

# Capital Project Business Case

## A289 Four Elms roundabout to Medway Tunnel journey time and network improvements

### The template

This document provides the business case template for projects seeking funding which is made available through the **South East Local Enterprise Partnership**. It is therefore designed to satisfy all SELEP governance processes, approvals by the Strategic Board, the Accountability Board and also the early requirements of the Independent Technical Evaluation process where applied.

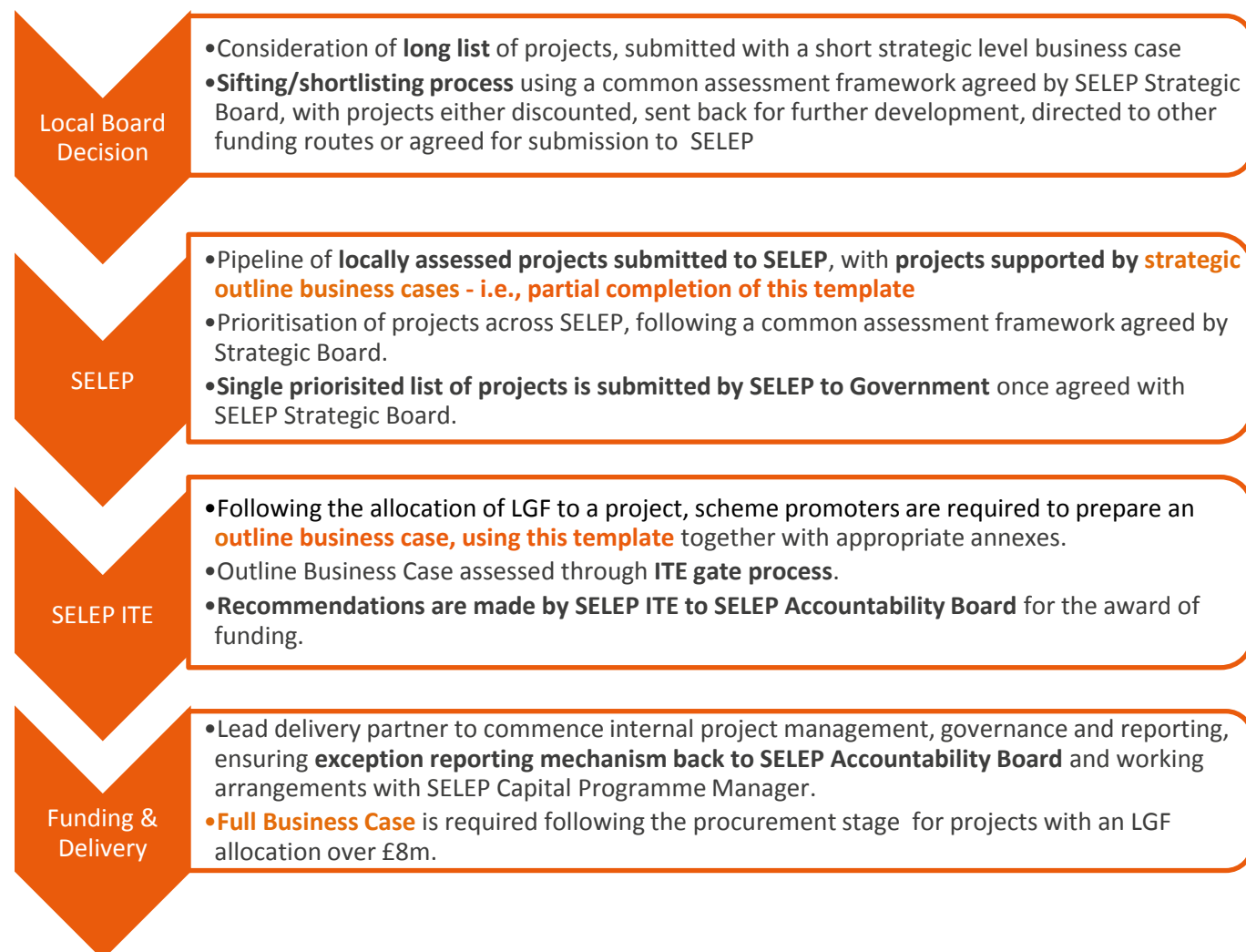
It is also designed to be applicable across all funding streams made available by Government through SELEP. It should be filled in by the scheme promoter – defined as the final beneficiary of funding. In most cases, this is the local authority; but in some cases the local authority acts as Accountable Body for a private sector final beneficiary. In those circumstances, the private sector beneficiary would complete this application and the SELEP team would be on hand, with local partners in the federated boards, to support the promoter.

Please note that this template should be completed in accordance with the guidelines laid down in the HM Treasury's Green Book. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

As described below, there are likely to be two phases of completion of this template. The first, an 'outline business case' stage, should see the promoter include as much information as would be appropriate for submission though SELEP to Government calls for projects where the amount awarded to the project is not yet known. If successful, the second stage of filling this template in would be informed by clarity around funding and would therefore require a fully completed business case, inclusive of the economic appraisal which is sought below. At this juncture, the business case would therefore dovetail with SELEP's Independent Technical Evaluation process and be taken forward to funding and delivery.

## The process

This document forms the initial SELEP part of a normal project development process. The four steps in the process are defined below in simplified terms as they relate specifically to the



LGF process. Note – this does not illustrate background work undertaken locally, such as evidence base development, baselining and local management of the project pool and reflects the working reality of submitting funding bids to Government. In the form that follows:

Version control	
Document ID	A289 revised outline Business Case
Version	4
Author	Helen Dyer
Document status	For SELEP/ITE Gate 2 review
Authorised by	Ruth Du-Lieu
Date authorised	21 <sup>st</sup> December 2017

## 1. PROJECT OVERVIEW

### 1.1. Project name:

A289 Four Elms roundabout to Medway Tunnel journey time and network improvements

### 1.2. Project type:

Transport scheme

### 1.3. Federated Board Area:

Kent and Medway

### 1.4. Lead County Council / Unitary Authority:

Medway

### 1.5. Development location:

A289 Four Elms roundabout to Medway Tunnel, Rochester, ME2

### 1.6. Project Summary:

The project focuses on a section of the A289 corridor which links the M2 junction 1 with the Medway Tunnel. The A228 is the sole route linking the Hoo Peninsula with Strood. The A289 connects with the A228 at the Four Elms roundabout, which is a key traffic interchange in Medway.

The Hoo Peninsula has been identified as an area of growth in the emerging Medway Local Plan. Due to the limited transport infrastructure available to the residents of the Hoo Peninsula any growth in the area will have an immediate and direct impact on traffic flows on the A289.

Currently the route is used by approximately 5000 vehicles per hour in the peak periods. There are two key points along the corridor which cause significant delays for traffic using the route – the Four Elms roundabout and the Sans Pareil roundabout. This project will increase the capacity of Four Elms roundabout, introduce dedicated free flow slip roads for two of the key traffic movements and improve facilities for pedestrians and cyclists. Free flow slip roads will be introduced between the Wainscott Bypass and Four Elms Hill at the Four Elms roundabout and between Frindsbury Hill and Wulfere Way at the Sans Pareil roundabout – movements which currently experience significant delay at peak times.

At present there are only uncontrolled pedestrian crossing points at Four Elms roundabout, this project will offer a toucan crossing to the south of the roundabout which will significantly improve pedestrian and cycle accessibility and safety and will offer improved connectivity with the Hoo Peninsula from Wainscott.

The third roundabout along the route is the Anthonys Way roundabout which serves the Medway City Estate, a key employment site. During the evening peak people using the Medway City Estate experience long delays when leaving onto the A289. This issue will be addressed through the LGF funded Medway City Estate accessibility improvements project.

#### 1.7. Delivery partners:

Partner	Nature of involvement (financial, operational etc.)
Medway Council	Project delivery lead. Will be the financial and operational lead
Liberty Park developer	Financial contributor (S106 contribution)
Damhead Creek Power Station developer	Financial contributor (S106 contribution)

#### 1.8. Promoting Body:

Medway Council

#### 1.9. Senior Responsible Owner (SRO):

*[Specify the nominated SRO and provide their contact details. The SRO ensures that a programme or project meets its objectives and delivers projected benefits. This is not the same as a Section 151 Officer.]*

Michael Edwards, Head of Integrated Transport.

#### 1.10. Total project value and funding sources:

Funding source	Amount (£)	Constraints, dependencies or risks and mitigation
LGF	11,100,000	Dependent upon Accountability Board approval of Business Case
S106	202,000	Secure
S106	262,000	Secure
<b>Total project value</b>	11,564,000	

Medway Council will contribute up to £10,000 per annum from 2020/21 to allow for project monitoring and evaluation.

#### 1.11. SELEP funding request, including type (LGF, GPF etc.):

Medway Council is seeking £11,100,000 LGF funding from SELEP to facilitate project delivery.

In the case of this grant application, state resources are involved as the project will be funded by the Local Growth Fund (via SELEP). However, the project will be compatible with the EU rules on state aid and any assistance given to any undertakings as part of the project will not constitute unlawful state aid.

#### 1.12. Exemptions:

This Business Case is not subject to any Value for Money exemptions as per the SELEP Assurance Framework 2017.

### 1.13. Key dates:

The project programme currently specifies the following key dates:

May 2015	Commencement of expenditure (note: this is a revised Business Case due to a reduction in S106 funding available during the lifetime of the project and therefore expenditure has already commenced)
September 2019	Construction start date
December 2020	Scheme completion/opening date

As the project progresses the programme will be reviewed and updated as required.

### 1.14. Project development stage:

Project development stages completed to date			
Task	Description	Outputs achieved	Timescale
Option selection	Option appraisal to determine optimum affordable solution	High level designs, cost assessment and modelling report	Complete
Outline Business Case	Outline Business Case to secure LGF funding to facilitate project development	Outline Business Case	Complete
Project development stages to be completed			
Task	Description	Timescale	
Outline design	Outline design of option recommended in option appraisal	January to June 2018	
Planning application	Preparation and submission of planning application (amendment to previous planning application may be sufficient)	June 2018 to December 2018	
Detailed design	Detailed design of option being taken forward	July 2018 to March 2019	
Land acquisition	Completion of land acquisition required to allow project delivery – attempts will be made to acquire the land through negotiation, however, a CPO will be used if required	October 2018 to April 2020 (assumes CPO required)	
Full Business Case	Full Business Case to secure LGF funding to allow project delivery	June 2019 submission	
Implementation	Delivery of project	October 2019 to December 2020	

### 1.15. Proposed completion of outputs:

*[Include references to previous phases/tranches of the project (link to the SELEP website) and to future projects to be funded by SELEP. Please see SELEP Programme for more information.]*

Delivery of the A289 Four Elms roundabout to Medway Tunnel project is programmed to be complete by December 2020. As the project funding profile runs until the end of the LGF

funding period a three-month float has been included within the programme to minimise the risk of project overrun.

This project is geographically closely linked with the Medway City Estate LGF funded project which is due for completion by March 2020. Improvements implemented as part of the Medway City Estate project to reduce delays for vehicles leaving the estate during the evening peak will inevitably impact on the A289. This impact will be carefully considered when moving forward with the project.

In addition, Medway Council has submitted a bid for funding from the Housing Infrastructure Fund (HIF) which will facilitate further improvements to the A289 corridor. The improvements proposed in the HIF bid will complement, rather than replace, the works undertaken as part of the A289 LGF project.

## 2. STRATEGIC CASE

*The Strategic Case should present a robust case for intervention, and demonstrate how the scheme contributes to delivering the SELEP Strategic Economic Plan (SEP) and SELEP's wider policy and strategic objectives. It includes a rationale of why the intervention is required, as well as a clear definition of outcomes and the potential scope for what is to be achieved.*

*The outlook and objectives of the Strategic Case need should, as far as possible, align with the Monitoring and Evaluation and Benefits Realisation Plan in the Management Case.*

### 2.1. Scope / Scheme Description:

*[Outline the strategic context for intervention, by providing a succinct summary of the scheme, issues it is addressing and intended benefits; max. 2 pages.]*

The A289 is one of the key highway routes through Medway. It runs from the M2 junction 1 in Strood to the Will Adams roundabout in Gillingham. This project is specifically focusing on the stretch between M2 junction 1 and the Medway Tunnel – a section of road which already experiences significant delays at peak times. Traffic flow on the A289 is also severely affected if there is any kind of incident on the network and greater resilience is needed to minimise these delays.

Medway Council is currently developing a new Local Plan, and is investigating options for delivering 29,500 homes across Medway by 2035. Consultation on the emerging Local Plan took place in January 2017. The consultation outlined four possible scenarios designed to meet the development and infrastructure needs of the area. All four of these scenarios included housing development on the Hoo Peninsula to some degree. It is therefore anticipated that the final Local Plan will outline proposals for housing development on the peninsula.

The A228 is the sole access route for vehicles accessing the Hoo Peninsula. The A228 is accessed via the A289 at Four Elms roundabout. It is therefore inevitable that any development on the Hoo Peninsula will have a direct impact on the levels of traffic using the A289. As indicated above the A289 already struggles during peak periods, therefore unless action is taken to address the issues, further development will simply compound the issue and create greater traffic delays for all users of this stretch of the network.

The aim of the scheme is to provide a highway network between the M2 junction 1 and the Medway Tunnel which can cater for the likely housing growth on the Hoo Peninsula that has been identified in the emerging Local Plan. The project will also alleviate the delays currently experienced by vehicles using the route, particularly at Four Elms roundabout and Sans Pareil roundabout.

The scheme will offer improved journey time reliability, reduced journey times (through reducing delays) and improved journey quality for all modes of travel including pedestrians and cyclists. The reduction in delays will also contribute to an improvement in air quality, which is particularly important given that Four Elms Hill, which leads to Four Elms roundabout, falls within an Air Quality Management Area.

This project will deliver the following improvements:

- Increased capacity and full signalisation (including pedestrian crossing facilities) at Four Elms roundabout;
- Free flow slip road from Wainscott Bypass to Four Elms Hill;
- Additional lanes on Wulfere Way between Sans Pareil and Four Elms roundabout;



- Free flow slip road from Frindsbury Hill to Wulfere Way;
- Realignment of Wainscott Road junction (from Sans Pareil roundabout to Frindsbury Hill);
- Additional exit lane onto Berwick Way for right turning traffic;
- Enforced reduced speed limit along the entire route.

At present the majority of the delays occur due to the volume of traffic using the Sans Pareil and Four Elms roundabouts exceeding the available capacity. The project will address this issue by increasing the size and therefore capacity of Four Elms roundabout and by introducing two new free flow slip roads, one at Four Elms roundabout and one at Sans Pareil roundabout, which will remove a significant volume of traffic from each roundabout. To enable the network to support the increased capacity at Four Elms roundabout additional lanes will be provided on Wulfere Way between Four Elms roundabout and Sans Pareil roundabout. The combination of increased capacity and reduced traffic flow at the key conflict points will offer users both reduced and more reliable journey times. This in turn will lead to a reduction in emissions and an improvement in air quality.

Under the current arrangement there are no formalised facilities for pedestrians or cyclists who wish to cross the A289. The only options available to these vulnerable road users are uncontrolled crossing points to the northwest and to the south of Four Elms roundabout. These crossing points are used by school children who live in Wainscott but go to school in Hoo. Whilst this situation has not directly resulted in any road traffic collisions, it has previously been noted to be a great concern to the local community. It has been possible to incorporate pedestrian/cyclist crossing facilities as part of the signalisation of Four Elms roundabout. Whilst this crossing will significantly improve the journey quality for vulnerable road users it will only have a minimal impact on journey times for road users.

Due to the introduction of a formal pedestrian crossing the decision has been taken to reduce the speed limit to 50mph for the entire route. This will be enforced using average speed cameras. Whilst the reduced speed limit will lead to improved safety for pedestrians and cyclists, it will also contribute towards creating a more reliable journey time for all road users.

Without these improvements the highway network will not be able to cope with the additional traffic generated through future development on the Hoo Peninsula. This project will increase the capacity of the network facilitating improved traffic flow in the immediate term and offering the capacity required to help cater for future development.

## 2.2. Location description:

*[Describe the location (e.g. characteristics, access constraints etc.) and include at least one map; max. 1 page excluding map.]*

This project focuses on the A289 corridor between M2 junction 1 and the Medway Tunnel. This stretch of road includes three roundabouts – Four Elms roundabout, Sans Pareil roundabout and Anthonys Way roundabout.

The location of the corridor is shown in Figure 1.



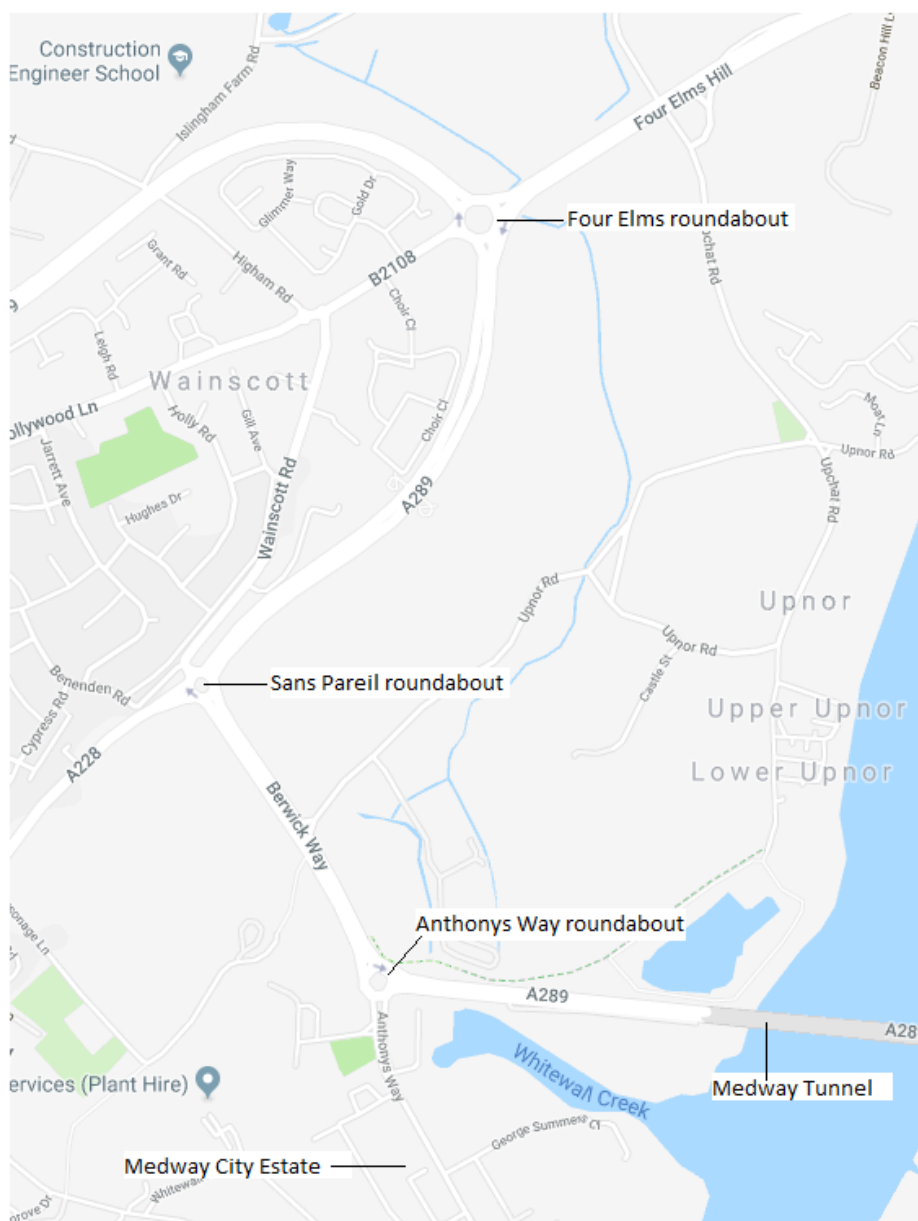


Figure 1 – scheme location

This section of the A289 is on the western edge of the Medway built-up area and falls within the Thames Gateway economic development area. The location of the scheme is shown in Figure 2 below.

