12	12	9	8
Urban Minor Roads	12	12	6	6	Attend within 7 days of notification. Unlikely to repair with current funding	12	9	6	6
Rural Minor Roads	9	9	4	4		9	9	4	4

Scenario: **Damaged/unserviceable non-safety critical highway sign**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	12	16	6	6	Attend within 7 days of notification. Unlikely to repair with current funding	12	16	6	6
Main Roads	12	16	6	6		12	16	6	6
Urban Minor Roads	6	9	4	4	Attend within 28 days of notification. Repair within 90 days. Unlikely to repair with current funding	6	9	4	4
Rural Minor Roads	4	4	2	2		4	4	2	2

Service Definition Sheet

Asset Group/Service: **Pedestrian Guard Rail Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Cyclic condition inspections as part of the wider highway inspection regime and targeted inspections informed by fault reports from customers ▪ Emergency response where there is deemed to be an immediate or imminent risk to highway safety ▪ Targeted assessment for removal of asset ▪ Maintenance/replacement of damaged and hazardous guard rail within public highway ▪ Installation of new guardrail as part of a safety or highway improvement scheme ▪ Removal of guard rail where it is assessed as no longer required	▪ Maintenance of any pedestrian guard rail which is located on private streets or un-adopted roads. ▪ Minor/cosmetic damage ▪ Cyclic replacement of pedestrian guard rail ▪ Installation of new pedestrian guard rail which is not part of a safety or highway improvement scheme ▪ Installation or upgrade of pedestrian guard rail to ornamental guard rail ▪ Painting of guard rail ▪ KCC recognises the importance of conservation but given resource challenges we cannot always routinely agree to meet conversation requirements. We therefore liaise with conservation officers on planned maintenance works in conservation areas and consider conservation issues alongside other factors such as affordability, lifecycle cost and maintainability, before deciding what works we will do and materials we will use.

Service Standard Risk Assessment:

Defect Type:	Damaged pedestrian guard rail	**Means of assessment**:	Visual inspection by a Highway Steward or Inspector

Potential Risks:

- Risk to highway users accessing the carriageway at unsafe locations due to missing or damaged pedestrian guard rail [Safety]
- Obstruction to the movement of pedestrians or carriageway users due to damaged pedestrian guard rail on the footway or encroaching the carriageway [Traffic]
- Increased disadvantage to vulnerable road users discouraging participation [Equality]
- Detrimental affect effect on/risk to highway asset condition [Damage]

Scenario: **Damaged/missing safety critical pedestrian guard rail**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	20	16	12	Emergency 2 hour attendance to make safe. Permanent repair within 28 days to 90 days	9	9	8	6
Main Roads	20	16	20	12		9	8	9	6
Urban Minor Roads	20	16	20	9		9	8	9	4
Rural Minor Roads	9	9	6	6		6	6	4	4

Scenario: **Damaged/missing non-safety critical pedestrian guard rail**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	12	20	6	4	Attend within 2 hours to make safe. Permanent repair within 28 days to 90 days	4	9	4	2
Main Roads	12	20	6	4		4	9	4	2
Urban Minor Roads	9	12	6	4		4	6	4	2
Rural Minor Roads	6	6	4	2		2	2	2	2

Service Definition Sheet

Asset Group/Service: **Road Markings and Cats' Eyes Asset Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Cyclic condition inspections as part of the wider highway inspection regime and targeted inspections informed by fault reports from customers ▪ Emergency response where there is deemed to be an immediate or imminent risk to highway safety ▪ Targeted renewal of the following safety critical road markings and cats' eyes – Current funding covers approximately 20% of the A road network and 15% of the B road network annually – Centre lining – Junction markings – Pedestrian crossing markings – SLOW markings – Safety critical double yellow line corner protection – Safety critical roundabout markings – Safety critical yellow box junction markings – Safety critical letters, arrows, and symbols ▪ Installation of new road markings and cats' eyes as part of a crash remedial or highway improvement scheme ▪ Review of road markings and cats' eyes for road asset renewal sites and replacement of those considered safety critical only	▪ Maintenance of any of the following safety critical road markings or cats' eyes on 80% of the A network, 85% of the B network or on the C or unclassified road network: – Centre line markings – Junction markings – Pedestrian crossing markings – SLOW markings – Yellow box junction markings – Roundabout markings – Letters, arrows, and symbols – Double white line systems – Double yellow line corner protection ▪ Maintenance of any of the following road markings and associated cats' eyes on all classes of roads: – Edge of carriageway markings – Cycle and bus lane markings – Hatching markings – Non-safety critical letters, arrows, and symbols – KEEP CLEAR markings – Parking bay markings – Non-safety critical yellow box junction markings – Speed limit roundels – Dog bone markings ▪ Maintenance of any road markings or cats' eyes which are located on private streets or un-adopted roads ▪ Installation of parking restriction lining which is not part of a safety related scheme ▪ Amendments to or replacement of yellow parking restrictions which form part of the parking strategy managed by the boroughs or districts ▪ Installation of any road markings which are not standard highway markings (TSRGD 2016)

Service Standard Risk Assessment:

Defect Type:	Worn/missing road markings and cats' eyes	**Means of assessment**:	Visual inspection by a Highway Steward or inspector

Potential Risks:

- Risk to highway users due to lack of warning of a hazard [Safety]
- Risk to highway users due to lack of warning of mandatory or regulatory restrictions on the highway [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental affect effect on/risk to highway asset condition [Damage]

Scenario: **Worn / missing safety critical road markings and cats' eyes**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	20	20	9	16	Emergency 2 hour attendance to make safe. Permanent refresh within 7 to 28 days	9	9	2	6
Main Roads	16	16	16	16		8	6	6	6
Urban Minor Roads	16	16	16	16	Emergency 2 hour attendance to make safe. No replacement	8	8	8	8
Rural Minor Roads	16	16	6	16		8	8	6	8

Scenario: **Worn/missing non-safety critical road markings and cats' eyes**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	12	12	6	6	Attend within 28 days. Refresh / replace within 28 to ninety days	6	6	2	2
Main Roads	12	12	12	6		6	6	6	2
Urban Minor Roads	9	9	12	6	Attend within 28 days to risk assess. Lining will not be routinely replaced.	9	9	9	4
Rural Minor Roads	9	9	6	4		9	9	6	4

Service Definition Sheet

Asset Group/Service: **Highway Improvements**

Service Scope

Service Provided:	Service Not Provided:
▪ Implementation of new highway improvement schemes and KCC's Casualty Reduction Strategy including Road Safety Education – Design and implementation of new highway infrastructure taking into account life cycle costs and future maintainability. Type of schemes: - – New or amended signs and lines – Changes to speed limits – Changes to movement and or weight restrictions – Safety cameras where current criteria are met – New pedestrian crossing points including zebra and push button crossings – Implementation, modification, or removal of vertical and horizontal traffic calming such as road humps, priority working systems, road narrowing, traffic islands, build outs – Traffic signals – Vehicle Activated Signs or Speed Indicator Devices – Junction improvement schemes – New and improvements to existing footways and cycle tracks – Installation of village gateways (if externally funded) – please note Kent County Council do not maintain village gateways therefore a maintenance agreement must be in place prior to installation – Installation of high grip surfacing on approaches to pedestrian crossings ▪ Parking restrictions to mitigate an evidenced road safety issue ▪ 3rd party funded traffic regulation orders (TROs) ▪ 3rd party funded directional and brown tourism signs ▪ Dropped kerbs and tactile paving to provide equal access for mobility impairment ▪ Delivery of new highway infrastructure, considering economic, social, and environmental improvements balanced with Kent's existing highway maintenance service levels	▪ Parking restrictions to address inconsiderate parking or amenity issues ▪ Installation or renewal of street name plates – this is a district/borough function ▪ Installation of private or non-prescribed highway signs ▪ Installation of specialist street furniture ▪ Investigation and testing into complaints of property damage caused by vehicle vibrations ▪ Targeted additional maintenance carried out on the routes and locations where cluster sites are apparent ▪ Reducing road noise with special materials ▪ Coloured surfacing and High Friction Surfacing will only be used when demonstrably justified by safety assessments ▪ KCC recognises the importance of conservation but given resource challenges we cannot always routinely agree to meet conversation requirements. We therefore liaise with conservation officers on planned improvement works in conservation areas, and consider conservation issues alongside other factors such as affordability, lifecycle cost and maintainability, before deciding what works we will do and materials we will use

Service Standard Risk Assessment:

Defect Type:	Casualty Reduction	**Means of assessment**:	Analysis of collision data

Potential Risks:

- Reduced highway safety, increased number of Casualties [Safety]
- Delayed movement of traffic [Traffic]
- Increased disadvantage to people with limited mobility [Equality]
- Detrimental effect on other highway assets [Damage]

Scenario: **Collisions and injuries/fatalities**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Urban	25	16	6	15	Crash cluster site identified, investigated and appropriate action taken. Collaborative working with the Strategic Road Safety Board and education partners including Kent Fire & Rescue.	20	12	4	9
Rural	25	9	6	12		20	6	4	9

Defect Type:	Congestion	**Means of assessment**:	Traffic surveys and modelling

Potential Risks:

- Reduced highway safety [Safety]
- Delayed movement of traffic [Traffic]
- Negative impact on regeneration and economic growth [Economy]
- Increased disadvantage to particular groups, such as poor air quality [Equality]

Scenario: **Highway infrastructure operating below required capacity**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Economy	Equality		Safety	Traffic	Economy	Equality
Major Strategic Roads	12	15	15	16	Site identified, investigated and appropriate action taken	9	9	12	12
Other Strategic Roads	12	15	15	16		9	9	12	12
Locally Important Roads	15	15	12	16		9	9	9	12
Minor Roads	12	12	12	16		9	9	9	12

Defect Type:	Mobility Dropped kerbs	**Means of assessment**:	Visual inspection and assessment of local links

Potential Risks:

- Reduced highway safety [Safety]
- Delayed movement of traffic [Traffic]
- Increased disadvantage to people with limited mobility [Equality]
- Detrimental effect on other highway assets [Damage]

Scenario: **Provision of dropped kerbs to allow easier movement for mobility impaired highway users**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Major Strategic Roads	9	9	16	9	Site investigated, and appropriate action taken and works installed.	6	6	9	6
Other Strategic Roads	9	9	16	9		6	6	9	6
Locally Important Roads	12	9	20	9		6	6	12	6
Minor Roads	12	9	20	9		6	6	12	6

Defect Type:	Specific maintenance for known cluster sites	**Means of assessment**:	Not assessed

Potential Risks:

- Reduced highway safety and increased number of KSIs [Safety]
- Delayed movement of traffic [Traffic]
- Increased disadvantage to people with limited mobility [Equality]
- Detrimental effect on other highway assets [Damage]

Scenario: **No higher maintenance regime on cluster sites and highest risk routes (in terms of KSIs)**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
Entire road network	25	20	12	25	There is not a programme of specific additional maintenance on known cluster sites which have been subject to remedial measures. These sites are included within the routine inspections and actioned within present investigatory levels.	25	20	12	25

Defect Type:	Major Highway Infrastructure Projects	**Means of assessment**:	Not assessed

Potential Risks:

- Reduced highway safety [Safety]
- Delayed movement of traffic [Traffic]
- Negative impact on regeneration and economic growth [Economy]
- High profile schemes with significant impact to existing network [Reputational]

Scenario: **Major Capital Projects**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Economy	Reputation		Safety	Traffic	Economy	Reputation
Entire road network	20	25	20	25	Major capital infrastructure projects bid for and receive government funding to deliver schemes that look to tackle existing congestion, improve journey time reliability and safety.	3	6	4	4

Service Definition Sheet

Asset Group/Service: **Winter Service**

Service Scope

Service Provided:	Service Not Provided:
▪ Delivers a winter service on Kent County Council maintained highways ▪ Carries out precautionary salting on defined primary routes - Class A and B roads; other roads included in the top three tiers of our current maintenance hierarchy – Major Strategic, Other Strategic and Locally Important ▪ Snow clearance on roads will be carried out on a priority basis on primary routes and other roads as specified in the winter service policy ▪ Maintenance of salt bins that are provided to give motorists and pedestrians the means of salting small areas of road or footway where ice is causing difficulty on highways not covered by primary precautionary salting routes ▪ The Winter Duty Officer will be responsible for issuing forecast updates and any revised salting instructions when necessary. The Kent Road Weather Forecast will be sent to KCC Highway Operations, contractors, neighbouring highway authorities, and other relevant agencies ▪ Agreements are in place whereby snowploughs are provided and maintained by Kent County Council and assigned to 114 local farmers and plant operators for snow clearance operations, generally on the more rural parts of the highway. ▪ Spot salting may be carried out on roads and footways beyond the scheduled precautionary salting routes ▪ District council resources are used during snow emergencies to clear snow and ice in town centres under agreements made with the County Council	▪ Motorways and trunk roads are managed and treated by Highways England ▪ Roads not in the top three tiers of the maintenance hierarchy are not precautionary salted unless identified in local winter plan/s or policy ▪ Footways and cycle tracks are not precautionary salted ▪ Snow clearance is not carried out on minor roads unless on agreed predetermined routes with farmers not included in the top three tiers of the maintenance hierarchy ▪ Private roads, car parks etc. not covered by the KCC winter service ▪ Increase in salt bins on the network in line with the policy

Service Standard Risk Assessment:

Defect Type:	Hoar frost, ice, and snow on road highway network during winter months October to April	**Means of assessment**:	Road surface temperature forecasts provided by road weather stations and road weather forecast

Potential Risks:

- Reduced highway safety due to hoar frost, snow, or ice [Safety]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental affect effect on/risk to highway asset condition due to freeze/thaw impact leading to increase in potholes [Damage]
- Inability of traffic to move freely along roads [Traffic]
- Reduced movement of pedestrians and cyclists in ice or snow conditions [Safety]

Scenario: **Hoar frost widespread across the network leading to reduced grip**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	16	16	8	8	Precautionary salting	4	4	6	4
Main Roads	16	16	8	8		4	4	6	4
Urban Minor Roads	16	16	8	8	Precautionary salting on selected roads	4	4	6	4
Rural Minor Roads	12	8	8	8	No intervention	12	8	8	8
Footways & cycle tracks			8	6				8	6

Scenario: **Snow on highway leading to loss of grip, limiting movement, increasing hazards to drivers**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	25	12	20	Snow ploughing, salting, patrolling, district council town centre snow clearance	9	9	4	15
Main Roads	25	25	12	20		9	9	4	15
Urban Minor Roads	25	25	12	20		9	4	6	15
Rural Minor Roads	25	25	12	20	Farmers snow ploughing, local district plan hand clearance priorities, parish salt bags	12	12	6	15
Footways & Cycle tracks	16	16	12	15	District and parish and local action on footways and cycle tracks	12	9	6	6

Scenario: **Ice on highway reducing grip and presenting a hazard to highway users**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	20	12	12	Precautionary and post salting	9	9	4	12
Main Roads	20	16	12	9	Precautionary and post salting	9	9	4	12
Urban Minor Roads	16	12	16	9	Precautionary and post salting on selected roads	9	4	6	12
Rural Minor Roads	16	9	12	12	Local district plan hand clearance priorities, parish salt bags on selected roads	12	12	6	15
Footways & Cycle tracks	25	16	16	16	Parish and local action on footways and cycle tracks	9		6	15

Service Definition Sheet

Asset Group/Service: **Highway Routine and Reactive Maintenance Management**

Service Scope

Service Provided:	Service Not Provided:
▪ Emergency response where there is deemed to be an immediate or imminent risk to highway safety ▪ Investigation of road and footway defects where there is a high risk to highway safety ▪ Ad hoc investigation of road and footway defects reported by members of the public ▪ Assessments of immediate area around a defect to identify other potential defects ▪ Permanent repairs to be carried out on all temporary repairs ▪ Driven, walked and cycled inspections of the highway ▪ Removal of dead animals 'bigger than a badger' from the highway	▪ Maintenance of any defects on private land or not publicly maintainable highway ▪ Automatic replacement of specialist materials. ▪ Routine verge maintenance due to vehicular damage ▪ Routine programmed haunching of roads. ▪ Removal of small dead animals from the highway ▪ Repairs for aesthetic reasons ▪ KCC recognises the importance of conservation but given resource challenges we cannot always routinely agree to meet conversation requirements. Our priority will be to make the highway safe. On larger reactive maintenance works, we may liaise with conservation officers, and consider conservation issues alongside other factors such as affordability, lifecycle cost and maintainability, before deciding what works we will do and materials we will use

Service Standard Risk Assessment:			
Defect Type:	See table	**Means of assessment**:	Visual inspection

Item	**Types of defect**
Road[1] (including laybys)	Potholes Edge deterioration of the running surface Surface erosion Heave/subsidence in the running surface Gap/cracks Rutting Displaced, worn or broken ironwork Sunken ironwork
Footway[1]	Rocking slab or abrupt difference in levels between slabs Pothole Open joints Tree root damage Surface erosion Raised/sunken/broken manhole covers Missing/dislodged/broken cross rainwater channel Defective coal plate/basement light etc. Consideration given for use of wheelchair users
Kerbing	Displaced/misaligned kerbs or where there is substantial vehicular damage Visibly loose/rocking Missing - part or complete
Cycle track	As road and footway but consider the 'vulnerable user issue'

Potential Risks:

- Reduced highway safety due to defect in highway [Safety]
- Delayed movement of traffic due to defect/ impassable roads [Traffic]
- Increased disadvantage to people with limited mobility therefore discouraging participation [Equality]
- Detrimental effect on/risk to highway asset condition [Damage]

Priority Rating	Response Times
A defect which presents an immediate high risk and potential for harm to pedestrian / road user	2 hour response P0/P1
A defect which is not an immediate high risk but likely to cause significant harm to pedestrian / road user or susceptible to short term deterioration	By end of next working day P2
A defect which is deemed not to present an immediate or imminent hazard or risk of short-term deterioration. Such defects have safety implications although of a lesser significance than P1 & P2	7 day response P3
A defect of a minor nature that might deteriorate before the next inspection but is not considered an immediate hazard. Includes non-urgent defects initiated by a CSM	28 days P4
A non-safety critical condition	Over 28 days, variable up to one year P5
For works with a start and end date.	Replacing P5S for schemes P6
An urgent closure but where we have agreed a date and want to monitor the date	P7
Risk assessed – No action required	An insignificant defect of little or no consequence that warrants no action, but will need to be recorded

Scenario: **Defect which presents an immediate high risk and potential for harm to pedestrian/ road user (P0 & P1)**

	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	25	25	25	25	2 hour response, repair or make safe	9	9	12	9
Main Roads	25	25	25	20		9	9	12	9
Urban Minor Roads	25	20	20	16		9	6	9	6
Rural Minor Roads	25	16	16	16		9	4	6	4
Urban Footway	25	16	25	16		6	6	6	6
Rural Footway	25	16	15	12		6	4	4	4
Cycle track	25	16	12	12		6	4	6	4

Scenario: **Defect which is not an immediate/high risk but likely to cause significant harm to pedestrian/ road user or susceptible to short term deterioration (P2)**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	20	25	20	20	Respond by end of next working day, repair or make safe. *In some instances, permanent solution will be made within 28 days or within timescales set out for Programmed Works.*	9	9	12	9
Main Roads	20	25	20	20		9	9	12	9
Urban Minor Roads	20	20	20	16		9	6	9	6
Rural Minor Roads	20	16	16	12		9	4	6	4
Urban Footway	20	16	20	16		6	6	6	6
Rural Footway	15	12	12	12		6	4	4	4
Cycle track	16	12	12	12		6	4	6	4

Scenario: **Defect which is deemed not to present an immediate or imminent hazard or risk of short-term deterioration (P3)**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	16	16	16	16	7 - day response, the timescale for repair will be determined by the type of road and the volume of traffic	9	6	6	4
Main Roads	16	16	16	16		9	6	6	4
Urban Minor Roads	12	12	12	9		6	6	6	4
Rural Minor Roads	12	9	9	9		6	4	6	4
Urban Footway	12	9	12	9		9	6	6	6
Rural Footway	9	4	6	6		4	4	4	4
Cycle track	9	4	6	6		4	4	4	4

Scenario: **Defect of a minor nature that might deteriorate before next inspection but is not considered an immediate hazard (P4)**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	8	9	8	2	28-day response, repairs to be actioned prior to the next inspection or those that can be joined together with others in the area as part of programmed works.	4	6	4	2
Main Roads	8	9	8	2		4	6	4	2
Urban Minor Roads	8	4	8	2		4	4	4	2
Rural Minor Roads	4	4	6	2		4	4	6	2
Urban Footway	8	4	8	2		4	2	4	2
Rural Footway	4	2	6	2		2	2	4	2
Cycle track	8	2	2	2		2	2	2	2

Scenario: **P5 /P7 – Non-safety critical condition**									
	Initial Risk				Mitigating Actions	Residual Risk			
	Safety	Traffic	Equality	Damage		Safety	Traffic	Equality	Damage
High Speed Roads	6	6	2	2	Over 28 days – variable up to one year. Programmed works only	4	4	2	2
Main Roads	6	4	2	2		4	4	2	2
Urban Minor Roads	6	4	2	2		4	4	2	2
Rural Minor Roads	4	4	2	2		2	4	2	2
Urban Footway	6	2	2	2		2	2	2	2
Rural Footway	2	2	2	2		2	2	2	2
Cycle track	4	2	2	2		2	2	2	2

[1] Currently, our inspection regime does not specifically cater for the use of eScooters, but this may need to be revised later.

Appendix C

Forward Works Programme

2021/22 to 2025/26

Introduction

This document sets out our five-year Forward Works Programme for the years 2021/22 to 2025/26. It reflects the need to move away from annual programmes and to consider asset management activity a multi-year one.

It is in two parts: the first concerns the next two years (2021/22 - 2022/23), and most of the sites included have already been verified by our engineers. The second part relates to years three to five of our five-year programme (2023/24 - 2025/26), and is largely based on data from our asset management systems, so may be subject to more changes as the schemes are verified. Any schemes involving the potential use of non-standard materials, such as those in conservation areas, or requiring detailed design will remain in the second part until those elements have been resolved and agreed, so that there is cost certainty prior to any commitment to deliver on the ground.

This programme is subject to regular review and may change for a number of reasons including budget allocation, contract rate changes, conflicting works and to reflect our changing priorities. The programme and extent of individual sites within the programme may also be revised following engineering assessment during the design phase, and additional sites may be added or others advanced if their condition deteriorates rapidly so that we need to react in order to keep the highway in a safe and serviceable condition.

Notes on our forward works programme for each asset group are included below.

Roads

- Surface preservation involves repairing and treating roads to improve their quality and extend their useful life before they need renewing or reconstructing. We may apply one or more coats of a cold-laid surface treatment material (micro surfacing) or of bitumen and chippings (surface dressing), or we may recycle and re-lay the existing surface material before applying a surface treatment (retread).

- Surface renewal describes the range of responses we may use when the surface or sub-surface layers of a road have deteriorated to the point that they need to be replaced. On asphalt roads where only the top layers are affected, we remove the existing surface by machine, a process known as milling. We then use a mechanical sweeper to ensure that the prepared surface is free from dust and debris. Finally, we lay the new surfacing material in either one or two layers using a machine called a paver, and compact the new surface with a roller. Where lower levels of a road have also deteriorated, we may fully or partially reconstruct the road. On concrete roads we may carry out localised

concrete repairs or replace full sections, and only overlay them with asphalt when this is necessary for engineering reasons.

- Retexturing is carried out where surveys indicate that the texture of the road is starting to deteriorate, and involves treating the road surface to restore its texture and grip.

Footways and Cycle Tracks

- Surface preservation is used where small defects are starting to show, and we wish to treat them now to seal the surface, preventing further deterioration and restoring the condition and appearance of the footway. It involves preparing the footway surface and applying by hand or two coats of a cold-laid surface treatment material, a process known as slurry sealing.

- Reconstruction involves removing and replacing at least the walking surface and sometimes deeper layers of the footway, and may include renewing kerbs and/or edgings. In some locations this may mean we are renewing damaged paving slabs or replacing slabs with an asphalt surface.

Drainage

- In addition to the works included in the programme, we will be continuing to develop our programme of planned works and carrying out reactive works in response to enquiries and our ongoing programme of inspections.

Structures

- In addition to the works included in the programme, we will be continuing to develop our programme of planned works and carrying out reactive works in response to enquiries and our ongoing programme of inspections.

Crash Barriers

- In addition to the works included in the programme, accident damage repairs are prioritised and carried out as either scheduled repair programmes or as separate urgent works.

Street Lighting

- Generally, the replacement of street lighting columns is based on the results of structural testing which is carried out each year. Due to the high numbers that are likely to be replaced across many locations, it is not possible to provide a detailed schedule of works. Structural testing is a cyclical programme which is undertaken each year.

Intelligent Traffic Systems (ITS)

- The need for planned work on traffic signals is based on an assessment of the equipment's age and the number of faults which have been reported during the past two years.
- The programme of planned work on traffic signals can be affected by the availability of spare parts, particularly for older equipment which is no longer manufactured.
- Work on traffic signals near development sites has not been included in the assessment as they may need alteration as part of the adjacent works.

Soft Landscape

- Grass cutting: urban areas are cut with a ride-on mower/strimmer. The cuttings are not cleared.
- Swathe cutting: 0.9m wide strips next to rural roads or footways are cut with a tractor and flail. The cuttings are not cleared.
- Visibility cutting: the full width of grassed areas at junctions and bends is cut with a tractor and flail to maintain visibility.
- Conservation Verges: Sites of Special Scientific Interest (SSSI) , Roadside Nature Reserves(RNR) and Bee Roads are cut at the end of the year with a tractor and flail.
- Shrub bed maintenance: the timing of this work depends on location. Beds are weeded and pruned, and self-seeded trees and litter removed.
- Urban hedge cutting: ornamental hedges are cut with a hedge cutter, and weeds, self-seeded trees and litter removed.
- Rural hedge cutting: the side of the hedge which faces towards the highway is cut with a tractor and flail cutter.
- Off-road cycle tracks: vegetation within 0.5m of the route is cut back with hand tools. The cuttings are not cleared.
- Weed spraying: roads, footways and cycle tracks are sprayed with herbicide that kills all green vegetation. Weeds are swept up by the district council.

Forward Works Programme

Years One and Two

2021/22 – 2022/23

ALL DISTRICTS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
	Grassed areas - various locations		Various	All Districts	Soft Landscape	Swathe cutting - see notes	Various	Routine maintenance: once a year
	Grassed areas - various locations		Various	All Districts	Soft Landscape	Visible cutting - see notes	Various	Routine maintenance: once a year
	Rural hedges - various locations		Various	All Districts	Soft Landscape	Rural hedge cutting - see notes	Various	Routine maintenance: once a year
	Shrub beds - various locations		Various	All Districts	Soft Landscape	Shrub bed maintenance - see notes	Various	Routine maintenance: once a year
	Urban grassed areas - various locations		Various	All Districts	Soft Landscape	Grass cutting - see notes	Various	Routine maintenance: six times a year
	Urban hedges - various locations		Various	All Districts	Soft Landscape	Urban hedge cutting - see notes	Various	Routine maintenance: once a year
	Various areas		Various	All Districts	Soft Landscape	Weed spraying - see notes	Various	Routine maintenance: once a year
	Various roads		Various	All Districts	Street Lighting	Street lighting column replacement - see notes	Various locations	Structural testing
	Various roads		Various	All Districts	Street Lighting	De-illumination of illuminated signs - see notes	Various locations	Review of legal requirements
	Various roads		Various	All Districts	Street Lighting	Illuminated sign column replacement - see notes	Various locations	Structural testing
	Various roads		Various	All Districts	Street Lighting	Remedial work to illuminated signs - see notes	Various locations	Electrical testing
	Various roads		Various	All Districts	Street Lighting	Electrical testing of street lights	Various locations	Legal requirement

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300025	Ash Hill	C150	Ruckinge	Ashford	Road	Surface preservation	From Ruckinge sign to former cattle grid (now concreted over)	Condition survey
1300033	Ashford Road	A20	Charing	Ashford	Footway	Reconstruction	From the junction with Wicken Lane to the Cold Store	Identified by inspection
1300032	Ashford Road	A28	Bethersden	Ashford	Road	Surface renewal	Forge Hill to Stephenson Brothers	Road grip survey
1300036	Ashford Road	A28	High Halden	Ashford	Road	Surface retexturing	Junction Cripple Hill	Road grip survey
1300036	Ashford Road	A28	High Halden	Ashford	Road	Surface renewal	Phase 1 Little Robhurst to Church Hill (High Halden) and Phase 2 - Church Hill to 40mph sign (Tenterden)	Condition survey
1300032	Ashford Road	A28	Bethersden	Ashford	Road	Surface preservation	Red pad (near bend) to Hannover Lodge (joint)	Condition survey
1300086	Beaver Road	B2229	Ashford	Ashford	Footway	Surface preservation	From the junction of Park Place to Norman Road	Identified by inspection
1300090	Bedlam Lane	C55	Egerton	Ashford	Road	Surface preservation	From telephone pole two (just past Wanden Lane) to previous micro surfacing joint outside Pond House	Local needs

