

# **Bradford District Local Plan**

## **Evidence Base**

### **Shipley and Canal Road Corridor Area**

#### **Action Plan:**

#### **Baseline Analysis Report**

#### **Working Draft**

**March 2013**

<b>Shipley and Canal Road Corridor: Baseline Analysis Report</b>			
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## 1.0 Introduction

It is important that the policies and proposals of the Shipley and Canal Road Corridor (CRC) Area Action Plan (AAP) are based on an up-to-date, robust and reliable evidence base to ensure a thorough understanding of the needs, opportunities and any constraints of the area.

The Council has drawn on a range of information about the important aspects of the CRC including housing, the local economy, environment, transportation and community facilities to form the evidence base for the AAP. These pieces of work provide a picture of the CRC in terms of key issues and also their spatial relevance.

The Council is encouraging comments and reviews on all of its evidence base technical studies and research papers. The full list of evidence base studies and research which have informed the AAP to date can be found on the Council's website under 'Evidence Base'. Some of the key pieces of evidence are listed as follows:-

- The Community Strategy
- Core Strategy Baseline Study
- Bradford District Retail & Leisure Study
- Bradford District Employment Land Review Assessment
- Bradford District Strategic Housing Market Assessment
- Bradford District Strategic Housing Land Availability Assessment
- Bradford Affordable Housing Economic Viability Assessment
- Bradford District Transport Study
- Bradford District Local Infrastructure Study
- Bradford District Open Space, Sports and Recreation Study
- Bradford District Conservation Area Assessments
- Bradford District Landscape Character Assessment
- Canal Road Corridor Strategic Development Framework Baseline Papers
- Canal Road Corridor Strategic Development Framework Options Report
- Canal Road Corridor Emerging Strategic Development Framework Report

In accordance with good practice advice by the Planning Advisory Service (PAS), including the online Plan Making Manual, the Council considers the gathering of evidence as an iterative process which must be continued throughout the plan preparation process. The reason for this is because the evidence is key to other

aspects of plan production including Sustainability Appraisal, Infrastructure Planning and Delivery, Options Generation and Community Engagement.

The Council has therefore published this '**Draft Baseline Analysis Report**' which provides a comprehensive analysis of the core baseline conditions and context of the CRC. The Draft Baseline Analysis Report has been published as part of the Issues and Options consultation. The report has been deliberately left in 'Draft' form and will be supplemented with additional information during the course of the preparation of the AAP. As part of the ongoing consultation process, the Draft Baseline Analysis Report has been made publicly available for consultees for comment and review.

### **1.1 Local Plan for Bradford**

Development in the District is currently managed by the Replacement Unitary Development Plan (RUDP), adopted in 2005. New planning legislation requires that local authorities replace their current development plans with a new type of plan called a Local Plan (previously LDF). The Local Development Scheme (LDS) provides a starting point for the local community and the stakeholders to find out what planning policies and proposals (Development Plan Documents) the Council intends to produce as part of the Local Plan.

The Local Plan will be a portfolio of documents which will replace the Council's current RUDP. For further information on the Local Plan, please see Bradford Council's website

[http://www.bradford.gov.uk/bmdc/the\\_environment/planning\\_service/local\\_development\\_framework](http://www.bradford.gov.uk/bmdc/the_environment/planning_service/local_development_framework)

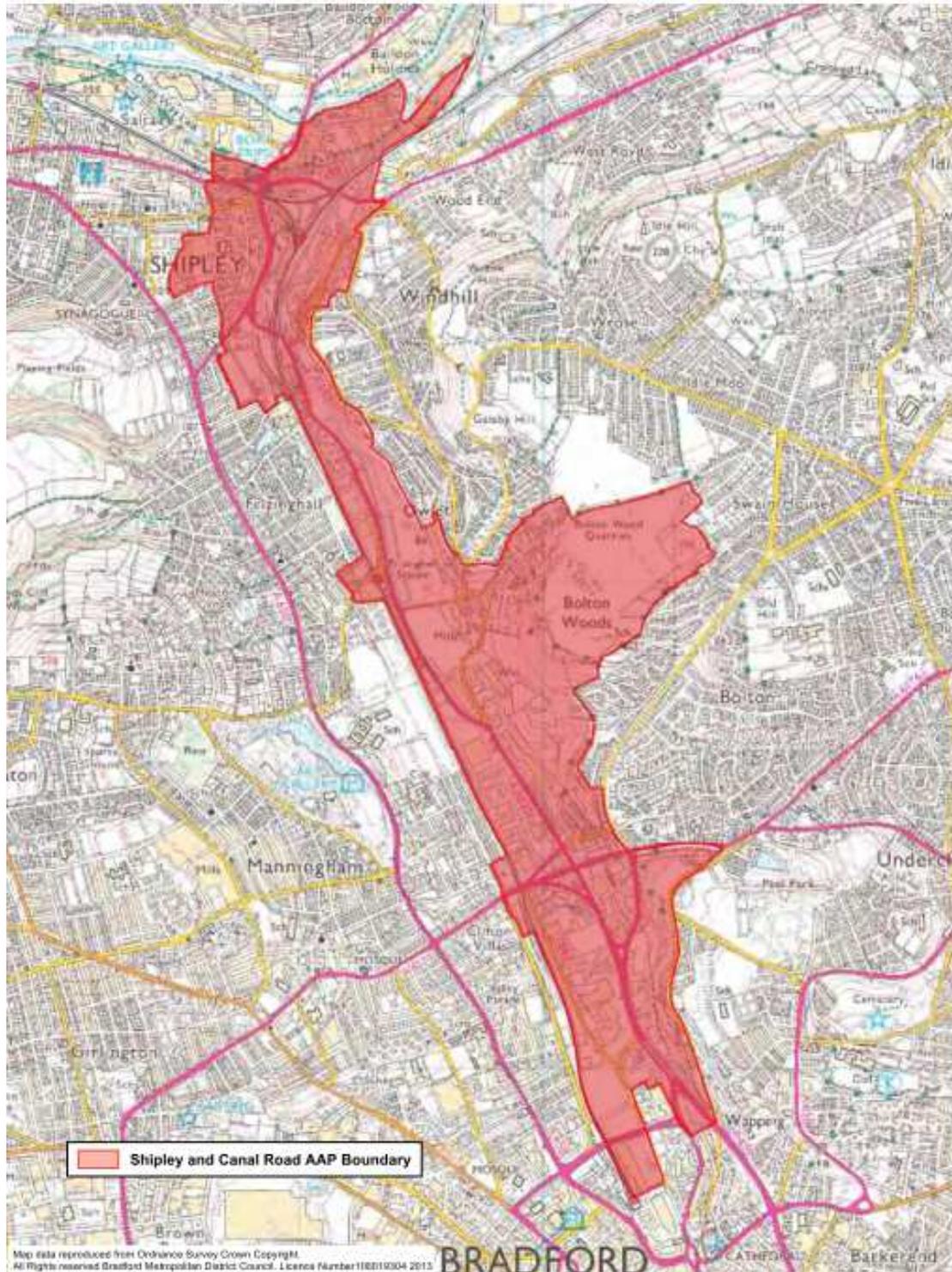
The AAP forms part of the Local Plan and will set the long term spatial vision for the Shipley and Canal Road Corridor and the policies and proposals to deliver the vision.

### **1.2 Shipley Canal Road Corridor– setting the context**

Bradford is a diverse District with sharp contrasts and challenges. This section sets out under several themes the spatial picture of the CRC together with key facts as an indication of where the CRC is at present.

The Canal Road Corridor is a traditional employment corridor as well being a key transport route northwards into and out of the city, forming a gateway into Airedale and beyond.

Figure 1: CRC Indicative AAP Boundary



Source: Shipley and Canal Road Corridor AAP Issues and Options Report CBMDC

The CRC is an area which extends northwards from Forster Square in the city centre in the south, straddling along the A6037 Canal Road, a major strategic route linking Airedale to Bradford, with the railway to the west until Shipley Town Centre in the north (Figure 1).

The land immediately surrounding Canal Road is flat, but rises very steeply to the east close to Bolton Woods quarry. It falls again at Shipley towards the river and railway line. The area contains a number of neighbourhoods such as Bolton Woods and Owlet, along with a number of industrial areas at Valley Road and Canal Road close to Bradford City Centre.

This area falls within Bradford East, Bradford West and Shipley Parliamentary Constituencies and straddles the Bolton and Undercliffe, Heaton, City, Windhill and Wrose Wards and part of the Shipley Ward to the north.

Council ward information can be found at:

<http://www.bradford.gov.uk/asp/councillors/bymap.asp>

### **1.3 History and Local Character**

The CRC is located within the main urban area of Bradford, stretching from the city centre to Shipley town centre. Canal Road itself is a major strategic route within the sub-region, linking areas within the Bradford District and beyond.

The Corridor is a traditional employment corridor as well being a key transport route northwards into and out of the city, forming a gateway into Airedale and beyond. Traditionally a mixed employment area, the Corridor developed out of its close proximity to the Bradford Canal and the railway line.

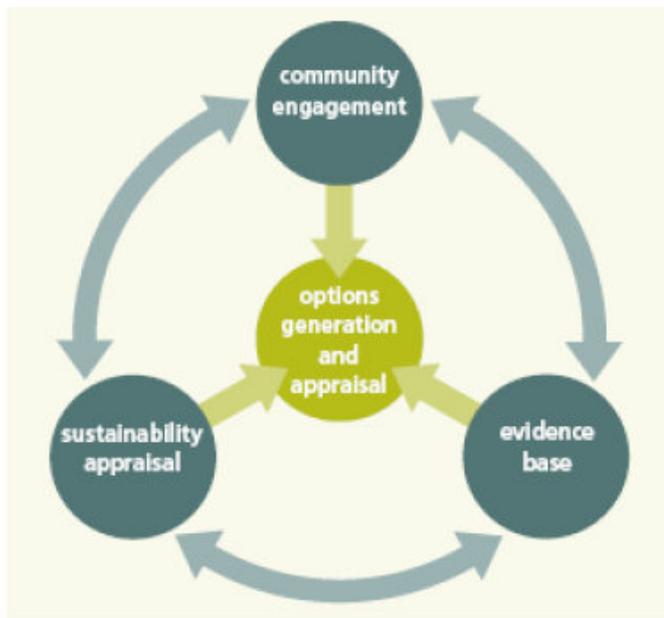
The Corridor today has become characterised by a mix of existing uses. The central section has a variety of employment uses, mainly located alongside Canal Road. To the south, the area has a predominance of retail uses, which link to Forster Square retail area. The northern section includes Shipley Town Centre and areas to the east of Shipley around Dockfield Road and Crag Road.

### **1.4 Scope and Purpose of the Baseline Analysis Report**

This report sets out the baseline position for the CRC, including the key issues and parameters which will inform the preparation of the AAP.

Essentially this document comprises a concise and comprehensive analysis of a wide range of topics relevant to the CRC's social, economic and environmental characteristics. The intention is that all policies and proposals in the AAP are justified by the relevant evidence, and so this report includes data which have highlighted the CRC's current position and the issues to be faced in the future. The Figure 2 below explains the linkages between these different areas.

Figure 2: Relationship between different elements of plan production



Source: PAS March 2008

The report is arranged by thematic topics (e.g. Housing, Environment, Transport) and includes data showing performance at national, regional and local levels, illustrated through tables, charts, maps and diagrams.

In 2010 the council commissioned BDP to produce a Strategic Development Framework (SDF) for the CRC to provide robust evidence to inform the preparation of the AAP. A significant part of the information contained within the report derives from the baseline evidence papers produced by BDP to inform the SDF. Further information can be found at:

[http://www.bradford.gov.uk/bmdc/regeneration/canal\\_road\\_corridor/masterplan\\_and\\_appointment](http://www.bradford.gov.uk/bmdc/regeneration/canal_road_corridor/masterplan_and_appointment)

The SDF evidence baseline papers include the following:

Shipley and Canal Road Corridor Area Action Plan: Baseline Analysis Report 2013

- Planning and Regeneration
- Design
- Ecology
- Transport
- Socio-Economic and Housing
- Property
- Ground Conditions
- Flood Risk
- Infrastructure

For the purposes of this Baseline Report the relevant information has been extracted from the SDF baseline papers and reproduced or summarised in the relevant chapters. These SDF baseline papers can be viewed in full on the Council's website and should be read in conjunction with this baseline report.

Relevant information, specific to the CRC , has also been collated and analysed from a variety of sources, including commissioned studies and surveys, District, Regional and National data and monitoring reports.

In preparing this report, the Council have not sought to replicate all published and unpublished documents and data, but to identify and describe key issues and findings that are raised. In considering the overall 'Evidence Base' that informs the emerging AAP reference should be made to the individual documents, strategies and data sources that are identified in each chapter.

This report will also focus on setting the current infrastructure context in the CRC, by achieving a basic knowledge and understanding of the issues relating to the provision of infrastructure. This will provide the foundation for the strategy, which will set out how the Council and key partners intend to implement the AAP and deliver the associated infrastructure requirements.

## **1.5 Structure of Report**

This report seeks to consider key elements of the 'Evidence Base' in a clear and structured manner, as follows:

- Planning Policy and Regeneration Context – the first two sections contain an appraisal of the national, regional, sub-regional and local planning policies which provide the context within which the CRC will be set. The second part of the section identifies and assesses a range of current and proposed regeneration initiatives affecting the future development of the CRC.
- Socio-Economic Assessment– An appraisal of the social and economic context of CRC.
- Housing Assessment – An overview of existing housing tenure and types, summary of the relevant housing policy documents, housing land availability assessments and an overview of the housing market.
- Social and Community Facilities– An assessment of the key public, private and community facilities that are currently provided in the CRC.
- Landscape Character & Historic Environment – An assessment of the landscape and the physical form and structure of the CRC.
- Urban Design Analysis- An overview of the key design considerations for the CRC area.
- Commercial Appraisal – A sectoral overview of the development potential and an assessment of the delivery issues that this raises.
- Transport and Accessibility– A review of the transportation infrastructure including highways, parking, facilities for pedestrians and cyclists, public transport as well as private vehicles.
- Environment– An assessment of the CRC’s environmental quality and extent of the issues affecting the delivery of sustainable development.
- Minerals and Waste Management- a review of CRC’s waste and minerals situation ranging from current capacity and management issues to future requirement and planning matters.
- Sustainability – An outline of the key sustainability issues that need to be addressed throughout the development of the CRC AAP.

Each section of this report summarises the key issues which are raised from the discussion of individual topic areas and which will be tested and explored during the next stage of the AAP.

## **2. Planning Policy Context**

This section summarises the national, regional and local planning policies that are relevant to Bradford district and those that should be considered during the development of the AAP.

The key planning policy documents at the national, regional, sub regional and district and AAP level are reviewed below. These comprise the National Planning Policy Framework and Planning Policy Statements at the national level; Regional Spatial Strategy at regional level; Leeds City Regional Development Programme at the sub regional level; and Replacement Unitary Development Plan and Local Plan documents at the district level. The key policy implications arising from these documents for the future of the CRC are considered below.

### **2.1 Planning Legislation**

Planning Policy is supported by legislation; this mainly takes the form of Acts of Parliament and Statutory Instruments. The most recent planning Acts are summarised below.

#### **The Planning and Compulsory Purchase Act 2004**

The Planning and Compulsory Purchase Act introduced proposals for planning reform to speed up the planning system. The Act included reform of the development plan system. At the regional level Regional Planning Guidance was replaced by 'Regional Spatial Strategy' (RSS), which have statutory backing. At local authority level the mixed system of unitary development plans and the two-tier system of structure and local plans was replaced by 'Local Development Frameworks' (LDFs). Section 38(6) of the Planning and Compulsory Purchase Act 2004 provides the statutory basis for Local Plans.

#### **The Planning Act 2008**

The Planning Act 2008 was granted Royal Assent on 26 November 2008. The Act introduced a new system for nationally significant infrastructure planning, alongside further reforms to the town and country planning system and the introduction of the Community Infrastructure Levy.

The Act also made further reforms to the planning system, including improving the Local Development Plan system by removing some minor procedures; adding a duty on councils to take action on climate change in their development plans; and to have regard to the desirability of achieving good design; streamlining development control procedures; making changes to the appeals process; and adding transitional powers allowing regional assemblies to delegate some planning functions to regional planning bodies.

The Act also contains enabling powers to empower local councils to apply a Community Infrastructure Levy (CIL) on new developments in their areas to support infrastructure delivery.

### **The Localism Act 2011**

The Localism Bill was given Royal Assent on 15th November 2011. From this date it became a formal Act – the Localism Act.