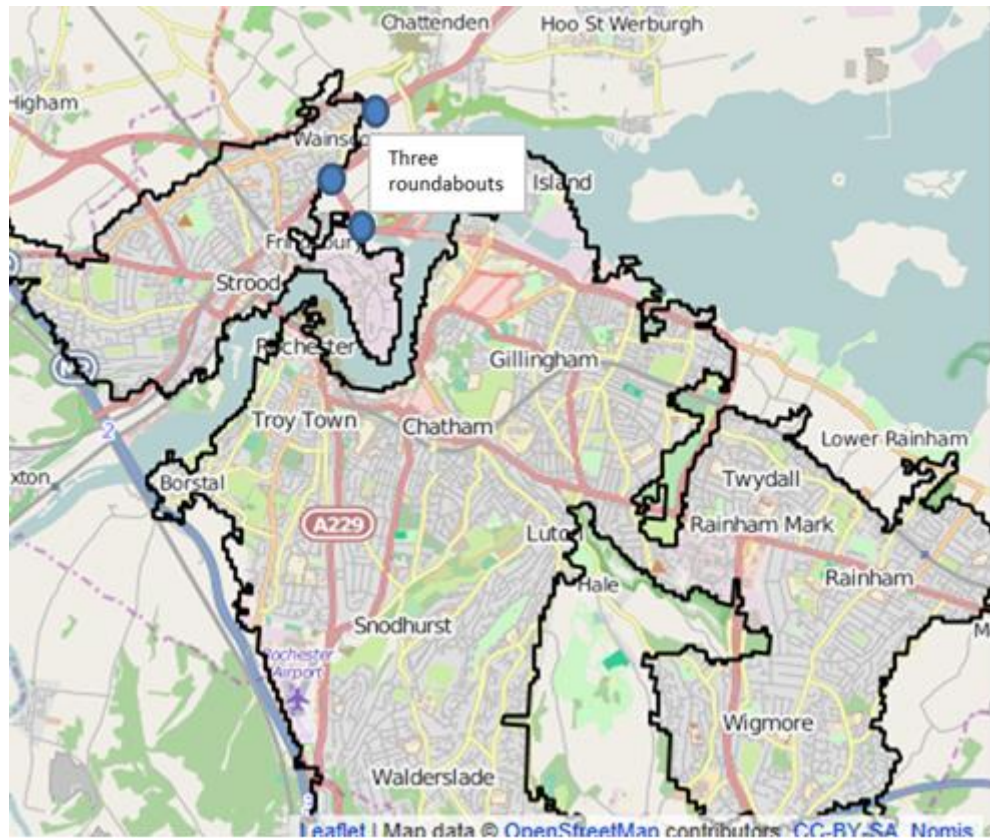


Figure 2 – Medway built-up area

At Four Elms roundabout the A289 meets the A228, which is the sole route between the Hoo Peninsula and Strood. Four Elms roundabout is a priority junction with uncontrolled pedestrian crossing points to the northwest and the south. During the morning and evening peaks there are considerable queues on the Wainscott Bypass and Four Elms Hill approaches.

In recent years there has been a significant amount of development off Hoo Road, a minor road which joins Four Elms roundabout. This development has resulted in an increase in the volume of traffic approaching the roundabout from this arm. Due to the imbalance between traffic flows approaching Four Elms roundabout on the A289, A228 and Hoo Road, traffic from Hoo Road currently struggles to join the roundabout due to a lack of suitable gaps in the circulatory traffic. This has historically led to a number of collisions at the roundabout each year. In the five years to the end of 2016, 9% of the reported collisions at Four Elms roundabout were as a result of vehicles pulling out of Hoo Road into the path of vehicles already on the roundabout.

Sans Pareil roundabout is a key junction through which traffic from Strood town centre and Chatham town centre can travel towards the M2 or the Hoo Peninsula. In addition, this roundabout currently acts as a means of local traffic joining the primary road network via Wainscott Road. Similarly to traffic entering Four Elms roundabout from Hoo Road, traffic entering from Wainscott Road struggles to find suitable gaps in the circulatory traffic flow due to the imbalance between traffic flows on the different approaches. This can lead to collisions, as well as queueing traffic at busy times. In the five years to the end of 2016 six collisions were reported at Sans Pareil roundabout, two of which involved vehicles joining the roundabout from Wainscott Road into the path of other vehicles.

Anthony's Way roundabout links the A289 with Medway City Estate. Medway City Estate is a key employment area in Medway, however, has been designed with only two access points. As a

result, during the evening peak there is high demand from vehicles exiting the estate. Due to the high volume of traffic approaching through the Medway Tunnel, vehicles trying to exit Medway City Estate have historically struggled to join the roundabout. As part of the Medway City Estate accessibility improvements LGF project measures have been implemented, which are designed to create gaps in the traffic flow through the Medway Tunnel to allow vehicles to leave the estate during the evening peak. These measures were introduced in October 2016 and indications are that the works have resulted in a reduction in journey times for vehicles leaving the estate during the peak period. The success of these measures will continue to be monitored and will be further built upon through delivery of the next phase of works on the estate and via delivery of the proposed improvements to the A289.

### 2.3. Policy context:

*[Specify how the intervention aligns with national/regional/local planning policies and the SELEP SEP; max. 3 pages.]*

*Smaller schemes: (less than £2 million) are required to complete this section in line with the scale of the scheme; max. 1 page]*

The strategic context for this intervention is outlined below:

#### National Strategy

##### National Infrastructure Plan

The Government has long-term objectives aimed at improving the economy, environment and society. These are the three tenets against which major transport infrastructure projects are assessed, and will continue to be assessed in future.

In its National Infrastructure Plan 2014, the Government presented its vision for the UK transport system:

- Transport infrastructure can play a vital role in driving economic growth by improving the links that help to move goods and people around and by supporting the balance, dynamic and low-carbon economy that is essential for future prosperity;
- Local transport systems must enable suburban areas to grow. The transport network must support good value and rapid movement of goods around the country. The transport system must be efficient but also resilient and responsive to infrequent and unexpected pressures; and
- Airports and ports are the gateways to international trade and the Government will work to improve the road and rail connectivity to major ports and airports.

The plan cites the importance of local infrastructure as part of economic growth.

#### Regional and Local Strategy

##### Growth Deal and Strategic Economic Plan

Published in March 2014, the SELEP Strategic Economic Plan (SEP) sets out the investment strategy for the area. This document includes the SELEP bid for the Local Growth Fund (round 1), the primary source of funding for this project.

A component element of this is the Kent and Medway Growth Deal which sets out plans for the public and private sectors' intention to invest over £80 million each year for the next six years to unlock our potential through:

- Substantially increasing the delivery of housing and commercial developments;
- Delivering transport and broadband infrastructure to unlock growth;
- Backing business expansion through better access to finance and support; and
- Delivering the skills that the local economy needs.

The SEP involves delivering the biggest local transport programme in the country to realise the potential of the growth corridors and sites, transforming connectivity for businesses and residents, unlocking jobs and homes, and bringing substantial benefits to the UK economy.

#### Thames Gateway economic development area

The A289 is situated within the Thames Gateway economic development area. This area is identified by the Government as a key area for growth in which the focus is upon ensuring sustainable and well-integrated communities. The Thames Gateway is a designated area for the growth of new communities, with Medway highlighted in the Delivery Plan as a strategic location for investment.

#### Medway Local Plan

Delivering these improvements to the A289 will support the emerging Medway Local Plan to deliver 29,500 homes by 2035. One of the areas under consideration for delivery of a significant number of new homes is the Hoo Peninsula, an area directly served by the A289.

It also supports the Council Plan 2017 – 2020 (the Council's strategic business plan) by working towards the strategic priority of 'maximising regeneration and economic growth'.

#### **2.4. Need for intervention:**

*[Specify the current and future context and articulate the underlying issues driving the need for intervention referring to a specific market failure, need to reduce externalities, Government redistribution objectives etc.; max. 2 pages.]*

Medway has significant growth aspirations that are closely related to the A289 Four Elms roundabout to Medway Tunnel scheme, most notably on the Hoo Peninsula. If these aspirations are to be delivered satisfactorily there is a need for a resilient transport network to serve the new areas of development. The intended growth on the Hoo Peninsula will contribute towards delivery of the emerging Local Plan.

It should be noted that the original Business Case referenced the Lodge Hill development which was expected to deliver 5,000 homes and 5,000 jobs. Since the initial Business Case was approved by the Accountability Board the Secretary of State made the decision to call in the Lodge Hill planning application and the enquiry was set for 2018. The Lodge Hill planning application has now been withdrawn and therefore the S106 funding which was expected to form part of the project budget is no longer available. Despite the Lodge Hill development not coming forward at the current time there are still plans for development on other parts of the Hoo Peninsula.

Medway Council has received considerable interest from developers in promoting land on the Hoo Peninsula, particularly around Hoo St. Werburgh. In early 2017 (January to May) Medway Council carried out the second formal consultation stage in the preparation of the new Local

Plan, focusing on Development Options. The Development Options consultation document provided a draft vision for Medway in 2035 and set out emerging approaches to policies to address the key issues facing Medway's communities, economy and environment. To consider options for how development land could be allocated across Medway, it also set out a range of scenarios that could provide the basis for Medway's development up to 2035.

A number of representations from land owners/developers were received in relation to land around Hoo at this stage of the consultation process. The larger land interests around Hoo have formed a 'consortium' and have supported a joint submission to the Local Plan consultation. This response can be found at Appendix P.

There are nine key sites which are being promoted around Hoo, however, as shown in Appendix Q there is a large extent of land being promoted through the Local Plan on the Hoo Peninsula. This includes large employment sites at Grain and Kingsnorth. For information a further two responses to the consultation can be found in Appendices R and S.

It is also worth noting that whilst the Lodge Hill planning application has been withdrawn, the HCA has confirmed that it will be promoting a new planning application/Local Plan allocation for the site.

It is clear from the representations received as part of the Development Options consultation that there is significant interest from land owners/developers in delivering homes and employment space on the Hoo Peninsula.

Medway Council has carried out strategic transport modelling which demonstrates that the existing link will become significantly more congested in future years and without intervention the congestion would threaten both existing and planned housing and employment sites. As a result, the scheme significantly improves opportunities for new business and employment developments within the Thames Gateway.

Medway Council has taken recent traffic survey data and created a model to look at the impact on the road network of the proposed development – both with and without the works planned as part of this project. If this project is not delivered the A289 between Four Elms roundabout and the Medway Tunnel will be operating significantly over capacity, resulting in lengthy delays for all road users at peak times. Delivering this project will significantly improve the situation.

The scheme is needed now because of:

- The unreliable journey times on the existing network;
- The existing operational delays to businesses operating on Medway City Estate and the Hoo Peninsula;
- Significant pressure for substantial commercial and residential development, which will have a negative impact on the existing network.

The scheme is considered to be essential by Medway Council to provide a sufficient transport network to support the emerging Medway Local Plan, particularly with regards to proposed development on the Hoo Peninsula.

Table 1 summarises the yearly profile of homes and jobs that are being enabled by the scheme.



**Table 1 - Target Numbers of New Homes and Jobs to be Enabled by the Scheme**

	2015/16	2016/17	2017/18	2018/19	2019/2020	2020/2025	Post 2025	Total
No. Jobs						3,262	6,366	9,628
No. Homes				200	205	1,626	3,253	5,284

### Current Transport Problems

All three roundabouts within the scheme corridor experience queueing and delays on weekdays during the am and pm peaks. The current peak hour queueing profiles at each of the junctions along the route are shown in Figure 3 overleaf.

The queue length survey data has been supported by additional analysis of Global Positioning System (GPS) data supplied by TrafficMaster which confirms the profile. In addition the 2014 TrafficMaster data was used to show variability in travel times. The GPS data analysis is shown in Figure 4 overleaf.

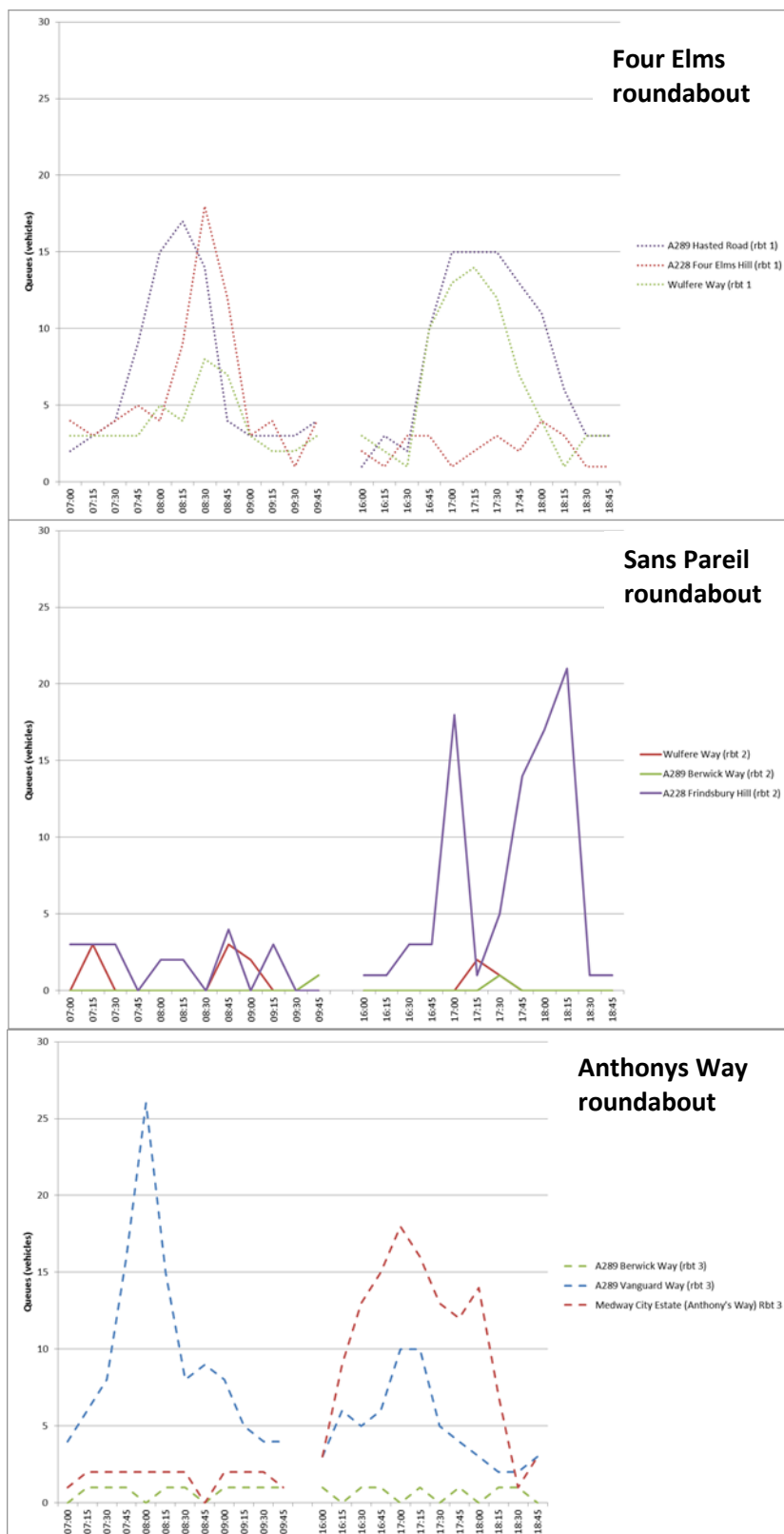


Figure 3 – Queueing by roundabout (Vehicles per 15 mins)



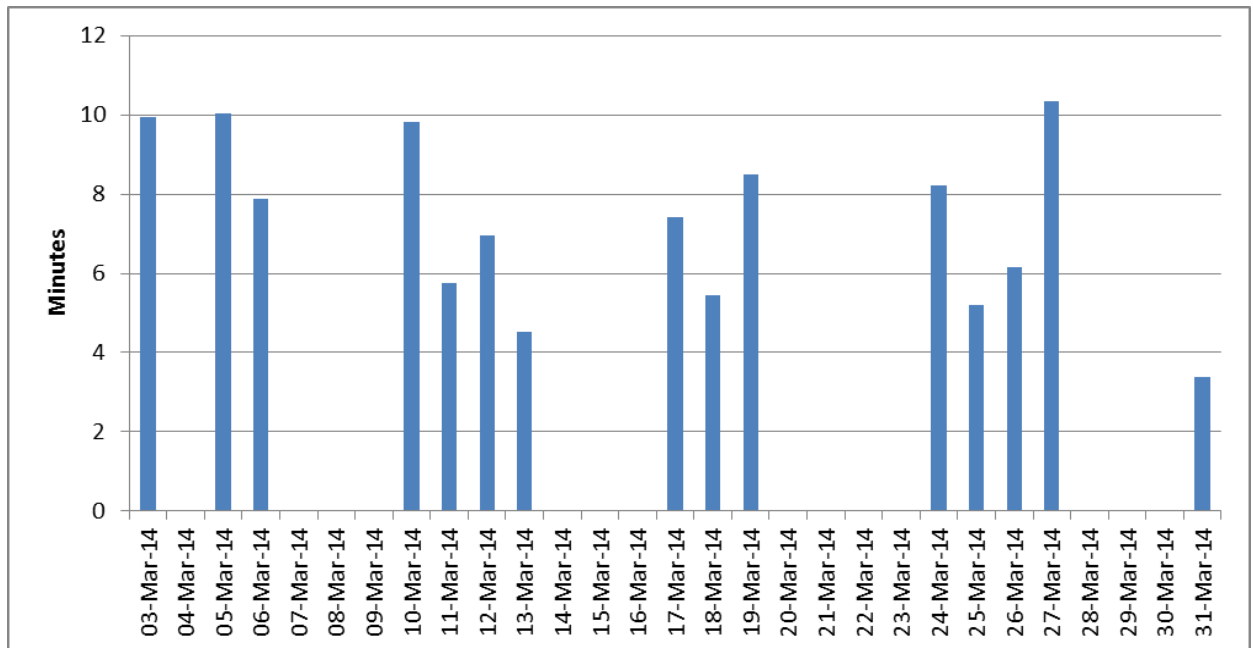


Figure 4 – Example of AM Peak TrafficMaster data (A289W-A289E)

The queue volumes that exceed about 10 vehicles per 15-minutes, in Figure 3, represent periods when traffic demand exceeds capacity on the respective roundabout approaches. These will be accompanied by vehicle travel time delays.

