
*Coast to Capital Local Transport Body
Application Supporting Document*

Worthing Sustainable Transport Package – Stage 1, Worthing Connectivity Public Realm Scheme (Phase 1)

Prepared for
West Sussex County Council

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CH2MHILL®

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Acronyms and Abbreviations

CABE – Commission for Architecture and the Built Environment

CCLTB – Coast to Capital Local Transport Body

C2C LEP – Coast to Capital Local Enterprise Partnership

C2C SEP – Coast to Capital Strategic Economic Plan

DfT – Department for Transport

EAST – Early Assessment and Sifting Tool

NPPF – National Planning Policy Framework

VAT – Value Added Tax

WTCI – Worthing Town Centre Initiative

1 Introduction

This document provides supporting information for the funding application to the Coast to Capital Local Transport Body (CCLTB) for Phase 1 of the Worthing Connectivity Public Realm Scheme (Stage 1 of the Worthing Sustainability Transport Package). It should be read in conjunction with the funding application. It sets out the benefits and costs of the project drawing on the key requirements of the CCLTB Funding Application and guidance from the Department for Transport's (DfT) Early Assessment and Sifting Tool (EAST) and WebTAG, and HM Treasury's Logic Model. The report firstly sets out the methodology that has been used to estimate the benefits and costs of the project and provides a scheme overview. It then explains how the Scheme links to national and local policy and provides more detail on how each of the Scheme's benefits has been calculated. The report is structured as follows:

- Section 2: Methodology;
- Section 3: Scheme Overview;
- Section 4: National and Local Policy;
- Section 5: Expected Economic Benefits (Economic Growth);
- Section 6: Social Distributional Impact;
- Section 7: Transport and Scheme Related Economic Benefits;
- Section 8: Environmental Impact;
- Section 9: Benefit Cost Analysis; and
- Section 10: Scheme Feasibility and Deliverability.

2 Methodology

HM Treasury's Logic Model approach has been used to explain the objectives of the project and to map these to the impacts that are expected to arise based on those included in the EAST sifting tool.

The potential benefits and costs of the project have been assessed in line with CCLTB's Funding Application guidelines, DfT's EAST sifting tool and WebTAG. The CCLTB Funding Application covers many aspects of the five transport business cases included in EAST: Strategic, Economic, Managerial, Financial and Commercial. However the Funding Application states that, at this early consideration of schemes, the focus of the assessment is on the economic benefits, socio-distributional impacts, environmental impacts and scheme feasibility and deliverability.

A review of existing studies into town centre regeneration projects was carried out in order to build up an evidence base for the impacts of the Scheme. A quantitative and qualitative assessment of the impacts that are likely to occur was then prepared, drawing on the evidence from the existing studies, local data and insights from local stakeholders.

3 Scheme Overview

The Worthing Connectivity Public Realm Scheme is part of the Worthing Sustainability Transport Package. The Package aims to deliver a range of transport and urban realm schemes in Worthing and is included in the Coast to Capital Strategic Economic Plan (C2C SEP). The Worthing Connectivity Public Realm Scheme aims to tackle the issue of the declining urban realm in the centre of Worthing and improve connectivity making a more attractive town centre. By upgrading the urban realm of key streets in the town centre, the proposed Scheme will increase Worthing's competitiveness with other local centres and encourage economic growth.

The Worthing Connectivity Public Realm Scheme will be delivered in six phases. WSCC are seeking funds for the capital costs of Phase 1 of the Scheme. The Phase 1 of the scheme forms Stage 1 of the Worthing Sustainability Transport Package.

The public realm improvements for the whole scheme include refurbishing the pedestrian section of Montague Street, the junction of Montague Street with Crescent Road, and Portland Road. In addition improvements will be made to Montague Place including the removal of the Rotunda, creating an area for market and social events, and strengthening the link between the main shopping area and the seafront. Figure 1 presents the area of the whole scheme. The scheme is expected to be delivered in six phases, with work starting on Phase 1 in January 2016. The subsequent phases will be completed subject to funding availability. The phased development is planned to take place during quieter months to reduce the interference with retail trade during the busy summer and Christmas period. Once constructed, the improvements are expected to have an estimated design life of 40 years.

Planned activities include:

- reinstating the kerbs and raising the short section of carriageway on Montague Street between Surrey Street and west buildings;
- reconstructing the existing footways, and the concrete carriageway;
- replacing the existing drainage channels with a system of gullies;
- planting trees or installing surface mounted tree planters;
- installing new street furniture;
- removing the rotunda in Montague Place and installing two contemporary shelters;
- reducing vehicle access in Montague Place and one way system for delivery vehicles. To compensate for the reduced vehicle access and reduced parking, new disabled parking will be placed on the sea front; and Liverpool Gardens
- relocating the new street lighting that is currently being carried out as part of a separate contract.

Phase 1 of the Scheme

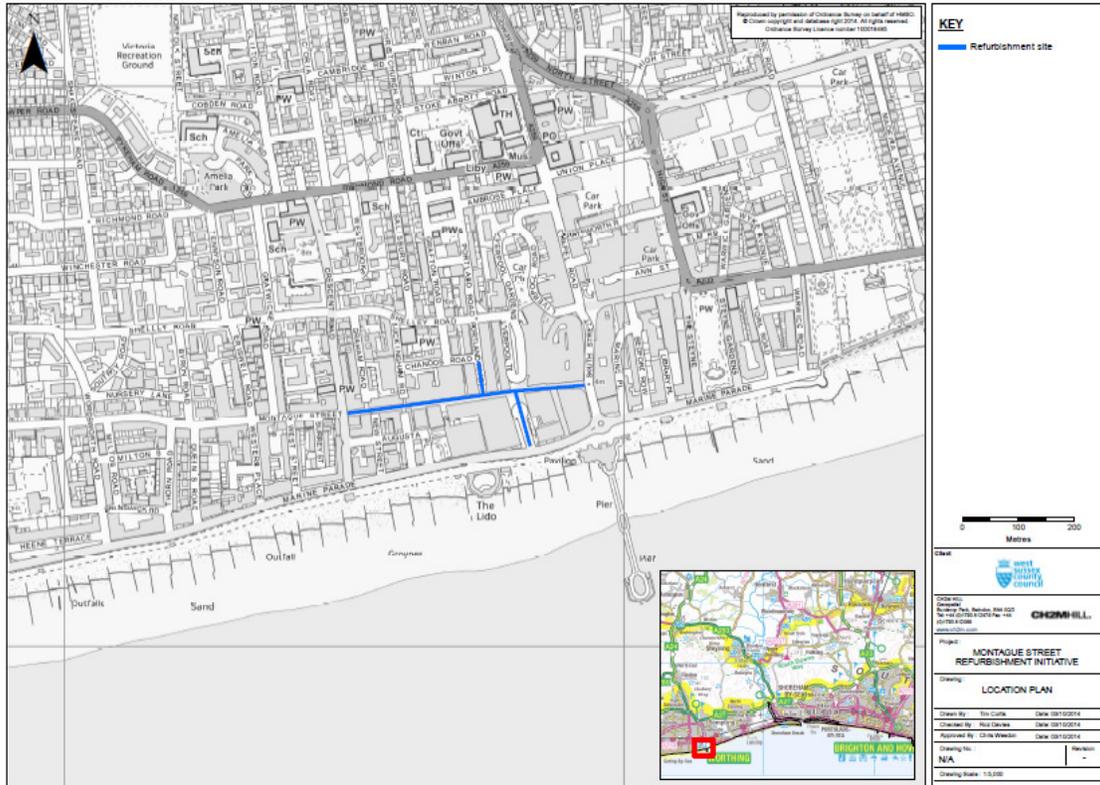
Phase 1 of the Scheme comprises of works to Montague Place. The phases of the scheme are presented in Figure 2. The works will comprise of:

