

# West Yorkshire Transport Fund

## Gateway 1 Review

### Harrogate Road/ Improvement New Line Junction

DRAFT

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### Gateway 1 Review Submission

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# Strategic Case

## 1.1. Business Strategy

The primary objective of the West Yorkshire Plus Transport Fund is to:

***‘Increase employment and productivity by completion of transport schemes across West Yorkshire by improving connectivity’.***

The Leeds City Region Transport Strategy identified three priority corridors in the West Yorkshire which required improved connectivity to drive economic growth. These corridors are between:

- Leeds and Bradford
- Leeds and Leeds Bradford International Airport
- Bradford and Leeds Bradford International Airport.

The A658 Harrogate Road / A657 New Line junction is situated on the corridor between Bradford and Leeds Bradford International Airport (LBIA). The crossroads are a significant congestion pinch point with delays on all four legs having a detrimental impact on journeys times between Bradford and LBIA, and also between Shipley / Airedale and Leeds. Figure 1 shows the location of the junction in relation to Bradford, Leeds and LBIA.

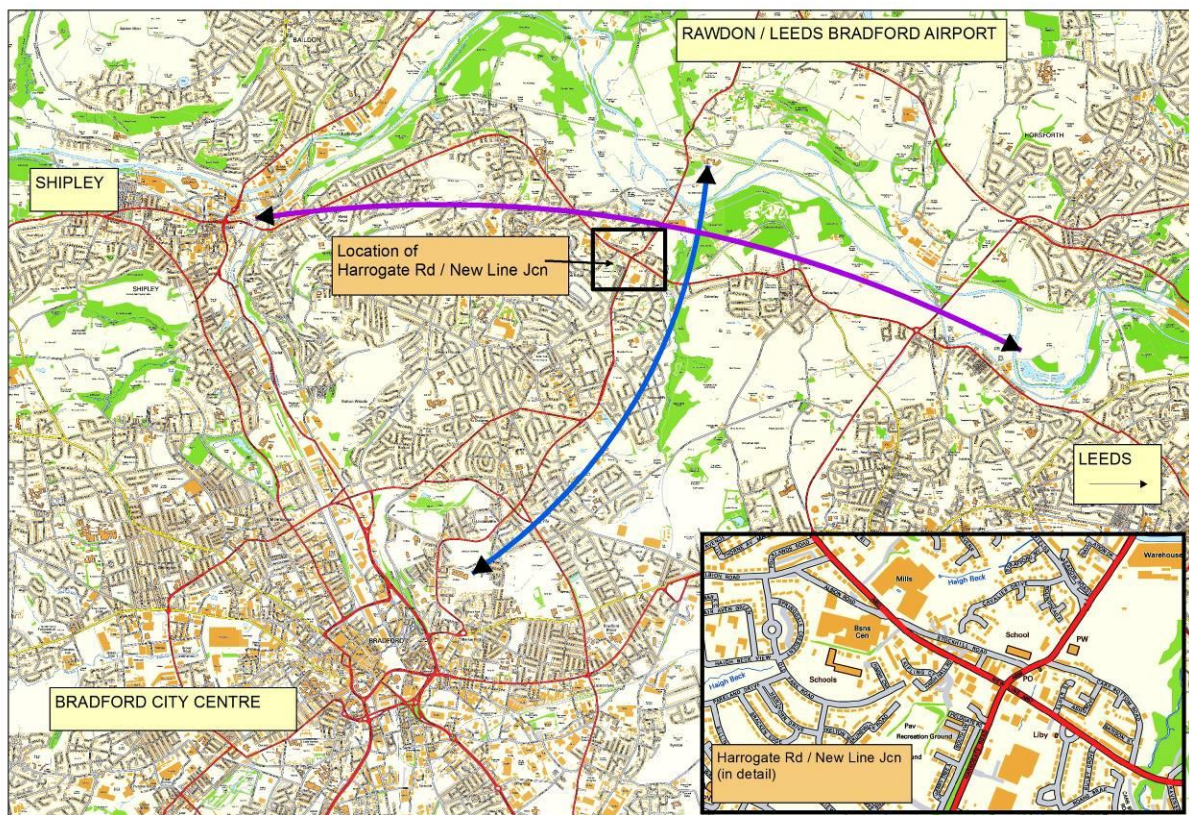


Figure 1 - Location of Harrogate Road / New Line junction (Greengates)

The principal traffic flows between Bradford and LBIA are indicated by the blue arrow and between Shipley and Leeds by the purple arrow.

Improvements to the Harrogate Road / New Line junction will improve traffic flows and reduce congestion on both the A658 and A657, improve access to LBIA and to the new rail station at Apperley Bridge. It will also facilitate housing development in the immediate area, and improve safety and reduce severance for pedestrians and cyclists. There are currently 4 sites which would deliver approximately 1309 dwellings within the locality which are either allocated in the Replacement Unitary Development Plan or have existing planning permission (see location plan at Appendix 11). In addition, as part of the Core Strategy, there are long term growth aspirations for housing development (approximately 4,700 dwellings within North East Bradford) and economic development in particular linked to the new Apperley Bridge railway station and surplus land at Esholt Water treatment works.

Improving the Harrogate Road / New Line junction fulfils the objectives of the West Yorkshire Plus Transport fund and also those of the West Yorkshire local Transport Plan which include supporting economic growth and improved quality of life through safer walking, and cycling and reduced air pollution.

## **1.2. Existing problems and issues**

Both the A658 and A657 carry significant volumes of traffic. The A658 Harrogate Road is a key commuter route between Bradford, Rawdon and Harrogate as well as the primary access between Bradford and Leeds Bradford International Airport (LBIA). Typical weekday traffic flows exceed 20,000 vehicles on this section of the A658.

The A657 New Line provides access from Keighley, Shipley and Bingley into Leeds. Again this is a key commuter route with traffic flows exceeding 16,300 on a typical weekday. This is an important strategic junction and lies adjacent to a busy local centre and supermarkets at Greengates. A new railway station at Apperley Bridge, to the north of the junction, is due to open December 2015 and there is potential for significant investing in new housing in the vicinity.

Enhanced links to LBIA is a key priority identified in the Leeds City Region Transport Strategy. Bradford City Centre and the LBIA are identified as two of only three 'Priority A' locations in the Transport Strategy. Improving accessibility to LBIA is critical to ensure that businesses have access to markets in continental Europe, facilitating the growth of high value services and manufacturing and attracting inward investment. There is also a direct bus link between Bradford and the airport which uses this junction and this is also an important facility for tourists visiting the Bradford District which includes the World Heritage Site at Saltaire, the Bronte related attractions at Haworth and the National Media Museum in the City Centre amongst its tourist offer.

The lack of capacity at the junction results in considerable congestion at peak times with traffic queuing on all four legs of the junction with queues in some directions exceeding

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1,000 metres. The average delay on each leg is indicated in Table 1 below and average weekday speeds in the evening peak are illustrated in Figure 2.

Time period	Southbound	Northbound	Eastbound	Westbound
08.00-09.00	4min 12 secs	58 secs	1 min 43 secs	3 min 10 secs
17.00-18.00	2min 52 secs	1 min 24 secs	1 min 26 secs	5 min 44 secs

Table 1 - Average delay into junction (CJAMS weekday 2013)

In addition to significant peak time congestion the junction can also suffer from considerable delays at times in the inter-peak and in particular on a Saturday with local traffic trying to access the Sainsbury supermarket, Farm Foods and associated retail park which are all located within 250m of the junction.

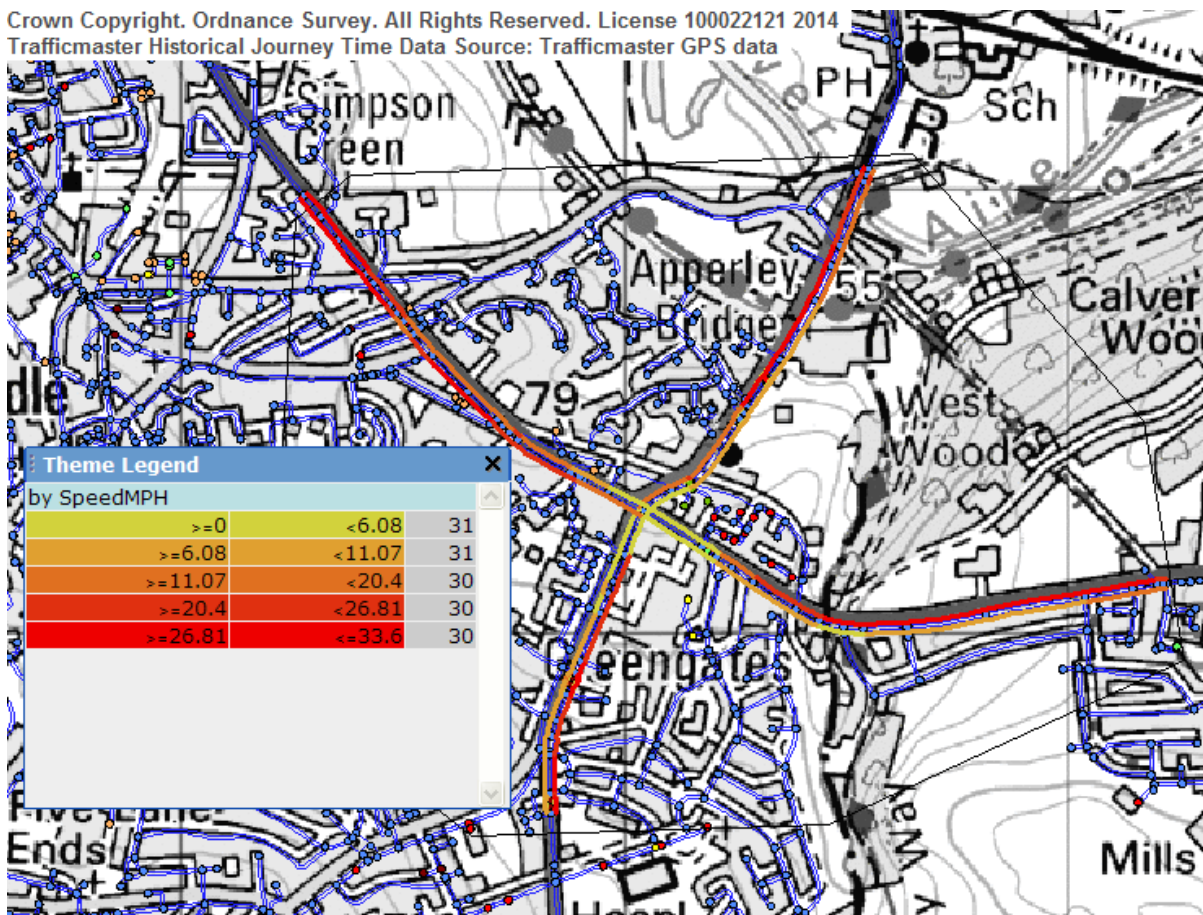


Figure 2 - PM Peak average speeds (2014)