The following conclusions have been drawn:

- All three roundabouts have some significant queueing (>10 vehicles) and traffic delay at peak times;
- Anthonys Way roundabout has prolonged queueing in the pm peak approaching from Medway City Estate (this is to be addressed through the Medway City Estate Accessibility Improvements project which has also been funded through the LGF);
- Sans Pareil roundabout has queueing in the pm peak, approaching from Strood, when the A289 northbound opposing flow is heaviest;
- Similarly, Anthonys Way roundabout has queueing in the am peak, approaching from the Medway Tunnel, when the A289 southbound opposing flow entering Medway City Estate is the greatest;
- Hasted Road (A289 Wainscott Bypass from M2 junction 1) has queueing in both peaks;
- Four Elms Hill already suffers from queueing at peak times so the situation would be exacerbated if there is further development on the Hoo Peninsula.

## 2.5. Sources of funding:

*[Promoters should provide supporting evidence to show that:*

- all reasonable private sector funding options have been exhausted; and
- no other public funding streams are available for or fit the type of scheme that is being proposed

Public funding is regarded as a last resort. Promoters are encouraged to think carefully about and provide strong evidence that the intervention they are proposing has exhausted all other potential sources of funding and there is a genuine need for intervention from the public sector; max. 1.5 pages.]

Medway Council has identified that the works proposed by this project are key to enabling development on the Hoo Peninsula. As a result, Medway Council has considered a range of funding options to obtain the money required to deliver the project.

Given the potential for further housing development on the Hoo Peninsula funding the improvements through S106 contributions was a key consideration. When the original Business Case was submitted a S106 contribution of £7.129m was expected in relation to the proposed development at Lodge Hill. Whilst Medway Council as the LPA were minded to grant planning permission the Secretary of State decided to call in the application, with an enquiry date set for 2018. The developer has since decided to withdraw the planning application and is currently reviewing their options. Medway Council has secured S106 contributions from the Liberty Park and Damhead Creek power station developers.

The feasibility of delivering the entire suite of improvements through S106 contributions was considered. However, in the absence of the Lodge Hill development, there are currently no individual developments of this scale planned on the peninsula. Funding would need to be collected from a substantial number of developers over an extended period of time to allow delivery of the proposed improvements. The works cannot easily be phased and therefore with the time constraints associated with the use of S106 funding it was considered that it would not be possible to gather sufficient funds at any given time to deliver the scheme in its entirety. In addition, it is likely that without this intervention proposed housing developments on the peninsula will not be granted planning consent due to the inevitable negative impact on the highway network of the additional traffic generated. These works will facilitate the bringing forward of anticipated future developments and therefore use of future S106 contributions is not considered to be a viable option.

Under the emerging Local Plan potential areas for new or enhanced employment land on the Hoo Peninsula have been identified. Due to the nature of the road network, with only one access route on and off the peninsula, it would be possible to directly link increased traffic due to proposed employment development with increased traffic on the A289. However, similarly to the proposed housing development, these highway improvement works would ideally need to be in place prior to businesses submitting planning applications for use of the employment sites identified in order to minimise the impact on the road network of the additional traffic generated. Each business could be required to make a S106 contribution towards improvements to the highway network. However, individually these contributions are not going to be sufficient to fund the substantial improvements required. Again, contributions could be pooled, however, with the time constraints associated with S106 contributions it is likely that it will not be possible to obtain sufficient funds to deliver the scheme at any given point in time. In addition, whilst the funding is pooled, users of the road network will suffer significant delays due to the increased level of traffic, threatening the success of businesses which establish themselves on the new and enhanced employment land. Therefore this was not considered to be a viable option.

Medway Council is aware of the importance of these works in connection with proposed development on the Hoo Peninsula, in line with the emerging Local Plan. In an ideal world Medway Council would have sufficient funding to deliver the proposed works from their own capital budget. However, due to wide ranging Government cuts the council is not in a position to be able to invest £11.1m of their own funds into the project.

Given the strategic importance of this project Medway Council has considered prudential borrowing from the Public Works Loan Board (PWLB) in order to facilitate project delivery. However, whilst the improvements will enable development of housing and employment land on the peninsula there is no direct income stream to the Council to allow for the repayment of the loan. S106 contributions may be forthcoming but this funding would need to be spent on specific

improvements rather than on repaying a loan. S106 contributions cannot be spent in advance of receipt and developers can request evidence that the funding has been spent on the appropriate improvements. In addition, there is a requirement to begin repaying borrowing from the PWLB within six months of the advance of funding. Medway Council does not have the funding needed to meet this requirement.

Since the original LGF Business Case for this project was submitted in February 2015 the opportunity to bid for Housing Infrastructure Fund (HIF) funding has arisen. Medway Council has submitted a bid which, if successful, will provide improvements to the A228/A289 corridor to facilitate further development on the Hoo Peninsula. On the basis that the LGF funding for the A289 project has already been approved (subject to submission of a revised Business Case) the measures proposed in the HIF bid are designed to complement, rather than replace, those delivered by this project. The option of HIF funding was not available when the original Business Case was prepared.

## 2.6. Impact of non-intervention (do nothing):

*[Describe the expected outcome of non-intervention. Promoters should clearly establish a future reference case and articulate the impacts on environment, economy and society, if applicable. The future reference case should acknowledge that market conditions are likely to change in the future, with or without any intervention. 'Do nothing' scenarios where nothing changes are unlikely; max. 1 page.]*

If funding cannot be secured to deliver the proposed improvements to the A289 corridor, it will not be possible for the entire package of highway works to proceed. In the medium term, it may be possible to use S106 contributions to deliver an improvement to Four Elms roundabout which may aid traffic from Hoo to join the network. However, without the improvements on the remainder of the route there is likely to be insufficient capacity to allow the vehicles to continue along the route without significant delay.

It is expected that over the coming years the number of vehicles using the highway network in Medway will naturally increase, even with no further development. As a result, congestion on the A289 corridor will continue to worsen. If any development is permitted the problem will be further compounded, journey times will increase and there will be no journey time reliability. Continued congestion on the network will have significant environmental implications for Medway. This is a key concern as Four Elms Hill, which leads to Four Elms roundabout, falls within an Air Quality Management Area.

Given the natural increase in traffic flows it is expected that unless this intervention can be delivered in full the LPA will be minded to refuse any future planning applications in relation to the provision of housing or employment premises on the peninsula. This will be due to the significant existing transport issues already faced by the A289, and the negative impact that further development will have on this section of the network.

If the LPA adopt this approach to dealing with future planning applications it will not be possible to fulfil the need for 29,463 new homes, 49,943m<sup>2</sup> of B1 office space, 155,748m<sup>2</sup> of B2 industrial land, 164,263m<sup>2</sup> of B8 warehousing land, 34,900m<sup>2</sup> of comparison retail space and 10,500m<sup>2</sup> of convenience retail space identified in the emerging Local Plan. Failure to deliver the residential and commercial infrastructure identified through the Strategic Housing and Economic Needs Assessment, which informed the emerging Local Plan, will be detrimental to the economic and social well-being of Medway.

Without the proposed commercial development on the Hoo Peninsula businesses looking to invest in Medway may have no option but to look for alternative premises outside Medway. In

addition, given the continuing traffic issues associated with the A289 corridor there is the potential for businesses already based in Medway to look for premises in alternative locations with more effective transport links. Loss of existing businesses and potential further investment in Medway will weaken Medway's economy. Residents looking for employment will have fewer opportunities available to them. There is also the risk of higher unemployment levels due to the relocation of businesses to premises outside Medway. Higher unemployment levels will have a negative impact on society as income levels drop. This will also lead to a reduction in spending which will have a negative impact on businesses in the local area.

Failure to deliver the housing requirement identified in the emerging Local Plan will limit Medway's growth. If the housing infrastructure cannot be provided, it will not be possible for Medway to grow and flourish as a key residential area which exploits the benefits offered of being within 35 minutes of Central London.

Failure to provide the housing required to enable Medway to grow will potentially have a knock-on effect for companies which are located in the area. If Medway does not grow in line with expectations companies looking to recruit new staff will potentially struggle, which could impact on the economic well-being of the individual companies as well as the Medway economy as a whole.

Failure to deliver this project will have a significant impact on the environment, society and the economy.

## 2.7. Objectives of intervention:

*[Outline the primary objectives of the intervention in the table below, and demonstrate how these objectives align with the problems presented in the Need for Intervention section.]*

### Project Objectives

#### Objective 1: Improve operation of the A289 corridor

The A289 corridor currently experiences congestion at key conflict points during both the morning and evening peak. The performance of this section of the road network needs to be improved to not only reduce journey times for existing traffic but also to create the capacity required to allow future development – both residential and commercial – on the Hoo Peninsula.

If this objective is met the following benefits will be seen:

- Improved journey time and reliability, for strategic and local traffic;
- Improved attractiveness of the area for inward investment and job creation;
- Improved attractiveness of the area for housing;
- Ability to develop schemes without excessive planning conditions;
- Ability to create employment and attract employees;
- Future predicted slow network journey time issues will be avoided.

#### Objective 2: Ensure minor side roads operate effectively, with acceptable traffic capacity and minimal delay.

As part of the current road layout each of the three roundabouts has one arm which is a minor side road. Users of the side roads all experience the same issues when attempting to join the primary road. Due to the imbalance in traffic flows between the side roads and the other arms of the three roundabouts, vehicles struggle to find suitable gaps in the circulatory flow. This can not

only lead to delays for vehicles using the minor arms but can also lead to collisions as drivers start to take risks in order to enter the main flow of traffic.

Meeting this objective will improve journey quality and accessibility for local communities and businesses by removing existing and future network problems.

**Objective 3:** Provide transport system which can aid delivery of emerging Local Plan

The emerging Local Plan has identified areas for both residential and commercial development on the Hoo Peninsula. The existing transport system will act as a constraint to any proposed development in the area as it is already struggling to cope with current levels of traffic. Any future development will only serve to exacerbate the existing issues, which is likely to be a key consideration when determining future planning applications. Provision of an improved transport system will act as a catalyst to generate development on the peninsula.

Meeting this objective will allow Medway to deliver its growth aspirations by removing predicted future network capacity problems.

**Objective 4:** Promote sustainable agenda

For many residents of the Hoo Peninsula travel by bus is not considered to be a realistic option. This is due to the assumption that the bus is not a reliable mode of travel due to the inconsistency of current journey times due to the existing level of congestion. The proposed improvements will offer improved journey time reliability for all traffic, including buses. If it can be demonstrated that travel by bus is a realistic and reliable option for people living and working on the Hoo Peninsula bus use will, over time, increase.

If this objective is met it will address the problem of bus journey time unreliability making use of public transport a more feasible option for a greater number of people. This in turn will lead to a reduction in the number of private vehicles using the road, which will provide environmental benefits.

**Problems or opportunities the project is seeking to address**

**Problem 1:** Unreliable journey times on existing network.

The existing network is not sufficiently resilient to be able to cope with any issues that occur on the highway. In addition to the delays encountered due to the volume of traffic using this section of the road network, any collision, vehicle breakdown or closure of a neighbouring road (e.g. the M2) at any time of the day has a significant impact on traffic flow and journey times. This means that on any given day drivers are unable to predict how long their journey will take them. Whilst this is frustrating for all drivers, it will potentially have a negative economic impact on businesses which operate on this route as it impacts on their ability to deliver their service efficiently.

**Problem 2:** Existing operational delays to businesses operating on Medway City Estate and the Hoo Peninsula.

Businesses operating on both Medway City Estate and the Hoo Peninsula are subject to delays when both joining and using the A289. These delays create operational issues for companies as they are not able to deliver their service as efficiently and effectively as their customers would expect.



If action is not taken to address the issues currently experienced by companies there is a significant risk that businesses will relocate to premises outside Medway or potentially even outside the South East.

Opportunity 1: Potential for and interest in significant commercial and residential development on the Hoo Peninsula.

The emerging Local Plan has identified potential areas for both residential and commercial development on the Hoo Peninsula. This development would benefit both the economic and social well-being of the local area and is therefore an opportunity that it is important to exploit.

*[Complete the following using a system of 0, ✓, ✓✓, ✓✓✓ which maps the objectives to their ability to address each problem. Add rows and columns as required and note not all sections of the table may require completion; max. 1 page.]*

	<b>Problems / opportunities identified in Need for Intervention section</b>		
	<b>Problem 1</b>	<b>Problem 2</b>	<b>Opportunity 1</b>
Objective 1	✓✓✓	✓✓	✓✓✓
Objective 2	✓✓	✓	✓
Objective 3	✓	✓	✓✓✓
Objective 4	✓✓	✓	✓✓

## 2.8. Constraints:

*[Specify high level constraints or other factors such as social/environmental/financial/developments/schemes/legal consents and agreements which may affect the suitability of the Preferred Option; max. 0.5 page.]*

In order to deliver the preferred option it will be necessary to obtain planning consent from the LPA. This is a requirement as the design extends beyond the current highway boundary. When the planning application for the original proposal was submitted there were a number of concerns raised, which needed to be addressed before the application could be presented to Planning Committee. Whilst the proposed design has been amended some of the concerns are still relevant and therefore work is ongoing to address the points raised prior to submitting an amended or new planning application as required.

A public consultation exercise was carried out based on the original proposal for the scheme. Public response to the new 'scaled back' option may be influenced by a subconscious comparison between the two schemes – which may lead to the public thinking the new proposal is not capable of delivering the required benefits. This will be managed through ongoing engagement and sharing of modelling information as appropriate to demonstrate the benefit of the revised scheme option.

The key constraint associated with the preferred option is that it will be necessary to acquire land to allow for project delivery in full. If land cannot be acquired within the project funding period it will not be possible to proceed with the preferred option in its entirety. It will be possible to deliver the elements of the scheme which are on Council-owned land but these works alone will not be sufficient to deliver the benefits required to improve traffic flow in the area. To address this constraint there will be early engagement with landowners to discuss the requirements for the scheme. The preferred approach will be to acquire the land through negotiation with landowners, however, if this is not possible a CPO process will commence as soon as the planning application has been determined.

## 2.9. Scheme dependencies:

*[Provide details of any related or interdependent activities that if not resolved to a satisfactory conclusion would mean that the benefits of the scheme would not be fully realised; max. 0.5 page.]*

Medway City Estate is geographically adjacent to the A289. Medway Council has received LGF funding for a project on the estate which will, in part, aid vehicular egress during the evening peak. Whilst the projects are not directly related or interdependent, it is necessary to consider the impact that any works on the estate will have on the A289.

If, as part of the Medway City Estate project, works are undertaken to significantly increase the flow of traffic leaving the estate onto the A289 it will be necessary to undertake some modelling work to ensure that this increase in traffic is not going to be detrimental to the journey times offered by the A289. The relationship between the projects needs to be carefully managed to ensure that both deliver the required benefits without negatively impacting on each other.

## 2.10. Expected benefits:

*[This section identifies scheme benefits (which will be achieved through delivering the scheme) which may not be valued in the Economic Case. Specify the extent of the scheme benefits referring to relevant economic, social, environmental, transport or other benefits. This is where any 'GVA based' estimates of benefits should be reported together with any dependent development (e.g. commercial or residential floorspace). Please reference the relevant section of the Economic Case where additional information regarding the assessment approach can be found; max. 0.5 page.]*

The Economic Case primarily focuses on the improvement in journey times and reduction in delays, however, there are other benefits offered by the scheme which are harder to quantify.

Completion of this project will enable delivery of the housing and commercial land need identified in the emerging Local Plan. It is anticipated that by 2028 there will be an additional 5,284 homes on the Hoo Peninsula (dependent on the scenario adopted in the Local Plan). In addition employment land totalling approximately 800 hectares has been identified on the peninsula. Without this project delivery of the housing and commercial premises would not be a viable option due to the existing issues with the highway network.

In addition to facilitating the development of new employment land this project will also offer improved accessibility to existing employment sites, including Medway City Estate and existing premises on the Hoo Peninsula through addressing the delays currently experienced on a daily basis.

Whilst the improvement in journey times will be included within the Economic Case, journey quality and journey time reliability are not factors that can be easily quantified. Through delivery of this project action will be taken to address the key conflict points along the A289 corridor, which are where delays often occur. Through minimising delays on the network during the morning and evening peaks, and by improving the resilience of the network, road users will have more certainty regarding their journey time. As a result of the greater journey time consistency for people using the route following completion of the works the journey quality for road users will increase due to a reduction in user frustration and a reduced fear of potential accidents as a result of the works undertaken.

As highlighted elsewhere in this Business Case road users entering the A289 from minor side roads at both Four Elms roundabout and Sans Pareil roundabout struggle to identify suitable gaps in the circulatory traffic due to the imbalance in traffic flows and are therefore more inclined



to take a risk when entering the flow of traffic. This has led to collisions at these roundabouts. The improvements delivered will aid traffic entering from minor side roads through signalisation which will eliminate the need for road users to take risks when joining the main network. As a result a reduction in this type of collision is expected.

Section 3.3 of the Economic Case provides additional information on the assessment approach adopted.

#### 2.11. Key risks:

*[Specify the key risks affecting delivery of the scheme and benefit realisation e.g. project dependencies, stakeholder issues, funding etc. Information on risk mitigation is included later in the template. This section should be kept brief and refer to the main risk register in the Management Case; max. 0.5 page.]*

The key risks which will affect delivery of the scheme and benefit realisation are:

- LGF funding is not forthcoming – if LGF funding is not awarded for the delivery of this project, it will not be possible for Medway Council to provide these essential works. This will hinder plans for further development on the Hoo Peninsula as outlined in the emerging Local Plan.
- Planning consent is not forthcoming – if planning consent is not received for the proposed works it will not be possible to proceed with the project as currently designed. Failure to secure planning consent will mean that the only option would be to deliver a project which is entirely within the existing highway boundary, however, a scheme with this footprint would not be able to offer the benefits required to address the existing traffic issues and provide the capacity required to enable future growth on the Hoo Peninsula.
- Land acquisition process takes significantly longer than anticipated – in order to deliver the preferred option it is essential that Medway Council is able to acquire some land from at least three different landowners. If the land acquisition process takes significantly longer than anticipated, e.g. if a CPO has to be used and is challenged by the landowner, it will not be possible to deliver the scheme in its entirety within the funding period. This will mean that the scheme does not offer all the benefits detailed in this Business Case.
- Delays by statutory undertakers – to facilitate delivery of the proposed improvements there is a need for some utility diversions. If the statutory undertakers delay completion of these diversions, completion of the entire project will be delayed.
- Negative public response to proposed design – a public consultation exercise was completed in 2016 based on the original proposals for the A289. There is a risk that when members of the public see the proposals for the 'scaled back' design there will be a negative response perhaps due to the perception that a reduced scheme cannot offer sufficient benefits to address the underlying problems.