The Localism Act aims to take power from central government and hand it back to local authorities and communities, giving people at the local level freedom and flexibility to achieve their own ambitions for their areas.

In summary, the Localism Act seeks to:

- Give new freedoms and flexibilities to local government
- Give new rights and powers for local communities and individuals
- Reform the planning system to make it clearer, more democratic and more effective
- Make reforms to ensure that decisions about housing are taken locally

The Localism Act is being taken forward through detailed Regulations and the National Planning Policy Framework (NPPF), which put in place the detailed guidance and procedures in support of these changes within the planning system, such as the Duty to Cooperate and Neighbourhood Planning. Some of these changes are covered in the NPPF section below.

The Localism Act contains provisions to make the planning system clearer, more democratic, and more effective. This includes:

- Abolition of regional strategies
- Duty to co-operate
- Community Right to Build/Neighbourhood Planning
- Requirement to consult communities before submitting certain planning applications
- Reforming the Community Infrastructure Levy
- Reform the way local plans are made
- Nationally significant infrastructure projects.

The Act will enable the abolishment all Regional Spatial Strategies and introduces a new 'Duty to Cooperate'. The duty requires local authorities and other public bodies to work together on planning issues.

The Act introduces the right for residential and business communities to shape their local areas through Neighbourhood Plans and Community Right to Build (CRTB) and strengthens the role of communities in development management, by introducing a new requirement for prospective developers to consult local communities before submitting planning applications for very large developments.

The Act has introduced statutory Neighbourhood Planning in England. It enables communities to draw up a Neighbourhood Plan for their area and is intended to give communities more of a say in the development of their local area. Neighbourhood Development Plans must be prepared in accordance with the statutory Planning Regulations and following a local referendum they can be adopted by the Council for them to be formally used and recognised in the planning process.

The legal regulations for the preparation of a neighbourhood plan are the Neighbourhood Planning General (Regulations) 2012.

- [The Neighbourhood Planning General \(Regulations\) 2012](#)

Following the statutory process, Neighbourhood Development Plans would become part of the statutory development plan (the Local Plan) and would form the basis for determining planning applications in that area. Other new tools include the Neighbourhood Development Order which would enable communities to grant planning permission for the development it wishes to see and follow a similar process to that for neighbourhood plans.

Community Right to Build is a new way for communities to deliver the development they want – be it homes, shops, businesses or facilities – where the benefits of the development will be retained by the community for the community. It is an alternative to a traditional application for planning permission.

The Act introduces changes to the Community Infrastructure Levy (CIL). It allows some of the money raised to be spent on things other than infrastructure. It will give local authorities greater freedom in setting the rate that developers should pay. The Act gives the Government the power to require that some of the money raised from the levy go directly to the neighbourhoods where development takes place.

In regards to the Development Plan process The Act reforms the way Local Plans are made by limiting the discretion of planning inspectors to insert their own wording into local plans.

The Act abolishes the Infrastructure Planning Commission and restores its responsibility for taking decisions to Government ministers. It also ensures the national policy statements, which will be used to guide decisions by ministers, can be voted on by Parliament.

A plain English guide to the Localism Act is available at: [www.communities.gov.uk/publications/localgovernment/localismplainenglishupdate](http://www.communities.gov.uk/publications/localgovernment/localismplainenglishupdate).

## **2.2 National Planning Policy Context**

At the top of the planning policy hierarchy are the National Planning Policy Framework (NPPF) and Planning Policy Statements (PPS) which are published by the Department of Communities and Local Government (CLG). The NPPF and PPS present the Government's views on general issues relating to planning policy and how local planning authorities should interpret this strategic policy at local level. The NPPF and PPS form material planning considerations in the decision making process with respect to development plan making and development management.

### **National Planning Policy Framework**

The Government published the National Planning Policy Framework (NPPF) on 27<sup>th</sup> March 2012. The NPPF replaces previous national guidance contained in 44 separate Planning Policy Guidance (PPG's) and Planning Policy Statements (PPS's). The supporting good practice guidance is still in place but is being reviewed by government.

The NPPF makes clear that the need for local authorities to have in place up to date development plans for their district. Development plans are now known as a 'Local Plan' which will from now on be the term used to describe the family of documents previously called the Local Development Framework (LDF).

The Council must take account of the NPPF in the plans that it is preparing to ensure that they are in accordance with national planning policies.

### Sustainable Development

The NPPF states that sustainable development can play three critical roles:

1. An **economic** role – in contributing to a strong, responsive, competitive economy;
2. A **social** role – in supporting vibrant and healthy communities; and
3. An **environmental** role - protecting and enhancing our natural, built and historic environment.

The policies in paragraphs 18 to 219 of NPPF constitute the Government's view of what sustainable development means for the planning system.

### Presumption in favour of sustainable development

At the heart of the new NPPF is the 'presumption in favour of sustainable development'.

This means that Local Plans should meet objectively assessed needs unless:

- any adverse impacts would significantly and demonstrably outweigh the benefits, when assessed against the NPPF
- specific NPPF policies indicate development should be restricted.

Plans should be based upon and reflect the presumption in favour of sustainable development with clear policies to guide how this should apply locally.

### Core Planning Principals

Planning should:

- be plan-led with local plans setting out a positive vision for the future of the area.
- be a creative exercise in finding ways to enhance and improve places.
- drive and support sustainable economic development and identify and meet the housing, business, and other development needs of an area.
- secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings.
- promote the vitality of urban areas, protect the greenbelt, recognise the intrinsic character and beauty of country side and support thriving rural communities.
- support the transition to a low-carbon future, taking full account of flood risk, encourage the reuse of existing resources and use of renewable resources.
- contribute to conserving and enhancing the natural environment and reducing pollution.
- encourage the effective use of land by reusing land that has been previously developed.
- promote mixed use developments, and encourage multiple benefits from the use of land in urban and rural areas.
- conserve heritage assets in a manner appropriate to their significance.
- manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.
- support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs.

### Building a strong, competitive economy

The NPPF states that significant weight should be placed on the need to support economic growth. This means Local Planning Authorities (LPAs) should plan proactively to meet the development needs of business.

In drawing up Local Plans LPAs should:

- set out an economic vision and strategy, which encourages sustainable economic growth;
- set criteria, or identify strategic sites to meet anticipated needs over the plan period;
- support existing business sectors, and identify and plan for new or emerging sectors. Policies should be flexible to accommodate unanticipated needs and allow a quick response to changing economic circumstances;
- plan positively for the location/promotion/expansion of clusters or networks of knowledge driven, creative or high tech industries;
- identify priority areas for economic regeneration, infrastructure provision and environmental enhancement;
- facilitate flexible working practices.

Policies should avoid the long term protection of employment sites where there is no reasonable prospect of a site being used for employment and employment allocations should be regularly reviewed.

#### Promoting competitive town centres

The NPPF states that planning policies should promote competitive town centres and manage their growth over the plan period.

The NPPF retains the sequential test for main town centre uses. An Impact assessment is required for retail, leisure and office developments (default threshold 2,500 sq m) outside of centres not in accordance with Local Plan.

LPAs should:

- Pursue policies to support viability and vitality of centres;
- define a network and hierarchy of centres;
- define the extent of centres and Primary Shopping Areas, primary/secondary frontages, and set policies on permitted uses;
- retain/enhance existing markets and, where appropriate, reintroduce or create new ones;

- allocate sites to meet need. Needs should be fully met and town centre uses not compromise by limited site availability;
- where suitable/viable town centre sites are not available, allocate appropriate edge of centre sites. If sufficient sites cannot be identified, set policies for meeting the needs in other accessible locations;
- set policies for considering proposals which cannot be accommodated in centre or edge of centre;
- set out policies to encourage residential development on appropriate sites.

### Promoting sustainable transport

The Government recognise transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives.

In preparing Local Plans LPAs should support a pattern of development which facilitates the use of sustainable modes of transport. Plans should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised taking account of other NPPF policies.

Plans should take account of whether:

- the opportunities for sustainable transport modes have been taken up to reduce the need for major transport infrastructure;
  - safe and suitable access to sites can be achieved for all people; and
  - improvements can be undertaken that cost effectively limit significant impacts.
- LPAs should only be prevent development on transport grounds where the residual cumulative impacts of development are severe.

Plans should protect and exploit opportunities for using sustainable transport modes.

Developments should be located to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements and have access to high quality public transport;
- create safe and secure layouts;
- consider the needs of people with disabilities.

Policies should aim for a balance of land uses within their area to minimise journey lengths. For larger scale residential developments, policies should promote a mix of uses to provide opportunities to undertake day-to-day activities, including work, on site. Where practical, key facilities (schools/local shops) should be located within walking distance of most properties.

LPAs can set local parking standards and should seek to improve the quality of parking in town centres. LPAs should identify and protect sites and routes critical in developing infrastructure.

### Delivering a wide choice of high quality homes

The NPPF sets out how LPAs should boost significantly the supply of housing. LPAs should ensure the Local Plan meets the full housing needs, as far as is consistent with the NPPF and identify key sites critical to delivery of the over the plan period;

A Strategic Housing Land Availability Assessment is required by the NPPF to establish assumptions on availability, suitability and viability of housing land. LPAs should set out their own approach to housing density to reflect local circumstances.

LPAs should plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community, identify the size, type, tenure and range of housing that is required and where an affordable housing is need is identified, set policies for meeting this need.

LPAs should:

- Set policies for meeting affordable housing need on site. Policies should be flexible to take account of changing market conditions over time.
- Identify and bring back into residential use empty properties.
- Set out approach to housing density to reflect local circumstances.

The NPPF makes reference to Garden Cities principles and large scale urban extensions/new settlements for meeting housing supply. Working with the support of their communities, LPAs should consider whether such opportunities provide the best way of achieving sustainable development.

### Requiring good design

The NPPF attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development. Local and Neighbourhood Plans should develop robust and comprehensive policies that set out the quality of development expected for the area.

The NPPF lists the aims for design policies. These include ensuring places function well over their lifetime, optimise the potential of sites to accommodate development, respond to local character and create safe and accessible new environments.

Policies should not attempt to impose styles or tastes or stifle innovation/originality/initiative through unsubstantiated requirements to conform to certain forms/styles. It is proper to promote or reinforce local distinctiveness. Policies should address the connections and the integration of new development into the natural, built and historic environment.

#### Promoting healthy communities

LPA should aim to involve all sections of the community in the development of Local Plans and in planning decisions and facilitate neighbourhood planning.

Policies, should aim to achieve places which promote:

- mixed-use developments, strong neighbourhood centres and active street frontages;
- safe and accessible environments and developments.

Planning policies should:

- plan positively for shared space, community facilities and local services;
- guard against unnecessary loss of valued facilities and services;
- ensure established shops/facilities/services are able to develop and modernise in a sustainable way, and are retained for the benefit of the community;
- ensure an integrated approach to considering the location of housing, economic uses and community facilities/services.

LPA should take a proactive, positive and collaborative approach to ensuring that a sufficient choice of school places is available to meet the needs of existing and new communities, and to development that will widen choice in education.

Existing open space/sports/recreational buildings/land, should not be built on unless:

- an assessment has been undertaken which has clearly shown the open space/buildings/land to be surplus to requirements; or
- the loss would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or
- the development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss.

### Protecting Green Belt land

The Government attaches great importance to Green Belts. The NPPF sets out the fundamental aim and essential character of Green Belts and its five purposes.

### Meeting the challenge of climate change, flooding and coastal change

LPAs should adopt proactive strategies to mitigate and adapt to climate change.

LPAs should:

- plan for new development in locations and ways which reduce greenhouse gas emissions;
- support energy efficiency improvements to existing buildings; and
- when setting any local requirements, be consistent with the Government's zero carbon buildings policy and adopt nationally described standards;
- have a strategy that promotes renewable/low carbon energy;
- design policies to maximise renewable/low carbon energy development, ensuring adverse impacts are addressed;
- consider identifying suitable areas for renewable/low carbon energy sources and supporting infrastructure;
- support community-led initiatives for renewable/low carbon energy;
- identify opportunities for decentralised/renewable/low carbon energy supply systems and for co-locating potential heat customers and suppliers.

Local Plans should take account the impact of climate change over the longer term. New development should be planned to avoid increased vulnerability to climate change impacts. Risks of vulnerable new development should be managed through suitable adaptation measures, including planning of green infrastructure.

Inappropriate development in areas at risk of flooding should be avoided. Where development is necessary, make it safe without increasing flood risk elsewhere. Local Plans should develop policies to manage flood risk from all sources.

Local Plans should apply a sequential, risk-based approach to the location of development by:

- applying the Sequential Test;
- if necessary, applying the Exception Test;
- safeguarding land required for current and future flood management;
- using opportunities offered by new development to reduce the causes and impacts of flooding;
- where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seek opportunities relocate development to more sustainable locations.

Development should not be allocated if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding.

If, following the Sequential Test, its not possible, for the development to be located in zones with a lower probability of flooding, the Exception Test can be applied. To pass:

- it must be demonstrated that the development provides wider sustainability benefits that outweigh flood risk,
- a site-specific flood risk assessment must demonstrate development will be safe for its lifetime, not increase flood risk elsewhere, and, where possible, reduce flood risk overall. Both elements of the test will have to be passed for development to be allocated

#### Conserving and enhancing the natural environment

The NPPF states that the planning system should contribute to and enhance the natural and local environment.

Aims of the planning system include:

- protect and enhance valued landscapes, geological conservation interests and soils;

- recognise the wider benefits of ecosystems;
- minimise impacts on biodiversity and provide net gains where possible;
- prevent development from contributing to/put at unacceptable risk from/being adversely affected by unacceptable levels of soil/air/water/noise pollution or land instability;
- remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land.

In preparing plans, the aim should be to minimise pollution and other adverse effects on the local and natural environment. Plans should allocate land with the least environmental or amenity value, where consistent NPPF.

Policies should encourage the effective use of land by re-using Previously Developed Land, provided it's not of high environmental value. LPAs may continue to set an appropriate local brownfield target. LPAs should seek to use areas of poorer quality agricultural land in preference to higher quality.

LPAs should set criteria based policies against which proposals affecting protected wildlife/geodiversity sites/landscape areas will be judged. Distinctions should be made between international, national and locally designated sites, so protection is commensurate with their status.

LPAs should set out a strategic approach in Local Plans, for networks of biodiversity and green infrastructure. Great weight should be given to conserving landscape and scenic beauty in AONBs.

Planning policies should:

- plan for biodiversity at a landscape-scale across LA boundaries;
- identify and map local ecological networks
- promote the preservation/restoration/re-creation of priority habitats/ecological networks and the protection/recovery of priority species, linked to national and local targets. Identify suitable indicators for monitoring biodiversity in the plan;
- aim to prevent harm to geological conservation interests;
- where Nature Improvement Areas are identified in Local Plans, consider specifying appropriate development in these areas.

To prevent unacceptable risks from pollution and land instability, policies should ensure new development is appropriate for its location.

Policies should ensure that:

- the site is suitable for its new use taking account of ground conditions and land instability,
- after remediation, as a minimum, land should not be capable of being determined as contaminated.

Planning policies should comply with and contribute towards EU/national limits or objectives for pollutants, taking into account the presence of AQMAs and the cumulative impacts on air quality from individual sites in local areas.

LPAs should set out in the Local Plan a positive strategy for the conservation and enjoyment of the historic environment. NPPF sets out in paragraph 126 requirements for developing this strategy.

#### Facilitating the sustainable use of minerals

The NPPF sets out minerals planning requirements for LPAs preparing a Plan. LPAs should:

- include policies for mineral extraction in their area;
- take account of the contribution of substitute/secondary/recycled materials and minerals waste to the supply, before considering extraction of primary materials;
- define Minerals Safeguarding Areas and define Minerals Consultation Areas based on these Minerals Safeguarding Areas;
- set out policies to encourage the prior extraction of minerals, if necessary for non-mineral development to take place;
- set out environmental criteria, in line with the NPPF, against which planning applications will be assessed;
- put in place policies to ensure worked land is reclaimed at the earliest opportunity.

The NPPF sets out detailed requirements for Mineral Planning Authorities in planning for supply of aggregates and industrial minerals

#### Plan-making Local Plans

The NPPF states that Local Plans are the key to delivering sustainable development that reflects the vision and aspirations of local communities. Local Plans must be prepared with the objective of contributing to the achievement of sustainable development. They should be consistent with the principles and policies set out in NPPF.

LPAs should seek opportunities to achieve each of the dimensions of sustainable development, and net gains across all three. Significant adverse impacts on these dimensions should be avoided and, where possible, alternative options which reduce or eliminate such impacts should be pursued.