- Removing the Rotunda at Montague Place
- Installation of two contemporary shelters for events/stalls
- Central paving feature integrating way finding lettering
- Stone cubes providing informal seating and a barrier for vehicles
- Raised table to improve pedestrian link to Liverpool Gardens

- Relocate disabled bays

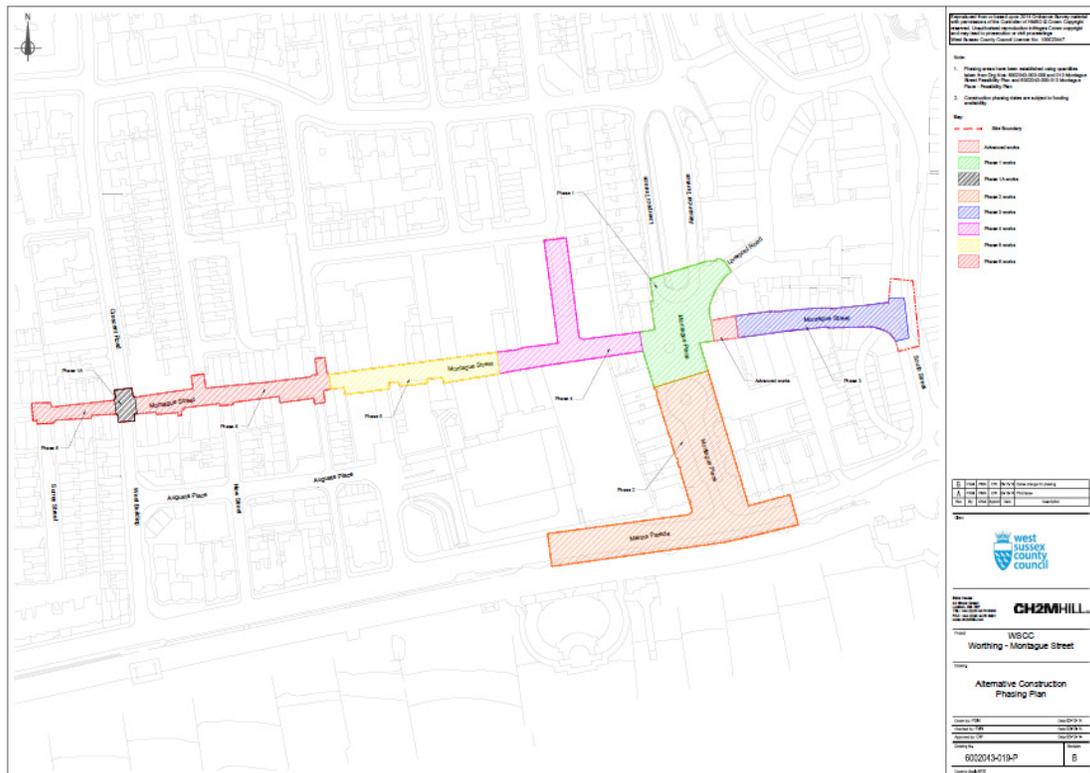
Initial feasibility plans have been prepared and a consultation with businesses and the public found strong support for the proposed refurbishments. The plans are now at the detailed design stage and initial feasibility drawings are included in Annexes 1 (Scheme Phases), Annex 2 (Montague Place) and Annex 3a and b (Scheme Designs).

Figure 1: Location map of proposed refurbishment area for the full Scheme



Source: CH2M HILL 2014

Figure 2 Diagram of Scheme Phases (Phase 1 is located in Montague Place and is highlighted in green)



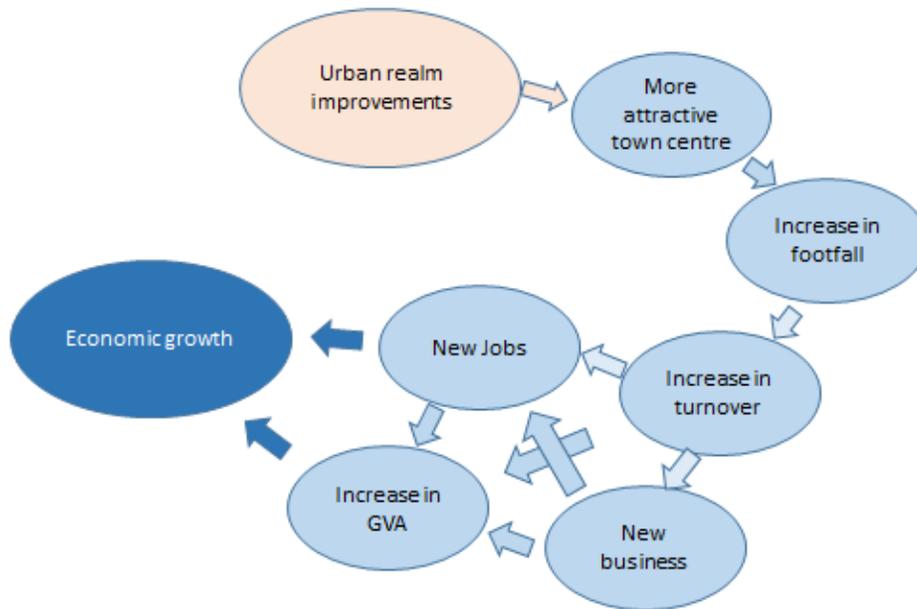
Source CH2M HILL 2014

The full scheme will deliver benefits to the local community, visitors, businesses and local government. By improving the urban realm of Montague Street, Portland Road and Montague Place, the town centre will become a more attractive environment to be in and a safer place for pedestrians by reducing trips on old, uneven paving. It will attract more people to shop in the area, increasing footfall in the town centre. This will have a positive impact on local businesses who will benefit from an increase in retail turnover and the associated benefits with this. The area will improve its competitiveness with other local centres and higher end shops will be encouraged to move into the area. The rate of vacant properties will also reduce. These impacts will create new jobs and improve the overall vibrancy of the town centre. The improvements will contribute to economic growth through employment generation and an increase in turnover, rental values and property prices. The government will benefit through the associated increase in business rates, Corporation Tax and Income Tax. It is also likely to facilitate the regeneration of the wider area.