A number of bus services operate through the junction including the 62 (Leeds – Shipley), 670/671 (Bradford – Leeds), 760 (Keighley – Leeds), 747 (Bradford – Leeds Bradford Airport) and 947 (Bradford and Yeadon). Bus services are delayed as a result of congestion at the junction which reduces journey time reliability and impacts passengers along the entire length of the bus routes.

Despite the number of retail units and a primary school which contribute to footfall in the area there are no dedicated pedestrian facilities at the junction which poses a significant

safety risk for local residents and school children. Surveys indicate that the nearby stand-alone pedestrian crossing is used by 46 primary school children in the AM peak and 76 in the evening peak. Between 2007 and 2012 there have been 23 accidents at this junction resulting in 2 serious and 33 slight injuries. The lack of dedicated facilities is also a barrier to walking and cycling.

Delays to traffic as a result of the congestion at this junction have been identified as a constraint to residential development in the locality and a barrier to attracting economic development and inward investment across a wider area. Congestion on the corridor also results in increased vehicle emissions, worsening air quality and high levels of pollution. Kerbside monitoring on Harrogate Road recorded an annual mean of 43  $\mu\text{g}/\text{m}^3$  (concentration of air pollutant per cubic metre) which exceeds Government standards for particulate emissions.

The current problems also constrain a number of large allocated housing sites which will place additional traffic onto the local road network.

### 1.3. *Scheme Objectives*

The key scheme objectives are:-

- **Reduced congestion on all approaches through the junction** leading to anticipated reductions in vehicle delays in the order of 200 seconds by 2026 in the peak periods
- **Increased safety provision for cyclists and pedestrians** through provision of dedicated pedestrian crossing facilities on all arms of the junction along with cycle lanes and advanced stop lines on all approaches.
- **Improved air quality** for local residents
- **Supports the delivery of significant new housing developments** in the short term as well as opening up long term development opportunities in the area through releasing transport constraints.
- **Improves access** to Leeds Bradford International Airport and the new rail station at Apperley Bridge with its interchange capabilities encouraging modal shift.
- **Improved Added Value** in line with the Green Infrastructure Task Group recommendations where appropriate.
- Project should be **complete by December 2017** in order to accommodate development traffic from the Miller Homes Simpsons Green residential development.
- The project should be **designed to meet the requirements of the Design Manual for Roads and Bridges, any applicable locally determined standards** and any relevant legislation (e.g. Highways Act 1980, Traffic Signs Regulations & General Directions)

The scheme also supports the West Yorkshire Local Transport Plan 3 (LTP3) objectives i.e:-

- **Economy** – improving connectivity to support economic activity and growth in West Yorkshire

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- **Low Carbon** – to make sustainable progress towards a low carbon sustainable transport system for West Yorkshire
- **Quality of Life** – to enhance the quality of life of people living, working in and visiting West Yorkshire.

Improving the junction will also support LTP3 indicators in relation to improving journey time reliability, reducing CO2 emissions and improving satisfaction with transport.

### 1.4. *Measures for success*

The key measures for success are:-

- Improved journey times between Bradford City Centre to LBIA and Bradford to Leeds.
- Based on 2014 levels a reduction in travel time of 62% in both the morning and evening peak periods respectively.
- Reduction in pedestrian and cycling accidents.
- Increased cycling and walking in the area.
- Reduced greenhouse gas emissions leading to improved air quality.
- Facilitating delivery of residential developments in the vicinity.
- Supporting and facilitating local job creation
- Improvements in bus journey time reliability encouraging increased levels of service and encouraging modal transfer.

### 1.5. *Scope*

The scope of the Harrogate Road/ New Line Junction Improvement project is constrained to the immediate locality of the junction and comprises:

- Completion of a Feasibility Assessment to identify a preferred option, and identify the extents of land acquisition.
- Progression of acquisition of land required for the scheme through private treaty or where this is not possible through the application of CPO powers having previously obtained approval from the Secretary of State for their use.
- Procurement of specialist advice and support to facilitate the CPO process and further modelling works from specialist third-party providers.
- Preparation of appropriate planning application documentation and securing planning permission for the improvements to the highway network beyond those permitted under 'permitted development' rights where necessary.
- Detailed Design of the traffic signal junction upgrade and associated highway improvements including provision of dedicated cycling facilities.
- Initial noise level surveys required for consideration of any Part 1 Land Compensation Act claims will be procured from specialist contractors together with indicative extents of properties eligible to claim for compensation.
- Procurement and Construction including contract administration, supervision and compliance with CDM Regulations.
- Scheme Evaluation and Monitoring following completion of the works.



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- Promotion and implementation of appropriate Traffic Regulation Orders and resolution of issues arising from the statutory consultation
- Taking measures to protect the war memorial in consultation and with the agreement of Friends of the War Memorial and English Heritage.

Other ancillary activities which are currently considered to be within scope for this project include:

- Working with Metro and local bus operators to incorporate appropriate facilities within the design to improve bus journey time reliability.
- Engaging with the local community in relation to the design and construction programme for the scheme.
- Working with the local school and the Council's Casualty Reduction and Road Safety Team to provide training and advice to school pupils and parents about the additional pedestrian and cycle friendly facilities.

The following activities are currently considered as being 'out of scope' of the project and consequently will not form part of the final project design:

- Works to upgrade Bradford Council's SATURN model – although this was identified in the Project Mandate to support WY+TF projects.

### **1.6. Constraints and Interdependencies**

The following constraints have been identified in relation to the project:

- The project should be complete by December 2017 in order to accommodate development traffic from the Miller Homes Simpsons Green residential development.
- Funding for the delivery of the scheme is reliant on significant Section 106 contributions of £1.92m from adjacent residential developments. Following the recent approval of the planning application for the Simpsons Green housing development negotiations on S106 obligations have now concluded. A total of £1.92m has been agreed with Miller Homes as a contribution to essential off-site highway works as described in Section 3.3 of this submission. The contributions from the S106 are anticipated to provide funding for the opportune purchase of properties currently on the open market or through private treaty together with the CPO preparation costs prior to Gateway 3 approval. The availability of funding from the Section 106 agreement in line with the agreed payment schedule may affect the Council's ability to acquire properties and progress the CPO to the current programme.
- The preferred scheme is dependent upon the acquisition of 19 plots of land from a number of land owners including the acquisition of the former Blockbuster Video premises, the New Line Retail Park and Sunnybank Nursery Car parks and a section of land from New Line Motors. Approaches to affected land owners to acquire the land necessary for the highway improvement via private treaty will run concurrently with the promotion of a formal Compulsory Purchase Order.

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The following interdependencies have been identified in relation to the project:

- Confirmation of approval to seek CPO powers and begin informal negotiations will be sought from the Council's Executive in January 2015 following approval of Gateway 1 together with approval or delegated powers to undertake all other necessary statutory approval processes.
- To comply with the Council's Contract Standing Orders (CSOs) it will be necessary to seek approval of the Council's Environment & Waste Overview and Scrutiny committee to the procurement strategy and scheme principles prior to Gateway 3.
- Any necessary planning permission associated with the highway alignment will also be sought during the period between Gateway 1 and Gateway 2 along with confirmation of any associated Traffic Regulation Orders.
- Construction permits under the Yorkshire Common Permit Scheme will need to be acquired in advance of Gateway 3 and the works will need to be factored into the programme of road and street works in both Bradford and Leeds council jurisdictions.
- Procurement of specialist legal, asset valuation and property acquisition advice and support in relation to both the CPO and private treaty acquisition will be secured prior to Gateway 2 approval.
- Agreement to the use of Council capital funding for a programme of land/property assembly required to facilitate the delivery of the scheme will be obtained from the Council's Project Appraisal Group.
- The scheme will be required to complement the outcomes from the Department for Transport Leeds Bradford International Airport access study which will be completed in the near future.
- The scheme supports existing housing delivery as well as long term growth in the emerging Local Plan Core Strategy which seeks to support the delivery of 41,100 dwellings across the district by 2030 and approximately 4,700 dwellings within the North East Bradford area.

