

Borough of Redditch Infrastructure Delivery Plan Report



1. Introduction

This Infrastructure Delivery Plan (IDP) has been prepared by Redditch Borough Council to accompany the Borough of Redditch Local Plan No.4. It is to be considered a 'live document' and it is accepted that not all necessary background work is complete and available at this time. The IDP will be updated through the Plan period to reflect new requirements when they are known and also to identify when infrastructure needs have been met.

This IDP Report is not to be regarded as having any formal planning policy status, nor is it to be used to make determinations through development management processes. The purpose of the report is to set out the known infrastructure information and where there is further work to be done. Key stakeholders and partners have been contacted regarding this report to provide input and this engagement will continue. It is also hoped that this IDP report will further improve lines of communication between key delivery agencies and Redditch Borough Council. It is recognised that delivery agencies may have to review their management and investment plans and priorities over time but this IDP should assist with that process. The IDP Report may also be considered to be background evidence to support the Borough Council's future Community Infrastructure Levy (CIL) work should the Council choose to prepare a CIL charging schedule.

This IDP covers infrastructure related to development within the Borough and cross boundary development required to meet the Borough's needs.

This structure of the remainder of this report is set out below:

2. The IDP - the aim of the IDP and the methodology employed to prepare it

3. Background – overview of the Borough and the Borough of Redditch Local Plan No.4 and links to the Worcestershire Infrastructure Strategy, Local Enterprise Partnerships (LEPs) and national planning policy

4. Physical Infrastructure – the current understanding of physical infrastructure in terms of current provision and planning for future needs arising from development.

5. Social Infrastructure - the current understanding of social infrastructure in terms of current provision and planning for future needs arising from development.

6. Green Infrastructure – links between this IDP and green infrastructure strategies

7. Funding mechanisms – details of various sources of funding for infrastructure

8. Going forward - future work on the IDP

Appendix A

Table 1: Schedule of Identified Infrastructure Requirements for Redditch Borough

Table 2: Transport Infrastructure Requirements for Bromsgrove and Redditch Borough

Table 3: Schedule of Identified Infrastructure Requirements for Cross Boundary Development

2. The Infrastructure Delivery Plan (IDP)

Aim

In order to ensure that new development delivers sustainable communities, the facilities and service needs of the planned population must be properly planned for. To achieve this, the IDP reports on the main physical and social infrastructure¹ requirements to support growth identified in Borough of Redditch Local Plan No.4 (BORLP No.4). This IDP covers infrastructure requirements for development within the Borough and cross boundary development to meet the Borough's needs.

It is important to remember that this will be a living document providing evidence for use well past the adoption of Local Plan No.4. For more details of BORLP No.4 please visit www.redditchbc.gov.uk/localplan

Methodology

The methodology for this IDP Report was developed following consideration of advice in 'A steps approach to infrastructure planning and delivery' published by the Planning Advisory Service. This IDP Report has been prepared in-house, and in its production the Council has consulted with a wide range of infrastructure service providers both external and those within the Council.

Background work to collect information began early in the plan-making process and a scoping exercise of the relevant background evidence and relevant stakeholders was undertaken. Individual 'Infrastructure Delivery Packs' were developed and sent to a range of different infrastructure providers, explaining the reason for the contact, the status of the (then) Core Strategy, the levels of development requirements envisaged, maps of the possible development sites, and a pro-forma. The pro-forma was sent with the pack with instructions for the provider to fill in the contents before meeting with planning officers. It asked what infrastructure they envisaged would be required, what evidence they have to determine that, if any standards exist, what the current funding commitment is for that infrastructure, the phasing and programming and to confirm the responsibility for delivery and scheme management. At that stage it was not possible to provide stakeholders with the details of a significant amount of Redditch growth requirements and locations because so much was required outside of the Borough Council's boundaries. It was therefore impossible to get a complete understanding of infrastructure requirements until the Borough Council could broker agreement from neighbouring Local Authorities on the growth requirements and locations.

The Borough Council has now reached agreements with Bromsgrove District Council and Stratford-on-Avon District Council regarding the location of cross boundary development. Therefore, in summer 2013 the Borough Council, in conjunction with Bromsgrove District Council, contacted infrastructure providers again with details of the preferred locations for growth. Infrastructure providers were sent an 'Infrastructure Planning and Delivery Pack' which included:

- Background information on infrastructure planning
- Development requirements for Bromsgrove District and Redditch Borough and the proposed locations
- The proposed timetable for adoption of the Plans.

¹ The Borough Council will also produse a Strategy for Green Infrastructure which, once complete, should be read in conjunction with this IDP.

• Information the authorities had already gathered regarding infrastructure requirements for each infrastructure type

The authorities sought the infrastructure providers' views on:

- the infrastructure delivery implications of various locations for development on the services/facilities that they provide;
- the infrastructure that might be required to support proposed development;
- the likely financial costs, sources of funding, timing and any relevant information about the delivery of the infrastructure required to support development; and
- current plans for service improvements within Redditch and Bromsgrove and the associated timescales. It is useful to understand how infrastructure needs based on the projected development needs are determined. For example, is it based on a number of houses or the population number or in some other way?

Based on the information received from infrastructure providers, a draft version of the Redditch IDP was produced. This draft version, alongside the Proposed Submission version of the Borough of Redditch Local Plan was published on 30th September 2013. The infrastructure providers were contacted again and given the opportunity to comment on, and update the information contained within the document. Accordingly, having regard to its 'live' status, the IDP was updated in March 2014.

The IDP for Redditch consists of this Report and Appendix A. The report explains the different types of infrastructure, current levels of provision and how future provision is planned for, where this information is available. Appendix A provides a summary of the infrastructure required to support development based on the information received during the recent engagement with infrastructure providers and information previously gathered. This includes:

- the location of where infrastructure is required
- details of what infrastructure is required
- when the infrastructure is required
- anticipated costs of the infrastructure
- potential sources of funding
- delivery partners
- related BORLP No.4 policies
- any other relevant information

The report and Appendix A are structured by infrastructure type (details below). Each of the infrastructure types has the relevant infrastructure project described but it is not possible to provide details of all projects for infrastructure from other Council services or external service providers because service providers will work to different planning timescales to the Local Plan and therefore some information is not currently available. The IDP is a live document that can be updated in the lead up to the adoption of BORLP No.4 and once the plan is adopted to reflect the changes that will be made to infrastructure provision over time.

Table 3 to Appendix A relates to iidentified Infrastructure Requirements for Cross Boundary Development that is located within the District of Bromsgrove. Having regard to the locations of the cross boundary sites and their proximity to Redditch it is recognised that infrastructure within Redditch is likely to be required to support the growth. This growth is identified in Appendix 1 of the BORLP No. 4 and Policy RCBD1 of the Bromsgrove District Plan.

The Infrastructure types included within the IDP include:

Physical Infrastructure

- A. Transport
- B. Utilities
 - i. Power
 - i.i Gas
 - i.ii Electricity
 - ii. Telecommunications and Broadband
- C. Water
 - i. Waste Water
 - ii. Water Supply
 - iii. Flood Risk
- D. Waste Management

Social Infrastructure

- A. Education
- B. Health
- C. Emergency Services
- D. Leisure (including play areas, playing pitches, public art and community facilities)
- E. Libraries
- F. Cemeteries
- G. Social Care

Green Infrastructure

Monitoring

This IDP aims to integrate the capital investment programmes of various services and partner organisations with planning for new development identified in BORLP No.4.

The IDP has been produced as live document which can be updated through active monitoring to inform service and spatial planning decisions. Progress on the delivery of infrastructure to serve planned development will be reviewed as part of on-going monitoring and reporting.

It is important to note that the uncertainty as a result of the current economic conditions and the limited availability of finance are likely to change during the plan period, and it is the nature of planning to deal with uncertainty in a pragmatic way. This IDP therefore does make assumptions which, through monitoring should be able to be recognised and responded to.

3. Background

Redditch Local Plan No.4

Redditch Borough Council is preparing the Borough of Redditch Local Plan No.4 (BORLP No.4) to guide development in the Borough. The Plan can be viewed at <u>www.redditchbc.gov.uk/localplan</u>.

Overview of Redditch Borough

Redditch Borough Council is one of six local authorities within the County of Worcestershire, in the West Midlands region. The authority borders Warwickshire County to the east and southeast. It is surrounded by Bromsgrove District to the west and north, Stratford District to the east and southeast and Wychavon District to the south and southwest. The Borough is situated at the outer edge of the Green Belt boundary for the West Midlands. Redditch offers easy access to the countryside and prominent local areas, including culturally rich areas such as Stratford upon Avon and naturally rich areas such as the Cotswolds.

Redditch is a predominantly urban town, but also includes the rural Parish of Feckenham. Between 1964 and 1985, Redditch was designated as a "New Town" to cater for the outward migration of populations from Birmingham and the West Midlands conurbation, which is some 12 miles (20 kilometres) to the north-east of Redditch.

The Redditch Borough Council area covers 21 square miles (5,435 hectares) and at the 2011 Census, the Borough population totalled 84,214,which represented an increase of 6.9% since the 2001 Census.

The Borough has two distinct areas of roughly equal size within its boundaries. There is the largely urban area of the north east which includes Redditch town centre (which has 93% of the population) and the other essentially rural area to the south and west, including Astwood Bank and Feckenham, (which has 7% of the population).

Redditch has some prosperous areas however; there are some areas of deprivation in the urban areas, namely the wards of Batchley, Matchborough, Church Hill, Winyates and Greenlands in Redditch. Areas of unemployment concern are also focussed on these deprived areas, with the highest concentrations of residents claiming Job Seekers Allowance located in Batchley, Church Hill, Winyates, Matchborough, Greenlands, Smallwood and Woodrow.

Housing

Redditch Borough Council has an obligation to ensure that sufficient land is identified to meet the housing needs of its population, including affordable homes, providing a range, mix and type of property in the best and most sustainable locations. Redditch has a housing requirement of 6,400 dwellings up to 2030; however, capacity within the Borough is limited to around 3,000 dwellings. In order to maximise its contribution to the housing requirements, Redditch Borough Council is proposing several Strategic Sites for development, which will play a key role in meeting the housing requirements. The Strategic Sites are located within or adjacent to the Borough's urban area, which is the Borough's principal sustainable settlement. All Strategic Sites would be required to come forward for development immediately as a continuous supply of housing land throughout the Plan period is a necessary requirement. The remaining 3,400 dwellings will be accommodated on two sites (known as Foxlydiate and Brockhill) in Bromsgrove District, adjacent to the Borough boundary.

Employment

Redditch Borough Council needs to ensure that sufficient employment land is identified to maintain a balance between housing needs and employment opportunities for its population, offering a strong, attractive, diverse and enterprising economic base to encourage a brighter economic future

for Redditch. Based upon the Borough's projected housing needs, Redditch has employment requirements of around 55 hectares up to 2030 to maintain the balance in its provisions; however, capacity within the Borough is limited to around 27 hectares. In order to maximise its contribution to the employment requirements, Redditch Borough Council is proposing an element of employment development within some of its Strategic Sites. Development of the Strategic Sites plays a key role in the delivery of Local Plan No.4. The remaining 28 hectares will need to be accommodated in neighbouring local authority areas, close to the Borough boundary. A minimum of 12 hectares is to be provided in Stratford-on-Avon District (as part of the Redditch Eastern Gateway site) and the remainder is to be provided in Bromsgrove District.

The Key Diagram on the following page shows the location of the proposed strategic development sites within the Borough and the proposed cross boundary development sites in Bromsgrove and Stratford-on-Avon Districts.

Worcestershire Infrastructure Strategy

The BORLP No.4 IDP is a Borough level plan directly related to the delivery of infrastructure requirements arising as a result of the Local Plan. In addition, Worcestershire County Council (WCC) is preparing a county-wide Strategy to provide a strategic framework for co-ordinating and concentrating partner investment across the county to meet strategic needs.

WCC's Infrastructure Strategy is a stakeholder led process called Planning for Infrastructure in Worcestershire. Worcestershire County Council's Strategic Planning Team consulted stakeholders on four research papers:

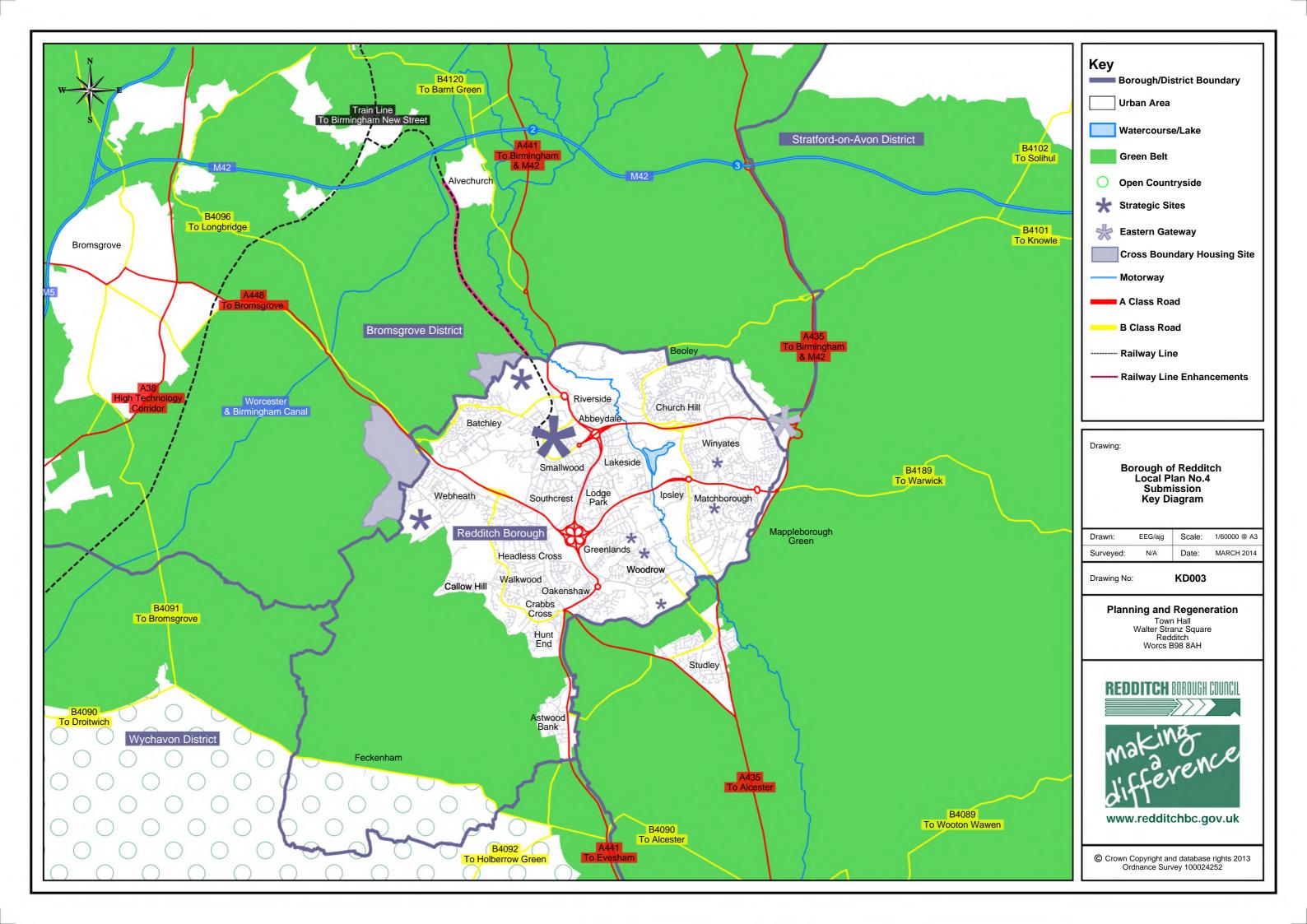
- Infrastructure Needs and Issues
- Prioritisation
- Funding and Delivery Mechanisms
- Viability Assumptions

These four reports provide the background evidence to underpin the development of the strategy and have been subject to a 'critical friend' review by Hewdon Consulting and Colin Buchanan.

The research papers have culminated in a draft infrastructure strategy published by WCC for consultation in January 2013. The Strategy focuses on those infrastructure themes which provide the greatest challenge to delivery of economic growth and which have the maximum impact on performance of Worcestershire's economy. The Strategy identifies gaps and explores opportunities for the efficient delivery of infrastructure to support the delivery of the primary economic growth areas in Worcestershire, known as 'game changer' sites as identified by the Worcestershire Place Shaping Group. One of these sites is the Redditch Eastern Gateway which is located to the east of Redditch adjacent to the Borough boundary on land within both Bromsgrove and Stratford-on-Avon Districts. This site has been identified to provide employment related development to meet the needs of Redditch Borough.

Much of the information in the WCC infrastructure strategy is complementary to this IDP for Redditch and references to the WCC strategy are made throughout.

In 2008, prior to the preparation of the WCC Infrastructure Strategy, WCC commissioned Baker Associates to identify the infrastructure requirements arising from the development targets set out in the Regional Spatial Strategy (RSS) Phase Two Preferred Option report. The study identified the existing capacity of the infrastructure and then assessed the impacts of additional development on the requirement for infrastructure. The study also sought to provide an indicative cost for additional infrastructure required as a result of development and to identify funding mechanisms and responsibility for delivery. The Baker Study, based on RSS targets, found that within Worcestershire the total cost of infrastructure required would be in the region of £819.33 million.



Local Enterprise Partnerships

Redditch Borough Council is a member of two Local Enterprise Partnerships; Worcestershire LEP and Greater Birmingham and Solihull LEP, reflecting Redditch's links with the conurbation and its place in contributing towards Worcestershire economy. Any available funding that exist from either LEP that assist in contributing towards delivering prosperity for either of the LEP areas will be sought by the Borough Council.

National Planning Policy Framework (March 2012)

This IDP has been prepared in the context of the requirements of the National Planning Policy Framework (NPPF) which places significant emphasis on the deliverability of plans. In particular, paragraph 162 requires local planning authorities to work with other authorities and providers to assess the quality and capacity of infrastructure and take account of the need for strategic infrastructure.

Paragraphs 173 to 177 place emphasis on ensuring viability and deliverability of the Plan. In accordance with Paragraph 177 Redditch Borough Council will monitor the progress of its Plan on an annual basis. The monitoring framework includes indicators which will monitor infrastructure provision.

This section of the report demonstrates that the Plan has been positively prepared, by identifying how infrastructure requirements are proposed to be met through local policies and subsequently monitored for delivery. Collaborative working with Bromsgrove District Council has also been demonstrated, and infrastructure requirements have been identified in relation to cross boundary development.