The benefits identified in this document only reflect the physical infrastructure improvements and do not take account of any supporting economic initiatives such as town centre marketing. WSCC are seeking funds for phase 1 of the scheme. The phase 1 of the scheme alone will only result in a proportion of the total benefits. Phase 1 equates to around 25% of the complete project and is likely to bring forward some of the benefits of the complete scheme on a roughly pro-rata basis. The full scheme will need to be constructed for the full benefits to be realised.

Figure 3 shows the linkages between the urban realm improvements and economic growth. Figure 4 shows how the project's objectives relate to the potential outcomes and impacts.

Figure 3: Diagram to show linkage between urban realm improvements and economic growth



Source: CH2M HILL 2014

Figure 4: Logic Model of Worthing Connectivity Public Realm Scheme

Objectives	Activities	Resources required	Outputs	Outcomes	Impacts
To increase the competitiveness of the town centre with other local centres	Reinstate kerbs on Montague Street between Surrey street and west	Finance	Physical refurbishment of Montague Street pedestrian area	Reduced trips and falls	Improved urban realm
To facilitate economic growth	raising the short section of carriageway on Montague Street between Surrey Street and west buildings	Design and construction staff	Physical refurbishment of Portland Road	Improved linkage between main shopping area and sea front	Increased competitiveness of the town centre
Regeneration of the town centre	reconstructing the existing footways, and the concrete carriageway	Materials	New space for market and events	Increased footfall	Economic growth
	replacing the existing drainage channels with a system of gullies		Reduced traffic in Montague Street	Increased retail turnover	Regeneration of the wider area
	Planting trees or have surface mounted tree planters;		Physical link created between shops and sea front	Increased rental values	
	New street furniture;			Increase in house prices	
	Removal of the rotunda in Montague Place and installing two contemporary shelters;			Increased business rates	
	Reduced vehicle access in Montague Place and one way system for delivery vehicles.			Reduced vacancy rates	
	relocating the new street lighting that is currently being carried out as part of a separate contract			Job creation	
				Increase in GVA	
				Increase in government revenues	
				Improved perceptions of the area	

Source: CH2M HILL 2014 based on HM Treasury (2011) Magenta Book Guidance, WSCC (2013) Montague Street Feasibility Technical Note, Project Brief and consultation with key stakeholders

Costs and timeframe

The scheme will be managed in six phases. Phase 1 of the construction is planned to commence in January 2016. The subsequent phases will be completed subject to funding availability.

The capital cost of phase 1 of the scheme is estimated to be £1.2 million including a 35% optimism bias (excluding VAT, expressed in 2014 Q2 prices).

The total capital cost of the whole scheme is £4.8 million including 35% optimism bias and excluding VAT.

The choice of the optimism bias percentage reflects the fact that some initial design works have already been prepared.

Funding

WSSC are seeking funds for phase 1 of the scheme. Of the total £1.2 million required for this phase, £800,000 is being sought from the C2C LEP and the remaining £400,000 will be raised through match funding (of which £120,000 from Section 106 and £280,000 from WSSC capital budget).

The remaining £3.6 million that would be required to fund the remaining stages of the scheme would be sought during future funding rounds.

Linkages to National and Local Policy

3.1 National level

Government policy at the national level supports the development and refurbishment of town centres. This is made clear in the National Planning Policy Framework (NPPF) which sets out the overarching policy for planning in England.¹ The NPPF states that planning should be carried out to ensure the vitality of town centres and encourage their growth. Specifically planning should:

- recognise town centres as the heart of their communities and pursue policies to support their viability and vitality;
- provide support to retain and enhance existing markets; and
- where town centres are in decline, local planning authorities should plan positively for their future to encourage economic activity.

The need to support high streets was championed in the Portas Review in 2011.² Recognising the need for intervention to facilitate high street growth, the Department for Business, Innovation and Skills also commissioned research into high streets. Recommendations from the Portas Review included introducing “town teams”, a key role of which should be to make high streets accessible, attractive and safe. Recommendations also included introducing business improvement districts, establishing a “National Market Day”, and reducing regulations on who can trade on the high street. Portas also recommended making explicit a presumption in favour of town centre development in the wording of the NPPF. This recommendation was implemented in the NPPF.

3.2 Sub regional level

At the sub regional level, support for the Worthing Sustainability Transport Package is clear. The Package is included in the planned activities of the C2C LEP in their Strategic Economic Plan (C2C SEP).³ The Worthing Connectivity Public Realm Scheme Phase 1 which makes up Phase 1 of the Sustainability Package also supports the overall priorities of the C2C LEP.

The C2C LEP promotes economic growth and supports infrastructure projects that will enable growth to happen. The C2C LEP’s vision is “that Coast to Capital will deliver exceptional growth and productivity gains to deliver economic performance to rival the best in Europe and the rest of the World.” Six strategic priorities are outlined in the C2C SEP. These are:

- Successful Growth Locations, including transport investment;
- Successful Businesses;
- Building Competitive Advantage;
- Skills and Workforce;
- Growth is Digital; and
- Housing and infrastructure.

In order to support the Strategy’s priorities Sustainable Transport Packages are one of three key areas for transport investment. The C2C SEP states

¹ Communities and Local Government (2012) National Planning Policy Framework

² Mary Portas (2011) The Portas Review

³ Coast to Capital Local Enterprise Partnership (2014) Strategic Economic Plan

"We are bringing forward a number of sustainable packages to restore confidence in our towns as areas which are ready and fit for growth. These will combine both transport and non-transport interventions."

The objectives of the Worthing Sustainability Transport Package are the following:

- Improving connectivity for pedestrians and cyclists between the railway station and seafront
- Enhancing the town centre by improving the public realm
- Introducing bus priority to increase use of bus
- Delivering improvements to the cycle network
- Improving the pedestrian network within and around the town

The Package will include the following schemes, of which Phase 1 of the Worthing Connectivity Public Realm Scheme makes up Phase 1 of the Transport Package:

- Local junction improvements – Package of junction improvements (mainly in the town centre), which could involve the removal of roundabouts and replacement with traffic signals to include bus priority, cycle ASLs and pedestrian facilities.
- Worthing Connectivity Public Realm Scheme – Public realm improvements, including re-paving and new street furniture to improve pedestrian connectivity and enhance the offer of this shopping area.
- Bus priority measures – Provision of bus priority at key junctions to improve journey times.
- Improved bus / rail interchange – Forecourt improvements and cycle hub facilities.
- Completion of Worthing Cycle Network – Improved and additional cycle routes to provide better connectivity for cyclists.
- Improvements to the pedestrian network – Improved links within and around the town centre to provide better connectivity.