### 3. ECONOMIC CASE

*The economic case determines whether the scheme demonstrates value for money. It presents evidence on the impact of the scheme on the economy as well as its environmental, social and spatial impacts in terms of how well they meet the spending objectives and critical success factors for the scheme. A reduced number of options are subject to a cost benefit analysis (CBA) in accordance with Green Book guidance, and qualitative costs, benefits and risks are also assessed.*

*The output of the Economic Case consists of an Appraisal Summary Table, risk analysis and sensitivity figures, a distributional analysis (where relevant), information on qualitative costs and benefits and information of other viable alternative options.*

*In addition to this application form, for schemes with a LGF funding request of more than £2.0m please provide a supporting appraisal spreadsheet (please see the SELEP Assurance Framework 2017, Section 5.7.4 and 5.7.5 for schemes which are exempt from this requirement). The supporting appraisal spreadsheet should provide:*

- *a calculation of Benefit-Cost Ratio (BCR) according to the most recent Government WebTAG transport analysis guidelines, with clearly identified, justified and sensitivity-tested assumptions and costs (please see Transport Analysis Guidance: WebTAG and*
- *inclusion of optimism bias and contingency linked, where appropriate, to a quantified risk assessment (please see Green Book supplementary guidance: optimism bias).*

*Smaller schemes (less than £2 million) are not required to provide a supporting appraisal spreadsheet, and do not have to calculate a BCR or complete the supporting appraisal tables, detailed in Section 3.11 (Value for money).*

*If the project includes a package of interventions, the treatment of costs and benefits for individual benefits should be discussed with the Independent Technical Evaluator during the Gate 0 discussions.*

#### 3.1. Options assessment:

*[Outline all options that have been considered, the option assessment process, and specify the rationale for discounting alternatives.*

*Promoters are expected to present a sufficiently broad range of options which avoid variations (scaled-up or scaled-down version) of the main options. The key to a well scoped and planned scheme is the identification of the right range of options, or choices, in the first instance. If the wrong options are appraised the scheme will be sub-optimal from the onset.*

*Long list of options considered:*

*Description of all options which have been considered to address the problem(s) identified in the Need for Intervention section above, including options which were considered at an early stage, but not taken forward.*

The 2015 Transport Scheme Business Case set out several options. These included:

- Option 1 – Do Nothing;
- Option 2 – Do Minimum, which included committed interventions;
- Option 3 – A low cost option which comprised public transport and active modes interventions (demand management/smarter choices). However, such measures would be part of 'locking-in' benefits of a highway scheme;
- Option 4 – A large roundabout scheme which comprised enlarging the existing three roundabouts with the potential of signalling them;

- Option 5 – A highway limits scheme which was to be built within the confines of the existing highway boundary. The existing roundabouts would be converted to signalised junctions;
- Option 6 – Do Maximum which comprised a large bypass road scheme, which required the realignment of the A289;
- Option 7 – Reduced scheme alternative, which comprised improvements to sections of corridor only e.g. Anthony's Way roundabout only.

Options assessment:

*Describe how the long list of options has been assessed (assessment approach), rationale behind shortlisting/discarding each option.*

The initial list of schemes was assessed against the investment objectives and a number of critical success factors for the scheme as set out in Table 2 below.

	<i>Option 1/2</i> <i>Do Nothing /Do Minimum</i>	<i>Option 3</i> <i>Low cost option</i>	<i>Option 4</i> <i>Large roundabouts</i>	<i>Option 5</i> <i>Highway Limits</i>	<i>Option 6</i> <i>Realignment of A289</i>	<i>Option 7</i> <i>Reduced scheme</i>
<b>Investment Objectives</b>						
<i>Improve operation of corridor</i>	x	x	✓	✓	✓	<i>Partial</i>
<i>Improvement of functioning of side arms</i>	x	x	✓	✓	✓	<i>Partial</i>
<i>Provide transport system which can deliver local plan</i>	x	x	✓	✓	✓	x
<i>Promote sustainable agenda</i>	x	✓	<i>Partial</i>	<i>unknown</i>	<i>unknown</i>	<i>unknown</i>
<b>Critical Success Factors</b>						
<i>Strategic Fit</i>		✓	✓	x	✓	x
<i>Economic Prosperity/VfM</i>		✓	✓	✓	<i>High cost suggests low BCR</i>	✓
<i>Affordable</i>		✓	✓	✓	x	✓
<i>Achievable Construction</i>		✓	✓	<i>unknown</i>	x	✓
<i>Manageable implementation/operation</i>		x	<i>Subject to design</i>	x	<i>unknown</i>	✓

Table 2 Summary of Scheme Option Assessment and Sifting

The list of options was refined to give a preferred option for appraisal in the 2015 business case as follows:

- Option 1 – Do Nothing – not relevant for appraisal as excludes committed interventions;
- Option 2 – Do Minimum – not carried forward but used as the 'baseline' for appraisal;
- Option 3 – Low cost option – this option was rejected as it would be insufficient for the highway network in this area;

- Option 4 – the large roundabout scheme was identified as the preferred scheme as it provided a deliverable scheme that would work operationally with the possibility of introducing bus priority;
- Option 5 – the highway limits scheme was rejected as it required a major downgrading from rural to urban speeds and required departures from design standards;
- Option 6 – Do Maximum – realignment of A289 was rejected due to the high, prohibitive cost and significant land take required;
- Option 7 – Reduced scheme alternative was rejected as it was insufficient to deliver Lodge Hill.

Following the decision by the Secretary of State to call in the Lodge Hill planning application, with an enquiry date set for 2018, it became apparent that the anticipated S106 contribution from this development would not be available during the lifetime of the project. As a result, this option was no longer affordable. Attempts were made to scale the scheme to develop a similar design which offered a benefit to road users whilst also being affordable, however, these were also unsuccessful and were not affordable within the new reduced budget.

The Do Maximum option (large bypass road scheme) detailed in the original Business Case was revisited during the review of options. Whilst it was accepted that this proposal would probably offer the greatest benefit to road users, the option was discounted once again due to the high cost and significant land take required to deliver the proposal.

Short list of options:

*The 'Options Assessment' section is an opportunity to demonstrate how learning from other projects and experience has been used to optimise the proposal, and the Preferred Option is expected to emerge logically from this process; max. 2 pages.*

*Smaller schemes (less than £2 million) are required to complete an Options assessment which is proportionate to the size of the scheme; max. 1 page.]*

Since the previous Business Case in 2015, further option development has been undertaken. This has identified a further four options:

Option 1

- Anthonys Way roundabout – as currently (give way roundabout with segregated left turn slip for vehicles turning left towards the Medway Tunnel) but with the addition of a new segregated slip lane between Anthonys Way and A289 Berwick Way. The at-grade pedestrian crossing to be replaced with a footbridge;
- Sans Pareil roundabout – new enlarged 'off line' roundabout with segregated left turn facilities provided between Wulfere Way & Berwick Way and between Frindsbury Hill & Wulfere Way. Also realignment of Wainscott Road junction to connect to Frindsbury Hill via a new signal controlled junction;
- Four Elms roundabout – full signalisation, a new segregated slip road for vehicles turning left from Hasted Road onto Four Elms Hill plus a footbridge on the Wulfere Way southern arm;
- Wulfere Way – to be made three lanes in each direction (currently two lanes).

Option 2

- Anthonys Way roundabout – as currently. No changes to be made and at-grade pedestrian crossing to remain in place;
- Sans Pareil roundabout – new enlarged 'off line' roundabout with segregated left turn facilities provided between Wulfere Way & Berwick Way and between Frindsbury Hill &

Wulfere Way. Also realignment of Wainscott Road junction to connect to Frindsbury Hill via a new signal controlled junction;

- Four Elms roundabout – full signalisation with split pedestrian crossing on the A289 (south) Wulfere Way arm and segregated left turn lane from Wainscott Bypass (Hasted Road) to Four Elms Hill;
- Wulfere Way – to be made three lanes in each direction.

### Option 3

- Anthonys Way roundabout – as currently. No changes to be made and at-grade pedestrian crossing to remain in place;
- Sans Pareil roundabout – new enlarged ‘off line’ roundabout with segregated left turn facilities provided between Wulfere Way & Berwick Way and between Frindsbury Hill & Wulfere Way. Also realignment of Wainscott Road junction to connect to Frindsbury Hill via a new signal controlled junction;
- Four Elms roundabout – as currently. No changes to be made;
- Wulfere Way – northeast bound carriageway to be made into three lanes, southwest bound carriageway to remain as two lanes.

### Option 4

- Anthonys Way roundabout – as currently. No change to be made and at-grade pedestrian crossing to remain in place;
- Sans Pareil roundabout – existing roundabout to remain but with the following alterations: segregated free flow slip road for vehicles travelling from Frindsbury Hill to Wulfere Way, realignment of Wainscott Road junction to connect to Frindsbury Hill – junction to be signalised with provision of a right turn lane to remove waiting vehicles from the flow of traffic on Frindsbury Hill, additional exit lane onto Berwick Way for right turning traffic leaving the roundabout;
- Four Elms roundabout – enlarged roundabout to increase capacity/stacking space. Roundabout to be fully signalised including at grade pedestrian crossing on the southern Wulfere Way arm. Dedicated free flow slip road from Wainscott Bypass (Hasted Road) onto Four Elms Hill;
- Wulfere Way - to be made three lanes in each direction between Sans Pareil roundabout and Four Elms roundabout.

### Features consistent across all options

50mph speed limit to be extended from the Medway Tunnel up to and including Four Elms roundabout with average speed camera enforcement.

The reasoning behind the selection of the preferred scheme to be the subject of this Business Case is discussed below.

Option 1 was discounted due to the high cost of delivering the works. In addition, whilst the modelling indicated that journey times for some movements improved as a result of this scheme, vehicles travelling the entire route during the evening peak (from Wainscott Bypass to Medway Tunnel) would suffer from significantly longer journey times following completion of the works.

Whilst option 2 was affordable (based on estimated costs) it was considered that there was insufficient contingency within the budget to allow for the uncertainties associated with the land acquisition process. This option would require significant land acquisition and at this stage there is an element of uncertainty regarding the costs associated with the land acquisition – this is, in part, as a result of uncertainty regarding whether the land can be acquired through negotiation or if a CPO will be required. For this reason, this option was discounted.



Option 3 was considered as it was felt that improvements at Sans Pareil roundabout would offer significant benefits for people using this route. However, this option was discounted as it offered no benefits at Four Elms roundabout. Significant development is anticipated on the Hoo Peninsula as part of the emerging Local Plan. The only available route for traffic leaving the Hoo Peninsula is to join the main network at Four Elms roundabout. As a result, improvements at Four Elms roundabout are essential to ensure that this development does not add significant additional delay to users of the network.

Option 4 was chosen as the preferred option as it is affordable, it offers benefits to people using this route and the level of land take required to deliver the scheme is significantly reduced, which will eliminate some of the uncertainty around costs.

### 3.2. Preferred option:

*[Describe the Preferred Option and identify how the scheme aligns with the objectives. Include evidence of stakeholder support for the Preferred Option either through consultation on the scheme itself or on the strategy the scheme forms part of; max. 1 page.]*

The preferred scheme comprises the following elements:

- Four Elms roundabout
  - Enlarged roundabout to increase capacity/stacking space;
  - Full signalisation including at grade pedestrian crossings;
  - Free flow slip road from Wainscott Bypass onto Four Elms Hill.
- Wulfere Way
  - Additional lane to be provided in each direction between Sans Pareil roundabout and Four Elms roundabout.
- Sans Pareil roundabout
  - Dedicated free flow slip road from Frindsbury Hill to Wulfere Way;
  - Realigned signalised Wainscott Road junction (from Sans Pareil roundabout to Frindsbury Hill);
  - Additional exit lane onto Berwick Way for right turning traffic.
- Entire route
  - Reduction in speed limit to 50mph;
  - Average speed enforcement cameras.

The preferred scheme aligns with the scheme objectives as follows:

Objective 1: Improve operation of the A289 corridor

The scheme will reduce delays and improve reliability for existing users.

Objective 2: Ensure minor side roads operate effectively, with acceptable traffic capacity and minimal delay

The relocation and signalisation of the Wainscott Road junction will ensure traffic from the minor side road can access the A289.

Objective 3: Provide transport system which can aid delivery of emerging Local Plan

The scheme provides additional capacity on the corridor which will aid delivery of the emerging Local Plan.

At this stage, there is no specific evidence of stakeholder support for the preferred option. However, there has been ongoing engagement with Local Elected Members throughout the options review process – most recently at Member Advisory Project Board when a full project update including scheme content was given.

### 3.3. Assessment approach:

*[Describe the approach used to assess the impacts of the scheme, describing both the quantitative (including reliability if appropriate) and qualitative approaches used. Describe the reference case ('Do nothing') and the Preferred Option.]*

*The assessment approach should be a proportionate application of Department for Transport's (DfT) modelling and appraisal guidance as set out in WebTAG (please see WebTAG: TAG guidance for the technical project manager); max. 1 page.*

*Smaller schemes (less than £2 million) are not required to assess Reliability in the Assessment Approach.]*

The scheme has been modelled using the 2016 Medway Aimsun model. The A289 scheme was tested using a subnetwork which was produced from the future year macro assignments using a static traversal (effectively a cordon model) and this was run at a microscopic level.

Matrices from this model are segmented as follows:

- UC1 = Car HBW
- UC2 = Car NHBW
- UC3 = Car HBO + NHBO
- UC4 = LGV HBW
- UC5 = LGV NHBW
- UC6 = LGV HBO + NHBO
- UC7 = HGV NHBW

The matrices were combined to give:

- Car Business = UC1 +UC2
- Car Commute = UC3 split by WebTAG proportions
- Car Other = UC3 split by WebTAG proportions
- LGV Freight = UC4 +UC5
- LGV Other = UC6
- OGV = UC7

The reference case was taken as the Do Minimum situation which included committed schemes in the wider macroscopic modelled area. The Preferred Option included the measures at the Four Elms and Sans Pareil roundabouts and the widening of the A289 Wulfere Way as set out in 3.2 above.

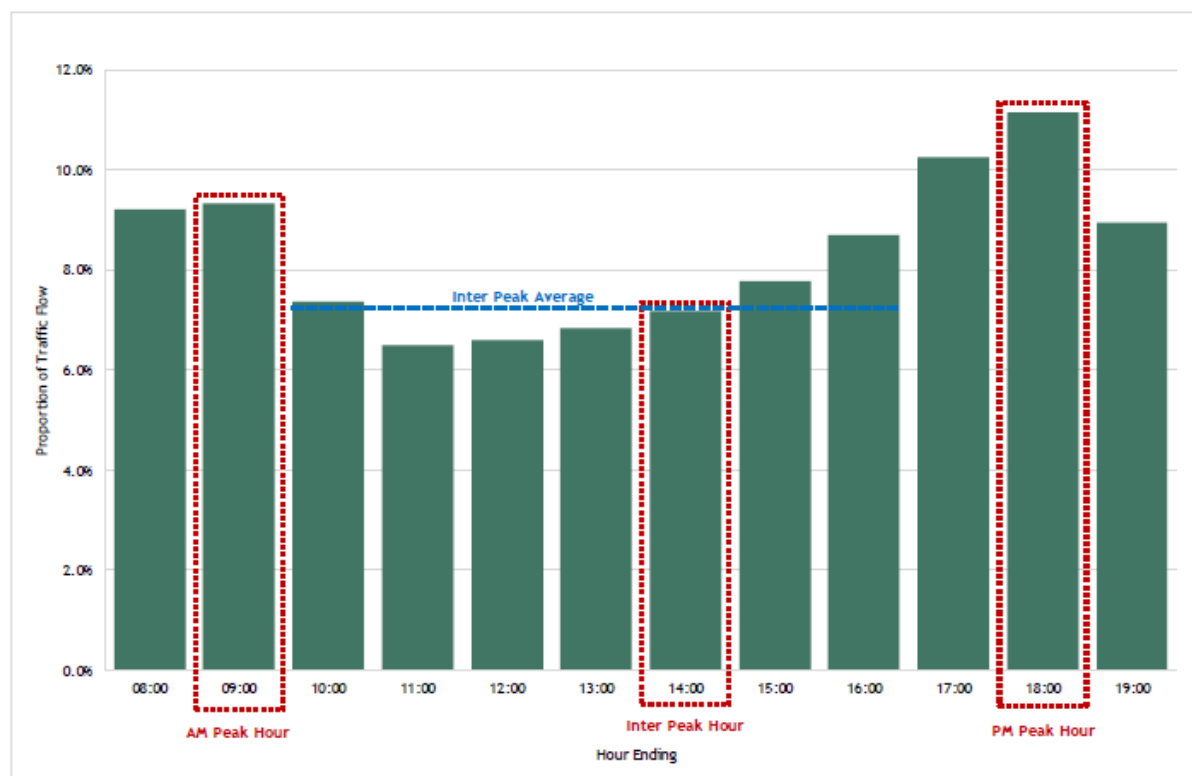
Forecast years of 2021, the first full year of benefits, and a final model year of 2035, which is consistent with the Medway Local Plan period, have been modelled. A core scenario was tested which only included the committed housing developments as committed employment forecasts were greater than the assumptions contained within TEMPRO v7.2. This approach also avoids the issue of double counting of trips between the new housing and the new employment. As none of the developments which have already been granted planning consent are considered as



dependent upon the scheme, the core scenario is compliant with WebTAG unit A2-3 transport appraisal in the context of dependent development.

Outputs from the microscopic model were input into TUBA to produce the BCR. Peak period to peak hour factors were derived from traffic count data collected for the development of the model. The AM peak period was taken as 07:00-09:00 as 09:00-10:00 is more representative of interpeak traffic flows. The interpeak was therefore taken as 09:00-16:00. For the PM Peak period this was taken as 16:00-18:00 as the traffic flows for 18:00-19:00 are significantly less than the peak hour. Therefore, the appraisal is based upon 11 hours of benefits. This gives the following peak hour to peak period factors:

- AM Peak – 1.99
- Inter Peak – 7
- PM Peak – 1.91



Source: Medway Aimsun Model, Model Validation Report, Fore Consulting

An annualisation factor of 253 was used i.e. weekdays excluding bank holidays.