### **1.7. Stakeholders**

The current Stakeholder Management plan as contained within the Communications Management Strategy (attached at Appendix 10) identifies the following key stakeholders and their contribution characteristics to the project as follows:

Stakeholder	Contribution
City of Bradford Metropolitan District Council	<p><b>As Highway Authority</b></p> <ul style="list-style-type: none"> <li>• Responsible for the promotion and implementation of any associated Traffic Regulation Orders required for the scheme.</li> <li>• Responsible for co-ordination of road and street works within the District of Bradford.</li> <li>• Responsible for extinguishment / creation of new highway associated with the project.</li> <li>• Responsible for ensuring that any project complies with appropriate national and local design standards and all appropriate legislation.</li> <li>• Responsible for arranging post completion monitoring.</li> <li>• Coordination of development activities associated with adjacent residential site developments.</li> </ul> <p><b>As Planning Authority</b></p> <ul style="list-style-type: none"> <li>• Responsible for issue of planning approval.</li> <li>• Responsible for the preparation and implementation of the Local Plan which sets out the development strategy to 2030.</li> </ul>
Leeds City Council	<p><b>As Highway Authority</b></p> <ul style="list-style-type: none"> <li>• Responsible for co-ordination of road and street works within the District of Leeds.</li> </ul>
Department for Transport	<ul style="list-style-type: none"> <li>• Publication of the Leeds Bradford International Airport Transport Study.</li> <li>• Conferring of statutory powers in relation to Compulsory Purchase Orders.</li> </ul>
WYCA	<ul style="list-style-type: none"> <li>• Liaison over operation of new P&amp;R car park facility at Apperley Bridge station</li> <li>• Promotion of bus service improvements through the junction.</li> </ul>
Bus Operators (First, Keighley & District, Yorkshire Tiger and TLC)	<ul style="list-style-type: none"> <li>• Provision of advice and comments about issues on the Harrogate Road / New Line corridors affecting bus journey time reliability.</li> </ul>
Local Ward Members	<ul style="list-style-type: none"> <li>• Interface with local community in relation to all statutory procedures and processes (e.g. planning permission and promotion of Traffic Regulation Orders).</li> </ul>
MPs (including both Leeds and Bradford constituencies)	<ul style="list-style-type: none"> <li>• Support and lobbying for statutory powers required for the delivery of the project.</li> <li>• Local interface with the community in relation to scheme specifics/issues and concerns.</li> </ul>
English Heritage	<ul style="list-style-type: none"> <li>• Co-ordination and agreement of details/consents associated with works in the vicinity of the war memorial.</li> </ul>

<b>Stakeholder</b>	<b>Contribution</b>
Friends of the War Memorial	<ul style="list-style-type: none"> <li>• Co-ordination and agreement of details associated with works in the vicinity of the war memorial.</li> <li>• Co-ordination of works programmes with acts of remembrance activities</li> </ul>
Local Residents	<ul style="list-style-type: none"> <li>• Purchase by private treaty of property required for the delivery of the scheme.</li> <li>• Liaison over the construction programme including potential unsocial hours working.</li> <li>• Development of detailed scheme proposals through a series of public consultation exercises and local Neighbourhood Forums.</li> </ul>
National and Local Businesses (including Farm Foods and New Line Retail Park)	<ul style="list-style-type: none"> <li>• Purchase by private treaty of property required for the delivery of the scheme.</li> <li>• Liaison over the construction programme including potential unsocial hours working.</li> <li>• Liaison over impact on business trading conditions during construction.</li> </ul>
Leeds Bradford International Airport	<ul style="list-style-type: none"> <li>• Involvement in the development of the Department for Transport's Leeds Bradford International Airport access study.</li> </ul>
Network Rail	<ul style="list-style-type: none"> <li>• Coordination of works associated with the Apperley Bridge railway station development.</li> </ul>
Miller Homes	<ul style="list-style-type: none"> <li>• Contribution of scheme funds through Section 106 Agreement for the Simpsons Green development.</li> </ul>
Housing Developers	<ul style="list-style-type: none"> <li>• Advising of phasing of developments and associated off-site highway works during construction period.</li> <li>• Provision of Transport Assessment information to inform scheme modelling and justification.</li> </ul>
Statutory Undertakers	<ul style="list-style-type: none"> <li>• Coordination, planning and delivery of associated statutory service supplies affected by the project.</li> </ul>
Primary School	<ul style="list-style-type: none"> <li>• Involvement with the communications strategy for the project including contribution to the development of proposals, encouraging 'buy-in' to consultation programme by local residents through school engagement exercises.</li> </ul>
B-SPOKE cyclists forum	<ul style="list-style-type: none"> <li>• Consultation on proposed cycle friendly infrastructure to be incorporated into the project.</li> <li>• Design review of proposals</li> </ul>
Planning and Highways Access Forum	<ul style="list-style-type: none"> <li>• Consultation on scheme proposals in relation to disability groups.</li> <li>• Contribution to the EIA assessment of the project design.</li> </ul>

**Table 2 - Summary of Currently Identified Stakeholders**

Additional stakeholders will be identified as the scheme progresses from GW1 to subsequent stages of delivery.

Consultation with parties both internal and external to the project will be undertaken in accordance with the Communications Management Strategy (see Appendix 10). As the project progresses from GW1 to GW2 an external communications schedule will be created to address notices, letters to occupiers/stakeholders and public consultation events.

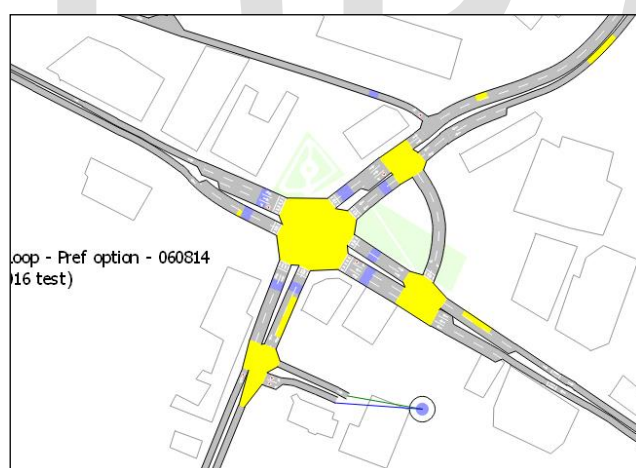
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## 1.8. Options

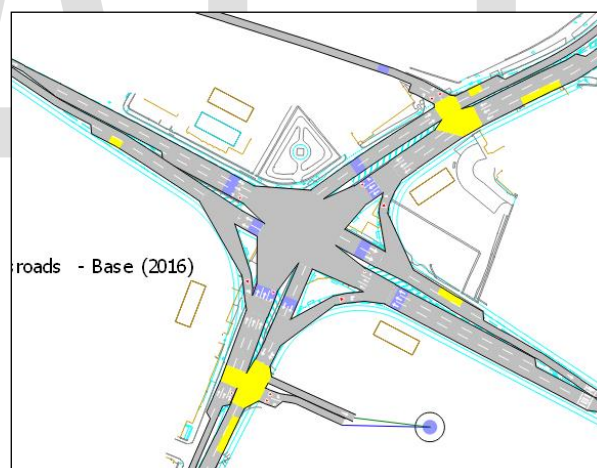
A number of different options have been considered during the initial development of proposals for the Harrogate Road / New Line site. Those that offer positive benefits in relation to the scheme objectives described in Section 1.3 are indicated below as Figures 3 and 4 (see also Appendix 7 and 8 for larger scale drawings of the P-Loop and Cross Roads options).

Although the P-Loop design provides similar outputs to the Cross Roads layout it is offered as the preferred option primarily because it has a lesser impact on the local area in terms of land and property demand together with corresponding savings in terms of capital cost. The scale of the more traditional Cross Roads option overly dominates the setting of this district centre and has increased effect on local businesses.

In all options which were appraised, with the exception of the ‘Do Nothing’ scenario, it has been assumed that Traffic Light Priority (TLP) modifications to the signal controller will be included to assist bus journey times and offer improvements in timetable reliability. Enhancements to bus stop facilities in the immediate vicinity of the junction will be developed during the detailed design phase and will be described in greater details as part of the Gateway 2 submission.



**Figure 3 – P-Loop Option (Preferred)**



**Figure 4 – Cross Roads Option**

In addition to the above two options the further alternatives of an ‘Pedestrian Facilities Only’ option (a do-minimum) and a ‘Do-Nothing’ option (the existing case) are tabulated and contrasted in Table 3 opposite with additional detail given in the Option Appraisal Report presented to September 2014 CBMDC WY+TF Programme Board (Appendix 12).

The low cost ‘Pedestrian Facilities Only’ option (Ref 3) is a potential likely intervention should the junction improvement not be taken forward. It would have a massive negative impact on the performance of an already congested junction resulting in increased delays, longer journey times and further deterioration in air quality and greenhouse gas emissions.