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300094	Bell Lane	C146	Smarden	Ashford	Road	Surface retexturing	Sharp bend at Forestry Commission gate entrance	Road grip survey
1300100	Biddenden Road	C105	Biddenden	Ashford	Road	Surface renewal	Raja of Kent Indian restaurant to Benenden Road	Local needs
1300115	Billington Gardens	U21443	Kennington	Ashford	Footway	Surface preservation	Entire extents	Identified by inspection
1301737	Birchett Lane	U11295	Woodchurch	Ashford	Road	Surface preservation	Ham Street to end of wooded section	Asset management (protection following patching/recycling work)
1301737	Birchett Lane	U11295	Woodchurch	Ashford	Road	Surface recycling	Ten metres in from Ham Street Road to end of wooded section	Condition survey
1300161	Bramble Lane	C171	Wye	Ashford	Footway	Surface preservation	From property named 'Colcot' to the level crossing	Identified by inspection
1300187	Brookfield Road	B2229	Ashford	Ashford	Road	Concrete road repair	Various sections	Structural failure
1300188	Brunswick Road	U21461	Ashford	Ashford	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
1300188	Brunswick Road	U21461	Ashford	Ashford	Road	Concrete road repair	Various sections	Structural failure
1300194	Bugglesden Road	U12704	Tenterden	Ashford	Road	Surface preservation	From Readers Bridge Road to A262	Asset management (protection following patching/recycling work)
1300216	Canterbury Road	A28	Boughton Aluph	Ashford	Road	Surface preservation	From Whitehill to Bilting Lane	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300218	Canterbury Road	A252	Challock	Ashford	Road	Surface preservation	Green Lane to wooded section	Condition survey
1300218	Canterbury Road	A252	Challock	Ashford	Drainage	Renewal	Challock to Chilham	Crash remedial site
1300222	Canterbury Road	A252	Molash	Ashford	Drainage	Renewal	Challock to Chilham	Crash remedial site
1300245	Chart Road	C620	Great Chart	Ashford	Structures	Bridge refurbishment / strengthening	Bucksford (Bridge (KCC structure no. 13)	Condition survey
1300244	Chart Road	A292	Ashford	Ashford	Traffic Signals	Refurbish existing signal-controlled crossing	Near New Street (13/0186)	Annual review of equipment age, specification and fault rate
1300273	Church Hill	C145	Bethersden	Ashford	Drainage	Renewal	Junction with Chester Avenue	Environment Agency / HAM Unfunded List
1300277	Church Hill (& Woodlands)	C186	Kingsnorth	Ashford	Road	Surface preservation	From Ashford Road to Finn Farm Road	Condition survey
1300298	Church Road	C665	Ashford	Ashford	Road	Surface preservation	From Sevington Lane to Hythe Road A292	Condition survey
1300289	Church Road	C177	Mersham	Ashford	Road	Road reconstruction	Mersham Primary School down to The Farriers Arms	Structural failure
1303587	Church Road	U11291	Warehorne	Ashford	Structures	Culvert inspection / refurbishment	Bridge Farm south culvert (KCC structure no. 2733)	No inspection records
1300249	Cranbrook Road	A28	Tenterden	Ashford	Structures	Culvert refurbishment	Watermill Farm (KCC structure no. 351)	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300344	Crockenhill Road	C86	Egerton	Ashford	Road	Surface preservation	Chapel Lane to Forstal Road	Asset management (protection following patching/recycling work)
1300344	Crockenhill Road	C86	Egerton	Ashford	Road	Surface recycling	From Chapel Lane to Forstal Road	Condition survey
1300349	Crowbridge Road	C263/U2122	Willesborough	Ashford	Road	Surface renewal	Phase 1: Gladstone Road to Crowbridge Link / phase 2: Crowbridge Link to The Boulevard	Condition survey
1300421	Etchden Road (Ninn Lane)	C148	Bethersden	Ashford	Road	Surface preservation	Entire extents	Condition survey
1300432	Faversham Road	C561	Charing	Ashford	Road	Surface preservation	Entire extents	Condition survey
1300432	Faversham Road	C561	Charing	Ashford	Road	Surface preservation	From A252 junction to Rushmere Lane	Condition survey
1300429	Faversham Road	A2042	Ashford	Ashford	Road	Surface preservation	From junction near A28 to Tudor Road	Condition survey
1300444	Flood Street	C177	Mersham	Ashford	Structures	Bridge strengthening / reconstruction	Mersham Forstal (KCC structure no. 131)	Condition survey
1300467	Frogmore Lane	U11416	Bonnington	Ashford	Structures	Culvert refurbishment / renewal	Bonnington No. Two (KCC structure no. 388)	Condition survey
1300468	Frogs Lane	U23607	Rolvenden	Ashford	Road	Surface preservation	Wassells Lane to A28	Local needs
1300469	Front Road	C210	Woodchurch	Ashford	Road	Surface preservation	Junction of B2067 to No. 82	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300469	Front Road	C210	Woodchurch	Ashford	Structures	Bridge strengthening	Stone Bridge (KCC structure no. 196)	Condition survey
1300510	Great Chart Bypass	A28	Great Chart	Ashford	Road	Surface renewal	Brookfield roundabout to Tithe Barn Lane	Condition survey
1300510	Great Chart Bypass	A28	Great Chart	Ashford	Road	Surface renewal	Tithe Barn Lane to new roundabout to Blue Barn	Condition survey
1300540	Hampton Lane	U11372	Brabourne	Ashford	Road	Surface recycling	Between Plumpton to Beddlestone Farm	Condition survey
1300558	Harville Road	C172	Wye	Ashford	Drainage	Renewal	Near Spring Grove School	KCC Flood and Water Management
1300579	Henwood	U14507	Ashford	Ashford	Drainage	Improvement scheme	Pumping station behind fire station	Identified by engineer
1300579	Henwood	U14507	Ashford	Ashford	Road	Concrete road repair	Various sections	Structural failure
1300587	High Street	A262	Biddenden	Ashford	Road	Surface renewal	From A274 Headcorn Road to Glebelands	Road grip survey
1300616	Hornash Lane	C150	Shadoxhurst	Ashford	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
1303413	Hythe Road	A292	Willesborough	Ashford	Road	Surface preservation	From Sprotlands Avenue to school	Condition survey
1300630	Hythe Road	A20	Mersham/ Smeeth	Ashford	Road	Surface renewal	Mersham turn (The Street) to junction The Ridgeway, Smeeth	Local needs

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300631	Hythe Road	A21	Mersham/ Smeeth	Ashford	Road	Surface renewal	Mersham turn (The Street) to junction The Ridgeway, Smeeth	Local needs
1303413	Hythe Road	A292	Ashford	Ashford	Road	Surface renewal	Rail bridge past Norton Knatchbull through to Church Road traffic signals	Local needs
1300630, 1300631	Hythe Road	A20	Sellinge	Ashford	Road	Surface preservation	Various sections from Highways Agency joint just before Bockham Lane to 40mph sign at Sellinge	Condition survey
1300650	Kenardington Road	B2067	Warehorne	Ashford	Structures	Culvert refurbishment	Stone Farm (KCC structure no. 3376B)	Condition survey
1300653	Kennington Road	A2070	Ashford	Ashford	Road	Surface preservation	From the Givaudan entrance to just before bridge	Condition survey
1302065	Kings Prospect	U25132	Willesborough	Ashford	Soft Landscape	Tree planting in soft surface	To be assessed - several locations	Green infrastructure enhancement
1300665	Kingsnorth Road	C142	Ashford	Ashford	Road	Surface renewal	Knock Road to Wotton Road roundabout turn	Condition survey
1300675	Knoll Lane	C625	Ashford	Ashford	Road	Surface renewal	Stanhope roundabout to Cuckoo Lane	Condition survey
1300679	Lakemead	U21734	Singleton	Ashford	Soft Landscape	Tree planting in soft and hard surfaces	Thirty to forty locations	Green infrastructure enhancement

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300732	Lower Road	C619	Woodchurch	Ashford	Road	Surface preservation	From Front Road to crossroads	Condition survey
1300757	Mace Lane	A292	Ashford	Ashford	Road	Surface renewal	Between Wellesley Road and Henwood roundabout	Condition survey
1303445	Maidstone Road	A252	Chilham	Ashford	Drainage	Renewal	Challock to Chilham	Crash remedial site
1300761	Maidstone Road	A20	Charing	Ashford	Road	Surface retexturing	Circulatory of roundabout junction with A252	Road grip survey
1300761	Maidstone Road	A20	Charing	Ashford	Road	Surface preservation	'From high friction surface joint on Charing Roundabout to start of dual carriageway	Condition survey
1301749	Maidstone Road	A20	Ashford	Ashford	Structures	Bridge refurbishment	Maidstone Road (KCC structure no. 869)	Condition survey
1300760	Maidstone Road	A292	Ashford	Ashford	Traffic Signals	Refurbish existing signal-controlled crossing	Near New Street (13/0186)	Annual review of equipment age, specification and fault rate
1300833	Mounts Lane	U11300	Rolvenden	Ashford	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
1300833	Mounts Lane	U11300	Rolvenden	Ashford	Road	Surface recycling	From 30 metres in from Tenterden Road to Lower Windsor Cottage	Local needs

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300852	New Road Hill	C609	Bonnington	Ashford	Road	Surface preservation	Boat Lane to B2067	Condition survey
1300853	New Street	A292	Ashford	Ashford	Road	Surface retexturing	Circulatory of roundabout junction Magazine Road	Road grip survey
1303364	Newchurch Road	U13862	Bilsington	Ashford	Structures	Culvert refurbishment	Bilsington Station Culvert (KCC structure no. 386)	Condition survey
1300173	Nortons Lane	U12637	Tenterden	Ashford	Road	Surface preservation	From A262 to Readers Bridge Road	Asset management (protection following patching/recycling work)
1300894	Old Surrenden Manor	C143	Bethersden	Ashford	Road	Surface preservation	BT pole DP131 near Barton Farm Industrial Estate to Mill Road cross roads	Condition survey
1300894	Old Surrenden Manor	C143	Bethersden	Ashford	Road	Surface preservation	JCB Agriculture to BT pole DP131 near Barton Farm Industrial Estate	Condition survey
1300894	Old Surrenden Manor Road	C143	Bethersden	Ashford	Road	Surface renewal	Bayley Wood to Old Surrenden Manor	Condition survey
1300903	Osborne Road	C396	Ashford	Ashford	Road	Surface preservation	Junction Hunter Road to wide circle layout before start of concrete section	Condition survey
1300907	Oxenturn Road	C184	Wye	Ashford	Road	Surface preservation	Junction with Chequers Road to new surfacing joint (Naccolt)	Asset management (protection following patching/recycling work)

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300941	Pixs Lane	U11310	Rolvenden	Ashford	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
1300941	Pixs Lane	U11310	Rolvenden	Ashford	Road	Surface recycling	Sparks Wood House to junction with Mounts Lane	Condition survey
1300943	Plain Road	C614	Smeeth	Ashford	Road	Surface preservation	From junction Granary Court Road to junction with A20	Condition survey
1300945	Pluckley Road	C143	Bethersden	Ashford	Road	Surface renewal	Batemans Corner to Norton Lane	Condition survey
1300947	Pluckley Road	C143	Hothfield	Ashford	Road	Surface preservation	Dowle Street to Fridd Lane	Condition survey
1300946	Pluckley Road	C493	Pluckley	Ashford	Road	Surface renewal	Pluckley Station/Railway Bridge to Stanford Bridge Farm	Condition survey
1301665	Pluckley Road	C143	Bethersden	Ashford	Road	Surface preservation	Mill Lane to Tuesnoad Lane then to Bridge	Condition survey
1301416	Pook Lane	U11254	Biddenden	Ashford	Road	Surface preservation	From Smarden Road to Wagstaff Lane	Asset management (protection following patching/recycling work)
1300958	Pope Street	U11345	Chilham	Ashford	Road	Surface recycling	Entire extents	Local needs
1300980	Quarrington Lane	U11389	Mersham	Ashford	Structures	Culvert maintenance / refurbishment	Quarrington Lane no. two culvert (KCC structure no. 392)	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1301011	Rolvenden Road	A28	Tenterden	Ashford	Road	Surface preservation	From railway crossing to Cranbrook Road (including approach to traffic signals)	Condition survey
1301012	Roman Road	C177	Aldington	Ashford	Road	Surface preservation	Calleywell Lane to Goldwell Lane	Condition survey
1301016	Romney Marsh Road	A2042	Ashford	Ashford	Road	Surface preservation	From high friction surface at pedestrian crossing to roundabout at junction with A2042	Condition survey
1301016	Romney Marsh Road	A2042	Ashford	Ashford	Road	Surface renewal	Over culvert	Structural failure
1301025	Rothbrook Drive	U21653	Kennington	Ashford	Footway	Reconstruction	From the junction with Bockhanger Lane to outside No.16 (south side only)	Identified by inspection
1300561	Rye Road	A28	Newenden	Ashford	Structures	Bridge refurbishment	Newenden Bridge (KCC Structure No. 50)	Condition survey
1301053	School Road	C264	Charing	Ashford	Road	Surface preservation	A20 to joint outside Vision Hair Salon	Condition survey
1301058	Shadoxhurst Road	C210	Woodchurch	Ashford	Road	Surface renewal	Between Coldblow Lane and Hengherst Farm	Condition survey
1301084	Small Hythe Road	B2082	Tenterden	Ashford	Road	Surface renewal	B2082 just before Dumbourne Lane	Road grip survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1301086	Smarden Road	C493	Biddenden	Ashford	Road	Surface preservation	Pook Lane to Vain Court Farm	Condition survey
1301105	Spelders Hill	C176	Brook	Ashford	Road	Surface renewal	Nats Lane to Brook Primary School	Condition survey
1301135	Station Road	C143	Pluckley	Ashford	Road	Surface preservation	From Pluckley Village Hall to Gate Lodge	Condition survey
1301185	Tenterden Road	A262	Biddenden	Ashford	Road	Surface renewal	From A274 Headcorn Road to Glebelands	Road grip survey
1301185	Tenterden Road	A262	Tenterden	Ashford	Road	Surface renewal	Raja of Kent Indian restaurant to Benenden Road	Local needs
1301230	The Street	A252	Molash	Ashford	Drainage	Renewal	Challock to Chilham	Crash remedial site
1301219	The Street	C647	Kennington	Ashford	Road	Surface renewal	A28 Canterbury Road to A251 Faversham Road	Local needs
1301228	The Street (Inc Bethersden Road)	C87	Hothfield	Ashford	Road	Surface preservation	Section one: from speed limit gateway near Church Lane to gate entrance by green fence Section two: from M J Allen entrance to junction of Bears Lane	Condition survey
1301273	Ulley Road	C647	Kennington	Ashford	Road	Surface renewal	A28 Canterbury Road to A251 Faversham Road	Local needs
1301284	Victoria Crescent	U14550	Ashford	Ashford	Drainage	Renewal	Entire extents	Customer enquiries

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300653 1301337	Willesborough Road	A2070	Ashford	Ashford	Road	Surface renewal	Quest through to rail bridge past Julie Rose stadium	Local needs
1300076	Wissenden Green	C152	Bethersden	Ashford	Road	Surface preservation	Wissenden Lane to Tuesnoad Lane	Asset management (protection following patching/recycling work)
1300076	Wissenden Green	C152	Bethersden	Ashford	Road	Surface recycling	Wissenden Lane to Tuesnoad Lane	Condition survey
1301347	Wissenden Lane	C152	Bethersden	Ashford	Drainage	Review of any outstanding issues	Entire extents	Customer enquiries
1301347	Wissenden Lane	C152	Bethersden	Ashford	Road	Surface preservation	Norton Lane (through wooded section)	Condition survey
1301358	Woodchurch Road	B2067	Tenterden	Ashford	Road	Surface preservation	From Knockwood Road to just past Oast House	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600052	Ashford Road	A28	Chartham	Canterbury	Road	Surface preservation	From high friction surface at Hatch Lane to the start of the concrete layby heading towards Ashford	Condition survey
5601735	Barnfield	U23545	Herne Bay	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600075	Barton Road	U18969	Canterbury	Canterbury	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
5600101	Beltinge Road	U13714	Herne Bay	Canterbury	Traffic Signals	Refurbish existing signal-controlled junction	Canterbury Road/ Belting Road/ High Street junction (06/0169)	Annual review of equipment age, specification and fault rate (06/0169)
5600110	Bifrons Hill	C203	Bridge	Canterbury	Road	Surface renewal	From A2 off slip to Town Hill	Local needs
5600134	Bonny Bush Hill	C585	Bishopsbourne	Canterbury	Road	Surface preservation	From Kingston sign to twenty metres past bus shelter	Condition survey
5600147	Bournes Close	U12974	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600165	Bredlands Lane	U11534	Hoath	Canterbury	Road	Surface preservation	Hoath Lane to Brengate Close	Asset management (protection following patching/recycling work)
5600165	Bredlands Lane	U11534	Hoath	Canterbury	Road	Surface recycling	Hoath Lane to national speed limit sign just before transport depot	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600172	Bridge Hill	C453	Bridge	Canterbury	Road	Surface preservation	From Higham Close to just past Bull Park Drive	Condition survey
5600531	Bullockstone Road	U13613	Herne Bay	Canterbury	Structures	Bridge refurbishment / bearing replacement	Bullockstone Road bridge (KCC structure no. 9013)	Condition survey
5600194	Bullockstone Road (including Greenhill Road)	U13632	Herne Bay	Canterbury	Road	Surface preservation	From the A299 overbridge to Poplar Drive	Condition survey
5602515	Canterbury Road	A291	Herne	Canterbury	Road	Surface preservation	From high friction surface at the roundabout to Mill Road (running lanes only)	Condition survey
5600219	Canterbury Road	B2205	Canterbury	Canterbury	Road	Surface renewal	From Joy Lane to Belmont Road	Road grip survey
5602491	Canterbury Road	A291	Sturry	Canterbury	Road	Surface preservation	From just past Hicks Forstal to Woodlands Farm entrance	Condition survey
5600216	Canterbury Road	B2205	Herne Bay	Canterbury	Traffic Signals	Refurbish existing signal-controlled junction	Canterbury Road/ Belting Road/ High Street junction (06/0169)	Annual review of equipment age, specification and fault rate
5600248	Chartham Downs Road	C196	Chartham	Canterbury	Road	Surface preservation	Five sections between Fauscet Hill and Kenfield Road	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600248	Chartham Downs Road	C196	Chartham	Canterbury	Road	Surface preservation	From 30 mph red surfacing (adjacent The Crescent) to Kenfield Road	Condition survey
5600268	Church Lane	C198	Chislet	Canterbury	Road	Surface preservation	Red high friction surface pad just past Chitty Lane to North Stream	Condition survey
5600314	Cobham Close	U19017	Canterbury	Canterbury	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
5600333	Copt Close	U11547	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600362	Crown Gardens	U19031	Canterbury	Canterbury	Footway	Reconstruction	Entire extents	Identified by inspection
5605689	Cycle track running between South Street and Chapel Lane	.	Chestfield	Canterbury	Cycle Track	Cycle track works	Approach to Thanet Way Bridge	Identified by inspection
5600384	Denne Close	U12974	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600389	Derringstone Downs	C201	Barham	Canterbury	Road	Surface preservation	Rabbit Hole to Derringstone Hill	Condition survey
5602472	Duck Pit Road	U11621	Petham	Canterbury	Structures	Culvert replacement	Duck Pit Road (KCC structure no. 2609)	Condition survey
5600462	Faversham Road	C118	Whitstable	Canterbury	Road	Surface renewal	Coast Guards Caravan Park to Alberta Holiday Park	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600473	Firs Road	C201	Womenswold	Canterbury	Road	Surface preservation	From Wick Lane to houses	Condition survey
5600487	Fordwich Road	C199	Sturry	Canterbury	Road	Surface renewal	From A28 to bridge structure	Condition survey
5600494	Forty Acres Road	C192	Canterbury	Canterbury	Road	Surface preservation	Salisbury Road to St Stephens Road	Condition survey
5600497	Fox's Cross Road	U1994	Yorkletts	Canterbury	Road	Surface preservation	Pye Alley Lane to A290	Asset management (protection following patching/recycling work)
5600497	Fox's Cross Road	U1994	Yorkletts	Canterbury	Road	Surface recycling	Pye Alley Lane to A290	Condition survey
5600515	Gilchrist Avenue	U13676	Herne Bay	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600519	Glebe Way	U13590	Whitstable	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600531	Golden Hill	U13613	Whitstable	Canterbury	Road	Road reconstruction	Approach to bridge structure from south side	Structural failure
5600531	Golden Hill	U13613	Whitstable	Canterbury	Structures	Bridge refurbishment / bearing replacement	Golden Hill (KCC structure no. 9010)	Condition survey
5600533	Goodwin Road	U13555	Swalecliff	Canterbury	Soft Landscape	Tree planting in soft surface	At least five sites	Green infrastructure enhancement
5600565	Grove Ferry Hill	C636	Chislet	Canterbury	Structures	Bridge strengthening / reconstruction	Grove Ferry (KCC structure no. 439)	Condition survey
5600589	Harbledown Bypass	A2050	Harbledown	Canterbury	Road	Surface preservation	Roman Road to traffic signals	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600597	Hardres Court Road	C194	Lower Hardres	Canterbury	Drainage	Improvement scheme	Junction with School Lane	Customer enquiries
5600597	Hardres Court Road	C194	Lower Hardres	Canterbury	Road	Surface preservation	Faussett Hill to just past Catts Wood Road junction at the national speed limit change.	Condition survey
5600625	Herne Drive	U13676	Herne Bay	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600626	Herne Street	A291	Herne	Canterbury	Road	Surface renewal	From Benstead Close to Park Place including mini roundabout approach on School Lane	Condition survey
5600626	Herne Street	A291	Herne	Canterbury	Road	Surface renewal	From mini roundabout to Park Place	Road grip survey
5600630	High Street	C453	Bridge	Canterbury	Road	Surface preservation	From Coin In Hand to Station Road	Condition survey
5600633	High Street	B2205	Herne Bay	Canterbury	Structures	Cellar infilling beneath footway	Herne Bay Cellars (KCC structure no.8700)	Condition survey
5600633	High Street	B2205	Herne Bay	Canterbury	Traffic Signals	Refurbish existing signal-controlled junction	Canterbury Road/ Belting Road/ High Street junction (06/0169)	Annual review of equipment age, specification and fault rate
5600648	Hillbrow Avenue	U11547	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600677	Hunters Chase	U13663	Herne	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600681	Ince Road	U24294	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600684	Island Road	A28	Chislet	Canterbury	Structures	Culvert refurbishment	Sarre Wall (KCC structure no. 356)	Condition survey
5600686	Island Wall	U13592	Whitstable	Canterbury	Road	Road reconstruction	Entire extents	Structural failure
5600710	King Edward Avenue	U13719	Herne Bay	Canterbury	Footway	Reconstruction	Entire extents	Identified by inspection
5600732	Ladywood Road	U12974	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600768	Littlebourne Road	A257	Canterbury	Canterbury	Road	Surface preservation	From driveway 'Woodside' to Start of high friction surface on right hand bend (past Swanton Lane)	Condition survey
5600770	London Road	C403	Canterbury	Canterbury	Road	Surface renewal	From roundabout to Queens Avenue	Road grip survey
5601897	Love Street Close	U23566	Herne Bay	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600785	Lower Bridge Street	A28	Canterbury	Canterbury	Road	Surface renewal	High friction surface approach to roundabout	Road grip survey
5600786	Lower Chantry Lane	A257	Canterbury	Canterbury	Road	Surface renewal	High friction surface approach to A2050	Road grip survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600797	Mandeville Road	U19142	Canterbury	Canterbury	Soft Landscape	Tree planting in soft surface	At least five sites	Green infrastructure enhancement
5600810	Margate Road	C409	Whitstable	Canterbury	Road	Surface preservation	Broad Hill to Broomfield Road	Condition survey
5600817	Marley Lane	U11630	Kingston	Canterbury	Structures	Strengthen embankment / extend retaining wall	Adjacent to Marley Lane retaining wall outside Marley Farm (KCC structure no. 6956)	Partial Collapse
5600826	Matthews Road	U13676	Herne Bay	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600844	Merton Lane	U23780	Chartham	Canterbury	Road	Surface preservation	Iffin Lane to joint by first driveway at Nackington Road	Condition survey
5600847	Mickleburgh Hill	C634	Canterbury	Canterbury	Road	Surface renewal	Between Canterbury Road and Grange Road	Local needs
5600856	Mill Road	A28	Sturry	Canterbury	Road	Surface renewal	From railway crossing to High Street	Road grip survey
5600892	New Dover Road	A2050	Canterbury	Canterbury	Road	Surface renewal	From roundabout to Barton Road	Condition survey
5601931	Oxford Close	U23569	Whitstable	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600981	Park View	U11547	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600982	Patrixbourne Road	U11606	Patrixbourne	Canterbury	Crash Barriers	Upgrade corrugated safety fencing	Local to A2 overbridge	Condition survey
5600986	Peartree Road	U15625	Herne Bay	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600998	Pier Avenue	U13692	Herne Bay	Canterbury	Footway	Surface preservation	From the junction of Western Avenue to Avenue Road	Identified by inspection
5601012	Pleydell Crescent	U12974	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5601020	Pond Hill	C206	Adisham	Canterbury	Road	Surface renewal	From Adisham Down Road to The Street	Condition survey
5601023	Popes Lane	U11546	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5600497	Pye Alley Lane	U13614	Whitstable	Canterbury	Road	Surface preservation	Fox's Cross Road to start of houses fifty metres before A290	Asset management (protection following patching/recycling work)
5600497	Pye Alley Lane	U13614	Whitstable	Canterbury	Road	Surface recycling	Fox's Cross Road to start of houses fifty metres before A290	Local needs
1300981	Reeves Way	U21644	Whitstable	Canterbury	Structures	Culvert maintenance / refurbishment	Reeves Way culvert (KCC structure no. 1181)	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5601150	Sea View Road	U13715	Herne Bay	Canterbury	Footway	Reconstruction	From junction with Beltinge Road to Beacon Hill (both sides)	Identified by inspection
5601154	Seasalter Lane	C119	Seasalter	Canterbury	Road	Surface renewal	From A299 overbridge for approx. five hundred sixty metres	Condition survey
5601172	Shelley Avenue	U19262	Canterbury	Canterbury	Footway	Reconstruction	Exact extents to be defined at design stage.	Identified by inspection
5602003	St Nicholas Close	U23580	Sturry	Canterbury	Footway	Surface preservation	Entire extents	Identified by inspection
5601270	St Stephen's Hill	C192	Canterbury	Canterbury	Road	Surface preservation	From Beaconsfield Road to Downs Road	Condition survey
5601270	St Stephen's Hill	C192	Canterbury	Canterbury	Road	Surface preservation	From Downs Road to Giles Lane	Condition survey
5601289	Stodmarsh Road	C207	Canterbury	Canterbury	Road	Surface preservation	From A257 to Moat Lane	Condition survey
5601311	Sturry Hill	A291	Sturry	Canterbury	Soft Landscape	Tree planting in soft surface	At least five sites	Green infrastructure enhancement
5601313	Sturry Road	A28	Fordwich	Canterbury	Road	Surface preservation	From 40mph sign at Sturry to high friction surfacing on approach to Vauxhall Road roundabout	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5601344	Sydney Road	U13584	Whitstable	Canterbury	Footway	Reconstruction	Entire extents	Identified by inspection
5602516	Tankerton Road	B2205	Whitstable	Canterbury	Footway	Reconstruction	From the junction with St Annes Road to Castle Road (both sides)	Identified by inspection
5602516	Tankerton Road	B2205	Whitstable	Canterbury	Road	Surface preservation	Northwood Road to Cliff Road	Condition survey
5601360	Thanet Way	A2990	Whitstable	Canterbury	Road	Surface preservation	Borstal Hill to Golden Hill	Condition survey
5601359	Thanet Way	A2990	Herne Bay	Canterbury	Road	Surface preservation	Greenhill Roundabout to Parkland Road	Condition survey
5601360	Thanet Way	A2990	Whitstable	Canterbury	Road	Surface preservation	From high friction surface at Church Lane to high friction surface at roundabout at Estuary View	Condition survey
5602389	Thanet Way	A2990	Whitstable	Canterbury	Road	Surface renewal	High friction surface approaches to crossing near Golden Hill	Road grip survey
5601360	Thanet Way	A2990	Whitstable	Canterbury	Road	Surface preservation	Millstrood Road to Church Street	Condition survey
5602371, 5602389	Thanet Way	A299	Various	Canterbury	Road	Road reconstruction	Various sections	Structural failure
5601381	The Foreland	U19060	Canterbury	Canterbury	Footway	Reconstruction	Entire extents	Identified by inspection

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5602371	Tile Kiln Hill	A290	Blean	Canterbury	Road	Surface renewal	Royal Oak public house to Tile Kiln Hill	Condition survey
5601452	Uplands	U19302	Canterbury	Canterbury	Soft Landscape	Tree planting in soft surface	At least five sites	Green infrastructure enhancement
5601505	Western Esplanade	U13681	Herne Bay	Canterbury	Road	Surface preservation	Bournemouth Drive to just before roundabout	Condition survey
5601532	Wicks Lane	C201	Womenswold	Canterbury	Road	Surface preservation	Dover Road to end of wooded section	Condition survey
5605384	Wingate Hill	U15150	Harbledown	Canterbury	Footway	Surface preservation	From the bus stop to the junction with London Road	Identified by inspection
5605553	Wingham Road	A257	Littlebourne	Canterbury	Road	Surface preservation	Joint by bridge on River Nailbourne to footpath to Equestrian Centre	Condition survey
5601573	Wraik Hill	U13616	Yorkletts	Canterbury	Road	Surface preservation	From joint at first driveway (fifty metres from A290) to telephone pole at start of narrow section	Condition survey
5600386	Denstroude Lane	U11544	Denstroude	Canterbury	Road	Surface preservation	From A290 five hundred metres to unmarked telephone pole	Asset management (protection following patching/recycling work)

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600892	New Dover Road	A2050	Canterbury	Canterbury	Road	Surface renewal	High friction surface approaches to crossing in vicinity of St Augustines Road	Road grip survey
5601453	Upper Bridge Street	A28	Canterbury	Canterbury	Road	Surface renewal	150 metres on approach to roundabout with Old Dover Road	Road grip survey

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500015	Alma Road	U15796	Swanscombe	Dartford	Footway	Reconstruction	Entire extents	Identified by inspection
10500037	Barn End Lane	B258	Wilmington	Dartford	Road	Surface renewal	From High Road to Sevenoaks district boundary	Condition survey
10500045	Bean Road	B255	Greenhithe	Dartford	Footway	Surface preservation	Entire extents	Identified by inspection
10500064	Birchwood Road	C268	Wilmington	Dartford	Road	Surface preservation	Leydenhatch Lane to Bracton Lane	Condition survey
10500730	Bob Dunn Way	A206	Dartford	Dartford	Drainage	Improvement scheme	Between Marsh Street North and Littlebrook Interchange	Customer enquiries
10500845	Bob Dunn Way	A206	Bridge	Dartford	Road	Surface renewal	From Marsh Street roundabout to junction 1A	Road grip survey
10506130	Bob Dunn Way	A206	Dartford	Dartford	Structures	Culvert maintenance / refurbishment	Fresh marsh drain culvert (KCC structure no. 2688)	Condition survey
10506130	Bob Dunn Way	A206	Dartford	Dartford	Structures	Culvert maintenance / refurbishment	Salt drain culvert (KCC structure no. 2689)	Condition survey
10500104	Burnham Road	A2026	Dartford	Dartford	Soft Landscape	Tree planting in soft surface	At least five soft sites	Green infrastructure enhancement
10500104	Burnham Road	A2026	Dartford	Dartford	Road	Surface renewal	Entire extents	Condition survey

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500128	Charles Street	C283	Stone	Dartford	Road	Surface renewal	From Crossways Boulevard to end of cul-de-sac	Condition survey
10500157	Coniston Close	U13284	Heath	Dartford	Footway	Reconstruction	From the junction with Vale Road to 23 Cedar House	Identified by inspection
10500168	Crossways Boulevard	A206	Stone	Dartford	Road	Surface renewal	From St Clements Way to Anchor Boulevard	Structural failure
10500172	Dale Road	C275	Southfleet	Dartford	Road	Surface renewal	Entire extents	Condition survey
10500266	Green Street Green Road (Trolling Down Hill)	B260	Darenth	Dartford	Road	Surface preservation	Gore Road to bridge over motorway	Condition survey
10500294	Heath Lane Upper	C361	Dartford	Dartford	Road	Surface renewal	From Princes Road to Heath Close Road	Condition survey
10500380	Kingsley Avenue	U13208	Dartford	Dartford	Footway	Reconstruction	Entire extents	Identified by inspection
10500408	Leyton Cross Road	C268	Dartford	Dartford	Road	Surface preservation	From Bracton Lane to Oakfield Lane	Condition survey
10500415	London Road	A226	Stone	Dartford	Footway	Reconstruction	Exact extents to be defined at design stage.	Identified by inspection
10500415	London Road	A226	Stone (Dartford)	Dartford	Road	Surface preservation	From Saundersons Way to Winston Close	Condition survey

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500420	Lonsdale Crescent	U12269	Darenth	Dartford	Footway	Reconstruction	Entire extents	Identified by inspection
10500448	Manor Way	U13206	Swanscombe	Dartford	Drainage	Improvement scheme	Outside MJD Group	Customer enquiries
10500472	Milestone Road	U117	Dartford	Dartford	Road	Surface preservation	London Road to end of road	Local needs
10500475	Milton Road	U15855	Swanscombe	Dartford	Road	Surface preservation	Church Road to Sweyne Road	Condition survey
10500476	Milton Street	U15855	Swanscombe	Dartford	Drainage	Improvement scheme	Near the junction with Milton Road	Response to surface water flooding
10506051	Oakfield Lane	C368	Dartford	Dartford	Soft Landscape	Tree planting in hard surface	One to three sites	Green infrastructure enhancement
10500575	Rochester Way	U13237	Dartford	Dartford	Road	Surface preservation	Shepherds Lane to tip	Local needs
10500607	Shepherds Lane	A2018	Dartford	Dartford	Road	Surface preservation	From A2174 Princes Road to Rochester Way	Condition survey
10506137	St Clements Way	B255	Stone	Dartford	Road	Surface renewal	From A226 London Road to Bluewater roundabout	Condition survey
10500654	Stanhope Road	U24992	Swanscombe	Dartford	Drainage	Review of any outstanding issues	Various locations	Customer enquiries
10500671	Stone Place Road (& Church Hill)	C281	Greenhithe	Dartford	Road	Surface preservation	From A226 to railway crossing (disused)	Condition survey
10500678	Summerhouse Drive	U12218	Dartford	Dartford	Soft Landscape	Tree planting in hard surface	One to three sites	Green infrastructure enhancement