As TUBA does not assess accident benefits, a simple COBALT model of the two junctions and the A289 between the two junctions was developed. Actual flows from the microscopic model were converted to AADT flows using data from a nearby permanent traffic counter.

An assessment of reliability was undertaken using the stress based approach as per Appendix 5 of WebTAG unit A1.3.

An assessment of reliability was undertaken by examining the standard deviation of journey times for all vehicles in the microsimulation model, which is appended (Appendix A – table 1). This shows that there is a reduction in the standard deviation of journey times in the inter peak

and PM peak indicating an improvement in journey time reliability. However, there is an increase in the standard deviation of journey times in the AM peak.

Journey time reliability is improved because there is more capacity at the roundabouts. This is shown in the degree of saturation results for the approaches to the roundabouts, which is appended (Appendix A – table 2). In the do minimum Wulfere Way and Hasted Road are operating above 85% capacity in the AM and PM peaks and Berwick Way is operating above 85% in the evening peak. In most cases this is reduced to below 85% in the do something scenario.

### 3.4. Economic appraisal inputs:

*[Provide details of key appraisal inputs, those which are different to the inputs defined in WebTAG A.1.1 (in terms of demand, user benefits, non-user benefits, revenue, capital costs, renewal costs and operating costs) as per the table below (expand as appropriate). Please note, not all sections of the table may require completion.]*

*Smaller schemes (less than £2 million) are not required to complete this section.]*

Capital costs were profiled as per the costs presented in Section 5.3 of the Financial Case. The costs used excluded inflation which was used to produce the outturn costs in the Financial Case.

An optimism bias of 44% was applied despite this being an outline Business Case as the scheme design is still at concept stage.

The economic appraisal includes allowances for maintenance and renewal as follows:

- Average speed cameras – £15,000 per annum, £350,000 every 15 years;
- Traffic signals – £12,500 per annum, £245,000 every 10 years;
- Street lighting – £15,000 per annum, needs renewal after 70 years, therefore no renewal cost included.

An optimism bias of 44% was applied to the maintenance and renewal costs.

In order to incorporate these in TUBA the total maintenance and renewal costs have been summed over the appraisal period. The annual proportion of the total maintenance and renewal cost was determined over the appraisal period.

### 3.5. Economic appraisal assumptions and results

*[Provide details of the key appraisal assumptions and results (BCR and sensitivity tests) as per the following tables (expand as appropriate). Please note, not all sections of the table may require completion. Also provide a supporting appraisal spreadsheet. Promoters should use their own spreadsheet to calculate qualitative costs and benefits and these should adhere to national guidelines. Please see Transport Analysis Guidance: WebTAG.]*

*Promoters should also include a statement which identifies other schemes which may have potentially contributed to the same benefits/impacts. Smaller schemes (less than £2 million) are not required to complete this section.]*

Appraisal Assumptions	Details
WebTAG version	TUBA version 1.9.9 which is consistent WebTAG data book, July 2017 has been used along with COBALT version 2017.1
Opening Year, Final Modelled Year and Appraisal Duration	The scheme is due to be completed in 2020. The first full year of benefits has been taken as 2021. The final modelled year has been taken as 2035 which is consistent with Medway's Local Plan period. A 60-year appraisal has been undertaken. The profile is assumed to be flat beyond 2035
Price Base/GDP Deflator	A Price Base of 2010 was used. The 2017 prices were converted to 2010 prices using the GDP Deflator from the WebTAG (July 2017) databook
Real Growth (i.e. above CPI or below)	TUBA applies real Growth applied in accordance with WebTAG
Discounting	Discounting was as per WebTAG applied at a rate of 3.5% per year for 30 years and 3.0% thereafter

	£m PV (2010)
<b>Costs*</b>	
Capital Costs	11.886
Renewal Costs	2.137 <sup>1</sup>
Operating Costs	
<b>Benefits</b>	
Journey Time Benefits	147.230
Highway Externalities	0
Greenhouse Gases	1.303
Accidents	-2.706
Revenue	0
Indirect Tax	-2.737
<b>Appraisal</b>	
Present Value of Costs (PVC)	14.023
Present Value of Benefits (PVB)	143.090
Net Present Value (NPV)	128.677
Benefit Cost Ratio (BCR)	10.2

\* Costs represent total Capital Costs, Renewal Costs and Operating Costs of the specific intervention seeking funding under LGF.

<sup>1</sup>. Operating and Renewal costs have been combined as TUBA does not account for them separately

The only scheme that may potentially contribute to the same benefits/impacts anticipated from this scheme is the Medway City Estate LGF project. Whilst the Medway City Estate project has a separate set of objectives to the A289, given their geographic proximity it is impossible for one scheme to not impact on the other.

### 3.6. Sensitivity tests:

*[The Benefit Cost Ratio is based on the best estimates currently available of the benefits of the scheme. However, these are estimates and therefore it is appropriate to assess the sensitivity of the appraisal result to changes in key inputs. Provide details of the sensitivity tests undertaken as per the following table (expand as appropriate). Please note, not all sections of the table may require completion. See [WebTAG unit M4 forecasting and uncertainty](#).*

High and low growth scenarios have been appraised. These include the TEMPRO adjustment as per WebTAG. The developments included in the core, high and low growth scenarios are the same.

Sensitivity tests on the appraisal period and the exclusion of inter peak benefits have also been undertaken. Also as business user benefits represent around 50% of benefits a sensitivity test with car business reclassified as car other has been undertaken.

	<b>£m PV (2010)</b>
<b>Sensitivity Test 1</b>	<i>High Growth Scenario</i>
Present Value of Costs (PVC)	14.023
Present Value of Benefits (PVB)	206.486
Net Present Value (NPV)	192.463
Benefit Cost Ratio (BCR)	14.7

	<b>£m PV (2010)</b>
<b>Sensitivity Test 2</b>	<i>Low Growth Scenario</i>
Present Value of Costs (PVC)	14.023
Present Value of Benefits (PVB)	43.781
Net Present Value (NPV)	29.758
Benefit Cost Ratio (BCR)	3.1

	<b>£m PV (2010)</b>
<b>Sensitivity Test 3</b>	<i>Core scenario 60-year appraisal excluding inter peak benefits</i>
Present Value of Costs (PVC)	14.023
Present Value of Benefits (PVB)	70.915
Net Present Value (NPV)	56.892
Benefit Cost Ratio (BCR)	5.1

	<b>£m PV (2010)</b>
<b>Sensitivity Test 4</b>	<i>Core Scenario 30-year appraisal</i>
Present Value of Costs (PVC)	13.199
Present Value of Benefits (PVB)	77.270
Net Present Value (NPV)	64.071
Benefit Cost Ratio (BCR)	5.9

	<b>£m PV (2010)</b>
<b>Sensitivity Test 5</b>	<i>Core scenario 30-year appraisal excluding inter peak benefits</i>
Present Value of Costs (PVC)	13.199
Present Value of Benefits (PVB)	41.560
Net Present Value (NPV)	28.361
Benefit Cost Ratio (BCR)	3.1

	<b>£m PV (2010)</b>
<b>Sensitivity Test 6</b>	<i>Core scenario 60-year appraisal Car business re-classed as Car Other</i>
Present Value of Costs (PVC)	14.023
Present Value of Benefits (PVB)	132.904
Net Present Value (NPV)	118.881
Benefit Cost Ratio (BCR)	9.5

*Smaller schemes (less than £2 million) are not required to complete this section.]*

### 3.7. Environmental impacts:

*[Provide details of the environmental impacts (WebTAG A3) as per the following table and provide supporting evidence if necessary. Please note, not all sections of the table may require completion; max. 0.5 pages excluding table.]*

<b>Environmental Impact</b>	<b>Assessment</b>
Noise	Noise Important Area adjacent to A289 Berwick Way.
Air Quality	Four Elms roundabout is adjacent to the Four Elms Hill Air Quality Management Area. Queues from the Four Elms roundabout currently extend into the AQMA. Improvements at the junction will reduce queued traffic in the AQMA.
Greenhouse Gases	Reduction in non- traded carbon of 28,413 tonnes over a 60-year period which equates to £1,295,000 over a 60-year period.
Landscape	This scheme will maintain the existing landscape character in an area which is not a designated landscape; that is, neither national or local high quality, nor is it vulnerable to change – <b>Neutral</b>
Townscape	No impact on townscape – <b>Neutral</b>
Heritage	No listed buildings in vicinity. The archaeological assessment for Lodge Hill identified heightened potential for Prehistoric, Roman and Anglo-Saxon settlements or activity around the Four Elms roundabout. An archaeological watching brief would ensure that there was no negative impact on any finds. Therefore, it is anticipated that there will be no appreciable impacts, either positive or negative, on any known or potential historic environmental assets – <b>Neutral</b>
Biodiversity	Scheme is in a SSSI Impact zone. Mitigation will be put in place to minimise the impact on any protected species identified – <b>Neutral</b>
Water Environment	Land around the Four Elms roundabout in flood risk zones 2 and 3. No anticipated increase in flood risk – <b>Neutral</b>

### 3.8. Social impacts:

*[Provide details of the social impacts (WebTAG A4.1) as per the following table and provide supporting evidence if necessary. Please note, not all sections of the table may require completion; max. 0.5 page excluding table]*

<b>Social Impact</b>	<b>Assessment</b>
Accidents	An increase in 110 accidents over a 60-year period with a reduction of 1.1 serious casualties and an increase of 196.8 slight casualties
Physical Activity	The scheme does not encourage walking or cycling – <b>Neutral</b>
Security	The scheme does not impact on security – <b>Neutral</b>
Severance	Existing uncontrolled pedestrian crossings removed across A289 Hasted Rd and replaced by pedestrian crossing facilities at Four Elms roundabout, existing pedestrian flow <200 per day – <b>Slight Benefit</b>
Journey Quality	This scheme will minimise delays on the network during the morning and evening peaks, and improve the resilience of the network, giving road users more certainty regarding their journey time. The greater journey time reliability on this route resulting from the scheme will further improve journey quality by reducing user frustration and safety concerns. AADF on the A289<100,000 – <b>Moderate Benefit</b>
Option values and non-use values	Scheme does not change the availability of transport services – <b>Neutral</b>
Accessibility	Scheme does not affect accessibility – <b>Neutral</b>
Personal Affordability	Scheme does not affect cost of travel – <b>Neutral</b>

### 3.9. Distributional impacts:

*[Evaluate the distribution of the scheme's impacts focusing on geographical location and socio-economic/demographic characteristics (WebTAG A4.2). In the absence of more recent or better quality local evidence, it is suggested that DataShine is used to inform this assessment; max. 0.5 page.]*

*Smaller schemes (less than £2 million) are not required to complete this section.]*

We have considered the distributional impacts of the scheme on Medway's population, particularly those under the age of 14 and those over the age of 64, and have focused on those factors that are likely to be most affected by the proposed changes to the A289.

#### **Economic Impact and Journey Quality**

This scheme is in an area of England with a significant proportion of households suffering from income deprivation. This can be seen in the appended map (Appendix B), which shows income deprivation across the Lower Super Output Area (LSOAs) of Medway. Therefore, the potential for the scheme to unlock housing and employment growth on the Hoo Peninsula will benefit those parts of the population that suffer from considerable income deprivation. Although there is evidence of income deprivation, this population is also economically active and the improvements to journey quality through improved capacity and reliability will be particularly beneficial to commuters in the Medway towns.

#### **Air Quality**

WebTAG A4.2 makes it clear that poor air quality impacts disproportionately on those in society that are most deprived. The section of the A289 that will be improved by this scheme passes through an LSOA that is ranked within the 10,000 most income deprived in England. It is also an important route for those in other parts of Medway, including some areas that rank within the



1,000 most deprived in England. Therefore, the reduction in emissions in and around the scheme due to reduced idle times and improved traffic flow will lead to improved air quality for those that are most deprived in Medway.

### Severance

Also appended are maps showing population distribution by age group in Medway for the young (0-4 years (Appendix C(i)) and 5-14 years (Appendix C(ii))) and the older population (65-89 years (Appendix C(iii))). These demonstrate that while the scheme will reduce severance through the introduction of a formal pedestrian crossing at the Four Elms roundabout, it will not disproportionately impact these groups of society often considered more vulnerable. There may be a slight benefit for a concentration of people between the ages of 65 and 89 resident in Wainscott, to the west of Four Elms roundabout, as well as a relatively large population of children in the residential area to the west of Four Elms roundabout.

### 3.10. Wider impacts:

*[Provide a description of the expected wider economic impacts as well as any dependent development (e.g. commercial floorspace, residential units, jobs created or safeguarded).*

*Smaller schemes (less than £2 million) are not required to complete this section.]*

The council is preparing a new Local Plan to provide direction on the future growth of the area. The aim is to ensure that Medway grows sustainably, to provide land for housing, employment, infrastructure and services, whilst protecting the area's environment and heritage. The new Local Plan will cover the period up to 2035, providing for the number of homes and jobs and supporting infrastructure that the area will need. The North Kent Strategic Housing and Economic Needs Assessment (March 2015) established the development needs for housing, employment and retail in Medway to 2035:

- 29,500 homes;
- 155,000 m<sup>2</sup> industrial land;
- 164,000 m<sup>2</sup> warehousing land;
- 50,000 m<sup>2</sup> office space;
- 78,000 m<sup>2</sup> comparison retail space; and
- 19,000 m<sup>2</sup> convenience retail space.

The Local Plan developments which are not already committed within the Hoo Peninsula are considered to be dependent on the scheme. The Local Plan has identified 5,284 residential units on the Hoo Peninsula. The number of committed developments on the Hoo Peninsula stands at 405 up to 2028, therefore the number of units that may be deemed to be dependent on the scheme is 4,879 (5,284 less 405).

The following employment sites are identified in the Local Plan and are considered as dependent upon the scheme being implemented.

Site	Uses	Site Area (ha)	Floorspace (Sqm)	Jobs
Kingsnorth 1	B2/B8	17	68,000	715-1,900
Kingsnorth Expansion	B1/B2/B8	93	406,000	8,913-18,060



### 3.11. Value for money:

*[Summarise the implications of the scheme (economic, social, environmental and distributional impacts) (DfT Value for Money Framework).*

*The following supporting appraisal tables (WebTAG appraisal tables) should also be provided and appended to this business case unless the scheme is subject to exemptions (detailed in the Project Overview):*

- *Appraisal summary table (summarises the environmental, economic and social impacts of a scheme and is different to the supporting appraisal spreadsheet);*
- *Analysis of Monetised Costs and Benefits (AMCB) table;*
- *Public Accounts table; and*
- *Economic Efficiency of the Transport System (TEE) table.*

*The tables above should be in standard WebTAG format as per the guidelines. Please note, not all sections of the table may require completion.*

*Max. 1 page excluding table.*

*Smaller schemes (less than £2 million) are not required to complete this section.]*

The scheme will improve journey times and reliability on the corridor. It will minimise delays on the network during the morning and evening peaks, and improve the resilience of the network, giving road users more certainty regarding their journey time. The greater journey time reliability on this route resulting from the scheme will further improve journey quality by reducing user frustration and safety concerns.

The increase in the capacity of the road network at this congested point will also enable development on the Hoo Peninsula to come forward. The current levels of congestion and delay on this section of route are constraining development in this area but there are significant development plans in this economic growth area. The current Local Plan includes 5,284 housing units plus 108 Ha of employment land, which would provide between 9,628 and 19,960 jobs on the Hoo Peninsula. This is particularly important for the growth and revitalisation of an area where some wards rank within the 1,000 most income-deprived in England.

The scheme will reduce severance caused by the A289 as the existing uncontrolled pedestrian crossings on the A289 Wulfere Way and Hasted Road will be replaced by a signalised pedestrian crossing on the southern arm of Four Elms roundabout. This may also have some benefits for pedestrian safety in this area, which has not been assessed. However, a COBALT assessment indicates that there will be a small increase in road traffic accidents because of the new signals; however, there is a reduction in the number of severe casualties.

The reduction in queued traffic on the approach to Four Elms roundabout will improve air quality in the adjacent Four Elms Hill Air Quality Management Area.

The scheme provides a very high value for money with a BCR of 10.2:1 over a 60-year appraisal period using an optimism bias of 44%. A number of sensitivity tests have been undertaken which shows that the economic case is robust. The BCR remains over 2, high value for money, with a BCR of around 3 with a 30-year appraisal period excluding inter peak benefits or for a low growth scenario.

The Analysis of Monetised Cost and Benefits (Appendix D), Transport Economic Efficiency (Appendix E), Public Accounts (Appendix F) and Appraisal Summary Table (Appendix G) are appended.

## 4. COMMERCIAL CASE

*The commercial case determines whether the scheme is commercially viable and will result in a viable procurement and well-structured deal. It sets out the planning and management of the procurement process, contractual arrangements, and the allocation of risk in each of the design, build, funding, and operational phases.*

### 4.1. Procurement options:

*[Present the results of your assessment of procurement and contracting route options and the supplier market, and describe lessons learned from others or experience; max. 1 page.]*

There are a number of procurement options available to the project team including:

#### Civil and Structural Engineering Professional Services Consultancy Framework

Medway Council have established a Civil and Structural Engineering framework following a full OJEU compliant process. This framework consists of a number of Lots, each of which covers different aspects of the consultancy work required to deliver a civil or structural engineering project. Lot 1 is entitled 'Traffic Schemes and Network Management Professional Services' and provides a realistic option for delivery of the design work required on this project. All companies that appear on the framework will have undergone a value for money assessment to ensure that Medway Council is being offered best value at all times.

There are two options for using this framework – direct award and mini-competition. Direct award allows for work to be awarded directly to the next company on the framework (subject to a suitable price being quoted) and therefore allows for very quick appointment of a supplier, whereas a mini-competition allows all suppliers within the relevant Lot to tender for the work. This approach allows for both price and quality/experience to be taken into account before making an appointment, however, does take longer than a direct award.

#### Highway Infrastructure contract

Following a full OJEU compliant procurement process Medway Council has recently entered into a contract with VolkerHighways for the provision of Highway Maintenance support and delivery of highway related capital projects. This contract will run from 1<sup>st</sup> August 2017 for a period of 5 years, with the option to extend this by a further 5 years.

Use of this contract is considered to be a viable option for appointing a contractor to deliver the proposed works contained within this project. Under the terms of the contract VolkerHighways are required to meet a number of KPI's including the use of local suppliers and local workforce, therefore, benefiting the local economy. Whilst a guideline pricing structure is included within the contract individual projects may need to be priced separately.

In addition, as VolkerHighways will be responsible for maintaining the highway once the improvement works have been completed, if they are appointed to construct the scheme it will be in their interests to ensure the works are completed to a high standard with careful consideration given to maintenance requirements and accessibility.