Ref	Option Description	Impacts	Risks
1	'P' Loop (Preferred)	<ul style="list-style-type: none"> <li>• Significant increase in junction capacity.</li> <li>• Significant reduction in delays in current and future year scenarios.</li> <li>• Improved pedestrian and cycle safety.</li> <li>• Less property / land required than the Cross Roads scheme.</li> </ul>	<ul style="list-style-type: none"> <li>• Reliant on the capacity of the 'P'-loop. Passive provision of a second left turn lane is proposed to lessen the risk.</li> <li>• Requires assembly of 19 parcels of third-party land.</li> </ul>
2	Cross Roads Junction	<ul style="list-style-type: none"> <li>• More expensive option than ref 1 'P-Loop' due to significantly more extensive property/ land requirements.</li> <li>• Significant increase in junction capacity.</li> <li>• Significant reduction in delays.</li> <li>• Improved pedestrian and cycling safety.</li> <li>• Destructive of the Greengates local centre.</li> <li>• Increased severance due to the size of the junction.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant land assembly required (approx. 28 no. separate parcels of land)</li> <li>• Less future capacity risk than P-Loop scheme.</li> <li>• Significant effect on existing businesses</li> <li>• Does not offer same level of assistance to cyclists as the P-Loop option. Cyclists would need to negotiate a right turn at the junction.</li> </ul>
3	Pedestrian Facilities Only ("Do Minimum")	<ul style="list-style-type: none"> <li>• Improved pedestrian safety through incorporation of pedestrian crossing facilities.</li> <li>• Reduces severance caused by junction on local community.</li> <li>• Significant increase in delays and congestion due to reduced junction capacity.</li> <li>• Deterioration in air quality and increasing greenhouse gas emissions.</li> </ul>	
4	Do-Nothing	<ul style="list-style-type: none"> <li>• Increasing delays and congestion on the strategic corridors.</li> </ul>	

**Table 3 - Scheme Option Comparison**

Land assembly is required for both the options Ref1 (preferred) and Ref2. To give assurance on the land acquisition process timescale a CPO process would run concurrent with negotiations and this has been factored into the delivery time programme.

# Economic Case

## 2.1 Introduction

This section sets out the economic, environmental, social and distributional impacts of the Harrogate Road / New Line junction proposals.

## 2.2 Options Appraised

A number of options have been considered as set out in Table 3 above including a Do-Nothing option (as is) (Ref 4), Pedestrian Facilities option (as is with pedestrian facilities) (Ref3), Cross-Roads (Ref 2) and the P-Loop (Ref 1), the preferred option. The P-Loop proposal has undergone a number of iterations in seeking to reduce the amount of land required whilst allowing the junction to operate efficiently.

The four options detailed above have been tested utilising an Aimsun microsimulation transport model to compare the impacts the proposed schemes will have on the operation of the junction. A microsimulation was used as the preferred modelling tool rather than the Bradford Saturn transport model as the Saturn model does not replicate traffic movements in this area correctly and it was felt that the outputs would not be realistic. Aimsun has been used successfully to test the impacts of changes to the road network elsewhere in Bradford including Tong Street, Manchester Road and Saltaire roundabout. One of the main advantages is that the modelled outputs are easy to understand by stakeholders which is key to gaining support for the proposed changes.

The microsimulation was developed by Fore Consulting and the model validation report is available at Appendix 3. Fore constructed the base model, the future year options were developed in-house at City of Bradford MDC in conjunction with Bradford's urban traffic control team. Each option was tested under 3 scenarios as follows. Each scenario was tested 10 times with a different random seed

- **Scenario 1** – 2014 traffic flows (base)
- **Scenario 2** – 2016 traffic flows + traffic demand forecast for Apperley Bridge station.
- **Scenario 3** – 2026 traffic flows + traffic demand forecast for Apperley Bridge station.

Both the P-Loop and Cross-Road options produced similar outputs in terms of reducing delays. Of the two, the P-Loop was adopted as the preferred option due to reduced land requirements producing lower costs and therefore a better cost-benefit ratio. The do-minimum option (providing pedestrian facilities) was discounted as it resulted in significant deterioration in junction capacity and increase in delays.

The 'do-nothing' and 'preferred option' have been further tested with both low growth and high growth scenarios as per WebTAG guidance.



### 2.3 Assumptions

First full year opening: 2016 (modelled)  
 Appraisal period: 10 years  
 Capital costs: £5.5m  
 Optimism bias: 44%  
 Annual Maintenance £0.023m

Traffic forecast :-

Tempro growth factors:-

	2014 to 2016	2016 to 2026
AM Peak	1.0503	1.1176
PM peak	1.0498	1.1165

Table 4 - Tempro Growth Factors (Based on Bradford District data)

Tempro growth factors have been used rather than the WebTAG guidance of NTEM growth factored by Tempro. The justification for this approach being that historically there has been very little change in traffic growth across the road network in Bradford as illustrated in figure 5 below.

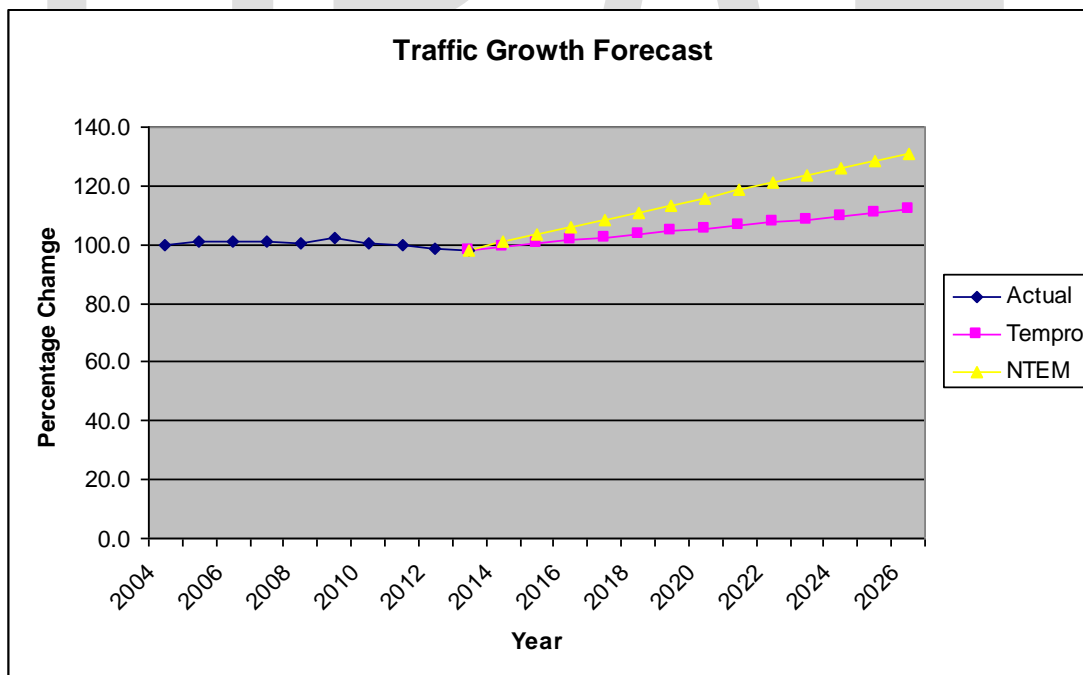


Figure 5 - Traffic Growth Forecast

Over the past 10 years traffic levels in Bradford have fallen slightly however Tempro forecasts traffic growth of 11.7% by 2026 as opposed to 31% if Tempro growth is factored with data from the NTEM model. Future year traffic growth of 11.7% has therefore been used to test the various junction options as this is deemed to be the most appropriate locally.

Both a high growth (Tempo + 7.9%) and low growth (Tempo -7.9%) have also been used within the testing. This is based on WebTAG treatment of national growth in demand. WebTAG assumes that between 1 and 36 years after the base year, the proportion of base year demand should rise from  $p$  to  $6 \cdot p$  in proportion with the square root of the years (for example, 16 years after the base year the proportion is  $4 \cdot p$ ). For highways demand the value of  $p = 2.5\%$ . Therefore, after 10 years the proportion equates to 3.162 (square root of 10) and  $p = 2.5\%$  therefore, growth value =  $3.162 \cdot 2.5 = 7.905$ . The low growth scenario is based on the same ranges below the core scenario demand as the high growth is above it.

### Background Assumptions:-

- A new rail station at Apperley Bridge is due to open in December 2015. Forecast traffic demand has been included in the 2016 and 2026 model runs in addition to traffic growth.
- A new housing development at Simpsons Green (to the west of the Harrogate Road / New line junction) comprising 267 new houses has recently received planning approval. This scheme is dependent on improvements to the Harrogate Road / New Line junction. Additional sensitivity testing is proposed prior to Gateway 2 submission to see if it would be possible to restrict traffic flows adjacent to the new housing development on Apperley Lane / Hemingway Road (to the west of the junction). This will potentially increase traffic at Harrogate Road / New Line.
- The Rodley roundabout on the A657 to the east of Harrogate Road / New Line junction will be signalised by 2015. We understand from Leeds Council that it is forecast to have only a marginal impact on traffic flows along the A657.
- It is acknowledged that increasing capacity at Harrogate Road / New Line may attract additional traffic flows from elsewhere on the highway network. It has not been possible to assess the impacts on the wider network due to a lack of coverage in this area within Bradford's Saturn model.
- The broad quantum of housing and employment development that are contained in the Publication Draft of Bradford' Local Plan Core Strategy were included in the Urban Dynamic Model as it was developed. The quantum in each sector of the District as identified in the Local Plan were allocated across the zones in that sector except in the case of major employment sites where specific locations and scales of development were identified.

### **2.4 Sensitivity and Risk Profile**

As indicated earlier in the report Tempo has been used to provide forecast traffic growth. This equates to 11.7% between 2016 and 2026. In addition, a high growth scenario has been evaluated (Tempo growth + 7.9%).

Under the high growth scenario the level of traffic in the base model (do nothing scenario) exceeds capacity on all four arms of the junction with modelled traffic queuing,

in effect, outside of the model. Therefore, the delays to vehicles may be underrepresented in the base model under a high growth scenario. It is intended, as part of further sensitivity testing, to use the model with a larger geographic extent to better understand the impacts of a high growth scenario and to include a new housing development at Simpsons Green.

Lunchtime weekend traffic flows are approaching the levels experienced at weekday peak times. Therefore, a further exercise is required to determine if turning movements are significantly different on a weekday compared to a weekend and if so, further sensitivity testing will be required. This work will be covered in the Gateway 2 submission package.