Each LPA should produce a Local Plan for its area. This can be reviewed in whole or in part to respond flexibly to changing circumstances. Additional DPDs should be used only where clearly justified. SPDs should be used to help applicants make successful applications or aid infrastructure delivery, and should not be used to add unnecessarily to financial burdens on development.

Local Plans should be aspirational but realistic and address the spatial implications of economic/social/environmental change. Local Plans should set out the opportunities for development and have clear policies on what will/will not be permitted and where.

Early and meaningful engagement is essential. A wide section of the community should be proactively engaged, so that Local Plans, as far as possible, reflect a collective vision and a set of agreed priorities, including neighbourhood plans.

LPAs should set out strategic priorities in the Local Plan to deliver:

- the homes and jobs needed;
- the provision of retail, leisure and commercial development;
- the provision of infrastructure, minerals and energy;
- the provision of community infrastructure and local facilities; and
- climate change mitigation and adaptation and conservation/enhancement of the natural and historic environment

Crucially, Local Plans should:

- plan positively for the development and infrastructure required to meet the objectives and policies of the NPPF;

- cover an appropriate time scale, preferably a 15-years, take account of longer term requirements, and be kept up to date;
- be based on co-operation with neighbouring authorities/public/private sector organisations;
- indicate broad locations for strategic development on a key diagram and land-use designations on a proposals map;
- allocate sites, bring forward new land where necessary and provide detail on form/scale/access/quantum of development where appropriate;
- identify areas where it may be necessary to limit freedom to change the uses of buildings;
- identify land where development would be inappropriate, for instance because of its environmental or historic significance; and
- contain a clear strategy for enhancing the natural, built and historic environment, and supporting Nature Improvement Areas where identified.

#### Using a proportionate evidence base

LPAs should ensure the Local Plan is based on adequate/up-to-date/relevant evidence.

LPAs should have a clear understanding of business needs across their area. They should:

- work with neighbouring LAs and LEPS to prepare and maintain a robust evidence base to understand existing and future business needs.
- work closely with the business community to understand changing needs and identify and address barriers to investment.

LPAs should have a clear understanding of housing needs in their area. LPAs are required to produce a SHMA to assess needs and SHLAA to assess land availability.

- The SHMA should identify the scale, mix and range of tenures needed over the plan period which:
  - meets household and population projections, taking account of migration and demographic change;
  - addresses the need for all types of housing, and of different groups in the community; and caters for demand and the scale of supply necessary to meet this;
- prepare a SHLAA to establish realistic assumptions about the availability, suitability and the likely economic viability of land to meet the identified housing need.

LPAs should use this evidence base to assess:

- the needs for land/floorspace for economic development, including the quantitative and qualitative needs for all types of employment use over the plan period;
- the existing and future supply of land and its suitability to meet identified needs.

Reviews of ELR should be undertaken or combined with SHLAAs;

- the role and function of town centres;
- the capacity of existing centres to accommodate development;
- locations of deprivation which may benefit from planned action;
- the needs of the food production industry and any planning barriers to investment.

Environment policies should be based on up-to-date information, including an assessment of existing and potential components of ecological networks. A SA should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors. Local Plans may require other environmental assessments, including under the Habitats Regulations, SFRA and assessments of the physical constraints on land use. Where possible, assessments should share evidence base and be conducted over similar timescales.

The NPPF requires careful attention to viability and costs in plan-making. Sites and future development should not be subject to obligations and policy burdens which threatens their ability to be developed viably. The costs of any requirements should, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.

LPAs should assess the likely cumulative impacts of all existing and proposed local/nationally required standards, SPDs and policies. The cumulative impact of these should not put implementation of the plan at serious risk, and should facilitate development throughout the economic cycle. Evidence supporting the assessment should be proportionate, using only appropriate available evidence.

Where practical, CIL charges should be worked up and tested alongside the Local Plan. The CIL should support and incentivise new development and place control of a meaningful proportion of the funds raised with neighbourhoods.

#### Planning strategically across local boundaries

The NPPF sets out a 'Duty to co-operate' on planning issues that cross administrative boundaries, particularly those which relate to the strategic priorities. LPAs should work collaboratively to ensure strategic priorities across local boundaries are properly coordinated.

LPAs should work collaboratively on strategic planning priorities to enable delivery of sustainable development in consultation with LEPs and Local Nature Partnerships. LPAs should also work collaboratively with private sector bodies, utility and infrastructure providers.

### Examining local plans

The NPPF outlines soundness requirements:

- Positively prepared – the Plan meets objectively assessed development and infrastructure requirements;
- Justified – the Plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;
- Effective – the plan should be deliverable and based on effective joint working on cross-boundary strategic priorities; and
- Consistent with national policy – the plan should enable the delivery of sustainable development in accordance with the NPPF

### Implementation

The NPPF strengthens local decisions making and reinforces the importance of up to date plans. The NPPF must be taken into account in preparing plans.

Due weight should be given to relevant policies in existing plans according to their degree of consistency with NPPF (the closer the policies in the plan to the policies in the NPPF, the greater the weight that may be given).

Weight may also given to relevant policies in emerging plans according to:

- the stage of preparation;
- the extent to which there are unresolved objections
- the degree of consistency of policies to the NPPF

The NPPF lists all documents it has replaced in Annex 3. The NPPF can be viewed in full at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6077/2116950.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf)

### **PPS10: Planning for Sustainable Waste Management (21st July 2005)**

PPS 10 sets out the Government's policy to be taken into account by waste planning authorities and forms part of the national waste management plan for the UK.

Paragraph 3 states that all planning authorities must help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for;

- provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities;
- help implement the national waste strategy, and supporting targets, are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations 1994;
- help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations;
- reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business, and encourage competitiveness;
- protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission;
- ensure the design and layout of new development supports sustainable waste management.

### **Planning Policy for Traveller sites**

The document sets out the Government's planning policy for traveller sites. It covers both gypsies and travellers and travelling showpeople and should be read in conjunction with the NPPF. The new Planning Policy for Traveller Sites replaces two previous traveller planning circulars (*Circular 01/2006: Planning for Gypsy and Traveller Caravan Sites* and *Circular 04/2007: Planning for Travelling Showpeople*).

LPAs should:

- make their own assessment of need for the purposes of planning;
- identify land for sites to meet this need;
- plan for sites over a reasonable timescale;
- protect Green Belt from inappropriate development;
- promote more private traveller site provision;
- reduce the number of unauthorised developments and encampments and make enforcement more effective;
- increase the number of sites in appropriate locations to address under provision and maintain an appropriate level of supply;
- ensure provision of suitable accommodation from which travellers can access education, health, welfare, and employment infrastructure

For plan making LPAs should:

- set pitch targets for gypsies and travellers and plot targets for travelling showpeople which address the needs of travellers in their area;
- identify and update annually five years' worth of sites against local targets;
- identify a supply of developable sites or broad locations for growth, for years six to ten and, where possible, for years 11-15;
- consider production of joint development plans that set targets on a cross-authority basis;
- set criteria policies to guide allocations where there is identified need;
- ensure that traveller sites are sustainable economically, socially and environmentally;
- where there is a lack of affordable land to meet local traveller needs LPAs should consider allocating rural exception sites solely for affordable traveller sites.
- Developments in rural areas should not be of a scale which would dominate the nearest settled community.

- Mixed use sites should be considered including for travelling show people who require mixed use yards comprising residential and use and equipment storage.

LPA's should ensure that their policies:

- promote peaceful and integrated co-existence between the site and the local community;
- promote access to health services and ensure children can attend school on a regular basis;
- provide for proper consideration of the effect of local environmental quality (such as noise and air quality) on the health and well being of any travellers that may locate there;
- do not locate sites in areas of high flood risk;
- reflect the extent to which traditional lifestyles (whereby some travellers live and work from the same location thereby omitting travel to work journeys) can contribute to sustainability;

### **Technical Guidance to the National Planning Policy Framework**

This document provides additional guidance to local planning authorities to ensure the effective implementation of the planning policy set out in the NPPF on development in areas at risk of flooding and in relation to mineral extraction.

This guidance retains key elements of Planning Policy Statement 25 and of the existing minerals policy statements and minerals planning guidance notes which are considered necessary and helpful in relation to these policy areas. The retention of this guidance is an interim measure pending a wider review of guidance to support planning policy.

### **Planning Policy Statement: Eco-towns - A supplement to Planning Policy Statement 1**

This Planning Policy Statement (PPS) provides the standards any eco-town will have to adhere to and the list of locations identified with the potential for an eco-town.

#### ET 7 Zero carbon in eco-towns

The definition of zero carbon in eco-towns is that over a year the net carbon dioxide emissions from all energy use within the buildings on the eco-town development as a whole are zero or below. The initial planning application and all subsequent planning applications for the development of the eco-town should demonstrate how this will be achieved.

This standard attempts to ensure that energy emissions related to the built environment in eco-towns are zero or below. Standards applicable to individual homes are set out in policy ET 9.

#### ET 8 Climate change adaptation

Eco-towns should be sustainable communities that are resilient to and appropriate for the climate change now accepted as inevitable. They should be planned to minimise future vulnerability in a changing climate, and with both mitigation and adaptation in mind.

Developments should be designed to take account of the climate they are likely to experience, using, for example, the most recent climate change scenarios available from the UK Climate Change Impacts Programme. Eco-towns should deliver a high quality local environment and meet the standards on water, flooding, green infrastructure and biodiversity set out in this PPS, taking into account a changing climate for these, as well incorporating wider best practice on tackling overheating and impacts of a changing climate for the natural and built environment.

Developments should be designed to take account of the climate they are likely to experience, using, for example, the most recent climate change scenarios available from the UK Climate Change Impacts Programme. Eco-towns should deliver a high quality local environment and meet the standards on water, flooding, green infrastructure and biodiversity set out in this PPS, taking into account a changing climate for these, as well incorporating wider best practice on tackling overheating and impacts of a changing climate for the natural and built environment.

#### ET 9 Homes

As well as being zero carbon as part of the whole built environment, homes in eco-towns should:

- (a) achieve Building for Life Silver Standard and Level 4 of the Code for Sustainable Homes at a minimum (unless higher standards are set elsewhere in this Planning Policy Statement)
- (b) meet lifetime homes standards and space standards
- (c) have real time energy monitoring systems; real time public transport information and high speed broadband access, including next generation broadband where possible. Consideration should also be given to the potential use of digital access to support assisted living and smart energy management systems
- (d) provide for at least 30 per cent affordable housing (which includes social rented and intermediate housing)
- (e) demonstrate high levels of energy efficiency in the fabric of the building, having regard to proposals for standards to be incorporated into changes to the Building Regulations between now and 2016 and
- (f) achieve, through a combination of energy efficiency and low and zero carbon energy generation on the site of the housing development and any heat supplied from low and zero carbon heat systems directly connected to the development, carbon reductions (from space heating, ventilation, hot water and fixed lighting) of at least 70 per cent relative to current Building Regulations (Part L 2006).

#### ET 10 Employment

It is important to ensure that eco-towns are genuine mixed-use communities and that unsustainable commuter trips are kept to a minimum. An economic strategy should be produced to accompany planning applications for eco-towns that demonstrate how access to work will be achieved. The strategy should also set out facilities to support job creation in the town and as a minimum there should be access to one employment opportunity per new dwelling that is easily reached by walking, cycling and/or public transport.

#### ET 11 Transport

Travel in eco-towns should support people's desire for mobility whilst achieving the goal of low carbon living. The town should be designed so that access to it and through it gives priority to options such as walking, cycling, public transport and other sustainable options, thereby reducing residents' reliance on private cars, including techniques such as filtered permeability. To achieve this, homes should be within ten minutes' walk of

- (a) frequent public transport and
- (b) neighbourhood services.

The provision of services within the eco-town may be co-located to reduce the need for individuals to travel by private car and encourage the efficient use of the sustainable transport options available.

Planning applications should include travel plans which demonstrate:

- (a) how the town's design will enable at least 50 per cent of trips originating in eco-towns to be made by non-car means, with the potential for this to increase over time to at least 60 per cent
- (b) good design principles, drawing from Manual for Streets, Building for Life, and community travel planning principles
- (c) how transport choice messages, infrastructure and services will be provided from 'day one' of residential occupation, and
- (d) how the carbon impact of transport in the eco-town will be monitored, as part of embedding a long term low-carbon approach to travel within plans for community governance.

Where an eco-town is close to an existing higher order settlement, planning applications should also demonstrate:

- (a) options for ensuring that key connections around the eco-town do not become congested as a result of the development, for example by extending some aspects of the travel plan beyond the immediate boundaries of the town, and
- (b) significantly more ambitious targets for modal share than the 50 per cent (increasing to 60 per cent over time) mentioned above and for the use of sustainable transport.

Eco-towns should be designed in a way that supports children walking or cycling to school safely and easily. There should be a maximum walking distance of 800m from homes to the nearest school for children aged under 11, except where this is not a viable option due to natural water features or other physical landscape restrictions.

#### ET 12 Healthy lifestyles

The built and natural environments are an important component in improving the health and well-being of people. Well designed development and good urban planning can also contribute to promoting and supporting healthier and more active

living and reduce health inequalities. Eco-towns should be designed and planned to support healthy and sustainable environments and enable residents to make healthy choices easily.

#### ET 13 Local services

Building sustainable communities is about providing facilities which contribute to the well-being, enjoyment and health of people. Planning applications should include a good level of provision of services within the eco-town that is proportionate to the size of the development. This should include leisure, health and social care, education, retail, arts and culture, library services, sport and play facilities and community and voluntary sector facilities.

#### ET 14 Green infrastructure

Forty per cent of the eco-town's total area should be allocated to green space, of which at least half should be public and consist of a network of well managed, high quality green/open spaces which are linked to the wider countryside. Planning applications should demonstrate a range of types of green space, for example community forests, wetland areas and public parks. The space should be multifunctional, e.g. accessible for play and recreation, walking or cycling safely, and support wildlife, urban cooling and flood management.

Particular attention should be given to land to allow the local production of food from community, allotment and/or commercial gardens.

#### ET 15 Landscape and historic environment

Planning applications for eco-towns should demonstrate that they have adequately considered the implications for the local landscape and historic environment. This evidence, in particular that gained from landscape character assessments and historic landscape characterisation should be used to ensure that development complements and enhances the existing landscape character. Furthermore, evidence contained in relevant Historic Environment Records, should be used to assess the extent, significance and condition of known heritage assets (and the potential for the discovery of unknown heritage assets) and the contribution that they may make to the eco-town and surrounding area. Eco-town proposals should set out measures to

conserve and, where appropriate, enhance heritage both assets and their settings through the proposed development.

#### ET 16 Biodiversity

Eco-towns should demonstrate a net gain in local biodiversity and planning permission may not be granted for eco town proposals which have a significant adverse effect on internationally designated nature conservation sites or Sites of Special Scientific Interest.

If after completing an appropriate assessment of a plan or project local planning authorities are unable to conclude that there will be no adverse effects on the integrity of any European sites, the plan or project will not be approved, irrespective of conformity with other policies. It is unlikely that proposals for ecotowns will meet the requirements of Article 6(4) of the Habitats Directive. In appropriate cases, local planning authorities may consider the scale and mass of the eco-town necessary to avoid adversely affecting the integrity of European sites. In the event that the authority concludes that it cannot allocate an eco-town of the minimum 5,000 dwellings or otherwise avoid or adequately mitigate any adverse effect, it should make provision up to the closest to the minimum size for which it can be concluded that it does not affect the integrity of any European sites.

A strategy for conserving and enhancing local biodiversity should be produced to accompany planning applications for eco-towns. This should be based on up-to date information about the biodiversity of the area including proposals for the management of local ecosystems and where appropriate, the restoration of degraded habitats or the creation of replacement habitats. It should set out priority actions in line with the England Biodiversity Strategy and Local Biodiversity Action Plans, including appropriate mitigation and/or compensation measures, required to minimise adverse effects on individual species and habitats of principal importance and to enhance local biodiversity overall. Developers should seek the advice of Natural England and other relevant statutory advisers when developing their strategies and decision making authorities should also consult those bodies as to the adequacy of such strategies. Delivery bodies should be identified in the strategy and its implementation should proceed in parallel with the development.

#### ET 17 Water

Eco-towns should be ambitious in terms of water efficiency across the whole development, particularly in areas of serious water stress, and should contribute, where existing water quality leaves scope for further improvement, towards improving water quality in their localities.