4. Physical Infrastructure

The purpose of this section of the IDP report is to set out the current understanding of physical infrastructure in terms of current provision and planning for future needs arising from development. The physical infrastructure types covered are:

A. Transport

B. Utilities

i. Power

i.i Gas

i.ii Electricity

ii. Telecommunications and Broadband

C. Water

i. Waste Water

ii. Water Supply

iii. Flood Risk

D. Waste Management

A. Transport

Worcestershire County Council is the Transport Authority for Redditch Borough and are responsible for preparing the Local Transport Plan. Worcestershire's third Local Transport Plan (LTP3) was adopted in February 2011. The LTP3 is based on an area-based multi-modal package approach to transport investment designed to ensure that transport is able to play a full role in supporting sustainable economic growth, managing transport related carbon emissions and minimising transport impact on the local environment, including air quality, noise and severance. The LTP3 has a clear objective of prioritising the spending of limited funds towards those schemes which will deliver the greatest benefits. Clearly, in the current economic environment the need to ensure that limited funds are efficiently prioritised is greater than ever. The LTP3 includes a Transport Scheme Appraisal Framework, designed to be capable of considering all transport schemes, regardless of cost or mode. In particular, the scheme favours 'packages'; that is to say, grouping of smaller schemes to make a bigger integrated scheme. This is because larger 'package' schemes tend to give much better value for money (with the whole being greater than the sum of its parts), and also helps to ensure that investments are made in a holistic (area-wide) manner, rather than a piecemeal approach.

Availability of public funding is expected to be limited, especially in the first five years of the Worcestershire LTP3. As such, the principal priority of Worcestershire County Council will be to ensure that best use is being made of existing transport infrastructure, by focussing on maintenance and enhancement schemes where a robust business case and funding can be identified. In each case, Worcestershire County Council will focus on those schemes which can be proven to deliver benefits in excess of their costs to the Worcestershire economy, environment and quality of life. In North East Worcestershire, the main challenges will be:

- To enable and promote growth
- To relieve congestion
- To enhance transport network reliability and resilience

The Borough benefits from good access to the National Strategic Highway Network, including the M42 onto the M40 and the M42 onto the M5. There is also an extensive Primary local network provided by Worcestershire County Council.

Traffic trends in North Worcestershire indicate that there has been a slight fall in the use of Highways Agency managed roads (Motorways), although the busiest section of Motorway in

Worcestershire remains the section of the M5 between Junctions 4a and 5, which is located in North East Worcestershire. This may be as a result of the current economic climate.

The Borough benefits from a Town Centre rail station which is the third busiest station (in terms of passenger numbers) in Worcestershire. The station is served by local services which feed into the West Midlands Conurbation. The key rail flows are to and from Birmingham/West Midlands area with around 2.3million passengers per annum (55% of rail journeys to and from Worcestershire). Redditch has a bus interchange located within the Kingfisher Centre complex and the area is served by a bus network of prime, core and tributary routes, supported by community transport linking rural areas to Redditch. Recent usage trends indicate that the numbers of persons using North East Worcestershire's bus and rail services is steadily rising over time.

Worcestershire County Council have undertaken an assessment of the impact on the performance of the transport network of the emerging Redditch Local Plan and Bromsgrove District Plan and the adopted Local Plans for both Redditch and Bromsgrove, with the aim of supporting the delivery of the planned development in both authorities. This assessment has included the completion of the following technical studies:

- A Transport Modeling Study has been carried out which has identified that various road junctions are experiencing significantly increased traffic flows where mitigation measures may be required.
- Transport Network Analysis and Mitigation Reports have been carried out for Redditch Borough and Bromsgrove District which identify potential sustainable transport and highway schemes to support development.

The methodology adopted has:

- Established the transport network and infrastructure baseline conditions
- Developed a Vehicle/Trip Generation model for the Bromsgrove and Redditch transport network to act as an assessment tool to assist with the identification of schemes to support the proposed development contained in the draft BDP and RLP; and
- Identified transport infrastructure schemes and services to mitigate against the adverse impacts of proposed development.

A key premise of this assessment has been to recognise that the quantum of development proposed for Bromsgrove and Redditch and surrounding areas will not only have a local transport impact (immediately adjacent to the planned sites) but also a cumulative impact on the wider transport network further afield. The nature of a transport network means that the cumulative demand for travel generated by a number of development sites can cause a significant impact some distance from any one individual traffic generation source. That is, as congestion and other network problems occur at pinch points throughout the network, it is caused by trips with trip origins and/or destinations across the Bromsgrove and Redditch network and wider.

The vehicular trip generation of each of the planned developments in the emerging and adopted Local Plans for Redditch and Bromsgrove has been calculated. The total forecast 24 hour vehicular trip generation is set out below:

Area	Development Generated Vehicle Trips (24 Hour)			
Redditch	52,237			
Bromsgrove	68,537			
Total	120,774			

The total forecast total development generated travel demand on the other main transport modes are summarised below:

Area	Development Generated Person Trips (24 Hour)						
	Rail	Bus	Cycle	Walk			
Redditch	3201	8141	2517	8058			
Bromsgrove	5560	6500	2297	8431			
Total	8761	14641	4815	16489			

The quantum of additional demand is significant and will have an impact on the performance of the transport network, particularly during weekday peak periods.

Strategic transport schemes have been identified to mitigate the forecast future year transport issues arising from the emerging Redditch Local Plan and Bromsgrove District Plan and the adopted Redditch Local Plan and Bromsgrove Local Plan.

The proposed highway infrastructure schemes for the primary road network aim to mitigate, as far as possible, the impacts on network performance of the additional delays and increased journey times and costs imposed by traffic generated by the planned developments of the emerging and adopted Local Plans for both Redditch and Bromsgrove Measures have been developed to, amongst other things, improve capacity at key junctions.

The proposed walk, cycle and passenger transport schemes and measures aim to improve accessibility and connectivity to destinations across and beyond Redditch Borough and Bromsgrove District and enhance access to the rail network. These schemes are required as they have a key function in managing the scale of adverse impact on the highway network where they represent an attractive alternative to journeys by car. They also provide access to key services and facilities for those without access to a car. Reducing the dependence on the car for travel to/from/within new developments is policy compliant and helps to reduce the adverse impact on highway network performance and on the environment of development generated travel demand.

Due to the location of cross boundary growth and the impact of this on the road networks in both Redditch and Bromsgrove, the identified transport infrastructure requirements are inextricably linked. The transport element of the IDP is therefore presented jointly for Bromsgrove and Redditch; this can be found in Table 2 of Appendix A and is based primarily on Redditch and Bromsgrove Transport Network Analysis and Mitigation Report. This IDP should, therefore, be read in conjunction with the Bromsgrove District IDP and the technical studies prepared by WCC.

The Highways Agency (HA) is responsible for maintaining, operating and improving the Strategic Road Network (SRN) in England on behalf of the Secretary of State for Transport. It is committed to supporting Government objectives on sustainable transport and climate change, and recognises the need for closer integration of transport and land use planning in order to minimise trip generation at source, to encourage sustainable modes of transport, to minimise journey lengths and to promote accessibility for all.

In respect of planned growth throughout Redditch Borough and Bromsgrove District, the key area of responsibility for the HA consists of the M5 including junctions 4 and 5, and the M42 including junctions 1 to 3.

The HA have worked closely with WCC to assess the transport impacts arising from the development identified in both the Redditch and Bromsgrove Plans. The Plan areas have been jointly considered in order to ensure that the cumulative impacts are fully understood. The outputs of the assessment work have indicated that the following improvements to the SRN will be required to support the planned growth to 2022:

• Significant alterations to the layout of junction 1 of the M42 to improve traffic flow on the A38 and ensure that queues on the off-slip do not reach back to the motorway mainline

- Improvements at junction 2 of the M42 to improve throughput of the junction; these are likely to be minor in nature pre-2022 and it is acknowledged that this will still result in increased queues on the A441
- Improvements at junction 3 of the M42; the expansion of the westbound off slip to 3 lanes in order to ensure queues do not reach back to the mainline, the exact length of the widening to be determined as part of more detailed analysis
- Improvements at junction 4 of the M5; there is a need to increase A38 capacity in the southbound direction at this junction in order to ensure that queues on the southbound off slips do not reach back to M5 mainline. The exact nature of the scheme is still to be determined, though initial testing of extending the two-lane merge on the A38 has demonstrated a positive impact on queues at this junction.

The improvements detailed above indicate that the junctions will provide sufficient capacity to accommodate the planned growth to 2022.

B. Utilities

This section covers the provision of gas, electricity and telecommunications and broadband. Utility companies provide much of the infrastructure required themselves rather than through developer contributions, except where an unplanned connection to a network is required, in which case it will be provided at the developer's expense.

It is not always possible to provide accurate costs for the provision of utilities for new development because they are often not determined until proposals reach a detailed design stage when costs are calculated on a site by site basis.

i. Power

A safe, reliable supply of energy is essential for all development. For the foreseeable future natural gas will be the main component for energy supply, although it is likely that more of our energy needs will have to be met from electricity from low-carbon sources to secure emissions reductions.

i.i Gas

National Grid Gas operates that national gas transmission network in England and the distribution network in Redditch Borough. Growth in and around Redditch will require network reinforcement to meet future needs. There may be a timing issue between development coming forward and construction of high pressure pipelines or plants which typically require two to four years notice, although in some circumstances the project lead-time may exceed this period.

National Grid has confirmed there are no issues relating to infrastructure or capacity at this time. Further investigation would be required when firm connections requests are received for the sites. However, due to the dynamic nature of the gas network this does not guarantee that the capacity will be available when connections requests for the specific loads are received but gives an indication of the availability of gas on the network up to the National Grid Year 10 planning horizon as it currently stands.

i.ii Electricity

The electricity network is split up into three sections:

- Transmission System (400kV to 275kV) owned by National Grid
- Distribution System (132kV to 230V) country split into 14 areas managed by distribution network operators (Western Power Distribution (WPD) covers Redditch)
- Generation owned and operated by a number of different companies

There is one major power facility substation in Feckenham and other sub stations throughout the Borough.

Generally, WPD would expect developers of a site to pay to divert less strategic electricity circuits operating at 11,000 Volts (11kV) or below. This may include undergrounding some 11kV and low voltage overhead lines as necessary. WPD would normally seek to retain the position of electricity circuits operating at 132,000 Volts (132kV) and 66,000 Volts (66kV) and in some cases 33,000 Volts (33kV), particularly if the diversion of such circuits placed a financial obligation on WPD to either divert or underground them as WPD would not be party to any planning application and any such obligation would also go against the statutory and regulatory requirement on WPD to operate an economic and efficient electricity distribution system.

WPD are obliged to offer customers the minimum scheme to enable electricity connection. Greenfield sites generally incur increased costs for developers to connect to the network, as brownfield sites often have capacity from previous uses. However, the reduced costs for brownfield connections can be offset by the increased potential for the need to relocate existing overhead lines. Overall, there are not considered to be any abnormal costs or funding required to ensure that energy infrastructure is in place to meet the development needs of the Borough. Each development will fund its own infrastructure needs in conjunction with discussions held with WPD.

WPD has provided an indication of the likely electricity infrastructure required for strategic development sites which is included in Appendix A.

ii. Broadband and Telecommunications

The NPPF requires local authorities to support the expansion of electronic communications networks, including telecommunications and high speed broadband whilst keeping the numbers of radio and telecommunications masts and the sites for such to a minimum consistent with the efficient operation of the network.

Broadband

The Government is committed to securing a world-class communications system, and currently the main barrier to this is the availability of super-fast broadband. The Coalition Government's aim to create the best broadband network in Europe is echoed by the County's Corporate Plan for which Open for Business is a priority and broadband a key enabler. This is fully supported by the business community and the Worcestershire Local Enterprise Partnership (LEP).

The WCC Infrastructure Strategy identifies that for the vast majority of residents and businesses in Worcestershire, broadband is supplied via terrestrial, fixed line networks. Two national infrastructure providers, BT and Virgin Media have competing networks in the county.

The Government is committed to securing a world-class communications system, and currently the main barrier to this is the availability of super-fast broadband. There are six exchange points which facilitate Broadband and Cable across the Borough although the quality of the provision varies within the Borough. The majority of the urban area has access to cable and has a choice of providers, however, rural areas, such as Feckenham only have access to ADSL, with speeds of no more than 2Mbps. WCC has produced a 'Local Broadband Plan' (LBP) which aims for a 'Faster Broadband for all by 2015'. 'Open for Business' is one of the County's key priorities and access to faster broadband is vital to ensure companies are able to remain competitive and grow their businesses. The plan, therefore, includes ambitious targets for 90% of Worcestershire's businesses and residents to have access to Superfast Broadband, with 100% of the county being able to access at least 2mbps.

WCC is considering locations in the County where this is not commercially viable (such as the remote rural areas) and will work with a preferred provider to supply the infrastructure. There has already been a project covering parishes in Worcestershire including Feckenham using funding

from the Choose How You Move project to provide wireless masts for internet access as these were considered the hardest to reach areas.

The provision of broadband is generally provided when development happens; i.e. its provision is 'reactive' rather than through forward planning. Service providers put in the appropriate infrastructure during or following development. Developers are not required to pay for infrastructure but are requested to 'future proof' developments by providing the space during development in order for cables to be 'blown' in by the service providers at a later date; this avoids roads having to be dug up once development is complete. Draft BORLP No.4 includes a policy to require this.

Virgin Media has confirmed that, subject to survey, they would be able to provide telephone, Cable TV and up to 100Mb broadband to the developments proposed through BORLP No.4. Virgin Media engages directly with developers regarding the supply of the required infrastructure.

BT has 10 exchanges located in Bromsgrove and Redditch. Some of those exchanges will serve premises outside of the local authorities area, while other premises in the local authority will be served by exchanges located out with the area and between them they serve about 85,000 premises, both business and residential, over the Openreach network. The Openreach network is an 'open access' network and available to any one of the UKs internet service providers and communications providers to deliver services to their customers. All exchanges have broadband technology (adsl1) delivering up to 8Mbps from the exchange (this is distance dependant and can reach about 5.5kms line length from the exchange). BT also engages directly with developers to determine the most appropriate infrastructure solution.

Telecommunications

The Mobile Operators Association (MOA) represents the four UK mobile network operators – 3, Telefonica (O2), Everything, Everywhere (formerly Orange & T-Mobile) and Vodafone. The MOA engage on behalf of operators on matters such as radio frequency, health and safety and associated town planning issues.

It is not possible for any operator to give a clear indication of what their infrastructure requirements are likely to be in 5, 10, 15 or 20 years' time because the technology is continually evolving and ways of improving quality of coverage and/or network capacity may change in the future. Each October the operators submit Annual Rollout Plans to all local planning authorities within the UK. These were most recently sent in October 2012. The plans provide details of all existing base stations within the authority's area and an indication of those additional sites each operator anticipates requiring over the coming twelve months.

Mobile telecommunications are vital for the delivery of sustainable development and are crucial to the success of the Government's plans for digital connectivity and wider economic growth. Good mobile connectivity allows people to access a wide range of central and local government services; do school homework; manage their bank account, pay bills, apply for jobs or buy groceries. Mobile connectivity is also vital for almost all business sectors, allowing people to market their services, process orders and engage with customers. Though coverage across the UK is good, lower population density and challenging topography limits coverage in some rural areas. The mobile network is a crucial piece of national infrastructure but it is delivered locally.

C. Water

This section covers waste water, water supply and flood risk management (including surface water and drainage). Reference should also be made to the Strategic Flood Risk Assessment (SFRA) Level 1 and Level 2 and Outline Water Cycle Study for Redditch Borough.

i. Waste Water

The wastewater produced from Redditch Borough is processed at either Spernal Sewage Treatment Works (STW) (located on the River Arrow, outside the Borough in Studley) or Priest Bridge Sewage Treatment Works (located on Bow Brook, within the southwestern corner of the Borough boundary). There are two systems of main foul sewers (old and new) forming the backbone of the Spernal network through Redditch and both are operating at capacity. All waste water transmitted in the combined or foul sewer networks, either by gravity systems or pumps, is taken to a Sewage Treatment Works to be cleansed and subsequently released back into the river network. Adoption of the sewers is agreed between the developer and STWL by way of a s.104 agreement (this is purely for adoption as an administrative exercise and does not receive any commuted sum for capital or revenue).

Redditch is primarily served by Spernal STW. This site currently serves the equivalent of around 78,500 people and has sufficient spare capacity to accommodate the combined developments being proposed across the Redditch catchment.

The Outline Water Cycle Study raised concerns about the capacity of the sewers to support proposed development. Engagement with Severn Trent Water Ltd is ongoing and they have recently completed sewer capacity assessments for strategic development proposals within the Borough and cross boundary. This assessment has found that from a sewer capacity perspective, developments located to the west are envisaged to have more capacity issues compared to those in the north-east of Redditch due to the proximity to the main trunk sewer which runs along to the Arrow Valley to the sewage treatment works located to the south east of the town centre. As the preferred locations for development are located to the west, significant additional sewer capacity will be required to be provided. There are two options for this based on either pumping waste water or using gravity; these are shown in Appendix A.

In terms of the provision of waste water infrastructure the developer will provide the on-site drainage and Severn Trent Water Ltd will provide any off site infrastructure and/or any upgrades to the sewage treatment works. Severn Trent is only responsible for paying for infrastructure improvements to ensure there is adequate off-site capacity in the existing sewerage system and providing sewage treatment capacity; developers are responsible for all other costs.

ii. Water Supply

Severn Trent Water Ltd provides the clean water supply for the Borough. The main water supply resource within the area is the Sherwood Sandstone Aquifer, located under the northwest and central area of Bromsgrove District. This groundwater supply provides most of the potable water supply for District and Borough, but besides its primary water supply function, the aquifer has significant environmental value and is vulnerable to over-abstraction and pollution. The Outline Water Cycle Study (WCS) for the Borough identifies that while the strategic supply infrastructure will support the proposed development sites assessed in the WCS (note: the cross boundary development sites were not assessed), it is likely that the local distribution network will require reinforcement. An extension to the water supply network will be required for greenfield sites and adjustments to the network for brownfield sites. The extent of reinforcements will need to be determined by detailed modelling of the network on a site by site basis together with consideration given to the cumulative effect of other development in the locality.

During recent engagement Severn Trent Water Ltd has confirmed that during the preparation of the Water Resource Management Plan (WRMP) they would have taken the proposed development sites into consideration. They are currently carrying out feasibility studies on the development sites and so far no problems have arisen at the initial stages for the smaller development sites. The larger development sites will require further detailed work. At this stage, STWL have raised concerns about the vulnerability of the Webheath boreholes/source protection zones in relation to the Foxlydiate site; however it is considered that these concerns can be dealt with by way of site

design and layout. Notwithstanding the above, no major capacity/supply issues have been identified that would delay the proposed developments from going ahead.

iii. Flood Risk, surface water and drainage

Flood risk is not considered a significant factor for strategic planning in the Borough. There are currently a number of flood defences in the Borough including flood deference structures, NFCDD (National Flood and Coastal Defence Database) culverts and NFCDD raised defences. Flood deference structures are located on the River Arrow, Dagnell Brook and The Wharrage from the Bow Brook. These defences can be seen on Figure 11 of the SFRA Level 1.

No development is anticipated in Flood Zone 3 in the next 20 years. If new development is located outside flood zones and thereby does not rely on flood defences to render it appropriate, the costs associated with flood alleviation will be negligible. However, water cycle studies are essential in understanding the detailed implications on development sites.