3.3 Local level

Support for the Worthing Connectivity Public Realm Scheme is explicit in local policy documents in particular the Worthing Infrastructure Delivery Plan. Support for upgrading the town centre is also raised in the Worthing Town Centre Master Plan, and Worthing Transport Plan. The Worthing Infrastructure Delivery Plan was prepared in 2010.⁴ It is a "live" document that is intended to support the strategic objectives of the Worthing Core Strategy in relation to infrastructure. It was updated in 2013 with new projects including the proposed enhancements to Montague Street which was included as a priority project.

The need for town centre refurbishments has been on the policy agenda in Worthing for a number of years. A Town Centre Master Plan for Worthing was prepared in 2006.⁵ This identified the key issues facing the town centre and priorities for investment. The Master Plan highlighted various locations, including Montague Street and Montague Place where improvements to the quality of public spaces would contribute towards regeneration and economic benefits. In particular it identified the need to enhance the retail environment and shop frontages along Montague Street and create a new public

⁴ Worthing Borough Council (Sept. 2010) Worthing Infrastructure Delivery Plan

⁵ Worthing Borough Council (2006) Worthing Town Centre Master Plan

space in Montague Place in order to strengthen its role as a strategic pedestrian link between the retail core and the sea front. The proposed refurbishment of Montague Place will create the much needed public space and linkage between the town centre and sea front, fulfilling the needs identified in the Plan.

The West Sussex Transport Plan (WSTP) (2011-2026) identified the need to support the vitality of town centres through effective transport policy⁶. The Worthing Transport Plan (2006) was developed in line with the WSTP.⁷ It states that there are proposals to redevelop and regenerate various areas around Worthing town. These will provide opportunities to improve the vitality and environment of the town centre. The Plan also says that it will need to take into account the transport implications of such proposals.

In summary, the Worthing Connectivity Public Realm Scheme and wider Worthing Sustainability Transport Package are supported by both economic and transport planning priorities at every level.

3.4 Local Indicators

The key performance indicators set by the C2C LEP in the C2C SEP are as follows:

- Increase net private sector jobs;
- Increase GVA total (£billion) to reduce the gap with the South East; and
- Increase the percentage of companies that are regularly exporting.

The targets are summarised in Table 1. The town centre refurbishments would contribute to both increasing private sector employment and GVA.

Table 1 Key Performance Indicators and Targets for the Coast to Capital LEP

Top line Priorities	2010 Baseline Coast to Capital	2010 Baseline South East Region	2020 Target
Net Private Jobs	652,200	Not applicable	140,000 net additional jobs
Private Jobs Share	81%	81%	Continue to match SE level
Public Jobs Share	19%	19%	Continue to match SE level
GVA Total £billion	£38.9bn	Not applicable	£55bn
GVA Per Head Working Age Population	£31,800	£35,100	Reduce gap with SE
Percentage of Companies Regularly Exporting	16%	Not available	1% increase year on year – double by 2035

Source: Coast to Capital LEP (2014) Strategic Economic Plan

⁶ West Sussex County Council (2011) West Sussex Transport Plan 2011 -2026

⁷ Worthing Borough Council (2006) Worthing Area Transport Plan

SECTION

4 Expected Economic Benefits (Economic Growth)

The Worthing Connectivity Public Realm Scheme will facilitate economic growth by improving the urban realm of the town centre, attracting an increase in footfall which will lead to an increase in retail turnover and attract more business and high end shops to the town centre. Phase 1 of the scheme will enable a proportion of these benefits to be realised, but implementation of the full scheme (Phases 1- 6) will be required for the full benefits to occur.

4.1 Base case

The quality of the public realm in Worthing Town Centre is in a poor condition and in need of refurbishment. The annual footfall in the town centre has been declining. From 2012 to 2013 there was a 10% decline in annual footfall. In addition, trends in retail turnover in the town centre show that a large proportion of shops have experienced a decline in turnover. For example, between 2012 and 2013 48% of shops experienced a decline in turnover and 48% experienced growth.

The town centre was hit by the recent recession with rents declining by 17.4% between 2008 and 2009. This was a 25% larger reduction than other similar town centres.⁸ Despite this, Worthing has a high market share for the region with an above average turnover for the region.⁸