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500687	Swanscombe Street	U15890	Swanscombe	Dartford	Road	Surface renewal	Southfleet Road to Manor Road	Local needs
10500104	Thames Road Roundabout	A206	Burnham	Dartford	Road	Surface retexturing	Roundabout circulation area	Road grip survey
10500716	Tredegar Road	U12039	Wilmington	Dartford	Footway	Reconstruction	From the social club to the end of the cul-de-sac and Manor Close	Identified by inspection
10500750	Watling Street	B2500	Stone	Dartford	Footway	Reconstruction	From the A296 roundabout to the junction with Hillhouse Road	Identified by inspection
10500754	Watling Street	A296	Swanscombe	Dartford	Road	Surface preservation	From Bean Lane roundabout to A2 slip	Condition survey
10500777	Whitehill Road	B255	Southfleet	Dartford	Road	Surface preservation	Hook Green Road to B260	Asset management (protection following patching/recycling work)
10500793	Woodward Terrace	U12402	Dartford	Dartford	Footway	Surface preservation	Entire extents	Identified by inspection

DOVER								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
11307591	Ash Road	C480	Sandwich	Dover	Structures	Culvert inspection / refurbishment	Windmill culvert (KCC structure no. 3339)	No inspection records
11300079	Barwick Road	U19489	Dover	Dover	Footway	Reconstruction	From the roundabout to Coombe Road	Identified by inspection
11300092	Beaufoy Road	U13519	Dover	Dover	Road	Road reconstruction	Entire extents	Local needs
11300175	Canterbury Road	A257	Wingham	Dover	Footway	Reconstruction	Footway on northern side at Wingham River	Identified by inspection
11300175	Canterbury Road	A257	Wingham	Dover	Road	Surface retexturing	Outside Waterlock Cottages	Road grip survey
11300205	Channel Lea	U19497	Walmer	Dover	Road	Surface preservation	Entire extents including Spurs	Asset management (protection following patching/recycling work)
11300242	Church Hill	C251	Shepherdswell	Dover	Road	Surface preservation	From Eythorne Road to Mill Lane	Condition survey
11300360	Deal Road	A258	St Margarets at Cliffe	Dover	Road	Road reconstruction	Between Dover Road (speed camera) and kennels at Ringwould	Local needs
11300393	Dover Road	C248	Dover	Dover	Crash Barriers	Upgrade corrugated safety fencing	A2 overbridge	Condition survey
11300395	Dover Road	C465	Sandwich	Dover	Footway	Reconstruction	Section between the junction with St. Barts Road and the level crossing	Identified by inspection

DOVER								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
11300537	Granville Road	C583	St Margarets at Cliffe	Dover	Road	Surface preservation	From Victoria Avenue to Bay Hill	Condition survey
11300614	High Street	U11957	Temple Ewell	Dover	Drainage	Asset condition survey	Culvert near No. 16	Customer enquiries
11300711	Lewisham Road	C656	River	Dover	Road	Surface preservation	Minnis Lane to Crabble Lane	Condition survey
11301782	London Road	C587	River	Dover	Road	Surface renewal	A256 Whitfield Hill to Alkham Valley Road	Condition survey
11301782	London Road	A256	River	Dover	Road	Surface preservation	From Pilgrims Way to London Road roundabout	Condition survey
11300745	Lower Street	C562	Eastry	Dover	Road	Surface renewal	Eastry High Street to Sandwich Road	Condition survey
11300821	Mill Road	U24291	Wingham	Dover	Drainage	Improvement scheme	Junction with Watercress Lane	Customer enquiries
11300843	Mongeham Road	C223	Mongeham	Dover	Road	Surface preservation	Ellens Road to speed terminal	Asset management (protection following patching/recycling work)
11300864	New Dover Road	B2011	Capel-le-Ferne	Dover	Road	Surface preservation	From Battle of Britain Memorial to Helena Road	Condition survey
11301005	Queen Avenue	U13524	Dover	Dover	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
11301012	Ramsgate Road	C465	Sandwich	Dover	Structures	Bridge refurbishment	Sandwich Toll Bridge (KCC structure no. 1693)	Condition survey

DOVER								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
11301065	Sandwich Road (Holt Street)	C195	Aylesham	Dover	Road	Surface preservation	From Vicarage Lane to Aylesham Road	Local needs
11301113	Singleledge Lane	C249	Whitfield	Dover	Road	Surface preservation	Near Temple Farm to Coldred	Condition survey
11301232	The Beach	C581	Walmer	Dover	Road	Surface preservation	From The Strand to Clarence Road	Condition survey
11301261	The Strand	A258	Walmer	Dover	Road	Surface preservation	From The Beach to Gladstone Road	Condition survey
11301268	The Street	U11965	East Langdon	Dover	Drainage	Renewal	At The Street Roundabout and Church Lane	Customer enquiries
11301262	The Street	C220	Ash	Dover	Road	Surface preservation	Chequer Lane to New Street	Local needs
11301306	Upper Road	U23895	St Margarets at Cliffe	Dover	Crash Barriers	Upgrade corrugated safety fencing	Various sections	Condition survey
11301413	Woodnesborough Road	C195	Sandwich	Dover	Road	Surface renewal	St Barts Road to A256	Condition survey
11301413	Woodnesborough Road	C195	Sandwich	Dover	Road	Surface renewal	The Butts to Sandwich Holiday Park	Condition survey
11301427	York Street	A256	Dover	Dover	Traffic Signals	Refurbish existing signal-controlled crossing	Near Folkestone Road (07/0569)	Annual review of equipment age, specification and fault rate

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500005	Aerodrome Road	C215	Hawkinge	Folkestone & Hythe	Road	Surface preservation	From Aerodrome Road to Swann Way	Condition survey
34500014	Aldington Road	C564	Lympne	Folkestone & Hythe	Road	Surface preservation	Otterpool Lane to Roman Road	Asset management (protection following patching/recycling work)
34500017	Alkham Valley	A260	Folkestone	Folkestone & Hythe	Road	Surface renewal	From A260 Canterbury Road to roundabout	Road grip survey
34500037	Ashford Road	A20	Sandling	Folkestone & Hythe	Footway	Surface preservation	From Stanford Depot to Postling	Identified by inspection
34500036	Ashford Road Roundabout	A20	Newington	Folkestone & Hythe	Road	Surface retexturing	Whole roundabout	Road grip survey
34500056	Barrack Hill	C413	Hythe	Folkestone & Hythe	Road	Surface renewal	From A261 London Road to junction with North Road	Condition survey
34503108	Beachborough	C585	Newington	Folkestone & Hythe	Crash Barriers	Upgrade corrugated safety fencing	Various sections	Condition survey
34500087	Beresforstal Hill	C212	Elham	Folkestone & Hythe	Road	Surface preservation	Canterbury Road to Acris Place	Condition survey
34500103	Blue House Lane	U11751	Hythe	Folkestone & Hythe	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
34500130	Brack Lane	U11454	Folkestone	Folkestone & Hythe	Road	Road reconstruction	Entire extents	Structural failure
34503185	Campbell Road	U9785	Hawkinge	Folkestone & Hythe	Soft Landscape	Tree planting in soft surface	Ten to fifteen locations	Green infrastructure enhancement

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500187	Canterbury Road	A260	Hawkinge	Folkestone & Hythe	Drainage	Review of any outstanding issues	Near Milgate Farm	Customer enquiries
34500187	Canterbury Road	C670	Hawkinge	Folkestone & Hythe	Road	Surface preservation	From Coombe Way to Campbell Road	Condition survey
34500186	Canterbury Road Roundabout	A259	Folkestone	Folkestone & Hythe	Road	Surface retexturing	Whole roundabout	Road grip survey
34500198	Castle Avenue	U13159	Hythe	Folkestone & Hythe	Footway	Surface preservation	Entire extents	Identified by inspection
34500220	Cheriton Gardens	A2034	Folkestone	Folkestone & Hythe	Road	Surface renewal	From Middelburg Square to Castle Hill roundabout	Condition survey
34500221	Cheriton High Street	B2064	Cheriton	Folkestone & Hythe	Drainage	Review of any outstanding issues	Between Stanley Road and Somerset Road	Customer enquiries
34500221	Cheriton High Street	B2064	Folkestone	Folkestone & Hythe	Road	Surface renewal	Quested Road to Cheriton interchange	Condition survey
34500224	Cheriton Road	B2064	Folkestone	Folkestone & Hythe	Road	Surface renewal	Castle Hill Avenue to Middleburg Square	Condition survey
34500224	Cheriton Road	A259	Folkestone	Folkestone & Hythe	Road	Surface renewal	From Cheriton Gardens to Middleburg Square	Road grip survey
34500224	Cheriton Road	B2064	Folkestone	Folkestone & Hythe	Road	Surface renewal	Cherry Garden Avenue to Quested Road	Condition survey
34500224	Cheriton Road	A2034	Cheriton	Folkestone & Hythe	Soft Landscape	Tree planting in hard surface	Five to seven locations	Green infrastructure enhancement

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500225	Cherry Garden Avenue	A259	Folkestone	Folkestone & Hythe	Road	Surface renewal	From the start of the high friction surface to the roundabout	Road grip survey
34500226	Cherry Garden Lane	C597	Folkestone	Folkestone & Hythe	Drainage	Review of any outstanding issues	Entire extents	Customer enquiries
34500234	Chittenden Lane	U11445	New Romney	Folkestone & Hythe	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
34500234	Chittenden Lane	U11445	New Romney	Folkestone & Hythe	Road	Surface recycling	Entire extents	Condition survey
34500239	Church Hill	U11737	Hawkinge	Folkestone & Hythe	Drainage	Review of any outstanding issues	Under Alkham Valley Road	Customer enquiries
34500254	Churchill Avenue	A259	Folkestone	Folkestone & Hythe	Road	Surface retexturing	From roundabout eastbound carriageway for 100 metres	Road grip survey
34500254	Churchill Avenue	A259	Folkestone	Folkestone & Hythe	Soft Landscape	Tree planting in soft surface	Thirty to sixty locations	Green infrastructure enhancement
34500305	Crete Hall East	U21847	Folkestone	Folkestone & Hythe	Crash Barriers	Upgrade corrugated safety fencing	Various sections	Condition survey
34500344	Derville Road	U13862	Lydd	Folkestone & Hythe	Structures	Deck reconstruction	Derville Road (KCC structure no. 2581)	Condition survey
34500354	Dover Road	A260	Folkestone	Folkestone & Hythe	Road	Surface renewal	Southern Way roundabout to Hill Road	Condition survey
34500354	Dover Road	A260	Folkestone	Folkestone & Hythe	Soft Landscape	Tree planting in hard surface	Five to seven Locations	Green infrastructure enhancement

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500370	Dymchurch Road	A259	New Romney	Folkestone & Hythe	Road	Surface renewal	From east side of railway bridge to large pond on north side of road	Condition survey
34500369	Dymchurch Road	A259	Hythe	Folkestone & Hythe	Road	Surface renewal	From Stanley Close to Fort Lodge	Road grip survey
34500379	Eastbridge Road	C178	Dymchurch / Burmarsh	Folkestone & Hythe	Road	Surface preservation	From Marshalls Bridge to Sherlocks Bridge	Asset management (protection following patching/recycling work)
34500379	Eastbridge Road	C178	Dymchurch / Burmarsh	Folkestone & Hythe	Road	Surface recycling	From Marshalls Bridge to Sherlocks Bridge	Condition survey
34500413	Fairfield Road	U23891	New Romney	Folkestone & Hythe	Footway	Surface preservation	Entire extents	Identified by inspection
	Folkestone - Pent Stream Catchment		Folkestone	Folkestone & Hythe	Drainage	Multi-agency collaborative working	Low lying areas around the Pent Stream (Floodcell 1818)	Flood Risk to Highway Assessment
	Folkestone Central		Folkestone	Folkestone & Hythe	Drainage	Multi-agency collaborative working	Local to Folkestone Central Railway Station (Floodcell 941)	Flood Risk to Highway Assessment
	Folkestone West - Enbrook Catchment		Folkestone	Folkestone & Hythe	Drainage	Multi-agency collaborative working	Low lying areas around the Enbrook Stream (Floodcell 1674)	Flood Risk to Highway Assessment
34500493	Green Lane	U13134	Hythe	Folkestone & Hythe	Structures	Culvert strengthening	Green Lane (KCC structure no.3413)	Condition survey

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500540	High Street	A259	Dymchurch	Folkestone & Hythe	Road	Surface renewal	At junction to Orgarswick Avenue west towards High Street service road	Road grip survey
34500540	High Street	A259	Dymchurch	Folkestone & Hythe	Road	Surface renewal	Junction of High Knocke to Chapel Road	Condition survey
34500550	Hill Road	A260	Folkestone	Folkestone & Hythe	Road	Surface preservation	Roundabout at Dover Hill to roundabout at Dover Road	Condition survey
34501725	Hill Road	A260	Folkestone	Folkestone & Hythe	Traffic Signals	Refurbish existing signal-controlled crossing	Near Canterbury Road (14/0203)	Annual review of equipment age, specification and fault rate
34500550	Hill Road	U21932	Folkestone	Folkestone & Hythe	Road	Surface renewal	From Dover Road to Tyson Road	Condition survey
34503171	Hook Wall	C191	Brookland	Folkestone & Hythe	Structures	Bridge reconstruction	Woolpack Bridge over White Kemp Sewer (KCC structure no. 667)	Partial Collapse
34500571	Horn Street	C591	Hythe	Folkestone & Hythe	Road	Surface renewal	Junction with A259 to Spring Lane	Condition survey
34500578	Hythe Road	A259	Dymchurch	Folkestone & Hythe	Road	Surface renewal	From Environment Agency pumping station to Redoubt Way	Condition survey
34500585	Ingoldsby Road	U21942	Folkestone	Folkestone & Hythe	Footway	Reconstruction	Entire extents	Identified by inspection

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500609	Kingfisher Avenue	U13127	Hythe	Folkestone & Hythe	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
34500690	Madeira Road	U13727	Littlestone	Folkestone & Hythe	Soft Landscape	Tree planting in soft surface	Five to seven locations	Green infrastructure enhancement
34500716	Martins Way	U13127	Hythe	Folkestone & Hythe	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
34503129	Maxted Street	U8852	Stelling Minnis	Folkestone & Hythe	Road	Surface recycling	Entire extents	Local needs
34500721	Melon Lane	U11433	Ivychurch	Folkestone & Hythe	Road	Surface recycling	Entire extents	Condition survey
34500739	Mill Road	U13151	Hythe	Folkestone & Hythe	Drainage	Review of any outstanding issues	Opposite church and outside 10 to 22	Customer enquiries
34501846	New Dover Road	B2011	Caple-le-Ferne	Folkestone & Hythe	Road	Surface renewal	From Crete Road East to junction with New Dover Road	Road grip survey
34501846	New Dover Road	B2011	Stelling Minnis	Folkestone & Hythe	Road	Surface renewal	Junction with Crete Road to Old Dover Road	Condition survey
34501864	Newchurch Road	C186	St Marys in the Marsh	Folkestone & Hythe	Road	Surface preservation	Griggors Green Road to Mill Lane	Asset management (protection following patching/recycling work)
34500826	Orgarswick Farm Lane	U11451	Hythe	Folkestone & Hythe	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
34500826	Orgarswick Farm Road	U11451	Hythe	Folkestone & Hythe	Road	Surface recycling	Entire extents	Local needs

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500894	Princes Parade	U13145	Hythe	Folkestone & Hythe	Footway	Surface preservation	Entire extents	Identified by inspection
34500993	School Road	C211	Saltwood	Folkestone & Hythe	Road	Surface preservation	Bartholomew Lane to Tanners Hill	Condition survey
34500999	Seabrook Road	A259	Hythe	Folkestone & Hythe	Drainage	Review of any outstanding issues	At the junction with Horn Street	Customer enquiries
34501011	Shepherds Walk	U13131	Hythe	Folkestone & Hythe	Footway	Reconstruction	Southern section from No. 55 to No. 115 Shepherds Walk	Identified by inspection
34501016	Shorncliffe Road	A2034	Folkestone	Folkestone & Hythe	Road	Surface renewal	Castle Hill Avenue to Middleburg Square	Condition survey
34503051	Spitfire Way	A260	Hawkinge	Folkestone & Hythe	Road	Surface preservation	From Swann Way to Areodrome Road	Condition survey
34501858	St Marys Road (Newchurch Road)	C185	St Marys in the Marsh	Folkestone & Hythe	Road	Surface preservation	St Mary's Road (crossroads) to 'S' bend	Asset management (protection following patching/recycling work)
34501079	Stanford Interchange Roundabout	B2068	Stanford	Folkestone & Hythe	Road	Surface renewal	Whole roundabout	Road grip survey
34501099	Stone Street	B2068	Monks Horton	Folkestone & Hythe	Road	Surface retexturing	75 metres either side of Blind House Lane (150 metres length)	Road grip survey
34501099	Stone Street	B2068	Monks Horton	Folkestone & Hythe	Road	Surface renewal	On bend 160 metres north of junction with Horton Downs	Road grip survey

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34501105	Stowting Hill	C181	Stowting	Folkestone & Hythe	Road	Surface preservation	Bradbourne Lane to Stowting Court Road	Condition survey
34501140	Teddars Lees Road	C215	Etchinghill	Folkestone & Hythe	Road	Surface preservation	Paddlesworth Court to Tanbarn Road	Condition survey
34501187	Tilery Lane	U11468	Ivychurch	Folkestone & Hythe	Structures	Culvert refurbishment	Nashes (KCC structure no. 2389)	Condition survey
34501251	Wear Bay Road	C595	Folkestone	Folkestone & Hythe	Road	Surface preservation	Hill Road to Swiss Way and The Pavilion to East Cliff Gardens	Condition survey
34501259	Wenhams Lane	U11465	Old Romney	Folkestone & Hythe	Structures	Bridge strengthening	Yoakes (KCC structure no. 709)	Condition survey
34501273	Wey Street	U11442	New Romney	Folkestone & Hythe	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
34501273	Wey Street	U11442	New Romney	Folkestone & Hythe	Road	Surface recycling	Entire extents	Condition survey
34501273	Wey Street	U11442	Brenzett	Folkestone & Hythe	Structures	Culvert refurbishment	Stockbridge East (KCC structure no. 2296)	Condition survey

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700069	Bracondale Avenue	U16023	Istead Rise	Gravesham	Drainage	Improvement scheme	Entire extents	Surface water management plan and customer enquiries
15700085	Brook Road	U16035	Gravesend	Gravesham	Drainage	Review of any outstanding issues	Northern end	Customer enquiries
15700124	Chalk Road	C2	Higham	Gravesham	Road	Surface renewal	From Chequers Street to Taylors Lane	Condition survey
15700123	Chalk Road	C369	Gravesend	Gravesham	Road	Surface preservation	Lower Higham Road to A226 Rochester Road	Condition survey
15700153	Cirrus Crescent	U16091	Gravesend	Gravesham	Footway	Reconstruction	Entire extents	Identified by inspection
15700739	Croftside	U16140	Vigo	Gravesham	Footway	Surface preservation	Entire extents	Identified by inspection
15700205	Cruden Road	U16134	Gravesend	Gravesham	Footway	Surface preservation	From the junction of Medhurst Gardens to Cervia Way	Identified by inspection
15703000	David Street	U16656	Harvel	Gravesham	Road	Surface preservation	From Harvel Lane to Horns Oak Road	Asset management (protection following patching/recycling work)
15703000	David Street	U16656	Harvel	Gravesham	Road	Surface recycling	From Harvel Lane to Horns Oak Road	Local needs
15700227	Dering Way	U23102	Gravesend	Gravesham	Road	Surface renewal	From Gravesend Road to Dalefield Road	Condition survey

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700240	Downs Road	U16161	Istead Rise	Gravesham	Footway	Reconstruction	From the junction with Chequers Close to Upper Avenue (Phase 1)	Identified by inspection
15700240	Downs Road	U16161	Istead Rise	Gravesham	Footway	Reconstruction	From the junction with Upper Avenue to Flowerhill Way (Phase 2)	Identified by inspection
15700241	Downs Wood	U16163	Vigo	Gravesham	Footway	Surface preservation	Entire extents	Identified by inspection
15700249	East Milton Road	A226	Gravesend	Gravesham	Road	Surface retexturing	Range Road to Denton Court Road	Road grip survey
15700263 15700179	Erskine Road (Commority Road)	U16182	Vigo	Gravesham	Road	Surface preservation	Harvel Road to Harvel Road	Condition survey
15700290	Forge Lane	U12165	Higham	Gravesham	Road	Surface preservation	Acme Wines to A226 Gravesham Road	Condition survey
	Gravesend		Gravesend	Gravesham	Drainage	Multi-agency collaborative working	Windmill Hill and Perry Street Areas (Floodcell 11744)	Flood Risk to Highway Assessment
15700328	Gravesend Road	A226	Shorne	Gravesham	Drainage	Review of any outstanding issues	At the junction with Forge Lane and Green Farm Lane	Customer enquiries
15700328	Gravesend Road	A226	Gravesend	Gravesham	Road	Surface renewal	Shorne Cross Roads to Lion Garage roundabout	Condition survey

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700347	Harman Avenue	U16253	Gravesend	Gravesham	Road	Surface renewal	From Singlewell Road to Wentworth Close	Condition survey
15700364	Henhurst Road	C4	Cobham	Gravesham	Road	Surface preservation	From road over rail bridge (Church Road) to Battle Street	Condition survey
15700373	High Street	B2175	Northfleet	Gravesham	Road	Surface preservation	College Road to Factory Road	Condition survey
15700405	Jeskyns Road	C4	Cobham	Gravesham	Road	Surface preservation	From road over rail bridge (Church Road) to Battle Street	Condition survey
15700977	Kenia Walk	U160	Westcourt	Gravesham	Soft Landscape	Tree planting in soft surface	One to three sites	Green infrastructure enhancement
15700461	Lower Higham Road	C2	Shorne	Gravesham	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
15700461	Lower Higham Road	C2	Gravesend	Gravesham	Road	Surface preservation	Rochester Road roundabout to Chalk Road	Condition survey
15701082	Lower Rochester Road	U17241	Higham	Gravesham	Road	Surface preservation	Two Gates Hill to Cherry Garden Cottages	Condition survey
15700471	Lynton Road South	U16346	Gravesend	Gravesham	Footway	Reconstruction	Entire extents	Identified by inspection
15700480	Manor Road	U12696	Cobham	Gravesham	Footway	Surface preservation	Entire extents	Identified by inspection
15700520	Milton Road	A226	Gravesend	Gravesham	Road	Surface renewal	Harmer Street to Parrock Street	Local needs

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15703035	New House Lane	C365	Gravesend	Gravesham	Road	Surface renewal	Entire extents	Condition survey
15700563	Old Road East	B261	Gravesend	Gravesham	Road	Surface preservation	From Echo Square to Singlewell Road	Condition survey
15700582	Parrock Avenue	U16435	Gravesend	Gravesham	Soft Landscape	Tree planting in soft surface	One to three sites	Green infrastructure enhancement
15700584	Parrock Street	A226	Gravesend	Gravesham	Road	Surface renewal	Parrock Street to Windmill Street	Local needs
15700642	Rochester Road	A226	Gravesend	Gravesham	Road	Surface renewal	Shorne Cross Roads to Lion Garage roundabout	Condition survey
15700642	Rochester Road	A226	Westcourt	Gravesham	Soft Landscape	Tree planting in soft surface	One to three sites	Green infrastructure enhancement
15700672	School Lane	C16	Higham	Gravesham	Drainage	Improvement scheme	Local to junction with St Johns Road	Customer enquiries
15700688	Singlewell Road	C366	Gravesend	Gravesham	Road	Road reconstruction	Cross Lane West to Lingfield Road	Condition survey
15700692	Sole Street	C492	Cobham	Gravesham	Drainage	Review of any outstanding issues	Between Manor Road and Gold Street	Customer enquiries
15700700	Springhead Road	B261	Gravesend	Gravesham	Road	Surface renewal	From Springhead Parkway to Pelican Crossing	Condition survey
15700700	Springhead Road	B262	Northfleet	Gravesham	Road	Surface preservation	Hall Road roundabout to Orchard Road	Condition survey
15700701	St Aidans Way	U16543	Westcourt	Gravesham	Soft Landscape	Tree planting in hard surface	One to three sites	Green infrastructure enhancement

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700707	St Chads Drive	U16550	Westcourt	Gravesham	Soft Landscape	Tree planting in hard surface	One to three sites	Green infrastructure enhancement
15700738	Stonebridge Road	B2175	Northfleet	Gravesham	Road	Surface preservation	Grove Road roundabout to College Road	Condition survey
15700739	Stonecroft	U16580	Vigo	Gravesham	Footway	Surface preservation	Entire extents	Identified by inspection
15700757	Tennyson Walk	U16595	Northfleet	Gravesham	Footway	Reconstruction	Entire extents	Identified by inspection
15700762	Thames Way	A226	Northfleet	Gravesham	Road	Surface renewal	From Overcliffe to Thames Way	Road grip survey
15700762	Thames Way	A226	Gravesend	Gravesham	Road	Surface renewal	From Rosherville Way to Springhead Road including Rosherville Way roundabout	Condition survey
15700799	The Street	C4	Cobham	Gravesham	Road	Surface preservation	From road over rail bridge (Church Road) to Battle Street	Condition survey
15700810	Thong Lane	U16603	Gravesend	Gravesham	Footway	Reconstruction	From the junction with Rochester Road to Leander Drive.	Identified by inspection
15700814	Timber Bank	U16606	Vigo	Gravesham	Drainage	Improvement scheme	Entire extents	Flooding Investigation
15700814	Timber Bank	U16606	Vigo	Gravesham	Footway	Surface preservation	Entire extents (not internal paths)	Identified by inspection

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700814	Timber Bank	U16606	Vigo	Gravesham	Footway	Surface preservation	Small rural footways / walkways behind properties.	Identified by inspection
15700828	Vale Road	C363	Northfleet	Gravesham	Road	Surface preservation	Thames Way to Perry Street	Condition survey
15701029	Vale Road	C363	Northfleet	Gravesham	Structures	Bridge reconstruction	Vale Road footbridge (KCC structure so. 3053)	Condition survey
15700829	Valley Drive	U16616	Gravesend	Gravesham	Footway	Reconstruction	From the Jesus Victory Centre to St Benedicts Avenue	Identified by inspection
15700836	Vicarage Lane	U16623	Gravesend	Gravesham	Road	Surface preservation	Lower Higham Road to Priests Walk (both sections)	Condition survey
15700841	Villa Road	C7	Higham	Gravesham	Road	Surface preservation	A226 Gravesend Road to School Lane	Condition survey
15700875	Whitehill Lane	C4	Gravesend	Gravesham	Road	Surface renewal	From Valley Drive to Christianfields Avenue	Condition survey
15700877	Whitehill Road	C4	Gravesend	Gravesham	Road	Surface renewal	Hollybush Road to Whitehill Lane	Condition survey
15700879	Whitepost Lane	U16660	Culverstone	Gravesham	Drainage	Renewal	Junction with Carters Hill Lane	Identified by engineer
15700886	Windhover Way	U16667	Gravesend	Gravesham	Soft Landscape	Tree planting in soft surface	One to three sites	Green infrastructure enhancement

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700887	Windmill Street	A226	Gravesend	Gravesham	Road	Surface renewal	Windmill Street to Wrotham Road	Local needs
15700895	Woodside	U16674	Vigo	Gravesham	Footway	Surface preservation	Entire extents	Identified by inspection
15700902	Wrotham Road	A227	Istead Rise	Gravesham	Drainage	Improvement scheme	Junction with Bracondale Avenue	Surface water management plan and customer enquiries
15700901	Wrotham Road	A227	Meopham	Gravesham	Drainage	Review of any outstanding issues	Next to Nurstead Wood	Customer enquiries
15701034	Wrotham Road	A227	Gravesend	Gravesham	Road	Surface renewal	Additional thirty metres on roundabout approach	Road grip survey
15703025	Wrotham Road	A227	Meopham	Gravesham	Road	Surface renewal	From Meopham Green to South Street	Road grip survey
15700901	Wrotham Road	A227	Meopham	Gravesham	Road	Surface renewal	Green Lane to Meopham Green	Condition survey
15700900	Wrotham Road	A227	Gravesend	Gravesham	Road	Road reconstruction	Old Road West to Wingfield Road	Local needs

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200009	Albion Place	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Albion Place/ Andrew Broughton Way junction (11/0455)	Annual review of equipment age, specification and fault rate
24200025	Andrew Broughton Way	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Albion Place/ Andrew Broughton Way junction (11/0455)	Annual review of equipment age, specification and fault rate
24200025	Andrew Broughton Way	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Ashford Road/ Andrew Broughton Way junction (11/0457)	Annual review of equipment age, specification and fault rate
24200025	Andrew Broughton Way	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Ashford Road/ King Street/ Wat Tyler Way/ Andrew Broughton Way junction (11/0451)	Annual review of equipment age, specification and fault rate
24200042	Ashford Road	A20	Lenham	Maidstone	Drainage	Asset condition survey	From Dickley Lane to Old Ashford Road	Customer enquiries
24200043	Ashford Road	A20	Maidstone	Maidstone	Drainage	Review of any outstanding issues	Under railway bridge	Customer enquiries
24200040	Ashford Road	A20	Harrietsham	Maidstone	Footway	Reconstruction	Sections from the junction with Church Road to the junction with Marley Road (petrol station)	Identified by inspection
24200041	Ashford Road	A20	Hollingbourne	Maidstone	Road	Surface preservation	A20 to A20 (M20 overbridge)	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200042	Ashford Road	A20	Lenham	Maidstone	Road	Surface preservation	Faversham Road to Dickley Lane	Condition survey
24208457	Ashford Road	A20	Maidstone	Maidstone	Structures	Bridge refurbishment / strengthening	Raigersfield East (KCC structure no.2392)	Condition survey
24200043	Ashford Road	A20	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Ashford Road/ Andrew Broughton Way junction (11/0457)	Annual review of equipment age, specification and fault rate
24200043	Ashford Road	A20	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Ashford Road/ King Street/ Wat Tyler Way/ Andrew Broughton Way junction (11/0451)	Annual review of equipment age, specification and fault rate
24200038	Ashford Road	A20	Bearsted	Maidstone	Road	Surface preservation	Roundwell to "Gainsborough "	Condition survey
24208249	Bearsted Road	A249	Maidstone	Maidstone	Road	Surface renewal	Chiltern Hundreds to Newnham Court roundabout (eastbound)	Condition survey
24208249	Bearsted Road	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled crossing	Near Hampton Road (11/0466)	Annual review of equipment age, specification and fault rate
24200225	Buckland Road	U2416	Maidstone	Maidstone	Structures	Footway protection works	Buckland Road Bridge (KCC structure no.3215)	Network Rail
24201306	Chatham Road	A229	Boxley	Maidstone	Structures	Culvert maintenance / refurbishment	Old Mill Culvert (KCC structure no. 366)	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200381	Coombe Road	U2471	Tovil	Maidstone	Footway	Reconstruction	Sections from Old Tovil Road to Quarry Road and from Courtney Road to No. 72	Identified by inspection
24200430	Crumps Lane	C101	Ulcombe	Maidstone	Road	Surface recycling	Headcorn Road to Headcorn Road	Condition survey
24200467	Dunn Street	C98	Bredhurst	Maidstone	Drainage	Renewal	Near Bennet's Cottages and Manor Farm	Identified by engineer
24200505	Eyhorne Street	C603	Hollingbourne	Maidstone	Road	Surface preservation	A20 to Pilgrims Way, excluding section between Tilefields and Hollingbourne School	Condition survey
24200524	Faversham Road	C258	Wichling	Maidstone	Road	Surface preservation	Old Lenham Road to Ringlestone Road (Doddington)	Condition survey
24200542	Foley Street	U2537	Maidstone	Maidstone	Footway	Surface preservation	Entire extents	Identified by inspection
24200636	Green Lane	U11004	Chart Sutton	Maidstone	Structures	Culvert replacement	Brick Kiln Cottage	Condition survey
24200654	Grigg Lane	U11043	Headcorn	Maidstone	Road	Surface preservation	Grigg Farm/Baker Lane to Oak Lane	Asset management (protection following patching/recycling work)
24200654	Grigg Lane	U11043	Headcorn	Maidstone	Road	Surface recycling	Grigg Farm/Baker Lane to Oak Lane	Condition survey
24200661	Hackney Road	U2579	Fant	Maidstone	Road	Surface preservation	From Unicumes Lane to Gatland Lane	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200673	Hampstead Lane	B2162	Nettlestead	Maidstone	Road	Surface preservation	Maidstone Road to Station Road	Condition survey
24200682	Harp Farm Road	U1468	Boxley	Maidstone	Drainage	Renewal	Low point approximately in the middle of the road	Identified by engineer
24200717	Heath Road	B2163	Boughton Monchelsea	Maidstone	Road	Surface preservation	Brishing Lane to Church Hill	Condition survey
24200717	Heath Road	B2163	Linton	Maidstone	Road	Surface preservation	Brishing Lane to Church Hill	Condition survey
24200717	Heath Road	B2163	Boughton Monchelsea	Maidstone	Road	Surface preservation	Church Hill to Loddington Lane	Condition survey
24200721	Heath Road	B2163	Linton	Maidstone	Road	Surface preservation	Loddington Lane to A229 Linton Hill	Condition survey
24200728	Heathfield Road	U2599	Penenden Heath	Maidstone	Footway	Surface preservation	Entire extents	Identified by inspection
24200731	Hedley Street	U2602	Maidstone	Maidstone	Footway	Surface preservation	Entire extents	Identified by inspection
24200786	Howland Road	C68	Marden	Maidstone	Road	Surface preservation	Maidstone Road to South Road	Condition survey
24200797	Hunton Road	C66	Chainhurst	Maidstone	Road	Surface preservation	Green Lane to Reed Court Cottages	Local needs
24200830	King Street	A20	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Ashford Road/ King Street/ Wat Tyler Way/ Andrew Broughton Way junction (11/0451)	Annual review of equipment age, specification and fault rate
24207031	Laddingford	C53	Laddingford	Maidstone	Drainage	Renewal	From UMIDB Depot to The Barn	Identified by engineer
24200850	Lakelands	U13897	Harrietsham	Maidstone	Drainage	Renewal	Entire extents	Customer enquiries