The development allocations currently proposed in BORLP No.4 are not anticipated to require flood defences in order to come forward as the allocations are not anticipated to be located in unsuitable areas or in places that would require defences to be provided. Furthermore, provided developments undertake adequate and appropriate surface water drainage management and, where appropriate, enhancements to the respective watercourses and de-culverting, the allocations are not anticipated to require further infrastructure provision as a result of exacerbating flood risk.

Surface water drainage within the whole of Redditch Borough is managed by Severn Trent Water (STW) Ltd.

In 2010 the Flood and Water Management Act (FWMA) delegated upper-tier authorities as Lead Local Flood Authorities (LLFA) with responsibility for their respective area's Local Flood Risk Management. Worcestershire County Council is therefore the LLFA for Worcestershire. This role currently relates to ordinary watercourses, surface water and groundwater flooding (fluvial flooding from main rivers is still currently the responsibility of the Environment Agency).

The FWMA has delegated a number of other statutory powers and duties to LLFAs extending their previous responsibilities for flood risk management including: A duty to establish a Sustainable Drainage Systems (SuDS) Approving Body (SAB) with responsibility for approval of all drainage plans and the adoption and maintenance of SuDS that serve more than one property in new developments (implementation expected by April 2014).

Surface water flooding is a potential risk at all sites due to the spatial variability, duration and intensity of rainfall. The SFRA Level 2 suggests SuDS will be required on the vast majority of development sites (as shown in Appendix 2). However, the cost implications for both the LLFA and the developer are currently unclear and further advice from Defra is awaited. For example, whilst the developer may still bear the cost of construction, the revenue cost of maintenance may no longer sit with the developer and some costs (such as revenue) may be borne by the LLFA, Central Government (in the initial stages of enactment) or by new occupants.

The sewers within Redditch are operating at capacity and are suffering from problems of storm water infiltration into the foul sewers, even though there is also an extensive network of storm water sewers within the town. Many of the areas outside Redditch town are served by combined sewer systems, which are also overwhelmed during heavy rainfall events. Figures 3 and 5 (of the SFRA Level 1) indicate the general locations of these events throughout the Borough, some of which are clustered within Feckenham village.

Sewer flooding outline modelling indicates that further investigation is required in Brockhill East, Webheath ADR, A435 ADR, Edward Street and Northwest Quadrant. STW will advise on the location of suitable connection and allowable discharge volumes, but would not undertake calculations and design until approached by a developer, who would be required to pay an infrastructure charge.

D. Waste Management

Municipal Solid Waste (MSW) (mostly but not exclusively, household waste) is managed by Waste Disposal Authorities (Worcestershire County Council) in partnership with Waste Collection Authorities (Redditch Borough Council) through partnership with the private sector (WCC's integrated PFI contract with Mercia Waste).

It is estimated that approximately 1,591,000 tonnes of waste are produced in Worcestershire each year including commercial and industrial waste (C&I), agricultural waste, construction demolition and excavation waste (C&D), municipal solid waste (MSW) and hazardous waste (clinical waste and radioactive waste).

Commercial and industrial (C&I) waste is managed by the private sector. Cross over contracts between the public and private sector to manage Construction & Demolition (C&D) waste are common. The third (voluntary) sector plays a small but increasing role in both streams. Very specialist waste, notably medium and high level radioactive waste is managed by quangos.

One household recycling centre is located at Crossgates Road (which is provided by Worcestershire County Council and operated by Severn Waste Services on its behalf) and a number of other small recycling centres (19) located throughout the Borough. Waste arising from houses in Bromsgrove District and Redditch Borough are both processed at the transfer station in Redditch. This is due to a change in the type of refuse vehicles used in Bromsgrove meaning that agreement was reached for these vehicles to use the Redditch transfer station because they are not compatible with the site in Bromsgrove. Commingled recyclable waste is sorted at a site in Norton (EnviroSort) nr Worcester (Jct 7 of M5) which has some spare capacity as it is currently running at approximately 75% of its annual throughput tonnage. Planning Permission has been obtained for AN Energy from Waste facility in Hartlebury and this solution is now being progressed.

The amount of waste which needs to be managed in Worcestershire is likely to increase. Local Authority Collected Waste is likely to increase 16.47% by 2031 as the population increases, and Commercial and Industrial waste is likely to increase 34.39% by 2031.

Waste management infrastructure is usually provided and operated by the public sector (district councils and Worcestershire County Council) or by private companies. In December 1998 Herefordshire Council and Worcestershire County Council signed a 25 year contract to provide waste management facilities to be operated on their behalf by Mercia Waste Services. The waste contract enables the Council's long-term strategy for the management of household waste in Herefordshire and Worcestershire to be implemented.

Consultation with WCC Waste Services has raised concerns over the capacity of the combined transfer station and Household Recycling Centre facility in Crossgates Road, Redditch for the years running up to 2023. Using the current waste arisings and the predicted completion figures for the period up to 2023 the combined transfer station and Household Recycling Centre facility in Crossgates Road, Redditch reaches its licensed capacity of 49,000 tonnes per annum in 2023. If this figure has been underestimated this situation will occur sooner. The implications arising from this are that waste collected by either RBC or BDC may have to diverted to another disposal point,

disrupting the current collection rounds or alternatively expand the existing facility to cope, which would involve a new planning permission licence and closure/diversion for construction.

Based on the same methodology used to calculate growth as for the Redditch transfer station and Household Recycling Centre, the other County Council disposal facilities in the area i.e. Bromsgrove Household Recycling Centre, Bromsgrove Transfer Station/Bulk Bays and Redditch Bulk Bays, should be able to cope with the additional waste arisings going through those facilities as a result of the additional housing. However, due to their design, planning permissions and licences/permits they cannot accommodate waste from the combined transfer station and Household Recycling Centre facility in Crossgates Road, Redditch.

5. Social Infrastructure

The purpose of this section of the IDP report is to set out the current understanding of social infrastructure in terms of current provision and planning for future needs arising from development.

The social infrastructure types covered are:

- A. Education
- B. Health
- C. Emergency Services
- D. Leisure (including play areas, playing pitches, public art and community facilities)
- E. Libraries
- F. Cemeteries
- G. Social Care

A. Education

There is a statutory duty on Worcestershire County Council to ensure there are sufficient school places for all children of statutory school age (ages 4-16) living in Worcestershire. Future housing developments will lead to an increase in the 0 - 19 year old population in the area, resulting in a demand for additional school places for all types of education (early-years to post-16 and specialist provision). Although a number of schools have become - or will be transferring to become – academies, it is not expected that this will have any adverse impact on the ability of WCC to manage school places across the county.

There are currently 20 first schools (ages 4-9), 7 middle schools (ages 9-13), 4 high schools (ages 13 plus) and 2 special schools in the Borough. The NEW College provides further education in Bromsgrove and Redditch along with 6th Form Centres in High Schools.

Primary pupil numbers are increasing in urban areas where the rising birth rate is felt most keenly. Secondary schools are currently experiencing more of a dip in numbers but will feel the impact of the higher primary numbers in due course. WCC has experienced a growth in pupils entering reception in recent intakes with demand for places particularly high in the north of the Borough necessitating new or expanded first school provision as part of new development.

It is difficult for education provision to be precisely planned for in the long term, in terms of exactly what is needed and where. The demand for provision is dependent on the type of residential development (i.e. houses are generally more likely to have families with children rather than flats) and parental preference which cannot really be predicted with complete accuracy. It is also dependent on birth rates, which are currently particularly high in Redditch (in comparison to other Worcestershire Districts) due to the population demographics (a higher proportion of the population is of child-bearing age). Economic factors can also affect demand; for example the withdrawal of a bus service which previously transported pupils to one particular school may mean pupils have to make an alternative choice of school. Therefore, provision planning has a very short lead in time, typically around 3 years . WCC has completed an assessment of Redditch schools for the 2014 intake and know where there is room for expansion to deal with demographic change.

In terms of future provision, WCC generally favours expansion of schools rather than new build due to cost constraints. Funding for schools comes in the form of developer contributions (expected to fund around 50% of provision) and from central government grant given to WCC to deal with demographic changes. The Borough Council has adopted a specific SPD on planning obligations for education facilities.

WCC does have a responsibility to make provision for pre-school aged children but the authority relies on the private sector to react to demand and deliver this. WCC facilitates this provision and has no current concerns over the levels of provision.

WCC also has a duty to provide post-16 education but this is largely based on *demand* for subjects rather than meeting a statutory need. Because of this, in WCC's experience, provision tends to take care of itself. Establishments providing such education are likely to continue to financially support their business without funding from new development.

WCC Education Services has provided an indication of the likely requirements for new schools and/or contributions to expanding schools to support future development and this is shown in Appendix A.

B. Health

Health infrastructure includes a variety of primary and secondary care facilities, including acute hospitals, community hospitals, general practices, dentists surgeries, opticians premises, and pharmacies.

The Worcestershire Acute Hospitals NHS Trust provides hospital-based services from three main sites:

- Worcestershire Royal Hospital
- The Alexandra Hospital (Redditch)
- Kidderminster Hospital and Treatment Centre

They also provide specialist outpatient clinics in some community hospitals, and this shift of care away from acute setting and into community settings is planned to continue and strengthen in coming years.

A countywide acute services reconfiguration project (initially known as joint services review) is being carried out by the Worcestershire Acute Hospitals NHS Trust and is likely to be completed in December 2013. This review is considering the best way to deliver the services of three hospitals managed by Worcestershire Acute Hospital Trust in the future in the light of competing demand for resources and skill shortages in key areas. Service changes could impact on future infrastructure requirements at the hospitals at Worcester, Redditch and Kidderminster.

Additional hospital facilities within Redditch include: Rowan Day Hospital, Smallwood and Hillcrest Mental Health Unit. There are 15 Doctors Surgeries, 10 Dental Practices and 1 Orthodontic Practice in the Borough.

The Redditch and Bromsgrove Clinical Commissioning Group (RBCCG) represents 22 GP practices across Redditch and Bromsgrove with a combined registered population of circa 170,000 patients. RBCCG will commission (buy) health and care services on behalf of the Redditch and Bromsgrove registered population including:

- Elective hospital care
- Rehabilitation care
- Urgent and emergency care
- Most community health services
- Mental health and learning disability services

The CCG has confirmed that it will take into account the anticipated increase in population and housing as part of their medium/long term planning. The CCG acknowledges this will increase the demands for healthcare services, but do not anticipate that there will be a proportionate increase in

hospital estate in response to this, as the overall strategy for health economies is to deliver a greater proportion of care outside of the hospital environment.

There is, however, likely to be an impact on the need for GPs and the number of GP surgeries. NHS Property Services identifies that having access to a general practitioner is an important component of a healthy community. In order to serve the community and meet their varying health needs, the general practitioner must have suitable primary care facilities in which to operate from. These surgeries need to be accessible to the community they serve, safe and convenient for all users' needs, and of sufficient capacity to cope with the demands on general practitioners both in terms of the number of patients they must serve and the variety of health services they must provide.

Across Redditch and Bromsgrove there are currently 26 surgeries (including branch surgeries) of varying age, size and configuration, and therefore there capacity to meet healthcare needs also varies. The surgeries are also located on very different sites and therefore their ability to expand or adapt to increase capacity also varies between surgeries. Some of the existing surgeries are in areas where demand for healthcare is high due to the characteristics of the area or the nature of the local population, other surgeries are better placed to cater for the needs of their area. The picture of existing surgery provision and the demands placed upon it is therefore complex, and capital for investment in improvements within the wider NHS system is inadequate.

NHS England, NHS Property Services and the Clinical Commissioning Groups (CCG's) have commenced a review of its existing estate as part of preparing a long term primary care strategy. This will establish the following:

- the current position in terms of existing surgery capacity and its ability to meet the healthcare needs of the current population;
- the scope for future improvements/extensions or rationalisation of surgeries; and,
- the nature and cost of proposed changes to surgery provision to meet existing and expected future primary healthcare needs over the next 15 years.

This will be informed by the work undertaken by Public Health in terms of the specific health needs of different areas within Redditch and Bromsgrove.

NHS Property Services predicts that growth of a total of 13,380 houses (6,380 houses for Redditch and 7,000 houses for Bromsgrove) at an average household size of 2.3 persons, gives an extra population of 30,774. This additional patient capacity, at 1750 patients per GP, will require 17.6 additional GP's. Analysis so far of the current GP premises indicates that there is a shortfall of spare accommodation capacity. There will therefore need to be a proportionate expansion of GP premises infrastructure to serve this additional patient demand. Additional GP premises capacity will need to be provided by a blend of:-

- New GP premises
- Replacing existing GP premises
- Extending existing GP premises, and
- Reconfiguring existing GP premises

NHS Property Services indicates that developer contributions for new build GP premises are in the order of £750 per household. Extensions and reconfigurations of existing premises are likely to cost less, but there may be additional costs such as temporary accommodation and VAT that will need to be factored in

The NHS partners have provided an initial indication of the likely infrastructure that will be needed to meet the additional capacity expected within each locality as a result of planned housing growth. This is shown in Appendix A.

C. Emergency Services

West Mercia Police (WMP) and Hereford & Worcester Fire and Rescue Service (HWFRS) are working together on infrastructure planning. WMP and HWFRS in turn regularly consult with West Midlands Ambulance Service (WMAS) to ensure that all three emergency services coordinate their infrastructure planning for future development and population growth.

The impact of development growth is understood to have two broad impacts on the emergency services. Firstly, increased development and population growth leads to an increased number of incidents which require an emergency response. Secondly, there will be a significant impact on response times and delivery of day-to-day services to the geographical area(s) concerned. New developments provide new destinations to be serviced and therefore will require additional emergency services infrastructure to be provided, if response times and services cannot be acceptably delivered using existing infrastructure. Additional funding and/or in-kind contributions will consequently need to be secured to provide an acceptable level of emergency services commensurate with development and associated population growth. The timing of infrastructure requirements will be determined by the phasing of specific development proposals. Emergency services infrastructure is more specifically defined as: -

- A. additional (including new) buildings and accommodation
- **B.** additional personnel set-up costs
- **C.** vehicles and other operational equipment
- **D.** central support services

Alongside the above, the emergency services recommend developments incorporate the following:

- **A.** Adequate water supplies for effective fire fighting, as existing funding sources are insufficient to meet the costs of providing fire hydrants in all new developments.
- **B.** The installation of automatic water suppression systems in all new housing and other developments. This is because these systems are proven to reduce significantly fire deaths, injuries and property damage as a consequence of fire. This is because they control fires with minimal water and reduce the toxic smoke plume fall out, as well as reducing the contaminated water run off from fire.
- **C.** The design of all new developments must ensure that the emergency services can access all areas and buildings. Ideally, there should be a dedicated access road that connects with the surrounding highway network. In addition, proposals involving on-street car parking within developments must not hinder emergency service access.

At the present time the emergency services are adapting themselves to meet the Government's financial plans for the public sector.

Police and Fire Services

A whole time fire station is currently located Middlehouse Lane in the north of Redditch.

The following Police locations are within Redditch:

- Redditch Police Station Grove Street, Town Centre
- Police Office 39 Winyates Centre

West Mercia Police (WMP) are required to reduce their annual spend by approximately £30m per year by April 2015. This is required as a result of the Government's Comprehensive Spending Review (CSR 1) announced in 2010, which covered four financial years up to 2014/15. At the time of writing, WMP are in year 3 of this cycle with the next financial year (2014/15) being the final year. It should also be noted that the Council Tax precept for policing has been frozen for 2013/14. Key to meeting the tough financial challenge has been the establishment of a 'Strategic Alliance' with Warwickshire Police. This involves both Forces sharing assets as much as possible, to ensure that services can be delivered in the most effective way.

Hereford & Worcester Fire and Rescue Service (HWFRS) are facing a period of significant uncertainty over future funding. Although grant reductions for 2013-14 and 2014-15 are now known, accurate information about future years is not available. In addition, the actual practical impacts of the major reforms to the Business Rates and Council Tax benefits are yet to be realised. In preparing the medium term financial plan, the Fire and Rescue Authority has taken into consideration the best available information, and anticipates the need to save an additional £4m by 2016-17, over and above the £2.3m savings identified since 2010-11. The achievement of these savings will demand radical changes, and the Authority is, therefore, reviewing how it needs to adapt services, priorities and ways of working in order to sustain its standards of service delivery and performance improvement for the future. Further work on financial planning and identifying savings is on-going.

The result of the above is that WMP and HWFRS have no resources at all to enable the provision of the additional infrastructure that will be required to address the demands arising as a result of the future development and population growth proposed for Bromsgrove District and Redditch Borough.

The re-structuring of WMP and HWFRS is fully underway, which currently makes it difficult for them to quantify infrastructure requirements over the forthcoming plan periods. They have therefore provided a high level 'snapshot' of the infrastructure requirements of the emergency services as they are currently understood which is included in Appendix A. In 2014 WMP and HWFRS will be undertaking detailed assessments of their infrastructure needs.

Ambulance Service

The West Midlands Ambulance Service (WMAS) NHS Trust aims to consolidate emergency and ambulance accommodation into centralised hubs supported by a network of Community Ambulance Stations (CAS). During the past 12 months there has therefore been a shift in the strategic delivery of ambulance/pre hospital medical care across the West Midlands Ambulance Service area. This entails the closure of old and decaying estate and moving the majority of resources into ambulance "hubs" but with the provision of tactically place response points and CAS points within the "old" station areas.

There are currently two ambulance stations serving Redditch Borough, one at Cedar Park Road, and another at Studley Road in Greenlands which opened in the summer of 2012. The ambulance station located in Cedar Park Road, Redditch is due to close in Spring 2014 and all resources relocated to centralised hubs at Burnt Meadow Road and Clews Road in Redditch, which were granted planning permission in January 2014.

WMAS has indicated that the implications of the proposed development for their service include:

- Insufficient Road development for increased housing and business expansion which could delay response to calls and cause extra traffic congestion.
- Increase in population which could lead to relative increase in demand.
- Modifications to the services at the acute hospital which could lead to increased demand for WMAS services.
- Change in activity areas that could make locations of existing response points highly challenged.

D. Leisure facilities

This section includes play areas, playing pitches, public art and community facilities. There is also consideration of built leisure. The potential infrastructure requirements included in Appendix A have been identified by the Council's Leisure Service. Currently, developers are required to provide open spaces, play areas and pitches or make a financial contribution towards provision or improvement of existing assets in accordance with the adopted SPD on Open Space Provision. In

addition, the Open Space Needs Assessment identifies the amount of open space (including play areas and pitches) in each ward of the Borough. Existing and proposed Local Plan policy is to maintain the Borough's average level of open space.

Play areas

Play areas in the Borough are currently under review. The Council's Leisure Service has indicated where new or improved play areas might be required in relation to developments sites as shown in Appendix A.

Playing Pitches

The Playing Pitch Strategy identifies 117 playing pitches and courts in use across the sports assessed including: 21 mini football pitches, 4 youth football pitches, 33 senior football pitches, 3 Artificial Grass Pitches, 2 bowling greens, 4 junior rugby pitches, 9 senior rugby pitches, 3 cricket pitches, 16 Multi Use Games Areas, 22 tennis courts. Not all pitches are currently available for community use under formal agreements.