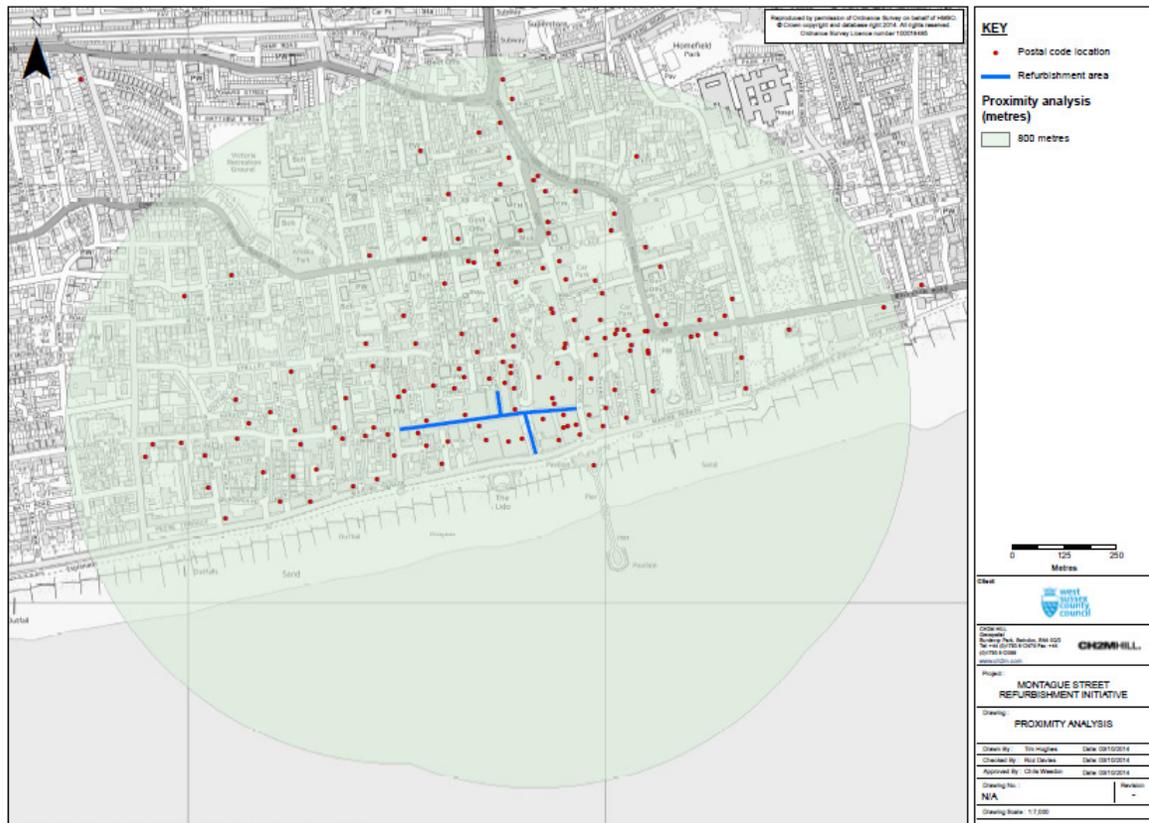
4.2 Impact Area

The impacts from the full scheme have been assessed within a core impact area. In order to define the core impact area, a review of existing studies was carried out. A study on town centres by CABE/Collin Buchannan used an 800 metre radius buffer zone.⁹ An 800 metre radius zone has been mapped on to the development site for this project. Commercial properties recorded in the Worthing Town Centre Initiative (WTCI) town centre retail database were also mapped and their distance from the development area was measured. Over 96% of the properties were within the 800 metre buffer zone (see Figure 5). Given the close match between the WTCI database and the 800 metre buffer and the availability of data, the town centre has been used as the core impact area.

⁸ Source: Worthing Town Centre Initiative (March 2012) Worthing Milestone Town Centre Performance Report

⁹ Based on the approach used by Collin Buchannan (2007) Paved With Gold: the real value of good street design

Figure 5: Location of retail property's postcodes in the town centre mapped with an 800 metre radius of the scheme development site



Source: CH2M HILL 2014

4.3 Footfall

Existing studies have consistently found that improving the urban realm of town centres leads to an increase in footfall. For example, improvements to the urban realm of town centres in Coventry and Bristol were found to increase footfall by 25%.¹⁰ Studies by Newby (1992) and Hass-Klau (1993) found footfall increased by an average of 32%.¹⁰

It is expected that the current decline in footfall in Worthing will be reversed as a result of this scheme and that an increase in footfall of approximately 25% to 32% will be achieved (with a mean of 29%). Applying the mean percentage growth to current annual footfall indicates that an increase of approximately 1.6 million pedestrian visits annually could be achieved.

4.4 Turnover

An increase in footfall is closely correlated with retail turnover. A review of studies by Just Economics, published in Pedestrian Pound in 2013, found that urban realm projects led to an increase in turnover of between 10% to 25% (with a mean of 18%).¹⁰ Effectively, for every 1% increase in footfall, a 0.6% increase in turnover is achieved. Detailed data on turnover in Worthing town centre is not available. However local shops provide the WTCI with monthly “ups and downs” information stating whether their turnover has increased or decreased. A figure for existing annual turnover in Worthing from 2006 is also available in the 2006 CACI town centres study.¹¹ Applying the mean percentage change of 18% to the Worthing

¹⁰ Source: Eilís Lawlor, Just Economics (2013) Pedestrian Pound

¹¹ CACI (2006) Worthing 5 Towns Market Summary - Worthing

turnover figure indicates that a potential increase in annual turnover of £17.7 million in the refurbished area, or an increase of £52 million across the whole town centre, could be achieved as a result of the project.

Turnover “efficiency” or improvements in productivity are expected to occur over time. With an increase in turnover, as the density of sales per square foot increases, the improvements to productivity will grow. The productivity impact has not been quantified here but it can be expected that costs of retailers for every pound of turnover achieved (including rents, rates and service charges) will reduce as turnover improves.

The projected increase in turnover associated with the project would help to transform the current decline of turnover into growth and would also have a knock on impact on productivity.

4.5 Rental Values

The increase in footfall and turnover in the town centre will facilitate a change towards a more attractive centre for business and boost Worthing’s competitiveness compared to other local retail centres. This increase in attractiveness is likely to lead to more demand from retailers and an increase in the rental values of properties. Existing comparative studies of town centre urban realm and rental values have found that urban realm improvements can lead to an increase in rental values of between 5% to 30% (a mean of 18%).¹² This is broadly consistent with estimated growth in footfall of 29% and turnover of 18%.

The impact on rental values in Worthing Town Centre have been estimated for this study based on local rateable values. Rateable values of retail properties are set by the Valuation Office Agency. A record of the rateable values are stored by the WTCI. The majority of rateable values were set in 2010 with some having been updated more recently. Using the findings from existing studies, a mean growth rate of 18% has been applied to current rateable values in the area. Applying the 18% increase to these properties rateable values indicates that an additional £1.5 million in rents per annum in the development area, or £4.5 million in rents per annum could be achieved across the town centre.

4.6 Business Rates

An increase in business rates is associated with an increase in rateable values, drawing in much needed funds for local government. Applying the standard business rate of 48.2% to the potential increase in rateable values, and factoring in the government’s subsidy of £1,000 (reduced from properties with a rateable value of under £50,000), indicates that an increase in business rates of £700,000 in the development area or £2.0 million could be achieved across the town centre annually (see Table 2) if the full scheme goes ahead.

Table 2: Forecast increase in rateable values and business rates as a result of the Worthing Connectivity Public Realm Scheme

	Post Construction		
	5% growth	30% growth	Mean (18%)
Total growth in rateable value for town centre	£1,275,000	£7,648,000	£4,461,000
Total growth in business rate (based on standard rate) across town centre	£577,000	£3,464,000	£2,021,000

Source: CH2M HILL analysis based on Valuation Office Agency, Worthing Town Centre Initiative rateable values and Standard business rates

¹² Based on studies by CABE/Collin Buchannan (2007) and Just Economics (2013)

4.7 Vacancy Rates

Another impact of the improved urban realm is a reduction in the number of vacant shops as businesses see the transforming effect on the town centre and the opportunities that this brings. Urban realm improvements to town centres have been found to lead to a reduction of vacant retail properties by 21%.¹⁰ The WTCl has already seen an increased interest in vacant properties along the streets that are part of the proposed refurbishment, despite the recent fall in footfall, due to the expected positive impacts of the project. If a 21% reduction in the vacancy rate along the streets that are being refurbished is achieved, then the current vacancy rate of 15 properties (8%) would be reduced to 12 properties (6%), attracting 3 new businesses. If this factor is applied across the whole town centre, the current vacancy rate of 46 properties (5%) would be reduced to 36 (4%) attracting a total of 10 new businesses.

4.8 Job creation

Jobs will be created as a result of the project, both during the construction stage and over the longer term. Potential employment generated at the construction stage has been based on the estimated construction costs. A review of similar construction projects was carried out and a ratio of one new job for every £143,750 in construction costs was identified. Applying this ratio to the estimated costs for this project of £4.8 million shows indicates that the construction stage is likely to generate around 33 temporary jobs or contracts during the three year period of construction. Of these around one third (11 jobs) are likely to be technical and professional, and two thirds (22 jobs) are likely to be construction related. In addition it is likely that some indirect and induced jobs will be produced through the supply chain and spending of employee wages.