Planning applications for all eco-towns should be accompanied by a water cycle strategy that provides a plan for the necessary water services infrastructure improvements. The water cycle strategy should have been developed in partnership with interested parties, including the local planning authority, the Environment Agency, and the relevant water and sewerage companies through a water cycle study. The strategy should:

- (a) assess the impact that the proposed development will have on water demand within the framework of the water companies' water resource management plans and set out the proposed measures which will limit additional water demand from both new housing and new non-domestic buildings
- (b) demonstrate that the development will not result in a deterioration in the status of any surface waters or ground-waters affected by the eco-town; and
- (c) set out proposed measures for improving water quality and avoiding surface water flooding from surface water, groundwater and local watercourses.

Eco-towns should:

- (a) incorporate measures in the water cycle strategy for improving water quality and managing surface water, groundwater and local watercourses to prevent surface water flooding from those sources; and
- (b) incorporate sustainable drainage systems (SUDS) and, except where this is not feasible, as identified within a relevant Surface Water Management Plan, avoid connection of surface water run-off into sewers.

Planning applications for all eco-towns should include a strategy for the long term maintenance, management and adoption of the SUDS.

#### ET 18 Flood risk management

The location, layout and construction of eco-towns should reduce and avoid flood risk wherever practicable. Eco-towns should not increase the risk of flooding elsewhere and should use opportunities to address and reduce existing flooding problems.

There is a strong expectation that all of the built-up areas of an eco-town (including housing, other public buildings and infrastructure) will be fully within Flood Zone 1 – the lowest risk. Flood Zone 2 (medium risk) should, as far as possible, be used for open spaces and informal recreational areas that can serve as multi-functional spaces, for example, those used for flood storage. There should be no built-up development in Flood Zone 3, with the exception of water-compatible development and, where absolutely necessary, essential infrastructure as defined in Table D.2 of PPS25: Development and Flood Risk.

#### ET 19 Waste

Eco-town planning applications should include a sustainable waste and resources plan, covering both domestic and non-domestic waste<sup>26</sup>, which:

- (a) sets targets for residual waste levels, recycling levels and landfill diversion, all of which should be substantially more ambitious than the 2007 national Waste Strategy targets for 2027; it should be demonstrated how these targets will be achieved, monitored and maintained
- (b) establishes how all development will be designed so as to facilitate the achievement of these targets, including the provision of waste storage arrangements which allow for the separate collection of each of the seven priority waste materials as identified in the Waste Strategy for England 2007
- (c) provides evidence that consideration has been given to the use of locally generated waste as a fuel source for combined heat and power (CHP) generation for the eco-town, and
- (d) sets out how developers will ensure that no construction, demolition and excavation waste is sent to landfill, except for those types of waste where landfill is the least environmentally damaging option.

#### ET 20 Master planning

All eco-town planning applications should include an overall master plan and supporting documentation to demonstrate how the eco-town standards set out above will be achieved and it is vital to the long-term success of eco-towns that the standards are sustained. Local Authorities should consider the use of design codes to facilitate efficient delivery of high quality development. In developing the master

plan, there should be a high level of engagement and consultation with prospective and neighbouring communities.

There should be a presumption in favour of the original; that is the first permitted master-plan. Any subsequent planning applications that would materially alter and negatively impact on the integrity of the original master-plan should be refused consent.

#### ET 21 Transition

To support the transition process, planning applications should set out:

- (a) the detailed timetable of delivery of neighbourhoods, employment and community facilities and services – such as public transport, schools, health and social care services, community centres, public spaces, parks and green spaces including biodiversity etc
- (b) plans for operational delivery of priority core services to underpin the low level of carbon emissions, such as public transport infrastructure and services, for when the first residents move in
- (c) progress in and plans for working with Primary Care Trusts and Local Authorities to address the provision of health and social care
- (d) how developers will support the initial formation and growth of communities, through investment in community development and third-sector support, which enhance well-being and provide social structures through which issues can be addressed
- (e) how developers will provide information and resources to encourage environmentally responsible behaviour, especially as new residents move in
- (f) the specific metrics which will be collected and summarised annually to monitor, support and evaluate progress in low carbon living, including those on zero carbon, transport and waste
- (g) a governance transition plan from developer to community, and
- (h) how carbon emissions resulting from the construction of the development will be limited, managed and monitored.

#### ET 22 Community and governance

A long term approach is necessary to ensure a new town retains its integrity as an eco-town, and is able to manage change in a planned way. Planning applications

should be accompanied by long term governance structures for the development to ensure that:

- (a) appropriate governance structures are in place to ensure that standards are met, maintained and evolved to meet future needs
- (b) there is continued community involvement and engagement, to develop social capital
- (c) sustainability metrics, including those on zero carbon, transport, water and waste are agreed and monitored
- (d) future development continues to meet the eco-town standards, and
- (e) community assets are maintained.

The governance proposals should be appropriate to the scale and complexity of the development, and should complement existing democratic arrangements for parish and local governance. They should set out the proposed financial, management and legal structures (including arrangements for the transfer of land, buildings or endowment funds to resident-led community organisations for community use and development, including cultural, worship and income generating purposes). Where appropriate, proposals for establishing new parish arrangements should be considered as part of the longer term governance arrangements for the eco-town. Governance structures will need to be designed so that they can reflect the composition and unique needs of the local community, so that they have potential to bring different groups together to resolve any differences and avoid tensions, and to create a sense of belonging for residents.

The Eco towns PPS supplement can be viewed in full at:

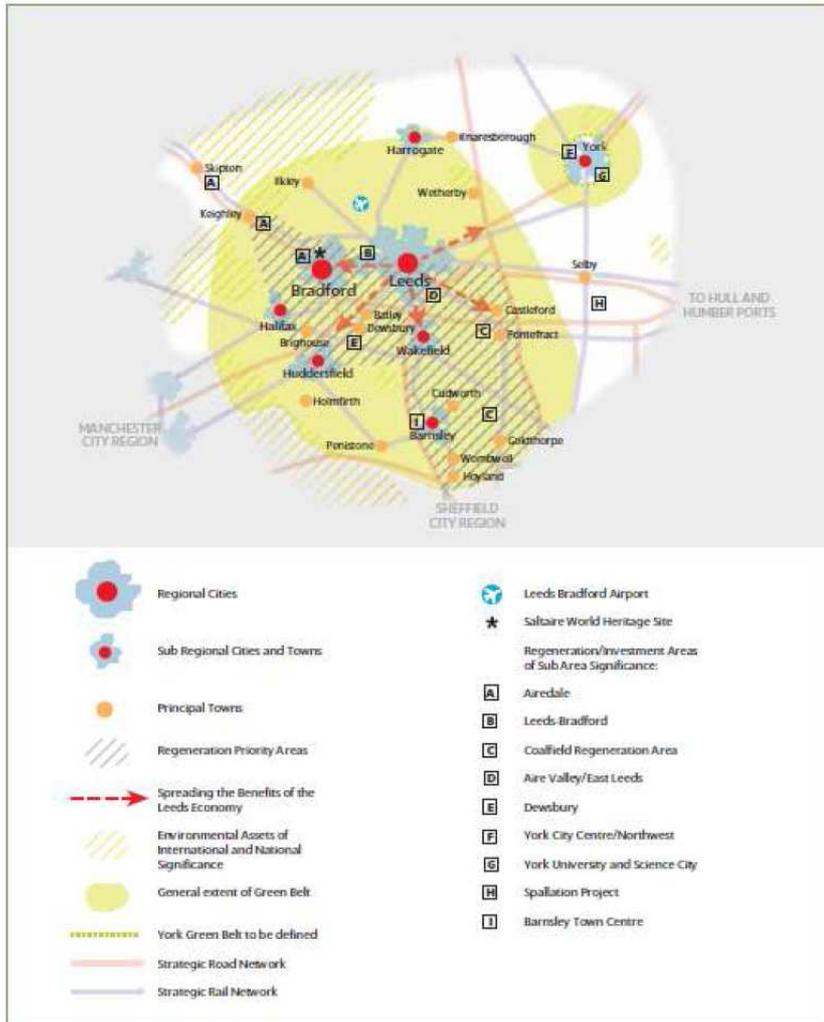
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7773/pps-ecotowns.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7773/pps-ecotowns.pdf)

## **2.3 Regional Context**

### **The Yorkshire and Humber Plan 2008 – Regional Spatial Strategy (RSS)**

The RSS recognised that main city, town and village centres throughout the region are critical in providing business services and performing a role as centres for social, cultural and political life. Bradford sits within the Leeds City Region sub area. The RSS identified Bradford as a Regional City within the regional settlement network with Keighley and Ilkley as principal towns.

Figure 3: Bradford in a Regional Context



Source: Yorkshire and Humber Plan, 2008

As part of the Government's programme of planning reform the Government intends to abolish Regional Strategies through the Localism Act and return decision making powers in planning to local authorities.

On 29 January 2013, the Government laid in Parliament an Order to revoke the Regional Spatial Strategy for Yorkshire and Humber, with the exception of the York Green Belt policies. The decision to revoke the RSS for Yorkshire and Humber follows the completion of a Strategic Environmental Assessment. The Order came into effect on 22 February 2013. The Regional Spatial Strategy for Yorkshire and Humber has now been revoked and no longer forms part of the statutory Development Plan for the Bradford district

The revoked Yorkshire and Humber Plan can be viewed in full at:-

[http://webarchive.nationalarchives.gov.uk/20100528142817/http://www.gos.gov.uk/497763/docs/199734/199799/689582/1\\_Y\\_H\\_Published\\_RSS\\_May\\_2008.pdf](http://webarchive.nationalarchives.gov.uk/20100528142817/http://www.gos.gov.uk/497763/docs/199734/199799/689582/1_Y_H_Published_RSS_May_2008.pdf)

### **The Regional Economic Strategy (RES) 2006-2015**

The Regional Economic Strategy (RES) 2006-2015 provided the 10 year blueprint for economic development in Yorkshire and the Humber.

The Strategy's six objectives are:

1. More Businesses that last – because higher levels of enterprise are so important
2. Competitive Businesses – making indigenous businesses more productive because they innovate and invest
3. Skilled People benefiting business – with talents that employers value and which offer due reward
4. Connecting People to good jobs – because levels of employment make a big difference to people and the economy, and we need more people in jobs in deprived areas.
5. Transport, Infrastructure and Environment – a strong economy needs good sustainable transport connections and to make the best of the environment and infrastructure
6. Stronger Cities, Towns and Rural Communities – to ensure they are attractive places to live, work and invest

In accordance with government policy, all Regional Development Agencies (RDAs) closed on 31 March 2012 and were abolished on 1 July 2012. Archive information for Yorkshire Forward can be found at the following Department of Innovation and Skills website:

<http://www.bis.gov.uk/policies/economic-development/regional-support/rda-archive>

Following the abolishment of the RDAs the Regional Economic Intelligence Unit (REIU) was established to ensure a co-ordinated approach to the use of key intelligence resources (such as the Regional Econometric Model).

The objectives of the unit are to:

- Support the work of Local Enterprise Partnerships (LEPs) across Yorkshire and Humber

- Work closely with local authorities in analysing, monitoring and evaluating their local economic areas
- Work with the public and private sectors in the economic appraisal of potential investment projects
- Provide bespoke economic advice and evidence

Further information can be found at:

[http://www.leeds.gov.uk/Business/Pages/Regional-Economic-Intelligence-Unit-\(REIU\).aspx](http://www.leeds.gov.uk/Business/Pages/Regional-Economic-Intelligence-Unit-(REIU).aspx)

### **Regional Housing Strategy 2005- 2021**

The Regional Housing Board was responsible for producing a Regional Housing Strategy as the basis of advice to ministers on strategic housing priorities in the region.

The Regional Housing Strategy had 3 main purposes:-

- To influence regional, sub-regional and local strategies across a range of housing priorities such as delivery of affordable housing, energy efficiency, fuel poverty, sustainable design and construction, and fair access to housing policies.
- To set out regional housing priorities to steer the use of the accompanying regional investment strategy and its single housing pot
- To steer wider investment towards integrated housing, economic and social activity

On 31 March 2009, the Assembly closed. The work of the Assembly will be taken forward by Local Government Yorkshire and Humber.

Further information can be found on the Local Government Yorkshire website: [www.lgyh.gov.uk](http://www.lgyh.gov.uk)

## **2.4 Sub-Regional Context**

### **Leeds City Region**

Leeds City Region comprises the 10 local authority districts of Barnsley, Bradford, Calderdale, Craven, Harrogate, Kirklees, Leeds, Selby, Wakefield, and York, which reflects the true area of how the economy of Leeds and the other cities, towns and

rural areas in the city region functions; for example, 95% of people who live in the city region also work in the city region.

A City Region Partnership comprising the councils of each of the 10 districts, plus North Yorkshire County Council (which has strategic responsibilities in three of the districts), was set up in 2004, and since then have been working together to look at how policy and delivery at this broad area level can be changed to improve economic growth and competitiveness. On the 1st April 2007 the Partnership became the City Region Leaders' Board, which is constituted as a Joint Committee. The Board comprises of the Leaders of each of the eleven constituent authorities, and has the remit of 'Promoting the economic wellbeing of the Leeds City Region.'

The Board will provide the political accountability and 'voice' of the City Region. The City Region Development Programme (CRDP) November 2006 has been prepared and agreed by the 11 councils and is essentially the economic plan for the city region, focussed on areas where we can add value and deliver our Vision for the city region which is to 'Develop an internationally recognised city region; to raise our economic performance; to spread prosperity across the whole of our city region, and to promote a better quality of life for all of those who live and work here.' This second iteration of the CRDP builds on a 2005 document, but provides a more robust and evidence-based programme for prioritising policy and programmes that will accelerate economic growth in the Leeds City Region.

Figure 4: Bradford in the Leeds City Region



Source: BMDC Core Strategy Baseline Report

The CRDP puts forward a growth scenario to achieve 4% per annum growth in GVA per capita across the city region over the coming ten years. This growth rate would be sufficient to close the productivity gap with the England average over the same time period and contribute to the Northern Way's aim to close the £30 billion gap in the North. This would create around 150,000 net new jobs and result in a £21.5 billion increase in GVA across the city region over the ten year period.

The financial and business services sector is identified as the key industry that will drive the city region's economic growth and competitiveness over the next 10 years. Future economic growth will not be driven solely by the City of Leeds and therefore a key element of the CRDP is to ensure that the city region has a 21st Century transport infrastructure that supports stronger links around the city region, particularly between growth locations and to rural hinterlands.

Realising a stronger and more competitive economy that will benefit all areas within the city region will require co-ordinated and complementary action from all partners and stakeholders within the city region as well as the support of Government in

helping address barriers to growth. Only then can the full economic potential of the Leeds City Region be realised and the benefits felt throughout.

Priorities and Objectives of the Leeds City Region are to:-

- Improve city regional, inter-region and international connectivity  
Encourage a culture of innovation in both individuals and businesses in enterprise, science and greater knowledge transfer
- Encourage and support the development of higher and more relevant skills in the workforce
- Accelerate the development of a world-class infrastructure within which all businesses innovate and can thrive
- Enhance and promote the City Region as a place to live and work

Recently, the Leeds City Region established its business-led board (Local Enterprise Partnership Board), to work alongside the Leaders Board in order to effectively address the city region's economic challenges.

With the impending revocation of the RSS the Partnership has a key role to play in strategic alignment and delivery. A first step towards this was in the adoption by the Leaders Board of the Leeds City Region Interim Strategy Statement. This statement reaffirms the commitment of the 11 authorities to the key principles of RSS in developing their Local Plans.

#### Leeds City Region Urban Eco Settlement Programme

The Bradford-Shipley Canal Road Corridor was identified by the Leeds City Region Partnership in 2008 as one of four Urban Eco Settlements in the Leeds City Region.

The Urban Eco Settlement programme aims to deliver Eco Town standards across the city region, with the focus on major urban growth and regeneration areas. The programme focused on four major brownfield regeneration areas located within key existing centres of housing and economic growth:

- Aire Valley Leeds
- Bradford-Shipley Canal Corridor
- York Northwest
- North Kirklees/South Dewsbury

The Programme of Development will enable the City Region to accelerate housing delivery and to address the following objectives:

- Providing the right housing offer to help sustain economic growth; and
- Creating a step change in the provision of affordable homes
- Meeting sustainability and environmental challenges
- Assisting regeneration of existing settlements.

The vision for the Bradford-Shipley Canal Road Corridor is *“to deliver a 'great place' consisting of a series of vibrant and diverse new sustainable settlements that will provide a quality environment for local people to live, work and thrive and to which new residents will want to move whilst significantly contributing to Bradford's role as a key regional economic driver”*.