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200866	Leeds Road	B2163	Leeds	Maidstone	Road	Surface preservation	Horseshoes Lane to Blair House	Condition survey
24200866	Leeds Road	B2163	Leeds	Maidstone	Road	Surface preservation	Plough public house crossroads (A274 Sutton Road) to Horseshoes Lane	Condition survey
24208458	Lees Road (including Laddingford & Claygate Road)	C53	Laddingford	Maidstone	Road	Surface preservation	From Lees Road to 200 metres past Laddingford School	Condition survey
24200878	Lenham Road	C258	Ulcombe	Maidstone	Road	Surface preservation	Chegworth Road to Rumham Lane	Condition survey
24200892	Linton Hill	A229	Linton	Maidstone	Road	Surface preservation	Stilebridge Lane (Marden) to Redwall Lane	Condition survey
24200919	Loose Road	A229	Maidstone	Maidstone	Road	Surface renewal	Wheatsheaf Pub to Cripple Street	Local needs
24200925	Lower Road	B2010	East Farleigh	Maidstone	Road	Surface preservation	Priory Close to Kettle Corner	Condition survey
24200926	Lower Road (including Upper Road	U1638	Maidstone	Maidstone	Road	Surface preservation	Square Hill Road to West Park Road	Asset management (protection following patching/recycling work)
24200994	Maidstone Road	A229	Staplehurst	Maidstone	Road	Surface preservation	George Street to Couchman Green Lane	Condition survey
24200992	Maidstone Road	B2079	Marden	Maidstone	Road	Surface preservation	New Barn Cottage to A229	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201015	Marden Road	C68	Staplehurst	Maidstone	Road	Surface preservation	A229 Station Road to west of junction with Clapper Lane (not including new roundabout)	Condition survey
24201021	Marley Road (Dickley Lane)	U1981	Lenham	Maidstone	Road	Surface preservation	Marley Works to Steeds Hill	Condition survey
24201050	Mill Bank	A274	Headcorn	Maidstone	Road	Surface renewal	Mill Bank - Kings Road to East Sutton Road	Condition survey
24201050	Mill Bank	A274	Headcorn	Maidstone	Road	Surface preservation	Mote Road to Gateway near bowling green (Sheepstile Road)	Condition survey
24201060	Milton Street	U2698	Maidstone	Maidstone	Road	Surface renewal	A26 Tonbridge Road to Hackney Road	Local needs
24201070	Mote Avenue	U1638	Maidstone	Maidstone	Road	Surface preservation	Square Hill Road to West Park Road	Asset management (protection following patching/recycling work)
24201085	New Barn Road	U11005	Sutton Valence	Maidstone	Road	Surface renewal	From A274 to Four Oaks Road	Local needs
24201611	North Pole Road (including North Street)	U1543	Barming	Maidstone	Road	Surface preservation	From North Street to Red Hill	Condition survey
24201114	Nottingham Avenue	U2725	Shepway	Maidstone	Footway	Surface preservation	From junction with Sutton Road to roundabout	Identified by inspection
24201114	Nottingham Avenue	U2725	Maidstone	Maidstone	Footway	Surface preservation	From roundabout to Lancashire Road	Identified by inspection

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201114	Nottingham Avenue	U2725	Maidstone	Maidstone	Footway	Surface preservation	From roundabout to Worcester Road	Identified by inspection
24201128	Old Ashford Road	C259	Lenham	Maidstone	Road	Surface preservation	Lenham Square to A20 Ashford Road	Condition survey
24201138	Old Tovil Road	U2732	Maidstone	Maidstone	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
24201158	Pagehurst Road	U1649	Staplehurst	Maidstone	Road	Surface preservation	Between Five Ash Lane and Thorn Road	Asset management (protection following patching/recycling work)
24201158	Pagehurst Road	U1649	Staplehurst	Maidstone	Road	Surface recycling	Marden Road to 250 metres south of junction with Thorn Road	Local needs
24201159	Palace Avenue	A229	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled crossing	Near Gabriels Hill (11/0416)	Annual review of equipment age, specification and fault rate
24201168	Pattenden Lane	C175	Marden	Maidstone	Drainage	Third party responsibility - continue to monitor	Under railway bridge	Customer enquiries
24201168	Pattenden Lane	C175	Marden	Maidstone	Road	Surface preservation	Underlyn Lane to West End	Condition survey
24201260	Rayners Hill	U1999	Lenham	Maidstone	Road	Surface preservation	A20 to Water Ditch Road	Condition survey
24201291	Roseacre Lane	U1926	Bearsted	Maidstone	Road	Surface renewal	Entire extents	Local needs
24201297	Roundwell	C349	Bearsted	Maidstone	Road	Surface preservation	From A20 Ashford Road to Church Lane (including The Street)	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201319	Sandling Lane	C349	Penenden Heath	Maidstone	Road	Surface preservation	40mph speed limit terminal to Running Horse Roundabout	Condition survey
24201351	Sherenden Lane	C78	Marden	Maidstone	Road	Surface preservation	Entire extents (Wilden Park Road to Goudhurst Road)	Asset management (protection following patching/recycling work)
24201351	Sherenden Lane	C78	Marden	Maidstone	Road	Surface recycling	Entire extents (Wilden Park Road to Goudhurst Road)	Local needs
24201351	Sherenden Lane	C78	Marden	Maidstone	Structures	Culvert replacement	Sherenden Lane East (KCC structure no. 3835A)	Condition survey
24201369	Sittingbourne Road	A249	Stockbury	Maidstone	Road	Surface retexturing	Approach to and beyond Church Hill junction (eastbound)	Road grip survey
24201370	Sittingbourne Road	A249	Stockbury	Maidstone	Road	Surface retexturing	Approach to and beyond Honeycrock Hill junction (eastbound)	Road grip survey
24201369	Sittingbourne Road	A249	Stockbury	Maidstone	Road	Surface retexturing	Approach to and beyond Rumstead Lane junction (eastbound)	Road grip survey
24201396	Southernden Road	U11043	Egerton	Maidstone	Road	Surface preservation	Barhams Mill Road to Grigg Farm / Baker Lane	Asset management (protection following patching/recycling work)

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201459	Stilebridge Lane	U1643	Marden	Maidstone	Road	Surface preservation	Linton Hill to Underlyn Lane	Asset management (protection following patching/recycling work)
24201459	Stilebridge Lane	U1643	Marden	Maidstone	Road	Surface recycling	Linton Hill to Underlyn Lane	Condition survey
24201464	Stockett Lane	U1586	Tovil	Maidstone	Road	Surface preservation	From Kent Fire & Rescue Service to Brockingford Lane	Condition survey
24201478	Sutton Road	A274	Langley	Maidstone	Drainage	Renewal	Between Horseshoes Lane and Leeds Road	Identified by engineer
24201478	Sutton Road	A274	Langley	Maidstone	Road	Surface retexturing	Stone Tile Warehouse to Pleydells Farm	Road grip survey
24201479	Sutton Road	A274	Maidstone	Maidstone	Road	Surface renewal	Wheatsheaf public house to Northumberland Road	Local needs
24201479	Sutton Road	A274	Maidstone	Maidstone	Soft Landscape	Tree planting in soft and hard surfaces	at least five sites	Green infrastructure enhancement
24201479	Sutton Road (Phase 1)	A274	Maidstone	Maidstone	Road	Surface renewal	Buffkyn Way to west of Willington Street	Road grip survey
24201479	Sutton Road (Phase 2)	A274	Maidstone	Maidstone	Road	Surface renewal	Willington Street to west of St Saviours Road	Road grip survey
24200207	The Broadway	A229, A20	Maidstone	Maidstone	Drainage	Review of any outstanding issues	Subway	Customer enquiries
39010235	The Street	C258	Doddington	Maidstone	Drainage	Asset condition survey	Entire extents	Flooding Investigation

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24208186	The Street	C98	Bredhurst	Maidstone	Road	Surface preservation	Forge Lane to M20 overbridge	Condition survey
24200564	Tilden Lane	U1644	Marden	Maidstone	Road	Surface preservation	Khernfields Farm House to Underlyn Lane	Asset management (protection following patching/recycling work)
24200564	Tilden Lane	U1644	Marden	Maidstone	Road	Surface recycling	Khernfields Farm House to Underlyn Lane	Condition survey
24201549	Tonbridge Road	A26	Teston	Maidstone	Drainage	Improvement scheme	Between Valley Court and Little Court Farm	Customer enquiries
24201548	Tonbridge Road	A26	Maidstone	Maidstone	Road	Surface renewal	Between Terrace Road and Queens Road	Local needs
24201548	Tonbridge Road	A26	Maidstone	Maidstone	Soft Landscape	Tree planting in soft and hard surfaces	at least five sites	Green infrastructure enhancement
24201547	Tonbridge Road	A26	Barming	Maidstone	Road	Surface preservation	Teston Lane to North Street (not including section with high friction surfacing on bend)	Condition survey
24201580	Upper Fant Road	U2874	Maidstone	Maidstone	Road	Road reconstruction	Bower Lane to Hackney Road	Local needs
24201591	Vicarage Lane	U1584	East Farleigh	Maidstone	Drainage	Improvement scheme	Near Shepherds Mead	Identified by engineer
24201592	Vicarage Road	C65	Yalding	Maidstone	Structures	Culvert replacement	Wardes Moat culvert (KCC structure no. 3970)	Condition survey
24201599	Walderslade Woods	A2045	Boxley	Maidstone	Road	Surface retexturing	Boxley Road roundabout extents	Road grip survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201610	Wat Tyler Way	A249	Maidstone	Maidstone	Road	Surface renewal	A20 to A229	Condition survey
24201610	Wat Tyler Way	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Ashford Road/ King Street/ Wat Tyler Way/ Andrew Broughton Way junction (11/0451)	Annual review of equipment age, specification and fault rate
24201621	Weavering Street	U1906	Bearsted	Maidstone	Road	Surface renewal	Between Grovewood Drive North and South	Local needs
24201634	West Walk	U2894	Barming	Maidstone	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
24201657	White House Lane	U11049	Headcorn	Maidstone	Road	Surface preservation	Shenley Road to A274 Biddenden Road	Asset management (protection following patching/recycling work)
24201657	White House Lane	U11049	Headcorn	Maidstone	Road	Surface recycling	Shenley Road to A274 Biddenden Road	Condition survey
24201669	Willington Street	C392	Maidstone	Maidstone	Soft Landscape	Tree planting in hard surface	at least five sites	Green infrastructure enhancement
24201673	Willow Way	U1638	Maidstone	Maidstone	Road	Surface preservation	Square Hill Road to West Park Road	Asset management (protection following patching/recycling work)

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300013	Ash Road	C252	Hartley	Sevenoaks	Road	Surface retexturing	Quaker Close to Bramblefields Close	Road grip survey
34300013	Ash Road	C252	Hartley	Sevenoaks	Road	Surface renewal	From Quaker Close to Chapel Wood Road	Condition survey
34300018	Ashgrove Road	U19848	Sevenoaks	Sevenoaks	Road	Surface preservation	Oak Lane to Weald Road	Local needs
34300021	Aspen Close	U14666	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300066	Betenson Avenue	U19857	Sevenoaks	Sevenoaks	Structures	Bridge strengthening	Betenson Bridge carrying watercourse under road (KCC structure no. 1445)	Condition survey
34300080	Blackhall Lane	C340	Sevenoaks	Sevenoaks	Road	Surface preservation	From Seal Hollow Road to Park Lane	Local needs
34300102	Bradbourne Vale Road	U248888	Sevenoaks	Sevenoaks	Footway	Surface preservation	Lower path section from Capital House to outside No. 2	Identified by inspection
34300104	Braeside Avenue	U19868	Sevenoaks Kippington	Sevenoaks	Soft Landscape	Tree planting in soft surface	at least five soft sites	Green infrastructure enhancement
34300118	Brittains Lane	C344	Sevenoaks Kippington	Sevenoaks	Soft Landscape	Tree planting in soft surface	at least five soft sites	Green infrastructure enhancement
34301727	Buckhurst	C306	Hever	Sevenoaks	Road	Surface preservation	Cowden Pound Road to Chiddingstone Hoath	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300160	Carters Hill	D271	Seal	Sevenoaks	Structures	Bridge slab extension replacement	Tumbling bay east (KCC structure No.623)	Condition survey
34300160	Carters Hill	D272	Seal	Sevenoaks	Structures	Bridge slab extension replacement	Tumbling bay west (KCC structure no.1472)	Condition survey
34300168	Cedar Close	U182	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300196	Chevening Road	U1182	Chevening	Sevenoaks	Drainage	Renewal	From property No. 2 to ditch	Customer enquiries
34300198	Chichester Drive	U19884	Sevenoaks Kippington	Sevenoaks	Soft Landscape	Tree planting in soft surface	Three sites	Green infrastructure enhancement
34300232	Clinton Lane	B2027	Hever	Sevenoaks	Road	Surface retexturing	First left hand bend heading east on Clinton Lane	Road grip survey
34300240	College Road	C277	Swanley	Sevenoaks	Road	Surface preservation	Newbarn Road to Hextable	Condition survey
34303064	Cowden Pound Road	C306	Mark Beech	Sevenoaks	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
34300269	Crescent Gardens	U181	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300275	Croft Way	U19890	Sevenoaks Kippington	Sevenoaks	Soft Landscape	Tree planting in soft surface	Seven soft sites identified	Green infrastructure enhancement

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300277	Crouch House Road	C328	Edenbridge	Sevenoaks	Footway	Surface preservation	From the junction of Lingfield Road to Crouch House Cottages	Identified by inspection
34300317	Downsview Road	U12121	Sevenoaks	Sevenoaks	Road	Surface preservation	Entire extents	Local needs
34300317	Downsview Road	U19894	Sevenoaks Kippington	Sevenoaks	Soft Landscape	Tree planting in soft surface	Seven soft sites identified	Green infrastructure enhancement
34300322	Eardley Road	U19895	Sevenoaks	Sevenoaks	Road	Surface renewal	Entire extents	Condition survey
34300389	Franks Lane	U198	Horton Kirby	Sevenoaks	Road	Surface preservation	From A225 to Eglantine Lane	Condition survey
34300404	Glebe Road	C300	Sevenoaks Weald	Sevenoaks	Road	Surface preservation	Windmill Hill to Hubbards Hill	Asset management (protection following patching/recycling work)
34300410	Goldsel Road	B258	Swanley	Sevenoaks	Drainage	Renewal	Near High Street	Identified by engineer
34300410	Goldsel Road	B258	Swanley	Sevenoaks	Road	Surface renewal	From Station Road to M20 bridge deck	Road grip survey
34301651	Gracious Lane	C304	Sevenoaks Weald	Sevenoaks	Road	Surface preservation	Ryecroft Lane to White House Road	Condition survey
34300432	Green Lane	B2024	Hever	Sevenoaks	Road	Surface renewal	Pootings Road to South Brook Lane (including Ide Hill Road)	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300461	Hartfield Road	B2026	Shoreham	Sevenoaks	Road	Surface retexturing	First right hand bend heading south	Road grip survey
34300461	Hartfield Road	B2026	Edenbridge	Sevenoaks	Drainage	Improvement scheme	East of Brook Street Farm	Identified by engineer
34300475	Heathwood Gardens	U183	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300488	High Street	A25	Brasted	Sevenoaks	Road	Surface renewal	Brasted Village Gateway to 100 metres past Chart Lane	Condition survey
34300439	High Street	A225	Eynsford	Sevenoaks	Road	Surface renewal	From Mill Lane to Walnut Close	Condition survey
34300496	High Street	B2027	Leigh	Sevenoaks	Road	Surface preservation	Lower Green to Powdermill Lane	Condition survey
34300488	High Street	A25	Brasted	Sevenoaks	Drainage	Review of any outstanding issues	Near Chart Lane	Environment Agency
34300508	Hildenborough Road	B2027	Leigh	Sevenoaks	Road	Surface preservation	From A21 overbridge to Powder Mill Lane	Condition survey
34300511	Hilders Lane	C329	Edenbridge	Sevenoaks	Road	Surface preservation	Ashcombe Drive to Railway Bridge	Local needs
34300535	Homedean Road	C303	Chipstead	Sevenoaks	Road	Surface preservation	Chipstead Village to A25	Condition survey
34303037	Hosey Hill	B2026	Westerham	Sevenoaks	Road	Surface preservation	From A25 to French Street	Local needs

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300547	Hubbards Hill	C300	Sevenoaks Weald	Sevenoaks	Road	Surface recycling	Various sections from Glebe Road to bridge over A21	Condition survey
34303095	Ide Hill Road	B2042	Four Elms	Sevenoaks	Road	Surface preservation	From Four Elms red surfacing at gateway to Toys Hill	Condition survey
34303061	Ide Hill Road	B2024	Hever	Sevenoaks	Road	Surface renewal	Pootings Road to South Brook Lane (including Green Lane)	Condition survey
34300553	Ideleigh Court Road	U1148	New Ash Green	Sevenoaks	Road	Surface preservation	Hartley Bottom Road to New Street Road	Condition survey
34300617	London Road	A224	Sevenoaks	Sevenoaks	Road	Surface renewal	From Granville Road to Kippington Road	Road grip survey
34300614	London Road	C296	Dunton Green	Sevenoaks	Road	Surface preservation	Lawrence Court Road to left turn to Polhill	Condition survey
34300614	London Road	A224	Dunton Green	Sevenoaks	Road	Surface renewal	From Station Road to Lennard Road	Road grip survey
34300622	London Road	A223	Westerham	Sevenoaks	Road	Surface preservation	Holcombe Close to Market Square	Condition survey
34300629	Lower Road	C277	Hextable	Sevenoaks	Road	Surface preservation	Top Dartford Road to Goss Hill	Asset management (protection following patching/recycling work)

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300699	Main Road	A25	Sundridge	Sevenoaks	Drainage	Review of any outstanding issues	Near Village Hall	Customer enquiries
34300769	Morleys Road	C300	Sevenoaks Weald	Sevenoaks	Road	Surface preservation	Windmill Road to 200 metres east of railway	Condition survey
34300776	Neal Road	U12268	West Kingsdown	Sevenoaks	Drainage	Renewal	Junction with Hever Avenue	Identified by engineer
34300803	Nunnery Lane	U1308	Penshurst	Sevenoaks	Road	Surface preservation	From Walters Green Road to Coldharbour Road	Local needs
34300805	Nursery Close	U12474	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300821	Old Farm Gardens	U12062	Swanley	Sevenoaks	Footway	Reconstruction	Entire extents	Identified by inspection
34300823	Old London Road	C302	Knockholt	Sevenoaks	Road	Surface preservation	Main Road to Birchwood Lane	Condition survey
34300830	Oliver Road	U184	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300839	Otford Road	A225	Sevenoaks	Sevenoaks	Road	Surface renewal	From Bat and Ball junction to Wickes car park.	Condition survey
34300160	Pease Hill	C290	Ash-cum-Ridley	Sevenoaks	Road	Surface preservation	South Ash Road to Hartley Bottom Road	Condition survey
41102079	Penshurst Road	B2176	Penshurst	Sevenoaks	Road	Surface renewal	Station Hill to Rogues Hill	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300912	Pootings Road	B269	Westerham	Sevenoaks	Structures	Bridge reconstruction	Pootings one carrying watercourse under road (KCC structure no. 2133)	Condition survey
34301521	Russett Way	U13773	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300978	Ruxley Close	U12979	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34300995	Scabharbour Road	C42	Sevenoaks Weald	Sevenoaks	Road	Surface preservation	Morleys Road to Coppins Road	Condition survey
34301017	Sevenoaks Road	A225	Otford	Sevenoaks	Soft Landscape	Tree planting in soft surface	Ten sites	Green infrastructure enhancement
34301026	Shoreham Lane	U11999	Riverhead	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection
34301028	Shoreham Road	A225	Eynsford	Sevenoaks	Road	Surface renewal	From railway bridge to Castle Road	Condition survey
34301030 / 34301031	Shoreham Road	A225	Otford	Sevenoaks	Road	Surface renewal	Pilgrims Way East to Station Road	Condition survey
34301031	Shoreham Road	A225	Edenbridge	Sevenoaks	Road	Surface retexturing	Under railway bridge	Road grip survey
34301033	Shrubbery Road	C295	South Darenth	Sevenoaks	Road	Surface preservation	East Hill to Holmesdale Hill	Condition survey
34301035	Sidney Gardens	U12200	Otford	Sevenoaks	Soft Landscape	Tree planting in soft surface	Four sites	Green infrastructure enhancement
34301041	Smarts Hill	C319	Penshurst	Sevenoaks	Road	Surface preservation	Coldharbour Road to New Road	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34301062	Springfield Road	U12064	Edenbridge	Sevenoaks	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
34301079	St Johns Hill	A225	Sevenoaks	Sevenoaks	Road	Surface renewal	Entire extents	Condition survey
34300492	Station Road	B2026	Edenbridge	Sevenoaks	Footway	Surface preservation	Railway bridge to No. 13	Identified by inspection
34301100	Station Road	C338	Brasted	Sevenoaks	Road	Surface preservation	From Church Road to M25 flyover	Condition survey
34301107	Station Road	A225	Otford	Sevenoaks	Road	Surface preservation	Roundabout (Otford High Street) to Pilgrims Way East	Condition survey
34303071	Stick Hill	B2026	Edenbridge	Sevenoaks	Drainage	Improvement scheme	East of Brook Street Farm	Identified by engineer
34301739	Sundridge Road	C307	Ide Hill	Sevenoaks	Road	Surface preservation	From Ide Hill Village to Emmetts Lane	Condition survey
34301235	Sundridge Road	B2211	Dunton Green	Sevenoaks	Road	Surface preservation	From Polhill roundabout to Chevening Road crossroads	Condition survey
34301132	Swanley Lane	B258	Swanley	Sevenoaks	Footway	Surface preservation	Junction with Bartholomew Way to Highlands Hill	Identified by inspection
34301143	The Butts	U1198	Otford	Sevenoaks	Soft Landscape	Tree planting in soft surface	Three sites	Green infrastructure enhancement

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34301158	The Landway	C310	Kemsing	Sevenoaks	Road	Surface preservation	From Pilgrims Way to West End (entire extents)	Condition survey
34301166	The Old Walk	U12201	Otford	Sevenoaks	Soft Landscape	Tree planting in soft surface	Five sites	Green infrastructure enhancement
34301188	Tinker Pot Lane	C292	Kemsing	Sevenoaks	Road	Surface preservation	Knatts Valley Road to Cottmans Ash Lane	Condition survey
34301190	Tonbridge Road	A225	Sevenoaks	Sevenoaks	Footway	Surface preservation	From the junction with Solefields Road to The White Hart Public House	Identified by inspection
34303087	Tonbridge Road	B2027	Chiddingstone	Sevenoaks	Road	Surface renewal	From Bore Place Lane eastwards for 400 metres	Road grip survey
34301191	Top Dartford Road	B258	Hextable	Sevenoaks	Road	Surface renewal	From district boundary to Victoria Hill Road	Condition survey
34301224	Walters Green Road	U1308	Penshurst	Sevenoaks	Road	Surface preservation	From Bradley Road to Sandfield Road	Asset management (protection following patching/recycling work)
34301242	Weald Road	C300	Sevenoaks	Sevenoaks	Road	Surface preservation	Gracious Lane to Ashgrove Road	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34301250	Well Road	U12200	Otford	Sevenoaks	Soft Landscape	Tree planting in soft surface	Seven sites	Green infrastructure enhancement
34301920	Wisteria Gardens	.	Swanley	Sevenoaks	Footway	Surface preservation	Entire extents	Identified by inspection

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39000002	Abbey Place	U18243	Faversham	Swale	Soft Landscape	Tree planting in soft surface	at least five sites	Green infrastructure enhancement
39000042	Ashtead Drive	U12409	Bapchild	Swale	Drainage	Renewal	Ashtead Drive and School Lane	Response to surface water flooding
39000067	Barton Hill Drive	C137	Minster-on-Sea	Swale	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
39000067	Barton Hill Drive	C137	Minster-on-Sea	Swale	Soft Landscape	Tree planting in soft surface	at least five sites	Green infrastructure enhancement
39000116	Bobbing Interchange	A249	Bobbing	Swale	Road	Surface retexturing	Gyratory	Road grip survey
39000124	Borden Lane	C120	Sittingbourne	Swale	Road	Surface renewal	From Homewood Avenue to Riddles Road	Condition survey
39000137	Boyces Hill	A2	Newington	Swale	Road	Surface renewal	From existing new joint for approximately 150 metres	Condition survey
39000144	Bramley Avenue	U15067	Faversham	Swale	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
39000149	Breach Lane	C94	Upchurch	Swale	Road	Surface preservation	Landrail Road to Home Farm	Condition survey
39000163	Bridge Road	U18320	Faversham	Swale	Structures	Bridge reconstruction	Brent Swing Bridge (KCC structure no. 1277)	Condition survey resulting in installation of replacement temporary bridge
39000188	Bull Lane	C121	Newington	Swale	Road	Surface preservation	From A2 Newington to Wormdale Hill	Condition survey

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39000208	Canterbury Rd / The Street (Boughton Hill)	A2	Dunkirk	Swale	Road	Road reconstruction	Embankment at the junction with Horselees Road	Structural failure
39000209	Canterbury Road	A2	Faversham	Swale	Footway	Surface preservation	From the junction with Love Lane to Preston Avenue	Identified by inspection
39001705	Canterbury Road	C452	Boughton Under Blean	Swale	Road	Surface renewal	From Chalky Road to Stockers Hill	Condition survey
39000210	Canterbury Road	A2	Sittingbourne	Swale	Drainage	Improvement scheme	Snipeshill open space at Greenways	Surface water management plan, flood event and and customer enquiries
39000232	Chalkwell Road	C630	Sittingbourne	Swale	Road	Surface preservation	From A2 London Road to B2005 roundabout	Condition survey
39000250	Chequers Road	B2008	Minster-on-Sea	Swale	Road	Surface preservation	Bell Farm Lane to Oak Lane	Condition survey
39000297	Coats Avenue	U18383	Sheerness	Swale	Footway	Reconstruction	Entire extents	Identified by inspection
39000315	Coombe Drive	U18393	Sittingbourne	Swale	Drainage	Improvement scheme	Entire extents	Response to surface water flooding
39000347	Crouch Lane	U11168	Selling	Swale	Road	Surface preservation	Selling Road to South Street	Condition survey
39000440	Fairleas	U18460	Sittingbourne	Swale	Footway	Surface preservation	Entire extents	Identified by inspection
39000482	Frensham Close	U18483	Sittingbourne	Swale	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
39000580	Head Hill	C118	Graveney	Swale	Road	Surface preservation	From A2 to Sportsman public house	Condition survey

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39000584	Hearts Delight Road	U12008	Tunstall	Swale	Road	Surface preservation	From Wrens Road to Bredgar Road	Asset management (protection following patching/recycling work)
39000589	Hickmans Green (Horselees)	C125	Boughton under Blean/Dunkirk	Swale	Road	Surface preservation	Snake Lane to Thunderhill Business Park	Condition survey
39000595	High Street	C607	Sittingbourne	Swale	Road	Surface renewal	From Park Avenue to Central Avenue	Condition survey
39000703	Lansdown Road	U18592	Sittingbourne	Swale	Drainage	Improvement scheme	Entire extents	Response to surface water flooding
39000717	Leysdown Road	B2231	Eastchurch	Swale	Road	Surface renewal	From Harty Ferry Road for a distance of 265 metres	Condition survey
39000718	Leysdown Road	B2231	Leysdown	Swale	Footway	Reconstruction	From the junction with Warden Bay Road to near thebus layby exit (north side)	Identified by inspection
39000733	London Road	A2	Sittingbourne	Swale	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
39001274, 39000736, 39000735, 39000731	London Road	A2	Bapchild, Tonge, Teynham, Norton	Swale	Drainage	Review of any outstanding issues	Various locations	Customer enquiries
39000738	Longridge	U18603	Sittingbourne	Swale	Footway	Surface preservation	Entire extents	Identified by inspection
39000844	Minster Road	B2008	Minster-on-Sea	Swale	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39000844	Minster Road	B2008	Minster-on-Sea	Swale	Road	Surface renewal	Between Halfway crossroads to Barton Hill Drive	Condition survey
39000844	Minster Road	B2008	Minster-on-Sea	Swale	Traffic Signals	Refurbish existing signal-controlled crossing	Near Lowfield Road (05/0600)	Annual review of equipment age, specification and fault rate
3900890	Noreen Avenue	.	Minster-on-Sea	Swale	Footway	Surface preservation	Entire extents	Identified by inspection
39000955	Parsonage Stocks Road	U11158	Throwley	Swale	Road	Surface preservation	Bagshill Road to Old Badgins Road	Condition survey
39000963	Penn Close	U18701	Sittingbourne	Swale	Footway	Surface preservation	Entire extents	Identified by inspection
39001005	Quay Lane	B2040	Faversham	Swale	Road	Surface renewal	Court Street to Bridge Road	Local needs
39001007	Queenborough Road	A250	Halfway	Swale	Drainage	Review of any outstanding issues	Entire extents	Customer enquiries
39001010	Queensway	U18723	Sheerness	Swale	Footway	Reconstruction	Remaining sections of Queensway not completed in phase 1	Identified by inspection
39001075	School Lane	C131	Bapchild	Swale	Road	Surface preservation	A2 London Road to Church Street	Condition survey
39001089	Scotts Lane	U11117	Painters Forstal	Swale	Road	Surface preservation	From Hansletts Lane to Eastling Road	Condition survey
39001105	Selling Road	C125	Selling	Swale	Drainage	Review of any outstanding issues	Under railway bridge (road becomes Fox Lane)	Customer enquiries