Whilst this option has the benefit of expediency in terms of appointment, it will be important to ensure that the works are programmed in at the earliest opportunity to ensure that the resources are available to facilitate project delivery within the required timeframe. It is also important to consider that any items outside the schedule of rates agreed at the start of the contract will need

to be quoted for separately by VolkerHighways. The main risk associated with this is that only one quote will be obtained for the works, meaning there is nothing to compare the cost against. The Principal Engineer will assess these costs prior to the quote being accepted to ensure that all costs quoted are reasonable.

#### Open tender

Whilst the use of a framework is preferred, if the work is of a specialist nature an open tender is still an acceptable option. If this option is adopted opportunities will be posted on the Kent Business Portal and will be open for all registered suppliers to tender if they wish. The key issue with this approach is the duration of the procurement process. Given the delivery programme for this project, use of an open tender is not a viable option.

Project design work (RIBA stages 3 and 4) will be procured through the Civil and Structural Engineering framework, via a direct award (subject to a satisfactory price being quoted). This approach will allow work to begin immediately. This approach will also have the advantage of allowing Mott MacDonald who worked on the development of revised options for the scheme, and who therefore have the required background knowledge, to progress with further design work potentially shortening the programme for this part of the project compared to if a new company came in who had no knowledge of the scheme or its complex history.

The Highway Infrastructure contract will be used to appoint the contractor to build the scheme – VolkerHighways. Use of the Highway Infrastructure contract allows for quicker appointment of the contractor (subject to a satisfactory price being quoted) which is key given the delivery programme for the project.

#### **4.2. Preferred procurement and contracting strategy:**

*[Define the procurement strategy and contracting strategy (e.g. traditional, (design and build, early contractor involvement) and justify, ensuring this aligns with the spend programme in the Financial Case and the project programme defined in the Management Case; max. 2 pages.]*

The procurement strategy adopted for this approach is the traditional approach for construction projects. A consultant will be appointed to deliver the developed and technical designs (RIBA stages 3 and 4). Once this work has been completed a contractor will be appointed to deliver the improvements.

Fully developing the design before appointing a contractor will give the project team greater certainty about design quality and cost. Given the fixed project budget, cost is a key consideration at every stage of the project. In order to reap the most benefit from this procurement type it will be essential that all the design information is presented to the contractor at the start of the procurement process. Any incomplete information or changes made following the appointment of the contractor will generate additional costs.

Subject to the design work being completed to a high standard, this procurement approach is considered to be low risk. As the contractor is provided with the full scheme design prior to appointment, they are required to submit a price for full project delivery. If, through no fault of the design or tender information, the contractor cannot build the scheme for the price quoted they are liable for any cost overrun. This ensures that the project team have a clear indication of project cost and can budget accordingly.

Whilst it has been agreed that the traditional approach is the correct strategy to use for this project, it is acknowledged that this approach may take longer than using design and build. This is due to the need to wait for the design to be completely finished before the procurement

process can begin. There can be no overlap as this will inevitably lead to additional costs being incurred during the construction phase.

In addition, this approach generally does not allow for any input from the contractor in terms of design. This means that the contractor has no opportunity to help improve the buildability of the scheme. They are tied into delivering the design presented to them, unless there are fundamental flaws within the proposals.

There are two key risks associated with this approach:

- The designer may try to make claims for changes to the design, which could increase project costs. In order to address this risk the Project Manager will ensure that the scope and objectives of the scheme are clear before progressing to the design phase. This will allow for the designer to be procured using a very focussed specification. If any change requests are submitted by the design consultant they will be robustly challenged by the Project Manager, and the designer will need to justify why the change is required and how the work required varies from that contained in the original specification.
- The design information is not complete or design changes are required following procurement of the contractor – both of which could incur significant additional costs to the project team. To mitigate this risk a full review of the design will be conducted by the Project Manager and Principal Highway Engineer prior to progression to procurement of a contractor. Regular meetings will be held with the design team to ensure that their work is progressing in line with the specification and in accordance with the project programme.

The traditional procurement approach has been used for the Chatham town centre LGF project. Whilst this approach has been a success and work is progressing well onsite, it has highlighted the importance of ensuring that the contractor is provided with a full breakdown of delivery requirements prior to appointment. This needs to include the complete design, specification for the works including type and colour of materials and project programme.

Both the Highway Infrastructure Contract and the Civil and Structural Engineering framework use NEC3 based contracts. The NEC3 contract is based on the fundamental principle of good project management, where the council and the designer/contractor work together in the spirit of mutual trust and co-operation.

One of the main principles of this type of contract is that either party may advise the other of a problem or a potential problem through an Early Warning Notice. The purpose is to identify potential problems before they occur, so that they can either be avoided or their effects mitigated rather than waiting until something has happened and then trying to deal with it. This approach promotes collaboration between the Project Manager and the designer/contractor. The submission of an Early Warning Notice results in a meeting where the sole aim is to deal with the problem for the good of the project.

An NEC3 contract offers clarity and simplicity for both parties, with clearly defined roles and responsibilities and established processes to deal with for any issues which arise. Due to the clarity of the contract suppliers are more likely to follow the terms of the contract, avoiding conflict between the two parties. This type of contract leads to better outcomes in terms of works being delivered to programme, cost and quality requirements.

Due to the time constrained delivery programme it is considered that the NEC3 contract is the most appropriate for this project. This contract will ensure that there is a clear delivery programme for the project, with established processes (such as the Early Warning Notice) in

place to deal with any unexpected issues. It is essential to the success of the project that any potential problems are dealt with or mitigated against before they arise in order to minimise delay to the project programme. This has not been the case to date in this project, with problems causing significant delays to the delivery of the project.

Given the short delivery period it is vital that the contract is clear and that there is no uncertainty around roles and responsibilities. In addition it is key that the contract promotes collaboration between the Project Manager and the designer/contractor as there is no scope for any conflict if the project is to be delivered within the funding period, as well as promoting good project management.

An NEC3 contract is in place between Medway Council and the contractor procured to deliver the improvements in Chatham town centre. This contract is working well, with two way open communication and early engagement regarding any potential issues. This approach has ensured that the project remains on programme despite some issues being encountered during the construction phase.

#### 4.3. Procurement experience:

*[Describe promoter (and advisor) experience of the proposed approach including any lessons learnt from previous procurement exercises of a similar scale and scope; max. 0.5 pages.]*

All procurement will be fully supported by Medway Council's Category Management team. This team has a proven track record of successful project delivery, both in terms of quality and value for money and were recognised in March 2014 at the Excellence in Public Procurement Awards when the team achieved the Highly Commended Award for Innovation or Initiative, and in August 2014 being shortlisted for two major award categories in the CIPS Supply Management Awards.

The team have extensive experience of all the procurement options considered, including setting up the Civil and Structural Engineering framework earlier this year and leading on the appointment of VolkerHighways as the term contractor for highway maintenance and capital projects.

The Civil and Structural Engineering framework will be used to appoint Mott MacDonald to undertake the RIBA stage 3 and 4 design work. This framework came into effect in May 2017 and is the preferred procurement approach for all civil and structural engineering consultancy requirements.

As part of the Strood town centre LGF project a direct award has been made using the Civil and Structural Engineering framework to arrange project management support, whilst appointment of a LGF Project Manager was completed. This award was completed quickly and efficiently meaning minimal disruption to the project programme. This use of the framework clearly demonstrated a key advantage to this procurement approach in that it allowed for an immediate start. This will be a key consideration when undertaking any procurement in relation to the A289 project due to the constrained time available for construction.

The Civil and Structural Engineering framework has also been used to procure a consultant to undertake the LGF Project Manager role. In this instance a mini-competition was conducted. Not only did this ensure that Medway Council received the best value for money, but also meant that the project team were able to review a number of CV's before making an appointment. This allowed full consideration to be given to both cost and quality. Whilst the use of a mini-competition extended the procurement period, compared to if a direct award had been made, it was felt in this instance that quality rather than pace was the key consideration. Nevertheless



the procurement process was completed in a timely fashion, allowing for the Project Manager to take up post in January 2018.

The Highway Infrastructure contract will be used to appoint VolkerHighways to undertake the construction works. This contract came into effect in August 2017 and is therefore still in its infancy. This contract was awarded following a full OJEU compliant procurement process. A process which the Category Management team has been following for a number of years.

The Highway Infrastructure contract has been used to appoint VolkerHighways to deliver the Strood town centre improvement works. It was decided that this would be the most suitable procurement approach due to the limited time available to procure a contractor and deliver the works. An open tender procurement exercise would have been too time-consuming and would have required an extension to the LGF funding period for the project.

The works being undertaken in Strood town centre are fairly standard and therefore the schedule of rates agreed at the outset of the contract covers most of the works planned. The works are being specified through an activity schedule. An alternative option would have been to provide VolkerHighways with the drawings and ask them to price for delivering the works. However, this is a much more involved exercise for them, things may be missed and the price may not be as expected. It has been agreed that as the works are standard the best approach is to use the schedule of rates to calculate the construction price for this project.

Preparation of the order for these works was quick and much of the price was pre-determined through the schedule of rates. This ensured that the contractor could be appointed in a timely manner and that there was certainty on the price of the works from the outset.

VolkerHighways have also been appointed, through the Highway Infrastructure contract, to deliver flood defences in Strood (including at the Civic Centre site). Whilst the Highway Infrastructure contract is primarily aimed at highway improvement works the scope of the contract allows for 'various ad-hoc requirements may arise during the term of the contract for individual schemes, usually but not limited to, as a result of capital funding allocation. These schemes shall improve and enhance the existing network and assets through other funding streams.' It was determined that this scheme fitted under the scope of the Highway Infrastructure contract as it enhances an existing asset – i.e. the Civic Centre site which is owned by Medway Council.

Initially the Strood flood defences work was being progressed by Balfour Beatty under the SCAPE framework. However, Balfour Beatty were unable to deliver these works in line with the budget and programme requirements specified by Medway Council. As a result it was decided to use the Highway Infrastructure contract to obtain an alternative quote and programme for the works to identify if there were any programme or cost efficiencies which could be considered. VolkerHighways were provided with a complete set of drawings and details of the work required and were asked to provide a full tender response detailing their experience, their approach to the works, a programme and a cost for delivery.

In their submission VolkerHighways were able to offer significant cost savings through identifying programme efficiencies. The programme put forward by VolkerHighways offered a 17 week saving, compared to that submitted by Balfour Beatty. This was facilitated through self-delivery rather than sub-contracting the work out to other contractors. They were also able to identify some cost efficiencies through sourcing more cost effective materials.

VolkerHighways were able to put forward an affordable scheme which enabled the optimum number of homes for the site. The use of the Highway Infrastructure contract allowed the project team to obtain a comparison price and programme in a relatively short space of time. The

process was simple, but still allowed for VolkerHighways to provide a full tender response in relation to the request which demonstrated their significant experience in delivering similar schemes for the Environment Agency.

A representative from the Category Management team attends the LGF Programme Steering Group meetings and is therefore always aware of the procurement timetable for all the projects.

#### 4.4. Competition issues:

*[Describe any competition issues within the supply chain; max. 0.5 page.]*

There are no competition issues within the supply chain. The chosen procurement route will be through the Civil and Structural Engineering Framework (for the design work) and through award under the Highway Infrastructure contract (for the construction work). Both VolkerHighways (holder of the Highway Infrastructure contract) and all companies that appear on the Civil and Structural Engineering framework have been through a full OJEU compliant procurement process. This has addressed any competition within the supply chains.

#### 4.5. Human resources issues:

*[Where possible, describe what you have done to identify and mitigate against any human resource issues; max. 0.5 pages.]*

A review of internal resourcing levels has identified that there is a shortage of appropriately skilled personnel to facilitate project delivery. The key resource which is currently absent is a Project Manager. To resolve this issue the decision has been made to appoint a dedicated project management resource to deliver this project, in conjunction with Medway Council's other three transport related LGF projects.

The Project Manager post has been subject to three failed recruitment attempts. The use of an external recruitment agency has also been investigated but proved unsuccessful. As a result an external consultant has been appointed through the Civil and Structural Engineering Framework to undertake the role as a secondment. The Project Manager will be in post from 3<sup>rd</sup> January 2018 and will focus solely on delivery of the LGF transport projects.

The Project Manager who was in post for the initial work on the project was appointed in a similar way, and it is acknowledged that this appointment was not a success for a number of reasons. Having learnt from this experience measures will be put in place to ensure that the appointment of the new Project Manager is a success. These measures will include a clear management and reporting structure to allow regular performance management and discussion of any project related issues, a requirement to provide regular budget, progress, programme and risk updates to the monthly LGF Programme Steering Group meetings and regular project meetings to ensure the project is progressing in line with the programme and within budget.

#### 4.6. Risks and mitigation:

*Specify the allocation of commercial risks (e.g. delivery body, federated area, scheme promoters) and describe how risk is transferred between parties, ensuring this is consistent with the cost estimate and Risk Management Strategy in the Management Case; max. 1 page.]*

Medway Council, as scheme promoter, will carry the commercial risk associated with this project.

This risk will be managed through the procurement process. In order to qualify to appear on any of the frameworks used by Medway Council, suppliers are required to undergo a financial check. This ensures that suppliers used have a sound financial background with a lower risk of failure during their period of appointment.

During the construction process, due to the chosen procurement route, the financial risk will pass to the contractor. The contractor will be presented with the full design at the start of the procurement exercise. This will allow the contractor to work out an accurate cost for delivering the scheme. Once the contract has been entered into the financial risk will be with the contractor as they will be required to deliver the scheme within the cost quoted, or be liable for the additional costs – this is based on the assumption that no further changes are made to the design post contractor procurement.

#### 4.7. Maximising social value:

*[Where possible, provide a description of how the procurement for the scheme increases social value in accordance with the Social Value Act 2012 (e.g. how in conducting the procurement process it will act with a view of improving the economic, social and environmental well-being of the local area and particularly local businesses); max. 0.5 page.]*

Medway Council has taken steps to ensure that the bulk of procurement within Medway increases social value in accordance with the Social Value Act 2012.

#### Civil and Structural Engineering Framework

As part of the pre-qualification (PQQ) process, all companies applying to be on the framework were required to provide an explanation of the opportunities they would offer in the following areas:

- Apprenticeships for local people;
- Local Employment opportunities for local people;
- Supply Chain opportunities for local businesses.

In order to progress to the next stage of the procurement process the suppliers were required to clearly indicate the opportunities that would be available to the local community and to local businesses if they were appointed to the framework. Their performance in this area will be monitored over the life of the framework.

#### Highway Infrastructure contract

Within the Highway Infrastructure contract there are key performance indicators (KPI's) regarding the use of local suppliers and the recruitment of local apprentices or graduates. These KPI's require VolkerHighways to use local suppliers for 50% of their work in year 1, 60% in year 2 and 70% in year 3 and beyond. They are also required to recruit and/or support a minimum of one local graduate or apprentice per year of the contract.

## 5. FINANCIAL CASE

*The Financial Case determines whether the scheme will result in a fundable and affordable Deal. It presents the funding sources and capital requirement by year, together with a Quantitative Risk Assessment (QRA), project and funding risks and constraints. All costs in the Financial Case should be in nominal values.*

*The profile of funding availability detailed in the Financial Case needs to align with the profile of delivery in the Commercial Case.*

### 5.1. Total project value and funding sources:

*[Specify the total project value and how this is split by funding sources by year, as per the table below (expand as appropriate). This should align with the total funding requirement described within the Project Overview section. Please include details of other sources of funding, and any conditions associated with the release of that funding. LGF can only be sought to 2020/21.]*

The total project value is £11,564,000. This will be funded through the following funding sources:

Local Growth Fund – £11,100,000  
S106 Liberty Park – £202,000  
S106 Damhead Creek Power Station – £262,000

The funding will be drawn down in accordance with the table below:

£m	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
LGF	0.500	1.1		1.601	4.0	3.899	11.1
S106 – Liberty Park	0.142	0.06					0.202
S106 – Damhead Creek Power Station				0.262			0.262
Total	0.642	1.16	0	1.863	4.0	3.899	11.564

To date Medway Council has drawn down £1,600,000 of the LGF funding, with the remaining balance (£9,500,000) being drawn down between 2018/19 and 2020/21. Draw down to date has exceeded spend and therefore no funding has been drawn down in 2017/18.

The S106 funding for both Liberty Park and Damhead Creek Power Station has been secured and the only condition associated with the release of the funding is that the contribution is used towards improving the highway network to cater for the stated developments.

Post project completion Medway Council will fund the monitoring and evaluation required to establish the effectiveness of the scheme. The Council will commit up to £10,000 per annum from 2020/21 onwards to enable completion of the required monitoring and evaluation. This work will be funded through the LTP.

### 5.2. SELEP funding request, including type (LGF, GPF, etc.):

Medway Council are seeking £11,100,000 LGF funding from SELEP to facilitate project delivery.

### 5.3. Costs by type:

*[Detail the cost estimates for the project by year as per the table below (expand as appropriate) and specify how the inclusion of the Quantitative Risk Assessment (QRA) and other overheads aggregate to the total funding requirement. Where conversion has been made between nominal and real cost estimates (and vice versa) please provide details of any inflation assumptions applied. The Financial Case should not include Optimism Bias. Please confirm that optimism bias has not been applied in the Financial Case. Also, include details of the agreed budget set aside for Monitoring and Evaluation, and ensure this aligns with the relevant section in the Management Case. Please note, not all sections of the table may require completion.]*

Cost type	Expenditure Forecast						
	15/16 £000	16/17 £000	17/18 £000	18/19 £000	19/20 £000	20/21 £000	21/22 £000
Capital - Four Elms roundabout improvements						632	
Capital – Wulfere Way additional lanes					903		
Capital – Sans Pareil roundabout improvements						702	
Capital – Speed limit reduction and SPECS					400		
Capital – Design costs	270	98	207	333			
Capital – Land acquisition				965			
Capital – Utilities			72		1,812	1,670	
Capital – Fees	136	303	233	615	35	14	
Capital – Construction supervision					245	172	
Capital – Surveys	34	61	73				
Non-capital [For example revenue liabilities for scheme development and operation]							
QRA – 10%				191	340	319	
Monitoring and Evaluation						10	10
Inflation (%)				74	265	390	
<b>Total funding requirement</b>	<b>440*</b>	<b>462*</b>	<b>585*</b>	<b>2,178*</b>	<b>4,000</b>	<b>3,909</b>	<b>10</b>

Inflation rates used: 2018/19 – 3.5%, 2019/20 – 7.1%, 2020/21 – 11.09%

\* To date Medway Council has drawn down £1,600,000 of the LGF funding (2015/16 - £500,000 and 2016/17 - £1,100,000). However, anticipated spend to the end of 2017/18 is expected to total only £1,285,000 (2015/16 - £298,000, 2016/17 - £402,000, 2017/18 - £585,000), leaving a balance of £315,000. Whilst this funding will be used to accelerate spend on other LGF projects in 2017/18, the draw down and spend profiles have been adjusted to take this into account for future years. Due to lower than anticipated spend in 2015/16 and 2016/17 there has been no requirement to draw down any funds in 2017/18 to cover expected spend.