A US study on the employment generated by the construction of pedestrian projects found that pedestrian only projects generated on average about 10 jobs to every US\$1 million invested.¹⁰ An additional 3 jobs per US\$1 million were created through spill over effects.¹⁰ This is more than double the estimate for the Montague Street project and appears unrealistically high. The US study did not make it clear whether the job estimate was construction only or also included permanent jobs that were created post construction.

There is limited evidence to quantify the number of jobs that would be generated in the longer term after construction of the refurbishment is completed. However Just Economics found that urban realm improvements in Washington DC to Barrack's Row, which consisted of new patterned paths, more efficient public parking, and new traffic signals, led to a total of 44 new businesses and 200 new jobs.¹⁰ Whilst information on the scale of the project is not available, the ratio of 4.5 new jobs to every new business can be applied to Worthing to provide a broad indication of how many jobs may be generated by attracting new businesses. Along the streets in which the refurbishments are planned, 3 new businesses would create the potential for 14 new permanent jobs. If this ratio is applied across the whole town centre and 10 new businesses move in, this would have the potential to create 45 new permanent jobs. Additional new employment would also be generated through the increase in turnover of these businesses and also through indirect and induced effects.

4.9 Impact on other government revenues

The economic growth associated with the project would generate revenues for local and central government. In addition to the increase in business rates referred to earlier in the report, over the forecast 40 year lifetime of the refurbished assets, the government would also benefit from taxes on the rental income. An increase in turnover is also likely to lead to a growth in profits and the corporation tax associated with this, and creation of new jobs would also contribute to government revenue generation through taxes from wages.

4.10 GVA and GDP

There are several approaches to calculating Gross Value Added (GVA). In order to estimate the GVA generated by the project, a simplified approach has been applied using available data. The GVA that would be generated at both the construction and operational stages of the project has been estimated based on the forecast growth in employment, and industry specific GVA/employment ratios sourced from the ONS regional GVA tables.

A ratio was created from total construction and professional & technical employment in the South East (165,069 jobs from the Business Register and Employment Survey) and the total workplace GVA for construction and professional & technical jobs in the South East (£13.496 billion and £15.140 billion respectively from Office for National Statistics GVA data).^{13, 14} The total GVA was divided by employment to identify that there is £81,760 annual GVA per construction job and £49,924 per professional & technical job in the South East. During the construction, an estimated 33 jobs will be created. Applying the ratio of employment/GVA to this job estimate reveals that approximately £2.3 million in GVA will be generated at the construction stage of the project.

Once the construction is complete GVA will be generated throughout the 40 year lifetime of the project. Estimating GVA during the operational stage of town centre urban realm improvements is notoriously difficult. In this case due to limited availability of data, only the GVA that would be generated by the new businesses entering the area (taking up vacant properties) has been estimated.

A ratio of retail employment to GVA has been made based on the total retail employment in the South East (856,928 jobs) to total workplace retail GVA (£31,087 billion). For every retail job, £36,277 is generated in GVA. The project may lead to 14 jobs from new businesses moving into the development site, or 43 new across the town centre. This could equate to an extra £500,000 annually in GVA at the development site or £1.6 million annually across to the town centre over the following 40 year lifespan of the refurbishments.

In order to estimate the increase in GVA generated by the existing businesses that can be expected as a result of the project turnover has been used as a proxy for GVA. As mentioned earlier in the report, £17.7 million extra turnover would be generated per annum.

Combining the forecast growth in GVA from current and new businesses shows that approximately £18.2 million in extra GVA would be generated annually. The GVA estimates are summarised in table 3.

Table 3: Forecast GVA generated by Worthing Connectivity Public Realm Scheme

Stage of project	GVA generated
Construction (temporary)	£2.2 million
Operational (new businesses)	£500,000
Operational (current businesses)	£17.7 million
Total operational	£18.2 million

Source: CH2M HILL 2014

¹³ Source: Business Register and Employment Survey (2011)

¹⁴ Source: Office for National Statistics (2011) Workplace based GVA1,2 NUTS1 by industry groups at current basic prices

5 Social Distributional Impact

The improvements to the urban realm and the associated economic impacts are likely to contribute to regeneration of the high street and wider area. This may be reflected in an increase in house prices, reduced deprivation, improved connectivity, and improved wellbeing.

5.1 House prices

Studies have found that improvements to urban realm have a positive impact on residential property prices. To give an indicative estimate of the scale of change that may occur as a result of the project, prices may increase by 5.2%¹⁵ in the town centre. As a broad guide, the average property price in the BN11 postcode (covering the town centre area) over the January to June 2014 period was approximately £262,000. Applying a 5.2% increase to represent the impact of the project could potentially lead to an average increase in residential property value of almost £14,000 making average property prices £276,000 (based on current prices). Table 4 shows the potential value increase by property type. This increase will benefit both home owners, the government from increase tax revenues on sales.

Table 4: Current and forecast residential property prices in Worthing town based on current prices (not factoring in other changes in the market or inflation)

Property type	Average property value (Jan – June 2014)	Forecast growth (opening year) ¹⁵	Forecast average property value (opening year)
Detached	£412,937	£21,473	£434,410
Semi detached	£298,552	£15,525	£314,077
Terraced	£231,190	£12,022	£243,212
Flat	£161,719	£8,409	£170,128
All	£204,793	£10,649	£215,442

Source: CH2M HILL analysis based on property prices on Rightmove.co.uk

5.2 Reduced deprivation

The growth in the retail sector discussed in section 4 will lead to new jobs, an increase in GVA and local government revenues which will benefit the local area contributing to regeneration of Worthing. This will be reflected in the increase in rental values and residential property prices.

The current relative level of deprivation in Worthing and the redevelopment site can be assessed using the English Indices of Multiple Deprivation¹⁶ (IMD) 2010. The IMD ranks area defined as “super output areas SOAs” against all the SOAs in England based on multiple indicators of deprivation. The redevelopment area and Worthing as a whole rank average in England at 49% and 55% most deprived in England. Assessing the SOAs that cover the redevelopment area in more detail shows that three of the SOAs fall within the top 20% most deprived SOAs in the country. The economic growth benefits of the project’s urban realm improvements would facilitate regeneration in these particularly low scoring areas.

5.3 Expected impact on connectivity and accessibility

The removal of the Rotunda in Montague Place and the associated works will improve the connectivity between the main town centre shopping area and the sea front opening up the town. This will make it more accessible, reducing the severance between the town centre and the sea front and improving

¹⁵ Based on study by CABE/Collin Buchanan (2007) Paved With Gold: the real value of good street design, that found an increase in property values of 5.2% for every increase in one PERS point.