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39001761	Sheppey Way	A249	Leysdown	Swale	Road	Surface preservation	Roundabout to bridge	Condition survey
39001145	South Street	U11127	Dunkirk	Swale	Road	Surface preservation	From Church to Nine Ash Lane	Condition survey
39001194	Staple Street	C125	Boughton under Blean	Swale	Road	Surface preservation	A229 Thanet Way to Church Hill	Condition survey
39001202	Step Style	U18818	Sittingbourne	Swale	Footway	Surface preservation	Entire extents	Identified by inspection
39001211	Stone Street	A251	Faversham	Swale	Road	Surface renewal	Between South Road and Preston Street	Condition survey
39001212	Stonebridge Way	U18823	Faversham	Swale	Soft Landscape	Tree planting in soft surface	Ten to fifteen trees	Green infrastructure enhancement
39001244	Thanet Way	A299	Hernehill	Swale	Crash Barriers	Upgrade tensioned corrugated beam safety fencing	Various sections between Staple Street and Whitstable off slip	Condition survey
39001243	Thanet Way	A299	Various	Swale	Road	Surface renewal	Brenley Corner to Staple Street (coastbound)	Road grip survey
39001275	The Street	C120	Borden	Swale	Road	Surface preservation	Borden Lane to Pond Farm Road	Condition survey
39001281	The Street	C115	Lower Halstow	Swale	Road	Surface preservation	From stream to 30mph speed limit gateway	Condition survey
39001274	The Street	A2	Bapchild	Swale	Traffic Signals	Refurbish existing signal-controlled crossing	Near School Lane (05/0626)	Annual review of equipment age, specification and fault rate
39001304	Tonge Road	C126	Sittingbourne	Swale	Road	Surface renewal	From Church Lane to All Saints Road	Condition survey

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39001314	Tunstall Road	C603	Tunstall	Swale	Road	Surface preservation	From Cranbrook Drive to St John Baptist Church	Condition survey
39001772	Warden Road	C134	Eastchurch	Swale	Road	Surface renewal	From Plough Road to caravan park entrance	Condition survey
39001670	Whitstable Road	B2040	Faversham	Swale	Structures	Bridge reconstruction	Lady Dane footbridge (KCC structure no. 3065)	Condition survey
39001429	Woodberry Drive	U18934	Sittingbourne	Swale	Drainage	Improvement scheme	Entire extents	Response to surface water flooding

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300028	Albion Road	B2053	Margate	Thanet	Road	Surface renewal	Between Sowell Street and St Peters Court	Road grip survey
40300099	Barrows Close	U14271	Birchington	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40300113	Beach Grove	U19587	Ramsgate	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40301815	Beacon Road	B2053	Broadstairs	Thanet	Structures	Bridge reconstruction	Beacon Road footbridge (KCC structure no. 2697)	Condition survey
40300149	Bradstow Way	U13797	Broadstairs	Thanet	Road	Surface preservation	Entire extents	Local needs
40300179	Bush Avenue	U14007	Ramsgate	Thanet	Road	Surface renewal	Newington Road to Melbourne Avenue	Local needs
40302189	Canterbury Road	A28	Westgate-on-Sea	Thanet	Footway	Reconstruction	From the library to the junction with Victoria Avenue (south side)	Identified by inspection
40300197	Canterbury Road	A28	Margate	Thanet	Traffic Signals	Refurbish existing signal-controlled crossing	Near Hartsdown Road (08/0531)	Annual review of equipment age, specification and fault rate
40302080	Canterbury Road	A28	St Nicholas-at-Wade	Thanet	Road	Surface renewal	From St Nicholas-at-Wade to Sarre	Road grip survey
40300200	Canterbury Road	A28	St Nicholas At Wade	Thanet	Road	Surface preservation	From Upper Hale (No through road) to joint near speed camera approaching junction with Seamark Road	Local needs

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300203	Canterbury Road West	A299	Cliffsend	Thanet	Road	Surface renewal	Hengist Way to Haine Road	Local needs
40300260	Chilton Lane	U13953	Ramsgate	Thanet	Road	Surface preservation	Entire extents	Local needs
40300312	College Road	B2052	Margate	Thanet	Road	Surface renewal	From A254 to eastern end of box junction with Yoakley Square	Road grip survey
40300375	Dane Court Road	A255	Broadstairs	Thanet	Drainage	Review of any outstanding issues	Roundabout and on to A256	Customer enquiries
40300386	Dane Road	U14319	Margate	Thanet	Footway	Surface preservation	From the junction of Approach Road to Northdown Park Road	Identified by inspection
40300386	Dane Road	C431	Margate	Thanet	Road	Surface preservation	Dane Mead Terrace to Approach Road	Condition survey
40300396	Delacourt Close	U19611	Ramsgate	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40300442	Earlsmead Crescent	U19617	Ramsgate	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40300501	Fairfield Road	U12429	Minster	Thanet	Footway	Reconstruction	Entire extents	Identified by inspection
40300521	Foads Lane	U13937	Ramsgate	Thanet	Footway	Surface preservation	From the junction with Cliffs End Grove to Sandwich Road	Identified by inspection
40300549	George Hill Road	B2052	Margate	Thanet	Road	Surface renewal	From Botany Road to Green Lane	Condition survey
40300570	Gore Street	C584	Monkton	Thanet	Road	Surface renewal	From river heading north for 550 metres	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300570	Gore Street	C584	Monkton	Thanet	Structures	Deck reconstruction	Monkton Marshes (KCC structure so. 294)	Condition survey
40300586	Greenhill Gardens	U12429	Ramsgate	Thanet	Footway	Reconstruction	Entire extents	Identified by inspection
40300599	Grotto Hill	U14340	Margate	Thanet	Footway	Reconstruction	Entire extents	Identified by inspection
40300610	Haine Road	A256	Ramsgate	Thanet	Road	Surface renewal	From Spratling Street to Canterbury Road West roundabout	Condition survey
40300269	Hartsdown Road	B2052	Margate	Thanet	Drainage	Renewal	Near Margate Cricket Club	Identified by engineer
40300659	High Street	C566	Margate	Thanet	Road	Surface preservation	Shottendane Road to Canterbury Road	Condition survey
40300727	King Street	C431	Margate	Thanet	Road	Surface preservation	Hawley Street to Dane Hill	Condition survey
40300789	London Road	B2054	Ramsgate	Thanet	Road	Surface renewal	Hundred metres approach to roundabout with A255	Road grip survey
40300813	Manor Road	C242	St Nicholas at Wade	Thanet	Road	Surface renewal	From Canterbury Road to junction with The Length	Condition survey
40300821	Manston Road	B2050	Manston	Thanet	Road	Surface renewal	From Manston Court Road to junction with Spitfire Way	Local needs
40300820	Manston Road	C229	Margate	Thanet	Road	Surface preservation	Shottendane Road to waste recycling tip	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300826	Margate Road	A254	Ramsgate	Thanet	Road	Surface renewal	Centre of junction with College Road and Princes Road	Road grip survey
40300842	Marsh Farm Road	U11797	Minister	Thanet	Road	Surface preservation	From crossing to end	Asset management (protection following patching/recycling work)
40300854	Melanby Close	U14271	Birchington	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40300878	Minster Road	C424	Westgate on Sea	Thanet	Road	Surface preservation	Main Road to houses	Local needs
40300887	Monkton Roundabout	A299	Monkton	Thanet	Road	Surface renewal	Circulatory section	Road grip survey
40300889	Montefiore Avenue	C422	Ramsgate	Thanet	Road	Surface preservation	Hereson Road to Dumpton Park Drive	Local needs
40300904	Nash Court Road	U14225	Margate	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40300917	New Cross Street	U14385	Margate	Thanet	Footway	Reconstruction	Red block paved area, exact extents to be determined at design stage	Identified by inspection
40300921	Newington Road	B2014	Ramsgate	Thanet	Footway	Reconstruction	From the junction with Granville Avenue to Queens Avenue (east side) and from Bush Avenue to Queens Avenue (west side)	Identified by inspection
40300932	Norrie Close	U14271	Birchington	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300939	Northdown Park Road	C431	Margate	Thanet	Road	Surface preservation	Millmead Avenue to Northumberland	Condition survey
40301822	Northdown Road	U14149	Broadstairs	Thanet	Structures	Bridge reconstruction	Northdown Road footbridge (KCC structure no. 2698)	Condition survey
40300944, 40303072	Northwood Road	U14136	Ramsgate	Thanet	Road	Surface renewal	From Margate Road to Westwood Road	Local needs
40300963	Old Hall Drive	U19717	Ramsgate	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40300996	Park Road	A255	Ramsgate	Thanet	Road	Surface renewal	From A254 Margate Road to junction with High Street, Ramsgate	Condition survey
40301003	Pegwell Road	U13947	Ramsgate	Thanet	Road	Surface preservation	Downs Road to Abbey Grove	Asset management (protection following patching/recycling work)
40301013	Phillips Road	U14271	Birchington	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40301033	Primrose Way	U19730	Ramsgate	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40301060	Queen Elizabeth Avenue	B2051	Margate	Thanet	Road	Surface preservation	Northdown Park Road to Northdown Park Road	Local needs
40301063	Queens Avenue	U14449	Birchington	Thanet	Soft Landscape	Tree planting in hard surface	Two to four locations	Green infrastructure enhancement
40301079	Ramsgate Road	A255	Broadstairs	Thanet	Road	Surface renewal	From Park Avenue to Nissan garage	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40301087	Reading Street Road	C428	Broadstairs	Thanet	Road	Surface preservation	Green Lane to farm area before Convent Road	Condition survey
40301169	Sewell Close	U19746	Birchington	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40303049	Shottendane Road	C565	Birchington	Thanet	Road	Surface renewal	From Park Road to Manston Road	Condition survey
40301194	South Eastern Road	U13984	Ramsgate	Thanet	Drainage	Review of any outstanding issues	Outside Nos. 100 to 105	Customer enquiries
40301198	Sowell Street	U14153	Broadstairs	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40301258	St Mildreds Road	C424	Westgate on Sea	Thanet	Road	Surface preservation	From Station Road to Harold Avenue	Condition survey
40301259	St Nicholas at Wade Roundabout	A299	Birchington	Thanet	Road	Surface renewal	Circulatory section and A28 approaches	Road grip survey
40301267	St Peters Road	A255	Margate	Thanet	Drainage	Review of any outstanding issues	Linked to Dane Court Road	Customer enquiries
40301304	Surrey Road	U14370	Margate	Thanet	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
40300541	Thanet Way	A299	Birchington / St Nicholas at Wade	Thanet	Crash Barriers	Upgrade tensioned corrugated beam safety fencing	Various sections between Thanet District Council boundary and St. Nicholas at Wade roundabout (works continue into Canterbury City Council area)	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40301328	Thanet Way	A299	St. Nicholas at Wade	Thanet	Structures	Preventative maintenance to corrugated steel culvert	Wantsum culvert carrying River Wantsum under road (KCC structure no. 275)	Condition survey
40301359	The Street	C672	Acol	Thanet	Road	Surface preservation	Crispe Road to Plumstone Road	Condition survey
40301361	The Street	C242	St Nicholas at Wade	Thanet	Road	Surface preservation	Wantsum Way to Pepper Alley	Condition survey
40301399	Upton Road	U14139	Broadstairs	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40301420	Victoria Road	B2054	Ramsgate	Thanet	Road	Surface preservation	Truro Road to high friction surface at traffic lights before Hereson Road	Condition survey
40301429	Walmer Gardens	U19810	Ramsgate	Thanet	Footway	Surface preservation	Entire extents	Identified by inspection
40301465	Westcliff Road	C421	Ramsgate	Thanet	Road	Surface renewal	Grange Road to and including junction into Elms Avenue	Local needs
40301495	Wilderness Hill	U14339	Margate	Thanet	Road	Surface preservation	Clarendon Road to Dane Road	Condition survey
40301496	Wilfred Road	U14024	Ramsgate	Thanet	Road	Surface preservation	From junction to Station Approach Road	Condition survey

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600003	Addington Lane	C22	Trottiscliffe	Tonbridge & Malling	Road	Surface preservation	From Woodgate Road to Ford Lane	Condition survey
40600031	Ashley Road	U12038	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600033	Ashton Way	A228	West Malling	Tonbridge & Malling	Road	Surface preservation	From Kings Hill to A20 (both directions)	Asset management (protection following patching/recycling work)
40601323	Avenue Du Puy	U24920	Tonbridge	Tonbridge & Malling	Road	Surface renewal	Between B2260 and Sovereign Way (also incorporating Avenue Du Puy)	Condition survey
40600059	Bates Hill	A227	Ightham	Tonbridge & Malling	Road	Surface renewal	Sevenoaks Road to Ismays Road	Local needs
40600072	Bell Lane	U1500	Ditton	Tonbridge & Malling	Road	Surface preservation	From A20 to M20 overbridge	Local needs
40600104	Bordyke	A227	Tonbridge	Tonbridge & Malling	Road	Surface renewal	Bourne Lane to A227 High Street	Local needs
40600115	Bramble Close	U12238	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600118	Branbridges Road	A228	East Peckham	Tonbridge & Malling	Crash Barriers	Upgrade tensioned corrugated beam safety fencing	Various sections between Whetsted Road roundabout and Maidstone Road roundabout	Condition survey
40600137	Brookfield Avenue	U12547	Larkfield	Tonbridge & Malling	Drainage	Improvement scheme	Between River Way and Marsh Way	Identified by engineer

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600140	Brookmead	U12038	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600154	Byrneside	U12203	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600204	Church Lane	U1434	East Peckham	Tonbridge & Malling	Road	Surface preservation	Entire extents	Local needs
40600236	Common Road	U1514	Ightham	Tonbridge & Malling	Road	Surface preservation	From A25 to A227 including Bank Lane	Condition survey
40600244	Copse Road	U12203	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600298	Dry Hill Park Road	C352	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with London Road to Dry Hill Road	Identified by inspection
40600299	Dry Hill Road	U2115	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Dry Hill Park Road to London Road	Identified by inspection
40600316	Elm Grove	U12238	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600324	Exedown Road	C31	Wrotham	Tonbridge & Malling	Road	Surface preservation	Kemsing Road to a point 700 metres south of Terry's Lodge Road	Condition survey
40600328	Fairfield Way	U12203	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600359	Fosse Road	U2130	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40601388	Hale Street Bypass	A228	East Peckham	Tonbridge & Malling	Structures	Culvert replacement	Beech Wood (KCC structure no. 3150A)	Condition survey
40600412	Hall Road	C26	Aylesford	Tonbridge & Malling	Drainage	Third party responsibility - continue to monitor	Near junction with Station Road	Customer enquiries
40600412	Hall Road	C26	Aylesford	Tonbridge & Malling	Road	Surface preservation	A20 to Station Road	Condition survey
40600412	Hall Road	C26	Aylesford	Tonbridge & Malling	Road	Surface renewal	Station Road to A20 London Road	Local needs
40600427	Hatham Green Lane	C22	Stansted	Tonbridge & Malling	Road	Surface preservation	Entire extents	Asset management (protection following patching/recycling work)
40600428	Havelock Road	U2147	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Hawden Road to Lansdowne Road	Identified by inspection
40600430	Hawden Road	U2148	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Havelock Road to Houselands Road	Identified by inspection
40600444	High Street	A26	Aylesford	Tonbridge & Malling	Road	Surface renewal	The Friars to Forstal Road	Local needs
40600447	High Street	A26	Hadlow	Tonbridge & Malling	Road	Road reconstruction	Whole block paved length	Structural failure

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600480	Houselands Road	U2159	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with The Crescent to Havelock Road	Identified by inspection
40600534	Lakeside	U13804	Snodland	Tonbridge & Malling	Drainage	Improvement scheme	Entire extents	Customer enquiries
40600537	Lansdowne Road	U2174	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with High Street to Lodge Road	Identified by inspection
40600540	Larkfield Close	U12672	Larkfield	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600541	Larkfield Road	U12672	Larkfield	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600559	Leybank	U12203	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40600576	Lodge Road	U2181	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Lansdowne Road to Hawden Road	Identified by inspection
40600582	London Road	B245	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Tonbridge Road / Noble Tree Road junction to opposite Teal Café (Sevenoaks boundary)	Identified by inspection
40600580	London Road	A20	Ditton	Tonbridge & Malling	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600586	London Road	A20	Wrotham	Tonbridge & Malling	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
40600589	London Road	A20	Wrotham	Tonbridge & Malling	Road	Surface renewal	Between Whitehill roundabout and A227 roundabout	Road grip survey
40600578	London Road	A20	Aylesford	Tonbridge & Malling	Road	Surface renewal	Hermitage Lane to Mills Road	Local needs
40600589	London Road	A20	Wrotham	Tonbridge & Malling	Road	Surface preservation	Nepicar to Whitehill	Condition survey
40600586	London Road	A20	Ryarsh	Tonbridge & Malling	Road	Surface preservation	Sandy Lane to West Malling	Condition survey
40600578	London Road	A20	Aylesford	Tonbridge & Malling	Road	Surface renewal	Station Road to Teapot Lane	Local needs
40600582	London Road	B245	Hildenborough	Tonbridge & Malling	Soft Landscape	Tree planting in soft and hard surfaces	at least five sites	Green infrastructure enhancement
40600581	London Road	A20	Larkfield	Tonbridge & Malling	Drainage	Renewal	Junction with New Road	Identified by engineer
40600591	Long Mill Lane	C262	Platt	Tonbridge & Malling	Road	Surface preservation	A25 to Beechin Wood Road	Condition survey
40600487	Maidstone Road	A25	Ightham	Tonbridge & Malling	Road	Surface preservation	From Dark Hill roundabout to Styants Bottom Lane	Condition survey
40600686	Meadway	U12203	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600705	Mill Crescent	U2203	Tonbridge	Tonbridge & Malling	Structures	Deck replacement	Mill Cottage Bridge carrying mill race over access (KCC structure no. 3125)	Condition survey
40600703	Mill Lane	U1522	Hildenborough	Tonbridge & Malling	Road	Surface preservation	From B245 to Vines Lane	Condition survey
40600732	New Hythe Lane	C24	Larkfield	Tonbridge & Malling	Road	Surface preservation	A20 to Leybourne Way	Condition survey
40600754	Oak Drive	U12541	Ditton	Tonbridge & Malling	Road	Surface preservation	Entire extents	Local needs
40600764 40601436	Old Church Road	U1459	East Peckham	Tonbridge & Malling	Road	Surface preservation	From A228 to A228 (whole crescent)	Asset management (protection following patching/recycling work)
40600766	Old Hadlow Road	U2218	Tonbridge	Tonbridge & Malling	Road	Surface preservation	Entire extents	Local needs
40600766	Old Hadlow Road	U2218	Tonbridge	Tonbridge & Malling	Structures	Bridge strengthening	Stair Bridge carrying watercourse under road (KCC structure no. 212)	Condition survey
40600802	Park Road	C38	West Peckham	Tonbridge & Malling	Road	Surface preservation	From Hamptons Road to Pillar Box Lane	Condition survey
40600811	Pembury Road	A2014	Tonbridge	Tonbridge & Malling	Drainage	Improvement scheme	Outside the police station	Identified by engineer

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600811	Pembury Road	A2014	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction of Quarry Hill Road to the entrance to Fish Lodge at the A21	Identified by inspection
40600811	Pembury Road	A2014	Tonbridge	Tonbridge & Malling	Road	Surface preservation	Quarry Hill Road to Woodgate Way	Condition survey
40600811	Pembury Road	A2014	Tonbridge	Tonbridge & Malling	Traffic Signals	Refurbish existing signal-controlled crossing	Near St Marys Road (10/0298)	Annual review of equipment age, specification and fault rate
40600854	Priory Road	U2230	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Quarry Hill Road to Hectorage Road	Identified by inspection
40600863	Quarry Hill Road	A26	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Pembury Road to Brook Street	Identified by inspection
40600863	Quarry Hill Road	A26	Tonbridge	Tonbridge & Malling	Traffic Signals	Refurbish existing signal-controlled crossing	Near St. Stephen's Church (10/0299)	Annual review of equipment age, specification and fault rate

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600880	Red Hill	C254	Wateringbury	Tonbridge & Malling	Footway	Surface preservation	Various sections between the junction with Tonbridge Road and the North Pole public house	Identified by inspection
40600898	Robin Hood Lane	C32	Walderslade	Tonbridge & Malling	Road	Surface preservation	Taddington Wood Lane to Fostington Lane	Condition survey
40600898	Robin Hood Lane	U15066	Walderslade	Tonbridge & Malling	Soft Landscape	Tree planting in soft surface	at least five sites	Green infrastructure enhancement
40600903	Rochester Road	C21	Burham	Tonbridge & Malling	Footway	Surface preservation	From outside No. 402 to approximately outside No. 484	Identified by inspection
40600906	Rochester Road	B2097	Aylesford	Tonbridge & Malling	Road	Surface renewal	Bridgewood Roundabout to Medway border	Condition survey
40600903	Rochester Road	C21	Burham	Tonbridge & Malling	Road	Surface preservation	Scarborough Terrace to Whitehouse Crescent	Condition survey
40600925	Royal West Kent Avenue	U2249	Tonbridge	Tonbridge & Malling	Road	Surface preservation	Helen Keller Court to The Ridgeway	Local needs
40600935	Salisbury Road (including Romney Way)	U2243	Tonbridge	Tonbridge & Malling	Road	Surface preservation	Entire extents	Local needs
40601388	Seven Mile Lane	A228	Mereworth	Tonbridge & Malling	Road	Surface preservation	A26 to Hale Street	Local needs

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600969	Shipbourne Road	A227	Hadlow	Tonbridge & Malling	Road	Surface renewal	High friction surface approaches to Higham Lane junction	Road grip survey
40600971	Shipbourne Road	A227	Tonbridge	Tonbridge & Malling	Road	Surface renewal	Oaks Close to White Cottage Road	Road grip survey
40600980	Snodland Bypass	A228	Snodland	Tonbridge & Malling	Road	Surface renewal	Leybourne Way to Peters Bridge	Local needs
40600981	Snodland Road	C22	Birling	Tonbridge & Malling	Road	Surface preservation	Bull Road to Stangate Road	Condition survey
40600993	St Benedict Road	U15165	Snodland	Tonbridge & Malling	Road	Surface preservation	From Paddlesworth Road to Snodland Road	Local needs
40601010	Stafford Road	U2269	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with The Slade to Hawden Road	Identified by inspection
40601065	The Avenue	U2279	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Havelock Road to Lodge Road	Identified by inspection
40601079	The Crescent	U2282	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Houselands Road to Havelock Road	Identified by inspection
40601096	The Orpines	U12995	Wateringbury	Tonbridge & Malling	Road	Surface recycling	Entire extents	Condition survey

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40601100	The Slade	U2285	Tonbridge	Tonbridge & Malling	Footway	Surface preservation	From the junction with Stafford Road to the car park	Identified by inspection
40601106	The Street	C262	Plaxtol	Tonbridge & Malling	Road	Surface preservation	From School Lane to Dux Hill (including Long Mill Lane)	Condition survey
40601127	Tonbridge Road	A26	Mereworth/East Peckham	Tonbridge & Malling	Road	Surface renewal	Alders roundabout and approaches	Local needs
40601130	Tonbridge Road	A26	Wateringbury	Tonbridge & Malling	Road	Surface preservation	Danns Lane to Pizien Well Road	Local needs
40601130	Tonbridge Road	A26	Wateringbury	Tonbridge & Malling	Road	Surface preservation	Junction with Pizien Well Road to Canon Lane	Local needs
40601150	Turnbury Avenue	U12421	Aylesford	Tonbridge & Malling	Footway	Surface preservation	From the Medway boundary to the junction with Robin Hood Lane	Identified by inspection
40601160	Upper Haysden Lane	C48	Tonbridge	Tonbridge & Malling	Structures	Culvert replacement	Upper Haysden (KCC structure no. 1832A)	Condition survey
40601165	Vale Road	C568	Tonbridge	Tonbridge & Malling	Road	Surface renewal	Between B2260 and Sovereign Way (also incorporating Avenue Du Puy)	Condition survey

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40601184	Walderslade Woods	A2045	Aylesford	Tonbridge & Malling	Road	Surface preservation	From Boxley Road to Robin Hood Lane (2018 surfacing joint)	Condition survey
40601203	Wealden Close	U12203	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
15700873 40601219	White Horse Road	U1437	Fairseat	Tonbridge & Malling	Road	Surface preservation	From Harvel Road to Holly Hill	Asset management (protection following patching/recycling work)
15700873 40601219	White Horse Road	U1437	Fairseat	Tonbridge & Malling	Road	Surface recycling	From Harvel Road to Holly Hill	Local needs
40601260	Woodview Crescent	U12238	Hildenborough	Tonbridge & Malling	Footway	Surface preservation	Entire extents	Identified by inspection
40601265	Wrotham Heath/Nepicar Roundabout	A20	Wrotham	Tonbridge & Malling	Road	Surface retexturing	Full extents of roundabout plus exits to A20	Road grip survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100005	Albion Road	U2945	St James'	Tunbridge Wells	Road	Surface preservation	Entire extents	Local needs
41100011	Allandale Road	U2947	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
41100021	Angerly Road	A262	Cranbrook	Tunbridge Wells	Road	Surface retexturing	From Sheafe Drive to just past Whitewell Lane	Road grip survey
41100034	Ashley Park	U2958	Rusthall	Tunbridge Wells	Road	Surface renewal	Entire extents	Local needs
41102203	Bentham Hill	U24678	Southborough	Tunbridge Wells	Road	Surface preservation	Between A26 London Road to Speldhurst Hill	Asset management (protection following patching/recycling work)
41100096	Birken Road	U2975	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
41100114	Bounds Oak Way	U2981	Southborough	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	at least five soft sites	Green infrastructure enhancement
41100809	Brenchley Road	C50	Brenchley	Tunbridge Wells	Road	Surface preservation	B2160 Matfield to Petteridge Lane	Condition survey
41100126	Bretland Road	U2988	Rusthall	Tunbridge Wells	Footway	Surface preservation	Entire extents	Identified by inspection
41100129	Brick Kiln Lane	U1744	Horsmonden	Tunbridge Wells	Road	Surface preservation	Rectory Park Road to Spelmonden Road	Asset management (protection following patching/recycling work)
41100159	Burslem Road	U21004	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
41100165	Calverley Park Gardens	B2249	Tunbridge Wells	Tunbridge Wells	Road	Surface renewal	Entire extents	Local needs

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100181	Castle Road	U21016	Tunbridge Wells	Tunbridge Wells	Drainage	Improvement scheme	Entire extents	Flooding Investigation
41100196	Chester Avenue	U21025	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Entire extents	Identified by inspection
41100226	Cleeves Avenue	U21035	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Entire extents	Identified by inspection
41100240	Colliers Green Road	C81	Cranbrook	Tunbridge Wells	Road	Surface preservation	A262 to Colliers Green School (Marden Road)	Condition survey
41100253	Constitutional Hill Road	U21046	Southborough	Tunbridge Wells	Road	Surface preservation	From Victoria Road to Holden Pond	Condition survey
41100268	Crendon Park	U21049	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Entire extents	Identified by inspection
41100334	Erskine Park Road	U21085	Rusthall	Tunbridge Wells	Footway	Reconstruction	Entire extents	Identified by inspection
41100336	Etherington Hill	C45	Speldhurst	Tunbridge Wells	Crash Barriers	Upgrade corrugated safety fencing	Junction Lower Green Road	Condition survey
41100369	Frant Road	A264	Tunbridge Wells	Tunbridge Wells	Road	Surface renewal	Rodmell Road to Forest Road	Local needs
41100374	Friars Way	U21099	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
41101502	Frittenden Road	C89	Frittenden	Tunbridge Wells	Road	Surface preservation	Satins Hill to Digdog Lane	Asset management (protection following patching/recycling work)

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100417	Goudhurst Road	A262	Lamberhurst	Tunbridge Wells	Road	Surface retexturing	From the junction with A21 to just past junction with Horsmonden Road	Road grip survey
41100416	Goudhurst Road	C50	Horsmonden	Tunbridge Wells	Road	Surface preservation	By Lamberts Place 'Red Tiles' to eastern village gateway	Condition survey
41100434	Greggs Wood Road	U21118	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
41100455	Harmony Street	U21128	Tunbridge Wells	Tunbridge Wells	Footway	Reconstruction	From Upper Street to Rusthall Park (west side only)	Identified by inspection
41100456	Harries Road	U21129	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
41100469	Hawkhurst Road	A229	Cranbrook	Tunbridge Wells	Road	Surface preservation	Water Lane to Glassenbury Road	Condition survey
41100486	High Brooms Road	C389	Tunbridge Wells	Tunbridge Wells	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
41100497	High Street	C560	Pembury	Tunbridge Wells	Road	Surface preservation	Lower Green Road to A228 Woodsgate Corner	Condition survey
41100494	High Street	A268	Cranbrook	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	Ten locations	Green infrastructure enhancement