## 2.5 Value for Money Statement

The headline economic results from the West Yorkshire Urban Dynamic Model (UDM) are presented below for Harrogate Road – New Line Junction. Two options have been tested: the preferred P-Loop design; and an alternative crossroads design. The values relate to the forecast year of 2026.

The initial results from the assumptions used to test and prioritise the scheme within the WY+TF are also presented to allow comparison between the Portfolio Baseline (the approved package of interventions across West Yorkshire and York) and the preferred option. Comparing the preferred option against the Portfolio Baseline shows that the preferred option creates more jobs than previously tested as well as resulting in a significant increase in GVA, a decrease in capital costs and therefore a stronger GVA/£ ratio which has increased from 0.6 to 3.1.

<b>Test</b>	<b>WY Jobs</b>	<b>GVA p.a. 2009 Prices</b>
Preferred Option: P-Loop	+150	+£10.4m
Alternative: Crossroads	+137	+£9.4m
Initial Assumptions used to prioritise the scheme for WY+TF funding.	+31	+£2.1m

**Table 5 - Headline Economic Results from West Yorkshire UDM**

Headline GVA/£ figures have been calculated based on the revised UDM testing and associated scheme costs. The GVA/£ metric is used to rank schemes within the Transport Fund and represents single year GVA for the forecast year of 2026 considered against the whole life cost of the scheme to the Transport Fund.

Test	Capital Cost (incl. OB)	Third Party Funding	Whole Life Cost	GVA/£
Preferred Option: P-Loop	£5.5m	£1.6m	£3.4m	3.1
Alternative: Crossroads	£7.0m	£2.1m	£4.1m	2.3
Initial Assumptions used to prioritise the scheme for WY+TF funding.	£7.1m	£1.75m	£3.7m	0.6

**Table 6 – Headline GVA/£**

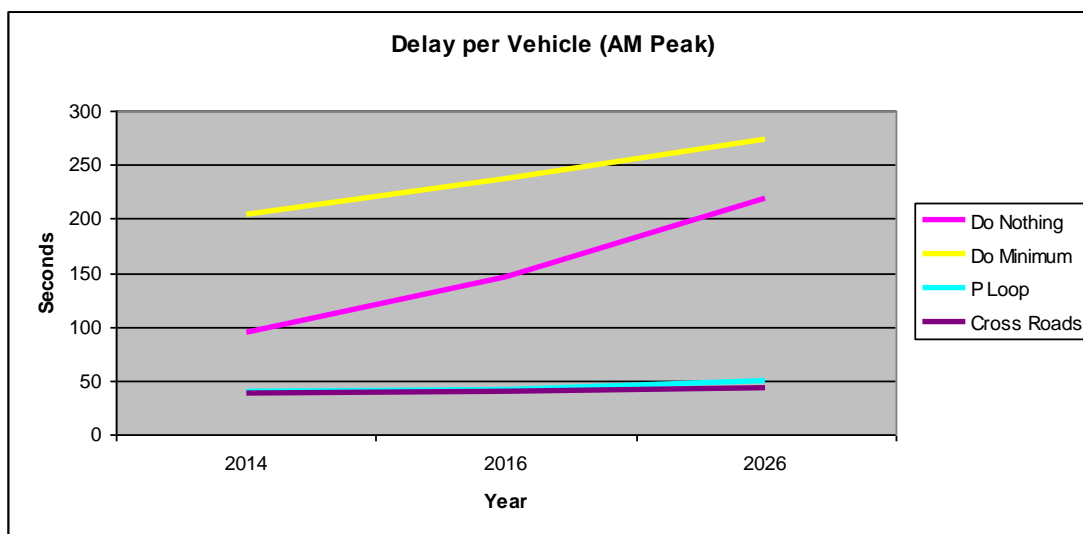
**Note**

1. For the Preferred Option P-Loop, the maintenance and renewal whole life cost not discounted ( as shown on the Budget Estimate Summary, see Appendix) is £1,390,253.07
2. Extend in the same manner as calculated to include construction/land costs and fees the whole life cost not discounted is £6,801,618
3. Stripping out 3<sup>rd</sup> party contributions and applying discount, the whole life cost to the WY+TF discounted is £3.4 million.

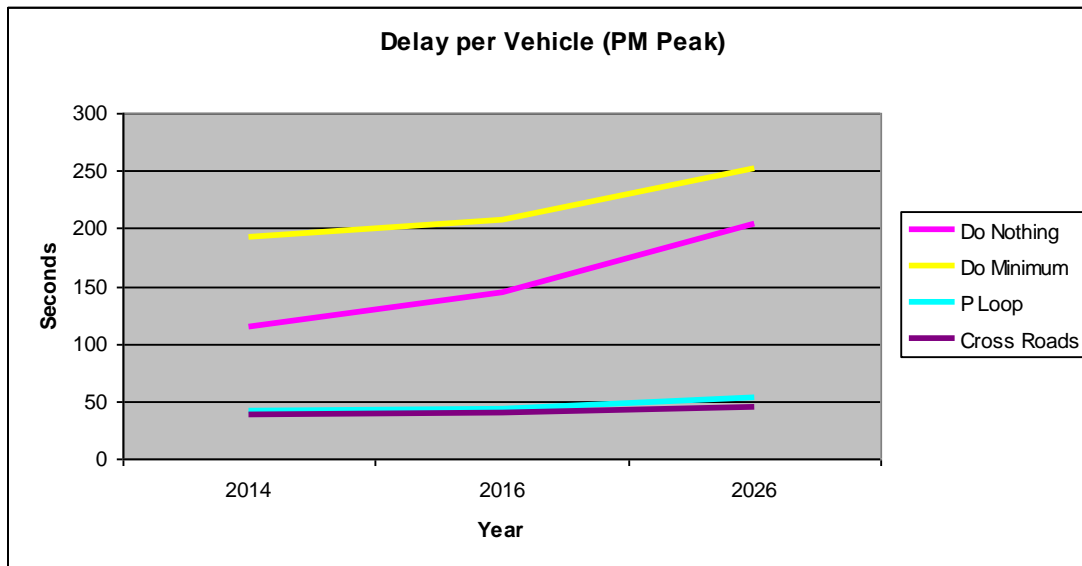
The results presented above include a third party contribution towards the scheme for each option equivalent to 30% of the scheme capital cost including Optimism Bias.

As indicated earlier, the proposed junction will substantially reduce peak period delays at this junction. On the basis of current traffic levels (2014) total travel time for modelled vehicles is expected to reduce from 435 hours in the morning peak down to 270 hours. In the evening peak total travel time will reduce from 503 hours down to 289 hours.

As forecast traffic levels increase by 2026 (TEMPRO) there will be a significant increase in delays at the junction unless capacity is improved. The average delay per vehicle over the time period between 2014 and 2026 is presented below in figure 6 and figure 7.



**Figure 6 - Average delay per vehicle AM Peak (standard growth)**



**Figure 7 - Average Delay per vehicle PM peak (standard growth)**

In the scheme opening year the potential costs savings are equivalent to £1.845m per year based reduction in delays in comparison with no improvements at the junction. The scheme delivers a very high VFM with an initial BCR of 11.62.

The BCR is based on time savings generated in both morning and evening peaks on a typical weekday. The junction also suffers from congestion in off-peak periods and on Saturdays but not to the same extent as weekday peak times. The inclusion of off peak cost savings would result in a higher BCR than the one calculated and presented in this report.

The present value of benefits is £57m and the present value of costs = £5.5m (including a 44% optimism bias)

Forecast	BCR
Standard	11.62
Low Forecast	8.51
High Forecast	11.46*

*\* This is lower than the standard forecast as the do-nothing model indicates the junction and surrounding links all exceed capacity and the model cannot process all the additional traffic.*

**Table 7 – BCR**

The BCR was calculated using an Excel spreadsheet. The benefits were derived as follows:

- The average total journey times for vehicles was calculated for both the do nothing and p loop scenarios.
- The difference in total journey times was then monetised using values of time from WebTAG (values determined by journey purpose).
- The benefits were discounted over a 60 year period to determine a present value.
- The scheme costs for both construction and ongoing maintenance were similarly discounted to a present day value.
- These were then used to calculate the BCR.

The Appraisal Summary table is attached at the Appendix 4.

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## Financial Case

### 3.1 Introduction

The estimated costs of the schemes are preliminary estimates based on feasibility stage drawings and therefore an optimism bias of 44% has been applied for the purpose of the appraisal process.

### 3.2 Costs

The overall cost of the preferred 'P-Loop' option is currently estimated to be £3.8m, which includes land cost of £0.9m. Application of 44% optimism bias to this figure results in a total overall cost of £5.5m. By comparison the overall cost of the Cross Roads option including optimism bias is £7m. Appendix 1 and 2 contain the cost breakdown estimates for these two options

An assessment has been made of a 60 year whole life cost for the preferred option. High value costs associated with resurfacing the additional paved areas of the junction on a 20 year cycle have been included within the costing. The year on year expenditures involved in maintaining traffic signalling, lighting and landscaping, together with 'as required' sign maintenance, have also been factored in.

Maintenance and renewal whole life cost not discounted. = £1.390m (60 years)

Maintenance and renewal will be funded through the highway revenue budget allocation which is administered by Bradford Council.

### 3.3 Budgets / Funding Cover

Addressing congestion at Harrogate Road/ New Line junction is key to on-going development within this part of the Bradford District. Recently planning permission has been granted for the Simpsons Green (14/00255/MAF) residential development by Miller Homes for 268 residential dwellings and two other applications are currently now coming on stream, including:

- **Cote Farm** – currently planning application for land at Cote Farm, Thackley for up to 270 dwellings and green space (13/04148/MAF); and
- **Fagley Quarry** – current planning application for 600 dwellings on land at Fagley Quarry (14/00208/MAO).