Football: None of the football pitches in Redditch were rated as 'Excellent' however, 32 pitches were rated as 'Good' and 23 pitches in the area received an 'Average' rating. There were no pitches which were rated as 'Below average' or 'Poor'. The provision and quality of ancillary facilities such as changing rooms, is one of the greatest issues in terms of football facilities in Redditch. The Playing Pitch Model results show that there is currently a theoretical surplus in provision (in terms of quantity) in terms of Senior pitches (13 pitches) and Mini pitches (4 pitches). There is a theoretical deficiency (9 in total) of Junior pitches. In relation to future demand, the current and future surplus of senior football pitches is more than sufficient to accommodate increased demand for youth football, and the latent demand identified. The shortfall could be accommodated through the remarking of some existing sites in each sub area to reflect the nature of actual football pitch demand - for example more junior size football pitches, with appropriately sized goals. The Playing Pitch Model results show that there is currently a theoretical surplus in provision (in terms of quantity) in terms of Senior pitches (13 pitches) and Mini pitches (4 pitches). There is a theoretical deficiency (9 in total) of Junior pitches. In relation to future demand, the current and future surplus of senior football pitches is more than sufficient to accommodate increased demand for youth football, and the latent demand identified. The shortfall could be accommodated through the remarking of some existing sites in each sub area to reflect the nature of actual football pitch demand - for example more junior size football pitches, with appropriately sized goals.

Cricket: A total of 3 formal cricket squares have been identified in the audit process, with all of them identified as available for community use. All three cricket squares were assessed as 'Good' by the auditing team. There is a current shortfall of cricket pitches in Redditch based on the 'peak demand' time of Saturday. The cricket infrastructure is viewed to be at capacity. Although all clubs report theoretical capacity for new members, and an aspiration to grow, a lack of facilities is likely to impact on this. Current pitch sharing arrangements may actually be masking a higher level of demand for facilities.

Rugby: A total of 13 rugby pitches have been identified, although not all are suitable or available for community use. Of these pitches, 11 (around 83%) are available for community use (9 adult size). Of the total 13 pitches, 9 are full size and 4 of these are not full-size pitches (junior sized). The quality audit shows that no pitches were rated 'Excellent', 'poor' or 'below average', suggesting that most pitches should be able to accommodate an equivalent of two matches per week. There is currently a theoretical surplus of adult rugby pitches across the Borough, although most rugby pitches are provided on education sites. According to projections, and accounting for participation increases, it is not anticipated that there will be any significant change to the supply/demand balance.

Hockey: There are a total of 3 Artificial Grass Pitches (AGPs) in Redditch (all sand-based). All of the 3 AGPs are available for secured community use. All 3 of the AGPs in the Borough were rated as 'good'. The Playing Pitch Model results show that there is currently a theoretical surplus in quantitative provision. According to projections, by the end of the study period, it is unlikely that there will be any significant change in terms of demand for match slots.

The Council's Leisure Service has identified where new pitches might be required as part of developments or where financial contributions will be sought to improve existing pitches; this is shown in Appendix A.

Community Centres

Within the Borough there are 14 Community Centres. Redditch Borough Council manages six facilities at: Batchley – Cherry Tree Walk, Matchborough East – Dilwyn Close, Oakenshaw – Castleditch Lane, Windmill - Ryegrass Lane, Winyates Barn – The Craft Centre and Winyates Green – Furze Lane. None of these facilities are booked to full usage capacity.

There are village hall facilities at Feckenham and Webheath.

Other facilities include: Redditch Youth House (WCC managed), Church Hill Centre (RBC owned, YMCA managed), Loxley Close (RBC owned, YMCA managed) incorporating Willow Trees Children's Centre (Sure Start).

Facilities where use is more specific to limited voluntary organisations: Community House (RBC owned) used by Home Start, Redditch Pakistani Community Forum, Redditch Talking Newspaper, Cleeve Close, Church Hill (WCC) used as a childrens nursery attached to school, Quibery Close, Winyates East (WCC) used by Maple Trees children's centre (Sure Start), Woodrow Community Centre (managed by a voluntary sector Management Committee), Clifton Close, Matchborough West (RBC owned, let to WCC) as a day centre for adults with special needs, Sandycroft Wellbeing Centre.

There is a 10 year maintenance plan in place for RBC community facilities and the Council's Leisure Service has identified where further developer contributions towards community rooms could be required.

Built Leisure

Across Redditch there are a variety of built leisure facilities, including the theatre, a cinemas, bingo halls, sports centres and swimming pools. Some assets are provided by the private sector, while other facilities are provided or commissioned by the public sector (e.g. local authority run theatre and sports centres). The Regional Sports Facilities Framework for the West Midlands identified that the key issue for built leisure facilities in Worcestershire is their age (this may include considerations such as condition, size and flexibility to meet future needs). The expected trend is for people to live longer and to be active longer in a wider range of sports. The Abbey Stadium Leisure Centre has recently undergone major refurbishment to provide additional facilities including swimming pool. The Council's Leisure Service has not indicated, at this stage, that there will be any additional need in relation to built leisure facilities.

E. Libraries

Worcestershire County Council has a statutory duty under the Public Libraries and Museums Act 1964 to provide a comprehensive library service. WCC's gross library budget is being reduced by 28% over the three years from 2010/11. Cost saving has already been achieved in the County through co-locating libraries with other local authority and partners' services.

There are two libraries in Redditch; one in the Town Centre and one in Woodrow, as well as a mobile library service. WCC has confirmed that there is sufficient capacity at the Town Centre library to support development within the Borough and at the two cross boundary development sites. In addition, the WCC library service will, if appropriate, seek to locate further services within new developments alongside, for example, schools or other community facilities.

F. Cemeteries

In Redditch Borough there is currently one Crematorium at Bordesley Lane and three cemeteries:

- Bordesley Lane
- Plymouth Road (closed to new burials)
- Edgioake Lane, Astwood Bank (outside Borough boundary, but RBC managed)

Average annual burials are approximately: 50 new graves; 50 reopen graves; 100 cremated remains graves. The Borough Council operates the crematorium and cemeteries.

Burial space within the Borough will last approximately 3 years (based at October 2011). There has recently been a small extension to the Bordesley Lane Cemetery to provide extra capacity and investigations are currently under way to find a suitable site for an additional cemetery. There are however very specific requirements for cemetery sites which severely limits the suitability of much land in the Borough. There is no set formula for determining cemetery provision i.e. a number of hectares/population increase but it has been suggested that an area of at least 1.7ha is required in the Borough and the preference is for one large site rather than several smaller ones. It is the Borough Council's responsibility to provide the new cemetery site. Indicative costs are shown in Appendix A.

G. Social Care

According to the Care Quality Commission, at 1 April 2010, there were 162 registered residential homes, 60 registered nursing homes, 1 registered adult place scheme (shared lives), 62 registered home care agencies, and 6 registered nursing agencies in Worcestershire. Together they supply 2,928 residential home places and 2,483 nursing home places².

In addition the Older People's Strategy identifies that the following existing provision exists in Redditch:

- 4 Residential short-term places
- Extra Care Housing Care scheme
- There is also an agreement with Redditch Borough Council for the provision of an 'Integrated Very Sheltered Housing and Home Care Service'
- Shopmobility

Redditch Borough Council provides a number of social care services to support the community. Services provided by the Council include Dial-A-Ride – a door to door transports service for people who cannot use public transport. Redditch Shopmobility – free mobility equipment for those who require it within Redditch Town Centre. Worcestershire County Council also provides a full range of social care support for the Redditch community including Assistive Technology, Children's Residential Services and Housing Support to name just three.

There are plans to develop a further Extra Care scheme in Redditch (identified in the Older People's Strategy). The Older People's Strategy has identified that an agreement exists with Redditch Borough Council for the provision of an Integrated Very Sheltered Housing and Home Care service within the Borough. The Older People's Strategy also details a number of Strategic

² Bromsgrove Social Infrastructure Audit 2010

Aims for improvements to facilities across the County but are not Redditch-specific or cost specific. Examples include Information and Advice Services, Supporting People with Long Term Condition and Extra Care Housing.

From the information provided above it is clear that a wide range of services exist within the Borough to meet social care needs however it is not considered that there are any specific infrastructure requirements arising at this time.

6. Green Infrastructure

Green Infrastructure (GI) is the network of green spaces and natural elements across the Borough. A GI Strategy for Redditch Borough will be completed to support Local Plan No.4 Policy 11 'Green Infrastructure'. The strategy will identify and assess the existing GI network and make recommendations on how the network can be enhanced. GI Concept Statements will be produced to guide masterplanning and development of strategic sites. The GI Strategy for Redditch will complement the Worcestershire Green Infrastructure Strategy which was completed by Worcestershire Green Infrastructure Partnership in February 2014. The Worcestershire GI Strategy sets out county-scale principles to inform plans and strategies being developed by partner organisations and to enable a coherent approach to delivery across a range of initiatives.

The GI Strategy for Redditch Borough, once completed, should be read in conjunction with this IDP.

7. Funding Mechanisms

Funding for infrastructure is available from a range of sources. Potential funding mechanisms for infrastructure related to BORLP No.4 include but are not limited to:

Developer Contributions - Section 106 and CIL

Developers will be expected to make a contribution towards infrastructure provision to help address any uplift in demand on services and facilities that would result from a new development.

On-site provision of infrastructure to serve the needs of a particular development can be implemented through a planning obligation negotiated under Section 106 of the Town and Country Planning Act 1990. Where infrastructure is needed to benefit a broader area, contributions can be secured from a wide range of developments, via the Community Infrastructure Levy (CIL). CIL comprises a range of standard charges that apply to new built development within an area based on the economic viability (ability to pay) of the different types of uses. Local Authorities can choose whether or not to bring in CIL and Redditch Borough Council has not made a decision on this matter yet.

2013-15 Affordable Homes Guarantees Programme Framework

The 2013 – 2015 Affordable Housing Programme Framework aims to increase the supply of new affordable homes in England. Throughout 2013 – 2016 the Homes and Communities Agency will invest a further £225 million with the aim of delivering a further 15,000 new affordable homes. The higher amount of funding is available over a four year period from 2013-14 to 2016. The government launched the bidding guidance for the Affordable Housing Guarantees Programme Framework in February 2013. The programme will fund the same products as the original framework to include affordable rent and affordable home ownership (shared ownership). The programme will not fund social rent homes. The programme will also only fund identified firm schemes.

The Government explicitly expects housing associations to take full advantage of the guarantee alongside a mix of other funding sources to deliver even lower capital grant rates than they achieved during for the 2011-15 programme. The funding sources in the guidance include:

 $\hfill\square$ The benefit of the guarantee;

- □ Capital grant;
- □ Agreed flexibilities on existing assets, such as conversions or disposals; and

□ Other sources including public land, new homes bonus and CIL receipts (for supporting infrastructure).

New homes must be started by March 2015; however providers have the flexibility to complete by March 2017.

Local Sustainable Transport Fund

The Local Sustainable Transport Fund represents a stage in the Government's move away from specific grants to provide local authorities the freedom to develop the targeted transport packages that address the particular transport problems in their areas. The purpose of the Fund is to enable the delivery by local transport authorities of sustainable transport solutions that support economic growth while reducing carbon. These solutions will be geared to supporting jobs and business

through effectively tackling the problems of congestion, improving the reliability and predictability of journey times, enabling economic investment, revitalising town centres and enhancing access to employment. They should at the same time bring about changing patterns of travel behaviour and greater use of more sustainable transport modes and so deliver a reduction in carbon and other harmful emissions. The Fund also provides the opportunity to take an integrated approach to meeting local challenges and to delivering additional wider social, environmental, health and safety benefits for local communities.

The Department for Transport (DfT) made £560 million available to the Fund over the 4 year period to 2014-15.

In 2011 Worcestershire County Council applied to DfT for funding for the 'Choose How You Move 2: Redditch'. The 'Choose' represents an exciting development from the highly successful Sustainable Travel Town Demonstration Project in Worcester entitled 'Choose how you move', which ran from 2004 to 2008 to export this best practice approach to the former new town of Redditch, extending the benefits of smarter choices to a third of Worcestershire's residents. On 7th July, 2011, the Department for Transport announced that Worcestershire County Council had been successful in its bid, and was awarded £2,815,000 to develop and deliver this proposed package of measures. The total package cost that was secured was £3,520,075, with a total DfT funding amount of £2,814,500. The project is being delivered by a range of partners, which include Redditch Borough Council, Sustrans, and Redditch Town Centre Partnership.

Regional Growth Fund

The Regional Growth Fund (RGF) is a £3.2 billion fund, helping companies throughout England to create jobs between now and the mid-2020s. The RGF is a flexible and competitive fund, with bidders able to submit bids either as a project or a programme. It has a minimum bid threshold of £1 million. The payment of RGF money is spread between 2011 and 2017. RGF supports projects and programmes that are using private sector investment to create economic growth and sustainable employment.

The first 3 rounds of the Regional Growth Fund are now delivering, with £2 billion awarded to almost 300 projects and programmes. These projects and programmes have committed to deliver 473,000 jobs and £12 billion of private sector investment. 102 bids have been selected to receive RGF Round 4 funding.Following the June 2013 Spending Round allocation of a further £600 million to the Regional Growth Fund, ministers are considering the scope and timings of Round 5 of the RGF.

European Regional Development Fund

The ERDF aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions. In short, the ERDF finances:

- direct aid to investments in companies (in particular SMEs) to create sustainable jobs;
- infrastructures linked notably to research and innovation, telecommunications, environment, energy and transport;
- financial instruments (capital risk funds, local development funds, etc.) to support regional and local development and to foster cooperation between towns and regions;
- technical assistance measures.

ERDF is one of the largest funding sources. Funding is allocated over 'programming periods'. The current programming period runs from 2007 to 2013. The programmes that the Department for Communities and Local Government (DCLG) manages in England are worth around €3.2 billion (around £2.8 billion) between 2007 and 2013. The money goes to public, private and voluntary sector organisations to support economic growth.

ERDF generally pays up to 50% of the eligible costs of a project. The remaining funding must be found by the applicant and can come from a range of public, private and voluntary sources. Grants go to projects that would not have taken place without it.

The ERDF's priorities are to:

- support innovation and the knowledge-based economy
- stimulate enterprise and support successful businesses
- ensure sustainable development, production and consumption
- build sustainable communities

Funding is managed in 3 strands:

- convergence
- regional competitiveness and employment
- European territorial co-operation

The West Midlands is one of 9 regions to qualify for Competitiveness and Employment funding. Under the 2007 to 2013 programme, the region can receive €400 million of investment. For more information contact the West Midlands Programme Delivery Team on 0303 444 6587 or <u>WM.ERDFenquiries@communities.gsi.gov.uk</u>.

Growing Places Fund

In 2011, the Government established the Growing Places Fund to help deliver the key infrastructure needed to promote economic growth, create jobs and build houses in England. The £500 million fund was set up uniquely as an unringfenced fund for distribution to Local Enterprise Partnerships.

The Growing Places Fund aims to enable targeted investment in pieces of infrastructure which unlock development allowing places to realise development values which can be recycled to provide a longer term solution to infrastructure provision.

The Growing Places Fund has three overriding objectives:

- to generate economic activity in the short term by addressing immediate infrastructure and site constraints and promote the delivery of jobs and housing
- to allow local enterprise partnerships to prioritise the infrastructure they need, empowering them to deliver their economic strategies
- to establish sustainable revolving funds so that funding can be reinvested to unlock further development, and leverage private investment.

Local enterprise partnerships were invited to submit proposals, on the basis that they had an identified lead local authority that would receive and account for the funding, on behalf of all members of the partnership.

Broadband Delivery UK

Broadband Delivery UK was introduced to continue to improve the UK's broadband network, with particular emphasis on making high-speed broadband available in rural communities. The government has allocated £530 million during the current spending review period to stimulate commercial investment to roll out high-speed broadband in rural communities by 2015.

BDUK is responsible for managing the rural programme, and the local authorities and the devolved administrations are responsible for individual projects, as set out in BDUK's delivery model. To help local authorities find suppliers, BDUK has put in place a framework delivery contract.

The Rural Community Broadband Fund is also available, jointly funded by Defra and BDUK, which is aimed at the 10% hardest-to-reach areas which risk only receiving standard 2Mbps broadband. The fund has up to £20 million for small community projects to implement enhanced or superfast broadband solutions beyond the standard connection.

Council Tax

The Council Tax funding is Redditch Borough Council's share of the Council Tax paid by taxpayers in the Borough. This will make up the difference between what the Council spends in providing general fund services and the income it receives from fees and charges, sales and grants. It is the amount required to balance the Councils budget for the year. None of this money is available for spending on anything other than the items approved in the budget set for the year.

Local Transport Capital Settlement (Integrated Transport Block & Highways Maintenance Capital)

This is a non ring-fenced budget which can be spent in accordance with local priorities.

New Homes Bonus

The New Homes Bonus was introduced by the Government in 2011. It is a grant that is paid by central government to local councils for increasing the number of new homes in their administrative area. The New Homes Bonus is paid each year for 6 years. It is based upon the amount of extra Council Tax revenue raised for new build homes, conversions and long-term empty homes brought back into use. There is also an extra payment for the provision of affordable homes. Central government calculates the amount of grant to be awarded to each local authority, based on their number of housing completions for the housing monitoring year (April to March). Local councils can decide how to spend the New Homes Bonus; however, they should consult local communities about how it is spent, especially in areas where housing stock has increased.

Local Transport Plan Funding

Public Sector funding for transport schemes is predominantly secured through the Local Transport Plan settlement provided by Central Government. Worcestershire County Council published its LTP.3 in 2011. The LTP3 strategy will be delivered through a number of shorter-period (up to 5 years) detailed Delivery Plans but it is not yet clear how the County Council will prioritise the investment from the LTP schemes mentioned.

The Delivery Plans will take account of the availability of funding over these periods and the appraisal of the case for investment in specific transport schemes and packages of schemes. Worcestershire County Council is required to prioritise limited funding allocations to invest in transport schemes, with all transport schemes that are proposed for delivery to be appraised using the Worcestershire Transport Scheme Appraisal Framework. The Appraisal Framework will prioritise investment in transport towards proposals which can be proven to best support agreed local and national objectives and thus deliver the greatest returns on investment. However, it is improbable that Worcestershire County Council will be in a position to fund or bid for funding for

many new major transport investment projects unless there is a robust business case to support investment. Within this context and in particular during the first LTP3 Delivery Plan period, Worcestershire County Council will seek to use available funding to maintain or enhance the performance of its existing transport networks to support and enhance the local economy.

Further information on potential funding sources is provided by Worcestershire County Council's background document, "Funding Mechanisms Background Paper", which accompanies the work on infrastructure throughout the County.

8. Going forward

This IDP report and Appendix A have been compiled following on going engagement with infrastructure providers; they are also informed by the findings of technical assessments. Providers were engaged in summer 2013, in conjunction with Bromsgrove District Council and information was requested based on the proposals in the emerging Borough of Redditch Local Plan No.4 and Bromsgrove District Plan. Engagement also occurred during the consultation on the Proposed Submission Local Plan No.4 in November and December 2013.