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100499	High Woods Lane	U15376	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	From the junction with Halls Hole Road to the Indoor Bowls Club	Identified by inspection
41100502	Highfield Road	C389	Southborough	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	at least three assets already identified	Green infrastructure enhancement
41100503	Highgate Hill	A229	Hawkhurst	Tunbridge Wells	Road	Surface renewal	Talbot Road to A268 Rye Road	Local needs
41100503	Highgate Hill	A229	Cranbrook	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	Ten locations	Green infrastructure enhancement
41100522	Hopwood Gardens	U21146	Tunbridge Wells	Tunbridge Wells	Footway	Reconstruction	Entire extents	Identified by inspection
41100565	Horsmonden Road	A262	Lamberhurst	Tunbridge Wells	Road	Surface retexturing	From the junction with A21 to just past junction with Horsmonden Road	Road grip survey
41100525	Horsmonden Road	C50	Brenchley	Tunbridge Wells	Road	Surface preservation	Brenchley Post Office to 200 metres east of junction with Spout Lane	Condition survey
41102057	Iden Green Road	C257	Benenden	Tunbridge Wells	Road	Surface preservation	Standen Street to Benenden crossroads	Condition survey
41100564	Lamberhurst Road	B2162	Horsmonden	Tunbridge Wells	Road	Surface renewal	Horsmonden Village to just past the junction with Spelmonden Road	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100571	Langton Road	A264	Tunbridge Wells	Tunbridge Wells	Drainage	Review of any outstanding issues	Outside No. 19	Customer enquiries
41100570	Langton Road	C40	Speldhurst	Tunbridge Wells	Road	Surface preservation	Burnt House Lane to A264	Condition survey
41100571	Langton Road	A264	Tunbridge Wells	Tunbridge Wells	Road	Surface renewal	From Major Yorks Road to Rusthall Road	Condition survey
41102009	Langton Road	C40	Speldhurst	Tunbridge Wells	Road	Surface preservation	Penshurst Road to Burnt House Lane	Condition survey
41100596	Liptraps Lane	U21177	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Exact extents to be defined at design stage	Identified by inspection
41100615	Maidstone Road	B2160	Matfield	Tunbridge Wells	Drainage	Improvement scheme	North of Kipping's Cross	Crash remedial site
41100618	Maidstone Road	B2160	Paddock Wood	Tunbridge Wells	Footway	Reconstruction	From the junction with Warrington Road to Badsell Road	Identified by inspection
41100615	Maidstone Road	B2160	Matfield	Tunbridge Wells	Road	Surface renewal	A21 to Bramble Reed Lane	Local needs
41100615	Maidstone Road	B2162	Horsmonden	Tunbridge Wells	Road	Surface preservation	Brenchley Road (crossroads) to Kirkins Drive (The Foundry)	Condition survey
41100615	Maidstone Road	B2160	Paddock Wood	Tunbridge Wells	Road	Surface renewal	From A21 Kippings Cross roundabout to Bramble Reed Lane	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100618	Maidstone Road	B2160	Paddock Wood	Tunbridge Wells	Traffic Signals	Refurbish existing signal-controlled crossing	Near Mount Pleasant (12/0607)	Annual review of equipment age, specification and fault rate
41100620	Major York's Road	C383	Tunbridge Wells	Tunbridge Wells	Drainage	Renewal	Entire extents	Flooding investigation
41100222	Marden Road	U1759	Sissinghurst	Tunbridge Wells	Road	Surface renewal	100 metres in advance and 100 metres of high friction surface	Local needs
41100643	Megrims Hill	A268	Sandhurst	Tunbridge Wells	Road	Surface preservation	Megrims Cottage to Sandhurst Gateway	Condition survey
41100655	Mile Oak Road	C53	Brenchley	Tunbridge Wells	Road	Surface preservation	Crook Road to Mascalls Court Lane	Condition survey
41100669	Montgomery Road	U21203	St. John's	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	One to three sites	Green infrastructure enhancement
41101022	Moor Hill	A229	Cranbrook	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	Four locations	Green infrastructure enhancement
41100682	Mount Pleasant	A263	Tunbridge Wells	Tunbridge Wells	Road	Surface renewal	From Crescent Road to south side of Grove Hill Road roundabout	Road grip survey
41100682	Mount Pleasant Road	A263	Tunbridge Wells	Tunbridge Wells	Road	Surface renewal	From junction with A264 Crescent Road to south side of roundabout with Grove Hill Road	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100690	Neills Road	C57	Lamberhurst	Tunbridge Wells	Road	Surface recycling	Free Heath Road to Coulsey Wood crossroads (county boundary)	Condition survey
41100704	Newlands Road	U21217	St John's	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	at least twelve soft sites	Green infrastructure enhancement
41100742	Old Church Road	U1683	Pembury	Tunbridge Wells	Road	Surface preservation	A228 to college/church/ cul-de-sac end	Condition survey
41100742	Old Church Road	U1683	Pembury	Tunbridge Wells	Road	Surface recycling	A228 to college/church/ cul-de-sac end	Condition survey
41100769	Peasley Lane	U1777	Goudhurst	Tunbridge Wells	Road	Surface preservation	Ranters Lane to Bedgebury Road	Condition survey
4110075	Pembury Northern Bypass	A228	Pembury	Tunbridge Wells	Crash Barriers	Upgrade open box beam safety fencing	Near Old Church Road	Condition survey
41100789	Pennington Road	U21240	Southborough	Tunbridge Wells	Road	Surface preservation	A26 London Road to Pennington Place	Condition survey
41100792	Penshurst Road	C40	Speldhurst	Tunbridge Wells	Road	Surface preservation	From Barden Road through Speldhurst village to Ashwood gates/ speed limit signs.	Condition survey
41102081	Pixot Hill	C41	Brenchley	Tunbridge Wells	Road	Surface preservation	Crook Road to Mascalls Court Lane	Condition survey
41102060	Prospect Road	B2023	Tunbridge Wells	Tunbridge Wells	Road	Surface preservation	Bayhall Road to Grove Hill Road	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100701	Queen Street	A268	Sandhurst	Tunbridge Wells	Road	Surface preservation	West village gateway to Marsh Quarter Lane	Local needs
41100820	Ramslye Road	U21248	Broadwater	Tunbridge Wells	Soft Landscape	Tree planting in soft surface	at least five soft sites	Green infrastructure enhancement
41100856	Royal Chase	U21266	Culverden	Tunbridge Wells	Road	Surface preservation	Mount Ephraim to Connaught Way	Condition survey
41100861	Rusthall Road	U1724	Rusthall	Tunbridge Wells	Footway	Surface preservation	From the junction of Lower Green Road to Langton Road	Identified by inspection
41100864	Rye Road	A268	Hawkhurst	Tunbridge Wells	Road	Surface preservation	Little Fowlers to Conghurst Lane ("Risden")	Condition survey
41100874	Sandhurst Park	U15034	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Entire extents	Identified by inspection
41100875	Sandhurst Road	U21282	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	Entire extents	Identified by inspection
41100899	Silverdale Lane	U21394	Tunbridge Wells	Tunbridge Wells	Road	Surface recycling	Upper Grosvenor Road to Silverdale	Condition survey
41100926	Spelmonden Lane	C56	Horsmonden	Tunbridge Wells	Road	Surface recycling	A262 (Spelmonden Road) to B2162 Lamberhurst Road	Condition survey
41102104	Spelmonden Road	A262	Goudhurst	Tunbridge Wells	Road	Surface retexturing	From bridge deck west for 165 metres	Road grip survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41102104	Spelmonden Road	A262	Goudhurst	Tunbridge Wells	Road	Surface renewal	High friction surface at junction with Spelmonden Lane	Road grip survey
41100927	Sponden Lane	C257	Sandhurst	Tunbridge Wells	Road	Surface preservation	Sponden Lane Triangle to A268 Megrims Hill	Condition survey
41100945	St Johns Road	A26	Tunbridge Wells	Tunbridge Wells	Footway	Reconstruction	Exact extents to be defined at design stage	Identified by inspection
41100961	Station Road	A262	Goudhurst	Tunbridge Wells	Road	Surface retexturing	From Blue Coat Lane to bridge deck	Road grip survey
41100963	Stephens Road	U21320	Tunbridge Wells	Tunbridge Wells	Footway	Reconstruction	Entire extents	Identified by inspection
41100964	Stepneyford Lane	C110	Cranbrook / Benenden	Tunbridge Wells	Road	Surface preservation	Rolvenden Road to Colebrook Farm (Halden Lane)	Asset management (protection following patching/recycling work)
41100967	Stockland Green Road	U1678	Southborough	Tunbridge Wells	Road	Surface preservation	Between A26 London Road to Speldhurst Hill	Asset management (protection following patching/recycling work)
41100984	Swattenden Lane	B2086	Benenden	Tunbridge Wells	Road	Surface preservation	Martins Farm/Charity Farm to Barn Store	Condition survey
41100617	The Down	B2169	Lamberhurst	Tunbridge Wells	Road	Surface preservation	Spray Hill to Town Hill (Brown Trout)	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100492	The Street	C89	Biddenden	Tunbridge Wells	Road	Surface preservation	Northern gateway by electricity substation, Frittenden to Parsonage Farm	Condition survey
41101047	Tristan Gardens	U21339	Rusthall	Tunbridge Wells	Footway	Surface preservation	Entire extents	Identified by inspection
41101057	Upper Grosvenor Road	C389	Tunbridge Wells	Tunbridge Wells	Road	Surface preservation	Grosvenor Bridge to Meadow Road	Asset management (protection following patching/recycling work)
41101073	Victoria Road	U21353	Southborough	Tunbridge Wells	Road	Surface preservation	Between A26 London Road to Speldhurst Hill	Asset management (protection following patching/recycling work)
41101074	Victoria Road	U21352	Tunbridge Wells	Tunbridge Wells	Road	Surface renewal	Entire extents	Local needs
41101098	Western Road	U21361	St James'	Tunbridge Wells	Road	Surface preservation	Entire extents	Local needs
41101394	Windmill Hill	C41	Brenchley	Tunbridge Wells	Road	Surface preservation	Brenchley Road to Crook Road	Condition survey
41101133	Woodlands Road	U21375	High Brooms	Tunbridge Wells	Road	Surface recycling	Silverdale to Homewood Road	Condition survey
41101146	Yew Tree Road	C389	Tunbridge Wells	Tunbridge Wells	Footway	Surface preservation	From the junction with A26 London Road to Powder Mill Lane	Identified by inspection

Forward Works Programme

Years Three to Five

2023/24 to 2025/26

ALL DISTRICTS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
	Grassed areas - various locations		Various	All Districts	Soft Landscape	Swathe cutting - see notes	Various locations	Routine maintenance: once a year
	Grassed areas - various locations		Various	All Districts	Soft Landscape	Visible cutting - see notes	Various locations	Routine maintenance: once a year
	Rural hedges - various locations		Various	All Districts	Soft Landscape	Rural hedge cutting - see notes	Various locations	Routine maintenance: once a year
	Shrub beds - various locations		Various	All Districts	Soft Landscape	Shrub bed maintenance - see notes	Various locations	Routine maintenance: once a year
	Urban grassed areas - various locations		Various	All Districts	Soft Landscape	Grass cutting - see notes	Various locations	Routine maintenance: six times a year
	Urban hedges - various locations		Various	All Districts	Soft Landscape	Urban hedge cutting - see notes	Various locations	Routine maintenance: once a year
	Various areas		Various	All Districts	Soft Landscape	Weed spraying - see notes	Various locations	Routine maintenance: once a year
	Various roads		Various	All Districts	Street Lighting	Remedial work to illuminated signs - see notes	Various locations	Electrical testing
	Various roads		Various	All Districts	Street Lighting	De-illumination of illuminated signs - see notes	Various locations	Review of legal requirements
	Various roads		Various	All Districts	Street Lighting	Illuminated sign column replacement - see notes	Various locations	Structural testing
	Various roads		Various	All Districts	Street Lighting	Street lighting column replacement - see notes	Various locations	Structural testing
	Various roads		Various	All Districts	Street Lighting	Electrical testing of street lights	Various locations	Legal requirement

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300035	Ashford Road	A28	Great Chart	Ashford	Road	Surface preservation	Bethersden Road to Sandy Lane	Condition survey
1303385	Ashford Road	A28	Tenterden	Ashford	Road	Surface preservation	Chalk Avenue to Shoreham Lane	Condition survey
1300032	Ashford Road	A28	Bethersden	Ashford	Road	Surface preservation	Forge Lane to Bull Lane	Condition survey
1300032	Ashford Road	A28	Bethersden	Ashford	Road	Surface preservation	Forge Lane to Kiln Hill	Condition survey
1300036	Ashford Road	A28	High Halden	Ashford	Road	Surface renewal	Little Robhurst to Millfield	Condition survey
1300035	Ashford Road	A28	Great Chart	Ashford	Road	Surface renewal	Old Surrenden Manor Road and Bethersden Road	Condition survey
1300033	Ashford Road	A20	Charing	Ashford	Road	Surface preservation	Station Road to 40mph speed limit	Condition survey
1300101	Benenden Road	B2086	Rolvenden	Ashford	Road	Surface preservation	A28 Tenterden Road to Stepneyford Lane	Condition survey
1300108	Bethersden Road	C151	Woodchurch	Ashford	Road	Surface preservation	Plurenden Lane to Redbrook Street	Condition survey
1300104	Bethersden Road	C149	Bethersden	Ashford	Road	Surface preservation	Sparrow Hatch Lane to Mill Lane	Condition survey
1300113	Biddenden Road	A262	Tenterden	Ashford	Road	Surface renewal	Raja of Kent to Woolpack Corner	Condition survey
1300184	Brook Street	B2067	Woodchurch	Ashford	Road	Surface renewal	Between Brattle Estate and Swain Road	Condition survey
1300220	Canterbury Road	A28	Chilham	Ashford	Road	Surface renewal	Between Shalmsford Street and Shalmsford Road/A252	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1300215	Canterbury Road	A28	Kennington	Ashford	Road	Surface preservation	The Street to Bell Lane	Condition survey
1300217	Canterbury Road	C181	Brabourne	Ashford	Road	Surface preservation	The Street to Manor Pound Lane	Condition survey
1300218	Canterbury Road	A252	Challock	Ashford	Road	Surface preservation	Westwell Lane to Squids Gate Lane	Condition survey
1300216	Canterbury Road	A28	Boughton Aluph	Ashford	Road	Surface preservation	Wye Road to Bilting Lane	Condition survey
1300215	Canterbury Road	A28	Ashford	Ashford	Traffic Signals	Refurbish existing signal-controlled junction	Canterbury Road/ Faversham Road junction	Annual review of equipment age, specification and fault rate (13/0700)
1300223	Capel Road	C179	Orlestone	Ashford	Road	Surface preservation	Stone Cross Road to Hamstreet Road	Condition survey
1300273	Church Hill	C145	Bethersden	Ashford	Road	Surface preservation	Mill Lane to A28	Condition survey
1300277	Church Hill	C186	Kingsnorth	Ashford	Road	Surface preservation	Stumble Hill to A28 Ashford Road	Condition survey
1300429	Faversham Road	A2042	Ashford	Ashford	Road	Surface preservation	Canterbury Road to Trinity Road	Condition survey
1300430	Faversham Road	A251	Boughton Aluph	Ashford	Road	Surface preservation	Trinity Road to Swale Border	Condition survey
1300429	Faversham Road	A2042	Ashford	Ashford	Traffic Signals	Refurbish existing signal-controlled junction	Canterbury Road/ Faversham Road junction	Annual review of equipment age, specification and fault rate (13/0700)
1300459	Fougeres Way	A20	Ashford	Ashford	Road	Surface preservation	Drovers Roundabout to M20 interchange (roundabout)	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1303216	George Williams Way	U24269	Ashford	Ashford	Traffic Signals	Refurbish existing signal-controlled junction	Canterbury Road/ Faversham Road junction	Annual review of equipment age, specification and fault rate (13/0700)
1300495	Goldwell Lane	C609	Aldington	Ashford	Road	Surface preservation	Calleywell Lane to Calleywell Barn	Condition survey
1300540	Hampton Lane	U11372	Brabourne	Ashford	Road	Surface preservation	Plumpton to Beddlestone Farm	Protection following patching/recycling works:
1300562	Hastings Road	A28	Rolvenden	Ashford	Road	Surface preservation	Wassalls Lane to A268	Condition survey
1303413	Hythe Road	A292	Boughton Aluph	Ashford	Road	Surface preservation	Sprotlands Avenue to traffic signals	Condition survey
1300758	Magazine Road	A28	Ashford	Ashford	Road	Surface preservation	Canterbury Road to A292	Condition survey
1300761	Maidstone Road	A20	Charing	Ashford	Road	Surface preservation	From 2022 works to Maidstone district boundary	Condition survey
1301658	Peening Quarter Road	B2082	Wittersham	Ashford	Road	Surface preservation	Middle section only (extents to be determined)	Condition survey
1300946	Pluckley Road	C493	Charing	Ashford	Road	Surface preservation	Hunger Hatch Lane (water works) to A20	Condition survey
1300952	Plurenden Road	C164	Woodchurch	Ashford	Road	Surface preservation	Bethersden Road to Woodchurch Road	Condition survey
1300958	Pope Street	U11345	Chilham	Ashford	Road	Surface preservation	Entire extents	Condition survey
1300960	Poplar Road	B2082	Wittersham	Ashford	Road	Surface renewal	Between Forge Meads and The	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
							Meadows	
1300960	Poplar Road	B2082	Wittersham	Ashford	Road	Surface preservation	The Meadows to The Street	Condition survey
1300990	Reading Street	B2080	Tenterden	Ashford	Road	Surface preservation	Reading Street to Reading sewer	Condition survey
1301012	Roman Road	C177	Aldington	Ashford	Road	Surface preservation	Goldwell Lane to B2067	Condition survey
1301016	Romney Marsh Road	A2042	Ashford	Ashford	Road	Surface preservation	Malcolm Sargent Road to Asda roundabout	Condition survey
1301041	Sandhurst Road	A268	Newenden	Ashford	Road	Surface preservation	A28 to Lomas Lane	Condition survey
1301087	Smarden Road	C493	Pluckley	Ashford	Road	Surface preservation	Smarden Bell Road to stream	Condition survey
1301131	Station Road	B2080	Appledore	Ashford	Road	Surface renewal	Between Appledore Level crossing and The Street Appledore	Condition survey
1301147	Stocks Road	B2082	Wittersham	Ashford	Road	Surface preservation	Rye Road to The Street	Condition survey
1301463	Templer Way	A28	Ashford	Ashford	Road	Surface preservation	Drovers Roundabout to Chart Road	Condition survey
1301184	Tenterden Road	B2080	Appledore	Ashford	Road	Surface renewal	Between The Street Appledore and Appledore Road/School Road junction	Condition survey
1301185	Tenterden Road	A262	Tenterden	Ashford	Road	Surface preservation	Biddenden to Wool Pack Corner	Condition survey

ASHFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1301235	The Street	C167	Wittersham	Ashford	Road	Surface preservation	Stocks Road to primary school	Condition survey
1301639	Trinity Road	A251	Ashford	Ashford	Road	Surface renewal	Various roundabouts and approaches between A251 and M20 Junction 9	Condition survey
1301296	Warehorne Road	B2067	Kenardington	Ashford	Road	Surface preservation	Extents to be determined	Condition survey
1301350	Wittersham Road	C161	Stone-cum-Ebony	Ashford	Road	Surface preservation	Catts Hill to The Stocks	Condition survey
1301355	Woodchurch Road	C151	Bethersden	Ashford	Road	Surface preservation	A28 Ashford Road to May Shaves	Condition survey
1301358	Woodchurch Road	B2067	Tenterden	Ashford	Road	Surface preservation	Tenterden Golf Course to Beacon Oak Road	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600011	Adisham Road	B2046	Womenswold	Canterbury	Road	Surface preservation	A2 to Spinney Lane	Condition survey
5600173	Bridge Road	U10841	Bridge	Canterbury	Road	Surface preservation	Station Road to Fauscett Hill	Condition survey
5600180	Broad Street	U10841	Canterbury	Canterbury	Road	Surface preservation	Roundabout with A257 to Military Road	Condition survey
	Canterbury East		Canterbury	Canterbury	Drainage	Asset condition survey	South of Canterbury East Station (Floodcell 6144)	Flood risk to highway assessment
5602515	Canterbury Road	A291	Herne	Canterbury	Road	Surface preservation	Benstede Close to Lower Herne Road	Condition survey
5600215	Canterbury Road	A291	Herne	Canterbury	Road	Surface preservation	Bullockstone Road to Curtis Wood Park Road	Condition survey
5600216	Canterbury Road	B2205	Herne Bay	Canterbury	Road	Surface renewal	Eddington Lane to roundabout	Condition survey
5600215	Canterbury Road	U10841	Herne	Canterbury	Road	Surface preservation	Hicks Forstal Road to Bullockstone	Condition survey
5602491	Canterbury Road	U10841	Sturry	Canterbury	Road	Surface preservation	Hicks Forstal to Bates Tile Yard	Condition survey
5600216	Canterbury Road	U13703	Herne Bay	Canterbury	Road	Surface renewal	High Street to Central Parade	Condition survey
5600891	Dover Road	C453	Bridge	Canterbury	Road	Surface preservation	Bekesbourne Road to Roman Road	Condition survey
5600485	Ford Hill	U10841	Hoath	Canterbury	Road	Surface preservation	Highstead to Maypole Lane	Condition survey
5600574	Hackington Road	U10841	Tyler Hill	Canterbury	Road	Surface preservation	Summer Lane to Thornden Wood Road	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5600589	Harbledown Bypass	A2250	Harbledown	Canterbury	Road	Surface preservation	Palmers Cross Hill to dual carriageway	Condition survey
	Herne Bay		Herne Bay	Canterbury	Drainage	Asset condition survey	Kings Road and Memorial Park area (Floodcell 8864)	Flood risk to highway assessment
5600624	Herne Bay Road	B2205	Whitstable	Canterbury	Road	Surface renewal	Bennetts Avenue to roundabout	Condition survey
5601311, 5600623	Herne Bay Road	A291	Sturry	Canterbury	Road	Surface renewal	Between A28 Island Road and Sweechgate	Condition survey
5605125	Herne Bay Road	A291	Sturry	Canterbury	Road	Surface preservation	Sweechgate to A291 Canterbury Road	Condition survey
5600697	Joy Lane	C119	Whitstable	Canterbury	Road	Surface preservation	Joyden School to Shamrock Avenue	Condition survey
5600768	Littlebourne Road	A257	Canterbury	Canterbury	Road	Surface preservation	Stodmarsh Road to Swanton Lane	Condition survey
5600849	Military Road	U10841	Canterbury	Canterbury	Road	Surface preservation	Canterbury Town Hall to Broad Street	Condition survey
5600888	Nethergong Hill	U10841	Upstreet	Canterbury	Road	Surface preservation	A28 Island Road to campsite	Condition survey
5601083	Rheims Way	A28	Canterbury	Canterbury	Road	Surface preservation	St Peters Place (roundabout) to Castle Street (roundabout)	Condition survey
5601167	Shalmsford Street	U10841	Chartham	Canterbury	Road	Surface preservation	A28 to Bobbin Lodge Hill	Condition survey
5601236	St Johns Road	U10841	Whitstable	Canterbury	Road	Surface preservation	Oyster Place to Herne Bay Road	Condition survey

CANTERBURY								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
5601273	St Thomas Hill	A290	Canterbury	Canterbury	Road	Surface renewal	Cherry Garden Road to Glen Iris Avenue	Condition survey
5601312	Sturry Road	A28	Canterbury	Canterbury	Road	Surface renewal	South Street to Vauxhall Road roundabout	Condition survey
5601360	Thanet Way	A2990	Whitstable	Canterbury	Road	Surface preservation	Borstal Hill to South Street	Condition survey
5601359	Thanet Way	A2990	Herne Bay	Canterbury	Road	Surface preservation	Chestfield Road roundabout to Greenhill roundabout	Condition survey
5601360	Thanet Way	A2990	Whitstable	Canterbury	Road	Surface preservation	Fox Grove Road to Chestfield Medical Centre	Condition survey
5602372	Thanet Way	A2990	Herne	Canterbury	Road	Surface preservation	London Bound off slip Mill Lane to Margate Road	Condition survey
5601431	Tower Parade	B2205	Whitstable	Canterbury	Road	Surface renewal	Cromwell Road to Tower Hill	Condition survey
5601529	Whitstable Road	B2205	Swalecliffe	Canterbury	Road	Surface renewal	Sea Street to Colewood Road	Condition survey
5605553	Wingham Road	A257	Littlebourne	Canterbury	Road	Surface renewal	Between junctions with Lee Parkway	Condition survey
5605624	Wingham Road	A257	Bramling	Canterbury	Road	Surface preservation	Lee Priory to Cherville Lane	Condition survey

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500037	Barn End Lane	B258	Wilmington	Dartford	Road	Surface preservation	Goss Hill to High Road	Condition survey
10500056	Betsham Road	B255	Southfleet	Dartford	Road	Surface preservation	Park Corner Road to Southfleet Road	Condition survey
10500123	Cedar Drive	U12534	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500141	Church Hill	B258	Wilmington	Dartford	Road	Surface renewal	Hawley Road to A2 bridge	Condition survey
10500179	Darenth Wood Road	U134	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
Page 504	Dartford North		Dartford	Dartford	Drainage	Multi-agency collaborative working	Area between A225 Princes Road and Victoria Industrial Estate (Floodcell 12137)	Flood risk to highway assessment
10500187	Dartford Road	A225	Sutton-at-Hone	Dartford	Road	Surface preservation	Station Road going south for five hundred metres	Condition survey
10506243	Ebbsfleet Gateway	A2260	Ebbsfleet	Dartford	Road	Surface preservation	Thames Way to International Way	Condition survey
10506206	Fastrack Darenth Road	U9893	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500253	Galley Hill Road	A226	Swanscombe	Dartford	Road	Surface preservation	Lower Road to High Street	Condition survey
10500267	Green Street Green Road	B260	Dartford	Dartford	Road	Surface preservation	A282 to A225 Princes Road	Condition survey
10500266	Green Street Green Road	B260	Darenth	Dartford	Road	Surface preservation	Canada Farm Road to Sandbanks Hill	Condition survey
10500266	Green Street Green Road	B260	Darenth	Dartford	Road	Surface renewal	Shellbank Lane to Canada Farm Lane	Condition survey

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500266	Green Street Green Road	B260	Darenth	Dartford	Road	Surface preservation	Wood Lane to Gore Road	Condition survey
10500287	Hawley Road	A225	Hawley	Dartford	Road	Surface preservation	Warren Road to Waterworks (40mph section)	Condition survey
10500309	High Street	B255	Bean	Dartford	Road	Surface renewal	Bean roundabout to Beacon Wood Country Park	Condition survey
10500371	Keary Road	U15836	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500387	Knockhall Road	U15840	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500416	London Road	A226	Greenhithe	Dartford	Road	Surface preservation	B255 to The Avenue	Condition survey
10500414	London Road	A226	Dartford	Dartford	Road	Surface preservation	Craylands Lane to High Street	Condition survey
10500414	London Road	U13292	Dartford	Dartford	Road	Surface preservation	The Avenue to Craylands Lane	Condition survey
10500416	London Road	A226	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500441	Main Road	B260	Longfield	Dartford	Road	Surface preservation	Hartley Road to Nurstead Lane	Condition survey
10506056	New Barn Road	C278	Longfield	Dartford	Road	Surface preservation	B260 to The Beeches	Condition survey
10500507	Oakfield Lane	C368	Dartford	Dartford	Road	Surface preservation	Parsons Lane to Hawley Road	Condition survey
10500526	Park Road	U15866	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500548	Port Avenue	U15870	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500551	Princes Avenue	U13241	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500552	Princes Road	A225	Dartford	Dartford	Road	Surface preservation	Darenth Road to B2174 / A225 Cross Road	Condition survey
10500552	Princes Road	A225	Dartford	Dartford	Road	Surface renewal	Darenth Road to Park Road	Condition survey
10500552	Princes Road	B2174	Dartford	Dartford	Road	Surface preservation	Heath Lane to A225 Princes Road	Condition survey
10500552	Princes Road	B2174	Dartford	Dartford	Road	Surface preservation	Shepherds Lane to Heath Road (lower)	Condition survey
10500578	Rosedale Close	U12272	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500590	Sandbanks Hill	B262	Bean	Dartford	Road	Surface preservation	Betsham Road to Green Street Green Road	Condition survey
10506054	Sanderling Way	U8761	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500607	Shepherds Lane	A2018	Dartford	Dartford	Road	Surface preservation	Princes Road to Rochester Way	Condition survey
10500607	Shepherds Lane	A2018	Dartford	Dartford	Road	Surface renewal	Wyvern Close to Somerset Road	Condition survey
10500609	Ship Lane	C287	Sutton-at-Hone	Dartford	Road	Surface preservation	Wood Street to A225	Condition survey
10500612	Shirehall Road	U143	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500657	Starboard Avenue	U15884	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

DARTFORD								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
10500663	Station Road	B262	Southfleet	Dartford	Road	Surface renewal	Park Corner to New Barn Lane	Condition survey
10500919	Steele Avenue	U24894	Dartford	Dartford	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
10500754	Watling Street	A296	Swanscombe	Dartford	Road	Surface renewal	B225 roundabout to slip road	Condition survey
10500750	Watling Street	B2500	Dartford	Dartford	Road	Surface preservation	The Brent to A296	Condition survey
10500763	West Hill	A226	Dartford	Dartford	Road	Surface preservation	Highfield Road to Shepherds Lane	Condition survey

DOVER								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
11300009	Adisham Road	B2046	Aylesham	Dover	Road	Surface renewal	Cooting Road to railway bridge	Condition survey
11301764	Adisham Road	B2046	Adisham	Dover	Road	Surface preservation	Cooting Road to Spinney Lane	Condition survey
11300010	Adisham Road	B2046	Wingham	Dover	Road	Surface preservation	Love Lane to Crockshard Lane	Condition survey
11300040	Archers Court Road	C233	Whitfield	Dover	Road	Surface preservation	Cranleigh Drive to Pineham Road	Condition survey
11300052	Astor Avenue	C417	Dover	Dover	Road	Surface preservation	South Road to Priory Fields School	Condition survey
11300076	Barton Road	A256	Dover	Dover	Traffic Signals	Refurbish existing signal-controlled crossing	Near Nightingale Road	Annual review of equipment age, specification and fault rate (07/0515)
11300135	Broad Lane	C221	Northbourne	Dover	Road	Surface preservation	Northbourne Road to The Street	Condition survey
11301913	Canterbury Road	A260	Denton	Dover	Road	Surface preservation	Denton Lane to Gatteridge Hill	Condition survey
11303214	Canterbury Road	A260	Lydden	Dover	Road	Surface preservation	Side Hills to Agestor Lane	Condition survey
11300179	Capel Street	U11985	Capel-le-Ferne	Dover	Road	Surface preservation	Green Lane to A20	Condition survey
11300186	Castle Hill Road	A258	Dover	Dover	Road	Surface preservation	Castle Street to Dover Road	Condition survey
11300206	Channel View Road	U19497	Dover	Dover	Road	Surface renewal	Entire extents	Condition survey
11300289	Coldred Hill	C236	Lydden	Dover	Road	Surface preservation	A2 to Church Lane	Condition survey

DOVER								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
1130039	Cooting Road	U11876	Aylesham	Dover	Road	Road reconstruction	Entire extents (concrete road-industrial estate)	Condition survey
11300313	Cornwall Road	B2056	Walmer	Dover	Road	Surface preservation	Dover Road to Telegraph Road	Condition survey
11303701	Deal Road	A258	St Margarets at Cliffe	Dover	Road	Surface preservation	Jubilee Way to Dover Road	Condition survey
11300357	Deal Road	A258	Guston	Dover	Road	Surface preservation	Jubilee Way to Upper Road	Condition survey
11300360	Deal Road	A258	St Margarets at Cliffe	Dover	Road	Surface preservation	Station Road to Dover Road	Condition survey
11300360	Deal Road	A258	St Margarets at Cliffe	Dover	Road	Surface preservation	Station Road to Queens Rise	Condition survey
11300361	Deal Road	A258	Worth	Dover	Road	Surface preservation	The Street to Deal Road	Condition survey
11300432	Eastry Bypass	A256	Eastry	Dover	Road	Surface preservation	Northbourne Road to Cater Road	Condition survey
	Folkestone Road		Dover	Dover	Drainage	Multi-agency collaborative working	Folkestone Road and Elms Vale Road (Floodcell 2507)	Flood risk to highway assessment
11300481	Folkestone Road	B2011	Dover	Dover	Road	Surface renewal	To be determined	Condition survey
11300490	Foxborough Hill	C220	Eastry	Dover	Road	Surface preservation	Oak Hill to 30mph/national speed limit signs	Condition survey
11301923	Goodnestone Road	C230	Goodnestone	Dover	Road	Surface preservation	Boyes Lane to Buckland Lane	Condition survey
11300524	Goodnestone Road	C230	Wingham	Dover	Road	Surface preservation	Goodnestone Road to Cave Lane	Condition survey

DOVER								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
11300571	Hamilton Road	B2056	Deal	Dover	Road	Surface preservation	Telegraph Road to Mill Road	Condition survey
11300615	High Street	A257	Wingham	Dover	Road	Surface preservation	Canterbury Road to Preston Hill	Condition survey
11300625	Hobart Crescent	U13502	Dover	Dover	Road	Surface renewal	Entire extents	Condition survey
11300633	Homestead Lane	C265	Sutton	Dover	Road	Surface preservation	East Studdel to Roman Road	Condition survey
11300686	Kingsdown Road	C581	Walmer	Dover	Road	Surface preservation	Granville Road to Alexandra Road (continuation of works to The Beach)	Condition survey
11300742	Lower Road	C218	Staple	Dover	Road	Surface preservation	Durlock Road to Barnsole Road	Condition survey
11300754	Lydden Hill	C587	Denton	Dover	Road	Surface preservation	A2 to Swanton Lane	Condition survey
11300770	Manor Road	B2056	Deal	Dover	Road	Surface preservation	London Road to Mill Hill	Condition survey
11300799	Melbourne Avenue	C657	Dover	Dover	Road	Surface preservation	Green Lane to Selkirk Road	Condition survey
	Mill Hill		Deal	Dover	Drainage	Asset condition survey	Mill Hill and Mill Road Area (Floodcell 3978)	Flood risk to highway assessment
11300857	Napier Road	U13502	Dover	Dover	Road	Surface renewal	Entire extents	Condition survey
11300869	New Street	C220	Ash	Dover	Road	Surface preservation	Saunders Lane to Sandwich Road	Condition survey
11300989	Preston Road	C584	Wingham	Dover	Road	Surface preservation	Wenderton Lane to Nash Road	Condition survey
11300991	Primrose Road	U13513	Dover	Dover	Road	Surface renewal	Entire extents	Condition survey