A further application is expected:

- **Land at former Stylo Factory** – Harrogate Road / Carr Bottom Lane estimated 171 dwellings (based on the density of the adjacent Stylo consent).

## Gateway 1 Submission – Harrogate Road / New Line Junction Improvement

A scheme for securing private developer contributions for the Harrogate Road / New Line junction improvement was agreed by the Council's Portfolio Holder on a 'first developer pays' approach as described below:

Each development would be subject to a viability appraisal with assessments for individual schemes having the ability to pay the full £2m essential off-site highway works contribution upon whichever is the first to commence.

### **Obligations of first developer**

- The full Harrogate Road / New Line contribution and any other 'fixed' contributions (e.g. essential off-site highway works or other essential works needed to allow the development to proceed) are paid plus any 'affordable' contributions (Education, Affordable Housing, Recreation etc.) based on what monies are remaining as set out in the agreed viability assessment. This S106 option is used on all consents granted up to the point that any developer has commenced and made the Harrogate Road / New Line payment thereby securing the required key junction improvement. Only one scheme would make this S106 payment, other developments commencing after another developer has made this payment would automatically move to the subsequent developer obligations.

### **Subsequent developer obligations**

- The viability appraisal will set out and agree the total monies available for S106 contributions such as education, recreation, and affordable housing provision. As the pinch-point Harrogate Road / New Line improvement works have already been secured by an earlier development no contribution to the highway scheme is required.

Funding up to £1.92m may be used by Bradford Council as third party contributions to the total cost of the Harrogate Road / New Line junction improvement and will be paid in four payments as described in the S106 agreement.

The ratio of third party funding to WY+TF funding shall be on the basis of a 30/70 split, subject to the maximum value of £1.92m (i.e. 30% of the funding costs shall come from third parties and 70% from the Transport Fund). Any reduction in project costs shall lead to a corresponding reduction in developer contributions to the scheme on this basis. Any residual funds of the £1.92m third party contribution following completion of the works to Harrogate Road / New Line junction shall be applied by the Council to local affordable housing provision as described in the S106 Agreement.

It is understood that the land negotiation and CPO process will not be funded by the WY+TF until Gateway 3 approval has been achieved. Therefore, subject to the agreement of the payment programme for the S106, Bradford Council will use the third party contributions to fund opportune property purchase and CPO preparation costs up to Gateway 3 approval.

To take the scheme up to Gateway 2 indicative costs are £137k (£198k inclusive of 44% optimism bias) to cover:



<b>Activity</b>	<b>Estimated Cost (£000s)</b>	<b>Estimated Cost (£000s) including 44% OB</b>
Detailed design and estimates	61	88
Stage 2 Road Safety Audit	6	9
CDM	3	4
Consultation	6	9
C4 Statutory Undertakers Notices	30	43
Planning Process	9	13
TROs	6	9
GW2 business case development	16	23
	<b>137</b>	<b>198</b>

An allowance of £1,709, 000 has been made for land assembly inclusive of the CPO process. Likely expenditure at time of GW2 (Q3 2015/16) is £386,000 (£555,000 including 44% OB). It is understood that the cost of these activities are borne by the Council up until GW3 approval and will be supported by the secured third party contribution.

A fully detailed and justified business case will be developed at Gateway 2 level submission

Funding from the Transport Fund has been allocated up to a maximum level of £4.9m to give a total project allocation of £6.82m. An indicative budget profile is shown below:

	<b>2013/14 (£'000s)</b>	<b>2014/15 (£'000s)</b>	<b>2015/16 (£'000s)</b>	<b>2016/17 (£'000s)</b>	<b>2017/18 (£'000s)</b>	<b>TOTALS</b>
<b>WY+TF</b>	16	183	63	1,709	2,923	4,894
<b>Third Party Contributions</b>		300	200	426	1,000	1,926
<b>Total</b>	<b>16</b>	<b>483</b>	<b>263</b>	<b>2,135</b>	<b>3,961</b>	<b>6,820</b>

Table 8 - Total Project Allocation – Showing an Indicative Funding Profile (including 44% optimism bias)

# Commercial Case

## 4.1 Introduction

The procurement for this project is in three distinct parts

- Land acquisition;
- Specialist advice and support services; and
- Site Construction.

## 4.2 Output based specification

The project objectives and key measures for success which will be used to generate the output based specification are described in Section 1.3 and 1.4 of this submission respectively. These criteria will be regularly reviewed and the contribution of the design solution assessed as part of formal design review procedures at appropriate stages of the scheme's development. The findings of these reviews will be documented accordingly and captured in the Benefits Realisation Plan.

Baseline data will be assembled and a formal post implementation review of the scheme will be undertaken after 1 year and 5 years of operation.

Wherever possible the project will meet the requirements of the Design Manual for Roads and Bridges together with local determined standards. The project will comply with relevant legislation including local revisions

## 4.3 Procurement Strategy

In line with public sector requirements the procurement strategy options need to demonstrate Best Value for Money by ensuring delivery of the project outcomes within the allocated budget by achieving the optimum combination of whole life costs, quality and benefits including economic, environmental and social value. The estimated value of the project dictates that procurement does not exceed the EU threshold value (£4.322m (Jan 2014)) and hence will be outside the EU procurement rules.

Bradford Council has recent success in delivery of medium value schemes (up to £5m) including Saltaire roundabout signalisation (£3.3m) and Canal Road / Stanley Road pinch point scheme (£3.74 m) using the NEC form of Contract (Option B) both of which are similar in nature, size and complexity to the proposed Harrogate Road / New Line project.

In compliance with the Council's Contract Standing Orders the final procurement strategy for this project must be reported to the Environment & Waste Overview and Scrutiny Committee for approval following pre-procurement engagement with the market (including talking to suppliers and stakeholders) to develop the requirements and the best value for money contractual approach. The preferred procurement route for this scheme

is therefore via a restricted tender process. This will be offered through either the YORcivils framework or schedule of approved contractors. A minimum of 5 suppliers will be shortlisted to submit tenders following completing the pre-selection PQQ.

The Council's Contract Standing Orders require that where appropriate, and always subject to EU law, tenders are framed in such a way as to encourage local suppliers and SME's (see CSO clause 3.2).

The form of contract will be the NEC. It is expected that there will be reasonable accuracy of scope/specification and therefore, Option B where the risk of carrying out the works at agreed prices is borne by the Contractor, is currently believed to be the most appropriate procurement approach.

### **Land Acquisition**

The initial approach of the Council towards securing any land required for the delivery of the project will be by negotiation between the Council via specialist third party agents (where the Council's own internal services are unable to provide the appropriate service) and the title holder.

A concurrent CPO procedure will be undertaken by the Council (with input from framework consultants) to ensure programme achievement.

### **Specialist Advice & Support Services**

Specialist advice and support services in relation to both legal and estates management and land valuation activities will be in accordance with the Council's framework agreements for these activities.

It should also be noted that discussions are currently on-going in relation to the establishment of a central resource of specialist legal and land agent/valuation services within the Combined Authority for use on Transport Fund schemes. Subject to the establishment of such a service the Council will look to use this facility where it is unable to secure the advice either internally or via its existing framework arrangements.

#### ***4.4 Sourcing Options***

See 4.3 above for the purpose of this Gateway 1 submission.

#### ***4.5 Payment Mechanisms***

Project payments will be controlled through the formal contract standing orders and financial regulations of Bradford Council and those of the Combined Authority.

CBMDC project development charges will be reimbursed on a quarterly basis based on the Council's Professional Engineering Services charging scheme.

Payments relating to the works contract will be subject to monthly certified payments based on the agreed value of measured works and subject to minimum payment levels specified in the contract.

Statutory Undertakers costs will be paid in advance, taking advantage of agreed discounts.

#### **4.6 Pricing Framework / Charging Mechanisms**

Project development cost is controlled through a fee bid process in accordance with the Council's Professional Engineering Services charging schedule, with payment made on a quarterly basis.

Land costs will be verified by independent valuation or open market value (whichever is most appropriate).

Works will be subject to competitive tender with cost controlled through the NEC form of contract with monthly payments.

#### **4.7 Risk Allocation and Transfer**

Risks are routinely identified and measured throughout the course of the project development process. Identified risks have been allocated to the appropriate party best able to ensure appropriate mitigation is implemented. The current Risks, Issues & Lessons Log is attached at Appendix 9.

Current key risks (with ratings of >12) are:

- Judicial Review finds planning consent invalid resulting in loss of 3<sup>rd</sup> party contributions and funding gap of up to £2m.
- Reduction of 'in curtilage' parking to various properties as a result of necessary land acquisition (the junction lies at a very constrained location)
- Potential programme delay if CPO/Inquiry required, the process can take up to 2.5 years.
- Preferred option requires the acquisition of Blockbuster (currently advertised To Let)
- CBMDC Legal view is that Planning Permission is required. Risks associated with refusal of permission.
- Lack of specialist legal/land assembly resources within CBMDC. Scarce resources working to capacity on schemes with competing priorities resulting in delays to programme.

In accordance with the Council's Contract Standing Orders a fully documented Risk Log has been developed and will continue to evolve through the detailed design and procurement stages of delivery and will be shared with tenderers as part of the tender documentation. The successful contractor will be expected to assist in maintaining the risk log through the construction stage and participate in any risk assessment activities.

The NEC form of Contract encourages parties to proactively and collaboratively identify problems and risks at the earliest stage and to work together to mitigate their impact. The Employer will identify and share with the Contractor risks they are aware of and the Contractor will add to the list within their tender return.