Monitoring and evaluation costs will be covered through the Local Transport Plan.

Optimism bias has not been applied in the financial case.



#### 5.4. Quantitative risk assessment (QRA):

*[Provide justification for the unit costs and a Quantitative Risk Assessment (QRA) provisions (detailed in the capital and non-capital tables above); max. 2 pages. Please provide supporting documents if appropriate.]*

All the unit costs included in the table above have been derived from discussions with external consultants or internal teams. At this stage of the project it is not possible to give exact costs due to the design only being at the concept stage, however, through discussions with experts in the field the costs are deemed to be as accurate as possible at this stage. Optimism bias of 44% has been applied in the Economic Case to reflect the element of uncertainty around the costs. As the project progresses these costs will be continuously reassessed and if necessary value engineering will be considered where appropriate to ensure that the project is delivered within budget.

In summary the unit costs outlined above have been derived from the following sources:

- Construction costs – Mott MacDonald have been working on the revised options for this scheme. As part of this work they have been asked to give a high level indication of the construction costs of each element of the project. Mott MacDonald have substantial experience in delivering schemes of this type and therefore it is considered that these costs can be relied upon to be as accurate as possible at this stage of the project. These costs have been used as the basis for the information provided in the table above.
- Speed limit reduction and SPECS costs – Medway Council's Road Safety team have years of experience in implementing speed limit changes and of introducing average speed cameras. One of the Road Safety Engineers was asked, based on his considerable experience both at Medway Council and at the Kent and Medway Safety Camera Partnership, to estimate the cost of reducing the speed limit and introducing the SPECS enforcement along the entire route. This figure has been fed into the cost outline above.
- Design costs – Prior to the full review of costs which established that the original proposal was unaffordable a procurement process was undertaken to appoint a consultant to lead on the technical design for the scheme. Whilst it is acknowledged that further design work is required as the design for the new proposal is not yet complete to RIBA stage 3 the cost provided within the successful tender was used as the basis for the cost provided above. The Principal Engineer in the Highways team, who has over 30 years experience in delivering projects of this type, provided advice on the likely costs that would be incurred in order to complete the additional design work required and these figures have been incorporated. A definitive cost for the design work will be received within the next two months, following completion of a direct award from the Civil and Structural Engineering framework.
- Land acquisition costs – A highly experienced consultant has been appointed to lead on the land valuation and negotiation aspects of the land acquisition process. As part of this work an estimate of the value of the land needed to deliver the original proposal was provided. Whilst the scheme proposal has changed it was possible to use the cost information provided to calculate an estimate of the likely costs of land acquisition associated with the new proposal.
- Utilities – the Highways team have held some initial discussions with statutory undertakers to determine the extent of any diversions required and the likely costs



associated with this work. Whilst these discussions were based on the original proposals for the scheme it has been possible to use this information to provide an initial estimate of the utility diversions required for the revised project scope.

- Construction supervision – Medway Council’s Highways team has substantial previous experience of delivering projects of this scale and in a number of cases has provided the construction supervision element internally. As a result of this experience, and having seen the revised scheme proposal the Principal Highways Engineer was able to provide a cost for this element of the work.

As the developed design is progressed the costs will be reviewed and updated as appropriate. The Project Manager will continuously review project costs and will immediately flag any potential issues to the LGF Programme Steering Group.

A full Quantitative Risk Assessment will be completed by the Project Manager within six months of their appointment. In the interim a risk allowance of 10% has been included in the table above. This figure has been included on the advice of Mott MacDonald – a consultancy who has extensive experience of delivering schemes of this size and scope. Within the scheme there are certain work streams which have the greatest financial uncertainty associated with them. These include land acquisition and utility diversions. The cost associated with land acquisition will vary depending on whether it is possible to acquire the land through negotiation or if a CPO is required. Acquisition through negotiation would be the most beneficial in relation to the project programme, however, is likely to come at a greater cost in terms of the price paid for the land. The CPO process will take much longer and will incur significant fees and charges but will ensure land is acquired at market value. With the project programme being a key consideration acquisition through negotiation will be the initial focus, with a CPO only being used if this approach is not successful.

Whilst initial discussions have been held with the key statutory undertakers, these discussions focussed on the original scheme proposals. Based on the information provided an estimate of utility costs has been included in the cost breakdown above. Further work with the utility companies is required to fully assess the impact of the new scheme proposal on the level of statutory diversions required and solidify the figure included above.

#### 5.5. Funding profile (capital and non-capital):

*[Where possible, explain the assumed capital and non-capital funding profile, summarise the total funding requirement by year, and funding source (add rows / columns as appropriate). Please note, not all sections of the table may require completion. Also, explain the external factors which influence/determine the funding profile, describe the extent of any flexibility associated with the funding profile, and describe non-capital liabilities generated by the scheme; max. 1 page.]*

Funding source	Expenditure Forecast							
	15/16 £000	16/17 £000	17/18 £000	18/19 £000	19/20 £000	20/21 £000	21/22 £000	22/23 £000
LGF	298	402	585	1,916	4,000	3,899		
S106 – Liberty Park	142	60						
S106 – Damhead Creek Power Station				262				
LTP (monitoring and evaluation)						10	10	10
<b>Total funding requirement</b>	<b>440</b>	<b>462</b>	<b>585</b>	<b>2,178</b>	<b>4,000</b>	<b>3,909</b>	<b>10</b>	<b>10</b>

The capital funding profile has been based on the following approximate delivery timetable:

2015/16 – options appraisal and high level modelling  
2016/17 – outline design, submission of planning application and cost review  
2017/18 – revised options appraisal, modelling and outline design  
2018/19 – detailed design, submission of revised/new planning application and commencement of land acquisition process  
2019/20 – conclusion of the land acquisition process (if required) and construction  
2020/21 – construction

The contribution from the LTP has been provided to facilitate the required post completion monitoring to determine whether the project has delivered the required outcomes.

The funding profile will be influenced by the planning and land acquisition processes. As the proposed scheme incorporates land outside the existing highway boundary it will be necessary to obtain planning consent prior to commencing any works. Whilst work will be undertaken to ensure that the planning application is as robust as possible prior to submission, there is always an element of uncertainty due to the potential for unforeseen objections being received. It is anticipated that the planning application will be submitted and determined during 2018/19; however, any delays may push determination into early 2019/20.

The land acquisition process is a key factor in delivering this project. There will be a requirement to acquire land at both Four Elms and Sans Pareil roundabouts to enable delivery of the scheme proposals. The intention is to acquire the land through negotiation with landowners if possible, with discussions with landowners commencing in early 2018/19. If negotiation goes well it is feasible that the land could be acquired in a relatively short timeframe. However, if the land cannot be acquired through negotiation it will be necessary to use a Compulsory Purchase Order (CPO) to acquire the land. This adds a significant delay to the project programme as a CPO could take up to 18 months to complete. If this is the case the funding profile will need to be amended.

As the funding profile for this project runs until the end of the LGF funding period, there can be limited flexibility. Depending on project progress the expenditure per year may vary, however, the project completion date (and therefore overall funding period) cannot be altered. The Project Manager will review the project spend profile within one month of taking up the position. This review will inform a discussion with the LGF Programme Management team regarding any changes that may be required to the funding profile.

The S106 contribution from Damhead Creek Power Station is time limited and therefore there can be little flexibility in spend.

As part of this project street lighting will be installed on the new freeflow slip roads. Maintenance of these streetlights will need to be covered through future year's revenue budgets. The installation of average speed cameras along the entire route will also incur maintenance costs in future years, as will the traffic signals which will be installed at Four Elms roundabout and at the realigned Wainscott Road junction.

**5.6. Funding commitment:**

*[Provide signed assurance from the Section 151 officer to confirm the lead applicant will cover any cost overruns relating to expenditure and programme delivery, as per the template in Appendix H. Please also confirm whether the funding is assured or subject to future decision making.]*

Throughout the project programme Medway Council will continuously review the project budget and estimated costs to identify at the earliest opportunity any risk of cost overruns. Wherever possible action will be taken to reduce or eliminate the cost overrun through various measures including value engineering. However, if it is not possible to deliver the scheme in accordance with the Business Case without a cost overrun Medway Council will cover the cost overrun.

A signed assurance from the Section 151 Officer is provided at appendix H.

**5.7. Risk and constraints:**

*[Specify project and funding risks and constraints. Describe how these risks have, where appropriate, been quantified within the QRA/contingency provisions; max 0.5 pages.]*

The key funding risk associated with this project is that LGF funding is not forthcoming. Without the LGF funding it will not be possible to deliver the project.

If LGF funding is awarded project delivery will be constrained due to the restricted funding period available. Project delivery is required to be complete by the end of March 2021 in order to comply with the funding period. If, for any reason, this is not possible Medway Council will be liable for any costs post March 2021. The Project Manager will continuously review the programme and will immediately address any issues which may adversely impact on the successful delivery of the project in line with the agreed programme.

There is an element of uncertainty regarding the costs associated with the land acquisition and utility diversion workstreams. This is due to uncertainty regarding the approach to be adopted in terms of land acquisition and the early stage of discussions with the statutory undertakers. Both of these risks have been taken into account in the initial QRA provisions outlined in section 5.4.

## 6. MANAGEMENT CASE

*The management case determines whether the scheme is achievable and capable of being delivered successfully in accordance with recognised best practice. It demonstrates that the spending proposal is being implemented in accordance with a recognised Programme and Project Management methodology, and provides evidence of governance structure, stakeholder management, risk management, project planning and benefits realisation and assurance. It also specifies the arrangements for monitoring and evaluation in terms of inputs, outputs, outcomes and impacts.*

### 6.1. Governance:

*[Nominate the project sponsor and Senior Responsible Officer, explain the project governance structure (ideally as a diagram with accompanying text) and describe responsibilities, project accountability, meeting schedules etc.; max. 1 page.]*

The Project Sponsor is Ruth Du-Lieu, Assistant Director for Front Line Services at Medway Council.

The Senior Responsible Officer is Michael Edwards, Head of Integrated Transport at Medway Council.

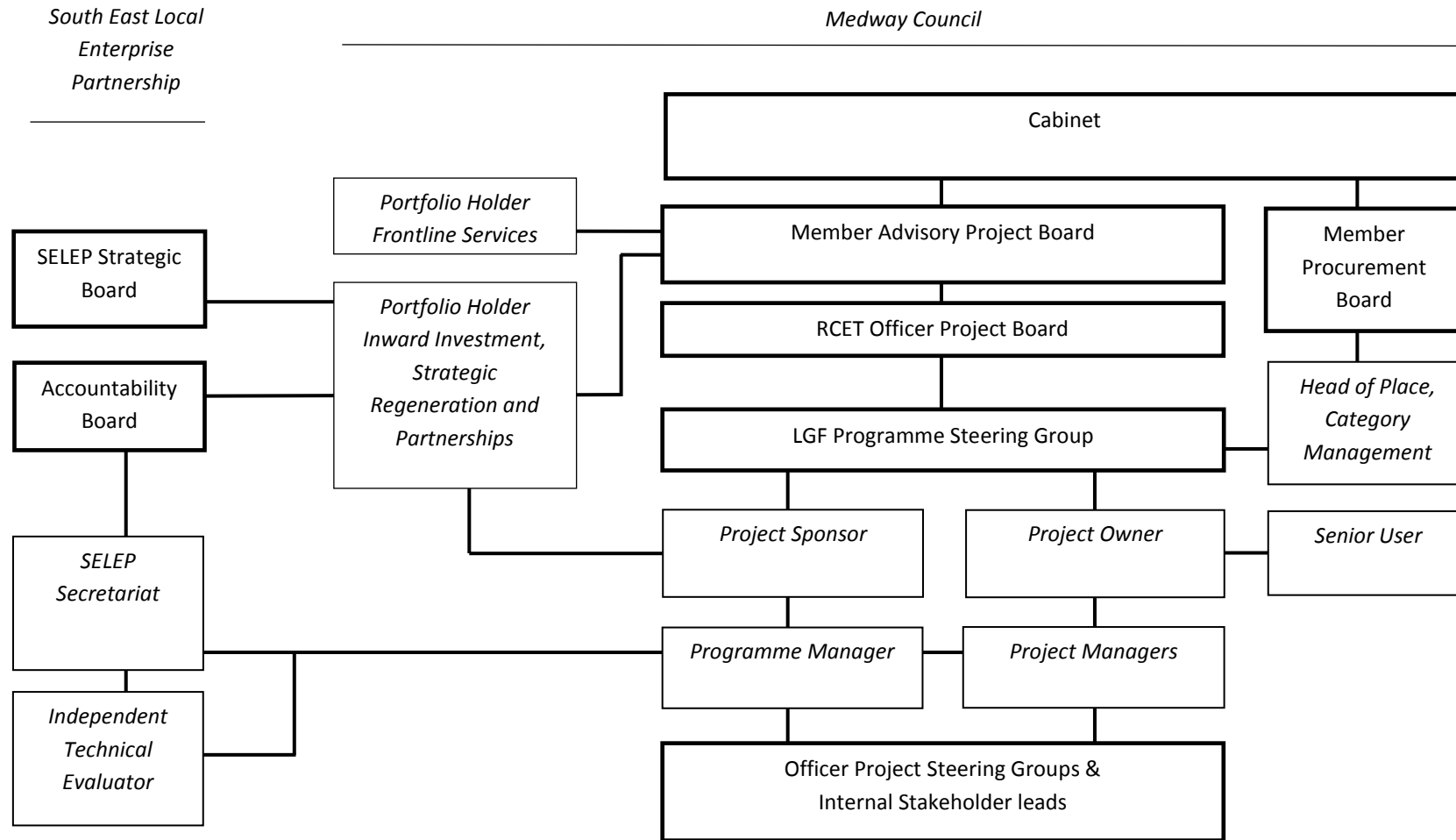
Medway Council has effective governance arrangements in place to ensure successful delivery of LGF projects. The governance arrangements include both Councillors and senior officers of the council. Figure 5 (overleaf) shows the governance arrangements.

The LGF Programme Steering Group is a cross-directorate officer group that oversees and co-ordinates the programme of LGF funded projects. This group brings together officers responsible for project delivery and programme management. The group meet every four weeks and review the latest project dashboard reports to ensure that the programme is being managed to time, budget and agreed specification. In addition the group review project risk registers to ensure that appropriate mitigating actions are in place and discuss any change management requests that have been submitted by Project Managers. Change management requests which are considered to be medium or high risk are referred to the RCET Officer Project Board for decision.

Project dashboard reports are prepared by Project Managers in advance of the LGF Programme Steering Group meetings. The reports provide an update on project progress, finances, issues, risks and project changes. Project Managers use this report to flag up any areas of concern or decisions which need to be made at a higher level. Following the LGF Programme Steering Group meetings the project dashboard reports are updated if required before submission for consideration at RCET Officer Project Board.

The RCET Officer Project Board is a senior officer group which manages all capital projects including LGF funded projects. The Board is responsible for the strategic management of the LGF projects and has authority to commit resources to the project in accordance with the Council's Constitution. An updated dashboard report for each LGF project is a standing item on the agenda. In addition the Board are asked to consider any change management requests which are considered to be medium or high risk. The Board meets every four weeks, typically a few days after the LGF Programme Steering Group meeting.

Figure 5 - LGF Project Governance



The Member Advisory Project Board offers Members an overview of project development and delivery. The Board reviews, analyses and scrutinises progress on the directorate's capital programme and, where relevant, specific large/complex projects. LGF update reports are regularly considered by the Board. The Board meets approximately every three months. The Board membership includes the following elected members:

- The Leader/Portfolio Holder for Finance;
- Portfolio Holder Inward Investment, Strategic Regeneration and Partnerships;
- Portfolio Holder for Frontline Services;
- Portfolio Holder for Housing and Community Services.

Cabinet is a member group that manages council business including high value/high risk procurement and projects including LGF projects (when required).

Medway Council's Governance and Management Arrangements Protocol for LGF projects can be found in appendix I.

## 6.2. Approvals and escalation procedures:

*[Specify the reporting and approval process; max. 0.5 pages.]*

Project managers are expected to make day to day operational decisions in order to ensure project delivery. Any issues or risks that arise which might impact on the successful delivery of the project must be reported on the monthly project dashboard report. In addition if the project manager is requesting a change to the project which will impact on budget, outcomes, outputs, delivery timetable or will signify a change in project scope or delivery approach compared to that specified in the Business Case they are required to submit a change management request for consideration at the LGF Programme Steering Group meeting.

At the LGF Programme Steering Group meeting there will be discussion regarding the issues or risks flagged up by the project manager. Advice will be given regarding how to address the risks and issues, in order to minimise the impact on project delivery. As the attendees at the LGF Programme Steering Group meeting include both Project Owners and Project Sponsors, the group is also able to consider the change management requests put forward by the project managers. The change requests will be considered from both a project and programme management perspective. A decision will then be made as to whether the LGF Programme Steering Group support the change requested. If the change supported by the Steering Group is considered to be low risk and has no budgetary implications the project manager can implement the change without further approval required. However, if the change is considered to be medium or high risk or has budgetary implications the change management request also needs to be presented to RCET Officer Project Board.

RCET Officer Project Board is attended by senior council officers including the Director of Regeneration, Culture, Environment and Transformation. This board has greater authority to approve changes which impact on the use of council resources or which could significantly impact on project delivery.

Any project changes that have been requested will be included on the dashboard reports that go to Member Advisory Project Board. At this meeting Members can challenge project progress and decisions that have been made.

If approval is needed for a change that will result in a significant change to the project Business Case the Portfolio Holder for Inward Investment, Strategic Regeneration and Partnerships, as the



council's representative on the SELEP Accountability Board, will be involved in the approval process.

The LGF Programme Management team will ensure that the SELEP change management process, as set out in the SELEP Assurance Framework, is followed where required. This process ensures that project changes are reported to Accountability Board. In situations where a significant change is proposed Medway Council is required to seek approval by Accountability Board before implementing the change.

### 6.3. Contract management:

*[Explain your approach to ensuring that outputs are delivered in line with contract scope, timescale and quality; max. 0.5 pages.]*

As part of the procurement process contractors and consultants will be required to provide a programme for completing each specific workstream. A clear work specification will be issued prior to appointment which will detail the scope of the work required. When procuring a contractor to build the scheme there will be a clear indication of the quality required when considering the final output.

Once a contractor or consultant has been appointed they will be required to attend regular meetings with the project team to provide an update on progress with the workstream and to give an update on how work is progressing in accordance with the programme. At these meetings the project manager will be able to address any queries regarding the scope of the work and will provide feedback on work completed to date.