DOVER								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
11301012	Ramsgate Road	A256	Sandwich	Dover	Road	Surface preservation	Ramsgate Road to East Road	Condition survey
11308772	Sandwich Road	A258	Sholden	Dover	Road	Surface preservation	Bridge Hill to Sholden New Road	Condition survey
11304066	Sandwich Road	A256	Worth	Dover	Road	Surface preservation	Deal Road to Felderland Lane	Condition survey
11301066	Sandwich Road	C562	Eastry	Dover	Road	Surface preservation	High Street to A256	Condition survey
11308772	Sandwich Road	A258	Sholden	Dover	Road	Surface renewal	Sholden New Road to Bettshanger Park roundabout	Condition survey
11301176	St Radigunds Road	U13521	Dover	Dover	Road	Surface renewal	Bunkers Hill Road to Barwick Road	Condition survey
11301183	Staple Road	C218	Wingham	Dover	Road	Surface preservation	Addisham Road to Grove Road	Condition survey
11301189	Station Road	C407	Walmer	Dover	Road	Surface preservation	Dover Road to Sydney Road	Condition survey
11301232	The Beach	C581	Walmer	Dover	Road	Surface preservation	From Clarence Road to Alexandra Road (continuation of works to Kingsdown Road)	Condition survey
11301270	The Street	C548	Preston	Dover	Road	Surface renewal	Court Lane to Grove Road	Condition survey
11301274	The Street	C195	Woodnesborough	Dover	Road	Surface preservation	Oak Hill to A256 Sandwich Bypass	Condition survey
11301398	Winehouse Lane	C473	Capel-le-Ferne	Dover	Road	Surface preservation	New Dover Road to Satmar Lane	Condition survey

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500005	Aerodrome Road	C215	Hawkinge	Folkestone & Hythe	Road	Surface preservation	Haven Drive to Elvington Lane	Condition survey
34503140	Ashford Road	A20	Stanford	Folkestone & Hythe	Road	Surface preservation	500 metres either side of junction with B2067	Condition survey
34500037	Ashford Road	A20	Postling	Folkestone & Hythe	Road	Surface preservation	A20 to Sandling Road	Condition survey
34500039	Ashford Road	A20	Stanford	Folkestone & Hythe	Road	Surface preservation	B2067 To Stone Street	Condition survey
34500034	Ashford Road	C653	New Romney	Folkestone & Hythe	Road	Surface preservation	Five Vents Lane to Cock Reed Lane	Condition survey
34503093	Ashford Road	A20	Newington	Folkestone & Hythe	Road	Surface preservation	Sandling Road to Blue House Lane	Condition survey
34505088	Barrow Hill	A20	Sellindge	Folkestone & Hythe	Road	Surface preservation	B2067 to M20 overbridge	Condition survey
34500109	Bossingham Road	C194	Stelling Minnis	Folkestone & Hythe	Road	Surface preservation	Mill Lane to Wheel Barrow Town	Condition survey
34500185	Canterbury Road	C585	Elham	Folkestone & Hythe	Road	Surface preservation	Bereforstal Hill to Brady Road	Condition survey
34500189	Canterbury Road	A260	Swingfield	Folkestone & Hythe	Road	Surface preservation	Reece Lane to Mansell Lane	Condition survey
34500186	Canterbury Road	A260	Folkestone	Folkestone & Hythe	Road	Surface preservation	Roundabout to Churchill Avenue to Crete Road East	Condition survey
34503121	Canterbury Road	A260	Swingfield	Folkestone & Hythe	Road	Surface preservation	Stockham Lane to Mansell Road	Condition survey
34500246	Church Road	C592	Folkestone	Folkestone & Hythe	Road	Surface preservation	Horn Street to B2063 Risborough Lane	Condition survey

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500270	Coach Road	C212	Swingfield	Folkestone & Hythe	Road	Surface preservation	School Road to Pay Street	Condition survey
34500369	Dymchurch Road	A259	Hythe	Folkestone & Hythe	Road	Surface renewal	Botolphs Bridge Road to 100 metres east of old gravel pit entrance	Condition survey
34500368	Dymchurch Road	A259	Dymchurch	Folkestone & Hythe	Road	Surface preservation	High Knock Estate to Dunstall Lane	Condition survey
34500369	Dymchurch Road	A259	Hythe	Folkestone & Hythe	Road	Surface preservation	Martello Drive to the Dymchurch redoubt	Condition survey
34500443	Forge Hill	C214	Acrise	Folkestone & Hythe	Road	Surface preservation	Acris Park Road to Hoad Road	Condition survey
34500550	Hill Road	A260	Folkestone	Folkestone & Hythe	Road	Surface renewal	Dover Hill roundabout to top of Dover Hill	Condition survey
34500579	Hythe Road	A261	Lympne	Folkestone & Hythe	Road	Surface renewal	Roman Lane to 175 metres north of Pedlinge	Condition survey
34500599	Jurys Gap Road	C345	Lydd	Folkestone & Hythe	Road	Surface preservation	High Street to South Court Farm	Condition survey
34503109	Longage Hill	C194	Lyminge	Folkestone & Hythe	Road	Surface preservation	Green Lane to Canterbury Road	Condition survey
34503129	Maxted Street	U8852	Stelling Minnis	Folkestone & Hythe	Road	Surface preservation	Entire extents	Protection following patching/recycling works:
34500721	Melon Lane	U11433	Ivychurch	Folkestone & Hythe	Road	Surface preservation	Entire extents	Protection following patching/recycling works:
34501894	Midley Wall	C191	Old Romney	Folkestone & Hythe	Road	Surface preservation	Coldharbour Lane to Midley Wall	Condition survey

FOLKESTONE & HYTHE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34500936	Rhee Wall	B2080	Brenzett	Folkestone & Hythe	Road	Surface preservation	Straight Lane to King Street	Condition survey
34503143	Rhee Wall Road	B2080	Snargate	Folkestone & Hythe	Road	Surface preservation	Bowdell Lane to Arrowhead Lane	Condition survey
34500957	Romney Road	B2075	Lydd	Folkestone & Hythe	Road	Surface preservation	A259 to Caldecott Lane	Condition survey
34500967	Rye Road	U13131	Brookland	Folkestone & Hythe	Road	Surface preservation	A259 to A259 (entire extents)	Condition survey
34500978	Sandgate High Street	A259	Folkestone	Folkestone & Hythe	Road	Surface preservation	B2063 to Wilberforce Road	Condition survey
34500999	Seabrook Road	A259	Hythe	Folkestone & Hythe	Road	Surface preservation	Princes Parade to Hospital Hill	Condition survey
34501016	Shorncliffe Road	B2064	Folkestone	Folkestone & Hythe	Road	Surface preservation	Beachborough Road to Bathurst Road	Condition survey
34501016	Shorncliffe Road	A259	Folkestone	Folkestone & Hythe	Road	Surface preservation	Castle Hill Avenue to Earls Avenue	Condition survey
34501091	Station Road	C585	New Romney	Folkestone & Hythe	Road	Surface preservation	Dymchurch Road to Langport Road	Condition survey
34501102	Stone Street	B2068	Stelling Minnis	Folkestone & Hythe	Road	Surface renewal	Wadden Hall to Doghouse Farm	Condition survey
34501102	Stone Street	B2068	Stelling Minnis	Folkestone & Hythe	Road	Surface renewal	Lime Kiln Lane to Grannies Lane	Condition survey

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700021	Arnold Road	U15975	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700036	Bader Walk	U15991	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700043	Bath Street	A226	Gravesend	Gravesham	Road	Surface renewal	Entire extents	Condition survey
15700074	Brewers Road	C7	Cobham	Gravesham	Road	Surface preservation	Woodlands Lane to A2/M2 overbridge	Condition survey
15700079	Brightlands	U22525	Northfleet	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15701407	Buckland Road	C15	Higham	Gravesham	Road	Surface preservation	Gore Green Road to garden centre	Condition survey
15700101	Cambria Crescent	U16050	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700105	Camer Road	C492	Meopham	Gravesham	Road	Surface preservation	Sole Street to Norwood Lane	Condition survey
15700120	Cerne Road	U16066	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700173	Coldharbour Road	C364	Northfleet	Gravesham	Road	Surface preservation	Ladyfields to Hall Road	Condition survey
15700177	Colyer Road	U16108	Northfleet	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700206	Crutches Lane	C16	Higham	Gravesham	Road	Surface preservation	Watling Street to Wainscott Bypass	Condition survey
15700215	Darnley Road	U22957	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700232	Dogwood Close	U16156	Northfleet	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700238	Dover Road	C669	Northfleet	Gravesham	Road	Surface preservation	London Road to Vale Road	Condition survey
15700239	Dover Road East	B261	Northfleet	Gravesham	Road	Surface preservation	Victoria Road to end of houses (before railway bridge)	Condition survey
15700280	Ferndale Road	U16197	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700319	Gore Green Road	C6	Higham	Gravesham	Road	Surface preservation	Sandhill Lane to utility sub-station	Condition survey
15700326	Gravesend Road	A226	Higham	Gravesham	Road	Surface renewal	Medway boundary to Halstead Road	Condition survey
	Gravesend South		Gravesend	Gravesham	Drainage	Asset condition survey	Area between A2 and Dene Holm Road (Floodcell 11742)	Flood risk to highway assessment
15700342	Hall Road	C576	Northfleet	Gravesham	Road	Surface preservation	Springhead Road roundabout to end of houses	Condition survey
15700519	Harmer Street	A226	Gravesend	Gravesham	Road	Surface renewal	The Terrace to Clock Tower	Condition survey
15700353	Harvel Road	C12	Meopham	Gravesham	Road	Surface preservation	Wrotham Road, Meopham to Whitehorse Road	Condition survey
15700370	Hever Court Road	C367	Gravesend	Gravesham	Road	Surface preservation	Miskin Way to Singlewell Road	Condition survey

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700383	Hollands Close	U12333	Shorne	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700418	Kings Drive	U16307	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700437	Leander Drive	U16325	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700445	Leywood Road	C12	Gravesend	Gravesham	Road	Surface preservation	Whitehorse Road to Luxon Road	Condition survey
15700455	London Road	B2175	Northfleet	Gravesham	Road	Surface preservation	St Marks Avenue to Dover Road	Condition survey
15700457	Longfield Road	B260	Meopham	Gravesham	Road	Surface preservation	End of houses (Wrotham Road) to Monk Reed Villas	Condition survey
15700457	Longfield Road	B260	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700461	Lower Higham Road	C2	Gravesend	Gravesham	Road	Surface preservation	Church Lane to Chalk Road	Condition survey
15700520	Milton Road	A226	Gravesend	Gravesham	Road	Surface renewal	Honda Garage to Albion Road	Condition survey
15700536	New Road	U23631	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700576	Palmer Avenue	U16429	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700564	Pelham Road / Old Road West	B261	Northfleet	Gravesham	Road	Surface renewal	Double roundabouts at junction of Old Road West	Condition survey
15700600	Perry Street	C576	Northfleet	Gravesham	Road	Surface renewal	Entire extents	Condition survey
15700614	Porchfield Close	U16454	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15700642	Rochester Road	A226	Gravesend	Gravesham	Road	Surface renewal	Lion Garage roundabout to Abbey Road	Condition survey
15700672	School Lane	C16	Higham	Gravesham	Road	Surface preservation	Taylors Lane to Lands Way	Condition survey
15700700	Springhead Road	B262	Northfleet	Gravesham	Road	Surface preservation	Water Dales to industrial estate	Condition survey
15700738	Stonebridge Road	A226	Northfleet	Gravesham	Road	Surface renewal	Roundabout circulation area and to garage entrance	Condition survey
15700761	Thames Way	U23223	Gravesend	Gravesham	Road	Surface renewal	Covesfield to Stuart Road	Condition survey
15700762/020	Thames Way	A226	Northfleet	Gravesham	Road	Surface renewal	Rosherville Way to Overcliffe	Condition survey
15700762/051	Thames Way	A226	Northfleet	Gravesham	Road	Surface renewal	Springhead roundabout to cement works roundabout	Condition survey
15700799	The Street	C492	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

GRAVESHAM								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
15700829	Valley Drive	U16616	Gravesend	Gravesham	Road	Surface preservation	Hever Court Road to Winchester Crescent	Condition survey
157000829	Valley Drive	U16616	Gravesend	Gravesham	Road	Surface renewal	Old Road East to Whitehill Lane	Condition survey
15701218	Watling Street	A2	Higham	Gravesham	Road	Surface preservation	Carnation Road to A2 slip roundabout	Condition survey
15700876	Whitehill Parade	U16654	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
15701034	Wrotham Road	A227	Gravesend	Gravesham	Road	Surface renewal	Roundabout circulation areas on both east- and westbound slips for A2	Condition survey
15700901	Wrotham Road	A227	Gravesend	Gravesham	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200875	A249 Newham Court roundabout exit	A249	Boxley	Maidstone	Road	Surface renewal	Link road between M20 Junction 7 interchange and Bearsted Road/Newnham Court roundabout	Condition survey
24200477	A249/M20 Junction 7 roundabout	A249	Boxley	Maidstone	Road	Surface renewal	Extents of the M20, Junction 7 interchange	Condition survey
24200019	Allington Way	U2336	Maidstone	Maidstone	Road	Surface preservation	Trafford Close to bottom section	Condition survey
24200039	Ashford Road	A20	Broomfield	Maidstone	Road	Surface preservation	Roundwell to Greenway Court Road	Condition survey
24200125	Biddenden Road	A274	Headcorn	Maidstone	Road	Surface preservation	Frittenden Road to Smarden Road	Condition survey
24200178	Boxley Road	C97	Maidstone	Maidstone	Road	Surface preservation	Lower Boxley Road to Penenden Heath roundabout	Condition survey
24200250	Campbell Road	U2425	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Hayle Road/ Campbell Road junction	Annual review of equipment age, specification and fault rate (11/0433)
24208326	Chart Road	C103	Sutton Valence	Maidstone	Road	Surface preservation	A274 Sutton Valence Hill to Chart Hill Road	Condition survey
24200314	Chilston Road	U12478	Lenham	Maidstone	Road	Surface preservation	Entire extents	Condition survey
24200329	Church Lane	C103	East Sutton	Maidstone	Road	Surface preservation	Workhouse Lane to Charlton Lane	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201530	Claygate	B2162	Marden	Maidstone	Road	Surface renewal	Between Sheephurst Lane and Longend Lane	Condition survey
24201530	Claygate	B2162	Collier Street	Maidstone	Road	Surface preservation	Spenny Lane to Burtons Lane	Condition survey
24208339	Claygate Road	C79	Yalding	Maidstone	Road	Surface preservation	Jarmans Lane to Emmett Hill Lane	Condition survey
24200374	College Road	B2010	Maidstone	Maidstone	Road	Surface preservation	Old Tovil Road to Maidstone gyratory	Condition survey
24207012	Collier Street	B2162	Collier Street	Maidstone	Road	Surface preservation	Darman Lane to Emmett Hill Lane	Condition survey
24200386	Copsewood Way	U12167	Bearsted	Maidstone	Road	Surface preservation	Off Cavendish Way (entire extents)	Condition survey
24200430	Crumps Lane	C101	Ulcombe	Maidstone	Road	Surface preservation	Headcorn Road to Headcorn Road	Protection following patching/recycling works:
24208367	Darman Lane	C53	Marden	Maidstone	Road	Surface preservation	Claygate Road to Pike Fish Lane	Condition survey
24200442	Dean Street	B2010	Tovil	Maidstone	Road	Surface preservation	Lower Road to Burial Ground Road	Condition survey
24200475	East Sutton Road	C102	East Sutton	Maidstone	Road	Surface preservation	A274 to East Sutton Road	Condition survey
24201987	East Sutton Road	C103	East Sutton	Maidstone	Road	Surface preservation	Baker Lane to Church Lane (prison)	Condition survey
24208434	Forstal Road	C349	Boxley	Maidstone	Road	Surface renewal	Between M20 overbridge and Running Horse roundabout	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200581	Frittenden Road	C70	Staplehurst	Maidstone	Road	Surface preservation	A274 to Parkwood Lane	Condition survey
24200621	Goudhurst Road	B2079	Marden	Maidstone	Road	Surface preservation	Sherenden Lane to West End	Condition survey
24200674	Hampstead Lane	B2162	Yalding	Maidstone	Road	Surface preservation	Station Road to Lees Road	Condition survey
24200673	Hampstead Lane	B2162	Nettlestead	Maidstone	Road	Surface preservation	Maidstone Road to Station Road	Condition survey
24200703	Hayle Road	A229	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Hayle Road/ Campbell Road junction	Annual review of equipment age, specification and fault rate (11/0433)
24200711	Headcorn Road	C68	Staplehurst	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Station Road/ Marden Road junction	Annual review of equipment age, specification and fault rate (11/0899)
24200751	High Street	B2010	Yalding	Maidstone	Road	Surface renewal	Between Yalding bridge and Lughorse Lane	Condition survey
24200749	High Street	A299	Staplehurst	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Station Road/ Marden Road junction	Annual review of equipment age, specification and fault rate (11/0899)

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200767	Holland Road	B2012	Maidstone	Maidstone	Road	Surface preservation	Wheeler Street to A249	Condition survey
24200829	King Edward Road	U2639	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Hayle Road/ Campbell Road junction	Annual review of equipment age, specification and fault rate (11/0433)
24200833	Kings Road	C258	Headcorn	Maidstone	Road	Surface renewal	Between A274 and Forge Lane	Condition survey
24200840	Knightrider Street	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Lower Stone Street/ Mote Road junction	Annual review of equipment age, specification and fault rate (11/0403)
24200910	London Road	A20	Maidstone	Maidstone	Road	Surface renewal	Between Terrace Road and Queens Road	Condition survey
24200910	London Road	A20	Maidstone	Maidstone	Road	Surface preservation	Terrace Road to Castle Road	Condition survey
24200919	Loose Road	A229	Maidstone	Maidstone	Road	Surface renewal	Between Armstrong Road and Sheals Crescent (northbound)	Condition survey
24200919	Loose Road	A229	Maidstone	Maidstone	Road	Surface renewal	Between Barton Road and Park Way (southbound)	Condition survey
24200928	Lower Road	B2010	West Farleigh	Maidstone	Road	Surface preservation	Kettle Corner to Smiths Hill	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24200929	Lower Stone Street	A229	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Lower Stone Street/ Mote Road junction	Annual review of equipment age, specification and fault rate (11/0403)
24200990	Maidstone Road	A274	Headcorn	Maidstone	Road	Surface preservation	Miller Court to The Oast (Little Moatenden)	Condition survey
24200992	Maidstone Road	B2079	Marden	Maidstone	Road	Surface preservation	High Street to "Hartridge"	Condition survey
	Maidstone West - Tonbridge Road		Maidstone	Maidstone	Drainage	Asset condition survey	Tonbridge Road and surrounding roads (Floodcell 5544)	Flood risk to highway assessment
24201015	Marden Road	C68	Staplehurst	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Station Road/ Marden Road junction	Annual review of equipment age, specification and fault rate (11/0899)
24201071	Mote Road	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Lower Stone Street/ Mote Road junction	Annual review of equipment age, specification and fault rate (11/0403)
24201071	Mote Road	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Mote Road/ Wat Tyler Way junction	Annual review of equipment age, specification and fault rate (11/0460)
24208130	Old Ham Lane	U1986	Lenham	Maidstone	Road	Surface preservation	Chartway Road to Ham Lane	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201156	Padsole Lane	U2737	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Romney Place/ Padsole Lane/ supermarket access junction	Annual review of equipment age, specification and fault rate (11/0926)
24201156	Padsole Lane	U2737	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Wat Tyler Way/ Padsole Lane junction	Annual review of equipment age, specification and fault rate (11/0459)
24201175	Penenden Heath Road	C349	Penenden Heath	Maidstone	Road	Surface preservation	A249 to Boxley Road	Condition survey
24201178	Penfold Hill/Lower Street	B2163	Leeds	Maidstone	Road	Surface renewal	Between A20 Ashford Road and Forge Lane	Condition survey
24201199	Pilgrims Way	C99	Thurnham	Maidstone	Road	Surface preservation	Broad Street Hill to The Street, Detling	Condition survey
24201212	Plough Wents Road	B2163	Chart Sutton	Maidstone	Road	Surface preservation	Brishing Road to A274 Sutton Road	Condition survey
24201227	Postley Road	U2761	Maidstone	Maidstone	Road	Road reconstruction	Between Armstrong Road and A229 Sheals Crescent	Condition survey
24201249	Queens Road	C394	Maidstone	Maidstone	Road	Surface preservation	A26 Tonbridge Road to A20 London Road	Condition survey
24202045	Ringlestone Road	C182	Boxley	Maidstone	Road	Surface preservation	Hollingbourne Hill to Hogbarn Lane	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201289	Romney Place	U2790	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Romney Place/ Padsole Lane/ supermarket access junction	Annual review of equipment age, specification and fault rate (11/0926)
24201301	Royston Avenue	U12478	Lenham	Maidstone	Road	Surface preservation	Entire extents	Condition survey
24201345	Shenley Road	C91	Headcorn	Maidstone	Road	Surface preservation	A274 to Whitehouse Lane	Condition survey
24201	Shepway - Maidstone		Shepway	Maidstone	Drainage	Asset condition survey	Area between Sutton Road and Northumberland Avenue (Floodcell 5735)	Flood risk to highway assessment
24201382	Smiths Hill	B2163	West Farleigh	Maidstone	Road	Surface renewal	Between Teston Lane and Hunt Street	Condition survey
24201445	Staplehurst Road	A229	Marden	Maidstone	Road	Surface renewal	Between Chart Hill Road and Summerhill Road	Condition survey
24201450	Station Road	A274	Headcorn	Maidstone	Road	Surface preservation	Forge Lane to 150 metres east of railway station	Condition survey
24201452	Station Road	C73	Nettlestead	Maidstone	Road	Surface preservation	Maidstone Road to Hampstead Lane	Condition survey
24201453	Station Road	A229	Staplehurst	Maidstone	Road	Surface preservation	Marden Road to Couchman Green Lane	Condition survey

MAIDSTONE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
24201453	Station Road	A299	Staplehurst	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Station Road/ Marden Road junction	Annual review of equipment age, specification and fault rate (11/0899)
24201156	Superstore access	U2737	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Romney Place/ Padsole Lane/ supermarket access junction	Annual review of equipment age, specification and fault rate (11/0926)
24201493	Teston Lane	B2163	West Farleigh	Maidstone	Road	Surface preservation	A26 to Lower Road	Condition survey
24201549	Tonbridge Road	A26	Teston	Maidstone	Road	Surface preservation	The Opines to Cedar Drive	Condition survey
24201583	Upper Stone Street	A229	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Lower Stone Street/ Mote Road junction	Annual review of equipment age, specification and fault rate (11/0403)
24201610	Wat Tyler Way	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Mote Road/ Wat Tyler Way junction	Annual review of equipment age, specification and fault rate (11/0460)
24201610	Wat Tyler Way	A249	Maidstone	Maidstone	Traffic Signals	Refurbish existing signal-controlled junction	Wat Tyler Way/ Padsole Lane junction	Annual review of equipment age, specification and fault rate (11/0459)
24201650	Wheeler Street	A274	Headcorn	Maidstone	Road	Surface preservation	New Road to Smarden Road	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300080	Blackhall Lane	C340	Sevenoaks	Sevenoaks	Road	Surface preservation	Seal Hollow Road to Park Lane	Condition survey
34300090	Bosville Road	U19864	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300137	Bullfinch Close	U12003	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300166	Cavendish Avenue	U19878	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300172	Chafford Lane	C332	Penshurst	Sevenoaks	Road	Surface preservation	Fordcombe Road to Bradley Road	Condition survey
34303078	Chequers Hill	B2027	Chiddingstone	Sevenoaks	Road	Surface preservation	Ide Hill Road to railway bridge	Condition survey
34303078	Chequers Hill	B2027	Chiddingstone	Sevenoaks	Road	Surface renewal	The Close to the railway overbridge (Wheatsheaf Pub)	Condition survey
34300197	Chevening Road	U1182	Sundridge	Sevenoaks	Road	Surface preservation	Ovenden Road to Sundridge	Condition survey
34300202	Chipstead Lane	C303	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34301377	Christies Avenue	A224	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300236	Cold Arbor Road	B2042	Chevening	Sevenoaks	Road	Surface preservation	A21 Flyover to Dibden Lane	Condition survey
34300241	Collet Road	U12147	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300268	Cray Road	B258	Crockenhill	Sevenoaks	Road	Surface renewal	Goldsel Road to county boundary	Condition survey
34300268	Cray Road	B258	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300284	Croydon Road	B2024	Westerham	Sevenoaks	Road	Surface preservation	Pilgrims Way to Farley Lane	Condition survey
34300310	Dippers Close	U12806	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300325	Edgar Close	U12907	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300360	Fawkham Road	C269	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34303062	Fordcombe Road	B2188	Penshurst	Sevenoaks	Road	Surface preservation	District boundary to Chafford Lane	Condition survey
34300378	Fordcombe Road	B2188	Penshurst	Sevenoaks	Road	Surface preservation	Grove Road to Penshurst	Condition survey
34300410	Goldsel Road	B258	Swanley	Sevenoaks	Road	Surface renewal	Cray Road to M20 bridge	Condition survey
34305041	Gorse Hill	A20	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300425	Granville Road	U1208	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300431	Green Court Road	B258	Crockenhill	Sevenoaks	Road	Surface preservation	Stones Cross Road to Green Court Road	Condition survey
34300432	Green Lane	B2042	Hever	Sevenoaks	Road	Surface preservation	Coopers Corner to Roodlands Lane	Condition survey
34300432	Green Lane	B2042	Hever	Sevenoaks	Road	Surface renewal	Southbrook Lane to Coopers Corner Road.	Condition survey
34300434	Greenfield	U12886	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300443	Greystone Park	U12231	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300452	Halstead Lane	C301	Knockholt	Sevenoaks	Road	Surface preservation	Rushmore Hill to Halstead village gateway	Condition survey
34300482	Hever Road	C314	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300496	High Street	B2027	Leigh	Sevenoaks	Road	Surface preservation	Ensfield Lane to Powder Mill Lane	Condition survey
34300508	Hildenborough Road	B2027	Leigh	Sevenoaks	Road	Surface renewal	Rings Hill to The Green	Condition survey
34301760	Hosey Common Road	B2026	Westerham	Sevenoaks	Road	Surface preservation	Hosey Hill to Crockenham Hill	Condition survey
34300547	Hubbards Hill	C300	Sevenoaks Weald	Sevenoaks	Road	Surface preservation	Various sections from Glebe Road to bridge over A21	Protection following patching/recycling works:
34300551	Ide Hill Road	B2042	Sundridge	Sevenoaks	Road	Surface preservation	Coopers Corner to Ide Hill	Condition survey
34300621	London Road	A20	West Kingsdown	Sevenoaks	Road	Surface preservation	Ash Lane to Forge Lane	Condition survey
34300621	London Road	A20	West Kingsdown	Sevenoaks	Road	Surface preservation	Colin Chapman Way to Millfield	Condition survey
34300614	London Road	A224	Dunton Green	Sevenoaks	Road	Surface renewal	Leonard Road to London Road	Condition survey
34300615	London Road	A20	Farningham	Sevenoaks	Road	Surface preservation	Scratchers Lane to Colin Chapman Way	Condition survey
34300694	Maidstone Road	B2173	Swanley	Sevenoaks	Road	Surface preservation	Birchwood Road to Bartholomew Way	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34300693	Maidstone Road	A25	Seal	Sevenoaks	Road	Surface preservation	Pillar Box Lane to Seal gateway red surfacing	Condition survey
34300693	Maidstone Road	A25	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300699	Main Road	A25	Sundridge	Sevenoaks	Road	Surface preservation	Dry Hill Lane to Church Road (crossroads)	Condition survey
34300698	Main Road	C450	Knockholt	Sevenoaks	Road	Surface preservation	Pound Lane to Cudham Lane South	Condition survey
34300697	Main Road	B2026	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300747	Mill Lane	U19954	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300763	Morants Court Road	A224	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300793	Noahs Ark	C310	Seal	Sevenoaks	Road	Surface preservation	Honey Pot Lane to Tanners Cross	Condition survey
34300857	Parkfield	U14639	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34300874	Penshurst Road	B2027	Leigh	Sevenoaks	Road	Surface preservation	Ensfield Road to Penshurst Road	Condition survey
34300875	Penshurst Road	B2176	Penshurst	Sevenoaks	Road	Surface preservation	High Street Penshurst to Moorden Lane	Condition survey
34300954	Riverside	C279	Eynsford	Sevenoaks	Road	Surface preservation	A225 High Street to Sparepenny Lane	Condition survey
34301001	School Lane	C292	West Kingsdown	Sevenoaks	Road	Surface preservation	A20 to St Clere Hill Road	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34301005	Seal Hollow Road	B2019	Sevenoaks	Sevenoaks	Road	Surface preservation	Blackhalls Lane to A225 High Street	Condition survey
	Sevenoaks Bat and Ball		Greatness	Sevenoaks	Drainage	Asset condition survey	East of St. Johns Hill and north of Seal Road (Floodcell 3978)	Flood risk to highway assessment
34301020	Shenden Way	U19994	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34301025	Shoreham Lane	C325	Halstead	Sevenoaks	Road	Surface preservation	A224 roundabout to Station Road	Condition survey
34301031	Shoreham Road	A225	Shoreham	Sevenoaks	Road	Surface preservation	Station Road to Preston railway bridge	Condition survey
34301031	Shoreham Road	A225	Shoreham	Sevenoaks	Road	Surface renewal	To be determined	Condition survey
34303071	Stick Hill	B2026	Edenbridge	Sevenoaks	Road	Surface renewal	Entire extents	Condition survey
	Swanley Central		Swanley	Sevenoaks	Drainage	Asset condition survey	Area to south of London Road, north of railway line (Floodcell 9098)	Flood risk to highway assessment
	Swanley South		Swanley	Sevenoaks	Drainage	Asset condition survey	Cranleigh Drive and Pinks Hill Areas (Floodcell 8879)	Flood risk to highway assessment
34300377	The Lane	C332	Penshurst	Sevenoaks	Road	Surface preservation	Spring Hill to Poundsbridge Lane	Condition survey
34301177	The Street	C271	Horton Kirby	Sevenoaks	Road	Surface preservation	Bull Hill to Rays Hill	Condition survey
34301191	Top Dartford Road	B258	Swanley	Sevenoaks	Road	Surface renewal	Victoria Hill Road to Puddle Dock Road	Condition survey

SEVENOAKS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
34301191	Top Dartford Road	B258	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
34301209	Valley Drive	U13922	Sevenoaks	Sevenoaks	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39000123	Borden Lane	C120	Borden	Swale	Road	Surface preservation	Bannister Hill to A2	Condition survey
39000150	Breach Lane	C94	Upchurch	Swale	Road	Surface preservation	Honeywell Lane to A2	Condition survey
39000174	Brogdale Road	C96	Faversham	Swale	Road	Surface preservation	A2 to M2 overbridge	Condition survey
39000219	Castle Road	B2005	Sittingbourne	Swale	Road	Road reconstruction	Various sections between Dolphin Road and Eurolink Way	Condition survey
39002025	Chequers Hill	C116	Doddington	Swale	Road	Surface preservation	Down Court Road to The Street	Condition survey
39000332	Crescent Road	B2040	Faversham	Swale	Road	Surface renewal	East Street to Court Street Road	Condition survey
39000384	Doddington Lane	C116	Doddington	Swale	Road	Surface preservation	Down Court Road to Kingsdown Road	Condition survey
39000414	East Street	C607	Sittingbourne	Swale	Road	Surface preservation	Bell Road to South Avenue	Condition survey
39001718	Eastchurch Road	B2008	Eastchurch	Swale	Road	Surface renewal	Lower Road to roundabout	Condition survey
39000447	Faversham Road	C258	Newnham	Swale	Road	Surface preservation	Wichling Crossroads to A2 London Road	Condition survey
39000546	Grovehurst Road	C599	Sittingbourne	Swale	Road	Surface preservation	Sheppey Way to A249	Condition survey
39000546	Grovehurst Road	B2005	Sittingbourne	Swale	Traffic Signals	Refurbish existing signal-controlled crossing	Near Newman Drive	Annual review of equipment age, specification and fault rate (05/0707)
39000603	Highsted Road	C95	Sittingbourne	Swale	Road	Surface preservation	Bell Road to Cromer Road	Condition survey