#### **4.8 Contract Length**

Currently construction of the works is expected to take approximately 9 months. This assessment will be refined within future gateway submissions.

#### **4.9 Contract Management**

The Contract will be managed by CBMDC using the NEC form of contract.

A contract management team structure will be developed and presented within a future Gateway submission.

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## Management Case

### 5.1 Introduction

The scheme will be managed by CBMDC using the Council’s project management procedures in conjunction with WYCA.

### 5.2 Evidence of similar projects

Similar recent projects successfully delivered by CBMDC include:

<b>Scheme Name:</b> Saltaire Roundabout
<b>Contract Value:</b> £3.3m
<b>Procurement Strategy:</b> Competitive Tender under NEC3 Option B
<b>Duration:</b> 26 weeks
<p><b>Scheme Description:</b></p> <p>This scheme involved the removal of an existing small ICD roundabout at the entry to the UNESCO World Heritage Site of Saltaire and the construction of a replacement traffic signal controlled junction together with a programme of complementary measures including:</p> <ul style="list-style-type: none"> <li>• Extension of the existing in-bound (to Bradford) bus lanes on the A650 approach to Saltaire Roundabout.</li> <li>• Provision of bus gates/pre-signals on approaches to Saltaire Roundabout</li> <li>• Linking Clarence Road / Albert Road to create public open space and facilitate installation of a gateway feature to the World Heritage Site.</li> <li>• Creation of 20mph zones in Nab Wood, Moorhead, Hirst Wood, Wycliffe and Saltaire Village.</li> <li>• Introduction of peak time signals on Bankfield Hotel Roundabout.</li> </ul> <p>The site of the previous six leg Saltaire Roundabout is at the intersection of A650 Bingley Road and Saltaire Road and suffered from significant congestion and a significant accident problem being the 12<sup>th</sup> most dangerous junction in Bradford in 2010.</p> <p>Development of the scheme proposals needed to be sympathetic to the World Heritage Site and required proposals being assessed by the Council’s World Heritage Site Officers, English Heritage and UNESCO as the junction was within the World Heritage Site buffer zone.</p> <p>Some land required for the scheme was in third party ownership including the forecourt of the adjacent Shell Petrol Filling Station for which the specialist services of the District Valuer were secured.</p>

<b>Scheme Name:</b> Canal Road/Stanley Road Junction Improvement Scheme
<b>Contract Value:</b> £3.8m
<b>Procurement Strategy:</b> Competitive Tender under NEC3 Option B
<b>Duration:</b> 52 weeks
<p><b>Scheme Description:</b></p> <p>The scheme has the following objectives:</p> <ul style="list-style-type: none"> <li>• To improve traffic flow along the A6037 Canal Road (and reduce ‘rat running’ through Bolton Woods and Windhill).</li> <li>• To support sustainable housing and employment growth in the New Bolton Woods masterplan.</li> <li>• To improve pedestrian and cycling facilities.</li> <li>• To improve access to opportunities and labour markets along the Airedale corridor.</li> </ul> <p>The signalisation of the junction and part dualling of Canal Road was developed to substantially reduce peak period delays at the junction especially for inbound (to Bradford) movements on Canal Road benefiting the significant number of commuters who use this strategic corridor.</p> <p>The great majority of the land required for the scheme was either in Council ownership or the ownership of Arnold Laver (who are a partner involved in the Canal Road Urban Village Limited and have agreed to make the land available for the scheme). Some of the land is occupied by leaseholders and detailed surveys suggest that a small section is in private ownership. Early negotiations were therefore required to secure the use of the necessary land for the highway scheme in good time.</p>

<b>Scheme Name:</b> Connect 2, Element 2: Bridge and associated Roadworks
<b>Contract Value:</b> £2.08m
<b>Procurement Strategy:</b> Competitive Tender under NEC3 Option B
<b>Duration:</b> 52 weeks
<p><b>Scheme Description:</b></p> <p>The Bradford Living Street Project was developed as a strategy to provide new and attractive walking and cycling routes connecting the major communities of Marshfields and West Bowling with their local schools and shops, St Luke’s Hospital, the Learning Quarter and the City Centre. The project is expected to benefit more than 85,000 people living within a mile of the route, providing economic, environmental and health benefits. Manchester Road dominates the area of Marshfields and West Bowling. The dual carriageway and associated bus guideway is a significant barrier, separating people from amenities. Manchester Road is the third busiest radial route within Bradford with traffic flows in excess of 37,000 vehicles on a typical weekday. One of the key aspects of the Living Street Project is the establishment of a suitable, convenient and safe route across Manchester Road, which in addition to improving connectivity will have the potential to visually contribute to this important gateway into the City.</p> <p>The Connect 2, Element 2 project involved construction of a new walking/cycling bridge</p>

over Manchester Road in the vicinity of St Stephens Road junction. The new bridge replaced an old footbridge in the same location with a high quality accessible structure. The proposed walking/ cycling bridge is a steel structure of unique design.

The existing footbridge was nearly 40 years old and was in need of some general routine maintenance to address time related deterioration. The footbridge had steep 1 in 10 gradient access ramps on the southern approaches and steep steps to the north and a width is 2.4m. The overall bridge design did not encourage popular use. During an average weekday 621 people use the surface crossing of Manchester Road, and only 340 the footbridge.

A key aspect to the success of this project was effective traffic management of a busy corridor to Bradford City Centre and engagement with the local community in relation to the construction activities, design and form of the finished bridge.

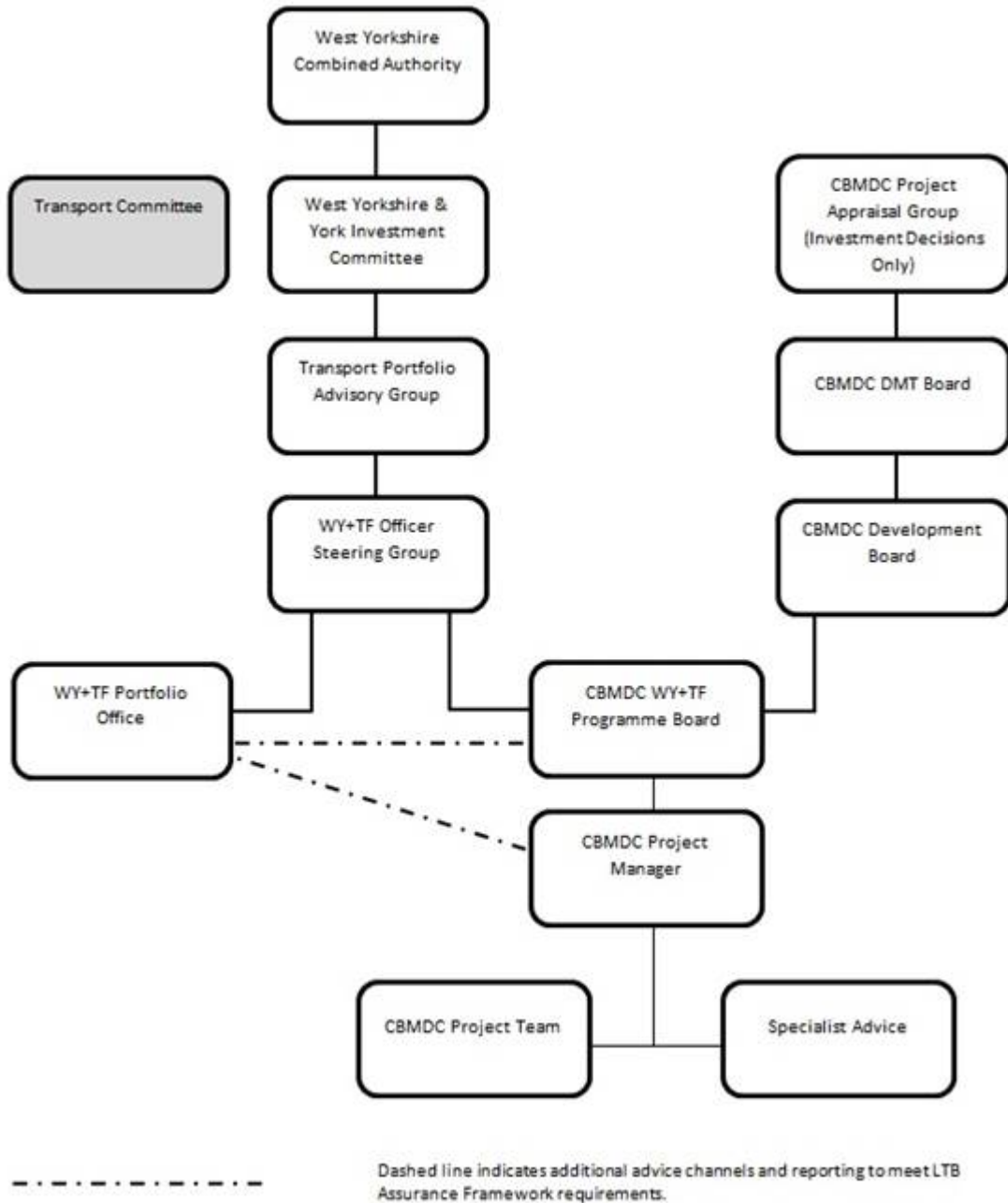
### ***5.3 Programme & Project dependencies***

A high level project plan is attached as a separate document at Appendix 5 and sets out key activities for the delivery of the project based on the current understanding of project constraints and interdependencies.

### ***5.4 Governance / Organisational Structure***

The Governance structure is identified below.