If the contractor/consultant needs to make any changes to the information submitted within their tender submission or to their programme they will be required to formally submit the details of the change and any implications in terms of programme or budget to the project manager via email. The project manager will then consider the change being requested and will respond in writing setting out whether the change has been agreed and if there are any alternative solutions to the issue identified which may reduce the impact on the project.

There are clear key performance indicators (KPI's) which the consultant/contractor appointed through the Civil and Structural Engineering framework will be required to meet. If these KPI's are not being met the supplier will be required to attend a meeting with the project team to explain their failure to comply with the requirements of their appointment. If a solution cannot be found, consideration will be given to terminating the contract and re-appointing from the framework.

### 6.4. Key stakeholders:

*[Describe key stakeholders, including any past or planned public engagement activities. The stakeholder management and engagement plan should be provided alongside the Business Case; max. 0.5 pages.]*

The key stakeholders and interest groups associated with this project are:

- SELEP – as primary funding provider (subject to approval of the Business Case);
- Kent and Medway Economic Partnership – as the federated area board which oversees delivery of LGF projects across Kent and Medway;
- Local elected members and MP's – members and MP's need to be kept informed of projects which are going to impact on their constituents;

- Parish Councils – there are a number of Parish Councils in the local area and ongoing engagement with these groups is essential and may offer benefits when dealing with the local population as a whole;
- Local businesses including those based on Medway City Estate and on the Hoo Peninsula – in the long run this scheme will improve the situation for these businesses, however, it is important to engage with these companies as in the short-term there will be further delays which could impact on their operation;
- Bus operators – Bus operators using the A289 and A228 will be affected by both the construction and the final scheme improvements;
- Local population – The project is designed in part to benefit the local population who use the network on a regular basis, however, they will also be adversely affected during the construction period;
- Potential developers (both housing and commercial) – this scheme is designed to enable further development on the Hoo Peninsula by increasing the capacity of the highway. Promoting these works will alert potential developers to the opportunities presented by completion of the project;
- Natural England – in order to deliver the project it will be necessary to acquire some land currently owned by the Ministry of Defence. This land has been left vacant for a significant period of time and is surrounded by a wall of trees. It will be necessary to consider the ecological implications before the land is acquired and the trees removed.

Prior to submission of the original planning application an informal public consultation event was held in Wainscott. In October 2016 the project team presented the scheme proposals at a Frindsbury Extra Parish Council meeting. Consultation with both local residents and statutory consultees was carried out as part of the planning application process. Further consultation will be undertaken when the amended or new (to be confirmed) planning application is submitted.

An interest/influence matrix showing how engagement with stakeholders will be handled can be found in appendix J. A full stakeholder management and engagement plan will be developed by the Project Manager within their first six months in post.

#### 6.5. Equality Impact:

*[Provide a summary of the findings of the Equality Impact Assessment (EqIA) and attach as an Appendix to the Business Case submission. If an EqIA has not yet been undertaken, please state when this will be undertaken and how the findings of this assessment will be considered as part of the project's development and implementation. The EqIA should be part of the final submission of the Business Case, in advance of final approval from the Accountability Board; max. 0.5 pages.]*

A Diversity Impact Assessment (DIA) has been completed in relation to this project. The main outcomes of this assessment are that the works will advance equality and foster good relations for the following protected characteristics groups: Age, Disability, Gender Reassignment, Marriage/Civil Partnership, Pregnancy/Maternity, Race, Religion/Belief, Sex, Sexual Orientation and Other.

This conclusion has been reached as the A289 corridor is used by all the protected characteristic groups on a regular basis. As a result all will benefit from the scheme being proposed through improved access to key employment sites and leisure facilities. Increased access to employment sites will boost the employment and training opportunities available to these groups, whilst improved access to leisure facilities will offer a better quality of life.

The action plan focuses on the next round of public consultation which will take place during the planning process. This will allow local residents to give feedback on the proposals and whether they feel they will offer the improvements stated within the DIA.

Consideration is also given to the adoption of the new Local Plan. This is due to take place during 2019. The emerging Local Plan identifies the need for new homes and employment space within Medway, with the Hoo Peninsula acting as one of the key sites being considered. Delivery of these works will facilitate the development outlined in the Local Plan and will further increase the opportunities available to people within the protected characteristic groups.

The DIA will be reviewed continuously as the project progresses.

The Diversity Impact Assessment can be found in appendix K.

#### 6.6. Risk management strategy:

*[Define the Risk Management Strategy referring to the example provided in Appendix L (expand as appropriate), ensuring this aligns with the relevant sections in the Financial and Commercial Case. Please provide supporting commentary here; max. 0.5 pages.]*

Throughout the lifetime of this project a risk register will be maintained which will reflect all risks associated with project delivery. If any of the risks materialise they may directly impact on the project delivery programme, unless appropriate mitigating action is taken.

It is acknowledged that there is little flexibility in the project programme as the spend profile runs until the end of the LGF funding period. However, Medway Council will work closely with both the design consultants and contractor to ensure that risks are identified quickly and that plans are put in place for the management of them, including review and re-profile of the programme if necessary, to ensure as little delay as possible.

Moving forward the project will benefit from the knowledge and lessons learnt from initial work completed on this project. Preliminary work on the project failed to maintain a holistic view of the project and lost sight of the financial risks associated with delivering a project with a clearly defined budget. As the project progresses the project manager will be required to provide an updated project budget and risk register for consideration at the monthly LGF Programme Steering Group meetings which are attended by all key personnel. The previous risk management strategy failed to identify a risk specifically related to it not being possible for the project to be delivered within budget, which may have contributed to the project managers failure to robustly address the issue. This has now been rectified and the project manager will be required to report on this and all other project risks on an ongoing basis throughout the life of the project.

In addition a project 'deep dive' review will be conducted every six months, which will look in detail at the project outputs, programme, costs and risks.

#### 6.7. Work programme:

*[Provide a high-level work programme in the form of a Gantt Chart which is realistic and achievable, by completing the table in Appendix M (expand as appropriate). Please describe the critical path and provide details regarding resource availability and suitability here; max. 0.5 pages.]*

A high-level work programme has been developed which will allow delivery of the project within the funding period. A three month 'float' has been included in the programme to minimise the

risk of project overrun. This float will also allow for the impact of the scheme to be monitored and any required adjustments made prior to the end of the funding period.

The outline design process will begin in January 2018 and will be complete by June 2018. The outline design will feed into the amended/new planning application (tbc) which will be determined by late 2018.

The development of the detailed design will run in parallel with the planning process to minimise any delay to the programme. Whilst the planning application is being considered early engagement with landowners regarding land acquisition will begin. Initial efforts will be made to acquire the land through negotiation, however, if this is not successful a CPO process will commence immediately after the planning application is determined (subject to planning consent being awarded).

In early 2019 once the detailed design has been completed a contractor will be appointed to deliver the improvements. Following procurement of the contractor and receipt of confirmation of construction costs a Full Business Case will be submitted, in order to release the funding required to build the project.

It is expected that construction will begin in late 2019 and will run until the end of 2020. If a CPO is required, it is possible that construction will begin on site prior to acquisition of all the land required. This is a risk as without acquiring the land it will not be possible to deliver the scheme in its entirety and therefore it will not deliver the benefits outlined in this Business Case. This is considered to be low risk as early engagement with landowners will either remove the need for a CPO or will smooth the process should a CPO be required.

The project will be delivered with three months of the funding period remaining.

A new project manager will be in post in early January 2018 and will have the capacity to effectively oversee and facilitate project delivery. Clear timescales will be included in all procurement specifications and consultants will be required to indicate their availability to meet these timescales prior to appointment.

A high-level work programme has been provided in Appendix M.

#### **6.8. Previous project experience:**

*[Describe previous project experience and the track record of the project delivery team (as specified above) in delivering projects of similar scale and scope, including whether they were completed to time and budget and if they were successful in achieving objectives and in securing the expected benefits; max. 0.5 pages.]*

The project will be managed by the Integrated Transport team at Medway Council. They will work in association with other Council departments including Category Management, Highways, Finance, LGF Programme Management, Legal and Property to ensure delivery of the project in accordance with budget, programme and the terms of the Business Case.

The Integrated Transport team have been responsible for managing delivery of all the transport focused LGF projects, including the Cycling Action Plan project. This project has been delivered in accordance with the Business Case and is on track for completion on programme and on budget.

To support the Integrated Transport team a project manager will be seconded to Medway Council from Pell Frischmann Consultants. The project manager put forward by the consultants has over 30 years' experience of managing, co-ordinating and delivering transport projects. The works successfully delivered include:

- A work programme of more than £12m across two London Boroughs including lane improvements, bus journey time improvement works and cycle improvements. As team leader he had overall responsibility for design, implementation and CDM.
- Major improvement scheme in Tunbridge Wells and inception of the M20 junction 4 widening scheme. These projects had a combined value of more than £22m. As project manager he was heavily involved in all aspects of project delivery including design, liaison with stakeholders – both internal and external, budget and project reporting.

The Project Manager will join Medway Council on 3<sup>rd</sup> January 2018. A Project Officer is already in post and will work alongside the Project Manager. The Project Officer has previous experience of supporting delivery of high profile projects that form part of the London Borough of Hackney's Transport Strategy for 2015-2025, including the Cycle Superhighway schemes. She has been in post since May so has a good understanding of the proposed project content, council processes and SELEP requirements.

The project team will be supported by the Principal Engineer from the Highways team who has worked on numerous transport schemes across Medway and who brings invaluable experience to the project team.

The Principal Engineer from the Highways team has over 30 years experience of delivering projects of this type and size. Two notable examples of projects which he has been closely involved in are:

- A228 Main Road to Ropers Lane improvements
  - This £15.5m project, built between September 2003 and November 2005, involved the dualling of the A228 in Rochester between the Main Road and Ropers Lane junctions. The project also involved the creation of three new roundabouts. The highway infrastructure that was in place previously, a narrow single carriageway road, was inadequate to support the level of commercial development on the Hoo Peninsula, as well as being unsuitable for the increasing volume of heavy traffic which was serving this development. In order to support existing commercial premises in Grain and the wider Hoo Peninsula and to encourage further development an improved highway network was required. In addition, some stretches of the old A228 experienced a higher than expected number of road traffic collisions, which was addressed through this scheme.
  - The Principal Engineer acted as resident engineer on this project. His involvement ensured that the project was delivered to programme and within budget.
- Chatham Regeneration
  - This £12.5m project, consisted of a number of elements which were delivered between February 2007 and December 2014. This scheme consisted of: conversion of Chatham ring road from one way to two way traffic flow, demolition of Sir John Hawkins Way viaduct and a disused building to allow construction of a



new bus route, realignment of Union Street at the junction with the A2 and Chatham Bus Station enabling works and civils.

- The overarching aim of this project was to create better traffic flow around Chatham town centre. Prior to this scheme being implemented, Chatham suffered from significant traffic delays, which also impacted on the bus companies' ability to deliver in accordance with their published timetable. As part of these improvements a new bus station was delivered, and bus only lanes were introduced in key locations in the town. Introduction of two way traffic has eliminated the need for vehicles to travel all the way around the town before reaching their destination.
- The Principal Engineer was heavily involved with all elements of the project, which was built to programme and within budget.

#### 6.9. Monitoring and evaluation:

*[SELEP are required to submit detailed quarterly project monitoring reports to the Department for Business, Energy and Industrial Strategy for schemes that have been funded through the LGF to enable ongoing monitoring and evaluation of individual projects. Monitoring and evaluation metrics should be aligned to these reporting requirements (South East Local Enterprise Partnership Assurance Framework 2017, Section 5.8 – see SELEP Business Case Resources document). A proportionate approach to Monitoring and Evaluation should be followed ensuring evaluation objectives relate back to the business case and build on assumptions used in the appraisal process.*

*Promoters should also include a statement which identifies other schemes which may have potentially contributed to the same benefits/impacts.*

*Max. 1 page excluding table.*

*Smaller schemes (less than £2 million) are required to complete Monitoring and Evaluation which is proportionate to the size of the scheme; max. 0.5 page.]*

#### Inputs

- Funding of £11.564m will be used to deliver this scheme.
- This project will benefit from the skills offered by a range of council departments including Integrated Transport, LGF Programme Management, Highways, Category Management, Finance and Property. All of these departments will use Medway Council premises and equipment to carry out the required work.

#### Outputs (delivering the scheme/project)

- The project will deliver an improved A289 corridor offering increased capacity and improvements for vehicles accessing the network from minor side roads. Delivery of the project will be monitored through delivery of the following transport outputs:
  - Total length of resurfaced roads;
  - Total length of newly built roads;
  - Total length of new cycle ways (to be confirmed)

#### Outcomes (monitoring)

- The following performance indicators will be used to monitor the outcomes of the project:
  - Jobs connected to intervention – construction jobs will be created in order to build the scheme. As the Highway Infrastructure contract will be used to appoint the contractor this will include a number of apprenticeships.
  - Commercial floorspace planned – whilst commercial floorspace will not be delivered as part of this scheme, the proposed works will enable the development of



- commercial floorspace on the Hoo Peninsula as identified within the emerging Local Plan.
- Housing units forecast – delivery of this project will enable developers to build new homes on the Hoo Peninsula, to meet the need identified in the emerging Local Plan.
- In addition, project specific monitoring will be undertaken as follows:
  - Average daily traffic and by peak/non-peak periods – the volume of traffic using the route will be monitored. This, in association with the average journey time, will provide a clear indication as to how well the improved highway is coping with the increasing traffic volume.
  - Average AM and PM peak journey time per mile on key routes – journey time monitoring will be undertaken during the morning and evening peak to establish the improvement in journey times offered by the project.
  - Day-to-day journey time variability – journey times will be collected over a period of days. This will allow for comparison to demonstrate the improved journey time reliability delivered by the project.
  - Average annual CO<sup>2</sup> emissions – reducing delays will lead to falling CO<sup>2</sup> emissions. It is vital that this is monitored as Four Elms Hill falls within an Air Quality Monitoring Area.
  - Collision/casualty rate – a review of road traffic collision data to determine if the scheme has contributed to a reduction in road traffic collisions.
  - Bus travel time by peak period – a review of bus travel time to establish if the improvements have allowed the bus companies to offer a more reliable service for local residents.
  - Pedestrian counts on new/existing routes – a pedestrian count will be undertaken to determine how well used the new facilities are.
  - Cycle journeys on new/existing routes (to be confirmed) – a cycle count will be undertaken to determine how well used the new facilities are.

#### Impacts (evaluation)

- The impacts of the project will be evaluated at both one and five years post implementation. In addition to continuing to monitor the outcomes highlighted above, the following Growth Deal outcomes will be considered:
  - Housing unit completion – the emerging Local Plan identifies the potential for future housing growth on the Hoo Peninsula. This scheme will enable this development by providing the required highway infrastructure.
  - Jobs created – Through the development of commercial/employment floorspace and through improving transport links for existing businesses jobs will be created.
  - Commercial/employment floor space completed – the emerging Local Plan identifies the potential for commercial development on the Hoo Peninsula. As with the anticipated housing growth this scheme will deliver the highway infrastructure required to support this development.
  - Apprenticeships – the Regeneration Delivery team will work with new and existing businesses to encourage increased use of apprenticeships and training schemes.

The improvements delivered as part of the Medway City Estate LGF project may potentially contribute to the benefits and impacts outlined above. Where possible the benefits offered by the projects have been considered separately, however, due to the geographic proximity of the two areas it may not be possible to completely isolate the benefits each scheme delivers.

A full breakdown of the monitoring and evaluation planned can be found in appendix N.

#### 6.10. Benefits realisation plan:

*[A Benefits Realisation Plan provides details of the process that will be followed to ensure that benefits are sustained and that returns on investment are maximised where possible. The Benefits Realisation Plan identifies the potential benefits and how these will be tracked and measured, the risks that may prevent benefits being realised and the critical success factors that need to be in place to ensure that benefits are realised. In many cases, benefits realisation management should be carried out as a duty separate from day to day project management. Describe the proposal for developing a Benefits Realisation Plan which should involve continuous public engagement to ensure the anticipated benefits are realised. The Benefits realisation plan should be consistent with the Strategic and Economic Case; max. 0.5 page.]*

The Project Manager, in association with the Head of Integrated Transport, will be responsible for developing a Benefits Realisation Plan. This plan will clearly set out the benefits that the scheme is expected to deliver, along with a process for collecting the required information to allow assessment as to whether the benefits have been realised.

The benefits realisation plan will include the following information:

- The benefits the scheme is expected to deliver and the information that is required to allow assessment of the project outcome in relation to each benefit;
- Milestones for when the benefits are expected to be delivered – some benefits may be delivered over a number of years following completion of the project;
- Planned method of collecting each piece of information needed;
- Clear approach for applying data collected to establish how effectively the benefits have been delivered;
- Timetable for collecting the required baseline data;
- Timetable for collecting data to assess benefit delivery – for some benefits this may commence during the construction process, whereas for other benefits data won't be collected until a year or more post project completion;
- Timetable for reporting on benefit realisation to the LGF Programme Steering Group and RCET Officer Project Board;
- Timetable for reporting on benefit realisation to SELEP in line with quarterly reporting requirements;

Whilst the Head of Integrated Transport will have overall responsibility for ensuring that the benefits are realised, collection of monitoring data will be delegated to appropriate council officers. The officers will collect the information in accordance with the timetable specified in the benefits realisation plan and report back to the Head of Integrated Transport to facilitate reporting to the LGF Programme Steering Group meeting and LGF Programme Management team.

The benefits realisation plan will be established within four months of the Project Manager taking up the post, and will involve continuous public engagement to ensure the anticipated benefits are realised.

## 7. DECLARATIONS

<i>Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?</i>	No
<i>Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors</i>	No
<i>Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?</i>	No

*If the answer is “yes” to any of these questions please give details on a separate sheet of paper of the person(s) and business(es) and details of the circumstances. This does not necessarily affect your chances of being awarded SELEP funding.*

I am content for information supplied here to be stored electronically, shared with the South East Local Enterprise Partnerships Independent Technical Evaluator, Steer Davies Gleave, and other public sector bodies who may be involved in considering the business case.

I understand that a copy of the main Business Case document will be made available on the South East Local Enterprise Partnership website one month in advance of the funding decision by SELEP Accountability Board. The Business Case supporting appendices will not be uploaded onto the website. Redactions to the main Business Case document will only be acceptable where they fall within a category for exemption, as stated in Appendix E.

Where scheme promoters consider information to fall within the categories for exemption (stated in Appendix E) they should provide a separate version of the main Business Case document to SELEP 6 weeks in advance of the SELEP Accountability Board meeting at which the funding decision is being taken, which highlights the proposed Business Case redactions.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. Any expenditure defrayed in advance of project approval is at risk of not being reimbursed and all spend of Local Growth Fund must be compliant with the Grant Conditions.

I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

<i>Signature of applicant</i>	
<i>Print full name</i>	Ruth Du-Lieu
<i>Designation</i>	Assistant Director Front Line Services