The Bradford-Shipley Canal Road Corridor Urban Eco Settlement looks to deliver improved connectivity and quality of place in an area which spans the existing urban centres of Bradford and Shipley. It will provide:

- improved access to walking and cycling opportunities through a new Sustrans cycle route;
- major transport improvements including a re-aligned and improved Canal Road, Shipley Eastern Link Road and a new railway station at Manningham;
- new education facilities for Shipley College;
- flood alleviation measures throughout the UES and making space for water;
- a high quality green corridor alongside a re-instated Bradford Canal;
- social and community infrastructure to complement new and improved residential areas; and
- over 40 hectares of developable brownfield land.

Sustainable development proposals will deliver a high quality of place and residential offer, with development to at least Code Level 4, changing perceptions and raising aspirations that will seek to be replicated across the city and elsewhere. Bradford-Shipley Canal Road Corridor will link green infrastructure improvements with open space provision, make space for water, enhance biodiversity and provide walking and a new Sustrans cycle network to promote and encourage healthy lifestyles

The programme points out that the early delivery of Crag Road (incorporating 500 homes) will provide the stimulus for the development of the whole corridor and will help to strengthen connectivity through its direct relationship with Shipley station and Shipley town centre. It will provide the first of a number of Communities along the corridor that will be linked by the highest standards of sustainable transport infrastructure, and help demonstrate the potential for behavioural change in relation to sustainable movement.

A joint study with the Government, [Urban Eco Settlements Deliverability Assessment](#), investigating the delivery potential of each of the proposed four UES locations was completed in January 2009.

The study concluded that all four locations have significant potential for creating new urban eco communities in major regeneration priority areas, and each has the potential to achieve early progress and outcomes over the next two years.

For the Bradford-Shipley Canal Road Corridor the study highlighted that in the short to medium term further work is required to establish a compelling vision for the area, to assemble and treat sites, prepare planning guidance and procure development partners. Consequently it recommends that funding is allocated to progress a programme of visioning, feasibility and physical enabling works to unlock sites with early delivery potential.

Further details of the Urban Eco Settlement Programme and studies can be found here:

<http://www.leedscityregion.gov.uk/ues.htm>

### **Leeds City Region Green Infrastructure Strategy**

The Leeds City Region Green Infrastructure Strategy was published in 2010 and seeks to guide environmental investment to underpin economic vitality and environmental health. It is built on the following vision:

*“Green infrastructure will shape the future economic, social and environmental success of the Leeds City Region by harnessing the potential of existing environmental resources to promote sustainable economic growth and to tackle climate change.”*

The strategy seeks to:

- identify the value of green infrastructure assets and reinforce and promote the compelling case for investing in them;
- establish the current priorities for green infrastructure investment at the city region level;
- complement national and pan regional efforts to make the most positive use of our current and potential green infrastructure;
- identify the existing green infrastructure assets and partnership strengths on which the strategy will build;
- set out existing and potential mechanisms to finance ambitious green infrastructure investment priorities

The Bradford Shipley Canal Road Corridor Urban Eco-Settlement is identified as a green infrastructure growth area. This settlement will deliver 5,000 homes, 1,500 retro-fitted homes and create 5,900 jobs. The goal is to create a “series of vibrant and diverse new sustainable settlements ... linking the existing urban and economic centres of Bradford and Shipley”. It envisages “the landscape between the settlements will be important, and that is likely to not just include the corridor itself” and includes ambitions for new walking and cycle routes, new open spaces, enhanced biodiversity and remediation of brownfield land.

Green infrastructure planning will therefore be undertaken for each Growth Area to influence the design process by:

- establishing aims and objectives for how green infrastructure should form part of the future development proposition;
- locating and describing all known existing green infrastructure features on site(s),
- explaining how green infrastructure assets should relate to other infrastructures, e.g. SUDS and renewable energy;
- proposing and locating key green infrastructure functions on site or offsite, using the opportunity to co-ordinate actions across a range of sites to ensure all sites benefit;
- identifying areas of green infrastructure which should be created or enhanced and areas which may be lost and why; and

- set out the criteria of protection that may be afforded to each typology of green infrastructure.

Further information can be found here:

<http://www.leedscityregion.gov.uk/gi.htm>

### **West Yorkshire Local Transport Plan (LTP3): MyJourney West Yorkshire**

MyJourney West Yorkshire is a new 15-year Local Transport Plan (LTP). The West Yorkshire LTP is the statutory plan for transport in West Yorkshire and sets out the needs, objectives, ambitions and strategy over the medium to long term as well as detailed spending proposals in its first three years. LTP3 will be delivered through 3 year Local Implementation Plans.

The objectives of the Plan are:

1. To improve connectivity to support economic activity and growth in West Yorkshire and the Leeds City Region.
2. To make substantial progress towards a low carbon, sustainable transport system for West Yorkshire, while recognising transport's contribution to national carbon reduction plans.
3. To enhance the quality of life of people living in, working in and visiting West Yorkshire.

The LTP continues to be seen by DfT as a key means of pulling together long term transport aims and the delivery plan for achieving these within a local area and relevant adjoining areas and setting this within the wider corporate agenda. Continuing to deliver on LTP2 objectives and establishing well thought out proposals under LTP3 will be critical to achieving aspirations for transport infrastructure.

For more information see:

<http://www.wyltp.com/getinvolved/>

## **2.5 Local Policy Context**

### **Community Strategy 2011-14 for Bradford District**

The Community Strategy sets out the big issues the district faces and priorities to address them. To deliver the 2020 Vision three transformational priorities have been agreed:

- Regenerating the city centre
- Improving education
- Developing people's skills

In addition to these priorities there is an urgent need to improve the supply of quality and affordable housing for people in the district and tackle poverty.

The 2020 Vision is broken down into four broader outcomes for the district:

**Economy:** Bradford's economy is increasingly resilient, sustainable, and fair, promoting prosperity and wellbeing across the District.

Strategic Aims:

- To regenerate our city centre and drive economic growth across the district.
- To deliver economic development, without compromising the quality of life of future generations.
- To improve the economic wellbeing of the people across the district.

**Inclusive and strong communities:** Bradford becomes an increasingly inclusive District where everyone is able to participate in the life of their communities and neighbourhoods, and understands their rights and obligations.

Strategic Aims:

- to raise our educational attainment and support our children and young people to reach their full potential
- to develop our skills-base to equip people with skills for work
- to foster safe, self-reliant, and resilient communities and neighbourhoods, that people take pride in
- to devolve influence and decision making, commissioning and resources to localities

**Improving the health, wellbeing and quality of life:** Bradford's people experience improving good health, wellbeing and quality of life, irrespective of their community, background or neighbourhood.

Strategic Aims:

- to improve people's capacity to make informed decisions about healthy lifestyle choices and minimise risky behaviour
- to close the health inequalities gap, while raising wellbeing levels across the whole district
- to support people to sustain their own health and wellbeing during life changes or transitions in circumstances

**Making Bradford a more attractive district:** Bradford becomes a more attractive District, supported by good connectivity and infrastructure.

Strategic Aims:

- to create a greener, cleaner and more sustainable environment which makes best use of our resources and positively affects climate change.
- to enhance transport and connectivity across the district while protecting our biodiversity and natural environment.
- to increase in the quality, quantity and affordability of sustainable housing across the district.
- to ensure our built heritage, natural resources, economic and infrastructure requirements are well balanced to promote sustainable wellbeing.

**Making Bradford a more attractive district:** Bradford becomes a more attractive District, supported by good connectivity and infrastructure.

Strategic Aims:

- to create a greener, cleaner and more sustainable environment which makes best use of our resources and positively affects climate change.
- to enhance transport and connectivity across the district while protecting our biodiversity and natural environment.
- to increase in the quality, quantity and affordability of sustainable housing across the district.
- to ensure our built heritage, natural resources, economic and infrastructure requirements are well balanced to promote sustainable wellbeing.

The AAP will be informed by the Community Strategy Strategic Aims and look to deliver the four outcomes of the 2020 vision.

### **The Core Strategy**

The Core Strategy is one of the key documents that will form part of the emerging Local Plan for Bradford. It will:

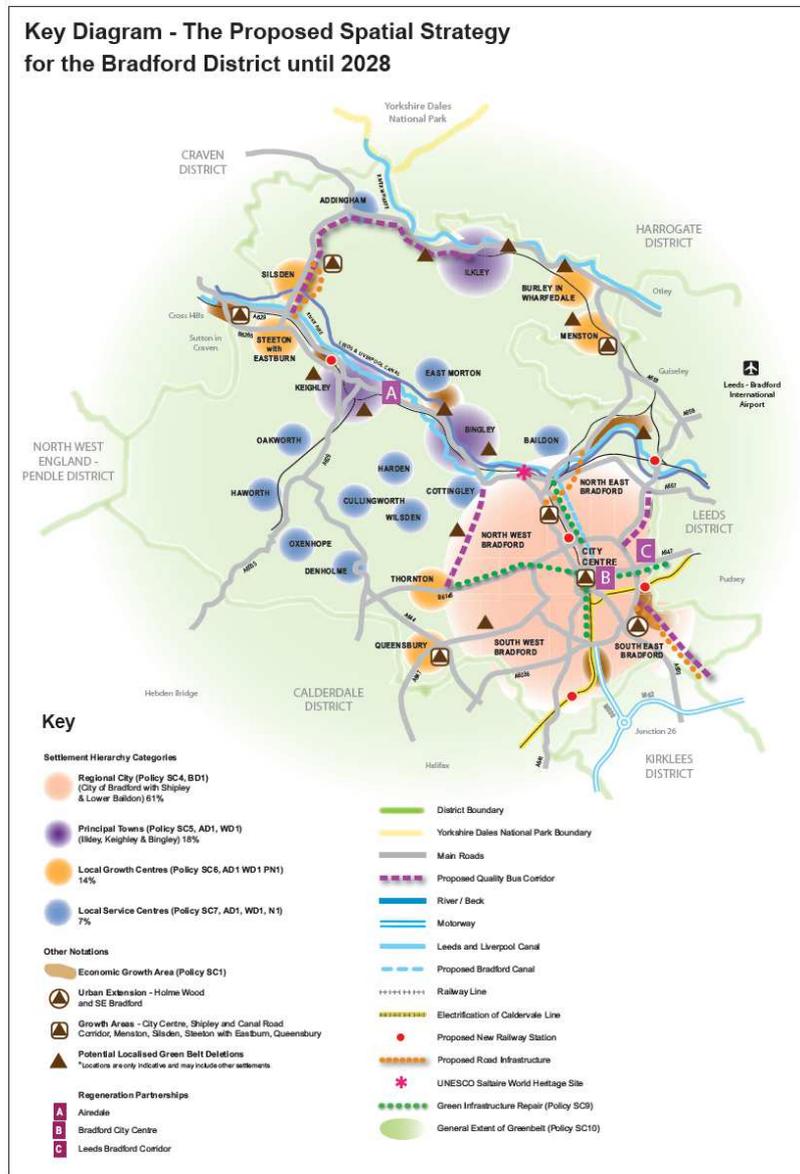
- Set out the broad aims and objectives for sustainable development in the District for the next 15-20 years until 2026;
- Set out broad policies for steering and shaping development within the district;
- Set out the broad locations for new housing, employment and infrastructure investment; and
- Take account of national and regional policy and the Council's aims as set out in the Community Strategy.

The Core Strategy is currently at the Preferred Options Stage and has yet to be subject to an Examination in Public or adopted by the council.

The Core Strategy sets out a locally defined settlement strategy and places particular emphasis on the importance of promoting the delivery of new infrastructure in tandem with development to enable regeneration and growth to be delivered across the district.

The Core Strategy Key Diagram illustrates how the Spatial Strategy will be applied across the district. The CRC is identified as a Growth Area on the Key Diagram.

Figure 5: Core Strategy Key Diagram



Source: Core Strategy Further Engagement Draft, 2011

The Vision set out in the Core Strategy for the Bradford District states that

*“By 2028 the Bradford District has become a key driver of the Leeds City Region’s economy and a much sought after and desirable location where people want to live, do business, shop and spend their leisure and recreation time. The district has demonstrated that it is a place that encourages sustainable lifestyle choices and responds positively to the challenge of climate change.*

*The growth of the City of Bradford and the towns along Airedale and Wharfedale has been supported by a significant increase in the delivery of new houses, both market and affordable. This growth has driven the economic and social transformation of the district. Sustainable development and management has been at heart of this growth and prosperity over the last 20 years. The District's unique landscapes, heritage and biodiversity assets have played a vital role in making great places that encapsulates what makes Bradford so special.*

*Economic transformation of the district has been achieved by building on Bradford's key strengths of its unique young, growing and international workforce as well as its culture of entrepreneurship, high quality places where businesses can thrive and its rich historic and cultural identity.”<sup>1</sup>*

This vision has been derived from the challenges, issues, opportunities and aspirations expressed in the Big Plan, other regional and local plans and strategies and consultations during the development stages of the Core Strategy.

The vision reinforces the role for Bradford as a key driver at the heart of a successful and growing Leeds City Region, driving the economic and social transformation of the district through sustainable growth and development.

Central to the strategy is the rejuvenation of the city centre and the delivery of the council's key regeneration priorities including Airedale, Manningham and the Shipley and Canal Road Corridor.

The Core Strategy Further Engagement Draft set out that approximately 50,000 new homes will have to be built in the district between 2008 and 2026, to meet the needs of the growing population and the increase in household formation. Similarly, during this period, there will be significant economic growth linked to this population increase, which will result in further development of employment, retail, education, leisure and ancillary uses.

In support of Bradford's regeneration priorities one of the key locations identified to deliver housing and economic growth in the Core Strategy is the Shipley and Canal Road Corridor (Policy SC1).

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<sup>1</sup> CBMDC (2011) *Core Strategy Further Engagement Draft*. CBMDC.

**Strategic Core Policy 1 (SC1) Overall Approach and Key Spatial Priorities**

Plans, strategies, investment decisions and programmes should aim to:

1. Transform economic, environmental and social conditions of the District, in particular Bradford City Centre, Airedale, Shipley and the Canal Road Corridor and the Leeds Bradford Corridor

Policy BD1 sets out that up to 5000 new homes are planned to be located in Shipley and the Canal Road Corridor. In line with the sub area policies in the Core Strategy, the AAP will set out planning policies to guide development proposals in the area, along with details of how these proposals will be delivered.

**Policy 1 (BD1): City of Bradford including Shipley and Lower Baildon Sub Area**

B. Urban Regeneration and Renewal and new housing provision will be focussed on the following areas:-

2. Shipley and the Canal Road Corridor will see the creation of up to 5,000 new houses by 2028. The Corridor will be characterised by innovative and contemporary architecture, Bolton Woods wildlife area and a linear park and waterway linking the town centre of Shipley to the City Centre of Bradford. This will all be supported by the creation of new cycleways and footways, new railway station at Manningham and improvements to Frizinghall station and new road infrastructure with the Shipley Eastern Link Road.