**CBMDC Project Approval Group (PAG)**

*Stuart McKinnon-Evans, Strategic Director of Finance  
Philip Westcott, Business Advisor (Capital)*

*Responsible for the approval of investment decisions relating to CBMDCs Capital Investment Programme (CIP) and approval of financial matters of outline business cases and financial management of CBMDC.*

**CBMDC DMT Board**

*Mike Cowlan, Strategic Director, Regeneration & Culture  
Julian Jackson, Assistant Director, Planning, Transportation & Highways  
Tony Stephens, Sheillah O’Neil, Andy Taylor*

## Gateway 1 Submission – Harrogate Road / New Line Junction Improvement

*Review of all Regeneration & Culture Boards and progress of key service outputs and initiatives associated with the Council's aspirations of regeneration within the Bradford District. Input to decisions on strategic issues in relation to scheme delivery and interface with key stakeholders and business interests.*

### **CBMDC Development Board**

*Julian Jackson, Assistant Director, Planning, Transportation & Highways  
Richard Gelder, Transportation Development Manager  
Chris Eaton, John Eyles, Andrew Marshall, Belinda Gaynor, Richard Burnham, Andy Taylor*

*To provide a co-ordination oversight for all strategically significant development projects (public and private sector) within the Bradford District, review delivery progress and interface issues, facilitate planning approvals, land acquisition and legal agreements and ensure compliance with development policies, benefit realisation through increased economic activity in relation to Business rates improvement.*

### **CBMDC WY+TF Programme Board**

*Project Executive – Richard Gelder  
Senior Supplier – Simon D'Vali/Andrew Smith  
Senior User – Joe Grint/Michael Ferguson*

*Decisions on scheme development, oversee business case development, planning approvals, land acquisition, design, procurement, construction and monitoring. Control of resources, costs, programme and risks.*

### **CBMDC Project Manager**

*Richard Day – day to day running of the project, ensures resources are in place to deliver the project, reports to Programme Board/Executive, business case development, planning approvals, land acquisition, design, procurement, construction and monitoring.*

### **CBMDC Project Team**

*CBMDC, Highway Design – reports to Project Manager, undertakes design, land acquisition, consultation processes, procurement and supervision of construction.*

### **Specialist Advice**

*Specialists from legal, planning, estates management, communications etc will be brought on board as required to support the Project Manager.*

### **West Yorkshire Combined Authority**

*The Combined Authority is responsible for the £1 billion West Yorkshire Plus Transport Fund, and will work closely with business in the region through the Leeds City Region LEP to ensure that business and the regional economy is at the heart of the decisions taken.*

### **Investment Committee**

*The Investment Committee is an advisory body whose role is to advise the Combined Authority in relation to funding submissions, local financial strategies and project management and delivery arrangements, review the impact of programmes funded by the Local Enterprise Partnership and to liaise with the Transport Committee to promote the strategic alignment of regional transport funding investment.*

### **Transport Committee**

*The Transport Committee is a decision making body whose role is to monitor and manage deliver of the LTP across the area, formulate policies, to approve decisions relating to transport functions of the Combined Authority and to liaise with the Investment Committee to promote the strategic alignment of regional transport funding investment.*

### **Transport Portfolio Advisory Group (formerly Interim Portfolio Board)**

*Subject to approval of the Terms of Reference the Transport Portfolio Advisory Group will be responsible for advising the Investment Committee (or Combined Authority) on the development of the WY+TF portfolio of programmes and projects ensuring their coordinated and prioritised investment.*

**WY+TF Officers Steering Group**

*Formulates advice and develops recommendations to be submitted to the Combined Authority Investment Committee.*

**WY+TF Portfolio Office**

*Day to day administration and co-ordination of WY+TF*

## **5.5 Programme / Project Reporting**

Highlight reports will be prepared by the Project Manager for the CBMDC WY+TF Programme Board. The highlight reports will reflect updates to the risk register and issues log and request the decisions required by the board. The project manager and project executive will also be responsible for reporting progress and any significant risks and issues to the WT+TF portfolio board via the project dashboard.

## **5.6 Risk Management**

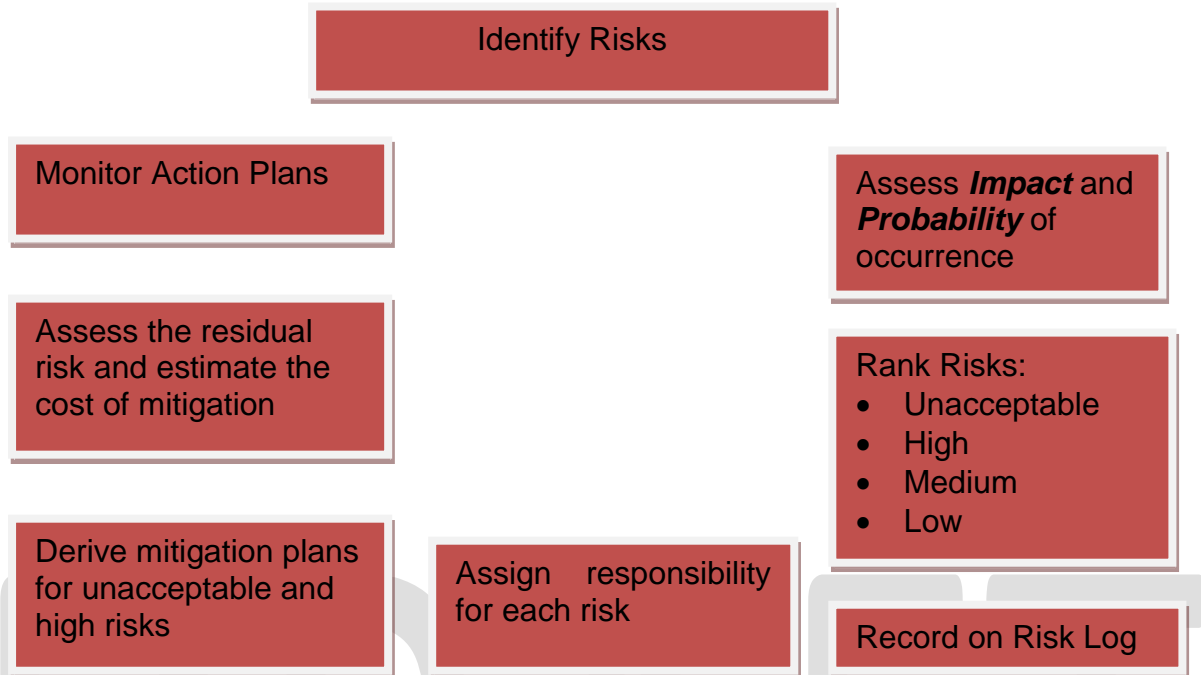
The Council's approach to risk management methodology will identify manage and cost project risks on the project in line with the Council's Standing Orders. The form of contract which is proposed (NEC) has the development and management of a risk strategy as a fundamental building block.

The Project Manager for the scheme will be responsible for ensuring risks are identified and quantified and he/she will manage the project risks and opportunities and report the identified impacts to the CBMDC WY+TF Programme Board. A qualitative risk register has been developed and will be maintained and regularly reviewed by the Project Manager in collaboration with other members of the CBMDC Project Team and key stakeholders. The consideration of risk is a standing CBMDC WY+TF Programme Board agenda item.

Each risk and opportunity will be allocated a named "owner" who will be responsible for undertaking regular reviews of the risk and recommending appropriate and timely mitigation / response measures.

### **Risk Management Process**

Risk management on the scheme involves identification of risk, evaluation and development of strategies for controlling the potential outcomes. This process is subdivided into the following key steps:



Project risks have been identified for this project by the CBMDC Project Team and will continue to be developed through a combination of discussions with the CBMDC Project Team, dedicated risk workshops, discussions with the CBMDC WY+TF Programme Board and key stakeholders.

Measures to mitigate the risks are proposed in the Risk Log with the owner of each risk being identified and the associated costs of mitigation, where appropriate. The Risk Log identifies ways in which to respond to risk using predefined strategies.

- **Prevention** – terminate the risk, do something different, take counter measures to prevent it happening;
- **Reduction** – treat the risk, take action to control it either through reducing its probability and/or consequence;
- **Transference** – the risk is transferred to others (e.g. through contractual obligations or insurance);
- **Acceptance** – the risk has to be tolerated, the costs of mitigation might exceed the benefits; and
- **Mitigation** – risk response plans are applied as and when the risk is seen to occur.

### ***5.7 Benefits Realisation Plan***

A detailed benefits realisation plan will be developed through to the Gateway 2 review based on increased understanding and modelling of the single option solution approved at Gateway 1.

### ***5.8 Monitoring and Evaluation***

A formal post implementation review of the scheme will be undertaken after 1 year and 5 years of operation.

Pre scheme data collected for the microsimulation model will provide information for the before study. A detailed monitoring plan will be provided as part of the gateway 2 submission.

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## Appendices

**Appendix 1** - Budget Estimate Summary. P-Loop Junction Improvement (Preferred)

**Appendix 2** - Budget Estimate Summary. Crossroads Junction Improvement

**Appendix 3** - Model Valuation Report

**Appendix 4** - Appraisal Summary Table (AST)

**Appendix 5** - High Level Project Plan

**Appendix 6** - Road Safety Audit – Stage 1 (together with Designer's response)

**Appendix 7** - A3 Drawing P-Loop scheme – preferred option – Dwg Ref:  
R/M/MH/101463/30D

**Appendix 8** - A3 Drawing Cross Roads Option – Dwg Ref: R/M/MH/101463/05C

**Appendix 9** - Risks, Issues & Lessons Learned Log

**Appendix 10** - Communications Management Strategy

**Appendix 11** – Location Plan – housing developments

**Appendix 12** - Option Appraisal Report - September 2014 CBMDC WY+TF Programme Board