As this report and Appendix A show, it has not been possible to identify all infrastructure requirements for all infrastructure types in all locations at this time. This is for a variety of reasons including the fact that some providers are currently carrying out their own assessments. Engagement with providers will therefore continue and this report and Appendix A will be updated at appropriate times to reflect new information becoming available.

Appendix A

This appendix consists of two tables:

Table 1 shows the physical and social infrastructure that have been identified to support BORLP No.4 development proposals (excluding transport)

Table 2 shows the identified transport infrastructure requirements including sustainable transport schemes and highway schemes Table 3 shows the physical and social infrastructure that have been identified to support the cross boundary development proposals only

referenced as Appendix 1 in the BORLP No.4 Plan (excluding transport). These are referenced in Policy RCBD1 of the Bromsgrove District Plan.

Table 1 – Schedule of Identified Infrastructure Requirements for Redditch Borough and Cross Boundary Development

Location	Project	Timescales	Cost	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
		Р	hysical Infra	structure			
A. Transport							
s therefore presented join DP and the Bromsgrove I B. Utilities i. Power i.	r i Gas	edditch; this can be	found in Table 2	of this Appendix a	nd should be read	in conjunction wit	h the rest of this
received for the sites. How	issues relating to infrastructive vever, due to the dynamic bads are received but gives	nature of the gas n	etwork this does	not guarantee that	the capacity will b	e available when	connections

RBC INFRASTRUCTU	RE DELIVERY PLAN RI	EPORT – MAR	CH 2014			APPENDIX A	ii	
Location BC D	RAFT IN Project ructui	Timescales	PLANCOSTORT	Sources of Alfunding ⁰¹	Delivery partners	BORLP No.4 policies	Further comments	
i.	ii Electricity							
Brockhill East Strategic Site	New 11kV circuit direct from Redditch North PSS to the site four or five distribution substations, depending on type of demand	In line with development	Cost to be confirmed when site comes forward for development	Developer Western Power Distribution	Developer Western Power Distribution	46	Further detailed assessment will be required	
Town Centre	One or two new 11kV circuits direct from Redditch North PSS to the site four or five distribution substations, depending on type of demand	In line with development	Cost to be confirmed when site comes forward for development	Developer Western Power Distribution	Developer Western Power Distribution	31	Further detailed assessment will be required	
Land to the rear of the Alexandra Hospital	11kV circuit reinforcement work one or two distribution substations	In line with development	Cost to be confirmed when site comes forward for development	Developer Western Power Distribution	Developer Western Power Distribution	47	Further detailed assessment will be required	
Webheath Strategic Site	11kV circuit reinforcement work one or two distribution substations	In line with development	Cost to be confirmed when site comes forward for development	Developer Western Power Distribution	Developer Western Power Distribution	48	Further detailed assessment will be required	
Redditch Eastern Gateway	two or three 11kV circuits direct from Ipsley PSS to the site	In line with development	Cost to be confirmed when site comes forward	Developer Western Power	Developer Western Power	23	Further detailed assessment will be required	

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Location _{RBC DI}	RAFT IN Project ructui	Timescales	LANCOSTORT	Sources of A funding ⁰¹	Delivery partners	BORLP No.4 policies	Further comments
	ten or eleven distribution substations, depending on type of demand		for development	Distribution	Distribution		
Ravensbank	New 11kV circuit direct from Redditch North PSS to the site four or five distribution substations, depending on type of demand	In line with development	Cost to be confirmed when site comes forward for development	Developer Western Power Distribution	Developer Western Power Distribution	23	Further detailed assessment will be required
Foxlydiate Cross Boundary Site	New 11kV circuit direct from Redditch South to the site four or five distribution substations	In line with development	Cost to be confirmed when site comes forward for development	Developer Western Power Distribution	Developer Western Power Distribution	Appendix 1 RCBD1	Further detailed assessment will be required
Brockhill Cross Boundary Site	Some 11kV circuit reinforcement work one or two distribution substations	In line with development	Cost to be confirmed when site comes forward for development	Developer Western Power Distribution	Developer Western Power Distribution	Appendix 1 RCBD1	Further detailed assessment will be required
	communications and						
Telecommunications and I	Broadband is generally deli	ivered on a site by	y site basis with th	e costs being borr	ne by the develope	er and the service	provider.
C. Water							
i. Was	te Water						
Brockhill East Strategic East, Webheath Strategic Site, Brockhill Cross	New gravity based sewer option which would also require	At time of development.	Dependent on which solution is chosen:	The developer will be responsible for	The developer will provide the on-site	18, 46, 48 and Appendix 1 RCBD1	Severn Trent Water is responsible for

Location _{BC DE}	RAFT INPROJECTION	_R Timescales _F	LAN COSTORT	Sources of A funding	Delivery partners	BORLP No.4 policies	Further comments
Boundary Site, Foxlydiate Cross Boundary Site	upgrades to Priest Bridge Sewage Treatment Works or New sewage pumping option to Redditch (Spernal) Sewage Treatment Works (This option is Severn Trent Water's preferred option)	Off-site capacity improvements will be required before the first property is occupied.	£2,800,000+ for gravity based option £1,004,000 for pumped option plus annual operating costs of £6,000 to £8,000 The cost of providing all on-site drainage and the cost of connecting to the nearest existing public sewer(s) work is not known.	the cost of providing all on-site drainage and the cost of connecting to the nearest existing public sewer(s).	drainage. Severn Trent Water is responsible for any off site infrastructure and/or any upgrades to the sewage treatment works.		ensuring there is adequate off-site capacity in the existing sewerage system and providing sewage treatment capacity.
Brockhill East Strategic Site	New gravity sewer and upgrades to existing sewers	At time of development. The timing of off-site capacity improvements will need to be phased to align with occupancy	Estimated to be up to £750,000.	The developer will be responsible for to cost of providing all on-site drainage and the cost of connecting to the nearest existing public	The developer will provide the on-site drainage. Severn Trent Water is responsible for any off site infrastructure and/or any	18, 46	Severn Trent Water is only responsible for paying for infrastructure improvements to ensure there is adequate off-site capacity in the existing

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	DRAFT IN Project ructu	RTimescales	PLANCOSTORT	Sources of A funding 01	Delivery partners	BORLP No.4 policies	Further comments
		rates.		sewer(s).	upgrades to the sewage treatment works.		sewerage system and providing sewage treatment capacity.
All development sites	Connection to sewage network May also require local upsizing of sewers to provide additional capacity	At time of development.	Will vary site by site	The developer will be responsible for to cost of providing all on-site drainage and the cost of connecting to the nearest existing public sewer(s).	The developer will provide the on-site drainage. Severn Trent Water is responsible for any off site infrastructure and/or any upgrades to the sewage treatment works.	3, 4, 23, 31, 34, 46, 47, 48, 49, Appendix 1: RCBD1	Severn Trent Water is only responsible for paying for infrastructure improvements to ensure there is adequate off-site capacity in the existing sewerage system and providing sewage treatment capacity.
ii. Wa	ter Supply						
All development sites	Extension to connect the water supply network will be required for greenfield sites and adjustments to the network for brownfield sites	At time of development.	Will vary site by site	Developer	Developer Severn Trent Water Ltd	3, 4, 23, 31, 34, 46, 47, 48, 49, Appendix 1 RCBD1	Severn Trent Water Ltd confirms that there are no capacity/ water supply issues currently

Location _{BC D}	RAFT IN Project ructu	- Timescales	PLANÇOSTORT	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
							identified.
iii. Floo	od Risk Management						
Ravensbank	SuDS to attenuate and store runoff	At time of development	Cost to be confirmed when site comes forward for development	Developer	Developer RBC WCC / NWWM as SuDS Approval Body	17, 18, 23	Based on SFRA Level 2 WCC / NWWM's role as SuDS Approval Body is currently uncertain and therefore responsibility/ funding for ongoing maintenance of SuDS is unknown
Land to the rear of the Alexandra Hospital	SuDS to attenuate and store runoff	At time of development	Cost to be confirmed when site comes forward for development	Developer	Developer RBC WCC / NWWM as SuDS Approval Body	17, 18, 47	Based on SFRA Level 2 WCC / NWWM's role as SuDS Approval Body is currently uncertain and therefore

Location _{BC D}	RAFT IN Project ructu	_R Timescales	LAN COSTORT	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
				2	Ø		responsibility/ funding for ongoing maintenance of SuDS is unknown
Housing ⁱ Site 211 / Employment ⁱⁱ Site IN82	SuDS to attenuate and store runoff	At time of development	Cost to be confirmed when site comes forward for development	Developer	Developer RBC WCC / NWWM as SuDS Approval Body	3, 4, 17, 18, 23	Based on SFRA Level 2 WCC / NWWM's role as SuDS Approval Body is currently uncertain and therefore responsibility/ funding for ongoing maintenance of SuDS is unknown
Brockhill East Strategic Site	Attenuation Ponds SuDS to attenuate and store runoff	At time of development	Cost to be confirmed when site comes forward for development	Developer	Developer RBC WCC / NWWM as SuDS	3, 17, 18, 46	Based on SFRA Level 2 WCC / NWWM's role as SuDS

Location BC D	RAFT IN Project ructu	R Timescales	LAN COSTORT	Sources of A funding	Delivery partners	BORLP No.4 policies	Further comments
					Approval Body		Approval Body is currently uncertain and therefore responsibility/ funding for ongoing maintenance of SuDS is unknown
Vebheath Strategic Site	SuDS to attenuate and store runoff	At time of development	Cost to be confirmed when site comes forward for development	Developer	Developer RBC WCC / NWWM as SuDS Approval Body	3, 17, 18, 48	Based on SFRA Level 2 WCC / NWWM's role as SuDS Approval Body is currently uncertain and therefore responsibility/ funding for ongoing maintenance of SuDS is unknown
own Centre	SuDS to attenuate and store runoff (green	At time of development	Cost to be confirmed	Developer	Developer	3, 17, 18, 31	Based on SFRA Level 2

Location _{BC DF}	RAFT IN Project ructu	RTimescales	LAN COSTORT	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
	roofs & permeable pavements)		when site comes forward for development		RBC WCC / NWWM as SuDS Approval Body		WCC / NWWM's role as SuDS Approval Body is currently uncertain and therefore responsibility/ funding for ongoing maintenance of SuDS is unknown
D. Waste Manage		4/1 0000		14/00	14/00	0.4.00	
Combined transfer station nd Household Recycling Centre facility in Crossgates Road, Redditch	Potential extension	After 2023	Unknown	WCC	WCC RBC	3, 4, 23	 This is based on current housing stock and projected housing completion rates for Redditch and Bromsgrove

Location _{BC}	DRAFT IN Project ructu	IR Timescales	LANCOSTORT	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
A. Education		So	cial Infrastruc	ture			
Land to the Rear of Alexandra Hospital	Financial contribution towards additional provision at existing schools.	WCC will monitor pupil members to judge when additional provision need to be made. A proportion of growth may be accommodate d in schools with existing spare capacity.	£321,725 (indicative amount based on the no. of bedrooms)	Developer	Developer WCC	47	More information in the Education Provision Supplementary Planning Document
Matchborough Centre	Financial contribution towards additional provision at existing schools.	WCC will monitor pupil members to judge when additional provision need to be made. A proportion of growth may be accommodate d in schools with existing spare capacity.	£17, 411 (indicative amount based on the no. of bedrooms)	Developer	Developer WCC	34	More information in the Education Provision Supplementary Planning Document

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Location _{BC D}	RAFT IN Project ructu	R Timescales	LANCOSTORT	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
Webheath	Financial contribution towards additional provision at existing schools.	WCC will monitor pupil members to judge when additional provision need to be made. A proportion of growth may be accommodate d in schools with existing spare capacity.	£1,514 for each 2/3 bed open market house and £2,271 for each 4+ bed open market house. £606 for 2+ bed flats.	Developer	Developer WCC	48	Approved under application 2012/210/OUT More information in the Education Provision Supplementary Planning Document
Brockhill East Strategic Site	Provision of a new first school on site	New first school building to be ready for occupation in September 2015	Estimate in the region of £6 million (not including land value) WCC to fund re-provision element of new build.	Developer	It is possible that the developer will build the school for WCC although that has not been agreed. It is anticipated that the subsequent cross boundary element will fund a future extension to that school and make a contribution to middle and	46	First school provision of around 30 places per year group. Cross- boundary development on adjacent land will impact on same area. Preferred solution is relocation of existing first school onto site with space for expansion.

Location BC DRAFT IN Project RUCTUR	Timescales	LAN COSTORT -	Sources of A funding ⁰¹³	Delivery partners	BORLP No.4 policies	Further comments
Middle and high school provision of around 30 places per year group. Financial contribution required towards additional provision at existing schools.	WCC will monitor pupil numbers to judge when additional provision needs to be made. A proportion of growth may be accommodate d in schools with existing	£2,995,290 based on cost multiplier. Developer contributions to fund at least 50% of cost of additional places for middle and high schools.		high schools if needed at that point. The exact costs are unclear and will depend on whether WCC is willing and able to fund the relocation of an existing school which was the preferred option or whether it will be a separate entity.		information in the Education Provision Supplementar Planning Document

Location _{BC D}	RAFT IN Project ructu	R Timescales	LANCOSTORT	Sources of funding 013	Delivery partners	BORLP No.4 policies	Further comments
		spare capacity.					
Boundary Site schoo up to	Provision of a new first school with capacity for up to 90 per year group.	In line with development. Depending on spare capacity at time of application may be in first phase of development.	New first school estimate in region of £6 million (not including land value). To be developed in phases alongside development.	Preferred option - 100% to be funded by developer		4, Appendix 1 RCBD1	More information in the Education Provision Supplementary Planning Document
	Contribution towards expansion of existing middle and high school provision for additional 82 places per year group	WCC will monitor pupil numbers to judge when additional provision needs to be made. A proportion of growth may be accommodate d in schools with existing spare capacity.	Middle and high school provision £8,187,126	Developer contributions to fund at least 50% of cost of additional places		-	

Location _{BC DF}	RAFT IN Project ructu	_R Timescales	LAN COSTORT	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
Brockhill Cross Boundary Site	First school provision for Brockhill East Strategic Site will be expanded to also serve this site.	WCC will monitor pupil numbers to judge when additional provision needs to be made. A proportion of growth may be accommodate d in schools with existing spare capacity.	Bulk of first school infrastructure will be in place. Cost of extension to provide additional places to be confirmed.	Preferred option - 100% to be funded by developer	Developer WCC	4, Appendix 1 RCBD1	More information in the Education Provision Supplementary Planning Document
	Contribution towards expansion of existing middle and high school provision for additional 20 places per year group.		Middle and high provision £1,996,860	Developer contributions to fund at least 50% of cost of additional places.	Developer WCC		
B. Health							
Redditch Borough	A review of primary care provision is being undertaken but there is likely to be a shortfall in space accommodation capacity	Unknown	New build GP premises are in the order of £750 per household	Developer NHS	Developer NHS	4, 44	
Brockhill Cross Boundary Site	Further accommodation for an additional 1,541 patients at one or more	To come forward in line with the	ТВС	ТВС	TBC	44, Appendix 1 RCBD1	

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Location _{BC D}	RAFT IN Project ructu	_R Timescales		Sources of Afunding ⁰¹	Delivery partners	BORLP No.4 policies	Further comments
	of the following surgeries / medical centres: Dow, Elgar House, Hillview,St. Stephens.	development			Ø	policies	
Foxlydiate Cross Boundary Site	New surgery / medical centre for additional 6,440 patients	To come forward in line with the development	TBC	ТВС	ТВС	44, Appendix 1 RCBD1	
Brockhill East Strategic Site	Further accommodation for an additional 2,300 patients at one or more of the following surgeries / medical centres: Dow, Elgar House, Hillview,St. Stephens.	To come forward in line with the development	твс	ТВС	TBC	44, 46	
Webheath Strategic Site	Further accommodation for an additional 1,150 patients at one or more of the following surgeries / medical centres: Bridge Dow, Elgar House, Hillview,St. Stephens	To come forward in line with the development	TBC	TBC	TBC	44, 48	
C. Emergency Serv	vices						
Redditch	New police station site	Awaiting outcome of a Strategic Infrastructure Assessment	Awaiting outcome of a Strategic Infrastructure Assessment	WMP Developer	WMP	3	Dispose of existing police station and provide new larger police

Location BC D	RAFT IN PROJECTRUCTU	_R Timescales	LAN ÇO Şt _{ort}	Sources of A funding	Delivery partners	BORLP No.4 policies	Further comments
		(SIA) (due 2014)	(SIA) (due 2014)	6	Ø		station. This will meet current needs and future demands arising from delivery of development growth.
HWFRS site Birmingham Road, Redditch	New fire and rescue station	Not yet known	Not yet known	HWFRS Developer	HWFRS	3	Provision of new fire and rescue station. This will meet current needs and future demands arising from delivery of development growth.
Redditch	Police - Additional officers (set-up costs)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	WMP Developer	WMP	3	
Redditch	Police - Additional	Awaiting	Awaiting	WMP	WMP	3	

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Location BC D	RAFT IN Project ructu	R Timescales F	LANCOSTORT	Sources of Afunding	Delivery partners	BORLP No.4 policies	Further comments
	vehicles and other operational equipment	outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	Developer	Ø		
Redditch	Police - Additional central support staff (set-up costs) to support cross boundary development	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	WMP Developer	WMP	3	
Ambulance Station, Cedar Road	Relocation of ambulance station currently located in Cedar Park Road, Redditch to centralised hubs at Burnt Meadow Road and Clews Road in Redditch - granted planning permission in January 2014.	Spring 2014	Covered by West Midlands Ambulance Service	West Midlands Ambulance Service	West Midlands Ambulance Service	3	
	s (including play area						
Housing site 208	a) contribution for Terrys Field Play Area improvements (off site)b) Playing Pitch improvements at Terrys	In line with development	a) Circa £40K b) Circa £60K	Developer	Developer RBC	4, 12	Possible match funding from Football foundation for pitch

Location _{BC D}	RAFT IN Project ructur	Timescales	PLAN COSTORT	Sources of funding	Delivery partners	BORLP No.4 policies	Further comments
	memorial						improvements
Webheath Strategic Site	 a) Play Area b) Green space community improvements at Morton Stanley Park (off site) c) Contribution to improve Webheath Village Hall d) Contribution to Public Arts Trail at Morton Stanley Park (off site) 	In line with development	a) Circa £60K b) Circa £180K c) Circa £20K d) Circa £15K	Developer	Developer RBC	12, 48	
Brockhill East Strategic Site	 a) 4 community accessible pitches, changing rooms, b) Play area c) Allotments d) contribution at Abbey : Outdoor Changing (off site) e) Playing pitch drainage, 3G contribution 	In line with development	 a) circa £230K b) circa £60K c) circa £40K d) circa £150K e) £500K f) £25K 	Developer	Developer RBC	12, 46	

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Location _{BC D}	RAFT IN PROJECTION	Timescales	PLANCOSTORT	Sources of A funding 01	Delivery partners	BORLP No.4 policies	Further comments
	f) Gateway Art provision				05		
Housing site 215	Contribution to Pitcheroak Woods Access (off site)	In line with development	circa £30K	Developer	Developer RBC	4, 12	
Housing site 216	a) contribution to OpenSpace (off site)b) Play Area inBatchley	In line with development	a) circa 15K b) circa 35K	Developer	Developer RBC	4, 12	
Housing sites 153/135/214	 a) Play Area b) Open Space c) Sports Pitches (off site) d) Allotments in Abbey Dale (off site) 	In line with development	a) circa £50K b) circa £25K c) circa £20K e) unknown	Developer	Developer RBC	4, 12	
Housing site 211	a) Community Centre expansion (off site) b) outdoor sports provision (e.g. 3G) (off site)	In line with development	a) circa £60K b) circa £500K	Developer	Developer RBC	4, 124, 12	
Housing site 156	a) Play Area b) Open Space	In line with development	a) circa £50K b) circa 35K	Developer	Developer RBC	4, 12	
Housing sites 158/200/157	a) Greenlands, pitch drainage, changing rooms (off site)	In line with development	a) circa £230K b) circa £60K	Developer	Developer RBC	4, 12	Possible match funding from Football

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Location _{BC D}	RAFT INPROJECTU	R Timescales	LANCOSTORT	Sources of funding ⁰¹	Delivery partners	BORLP No.4 policies	Further comments
	b) community use rooms (off site)				0		foundation for pitch improvements
Housing site 143	a) Play Areas (off site)b) Open Space (off site)	In line with development	a) circa £50K b) circa 35K	Developer	Developer RBC	4, 12	
Brockhill Cross Boundary Site	Open space, play areas, play pitches	In line with development	Unknown	Developer	Developer RBC	4, 12, Appendix 1 RCBD1	
Foxlydiate Cross Boundary Site	Open space, play areas, play pitches	In line with development	Unknown	Developer	Developer RBC	4, 12, Appendix 1 RCBD1	
E. Libraries							
	Opportunities to locate library services with other services will be sought in new developments, where appropriate.	At time of developments	Unknown	Developers WCC	Developers WCC	31, 34, 46, 48	
F. Cemeteries							
	New cemetery site of at least 1.7ha to serve Redditch Borough	Within two years	Based on a 3ha site: EA consent up to £6,000; Survey up to £3,000; Boreholes up	RBC	RBC	45	A suitable site within the Borough is currently being sought.