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39000717	Leysdown Road	B2231	Eastchurch	Swale	Road	Surface preservation	Including whole of Shellness Road, to Lower Road roundabout	Condition survey
39000733	London Road	A249	Sittingbourne	Swale	Traffic Signals	Refurbish existing signal-controlled crossing	Near Chalkwell Road	Annual review of equipment age, specification and fault rate (05/0193)
39000740	Loose Down Road	U11187	Throwley	Swale	Road	Surface preservation	Entire extents	Condition survey
39000742	Love Lane	B2040	Faversham	Swale	Road	Surface preservation	Graveney Road to A2	Condition survey
39000745	Lower Hartlip Road	C94	Hartlip	Swale	Road	Surface preservation	Mount Lane to Yelsted Road	Condition survey
39000760	Lynsted Lane	C116	Lynsted	Swale	Road	Surface preservation	A2 to Vallium Drive	Condition survey
39000834	Mill Way	B2006	Sittingbourne	Swale	Road	Surface renewal	Tribune Drive to St Paul Street roundabout	Condition survey
39001812	Millennium Way	A250	Sheerness	Swale	Traffic Signals	Refurbish existing signal-controlled crossing	Near Rose Street	Annual review of equipment age, specification and fault rate (05/0941)
39000844	Minster Road	B2008	Minster-On-Sea	Swale	Road	Surface preservation	Back Lane to Halfway House	Condition survey
39001889	Oad Street	C120	Bredgar	Swale	Road	Surface preservation	Pett Lane to Vigo Lane	Condition survey
39000917	Oast Lane	U11188	Throwley	Swale	Road	Surface preservation	Entire extents	Condition survey
39001144	South Road	B2040	Faversham	Swale	Road	Surface renewal	Pedestrian crossing at the junction with West Street	Condition survey

SWALE								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
39001193	Staplehurst Road	B2006	Sittingbourne	Swale	Road	Surface preservation	Vellum Drive roundabout to Chalkwell Road roundabout	Condition survey
39010224	Swale Way	B2005	Sittingbourne	Swale	Road	Surface preservation	Barge Way to B2005 roundabout	Condition survey
39010224	Swale Way	B2005	Sittingbourne	Swale	Road	Surface preservation	Castle Road to Great Easthall Way	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300028	Albion Road	B2053	Broadstairs	Thanet	Road	Surface preservation	Church Street to Callis Court Road	Condition survey
40300146	Boundary Road	A255	Ramsgate	Thanet	Road	Surface preservation	Herenson Road to Alma Road	Condition survey
40300146	Boundary Road	A255	Ramsgate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Boundary Road/ King Street junction	Annual review of equipment age, specification and fault rate (08/0069)
40300200	Canterbury Road	A28	St Nicholas at Wade	Thanet	Road	Surface renewal	St Nicholas at Wade roundabout to Seamark Road	Condition survey
40302190	Canterbury Road	A28	Birchington	Thanet	Traffic Signals	Refurbish existing signal-controlled crossing	Near Park Lane	Annual review of equipment age, specification and fault rate (08/0532)
40300221	Cecil Square	C503	Margate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Cecil Square/ Hawley Street junction	Annual review of equipment age, specification and fault rate (08/0541)
40300222	Cecil Street	B2055	Margate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Cecil Square/ Hawley Street junction	Annual review of equipment age, specification and fault rate (08/0541)
40303150	Ebbsfleet Lane North	C579	Margate	Thanet	Road	Surface preservation	Brook Lane to A256	Condition survey
40300524	Foreland Avenue	C432	Margate	Thanet	Road	Surface preservation	Northdown Park Road to Northdown Road	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300527	Fort Crescent	B2051	Margate	Thanet	Road	Surface renewal	Zion Place to Fort Promenade	Condition survey
40300549	George Hill Road	B2052	Margate	Thanet	Road	Surface preservation	East Northdown Garden Centre to Percy Avenue	Condition survey
40300629	Hartsdown Road	B2052	Margate	Thanet	Road	Surface preservation	George V Avenue to Shottendane Road	Condition survey
40300637	Hawley Street	B2055	Margate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Cecil Square/ Hawley Street junction	Annual review of equipment age, specification and fault rate (08/0541)
40300648	Hereson Road	A255	Ramsgate	Thanet	Road	Surface preservation	Victoria Road to Montefiore Avenue	Condition survey
40300648	Hereson Road	A255	Ramsgate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Boundary Road/ King Street junction	Annual review of equipment age, specification and fault rate (08/0069)
40300708	Joss Gap Road	B2052	Broadstairs	Thanet	Road	Surface preservation	Elmwood Road to Convent Road	Condition survey
40300728	King Street	C421	Ramsgate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Boundary Road/ King Street junction	Annual review of equipment age, specification and fault rate (08/0069)
40300789	London Road	B2054	Ramsgate	Thanet	Road	Surface preservation	Warre Avenue to St Mildreds Avenue	Condition survey
40300821	Manston Road	B2050	Minster	Thanet	Road	Surface preservation	B2050 Manston Road to Spitfire Museum	Condition survey
40300819	Manston Road	B2050	Manston	Thanet	Road	Surface preservation	Manston Court Road to A256	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300822	Manston Road	B2050	Ramsgate	Thanet	Road	Surface preservation	Newington Road to school	Condition survey
40300818	Manston Road	B2050	Birchington	Thanet	Road	Surface preservation	Park Lane to Shottendane Lane	Condition survey
40300819	Manston Road	B2050	Manston	Thanet	Road	Surface renewal	Various sections	Condition survey
	Margate		Margate	Thanet	Drainage	Asset condition survey	King Street and Hawley Street (Floodcell 9960)	Flood risk to highway assessment
40300826	Margate Road	A254	Ramsgate	Thanet	Road	Surface preservation	Newlands to Boundary Road	Condition survey
40300879	Minster Road	B2190	Minster	Thanet	Road	Surface preservation	Hengist Way to B2190	Condition survey
40303086	Monkton Street	C578	Monkton	Thanet	Road	Surface preservation	Prospect Road to primary school	Condition survey
40300915	Nethercourt Hill	A255	Ramsgate	Thanet	Road	Surface renewal	Whole length from Canterbury Road East to High Street St Lawrence	Condition survey
40300921	Newington Road	B2014	Ramsgate	Thanet	Road	Surface preservation	Sterling Way to Princes Avenue	Condition survey
40300934	North Foreland Hill	B2052	Broadstairs	Thanet	Road	Surface preservation	North Foreland Avenue to car park	Condition survey
40300938	Northdown Hill	B2053	Broadstairs	Thanet	Road	Surface preservation	Victoria Avenue to Northdown Road	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40300941	Northdown Road	C432	Margate	Thanet	Road	Surface preservation	Section one: Queen Elizabeth Avenue to Foreland Avenue, section two: Foreland Avenue to Holly Lane, section three: Northumberland Avenue to Princes Gardens	Condition survey
40300979	Palm Bay Avenue	B2051	Margate	Thanet	Road	Surface preservation	Clarence Avenue to Princess Margaret Avenue	Condition survey
40300990	Park Lane	B2050	Birchington	Thanet	Road	Surface preservation	Brunswick To Canterbury Road	Condition survey
	Ramsgate Central		Ramsgate	Thanet	Drainage	Asset condition survey	St. Luke's Avenue and surrounding roads (Floodcell 8244)	Flood risk to highway assessment
	Ramsgate Harbour		Ramsgate	Thanet	Drainage	Multi-agency collaborative working	Areas in and leading up to Ramsgate Harbour (Floodcell 8129)	Flood risk to highway assessment
	Ramsgate North		Ramsgate	Thanet	Drainage	Multi-agency collaborative working	Ramsgate North - Whitehall (Floodcell 8335)	Flood risk to highway assessment
40301080	Ramsgate Road	A254	Margate	Thanet	Road	Surface preservation	B2052 to Enterprise Road	Condition survey
40301079	Ramsgate Road	A255	Broadstairs	Thanet	Road	Surface preservation	Ramsgate Road roundabout to King Edward Avenue	Condition survey

THANET								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40301160	Seamark Road	C224	Monkton	Thanet	Road	Surface preservation	Entire extents (A28 to A253)	Condition survey
40301267	St Peters Road	A255	Margate	Thanet	Road	Surface preservation	Victoria Road to Addiscombe Road	Condition survey
40301388	Union Crescent	U14349	Margate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Cecil Square/ Hawley Street junction	Annual review of equipment age, specification and fault rate (08/0541)
40301420	Victoria Road	B2054	Ramsgate	Thanet	Traffic Signals	Refurbish existing signal-controlled junction	Boundary Road/ King Street junction	Annual review of equipment age, specification and fault rate (08/0069)
40301455	Wellington Crescent	B2054	Ramsgate	Thanet	Road	Surface preservation	Victoria Parade to Albion Place	Condition survey
40301468	Westbrook Avenue	C424	Margate	Thanet	Road	Surface preservation	Rancorn Road to Norman Road	Condition survey
40301480	Westgate Bay Avenue	C424	Margate	Thanet	Road	Surface preservation	St Mildreds Road to Norman Road	Condition survey
40301485	Westwood Road	A256	Broadstairs	Thanet	Road	Surface renewal	From Northwood Road to A254	Condition survey
40301536	Zion Place	B2055	Margate	Thanet	Road	Surface renewal	Entire extents	Condition survey

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600033	Ashton Way	A228	West Malling	Tonbridge & Malling	Road	Surface renewal	Link road between A20 London Road and A228 dual carriageway	Condition survey
40600136	Brook Street	C48	Tonbridge	Tonbridge & Malling	Road	Surface preservation	Upper Hayesden Lane to 300 metres before A26	Condition survey
40600170	Castle Way	A228	Leybourne	Tonbridge & Malling	Road	Surface renewal	Extents of M20 Junction 4 interchange /roundabout	Condition survey
40600217	Clare Lane	C27	East Malling	Tonbridge & Malling	Road	Surface preservation	Winterfield Lane to Mill Lane	Condition survey
40600395	Gravesend Road	A227	Wrotham	Tonbridge & Malling	Road	Surface renewal	Between A20 roundabout and Harvel Road	Condition survey
40601388	Hale Street By Pass	A228	East Peckham	Tonbridge & Malling	Road	Surface preservation	B2015 Maidstone Road to A228 Whetsted Road	Condition survey
40600469	Holborough Road	C491	Snodland	Tonbridge & Malling	Road	Surface preservation	A228 To Constitution Hill	Condition survey
40606160	Leybourne By Pass	A228	Leybourne	Tonbridge & Malling	Road	Surface renewal	Between M20 Junction 4 interchange and roundabout with Bull Road	Condition survey
40600588	London Road	A20	West Malling	Tonbridge & Malling	Road	Surface renewal	Between Ashton Way and Town Hill	Condition survey

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600589	London Road	A20	Wrotham	Tonbridge & Malling	Road	Surface renewal	Between roundabouts with A227 Gravesend Road and Old Coach Road	Condition survey
40600589	London Road	U14300	Wrotham	Tonbridge & Malling	Road	Surface preservation	M20 roundabout to Ash Lane	Condition survey
40600582	London Road	B245	Hildenborough	Tonbridge & Malling	Road	Surface preservation	Mill Lane to Morleys roundabout	Condition survey
40600580	London Road	A20	Ditton	Tonbridge & Malling	Road	Surface preservation	New Hythe Lane to Station Road	Condition survey
40600657	Maidstone Road	A25	Platt	Tonbridge & Malling	Road	Surface renewal	Between Minters Orchard and Grange Road	Condition survey
40600657	Maidstone Road	A25	Platt	Tonbridge & Malling	Road	Surface preservation	Crouch Lane to Grange Road	Condition survey
40600880	Red Hill	C254	Wateringbury	Tonbridge & Malling	Road	Surface preservation	30mph speed limit (Wateringbury end) to North Pole Road	Condition survey
40600905	Rochester Road	C21	Wouldham	Tonbridge & Malling	Road	Surface preservation	All Saints Church to county boundary	Condition survey
40600954	Seven Mile Lane	B2016	Mereworth	Tonbridge & Malling	Road	Surface renewal	Between Beech Road and roundabout with A26	Condition survey
40600959	Sevenoaks Road	A25	Borough Green	Tonbridge & Malling	Road	Surface renewal	Between Western Road and roundabout with Dark Hill Road	Condition survey

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40600971	Shipbourne Road	A227	Tonbridge	Tonbridge & Malling	Road	Surface preservation	The Ridgeway to Yardley Park Road	Condition survey
40600971	Shipbourne Road	A227	Tonbridge	Tonbridge & Malling	Road	Surface preservation	White Cottage Road to The Ridgeway	Condition survey
40600980	Snodland By-Pass	A228	Snodland	Tonbridge & Malling	Road	Surface preservation	Malling Road to Sort Mill Road	Condition survey
	Snodland Stream Catchment		Snodland	Tonbridge & Malling	Drainage	Multi-agency collaborative working	Catchment to the Snodland Stream (Floodcell 7218)	Flood risk to highway assessment
40601027	Stocks Green Road	B2027	Hildenborough	Tonbridge & Malling	Road	Surface preservation	Leigh Road to A21	Condition survey
40601060	Teston Road	C47	West Malling	Tonbridge & Malling	Road	Surface preservation	Offham to Leonards Street	Condition survey
40601096	The Orpines	U12995	Wateringbury	Tonbridge & Malling	Road	Surface preservation	Entire extents	Protection following patching/recycling works:
	Tonbridge		Tonbridge	Tonbridge & Malling	Drainage	Asset condition survey	East of Quarry Hill Road, Pembury Road and Vale Road (Floodcell 3978)	Flood risk to highway assessment
40601126	Tonbridge Road	A227	Ightham	Tonbridge & Malling	Road	Surface preservation	Back Lane to Mill Lane	Condition survey
40601125	Tonbridge Road	B245	Hildenborough	Tonbridge & Malling	Road	Surface renewal	Between Orchard Lea and Half Moon Lane	Condition survey
40601130	Tonbridge Road	A26	Wateringbury	Tonbridge & Malling	Road	Surface renewal	Crossroads with Bow Road/Red Hill	Condition survey

TONBRIDGE & MALLING								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
40601160	Upper Hayesden Lane	C48	Tonbridge	Tonbridge & Malling	Road	Surface preservation	A21 overbridge to Brook Street	Condition survey
40601184	Walderslade Woods	A2045	Walderslade	Tonbridge & Malling	Road	Surface renewal	Between Bridgewood roundabout and Taddington Woods Lane	Condition survey
40601184	Walderslade Woods	A2045	Aylesford	Tonbridge & Malling	Road	Surface preservation	Impton Lane to Robin Hood Lane	Condition survey
40601194	Wateringbury Road	C254	East Malling	Tonbridge & Malling	Road	Surface preservation	Sweets Lane to North Pole Road	Condition survey
40601267	Wrotham Road	A227	Borough Green	Tonbridge & Malling	Road	Surface preservation	Bull Lane (roundabout) to Borough Green Road	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41102133	Angley Road	A229	Cranbrook	Tunbridge Wells	Road	Surface preservation	Wilsley Pound roundabout to Rugby Club	Condition survey
41100021	Angley Road	A229	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100036	Ashurst Hill	A264	Speldhurst	Tunbridge Wells	Road	Surface preservation	County Boundary to Ashurst church	Condition survey
41100037	Ashurst Road	A264	Speldhurst	Tunbridge Wells	Road	Surface preservation	Ashurst church to Fordecombe Road	Condition survey
41100047	Badsell Road	B2017	Capel	Tunbridge Wells	Road	Surface preservation	Colts Hill roundabout to Maidstone Road	Condition survey
41100052	Balcombes Hill	B2079	Goudhurst	Tunbridge Wells	Road	Surface preservation	Maypole Lane to Goudhurst Road	Condition survey
41100071	Bedgebury Road	B2079	Goudhurst	Tunbridge Wells	Road	Surface renewal	300 metres north to junction with private lane (opposite Marlingate Farm)	Condition survey
41100071	Bedgebury Road	B2079	Goudhurst	Tunbridge Wells	Road	Surface renewal	Marlingate Farm to Pattenden Farm	Condition survey
41100071	Bedgebury Road	B2079	Goudhurst	Tunbridge Wells	Road	Surface renewal	Old railway bridge to Peasley Lane	Condition survey
41101170	Benenden Road	B2086	Cranbrook	Tunbridge Wells	Road	Surface preservation	Tilsden Lane to Babbs Lane	Condition survey
41100099	Birling Road	U15357	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100160	Bushy Gill	U12494	Rusthall	Tunbridge Wells	Road	Surface preservation	Entire extents	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100245	Common Road	U23771	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100249	Coneyburrow Road	U21043	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100263	Cranbrook Road	B2086	Benenden	Tunbridge Wells	Road	Surface preservation	New Pond Road to Babbs Lane	Condition survey
41100272	Crook Road	C52	Brenchley	Tunbridge Wells	Road	Surface preservation	Brenchley Road to Pearsons Green Road	Condition survey
41100321	Earls Road	U21075	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41101421	Ensfield Road	C61	Bidborough	Tunbridge Wells	Road	Surface preservation	Hayesden Lane to Sevenoaks boundary	Condition survey
41100341	Fairmile Road	U21088	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41102037	Five Oak Green Road	B2017	Capel	Tunbridge Wells	Road	Surface preservation	Whetsted Road to Alders Road	Condition survey
41100357	Fordcombe Road	B2188	Speldhurst	Tunbridge Wells	Road	Surface preservation	Ashurst Road to Sevenoaks district boundary	Condition survey
41100369	Frant Road	A267	Tunbridge Wells	Tunbridge Wells	Road	Surface renewal	Forest Road to Bayham Road	Condition survey
41100370	Free Heath Road	C57	Lamberhurst	Tunbridge Wells	Road	Surface preservation	Neills Road to Furnace Lane	Condition survey
41100390	Furnace Lane	B2169	Lamberhurst	Tunbridge Wells	Road	Surface preservation	County boundary (Bayham Abbey) to Town Hill	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100396	Gedges Hill	B2160	Brenchley	Tunbridge Wells	Road	Surface preservation	Maynards Lane to 'S' bends	Condition survey
41100403	Glassenbury Road	B2085	Cranbrook	Tunbridge Wells	Road	Surface preservation	A262 (Peacock public house) to A229	Condition survey
41100417	Goudhurst Road	A262	Lamberhurst	Tunbridge Wells	Road	Surface preservation	A262 (adjacent to old air strip)	Condition survey
41100435	Groombridge Hill	B2110	Speldhurst	Tunbridge Wells	Road	Surface preservation	Ashurst Road to county boundary	Condition survey
41100463	Hastings Road	B2244	Hawkhurst	Tunbridge Wells	Road	Surface preservation	The Moor, Hawkhurst to Conghurst Lane	Condition survey
41100470	Hawkhurst Road	A268	Hawkhurst	Tunbridge Wells	Road	Surface preservation	Slip Mill Lane to Water Lane (Tubbs Lake)	Condition survey
41100497	High Street	C560	Pembury	Tunbridge Wells	Traffic Signals	Refurbish existing signal-controlled junction	Woodsgate Corner	Annual review of equipment age, specification and fault rate (12/0596)
41100565	Horsmonden Road	B2162	Lamberhurst	Tunbridge Wells	Road	Surface preservation	A21 roundabout to Church Road	Condition survey
41100565	Horsmonden Road	B2162	Lamberhurst	Tunbridge Wells	Road	Surface preservation	A262 to Tong Lane	Condition survey
41100562	Lady Oak Lane	B2079	Goudhurst	Tunbridge Wells	Road	Surface renewal	A21 to main Bedgebury Forest car park entrance	Condition survey
41100562	Lady Oak Lane	B2079	Goudhurst	Tunbridge Wells	Road	Surface renewal	Bedgebury Forest car park to Park Lane	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41102061	Lamberhurst Quarter	A21	Lamberhurst	Tunbridge Wells	Road	Surface preservation	Old A21 from bend to School Hill	Condition survey
41102064	Langton Road	A264	Speldhurst	Tunbridge Wells	Road	Surface preservation	Broom Lane to Ashurst Road	Condition survey
41100571	Langton Road	A264	Tunbridge Wells	Tunbridge Wells	Road	Surface preservation	The Bothy through to Major Yorks Road	Condition survey
41100607	Lower Green Road	C571	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100615	Maidstone Road	B2162	Matfield	Tunbridge Wells	Road	Surface preservation	A21 to Kings Toll Road	Condition survey
41100615	Maidstone Road	B2162	Horsmonden	Tunbridge Wells	Road	Surface preservation	Brenchley Road (crossroads) to Kirkins Drive (The Foundry)	Condition survey
41100615	Maidstone Road	B2160	Brenchley	Tunbridge Wells	Road	Surface preservation	Kippings Cross to Sophurst Lane	Condition survey
41100620	Major Yorks Road	C383	Culverden	Tunbridge Wells	Road	Surface preservation	Eridge Road to Bishops Down	Condition survey
41100643	Megrims Hill	A268	Sandhurst	Tunbridge Wells	Road	Surface preservation	Conghurst Lane to Silverden Lane	Condition survey
41100665	Molyneux Park Road	U21201	Tunbridge Wells	Tunbridge Wells	Road	Surface preservation	Mount Ephraim to Earls Road	Condition survey
41100690	Neills Road	C57	Lamberhurst	Tunbridge Wells	Road	Surface preservation	Free Heath Road to Coulsey Wood crossroads (county boundary)	Protection following patching/recycling works:
41100716	North Road	B2079	Goudhurst	Tunbridge Wells	Road	Surface preservation	A262 to Chequers Road	Condition survey

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100775	Pembury Northern Bypass	A228	Pembury	Tunbridge Wells	Traffic Signals	Refurbish existing signal-controlled junction	Woodsgate Corner	Annual review of equipment age, specification and fault rate (12/0596)
41100778	Pembury Road	A228	Pembury	Tunbridge Wells	Traffic Signals	Refurbish existing signal-controlled junction	Woodsgate Corner	Annual review of equipment age, specification and fault rate (12/0596)
41102079	Penhurst Road	B2176	Bidborough	Tunbridge Wells	Road	Surface renewal	Junction with Poundsbridge Lane to district boundary	Condition survey
41100789	Pennington Road	U21240	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100791	Penshurst Road	B2176	Bidborough	Tunbridge Wells	Road	Surface preservation	Hayesden Lane to district boundary	Condition survey
41102093	Rocks Hill	A229	Frittenden	Tunbridge Wells	Road	Surface preservation	Grandshore Lane to London Lane	Condition survey
41100078	Rolvenden Road	B2068	Benenden	Tunbridge Wells	Road	Surface preservation	Stepneyford Lane to Walkhurst Road	Condition survey
41100856	Royal Chase	U21266	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100862	Rydal Drive	U21269	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100867	Salisbury Road	U21278	Rusthall	Tunbridge Wells	Road	Surface preservation	Langton Road to Ruscetts	Condition survey
41100899	Silverdale Lane	U21394	Tunbridge Wells	Tunbridge Wells	Road	Surface preservation	Upper Grosvenor Road to Silverdale	Protection following patching/recycling works:

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41100926	Spelmonden Road	C56	Horsmonden	Tunbridge Wells	Road	Surface preservation	A262 (Spelmonden Road) to B2162 Lamberhurst Road	Condition survey
41100930	Spray Hill	A21	Brenchley	Tunbridge Wells	Road	Surface preservation	B2169 The Down to Lamberhurst High Street	Condition survey
41100945	St Johns Road	A26	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41100945	St Johns Road	A26	Tunbridge Wells	Tunbridge Wells	Traffic Signals	Refurbish existing signal-controlled crossing	Near East Cliff Road	Annual review of equipment age, specification and fault rate (12/0878)
41100946	St Lawrence Avenue	U1681	Tunbridge Wells	Tunbridge Wells	Soft Landscape	To be assessed	To be assessed	Green infrastructure enhancement
41102112	The Common	A229	Cranbrook	Tunbridge Wells	Road	Surface preservation	50 metres from Wilsey Pound roundabout to Common Road	Condition survey
41101030	The Slade	B2100	Lamberhurst	Tunbridge Wells	Road	Surface preservation	Furnace Lane to Hog Hole Lane	Condition survey
41101030	The Slade	B2100	Lamberhurst	Tunbridge Wells	Road	Surface renewal	The Down to Wise Acre Close	Condition survey
41101031	The Street	B2086	Benenden	Tunbridge Wells	Road	Surface preservation	New Pond Road to Walkhurst Road	Condition survey
41101041	Tonbridge Road	C560	Pembury	Tunbridge Wells	Traffic Signals	Refurbish existing signal-controlled junction	Woodsgate Corner	Annual review of equipment age, specification and fault rate (12/0596)

TUNBRIDGE WELLS								
USRN	**Road Name**	**Road No.**	**Town/ Village**	**District**	**Asset**	**Description of Works**	**Extents**	**Identification**
41102124	Tudeley Road	B2017	Capel	Tunbridge Wells	Road	Surface preservation	Hartlake Road to Summerhill School (The Levels)	Condition survey
41102124	Tudeley Road	B2017	Capel	Tunbridge Wells	Road	Surface renewal	The Round House to Hartlake Road	Condition survey
41101106	Whetsted Road	C572	Capel	Tunbridge Wells	Road	Surface preservation	Loop by duck pond (A228 to A228)	Condition survey
41101133	Woodlands Road	U21375	High Brooms	Tunbridge Wells	Road	Surface preservation	Silverdale to Homewood Road	Protection following patching/recycling works:

KENT COUNTY COUNCIL – PROPOSED RECORD OF DECISION

DECISION TO BE TAKEN BY:	DECISION NO:
David Brazier, Cabinet Member for Highways & Transport	21/00028

For publication

Key decision: YES

Subject Matter / Title of Decision
Highways Asset Management Plan 2021/22-2025/26 – an Investment Strategy and Action Plan for the next five years

Decision:
As Cabinet Member for Highways and Transport, I agree to adopt and publish a single Highways Asset Management Plan document that sets out our approach to highways asset management over the next five years.

Reason(s) for decision:
Over the past years KCC has significantly developed its approach to highways asset management enabling KCC to maximise Department for Transport (DfT) funding.

Despite making significant progress in recent years, KCC, as other highways authorities, are in an increasingly challenging environment, with deteriorating assets, increasing traffic volumes, uncertainty around future funding and, more recently, facing the impacts of the global pandemic. It is therefore timely to develop a new single and updated HAMP document, to identify a clear investment strategy and associated action plan for the future that is fit for purpose and recognises the challenges and opportunities ahead.

Cabinet Committee recommendations and other consultation:
Report to Environment and Transport Cabinet Committee – 29 June 2021 refers

Any alternatives considered and rejected:
N/A

Any interest declared when the decision was taken and any dispensation granted by the Proper Officer:

....
signed date

This page is intentionally left blank

From: Benjamin Watts, General Counsel

To: Environment and Transport Cabinet Committee on 29 June 2021

Subject: Work Programme 2021-2022

Classification: Unrestricted

Past and Future Pathway of Paper: Standard agenda item

Summary: This report gives details of the proposed work programme for the Environment and Transport Cabinet Committee.

Recommendation: The Environment and Transport Cabinet Committee is asked to consider and agree its Work Programme for 2021/22.

1. Introduction

1.1 The proposed work programme, appended to the report, has been compiled from items in the Future Executive Decision List and from actions identified during the meetings and at agenda setting meetings, in accordance with the Constitution.

1.2 Whilst the chairman, in consultation with the cabinet members, is responsible for the programme's fine tuning, this item gives all members of this cabinet committee the opportunity to suggest amendments and additional agenda items where appropriate.

2. Work Programme 2021/22

2.1 The proposed work programme has been compiled from items in the Future Executive Decision List and from actions arising and from topics, within the remit of the functions of this cabinet committee, identified at the agenda setting meetings [Agenda setting meetings are held 6 weeks before a cabinet committee meeting, in accordance with the constitution].

2.2 The cabinet committee is requested to consider and note the items within the proposed Work Programme, set out in appendix A to this report, and to suggest any additional topics to be considered at future meetings, where appropriate.

2.3 The schedule of commissioning activity which falls within the remit of this cabinet committee will be included in the work programme and considered at future agenda setting meetings to support more effective forward agenda planning and allow members to have oversight of significant services delivery decisions in advance.

2.4 When selecting future items, the cabinet committee should consider the contents of performance monitoring reports. Any 'for information' items will be

sent to members of the cabinet committee separately to the agenda and will not be discussed at the cabinet committee meetings.

3. Conclusion

3.1 It is vital for the cabinet committee process that the committee takes ownership of its work programme to deliver informed and considered decisions. A regular report will be submitted to each meeting of the cabinet committee to give updates of requested topics and to seek suggestions for future items to be considered. This does not preclude members making requests to the chairman or the Democratic Services Officer between meetings, for consideration.

5. Recommendation: The Environment and Transport Cabinet Committee is asked to consider and agree its Work Programme for 2021/22.

6. Background Documents: None

7. Contact details

Report Author:
Matthew Dentten
Democratic Services Officer
03000 414534
Matthew.dentten@kent.gov.uk

Lead Officer:
Benjamin Watts
General Counsel
03000 410466
benjamin.watts@kent.gov.uk

Environment and Transport Cabinet Committee - WORK PROGRAMME 2021/22

Item	Cabinet Committee to receive item
Performance Dashboard	At each meeting
Work Programme	At each meeting
Budget Consultation	Annually (November/December)
Final Draft Budget	Annually (January)
Risk Register – Strategic Risk Register	Annually (March)
Annual Equality and Diversity Report	Annually (June/July)
Winter Service Policy	Annually (September)
Bus Feedback Portal update	Quarterly (every six months)
Strategic Delivery Plan Monitoring	Bi-Annual (every six months – November & May)

10 September 2021

No	Item	Key Decision	Date added to WP	Additional Comments
1	Intro/ Web announcement (Standing Item)	NO		
2	Apologies and Subs (Standing Item)	NO		
3	Declaration of Interest (Standing Item)	NO		
4	Minutes (Standing Item)	NO		
5	Verbal Update (Standing Item)	NO		
6	Performance Dashboard (Standing Item) Performance Dashboard	NO		To incorporate the KCC Net Zero Target emission calculator.
7	Work Programme (Standing Item)	NO		
8	Procurement and award of contract/s for Highway Rural Swathe Programmed Works – Key Decision	Yes		
9	Procurement and award of contract/s for Highway Emergency Tree Works – Key Decision	Yes		
10	Allington HWRC Project Status Update Report	No		
11	Maidstone District Heat Network – Key Decision (TBC post commercialisation case study findings)	Yes		

11 November 2021				
No	Item	Key Decision	Date added to WP	**Additional Comments**
7	Adaption Programme Endorsement	Yes		
19 January 2022				
No	Item	Key Decision	Date added to WP	**Additional Comments**
17 March 2022				
No	Item	Key Decision	Date added to WP	**Additional Comments**
24 June 2022				
No	Item	Key Decision	Date added to WP	**Additional Comments**

Items for Consideration that have not yet been allocated to a meeting	
18/00037 - M2 Junction 5	Date TBC
Road Crossing Patrol Policy (Decision)	Date TBC
Update report on the North West Maidstone Transfer Station	Date TBC - Requested at E&TCC on 16 July 2019
Update report on Serious Organised Crime	Date TBC - Requested at E&TCC on 16 July 2019