The vision for the CRC is:

*“Shipley town centre and the Canal Road Corridor has truly become an area of extensive transformational change, which is regarded as an exemplar Eco Settlement between Bradford city centre and Shipley town centre. The corridor has born witness to the delivery of mixed residential development with office, retail, sporting and leisure offer connected by a green corridor of the Bradford Canal running from Bradford city centre to Shipley.*

*This comprehensive re-development of brownfield sites has occurred within the context of high environmental standards and sustainable transport options. This has included Frizinghall and Manningham railway stations, Bolton Woods and the new waterways and linear parks. There have been significant improvements to connectivity and accessibility by road, rail and bus between Shipley and Bradford the city centre delivered through the connecting Airedale project.*

*Shipley has enhanced its role as an important town centre, through the expansion of its retail, leisure, office and housing market offer with the redevelopment of Market*

*Square, the former indoor markets, Well Croft and much improved links to Saltaire and the Leeds Liverpool Canal. This development has created an area worthy of its location in close proximity to the World Heritage Site of Saltaire and been managed in a way which has enhanced both Shipley and the World Heritage Site, creating a better offer for visitors and residents alike.*

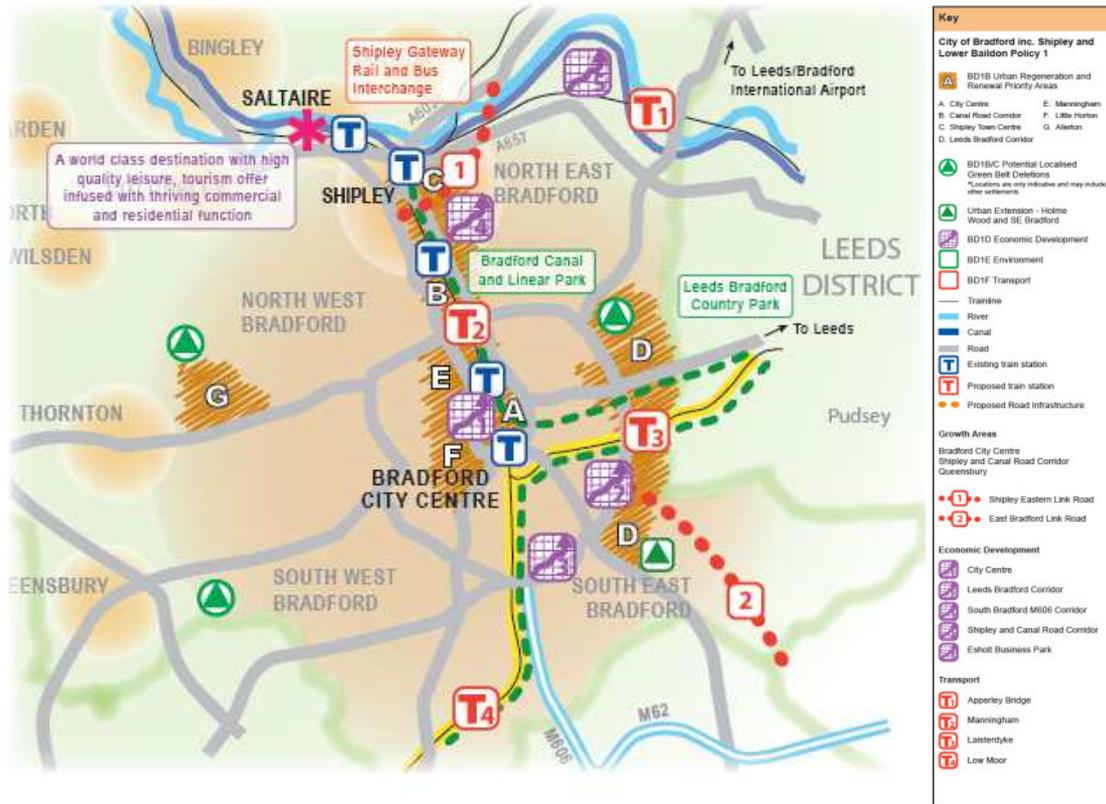
*The construction of the Shipley Eastern Link Road and associated accessibility improvements between the railway station and the town centre has played a significant role in the economic and physical regeneration of the town. The Shipley Eastern Link Road has opened up new opportunities for commercial and residential schemes in attractive waterside settings. The creation of the Shipley Gateway Rail and Bus Interchange with a good mix of office, residential, retail and leisure offer and associated multi level car parking provision has elevated Shipley as a location of choice for businesses and residents wanting to locate in a vibrant town. High quality, fast and frequent public transport links to the major city centres of Leeds and Bradford and beyond has contributed to this vibrancy.*

*Saltaire village is truly a world class destination, with a high quality leisure and tourism offer infused with thriving commercial and residential functions. Salts Mill, at the heart of the village, has a key role in the economy, providing one of the largest areas of business space in Airedale for many of its innovative and successful enterprises. The restoration of Roberts Park, river and canal walkways and public realm enhancements together with the creation of a visitors centre has reinforced Saltaire's role as a major tourism and leisure destination. Saltaire has been recognised as a major asset for the district, which has contributed as the catalyst for the economic regeneration of neighbouring Shipley town centre with the creation of a hotel providing tourist and business accommodation as well as quality shopping and dining experience.'*<sup>2</sup>

Figure 6: Core Strategy Spatial Vision Diagram: City of Bradford

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<sup>2</sup> CBMDC. Core Strategy Further Engagement Draft. CBMDC.



Source: Core Strategy Further Engagement Draft, 2011

Further relevant Core Strategy Policies are set out below:

### SC1 Overall Approach and Key Spatial Priorities

Growth and change will be managed in order to deliver the Spatial Vision and Core Strategy objectives.

The CRC AAP should aim to:

- Transform economic, environmental and social conditions of the District, in particular Bradford City Centre, Airedale, Shipley and the Canal Road Corridor.
- Enhance the role of Bradford District as an important business location with a good supply of labour, housing and associated community provision.
- Protect and enhance the District's environmental resources.
- Ensure resilience and adaptability to environmental threats.
- Avoid increasing flood risk, and manage land and river catchments
- Ensure that transport management and investment support and help deliver the Core spatial strategy, in particular sustainable patterns of development.

- Ensure that developments are of high quality which protect and enhance local settings, character, distinctiveness and heritage.

### SC2 Climate Change and Resource Use

The CRC should:

- Plan for the adaptation and long term resilience to the impacts of climate change
- Support the Council's carbon reduction targets
- Seek to assess and manage the impact of future decisions on the district's natural resources
- Encourage better energy, resource and water use and minimise resource demands from development.

### SC3 Working together to make Great Places

The CRC should be based on:

- effective collaboration between the Council, partners and communities within the District and the Leeds City Region.

### SC4 Hierarchy of Settlements

The Regional City of Bradford will be the prime focus for housing, employment, shopping, leisure, education, health and cultural activities and facilities in the District.

The CRC should:

- Achieve a wide range of housing and employment offer to meet the needs of the communities and modern employees.
- Develop a strong sense of place with a high quality of public realm
- Create new and improve existing green areas, networks and corridors
- to enhance biodiversity and recreation.
- Strengthen the identity and roles of Bradford City Centre and Shipley Town Centre as accessible and vibrant focal points for high trip generating uses.
- Improve public transport and increase opportunities for walking and cycling.
- Improve connectivity with the adjoining Regional City of Leeds

### SC5 Location of Development

The Council will allocate sites in DPDs by giving:

- First priority to the re-use of previously developed land and buildings and the more efficient and effective use of existing developed areas
- Second priority to other suitable infill opportunities
- Third priority to extensions to the built up areas of settlements in sustainable locations.

In identifying sites the Council will adopt an accessibility orientated approach to ensure that development:

- Makes the best use of existing transport infrastructure and capacity.
- Takes into account capacity constraints and deliverable improvements, particularly in relation to junctions on the Strategic Road Network.
- Complies with the public transport accessibility criteria and maximises accessibility by walking and cycling.
- Maximises the use of rail and water for uses generating large freight movements.

### SC6 Green Infrastructure

Support and encourage the maintenance, enhancement and extension of networks of Green Infrastructure.

Key areas of change within the District offer opportunities to improve Green Infrastructure include:

- Bradford Shipley Canal Road Corridor Urban Eco settlement to establish innovative means of low carbon living and create space for water management and sustainable transport routes.
- Bradford City Centre to improve connectivity and enhance the quality of the public realm
- Leeds-Liverpool Canal Corridor to enhance its positive contribution to recreation, tourism, heritage, biodiversity and environmental quality

Identify locations for development that offer opportunities to enhance Green Infrastructure and set out principles for design to deliver this.

### **Sub Area Policies**

BD1 City of Bradford including Shipley and Lower Baildon

The City Bradford will accommodate up to 28,000 dwellings and approximately 105 Ha of new employment in the period up to 2028.

Shipley and the Canal Road Corridor will see the creation of up to 5,000 new houses by 2028. The broad distribution of housing development for the CRC is:

- Canal Road 3000
- Shipley 2000

Economic Development

- The City of Bradford including Shipley to be the principal focus for indigenous economic development and growth.
- Support Bradford City Centre as the prime office, small and medium sized creative and knowledge industries, shopping, leisure and tourism focus
- Support the role of Shipley town centre as a location for a mix of retail, leisure and office developments
- Encourage leisure and tourism led mixed use developments in Saltaire which include enhancements to public realm, improved links between Saltaire and Shipley town centre whilst respecting the 'outstanding and universal value' of the UNESCO World Heritage status of Saltaire

Environment

- Protect and enhance the biodiversity and landscape character of the City of Bradford including Shipley.
- Protect the integrity of nationally and internationally important biodiversity sites.
- Improve green infrastructure network along the Shipley & Canal Road Corridor and Bradford City Centre
- Conserve and enhance the heritage values of Bradford City Centre and surrounding neighbourhoods; including Listed Buildings, Conservation Areas,
- Maximise renewable energy generation and energy efficiency, including neighbourhood CHP.
- Improve air quality, particularly in the four Air Quality Management Areas (AQMA) based on AQMA Action Plans.

## Transport

- Ensure that strategic patterns of development maximise the opportunities to use non car modes of transport and reduce the overall need to travel.
- Develop new railway stations at Manningham
- Improve public transport within and to Bradford City Centre and Shipley Town Centre.
- Develop critical road and public transport infrastructure with the Connecting Airedale Transport Improvement Project including the Shipley Eastern Link Road
- Improve key transport corridors, including M606/M62, A650 (Shipley Airedale Corridor)
- Implement stronger demand management in the City of Bradford, and in relation to the Strategic Road Network.
- Improve cycleway and public rights of way.

## Joined up working

- Collaboration on the implementation of the Core Strategy through the Area Action Plan DPDs, including adjoining local authorities, public, private and voluntary sector partners.

## BD2 Investment priorities for the City of Bradford including Shipley and Lower Baildon

Public and private sector investment will be targeted:

- To provide infrastructure to support site assembly, manage flood risk, and improve access to Bradford city centre, Shipley town centres as part of regeneration initiative on the Shipley and Canal Road Corridor.

## **Economy**

### EC1 Creating a successful and competitive Bradford District economy within the Leeds City Region

CRC AAP should help to deliver:

- Economic growth taking account of potential job growth.
- Investment in locations such as Bradford City Centre, Shipley Town Centre and the Canal Road Corridor
- The Council's priority for Grade A office developments will be Bradford City Centre

- Improved links between job opportunities, skills and the needs of excluded communities.
- A modern manufacturing sector and modernisation of manufacturing industries.
- A knowledge-driven economy.
- Higher rates of business start ups and survival, and a larger number of small businesses, including the provision of low cost and smaller incubator units in the City of Bradford and the Airedale Corridor.
- Development related to priority sectors or clusters, or individual employers important to the district's economy, where they have specific property requirements.
- The potential of non business class sectors, including health, sport, retail, leisure, tourism and education as key economic and employment generators.
- Opportunities for business relating to the District's unique environmental assets and challenges, including sustainable construction, renewable energy.

#### EC2 Supporting Business and Creating Jobs

Support the delivery of 2782 new jobs annually in the period to 2028 through:

- Planning for a supply of 146 ha of developable employment land by allocating a range of employment sites. Land allocated for employment purposes will not be granted permission for alternative uses
- Implementing regeneration proposals within Airedale and Bradford City Centre
- Supporting and improving the vitality of the City Centre and lower order town and district centres.

#### EC3 Employment Land Requirement

The planned requirement for 146 ha of employment land will be met from the following sources:

- Unimplemented but deliverable sites allocated within the RUDP;
- Other committed sites with planning permission for employment use;
- Sites already identified in existing regeneration strategies for Bradford City Centre and Airedale.
- Sites identified in forthcoming and emerging masterplans including that for the Shipley / Canal Road Corridor

The employment land requirement distribution is:

- 105 ha within City of Bradford
- 31 ha in the Airedale Corridor

#### EC4 Sustainable Economic Growth

Council will seek to manage economic and employment growth in a sustainable manner by:-

- Assessing all site proposals against their deliverability and sustainability
- Refusing Planning Permission for the alternative development of land and buildings currently or last in use for business or industrial purposes, unless it can be demonstrated that a site is no longer suitable for such use in terms of
- Identifying Strategic Employment Zones
- Supporting priority business sectors and clusters through the provision of appropriately located sites and premises
- Encouraging economic enterprises which develop or enhance the viability of tourism, culture and leisure based activities, and the built and natural environment
- Supporting the provision of live- work premises.
- Ensuring that new developments of more than 1000 sq metres of non residential floorspace will secure at least 10% of their energy from decentralised and renewable or low carbon sources and meet 'BREEAM Very Good' standards on buildings unless, this is not feasible or viable

#### EC5 City, Town, District and Local Centres

Plans, strategies, investment decisions and programmes should strengthen the role and performance of existing city, town, district and local centres.

- Centre boundaries, primary shopping areas, primary and secondary shop frontages and sites to meet at least the first five years of identified need will be determined by CRC AAP.
- Bradford City Centre then Shipley Town Centre should be the focus for a wide diversity of economic activity.
- Small Units (under 150sqm) will be permitted provided that the development will not adversely effect on the vitality and viability of other centres.
- Residential and office development above ground floor uses will be encouraged.

- Development, environmental enhancements, accessibility improvements, and town centre management and promotional events and activities should take place in each of the centres to create distinctive, attractive and vibrant sense of place and identity to be enjoyed and used by all.

## **Transport**

### TR1 Travel Reduction and Modal Shift

The District will aim to:-

- Reduce travel demand, traffic growth and congestion,
- Shift to modes with lower environmental impacts, and
- Improve journey time reliability

DPDs, will be informed by Government Policy and the public transport accessibility criteria in Appendix 3 to ensure development is appropriately located to encourage sustainable travel.

Protect and enhance the District's Road and Rail Transport Networks, especially on the Strategic Transport Network and other key corridors through:

- The appropriate location of development,
- Soft and integral demand management,
- Giving priority to improvements to public transport including upgrading of existing rail stations such as Frizinghall, the creation of transport interchanges in Shipley Town Centre and creation of new rail stations at Manningham.
- All developments leading in a potential increase in movement to provide a transport assessment/ statement and travel plan

Identify, protect and develop appropriate facilities for the development and improvement of walking, cycling

### TR2 Parking Policy

- Assess of new developments against indicative parking standards contained in Appendix 4.
- Park and ride facilities, for both rail and bus.
- Reduction in long stay parking (other than at railway stations to serve rail users and at other locations serving a park and ride function)

### TR3 Public Transport, Cycling and Walking

Safeguard and improve public transport infrastructure and services though:

- The public transport accessibility criteria, as set out in Appendix 3 and the Strategic Transport Network and other key corridors, should be used to guide the allocation of sites in DPDs

The following strategic public transport themes should have priority

- Improve public transport in the City of Bradford
- Provision of strategic bus- and rail-based park & ride/ parkway stations serving the City of Bradford and Shipley
- Develop and improve strategic public transport interchanges of District significance in the City of Bradford, Shipley
- protect sites and routes for light rail transport, walking and cycling as identified in DPDs.

### TR4 Transport and Tourism

Seek opportunities to improve access to all its main tourist destinations, particularly Saltaire and City of Bradford by public transport

### TR7 Transport Investment and Management Priorities

Transport investment and management priorities of the District as outlined in the Leeds City Region Transport Strategy and Local Transport Plan

## **Housing**

### HO1 Scale of Housing Required

Provision will be made within the LDF to facilitate broadly the scale of new housing development as set out in Policy H1 and Table 12.1 of the approved RSS.

This equates to the following minimum net completion rates over the plan period:

- Phase 1 (2004-8) = 1560 dwellings per annum
- Phase 2 (2008-16) = 2430 dwellings per annum
- Phase 3 (2016-28) = 2700 dwellings per annum

### HO2 Strategic Sources of Supply

Dwelling targets set out in Policy HO1 will be met through:

- Housing completions since April 2004; and

- Existing commitments with planning permission; and implemented but deliverable or developable sites allocated for residential development in the RUDP;
- Additional new deliverable and developable sites allocated for housing development within the forthcoming DPDs including the CRC AAP

Specific area based initiatives to help deliver the supply targets will include:

Growth areas including the development of an Urban Eco Settlement in the Bradford-Shipley Canal Road Corridor;

### HO3 Distribution of Housing Requirement

In accordance with the vision and spatial principles, the forthcoming Shipley & Canal Road DPD's will allocate sufficient land to meet the residual housing requirement of 45,500 for the district between April 2011 and April 2028. This requirement will be apportioned as follows:

- 5,000 (11% of the district total) within the Shipley & Canal Road AAP;

The Apportionments between the different settlements of the district will be as follows:

- Canal Road 3,000
- Shipley 2,000

### HO4 Phasing and Release of Housing Sites

The release of land within the LDF will be phased. Detailed proposals for the phasing periods, the allocation of sites within those phases and the trigger mechanisms for releasing land will be set out within the DPD's but will be based on the following principles:

- The need to maintain a 5 year supply of deliverable sites
- The need to have regard to delivering the overall housing requirement in line with the housing trajectory
- The need to meet the targets for development on brownfield land
- The need to prioritise and not undermine proposals for urban regeneration within the Regional City of Bradford
- The need to ensure that the scale and timing of development within the different strategic planning areas of the district is co-ordinated with the provision of new infrastructure;

### HO5 Density of Housing Schemes

- Developers will be expected to make the best and most efficient use of land.
- Densities should normally achieve at least a minimum of 30 dwellings per hectare, and developers will be expected to achieve significantly higher densities than this in areas well served by public transport.
- Detailed density targets applying to specific sub areas will be set out within the DPD's.