¹⁶ Communities and Local Government (2010) Index of Multiple Deprivation (IMD), part of the English Indices of Deprivation, at Lower layer Super Output Area (LSOA) level

pedestrian flow creating a more inviting urban environment. This improved connectivity will support the growth in footfall.

5.4 Physical Activity

The growth in pedestrian footfall will equate to greater physical activity as people walk more using local amenities, rather than out of town shopping centres.

5.5 Improved wellbeing

As well as increasing local's pride in their town centre, improved urban realm can have beneficial impacts on wellbeing. A study by CABE¹⁷ into the value of design in a range of setting (including healthcare, education, housing and street design) found that well designed environments led to reduced levels of treatment required, better exam results and other improvements including crime reduction in each of the respective environments.

¹⁷ CABE (2002) The Value of Design

6 Transport and Scheme Related Economic Benefits

The benefits of the Worthing Connectivity Public Realm Scheme are related primarily to economic growth rather than to transport benefits. Consequently the focus of the business case is on quantifiable benefits arising from increases in footfall, retail turnover, reduced vacancy rates, job creation and GVA generation. However there will also be some transport related benefits achieved by the project. In particular, reduced congestion and improved connectivity along Montague Place, and reduced pedestrian trips and falls.

6.1 Expected impact on journey times and reliability

The project is not anticipated to have an impact on journey times and reliability. The area is primarily pedestrianised already. However the journey quality and experience of the area for pedestrians will be significantly improved through its refurbishment.

The restriction on parking in Montague Place will help to reduce congestion in the area and improve the connectivity between the main shopping area and the sea front.

6.2 Expected impact on accidents

As the area is primarily pedestrian, improvements to the pedestrian area are not expected to have an impact on traffic accidents. Currently the paving is uneven and has led to some pedestrians tripping and falling. By replacing the paving and making alterations to curbing stones the risk of trips and falls will be reduced.

6.3 Expected impact on cost of travel

There is unlikely to be any impact on the cost of travel.

6.4 Valuing urban realm

Studies have found that the public have a high willingness to pay for improved public realm. A stated preference survey by Collin Buchannan found that on average, pedestrians were willing to pay more for better streets.¹⁸ The survey found that local residents were willing to pay more council tax, renters were willing to pay more rent and public transport users were willing to pay more in fares to have an improved town centre urban realm.

¹⁸ Collin Buchannan stated preference survey for Transport for London (TfL) referred to in CABE/Collin Buchannan (2007) Paved With Gold: the real value of good street design

7 Environmental Impact

Information in this section has been sourced from CH2M HILL's initial environmental assessment of the proposed Scheme¹⁹. The assessment was prepared for the Scheme feasibility study in 2014 that was commissioned by West Sussex County Council.

7.1 Expected impact on carbon emissions

An assessment into the impact on carbon emissions has not yet been carried out. However the expected impact is not significant.

7.2 Expected impact on air quality

There is one air quality management area (AQMA) in Worthing. This is the Grove Lodge AQMA which lies 2.6km to the north of the project site. Due to the nature of the proposed work and the distance away from the Scheme, it is not envisaged that this AQMA would be affected as a result of this Scheme.

7.3 Expected impact on noise/ natural and urban environment

Montague Street and Montague Place are home to both retail and residential properties. The residential properties are mainly flats above the shops. These properties are outside of the development site, adjacent to the proposed works and so should be considered as receptors for noise and vibration. The noise and vibration generated during the construction period will be audible to the local residents of Montague Street and Montague Place. However due to the nature of the works, the short duration of the works, and through mitigation by adherence to industry best practice for construction times and noise levels, it is not considered that the construction noise will overly disturb the local residents. It is also assumed that construction would be completed during the day which would further mitigate the impacts from noise.

In terms of ecology, there are no designated sites of conservation interest present at the site or within 2km of the site boundary. The local planning authority would require a tree survey of all trees within the extent of the site boundary if a planning consent is required.

The site lies within the Montague Street Conservation Area. The Planning Department (Development Management) in Adur and Worthing Councils should be contacted to discuss the proposals and potential impacts on the conservation area and trees within the area prior to submitting a planning application (if required).

Several listed buildings are adjacent to Montague Street although none are located within the site boundary itself.

It is envisaged that the project would disturb the local community during the construction period however the construction works would accommodate access to the local shops and the northern area of the informal garden would not be affected by the project. Bike storage may be affected and seat numbers would be reduced during the construction period however it is anticipated that these would be replaced like for like as a result of the project. In the long term the community would benefit from the project.

¹⁹ CH2M HILL (May 2014) Montague Street Worthing Technical Memorandum

SECTION

8 Benefit Costs Analysis

The Benefit Cost Ratio (BCR) for the scheme has been adapted from Department for Transport WebTAG guidance and EAST. A BCR based on WebTAG guidance is typically dominated by time savings but also includes other benefits. This project is pedestrian focused and the benefits of the project are related to public realm and economic growth rather than journey time savings. Therefore the BCR method has been adapted to be relevant to the project. The BCR has factored in the following monetary benefits:

- Forecast growth in commercial rent values;
- Business rates;
- Construction GVA. This has been estimated using ONS regional GVA for construction and related industries, and BRES data on regional construction employment;
- Operational GVA generated by new business. This has been based on the regional GVA/employee ratio for new retail businesses that would move to the area;
- Operational GVA generated by existing businesses. This has been estimated using the increase in turnover as a proxy for GVA.

The BCR has been based on the benefits derived from the development site during the construction stage and opening year of operations of the whole scheme, rather than the benefits to the whole town centre.²⁰

The estimated BCR for the project based on these monetised economic growth indicators is 4 to 1 (see Table 5). This represents good value for money based on DfT's value for money guidance. Please note that the BCR present a broad indication of the types of benefits that may occur as a result of the Scheme in the absence of detailed modelling. In addition to the benefits above, the project will lead to an increase in house prices, employment, improved accessibility and wellbeing, and reduced accidents, and severance. The environmental impacts are expected to be minimal. See Appendix 4 for the full benefit cost table.

Table 5 Estimated Monetised Benefit Cost Ratio for Worthing Connectivity Public Realm Scheme

Monetised assessment	Value
Benefits (development site)	
Forecast growth in rateable values (proxy for rent, annual)	£1,515,000
Forecast growth in business rates (annual)	£714,000
Forecast growth in construction GVA	£2,300,000
Forecast growth in operational GVA (annual from new business)	£508,000
Forecast growth in operational GVA (annual from existing business)	£17,698,000
Benefits total	£22,735,000
Costs	
Construction costs (ex VAT)	£4,800,000
VAT	£960,000
Cost total	£5,760,000
Benefit/Cost Ratio	4:1

Source: CH2M HILL 2014

²⁰ Benefits and costs are based on current prices

9 Scheme Feasibility and Deliverability

9.1 Current state of Scheme

Initial feasibility designs for the refurbishments along Montague Street, Montague Place, and Portland Road have been prepared (see Annexes 1-3). The feasibility designs have been presented to the local community and businesses as part of a public consultation on the scheme. Detailed designs are currently being developed.