Location BC DR	AFT INPROJECTRUCTU	Timescales	LAN COSTORT	Sources of A funding 013	Delivery partners	BORLP No.4 policies	Further comments
			to £6,000; Borehole				
			Monitoring up				
			to £3,000;				
			Ecology				
			surveys up to £20,000;				
			Design fees				
			and costs 4%				
			of build cost; Build cost -				
			£550,000 to				
			£800,000				
		G	reen Infrastructi	ure			

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Table 2 – Transport Infrastructure Requirements for Bromsgrove District and Redditch Borough

Location	Project	Timescales	Cost	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
		F	Physical Infra	structure			
A. Transport							
he road networks in both s therefore presented joi Bus operations – ro lote: Gold and Silver Bu	ehalf of Bromsgrove District Redditch and Bromsgrove, ntly for Bromsgrove and Rep outes and frequencies s Routes/Roadside Infrastru	, the identified tran dditch; this table s	sport infrastructu hould be read in	re requirements ar conjunction with th	e inextricably link e rest of this IDP	ed. The transport e and the Bromsgrov	element of the II ve IDP.
Report (November 2007) Redditch Service 50 (Brockhill Development)	Silver Standard Bus Route, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£400,000.00	Developer	Developer WCC Bus service provider	BORLP No.4: 19, 46	

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Location _{RBC}	DRAFT II Project RUCTU	_R Timescales	PLAN COSTORT	Sources of Alfunding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch Service 51 Brockhill Development)	Silver Standard Bus Route, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£400,000.00	Developer	Developer WCC Bus service provider	BORLP No.4: 19, 46	
Redditch Service 52 Brockhill Development)	Silver Standard Bus Route, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£400,000.00	Developer	Developer WCC Bus service provider	BORLP No.4: 19, 46	
Redditch Service 61 Developments east of he town centre)	Silver Standard Bus Route, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£667,000.00	Developer	Developer WCC Bus service provider	BORLP No.4: 19	

RBC INFRASTRUCT	JRE DELIVERY PLAN R	EPORT – MARC	CH 2014		Δ	PPENDIX A	IV
Location _{RBC E}	DRAFT II Project RUCTU	R Timescales F	LAN COSURT -	Sources of Automotion funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch - Webheath Service	Silver Standard Bus Route, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£134,000.00	Developer	Developer WCC Bus service provider	BORLP No.4: 19, 48	
Bromsgrove Town Centre, linking developments and railway station	Silver standard bus route TBC in clover leaf route	ТВС	800,000	Bus operators Developers	Bus operators	BDP 1 Sustainable Development principles, BDP 5 strategic sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	

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RBC INFRASTRUCTU	JRE DELIVERY PLAN R	EPORT – MARU	JH 2014		<i>µ</i>	APPENDIX A	V
Location _{RBC E}	RAFT II Project RUCTU	R Timescales F	LAN COSURT -	Sources of	Delivery partners	BORLP No.4 / BDP policies	Further comments
Inter-Urban - Service 144 - Birmingham to Worcester (via Bromsgrove and Catshill)	Gold Standard Bus Routes, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£2,200,000.00	Developer	Developer WCC Bus service provider	BORLP No.4: 19 BDP 1 Sustainable Development principles, BDP 5A Town Expansion Sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	
Inter-Urban - Service X3 - Kidderminster to Redditch (via Bromsgrove)	Gold Standard Bus Routes, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900- 2300), Sundays (0800-2000)	In line with development	£1,320,000.00	Developers	Developers WCC Bus service provider	BORLP No.4: 19 BDP 1 Sustainable Development principles, BDP 5A Town Expansion Sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	

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Location _{RBC}	DRAFT IN PROJECT RUCTU	R Timescales	LAN COSURT -	Sources of Automotion	Delivery partners	BORLP No.4 / BDP policies	Further comments
nter-Urban - Service 143 - Birmingham to Redditch (via Bromsgrove and Catshill):	Gold Standard Bus Routes, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£ 1,680,000.00	Developers	Developers WCC Bus service provider	BORLP No.4: 19 BDP 1 Sustainable Development principles, BDP 5A Town Expansion Sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	
Inter-Urban - Service 145 - Bromsgrove to Redditch (via Longbridge)	Gold Standard Bus Routes, Service Frequency; Mon-Sat (15 mins), Evenings and Sundays; min half hourly Periods of Operation; Mon-Sat (0600-1900), Evenings (1900-2300), Sundays (0800-2000)	In line with development	£ 1,200,000.00	Developer	Developer WCC Bus service provider	BORLP No.4: 19 BDP 1 Sustainable Development principles, BDP 5A Town Expansion Sites, BDP 16 Sustainable Transport, BDP 13 New Employment Development	

Location _{RBC}	DRAFT IN Project RUCTU	RTimescales	PLAN ÇOSORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Sustainable Trans		d				-	
Note: See maps at the e	end of this table for details of Signing strategy to link development site to appropriate local cycle routes (particularly Cycle Route 5) Provision for 2 Gold Standard Bus Stops	In line with development	£80,000.00	Developers	Developers WCC	BORLP No.4: 19, 48	Cycle Route 5 routes through Webheath providing an access route for pedestrians and cyclists to Redditch town centre and the railway station via an on road cycle route
Redditch Cluster 2	Improved access from the Foxlydiate Development site to Cycle Route 5 through the residential streets through appropriate route signage Provision for 2 Gold Standard Bus Stops	In line with development	£ 80,000.00	Developers	Developers WCC	BORLP No.4: 4, 19	

Location _{RBC I}	DRAFT IN PROJECT RUCTU	R Timescales F	PLAN COSURT -	Sources of funding ⁰¹³	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch Cluster 3	Connecting the cycle route on Brockhill Lane and Hewell Road to the cycle path running adjacent to Batchley Road and Windsor Road. Include dropped kerbs, road markings, signage and a toucan crossing Provision for 6 (50,51,52 Bus Service Routes) Gold Standard Bus Shelters	In line with development	£230,000.00	Developers	0	BORLP No.4: 19, 46	Cycle route connections would provide a continuous recommended route for cyclists from the development site to Redditch town centre.
Redditch Cluster 4	Connectivity to cycle route network through appropriate route signage Provision for 2 Silver Standard Bus Stops	In line with development	£50,000.00	Developers	Developers WCC	BORLP No.4: 19	The development sites are located in proximity to Cycle Route 5 on Bromsgrove Road and the recommended route for cyclists on Hewell Road and Clive Road which provides links to Redditch town centre.

Location _{RBC}	DRAFT INPROJECTRUCTU	_R Timescales _I	LAN COSURT	Sources of Automotion	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch Cluster 5	Provision for 2 Silver Standard Bus Stops	In line with development	£40,000.00	Developers	Developers WCC	BORLP No.4: 19	The development sites are located in proximity to the recommended route for cyclists on Hewell Road and Clive Road which provides links to Redditch town centre
Redditch Cluster 6	Connectivity to cycle route network through appropriate route signage on the surrounding residential streets, namely; Mount Pleasant, Parsons Road, Union Street and Burton Lane Additional pedestrian crossing on Mount Pleasant in proximity to Parsons Road Provision for 2 Silver Standard Bus Stops	In line with development	£120,000.00	Developers	Developers WCC	BORLP No.4: 19	Routes from the site to the town centre, railway station, bus station and other cycle/pedestria n routes are provided by Plymouth Road, Beoley Road and Holloway Lane

Location _{RBC}	DRAFT II Project ructu	R Timescales	PLAN COSTORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch Cluster 7	Connectivity to cycle route network through appropriate route signage Provision for 2 Silver Standard Bus Stops	In line with development	£50,000.00	Developers	Developers	BORLP No.4: 19	The development sites are located in close proximity to the cycle route which runs north south through Redditch on Park Way, Church Hill Way, Winyates Way and Matchborough Way. The cycle route provides links to the town centre and the employment districts in the east of the town

Location _{RBC}	DRAFT INPROJECTRUCTU	RTimescales	LAN COSORT -	Sources of Automotion	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch Cluster 8	Connectivity to cycle route network through appropriate route signage Provide pedestrian crossing on Studley Lane in proximity to Woodfield Middle School Provision for 2 Silver Standard Bus Stops	In line with development	£120,000.00	Developers	Developers WCC	BORLP No.4: 19	Cycle links north and south are provided by the on road cycle route on Holloway Road. A pedestrian footpath provides a link to Arrow Valley Country Park
Redditch Cluster 9	Connectivity to cycle route network through appropriate route signage and provide linkages from Ipsley Church Lane to NCN5 (dropped kerbs, road markings, cycle signs) Provision for 2 Silver Standard Bus Stops	In line with development	£60,000.00	Developers	Developers WCC	BORLP No.4: 19	Cycle links north and south are provided by the on road cycle route on Studley Road.
Redditch Cluster 10	Connectivity to cycle route network through appropriate route signage Provision for 2 Silver Standard Bus Stops	In line with development	£50,000.00	Developers	Developers WCC	BORLP No.4: 19	Cycle links north and south are provided by the on road cycle route on Studley Road.

Location _{RBC}	DRAFT INProjectRUCTU	R Timescales	-LAN COSTORT	Sources of Afunding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch Cluster 11	Connectivity to cycle route network through appropriate route signage Improve uncontrolled pedestrian crossing facilities at Yvonne Road junction with pedestrian footpath Provision for 2 Silver Standard Bus Stops	In line with development	£60,000.00	Developers	Developers	BORLP No.4: 19	The proposed development sites are located in Crabbs Cross are in proximity to the off road pedestrian/cycl e path which runs adjacent to Windmill Drive and provides a link to Yvonne Road and Swinburne Road in Headless Cross.
Redditch Cluster 12	Provide toucan crossing over the A441 Provision for 2 Gold Standard Bus Stops	In line with development	£140,000.00	Developers	Developers WCC	BORLP No.4: 19	The village of Astwood Bank is linked to the Redditch cycle network via Jill Lane which is a recommended cycle link which provides access to Brickyard Lane in the south east of the town.

vision for 4 Gold ndard Bus Stops at lyates Green dens Close) and	In line with development	£370,000.00	Developers	Developers	BORLP No.4: 19	
ayates Green eswick Close) (2 h site) vision for 2 Gold ndard Bus Stops at a v stop on ybrook Drive (serving route 61) in close kimity to ction with Winward ad grade quiet walking te linking Claybrook ve and cchborough Way. vision for 2 Gold ndard Bus stops lenning Road, shford (services 57, 58a, 59, 150,)		6		WCC		
vi novi ył r r xi te c c v i c te c c v i c s l	ision for 2 Gold dard Bus Stops at a stop on brook Drive (serving route 61) in close imity to ion with Winward d rade quiet walking e linking Claybrook e and hborough Way. ision for 2 Gold dard Bus stops enning Road, hford (services 57, i8a, 59, 150,	ision for 2 Gold dard Bus Stops at a stop on brook Drive (serving route 61) in close imity to ion with Winward d rade quiet walking e linking Claybrook e and shoorough Way. ision for 2 Gold dard Bus stops enning Road, hford (services 57, i8a, 59, 150,	ision for 2 Gold dard Bus Stops at a stop on brook Drive (serving route 61) in close imity to ion with Winward d rade quiet walking e linking Claybrook e and shoorough Way. ision for 2 Gold dard Bus stops enning Road, hford (services 57, 88, 59, 150,	ision for 2 Gold dard Bus Stops at a stop on brook Drive (serving route 61) in close imity to ion with Winward d rade quiet walking e linking Claybrook e and shoorough Way. ision for 2 Gold dard Bus stops enning Road, hford (services 57, 88, 59, 150,	ision for 2 Gold dard Bus Stops at a stop on brook Drive (serving route 61) in close mity to ion with Winward d rade quiet walking e linking Claybrook e and thborough Way. ision for 2 Gold dard Bus stops enning Road, hford (services 57, i8a, 59, 150,	ision for 2 Gold dard Bus Stops at a stop on brook Drive (serving route 61) in close mity to ion with Winward d rade quiet walking e linking Claybrook e and hborough Way. ision for 2 Gold dard Bus stops enning Road, hford (services 57, i8a, 59, 150,

Location _{RBC I}	DRAFT IN Project ructu	R Timescales	LAN COSURT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Foxlydiate Cross boundary site	Links to Local Cycle Network Route 5 Additional signage for pedestrians and cyclists on Church Lane Improve signage to quiet walking route under Bromsgrove Highway and formalise footpath (improved footway and provision of lighting) Provision of an additional 2 Gold Standards Bus Stops	In line with development	£260,000.00	Developers	Developers	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport, RCBD1 Redditch Cross Boundary Development	Costs only include for schemes outside the developer boundary
Brockhill Cross boundary site	Schemes proposed for Redditch Cluster 3 are sufficient to support the additional development proposed at the Cross Boundary Site		No additional costs above and beyond those associated with Redditch Cluster 3			BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport, RCBD1 Redditch Cross Boundary Development	

RBC INFRASTRUCTU	JRE DELIVERY PLAN R	EPORT – MARO	CH 2014			APPENDIX A	XV
Location _{RBC D}	RAFT II Project RUCTU	Timescales	-LAN COSTORT -	Sources of A funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
Various locations around Redditch town centre and residential areas	Provision for additional dropped kerbs	TBC	£110,000.00		WCC RBC	BORLP No.4: 19, 30	Providing additional crossing facilities in the form of controlled/drop ped kerbs will increase the attractiveness of travelling by sustainable modes on certain routes and at key junctions and in turn increase the connectivity across the town
Redditch town centre	Additional cycle parking infrastructure	TBC	£20,000.00		WCC RBC	BORLP No.4: 19, 30	Poor cycle parking provision in town centre currently
Redditch	Improved cycle/ pedestrian signage to Redditch railway station	твс	£160,000.00		WCC RBC	BORLP No.4: 19, 30	
Key locations in Redditch (suggest: at cycle storage facility in town centre, bus station and railway station).	Installation of information kiosks displaying cycle route maps, suggested pedestrian routes etc.	ТВС	£130,000.00		WCC RBC	BORLP No.4: 19, 30	

RBC INFRASTRUCTURE DELIVERY PLAN REPORT – MARCH 2014 APPENDIX A XVI BORLP Delivery Sources of Further Timescales PLAN CostoRT No.4/BDP Location_{RBC DRAFT INProject RUCTUR} funding partners comments policies TBC WCC BORLP No.4: Redditch Upgrade to a number of £130,000.00 A number of RBC existing subways subwavs in 19 Redditch are in poor condition and pedestrians feel intimidated when using them Redditch Ring way Toucan crossing at a TBC £80,000.00 WCC BORLP No.4: RBC suitable location 30 £10m WCC, Centro, DfT, Centro, BDP 13 New Bromsgrove railway Relocation of existing 2014-2015 Station station and construction Network Rail. WCC. Network Employment of station building, car DfT Rail, BDC Development park, new platforms, cycle storage, bus/ rail interchange. Works will

	facilitate line electrification						
Perryfields BROM2 (cluster 5 see map below)	Signing strategy to link Perryfields Development site to Cycle Route 5 through residential streets such as Green Road, Carol Avenue, Grayshott Close, Junction Road and Willow Road Provision for 2 Gold Standard Bus Stops	Alongside development?	£100,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Part of design not necessarily a planning obligation Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack of connectivity

Location _{RBC}	DRAFT II Project RUCTU	R Timescales	LAN COSURT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
	Pedestrian/cycle crossing in proximity of Sidemoor First school and nursery. Provide a Toucan crossing	Alongside development?	£80,000	Developers	Developers/W CC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Part of design not necessarily a planning obligation Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack o connectivity
	Provide a shared use pedestrian/cycle path adjacent to Perryfields Road to link Kidderminster Road with Stourbridge Road	Alongside development?	£1,420,000	Developers	Developers/W CC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Part of design not necessarily a planning obligation. Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack o connectivity

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Location _{RBC E}	RAFT II Project RUCTU	R Timescales	PLAN COSORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Norton Farm (cluster 6 see map below)	Scheme to link through development site to directly connect Cycle Routes 1 and 2 via Elm Grove and Public Footpath to the north, to link Barnsley Hall Drive and provide signage Provision for 2 Gold Standard Bus Stops	Alongside development?	£610,000	Developers	Developers/W CC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Part of design not necessarily a planning obligation Check if already negotiated as part of S106. Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack of connectivity
Development sites located between Burcot Lane and Slideslow Drive in proximity to Cycle Route 1 (cluster 7 see map below)	Signing Strategy to provide directions from development site to Cycle Route 1 Provision for 2 Gold Standard Bus Stops	Alongside development?	£80,000	Developers	Developers/W CC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack of connectivity