#### HO6 Maximising use of Previously Developed Land

The Council will give priority to the development of previously developed land.

In order to achieve the district wide target of 50%, the Allocations, Bradford City Centre and Shipley and Canal Road DPD's should bring forward land and manage its release so as to deliver at least the following proportions of housing development on previously developed land:

- In the Regional City of Bradford a minimum of 60%

#### HO7 Housing Site Allocation Principles

Sites will be identified, assessed, compared and allocated for housing development in the Shipley & Canal Road AAP based on a range of principles including:

- The need to allocate sufficient deliverable and developable sites to meet the targets set out in Core Strategy Policies HO1 and HO3;
- Prioritising the allocation of sites which would assist in the regeneration of the Plan area;
- Maximising the use of previously developed land within the Plan area and prioritising their development via phasing policies - subject to the maintenance of a range of sites which meet local need and provision of a 5 year supply of deliverable sites;
- Prioritising the allocation of sites which would remedy identified deficiencies in local infrastructure and services including open space, community and education facilities;
- Maximising positive environmental benefits of development by prioritising the allocation of sustainably located sites which:
  - a. Would result in significant environmental improvements to an area for example by reclaiming derelict land;

- b. Would enhance biodiversity or contribute to the aim of achieving no net loss of biodiversity;
- c. Would provide opportunities to draw energy supply from decentralised and renewable / low carbon sources;
- d. Would provide opportunities to create or enhance green infrastructure particularly those that link urban green spaces with the wider countryside.
- Minimising the use of green belt land within the Plan area;
- Minimising adverse environmental impacts of housing growth, in particular with regard to climate change, biodiversity and flood risk, by wherever possible:
  - a. Selecting sites accessible to a range of services and community facilities thereby reducing the need to travel;
  - b. Selecting sites accessible to quality public transport services;
  - c. Avoiding development of sites which would result in the fragmentation or isolation of natural habitats;
  - d. Minimising harm to the landscape context including the character and setting of the area in question;
  - e. Minimising the loss of trees and woodland;
  - f. Avoiding sites or locations which would pose unacceptable risk to health and safety;

#### HO8 Housing Mix

Seek to ensure that a mix and balance housing of all types, sizes, prices and tenures are provided to meet the need of the District's growing and diverse population.

All large sites will be expected to incorporate a mix of house types and sizes.

Specific guidance on house types and mix on an area or site basis will be set out as necessary in the Shipley & Canal Road DPD's.

There should be a particular emphasis of the following strategic priorities:

- Delivering more family housing across the district;
- Delivering sufficient affordable housing in line with Policy HO11
- Increasing the supply of larger homes across the district in particular in areas suffering from high levels of overcrowding;

- Increasing the supply of housing which is able to meet people's needs throughout their lives – for example to meet the needs of the elderly through housing built to lifetime homes standards;
- Increasing the supply of high quality flats and apartments particularly in accessible city and town centre locations;

#### HO9 Housing Quality

Encourage all new housing developments to meet the highest possible sustainable design and construction standards.

Subject to viability, the minimum acceptable standards with reference to the Code For Sustainable Homes over the LDF plan period will be as follows:

- Code Level 3 from 1st April 2011
- Code Level 4 from 1st April 2013
- Code Level 6 from 1st April 2016 or any national equivalent.
  
- Specific guidance on housing quality on an area or site basis will be set out as necessary in the Shipley & Canal Road DPD's
- The Shipley & Canal Road DPD will seek to deliver housing within the Urban Eco Settlement area which meets Eco Towns standards as defined in the supplement to PPS1, subject to feasibility and / or viability;
- New development of more than 10 dwellings should secure at least 10% of their energy from decentralised and renewable or low carbon sources, unless, this is not feasible and or viable;
- All new housing should be built to Lifetime Homes Standards from 1st April 2012.

#### HO10 Overcrowding and Vacant Homes

The Council will work with stakeholders and use its plans, programmes and strategies to make best use of and improve the quality of the existing housing stock.

#### HO11 Affordable Housing

- Subject to viability, the Council will negotiate up to 30% in the Bradford-Shipley Canal Road Corridor Urban Eco-Settlement area.
- Affordable housing will be required on sites of 15 dwellings or more and on sites over 0.4 hectares in size.

### HO12 Provision of Sites for Gypsies, Travellers and Travelling Showpeople

The Council will make provision via policies and site allocations to deliver the following number of additional pitches for Gypsies and Travellers and Travelling Showpeople for the period 2008-28:

- 68 pitches for the gypsy and traveller communities;
- 20 pitches for travelling showpeople

The Allocations DPD and Shipley & Canal Road AAP will identify sufficient sites to deliver this requirement in sustainable and accessible locations which meet the needs of local communities;

All sites which are developed or proposed for allocation for the gypsy and traveler and travelling showpeople communities should be assessed against criteria relating to:

- Safe and appropriate access to the highway network;
- Whether they are or can be served by utilities or infrastructure;
- Whether they are accessible to services, amenities and public transport;
- The avoidance of significant adverse affects on the environment and adjacent land uses; and
- Incorporating appropriate design and landscaping standards.

## **Environment**

### EN1 Open Space, Sports and Recreational

Land identified as recreation open space, or which is currently or was formerly used for recreation open space will be protected from development.

Exceptions will only be made where:

- The proposal includes alternative equivalent or better provision in terms of quantity, quality, accessibility and management arrangements, and
- The loss of open space does not lead to a deficiency in the area, taking into account the most recent assessments of existing provision and future proposals for growth, and
- The site is not suitable to meet any identified deficiency in other types of open space or indoor sports facilities.

Land currently identified as urban greenspace or which fulfils the functions of urban greenspace will be protected from development

- retains the open and green character and
- through design makes a positive contribution to the character and amenity of such areas.

Housing developments will be required to provide for new or improved open space, sport and recreational facilities through:

- The provision of new open space, preferably on-site,
- A contribution to the provision of new open space off-site; or
- The enhancement of existing open space nearby

### EN2 Biodiversity and Geodiveristy

Development likely to have an adverse effect on SEGIs and RIGS or Bradford Wildlife Areas will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the substantive nature conservation value of the site.

Proposals that are likely to have an impact on such sites will be assessed according to the following criteria;

- Whether works are necessary for management of the site in the interests of conservation.
- The potential for adverse impact on the habitat and features that form the rationale for designation.
- The potential for adverse impact on species of local and national importance.
- The extent to which appropriate measures to mitigate any potentially harmful impacts can be identified and carried out.

### EN3 Historic Environment

Proactively conserve and enhance the character, appearance, archaeological and historic value and significance of the District's designated and undesignated heritage assets and their settings.

These will be protected by:

- Ensuring the protection, management and enhancement of the Outstanding Universal Value of Saltaire World Heritage Site and its, setting and buffer

zone through a World Heritage Site Management Plan and associated documents.

- Requiring that development within the World Heritage Site should protect, conserve and enhance its Outstanding Universal Value. Development within the setting of the Site, including within the Buffer Zone, should not adversely impact on its Outstanding Universal Value or setting including views to and from the Site.

#### EN4 Landscape

Plans should seek to reverse the decline in species of local and national importance and in the quality and quantity of strategically important habitats within the district.

Apply the following principles:

- Respecting the principles of ecological networks design and the mapping of biodiversity enhancement opportunities identified at a regional level
- Respecting the overall sensitivity of the landscape and its capacity to adapt to change
- Incorporating beneficial existing biodiversity, geological and landscape features into design of the site and introducing further enhancement
- Enhancing landscapes in the urban fringe, achieving improvements in advance of development and achieving multi-functional benefits that meet Green Infrastructure objectives
- Respecting the importance of cultural associations, historic elements in the landscape and the setting of settlements and heritage assets
- Contributing towards overall enhancement of the District's biodiversity resource

#### EN5 Trees and woodlands

The Council will seek to preserve and enhance the contribution that trees and areas of woodland cover make to the character of the district.

#### EN6 Energy

Plans will maximise improvements to energy efficiency and support the development of renewable and low carbon sources of energy by:-

- Identifying strategic low carbon and renewable energy opportunities

- Ensuring that future development takes place in locations and at a scale that can make a positive contribution to the districts capacity for renewable and low carbon energy
- Setting out local requirements for the use of decentralised energy and sustainability of buildings in DPDs that promote the maximum use of decentralised energy in areas of greatest opportunity, while taking into account viability and the need to deliver both market and affordable housing

#### EN7 Development and Flood Risk

The Council will manage flood risk pro-actively and in assessing proposals for development will:

- Integrate sequential testing into all levels of plan-making
- Require space for the storage of flood water within Zones 2 and 3a
- Ensure that any new development in areas of flood risk is appropriately resilient and resistant
- Safeguard potential to increase flood storage provision and improve defences within the Rivers Aire and Wharfe corridors
- Manage and reduce the impacts of flooding within the beck corridors, in a manner that enhances their value for wildlife
- Adopt a holistic approach to flood risk in the Bradford Beck corridor in order to deliver sustainable regeneration in LDDs and in master planning work
- Require that all sources of flooding are addressed, that run-off from new development is minimised and that any need for improvements in drainage infrastructure is taken into account
- Require developers to assess the feasibility of implementing and maintaining SUDS in a manner that is integral to site design and maximises habitat value
- Use flood risk data to inform decisions made about Green Infrastructure.

The Council will not permit development in areas shown as functional floodplain in the Bradford SFRA with the exception of water compatible uses and essential infrastructure.

#### EN8 Environmental Protection Policy

Proposals which are likely to cause pollution or are likely to result in exposure to sources of pollution or risks to safety, will only be permitted if measures can be implemented to minimise pollution and risk to a level that provides a high standard of

protection for health, environmental quality and amenity. The following issues require particular attention:

- Air Quality
- Land
- Nuisance
- Water Resources

#### EN9 New Minerals Extraction Sites

Proposals to open up new minerals extraction sites on previously undeveloped land will not be acceptable unless it can be demonstrated that one of the following circumstances applies:

- It is not reasonably practical for physical, economic, or environmental reasons to reopen or extend any existing workings, or;
- That the specific qualities of the mineral reserve proposed to be extracted will meet an identified need that could not be met through the extension or re-opening of existing workings.

The extension of existing mineral extraction sites will be supported in principle in situations where existing permitted reserves are close to exhaustion, providing that those parts of the existing site which it is practicable to restore, without unreasonably constraining future minerals extraction activity, have been restored

#### Policy EN12 - Minerals Safeguarding

Seeks to safeguard mineral resources in the district.

#### EN13 Waste Management

Is based upon the waste Hierarchy and the need to ensure appropriate capacity to move towards self sufficient approach.

#### EN14 Waste Management

Provides guidance on the approach to allocating sites with the Waste management DPD

### **Implementation and Delivery Policies**

#### ID1 Development Plan Documents and Authority Monitoring Report

The Council will deliver the vision, objectives, core policies, thematic policies and sub area policies using a number of Development Plan Documents:-

ShIPLEY & Canal Road Corridor Area Action Plan DPD – will support the work of the Joint Venture Company established by the Council and Arnold Laver Group to deliver proposals for an urban eco settlement between ShIPLEY Town Centre and Bradford City Centre

#### ID2 Development Management

Sets out development control policy aims including that all development proposals should make a positive contribution to the environment and quality of life through high quality design, layout and landscaping

#### ID3 Developer Contributions

Sets out the council's policy for seeking contributions from developers where the need arises.

#### ID4 Working with Partners

The Council will work with a range of partners, including Leeds City Region LEP, its Local Strategic Partnership, West Yorkshire Integrated Transport Authority, infrastructure providers and stakeholders, to ensure that requirements for new infrastructure and services can be met.

Planned infrastructure will be set out in an Infrastructure Delivery Schedule which will be updated, where necessary, to incorporate partners' future plans. Future infrastructure provision will also be taken into account in during the production of the Canal Road Corridor AAP.

#### ID5 Facilitating Delivery

The Council will support the sustainable growth of the District and the targeted approach of the Core Strategy whilst ensuring that infrastructure can be provided through the following mechanisms:

- As land owners, the Council and other public sector organisations have an opportunity to consider how its decisions on the future use of its sites can support the vision and policies in the Core Strategy, and maximise the use of publicly owned land and buildings to enable sustainable and inclusive development.
- Area Action Plans will be prepared to deliver key proposals where necessary

- The co-location of facilities will be welcomed where this will meet greater infrastructure needs and in order to increase public access
- The Infrastructure Delivery Plan and Schedule will be reviewed and updated to ensure that there is commitment to delivery from infrastructure providers

#### ID6 Simplification of Planning Guidance to Encourage Sustainable Development

The Council will consider the use of a combination of the following tools to simplify the planning guidance to facilitate efficient and effective delivery of sustainable development:-

1. Simplified Planning Zones (SPZs)
2. Planning Performance Agreements (PPAs)
3. Article 4 Directions –
4. Local Development Orders/Neighbourhood Development Orders (LDOs/NDOs)
5. Supplementary Planning Documents (SPDs)

The Council will also consider the use of other innovative tools in partnership with central government to help simplify planning guidance.

#### ID7 Community Involvement

The Statement of Community Involvement will be the Council's statement on how the local community, stakeholders and other interested parties will be consulted on Local Development Plan Documents

#### ID8 Regeneration Funding and Delivery

The Council in its role as enabler will continue to use existing and new tools to promote and incentivise economic growth, such as:-

- Local Asset Backed Vehicles (LABVs)
- Joint European Support for Sustainable
- Investment in City Areas (JESSICAs)
- Joint European Resources for Micro to
- Medium Enterprises Initiative (JEREMIE)
- Infrastructure Financing
- Prudential Borrowing

- Voluntary Development Partnerships
- Business Improvement Districts (BIDS)
- Community Land Trusts (CLT)
- Tax Increment Financing (TIFs)
- Regional Growth Fund
- Local Incentive Backed Vehicles (LIBVs)
- Multi Use Infrastructure Procurement
- New Homes Bonus
- Total Place

To view the Core Strategy Preferred Approach see:

[http://www.bradford.gov.uk/bmdc/Consultations/core\\_strategy\\_preferred\\_options\\_stage](http://www.bradford.gov.uk/bmdc/Consultations/core_strategy_preferred_options_stage)

### **Replacement Unitary Development Plan 2005**

The Replacement Unitary Development Plan (RUDP) is the statutory Development Plan that the Council has produced to fulfil its obligations under the 1990 Planning Act.

The Development Plan is a land use strategy for the Bradford District and is the prime consideration when the Council makes decisions on planning applications. It includes policies to guide development and proposals for the use of land to ensure that the needs of the District's population for homes, jobs, shopping, recreation and other facilities can be met.

The Replacement Unitary Development Plan (RUDP) for the Bradford District was adopted by the Council on the 18th of October 2005.

#### *RUDP Saved Policies: October 2008*

Under Government legislation relating to the transition between the old UDP system and the new LDF system, the RUDP policies were 'saved' for 3 years. The Council has received a Direction from the Secretary of State which now saves the vast majority of RUDP policies beyond this 3 year period. The direction letter and schedule indicates which RUDP policies are still saved and therefore still form part of the statutory Development Plan for Bradford.

The key objectives of the RDP are:

- To maximise the potential for the built up areas to meet the development needs of the District.
- To promote the conservation and improvement of the built and natural environment.
- Improve the quality of the built environment through a high standard of design in buildings, streets, public spaces and neighbourhoods, which respects local distinctiveness.
- To ensure the provision of adequate housing and community facilities to meet the districts needs.
- To help promote economic success.
- To provide a location strategy for accommodating development and ensuring environmental protection in a way which promotes access to services and minimises dependence on the private car.
- To manage the use of the District's natural and renewable resources including energy efficiently and with care.
- To help ensure pollution and waste are minimised and managed efficiently.

The key 'saved' site specific policies of the Replacement Unitary Development Plan which directly influence development in the CRC and will be used to assess any future planning applications within the corridor against include:

- H4 Protecting Allocated Housing Sites – The land to the east of Canal Road to the rear of the industrial units, bordered Brow Wood is allocated as a phase1 housing site and the former Oswin Mills site is allocated as a phase 2 housing site. Proposals for uses other than residential are likely to strongly be refused on these sites.
- E6 Employment Zones – In these areas proposals for uses other than employment uses are likely to be refused, unless the proposal brings positive environmental benefits, contributes positively to the reuse of a listed building or accords with the plan's retail policies and proposals which permit the expansion of adjoining retail centres. Policy E7 confirms that within employment zones, the Council will support new employment development, although there are some restrictions on large storage and distribution warehouse development.