9.2 Is the Scheme within the public highway?

The Scheme is within the public highway.

9.3 If land is required, is this secured?

No additional land is required.

9.4 Public acceptability of scheme

A consultation was carried out by the Worthing Town Centre Initiative in 2013 with the public and local businesses to gather feedback on the Scheme. 357 Responses were received from members of the public, and 80 responses were received from businesses trading on Montague Street. Only 5 businesses on the precinct did not respond to the consultation. The majority of respondents were in favour of refurbishing the area. 71% of the respondents from the community voted for light grey paving and 29% for dark paving. 60% of businesses also voted for light grey paving and 40% for dark. The designs have been based on light grey paving reflecting the consultation results. A smaller but sizable proportion of respondents from the community (45%) and from businesses (38%) voted to remove the rotunda in Montague Place.

9.5 Risks to deliverability

Risks to the deliverability of the scheme have been identified by CH2M HILL in the Project Risk Register. A brief summary of the risks and mitigation measures is presented below in Table 6.

Table 6: Worthing Connectivity Public Realm Scheme - Project Risk Register

Root Causes	Risk Event	Probability	Finance Impact	Time Impact	Actions to Control/ Mitigate Measure
Resistance to scheme	Scheme delayed	M	M	H	Consult all identified stakeholders at early stage of scheme design. Develop and agree stakeholder consultation plan. There was general support at initial consultation.
Scope creep/abortive work	Budget exceeded/deadlines not met	M	M	L	Progress is monitored against agreed programme continuously, as a result EWNs & CEs are issued to WSCC with the design progress report on a monthly basis
Funding availability	Scheme delayed or only partly delivered	H	H	M	Undertake early cost estimation to establish overall budget requirements. Review and agree way forward with Steering Group, potential for phasing project etc. Develop business case for funding bid

Ground conditions/contamination	Increased costs or delay	H	M	H	Undertake early GI in area GI being delayed due to issues with contractor and road space booking
Statutory services	Increased costs or delay	H	H	H	Obtain C2 information, review against design and avoid stats where possible. Organise GPR survey to establish exact depth and locations. GPR survey undertaken location and depths identified
Overrun of footways by delivery vehicles	Damage to footway	H	H	M	To be considered as part of the design
Planning conservation area requirements	Scheme stopped or delayed by planners	L	I	I	Review during design consult with Worthing and Adur DC Richard Small confirm Planning is not required
Environmental issues	Scheme delayed due to environmental issues	L	L	L	Desk top study undertaken, no major issues raised, consider points raised during design.
Events/Markets Servicing to shops	Damage to footway, servicing requirements not sufficient to hold events	M	M	H	Review requirements for events and incorporate in design. Consider access, servicing, water, electricity etc. Sharon to supply details of market layout and stall numbers to ensure this can be accommodated within proposed layout Market layout received and overlaid on proposed design. Construction to be designed take anticipated use, awaiting SI results
Emergency Services	Emergency services cannot gain access	M	L	M	Consider requirements during design and consult with Emergency Services WSCC to undertake consultation
Taxi, disabled and motorcycle parking	Opposition to the relocation of parking	M	L	M	Consult with representatives of organisations, include within comms plan Proposal for swapping motor cycle parking in Liverpool Gardens with Disabled Bays in Liverpool Road has been reviewed by P Hayward as part of wider Worthing parking review and suggested this is not a good idea and not therefore proposed. Agreed with RW to leave out of the Montague scheme proposals.
New Development Montague Place	Change to the design, delay in scheme	M	M	M	Monitor the progress of the planning application, if successful obtain details to discuss with developers
S106 Funding challenge	Funding shortfall	M	M	M	WSCC reviewing internally

Source: CH2M HILL (2014) Project Management

Annex 1-3 Feasibility Maps

See attached documents:

1. Scheme Alternative Phasing Plan
2. Montague Place Feasibility Plan
- 3a. Worthing Urban Realm Feasibility Plan 1 of 2
- 3b. Worthing Urban Realm Feasibility Plan 2 of 2

Annex 4 Benefit Cost Table

Impacts		Assessment				
		Quantitative	Qualitative	Monetary (refurbishment site) £(NPV)	Monetary (across the town centre) £(NPV)	
Expected economic benefits - transport and scheme related	Impact on journey times and reliability		No impact	na	na	
	Impact on journey quality		Improved quality of urban realm	na	na	
	Impact on journey costs		No impact	na	na	
	Expected impact on accidents		Reduced incidents of trips and falls	na	na	
	Valuing public realm		Increase in value of public realm	na	na	
Expected economic benefits - economic growth	Impact on footfall	1.6 million pedestrians annually across the town centre	Increase in footfall	na	na	
	Impact on retail turnover (proxy for GVA of current businesses)		Increase in turnover	£17,698,000	£52,115,000	
	Impact on commercial rental values		Increase in rental values	£1,515,000	£4,461,000	
	Impact on business rates		Increase in business rates	£714,000	£	
	Impact on vacancy rates	10 new businesses across the town centre	Reduced vacancy rates - as new businesses enter the area	na	na	
	Impact on jobs (construction)	33 jobs	Creation of temporary jobs	na	na	
	Impact on jobs (operational)	45 jobs	Creation of permanent jobs	na	na	
	Impact on GVA (construction)		Generation of GVA	£2,300,000		
	Impact on GVA (operational) (new business)		Increase in annual GVA (new business)	£500,000	£1,600,000	
	Impact on government revenues (construction)		Increase in government revenues	not estimated	not estimated	
	Impact on government revenues (operational)		Increase in government revenues	not estimated	not estimated	
	Social distributional impacts	Impact on houseprices		Increase in houseprices	not assessed cumulatively	not assessed cumulatively
		Impact on regeneration		Regeneration of town centre	na	na
Impact on severance			Reduced severance	na	na	

	Impact on wellbeing		Improved wellbeing of people using the town centre	na	na
Environmental	Noise		Temporary increase in noise during construction	na	na
	Air Quality		Limited impact on noise	na	na
	Greenhouse gases		Limited impact on greenhouse gases	na	na
	Landscape		na	na	na
	Townscape		Improved townscape	na	na
	Historic Environment		No impact on historic buildings	na	na
	Biodiversity		No impact on biodiversity	na	na
	Water Environment		Limited impact on water environment	na	na
Project costs	Construction Costs			£4,800,000	
	Construction VAT			£960,000	

Monatised assessment	£
Benefits	£22,735,000
Cost	£5,760,000
Benefit/Cost Ratio	4

Annex 5 References

CABE/Collin Buchannan (2007) Paved With Gold: the real value of good street design

CABE (2002) The Value of Design

CACI (2006) Worthing 5 Towns Market Summary - Worthing

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