Location _{RBC D}	RAFT II Project RUCTU	R Timescales F	LAN COSURT	Sources of Alfunding ⁰¹³	Delivery partners	BORLP No.4 / BDP policies	Further comments
Development sites located south of Bromsgrove Highway and in proximity to Cycle Route 5 on Chesworth Road (Oakalls) (cluster 8 see map below)	Road/Cornforth Road via	Alongside development?	£210,000	Developers	Developers/W CC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack of connectivity
Whitford Road Development site ocated to the west of Whitford Road. (Cluster 9 see map below)	Potential to create designated walk / cycle route from the development site to the town centre via Sanders Park -upgrade existing path Provision for 2 Silver Standard Bus Stops	Alongside development?	£560,000.00	Developers	Developers/W CC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack of connectivity

Location _{RBC}	DRAFT II Project ructu	Timescales	PLAN COSURT	Sources of funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
	Toucan crossing as no existing crossing facility on Whitford Road to access site	Alongside development?	£100,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack of connectivity
Development sites ocated both east and vest of the railway line. Cluster 11 see map below)	Improved signage for pedestrians and cyclists via Railway Walk, Newton Avenue and Sherwood Road. Toucan pedestrian crossing at the A38 junction with Charford Road and a signed pedestrian/cycle path linking Charford Road with Conway Road (behind South Bromsgrove High School) to provide a link towards the town centre. Provision for 2 Gold Standard Bus Stops	Alongside development?	£520,000.00	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack o connectivity

Location _{RBC D}	RAFT IN PROJECT RUCTU	Timescales	LAN COSURT -	Sources of funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
/arious locations around Bromsgrove town centre and residential areas		Alongside development/ on-going?	£110,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Possible overlap with Town Centre Public realm enhancement works. Existing pedestrian and cycle infrastructure in poor condition can prevent use
Bromsgrove Town centre	Additional cycle parking infrastructure in Bromsgrove	Alongside development/ on-going?	£10,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Possible overlap with Town Centre Public realm enhancement works. Lack of adequate cycle storage facilities in Town Centre may prevent cycle trips to Bromsgrove and in turn increase trips into the Town Centre by sustainable modes

Location _{RBC E}	DRAFT IN Project RUCTU	R Timescales	PLAN COSURT	Sources of A funding 01	Delivery partners	BORLP No.4 / BDP policies	Further comments
Bromsgrove Railway Station	Improved signing of Cycle Route 5 to provide directions to station	Alongside development/ on-going?	£40,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Possible overlap with Town Centre Public realm enhancement works. Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
New Road corridor	Providing additional facilities for cyclists and pedestrians along the New Road corridor improve the attractiveness of the key route linking the town centre and the railway station. Includes additional dropped kerbs, a Toucan Crossing, informal crossings and additional street signage	Alongside development/ on-going?	£150,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Possible overlap with Town Centre Public realm enhancement works. Existing pedestrian and cycle infrastructure in poor condition without appropriate signage can prevent use

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Location _{RBC D}	RAFT IN PROJECT RUCTU	R Timescales I	PLAN COSORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Key locations in Bromsgrove. i.e. bus station and railway station.	Installation of information kiosks displaying cycle route maps, suggested pedestrian routes etc. at cycle storage facility, bus station and railway station. Provision of Gold Standard Bus Shelters at nearest bus stops to the information kiosks	Alongside development/ on-going?	£220,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Possible overlap with Town Centre Public realm enhancement works. Lack of appropriate facilities for sustainable transport users will not increase the number of non- car trips
High Street, Church Street, Mill Lane, School Drive, Worcester Road and Market Place	Public realm enhancement scheme	Alongside development?	£4,656,800	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5A Town Expansion sites, BDP 16 Sustainable Transport, BDP 17 Town Centre Regeneration	Possible overlap with Town Centre Public realm enhancement works. Existing pedestrian and cycle infrastructure in poor condition without appropriate signage can prevent use

RBC INFRASTRUCTU	BC INFRASTRUCTURE DELIVERY PLAN REPORT – MARCH 2014						
Location _{RBC D}	RAFT II Project RUCTU	R Timescales F	LAN COSURT -	Sources of A funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
Hagley	Provision of a Toucan crossing over the A456 at the south western corner of the development site. This will also provide access to the Hagley Primary School.	Alongside development?	£90,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5 strategic sites, BDP 16 Sustainable Transport.	Part of design not necessarily a planning obligation Check if already negotiated as part of S106. Not providing links to existing sustainable transport networks from proposed development sites can prevent trips due to a lack of connectivity

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BC INFRASTRUCTURE DELIVERY PLAN REPORT – MARCH 2014						APPENDIX A	
Location _{RBC I}	DRAFT II Project ructu	R Timescales F	LAN Costort -	Sources of A funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
	Additional cycle parking infrastructure at West Hagley Railway Station	Alongside development?	£20,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5 strategic sites, BDP 16 Sustainable Transport.	Part of design not necessarily a planning obligation Check if already negotiated as part of S106. Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non car trips made to the site

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	C INFRASTRUCTURE DELIVERY PLAN REPORT – MARCH 2014						APPENDIX A			
Location _{RBC I}	DRAFT II Project ructu	_R Timescales _F	LAN COSTORT -	Sources of funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments			
	Improved signing of cycle routes to West Hagley Railway Station	Alongside development?	£20,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5 strategic sites, BDP 16 Sustainable Transport.	Part of design not necessarily a planning obligation Check if already negotiated as part of S106. Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site			

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Location _{RBC I}		R Timescales	LAN COSURT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
	Installation of information kiosks displaying cycle route maps, suggested pedestrian routes etc. at key locations in Hagley. Suggested site: railway station. Provision of a Gold Standard Bus Shelter at nearest bus stop to the information kiosks	Alongside development?	£80,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 5 strategic sites, BDP 16 Sustainable Transport.	Part of design not necessarily a planning obligation Check if already negotiated as part of S106. Lack of appropriate facilities for sustainable transport users will not increase the number of non- car trips
ongbridge	Provide additional cycle parking infrastructure at Longbridge Railway Station	Alongside development?	£30,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Not negotiated for on Planning application. Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site

RBC INFRASTRUCTURE DELIVERY PLAN REPORT – MARCH 2014 APPENDIX A BORLP Sources of Delivery Further No.4/BDP Location_{RBC DRAFT In}Project_{RUCTUE} **Timescales** AN COSTORT funding partners comments policies BDP 1 Improved signing of Alongside £20,000 Developers Developers/ Not negotiated WCC cvcle routes to development? Sustainable for on Planning Longbridge Railway Development application? Station principles, Lack of BDP 16 appropriate Sustainable facilities for Transport. sustainable transport users at the Rail Station will not increase the number of noncar trips made to the site BDP 1 Installation of information Alongside £80,000 Developers Developers/ Not negotiated WCC for on Planning kiosks displaying cycle development? Sustainable Development application? route maps, suggested pedestrian routes etc. at principles, Lack of BDP 16 key locations in appropriate Longbridge. Suggested Sustainable facilities for site: railway station. Transport. sustainable Provision of a Gold transport users Standard Bus Shelter at at the Rail nearest bus stop to the Station will not information kiosks increase the number of noncar trips made to the site

RBC INFRASTRUC	TURE DELIVERY PLAN R		APPENDIX A				
Location _{RBC}	DRAFT IN PROJECT RUCTU	- Timescales	PLAN COSURT	Sources of funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
Barnt Green	Provide additional cycle parking infrastructure at Railway Station	Alongside development?	£30,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
	Improved signing of cycle routes to Barnt Green Railway Station	Alongside development?	£20,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
Barnt Green railway station	Installation of information kiosks displaying cycle route maps, suggested pedestrian routes etc. at key locations in Barnt Green. railway station. Provision of a Gold Standard Bus Shelter at nearest bus stop to the information kiosks	Alongside development?	£80,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site

Location _{RBC E}	RAFT II Project ructu	R Timescales	LAN COSTORT -	Sources of A funding ⁰¹³	Delivery partners	BORLP No.4 / BDP policies	Further comments
	New ramped access pedestrian footbridge to provide access to all platforms for wheelchair users	Alongside development?	£1,805,000.00	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
Barnt Green to Redditch capacity enhancement (to enable increase from 2 to 3 trains per hour)	New passing loop and second platform at Alvechurch	Late 2014	tbc	Network rail	Network rail	BDP 16 Sustainable Transport	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
Alvechurch	Additional cycle parking infrastructure at Railway Station	Alongside development?	£30,000.00	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site

RBC INFRASTRUCT	URE DELIVERY PLAN R	EPORT – MARC	CH 2014		A	PPENDIX A	
Location _{RBC E}		Timescales	LAN Costort	Sources of Automotion funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
	Improved signing of cycle routes to Railway Station	Alongside development?	£20,000.00	Developers	Developers /WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
	Installation of information kiosks displaying cycle route maps, suggested pedestrian routes etc. at key locations in Alvechurch. Suggested site: railway station. Provision of a Gold Standard Bus Shelter at nearest bus stop to the information kiosks	Alongside development?	£80,000.00	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
Alvechurch railway station	Provision of a ticket vending machine (TVM)	Summer 2014	£35,000	Centro / London Midland joint funded as part of TRT minor works programme	London Midland	BDP 16 Sustainable transport	

Location _{RBC [}	DRAFT II Project RUCTU	Timescales	LAN COSTORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Wythall Railway Station	Provide additional cycle parking infrastructure	Alongside development?	£30,000	Developers	Developers WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
	Provide two new high standard bus shelters with RTI system outside Wythall railway Station	Alongside development?	£50,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
	Improved signing of cycle routes to Wythall Railway Station	Alongside development?	£20,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site

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Location _{RBC}	DRAFT II PROJECTRUCTU	R Timescales	PLAN COSURT	Sources of funding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
	Installation of information kiosks displaying cycle route maps, suggested pedestrian routes etc. at key locations in Wythall. Suggested site: railway station.	Alongside development?	£50,000	Developers	Developers/W CC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of appropriate facilities for sustainable transport users at the Rail Station will not increase the number of non- car trips made to the site
Wythall	Cycle parking, bus shelters, signage and information	TBC	£150,000	Network rail	Network Rail/WCC	BDP 16 Sustainable transport	This may be duplicated above-check
Rail							
Redditch - Birmingham Railway Line/Service	Enhancements to the existing rail infrastructure and service	Start on site Autumn/ Winter 2013. Scheme completed 2014	Network Rail has sufficient funds to cover the cost	Network Rail	Network Rail Rail service provider	BORLP No.4: Policy 19	Examination of proposed scheme took place in April/May 2013. Examiner's report due to be sent to Secretary of State in August/ September 2013.

RBC INFRASTRUCT	URE DELIVERY PLAN R	EPORT – MARO	CH 2014			APPENDIX A	
Location _{RBC I}	DRAFT II. Project ructu	Timescales	LAN COSURT	Sources of Alfunding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
Highway Schemes						-	
A441 / B4101 Dagnell End Road	Add additional approach lane on the eastern arm and put on MOVA ⁱⁱⁱ	TBC	£520,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on a key route from Redditch to the Birmingham Conurbation
Bromsgrove Highway / Brockhill Drive (North Roundabout)	Add Additional lane approach lane on Brockhill Drive	TBC	£280,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on a key route from Redditch to Bromsgrove
Birchfield Lane / Foxlydiate Lane	TRO to protect the junction	TBC	£30,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on a key route from Redditch to Bromsgrove
Brockhill Drive (B4184) / Hewell Road (B4184) / Brockhill Lane	Additional lane on west and north approaches	TBC	£600,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on a key route from residential areas to Redditch town centre and the wider highway network

Location _{RBC I}	DRAFT II Project RUCTU	R Timescales	PLAN COSORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Hewell Road / Windsor Road (B4184)	Convert to a 4 arm signal junction	TBC	£1,490,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on a key route from residential areas to Redditch town centre and the wider highway network
Alvechurch Highway (A441) / Middlehouse Lane (B4184)	Signalise approaches from north, south and west	ТВС	£1,420,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from residential areas and Redditch town centre to the wider highway network
Alvechurch Highway (A441) / Redditch Ringway (B4160)	Install MOVA (see footnote 1)	TBC	£60,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from Redditch town centre to the wider highway network

Location _{RBC D}	RAFT IN PROJECT RUCTU	Timescales	PLAN COSTORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
Headless Cross Drive / Evesham Road	Install MOVA (see endnote i)	TBC	£60,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from residential areas to the wider highway network
Rough Hill Drive / Woodrow Drive / Greenlands Drive	Additional approach lane on main 3 approaches (not Woodrow N)	TBC	£1,280,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from residential/ employment areas to the wider highway network and on routes towards the hospital site
Woodrow Drive / Quinneys Lane (hospital access)	50m additional approach lane on western arm - right turn into the hospital	TBC	£280,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from residential/ employment areas to the wider highway network and on routes towards the hospital site

Location _{RBC D}	RAFT IN Project RUCTU	R Timescales	LAN COSURT	Sources of Alfunding ⁰¹³	Delivery partners	BORLP No.4 / BDP policies	Further comments
Woodrow Drive / Washford Drive / Studley Road	40m additional approach lane on south and eastern approach arm	TBC	£530,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from residential/emp loyment areas to the wider highway network and on routes towards the hospital site
Vashford Drive / Old Forge Drive	Signing and lining improvement	TBC	£110,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from residential/ employment areas to the wider highway network and on routes towards the hospital site

Location _{RBC D}	RAFT II Project RUCTU	R Timescales F	LAN COSURT -	Sources of A funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
lcknield St Dr (B4497) / Washford Drive / Claybrook Drive	Signing and lining improvement	TBC	£110,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on key routes from residential/ employment areas to the wider highway network and on routes towards the hospital site
Astwood Bank - Evesham Road (A441) / Feckenham Road / Sambourne Lane (B4092)	Install MOVA (see endnote i)	ТВС	£60,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on a key route from Redditch to Evesham
Brockhill Drive Corridor	Replace 4 existing Roundabout Junctions with Signalised Junctions all operating using MOVA (see endnote i)	TBC	£12,250,000.00	Developers	Developers WCC	BORLP No.4: 3, 20	Congestion at this junction will impact on a key route from residential areas to Redditch town centre and the wider highway network

Location _{RBC}	DRAFT IN Project ructu	_R Timescales	LAN Costort	Sources of Alfunding ⁰¹	Delivery partners	BORLP No.4 / BDP policies	Further comments
Redditch Eastern Gateway – A4023 Coventry Highway	4 arm roundabout	In line with development	£1,300,000.00	Developers	WCC Warwickshire CC	BORLP No.4: 3, 20	
M5 junction 4	Widening and realigning the roundabout and improving signage and road markings.	Starts 2014- ends 2015	£11,300,000	DfT	Highways Agency	BDP 13 New Employment Development BDP 14 Designated Employment BDP 16 Sustainable transport	'Pinchpoint' scheme. Any overlap with schemes below Ref: M5 Junction 4 / A38 (Birmingham Road)

Location _{RBC D}	RAFT IN Project RUCTU	RTimescales	PLAN COSORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
M5 Junction 4	Improvements likely to be required as there is a need to increase A38 capacity in the southbound direction to ensure queues do not reach back to M5. This would include additional southbound lane through junction linking A38 (Birmingham Road) and A38 (Halesowen Road)	TBC	3,900,000	Developers	HA/WCC/Dev eloper	BDP 1 Sustainable Development Principles, BDP 16 Sustainable Transport	Exact nature of scheme still to be determined (as at 11.11.13) but initial testing of extending the existing two lane merge on the A38 has demonstrated a positive impact on queues at this junction.
A38 (Worcester Road/Redditch Road) / 34094 (Worcester Road)	Implement signalised junction to replace existing roundabout	Alongside development	£1,250,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will impact on a key route from Bromsgrove to Droitwich and Worcester

Location _{RBC I}	DRAFT IN Project ructu	_R Timescales _F	LAN COSTORT -	Sources of Automatication	Delivery partners	BORLP No.4 / BDP policies	Further comments
A38 (Redditch Road) / Hanbury Road	Upgrade signal junction to install MOVA	TBC	£60,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion on this route will impact on key A38 corridor through Bromsgrove which links residential and employment developments and forms part of the strategic road network through the town
A38 (Redditch Road) / Austin Road / Buntsford Park Road	Implement signalised junction to replace existing roundabout	TBC	£2,460,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion on this route will impact on key A38 corridor through Bromsgrove which links residential and employment developments and forms part of the strategic road network through the town

Location _{RBC E}	DRAFT IN PROJECT RUCTU	R Timescales	LAN COSURT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
A38 (Redditch Road) / Buntsford Drive	Implement signalised junction to replace existing roundabout	TBC	£1,800,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion on this route will impact on key A38 corridor through Bromsgrove which links residential and employment developments and forms part of the strategic road network through the town
A38 / Stoke Road	Signal Optimisation Scheme	TBC	£60,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion on this route will impact on key A38 corridor through Bromsgrove which links residential and employment developments and forms part of the strategio road network through the town

RBC INFRASTRUCT	JRE DELIVERY PLAN R	EPORT – MARC	CH 2014			APPENDIX A	X
Location _{RBC E}	DRAFT II Project RUCTU	R Timescales	LAN Costort -	Sources of Automotion	Delivery partners	BORLP No.4 / BDP policies	Further comments
A448 (Bromsgrove Highway) / A38	Signalised Roundabout junction. Signals in operation on A38and eastern A448 approach. Operated using MOVA. Provide a 'hamburger' section through the junction to link the westbound A448 approach with the northbound A38 at the north of the junction	TBC	£9,310,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion on this route will impact on key A38/A448 intersection linking Bromsgrove and Redditch

Location _{RBC I}	DRAFT II Project RUCTUI	Timescales	PLAN COSURT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
M42 Junction 1 / A38	Close off access to existing signalised roundabout from B4096 (Alcester Road) - requires supporting TRO. Re-direct traffic via School Lane (Lickey End). Signal optimisation scheme at junction. Implement signalised junction on A38/School to accommodate diverted traffic resulting from scheme proposal. Scheme will require a school safety zone and supporting TRO	TBC	£1,140,000	Developers	HA/ WCC/ Developers	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will impact on the key A38 route from Bromsgrove to the strategic road network and the Birmingham Conurbation. Conurbation Alterations to the layout of the junction to improve traffic flow on the A38 to ensure that queues or the off slip do not reach back to the motorway mainline may be required.
M42 Junction 2	Minor improvements	Prior to 2022	TBC	TBC	HA/ WCC/ Developers	BDP 1 Sustainable Development Principles, BDP 16 Sustainable Transport.	Likely to still cause queues on A441.

RBC INFRASTRUCTU	JRE DELIVERY PLAN R	EPORT – MARC	CH 2014		Δ	PPENDIX A	XII
Location _{RBC E}	DRAFT II Project RUCTU	R Timescales	-LAN Costort	Sources of Alfunding	Delivery partners	BORLP No.4 / BDP policies	Further comments
M42 Junction 3	Expansion of westbound slip to 3 lanes	Prior to 2022	TBC	TBC	HA/WCC/ Developers	BDP 1 Sustainable Development Principles, BDP 16 Sustainable Transport.	Improvement s to ensure queues do not reach back to the mainline. The exact length of the widening to be determined as part of more detailed analysis
A448 (Kidderminster Road) / Whitford Road / Perryfields Lane	This junction is being investigated by the Perryfields Road and Whitford Road development sites allocated within the plan	TBC	£4,370,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDSP 5 A Town Expansion Sites BDP 16 Sustainable Transport.	Congestion at this junction will impact on a key route into Bromsgrove town centre from Kidderminster and residential areas on the edge of the town

	URE DELIVERY PLAN R	EPORT – MARC	CH 2014			APPENDIX A	XIII
Location _{RBC I}		R Timescales	LAN COSURT -	Sources of Alfunding ⁰¹³	Delivery partners	BORLP No.4 / BDP policies	Further comments
B4091 (Stourbridge Road) / Barnsley Hall Road	This junction is being investigated by the Perryfields Road development site allocated within the plan	TBC	£3,680,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDSP 5 A Town Expansion Sites BDP 16 Sustainable Transport.	Congestion at this junction will impact on a key route into Bromsgrove town centre and residential areas on the edge of the town
A448 (The Strand and Market Street) / Stourbridge Road / Birmingham Road	Signal Optimisation Scheme	ТВС	£60,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport. BDP 17 Town Centre Regeneration	Congestion at this junction will routes into Bromsgrove town centre
B4184 (New Road / Finstall Road)	Replace mini roundabout with signalised junction	TBC	£330,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will routes into Bromsgrove town centre

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Location _{RBC [}	DRAFT II Project RUCTUI	Timescales	LAN COSTORT -	Sources of A funding ⁰¹³	Delivery partners	BORLP No.4 / BDP policies	Further comments
84091 (Rock Hill) / Fox ane Whitford Road BROM 3	This junction is being investigated by the Whitford Road development site allocated within the plan. Site constrained by The Greyhound Pub, Select and Save Local Convenience Store and The Cheap Car Trade Centre (Car Dealership). Vehicles are also parked close to the junction adjacent to the southbound carriageway. Replace existing junction with signalised junction to improve output of vehicles from Fox Lane onto B4091 (Rock Hill). TRO required to prevent parking adjacent to the southbound carriageway. Junction to be operated using MOVA control. Remove existing pedestrian crossing north of junction and incorporate all movement crossing facility at proposed junction.	TBC	£770,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDSP 5 A Town Expansion Sites BDP 16 Sustainable Transport.	Congestion at this junction will affect routes into Bromsgrove town centre

RBC INFRASTRUCT	JRE DELIVERY PLAN RI	EPORT – MARC	CH 2014		A	PPENDIX A	XV
Location _{RBC}	RAFT II Project RUCTUI	R Timescales F	LAN COSURT -	Sources of A funding ⁰¹³	Delivery partners	BORLP No.4 / BDP policies	Further comments
A448 Kidderminster Road / St John Street / B4091 (Hannover Street)	Junction is constrained by adjacent properties. Replace existing junction with signalised junction. Additional eastbound approach lane into the junction on Kidderminster Road -this will require some civils work to reconfigure the existing kerb lines and a reduction in the width of the footways. Remove existing pedestrian crossing north of junction and incorporate all movement crossing facility at proposed junction.	TBC	£1,120,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport. BDP 17 Town Centre Regeneration	Congestion at this junction will affect routes into Bromsgrove town centre

Location _{RBC}	DRAFT II Project ructui	Timescales	LAN COSURT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
A448 (Market Street) / B4184 Market Place	Junction is constrained by adjacent properties. Replace existing junction layout with a signalised junction. Reposition traffic island and retain the southbound 'Give Way' into Market Place. Remove both existing pedestrian crossings in proximity to junction and provide an all red phase and pedestrian crossing facilities at the junction. Extend northbound right turn lane to allow additional stacking capacity.	TBC	£1,490,000.00	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport. BDP 17 Town Centre Regeneration	Congestion at this junction will affect routes into Bromsgrove town centre
A38 / B4184 (New Road)	Signal Optimisation Scheme	TBC	£60,000.00	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport. BDP 17 Town Centre Regeneration	Congestion on this route will impact on key A38 corridor through Bromsgrove which links residential and employment developments and forms part of the strategic road network through the town

Location _{RBC E}	RAFT II Project RUCTU	R Timescales	LAN Costort	Sources of Alfunding	Delivery partners	BORLP No.4 / BDP policies	Further comments
A38 (Birmingham Road) Birmingham Road	Signal Optimisation Scheme	TBC	£60,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport. BDP 17 Town Centre Regeneration	Congestion on this route will impact on key A38 corridor through Bromsgrove which links residential and employment developments and forms part of the strategic road network through the town
Hagley A456 (Kidderminster Road) / A491 (Hagley Road)	Signal optimisation scheme	ТВС	£60,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will impact on the key A456 and A491 routes through the town
A456 (Kidderminster Road) / A491 Stourbridge Road)	Signalisation of roundabout on the A456 and A491 approaches	твс	£880,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will impact on the key A456 and A491 routes through the town

Location _{RBC E}	RAFT II Project RUCTU	Timescales	PLAN COSTORT -	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
A456 (Worcester Road) / A450 (Worcester Road)	Signal optimisation scheme	TBC	£60,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will impact on the key A456 and A491 routes through the town
A456 Kidderminster Road / Development access	Any priority junction provided by the developer must be upgraded to a signalised junction. Note: costs allow for upgrade of priority junction to a signalised junction	TBC	£330,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will impact on the key A456 and A491 routes through the town
A456 (Worcester Road) / B4187 (Worcester Road)	Signal optimisation scheme	ТВС	£60,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	
Station Road	School Safety Zone Traffic Management Scheme and supporting TRO	TBC	£50,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Lack of a scheme at this location may have consequences for the safety of pedestrians outside the school entrance

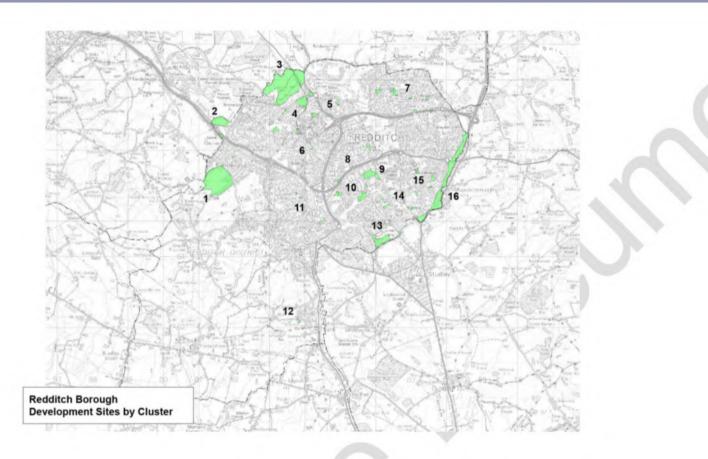
Location _{RBC I}	DRAFT IN Project ructu	R Timescales	PLAN COSTORT	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
A491 (Sandy Lane) / B4551 (Money Lane)	Junction safety scheme to narrow down the approach to the A491 from the B4551	TBC	£370,000	Developers	Developers/ WCC	BDP 1 Sustainable Development principles, BDP 16 Sustainable Transport.	Congestion at this junction will impact on route linking Bromsgrove/M 5/M42 with Hagley and Stourbridge







APPENDIX A 21



¹ A list of housing sites can be found in Appendix 2 of Local Plan No.4 ¹ A list of employment sites can be found in Appendix 3 of Local Plan No.4 ¹ MOVA – Microprocessor Optimised Vehicle Actuation. A strategy for the control of traffic light signals at isolated junctions, i.e. junctions that are uncoordinated with any neighbouring junctions.

Table 3 – Schedule of Identified Infrastructure Requirements for Cross Boundary Development

Location	Project	Timescales	Cost	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	Further comments
B. Utilities i. Power i.i Gas National Grid confirms no is	ssues relating to infrastructure	or capacity at this ti	me. Further investig	ation would be requ	ired when firm conn	ections requests ar	e received for the
sites. However, due to the o	dynamic nature of the gas net ation of the availability of gas	work this does not g	uarantee that the ca	pacity will be availa	ble when connectior	ns requests for the s	
Foxlydiate Cross Boundary Site	New 11kV circuit direct from Redditch South to the site four or five distribution substations	In line with development	Cost to be confirmed when site comes forward for development	Developer/ Western Power Distribution	Developer/West ern Power Distribution	BORLP4 - Appendix 1 RCBD1 BDP - RCBD1	Further detailed assessment will be required
Brockhill Cross Boundary Site	Some 11kV circuit reinforcement work one or two distribution substations	In line with development	Cost to be confirmed when site comes forward for development	Developer/ Western Power Distribution	Developer/ Western Power Distribution	BORLP4 - Appendix 1 RCBD1 BDP - RCBD1	Further detailed assessment will be required
Ravensbank	New 11kV circuit direct from Redditch North PSS to the site four or five distribution substations, depending on type of demand	In line with	Cost to be confirmed when site comes forward for development	Developer/ Western Power Distribution	Developer/ Western Power Distribution	BORLP4 - Appendix 1 RCBD1 BDP - RCBD1	Further detailed assessment will be required

ii. Telecommunications and Broadband

Telecommunications and Broadband is generally delivered on a site by site basis with the costs being borne by the developer and the service provider.

RBC INFRASTRUCTUR Location	E DELIVERY PLAN REPO Project	ORT – MARCH 20 ⁷ Timescales	Cost	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	²³ Further comments
C. Water							
i. Waste Water					-		
Brockhill East Strategic East, Webheath Strategic Site, Brockhill Cross Boundary Site, Foxlydiate Cross Boundary Site	New gravity based sewer option which would also require upgrades to Priest Bridge STW Or New sewage pumping option to Redditch (Spernal) STW	At time of development. Off-site capacity improvements will be required before the first property is occupied	Dependent on which solution is chosen: £2,800,000+ for gravity based option £1,004,000 for pumped option plus annual operating costs of £6,000 to £8,000 The cost of providing all on-site drainage and the cost of connecting to the nearest existing public sewer(s) work is not known.	The developer will be responsible for the cost of providing all on- site drainage and the cost of connecting to the nearest existing public sewer(s).	The developer will provide the on-site drainage. Severn Trent will provide any off site infrastructure and/or any upgrades to the sewage treatment works.	BORLP4 - Appendix 1 RCBD1 BDP - RCBD1	Severn Trent is only responsible for ensuring there is adequate off-site capacity in the existing sewerage system and providing sewage treatment capacity.
ii. Water supply							
All development sites	Extension to the water supply network will be required for greenfield sites and adjustments to the network for brownfield sites	At time of development	Will vary site by site	Developer	Developer Severn Trent Water Ltd	BORLP4 - 3, 4, 23, 31, 34, 46, 47, 48, 49, Appendix 1: RCBD1	Severn Trent Water Ltd confirms that there are no capacity/ supply issues currently identified.
iii. Flood Risk Manage	ement						
Ravensbank	SuDS to attenuate and	At time of		Developer	Developer		Based on SFRA

RBC INFRASTRUCTURE	E DELIVERY PLAN REPOI Project	RT – MARCH 201 Timescales	4 Cost	Sources of funding	Delivery partners	BORLP No.42 / BDP policies	⁴ Further comments
	store runoff	development		responsibility for revenue cost of maintenance is currently unclear	RBC WCC as SuDS Approval Body		level 2 WCC's role as SuDS Approval Body is currently uncertain and therefore responsibility/ funding for ongoing maintenance of SuDS is unknown
D. Waste Management							
Combined transfer station and Household Recycling Centre facility in Crossgates Road, Redditch	Potential extension	After 2023	Unknown	WCC	WCC RBC	BORLP4 - 3, 4, 23	This is based on current housing stock and projected housing completion rates for Redditch and Bromsgrove
A. Education							<u></u>
Foxlydiate Cross Boundary Site	Provision of a new first school with capacity for up to 90 per year group.	In line with development. Depending on spare capacity at time of application may be in first phase of development.	New first school estimate in region of £6 million (not including land value). To be developed in phases alongside development.	Preferred option - 100% to be funded by developer	Developer WCC	BORLP4 - Appendix 1 RCBD1 BDP – RCBD1	More information in the Education Provision Supplementary Planning Document
	Contribution towards expansion of existing	WCC will monitor pupil	Middle and high school provision	Developer contributions to			

RBC INFRASTRUCTUR Location	E DELIVERY PLAN REPO Project	RT – MARCH 201 Timescales	4 Cost	Sources of funding	Delivery partners	BORLP No.4 / BDP policies	²⁵ Further comments
	middle and high school provision for additional 82 places per year group	numbers to judge when additional provision needs to be made. A proportion of growth may be accommodated in schools with existing spare capacity.	£8,187,126	fund at least 50% of cost of additional places	0		
Webheath	Financial contribution towards additional provision at existing schools.	WCC will monitor pupil members to judge when additional provision need to be made. A proportion of growth may be accommodated in schools with existing spare capacity.	£1,514 for each 2/3 bed open market house and £2,271 for each 4+ bed open market house. £606 for 2+ bed flats.	Developer	Developer WCC	BORLP4 - 48	Approved under application 2012/210/OUT More information in the Education Provision Supplementary Planning Document
Brockhill Cross Boundary Site	First school provision for Brockhill East Strategic Site will be expanded to also serve this site.	WCC will monitor pupil numbers to judge when additional provision needs to be made. A proportion of growth may be accommodated in schools with existing spare capacity.	Bulk of first school infrastructure will be in place. Cost of extension to provide additional places to be confirmed.	Preferred option - 100% to be funded by developer Developer	Developer WCC Developer	BORLP4 - Appendix 1: RCBD1 BDP – RCBD1	More information in the Education Provision Supplementary Planning Document

BC INFRASTRUCTURE Location	DELIVERY PLAN REPO Project	RT – MARCH 201 Timescales	4 Cost	Sources of funding	Delivery partners	BORLP No.42 / BDP policies	⁶ Further comments
	Contribution towards expansion of existing middle and high school provision for additional 20 places per year group.		provision £1,996,860	contributions to fund at least 50% of cost of additional places.	WCC will manage provision.		
rockhill East Strategic Site	Provision of a new first school on site	New first school building to be ready for occupation in September 2015	Estimate in the region of £6 million (not including land value) WCC to fund re- provision element of new build.	Developer	It is possible that the developer will build the school for WCC although that has not been agreed. It is anticipated that the subsequent cross boundary element will fund a future extension to that school and make a contribution to	BORLP4 – 46	First school provision of around 30 places per year group. Cross-boundary development on adjacent land will impact on same area. Preferred solution is relocation of existing first school onto site with space for expansion.

RBC INFRASTRUCTU Location	IRE DELIVERY PLAN REPO Project	ORT – MARCH 201 Timescales	4 Cost	Sources of funding	Delivery partners	BORLP No.42 / BDP policies	7 Further comments
	Middle and high school provision of around 30 places per year group. Financial contribution required towards additional provision at existing schools.	WCC will monitor pupil numbers to judge when additional provision needs to be made. A proportion of growth may be accommodated in schools with existing spare capacity.	£2,995,290 based on cost multiplier. Developer contributions to fund at least 50% of cost of additional places for middle and high schools.		middle and high schools if needed at that point. The exact costs are unclear and will depend on whether WCC is willing and able to fund the relocation of an existing school which was the preferred option or whether it will be a separate entity.		More information in the Education Provision Supplementary Planning Document
C. Emergency service Redditch	New police station site	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	WMP Developer	WMP	BORLP4 - 3	

RBC INFRASTRUCTURI	E DELIVERY PLAN REPOR Project	RT – MARCH 201 Timescales	4 Cost	Sources of funding	Delivery partners	A BORLP No.428 / BDP policies	Further comments
HWFRS site Birmingham Road, Redditch	New fire and rescue station	Not yet known	Not yet known	HWFRS	HWFRS	BORLP4 - 3	
				Developer			
Redditch	Police - Additional officers (set-up costs)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	WMP Developer	WMP	BORLP4 - 3	
Redditch	Police - Additional vehicles and other operational equipment	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	WMP Developer	WMP	BORLP4 - 3	
Redditch	Police - Additional central support staff (set-up costs) to support cross boundary development	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	Awaiting outcome of a Strategic Infrastructure Assessment (SIA) (due 2014)	WMP Developer	WMP	BORLP4 - 3	
Ambulance Station, Cedar Road	Relocation of ambulance station currently located in Cedar Park Road, Redditch to centralised hubs at Burnt Meadow Road and Clews Road in Redditch - granted planning permission in January 2014.	Spring 2014	Covered by West Midlands Ambulance Service	West Midlands Ambulance Service	West Midlands Ambulance Service	BORLP4 - 3	

RBC INFRASTRUCTUR Location	E DELIVERY PLAN REPO Project	RT – MARCH 20 [/] Timescales	A Cost	Sources of funding	Delivery partners	BORLP No.42 / BDP policies	⁹ Further comments
Brockhill Cross Boundary Site	Open space, play areas, play pitches	In line with development	Unknown	Developer	Developer RBC	BORLP4 - Appendix 1 RCBD1 BDP - RCBD1	
Foxlydiate Cross Boundary Site	Open space, play areas, play pitches	In line with development	Unknown	Developer	Developer RBC	BORLP4 - Appendix 1 RCBD1 BDP - RCBD1	
E. Libraries				11	<u></u>		1
	Opportunities to locate library services with other services will be sought in new developments, where appropriate.	At time of developments	Unknown	Developers WCC	Developers WCC	BORLP4 - 3	
F. Cemeteries							
	New Redditch cemetery site of at least 1.7ha to serve Redditch Borough	From 2015	Based on a 3ha site: EA consent up to £6,000; Survey up to £3,000; Boreholes up to £6,000; Borehole Monitoring up to £3,000; Ecology surveys up to £20,000; Design fees and costs 4% of build cost;	RBC	RBC	BORLP4 - 3	A suitable site within the Borough is currently being sought.

RBC INFRASTRUCTURE	DELIVERY PLAN REPOR Project	RT – MARCH 201 Timescales	4 Cost	Sources of funding	Delivery partners	BORLP No.430 / BDP policies	Further comments
			£550,000 to £800,000				

G. Green Infrastructure

Green Infrastructure (GI) is the network of green spaces and natural elements across the District. BDP policy 24 'Green Infrastructure' addresses this issue and states that development should have regard to and contribute towards the Worcestershire Green Infrastructure Strategy, any local GI Strategy and the GI Concept Plans. The Worcestershire GI Strategy sets out county-scale principles to inform plans and strategies being developed by partner organisations and to enable a coherent approach to delivery across a range of initiatives. The WGI Framework documents provide the evidence base to inform and support the production of Worcestershire Green Infrastructure Strategy and future delivery of green infrastructure in Worcestershire. The Concept Plans prepared for strategic growth locations set out and prioritise the respective GI requirements for an individual site. It is anticipated that this IDP will be updated as required in relation to GI. It should also be noted that there is an overlap with GI infrastructure provision with other elements of this IDP due to the multi functionality of GI, for example, in relation to flood risk measures and leisure facilities.

APP