- OS2 Protection of Recreation Open Space – There are large swathes of land bounded by Valley Road and Crag Road / Poplar Road / Poplar Crescent that are allocated as recreational open space. Development on these sites is unlikely to be permitted unless the loss of recreation open space does not lead to or exacerbate a local deficiency in the availability of open space.
- OS3 Protection of Playing Fields – The King George V Memorial Playing Fields next to the former Oswin Mills site is allocated as playing fields and protected from development under policy OS3.
- OS4 New Open Space Provision – Brow Wood and the land to the north of Poplars Park Road are identified as new sites for recreational open space and under policy OS4, permission will not be granted for the development or use of these areas for any other purpose.
- OS6 Allotments – There are allotments to the north of Gaisby Lane, bounded by Canal Road, which are protected from development under policy OS6 unless alternative provision can be made or it can be demonstrated that community support for the allotments is negligible.
- NE9 Other Sites of Landscape or Wildlife Interest – It must be demonstrated that development would not have an adverse impact on such sites.
- TM10 National and local cycle network – Any development within the corridor will be expected to facilitate or incorporate the network and associated links.
- BN/NR4 & S/NR4 Bolton Woods Quarry Buffer Zone - proposals for further development or quarrying within the Bolton Woods Quarry Buffer Zone as defined on the proposals map will not be permitted.
- NR3 and NR4 – proposals for extensions to existing mineral workings or new workings will only be permitted if the proposal does not give rise to unacceptable adverse impacts on people and the environment or result in the loss of important ecological, archaeological, landscape or geological features.
- S/BH14 Saltaire World Heritage Site - within the Saltaire World Heritage Site buffer zone, development which would be likely to adversely affect views into or out of the World Heritage Site will only be permitted where a suitable program of mitigation is proposed.
- P8 Waste Management Facilities – proposals for waste handling, transfer, processing and recycling and scrapyards will only be permitted if a number of criteria are satisfied. This requires the activity to be appropriately sited within an employment site; safety accessible from the primary road network and

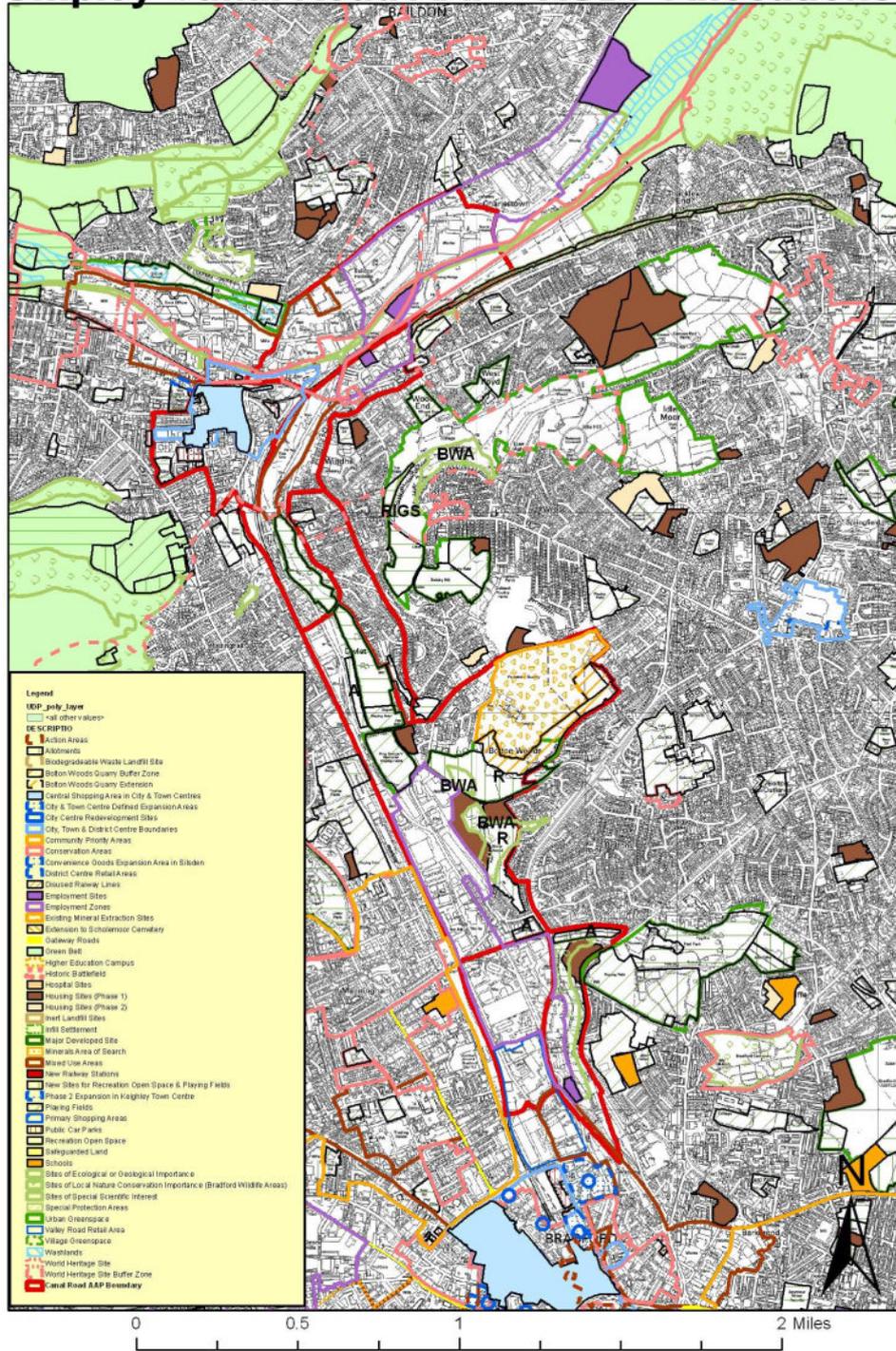
does not give rise to unacceptable adverse impacts on people and the environment.

- P12 Waste Management Facilities – Operational Matters – this policy requires all planning applications for such uses to be accompanied by full details of the activity including the proposed control and mitigation measures.
- Shipley is designated as a District Centre.
- The Masterplan area is adjacent to four Conservation Areas and a number of Listed Buildings.

Figure 7 shows the RUDP allocations in relation to the CRC (Note: this is a reproduction of the RUDP map layers and is not the formal statutory proposals map).

Figure 7: CRC RUDP Policies and Allocations

## Shipley Canal Road AAP - RUDP Allocations



Other 'saved' UDP policies which will be of importance for any development proposed within the corridor include:

### Principal Policies

- UDP1 Promoting Sustainable Patterns of Development

- UDP3 Quality of Built and Natural Environment
- UDP4 Economic Regeneration
- UDP7 Reducing the Need to Travel
- UDP8 Use of Natural Resources and Renewable Energy
- UDP9 Management of Pollution, Hazards and Waste

*Urban Renaissance*

- UR2 Promoting Sustainable Development
- UR3 The Local Impact of Development
- UR5 Safeguarded Land
- UR7A Mixed Use Areas

*The Economy, Employment and Tourism*

- E1 Protecting Allocated Employment Sites
- E8 New Tourist Facilities
- E10 Small Hotels and Guest Houses

*Housing*

- H6 Non-Residential Development of Existing Residential Uses
- H7 Housing Density – Expectation
- H9 Affordable Housing

*Town Centres, Retail and Leisure Developments*

- CT1 Development within the City and Town Centres and Defined Expansion Areas
- CT5 Amenity within City and Town Centres
- CT6 Amenity within City and Town Centres
- CR1A Retail Development within Centres
- CR2A Areas of Deficiency
- CR3A Small Shops
- CR4A Other Retail Development
- CR5A Specialist Retailing
- CL1 Leisure and Entertainment Development within City, Town or District Centres
- CL2 Leisure and Entertainment Developments in Expansion Areas

- CL3 Leisure and Entertainment Developments outside the City, Town and District Centres

#### *Transport and Movement*

- TM2 Impact of traffic and its mitigation
- TM4 Railway Stations
- TM8 New pedestrian and cycle links
- TM11 Parking standards for non residential developments
- TM12 Parking standards for residential developments
- TM14 Public parking in city and town centres
- TM19 Cycle parking

#### *Design*

- D1 General Design Considerations
- D2 Energy Efficiency and Sustainable Design
- D3 Access for People with Disabilities
- D4 Community Safety
- D5 Landscaping
- D6 Meeting the Needs of Pedestrians
- D7 Meeting the Needs of Cyclists
- D7A Meeting the Needs of Public Transport Through Design
- D8 Public Art
- D9 Urban Design in City and Town Centres
- D10 Environmental Improvement of Transport Corridors

#### *Built Heritage and the Historic Environment*

- BH1 Change of Use of Listed Buildings
- BH2 Demolition of Listed Buildings
- BH4 Alterations, Extension or Substantial Demolition of Listed Buildings
- BH4A Setting of Listed Buildings
- BH10 Open Space within or Adjacent to Conservation Areas

#### *Community Facilities*

- CF3 Community Uses
- *Open Land in Settlements*
- OS1 Urban Greenspace

*Natural Environment and the Countryside*

- NE2 Outdoor Sport and Recreation
- NE4 Trees and Woodlands
- NE10 Protection of Natural Features and Species

*Natural Resources*

- NR1 Safeguarding Resources
- NR12 Renewable Energy
- NR15B Flood Risk
- NR17 Groundwater Protection
- NR17A Water Courses and Water Bodies

*Pollution Hazards and Waste*

- P1 Air Quality
- P2 Air Pollution
- P3 Hazardous Installation
- P5 Development Close to Former Land Fill Sites
- P7 Noise

To view the RUDP see:

[http://www.bradford.gov.uk/bmdc/the\\_environment/planning\\_service/unitary\\_development\\_plan/unitary\\_development\\_plan.htm](http://www.bradford.gov.uk/bmdc/the_environment/planning_service/unitary_development_plan/unitary_development_plan.htm)

**Bradford Local Transport Plan (LTP) Implementation Plan (2011-2014)**

The first Bradford LTP Implementation Plan (2011-2014) has been approved in June 2011 which, as well as setting out an overview of the transport issues in the District, can be used when engaging local stakeholders and communities on transport issues. LTP3 thus provides greater flexibility for ITAs to determine the scope, nature and duration of its strategy and implementation plans.

The West Yorkshire Local Transport Plan 2011 – 2026 (LTP3) and this Local Implementation Plan supersedes the Bradford District Transport Strategy 2006-2021 approved by Bradford Council Executive on 24 April 2007

The introduction of the Local Transport Act in 2008 changed the governance of transport issues in England and Wales. One of the requirements of this Act was the formation of the West Yorkshire Integrated Transport Authority (WYITA) to oversee transport policy development in West Yorkshire.

The WYITA has produced the 15-year West Yorkshire Local Transport Plan Strategy – My Journey West Yorkshire – Local Transport Plan Strategy 2011-2026) and detailed 3-year Implementation Plans which set out the transport policy and programmes in West Yorkshire.

The Local Transport Plan has been informed by the Leeds City Region Transport Strategy and Connectivity Study, which identified key strategic transport interventions required across the City Region. This document sets out many of the transport aspirations of the Bradford District over the same period.

In terms of highway improvements, schemes proposed for delivery in the first 3 year Implementation Plan period include improvements to the Canal Road corridor to ease congestion and provide better walking and cycling facilities.

The plan highlights that there is likely to be an absence of significant levels of Government funding for new major transport schemes in the District at least in the early part of the Local Transport Plan period. It is therefore envisaged that more expensive transport infrastructure enhancements (such as link roads or bypasses) would only be implemented if substantially funded by the private sector through emerging Community Infrastructure Levies or Tax Incremental Financing. Such schemes will be developed through planning agreements, or through partnership arrangements, identified in the Local Plan, which support new housing or create jobs.

Masterplans for Airedale and the Canal Road corridor will influence the provision of transport enhancements within these areas over the Local Transport Plan period (eg Shipley Eastern Relief Road and further improvements to Canal Road).

To view the Bradford Local LTP Implementation Plan see:

<http://www.bradford.gov.uk/NR/rdonlyres/DF0F9794-F840-4AD0-BBFC-BD4CF3A6FF93/0/LTP3BradfordImplementationPlan.pdf>

## Connecting Airedale

The 'Connecting Airedale' Transport Improvement Project is being developed through a partnership between Bradford Council, Metro and the Airedale Partnership. The Airedale Masterplan gained widespread support from local residents and businesses and Connecting Airedale is a key element in the delivery of the Masterplan.

The Project's main aim is to address transport problems in a sustainable way to improve the safety and efficiency of the local transport system for all users. This is of critical importance for the regeneration of this regionally important area which will lead to more, and better, jobs and houses.

There are five stages to Connecting Airedale but all are at an early point in their development and require Government Department for Transport funding for their progression. The schemes indicated in the documents accessed via these web pages are at the concept stage and are likely to change as a result of the scheme development and consultation process. As such they should not be viewed as definitive proposals. The Stages are as follows:

- [Stage 1 – Shipley Town Centre & Saltaire Improvements](#)
- [Stage 2 – Manningham Rail Station](#)
- [Stage 3 – Canal Road Improvement and A650 Quality Bus Corridor](#)
- [Stage 4 – Shipley Eastern Relief Road/Leeds Road High Occupancy Vehicle Lane/Otley Road Bus Lanes](#)
- [Keighley Transport Improvements](#)

<http://www.airedalepartnership.org/masterplan.asp>

## **2.6 Conclusion**

The Canal Road Corridor has been identified by the City of Bradford Metropolitan District Council as an area with significant regeneration potential, and is one of the top regeneration priorities for Bradford District.

The conclusion identifies the national, regional and local objectives for the following key themes and considers their implications for the CRC:

- Housing

- Retail / Employment
- Green Infrastructure
- Heritage
- Transport
- Minerals and Waste
- Sustainability

## **Housing**

### National / Regional / Local Objectives:

- Maximise the role of Bradford, as a Regional city, in providing a distinctive and attractive residential offer.
- Provide housing choice through a range of quality dwellings, in terms of type and affordability, to cater for the current needs and future growth of the district.
- Make effective use of land through locally set appropriate density targets.
- Promote developments which are attractive, safe and designed and built to a high quality.
- Prioritise the use of previously developed land.
- Encourage developments to be located in areas with good access to jobs and key services.
- Meet objectively assessed needs and ensure an adequate supply of land for housing development in places with good transport links.

### Implications for the Canal Road Corridor:

- The CRC is identified as a growth location in the Core Strategy Preferred Approach and is identified as an Urban Eco Settlement in the Leeds City Region.
- Up to 5000 new homes are planned for the Shipley and the CRC.
- The RUDP currently allocates the land to the east of Canal Road to the rear of the industrial units, bordered Brow Wood as a phase1 housing site and the former Oswin Mills site is allocated as a phase 2 housing site.

## **Retail / Employment**

### National / Regional / Local Objectives:

- Secure sustainable economic growth and promote the vitality and viability of town and other centres as important places for communities.
- Focus new economic growth and development of main town centre uses in existing centres, with the aim of offering a wide range of services to communities in an attractive and safe environment and remedying deficiencies in provision in areas with poor access to facilities
- Encourage leisure and entertainment facilities where they positively impact upon the area.
- Undertake a sequential assessment and impact assessment for planning applications for main town centre uses including retail development that are not in an existing centre and are not in accordance with an up to date development plan.
- Promote support for retail diversity, competition, start up business growth and local markets.
- Support manufacturing and key growth sectors such as financial services, health, environmental, tourism, digital, cultural and creative industries.
- Improve services to investors to attract new businesses and promote the supply of land for development across the district.
- Promote and support a successful growing economy, by fostering indigenous firms and by attracting inward investment in the high value creative, innovative and knowledge based industries.
- Work with business to improve key corridors into the district, and tackle environmental issues.

*Implications for the Canal Road Corridor:*

- Shipley is designated as a District Centre.
- RUDP Policy E6 Employment Zones – In these areas proposals for uses other than employment uses are likely to be refused, unless the proposal brings positive environmental benefits, contributes positively to the reuse of a listed building or accords with the plan's retail policies and proposals which permit the expansion of adjoining retail centres. RUDP Policy E7 confirms that within employment zones, the Council will support new employment development, although there are some restrictions on large storage and distribution warehouse development.
- The RUDP retail hierarchy promotes new retail sites within centres in order to deliver wider regeneration benefits.

- New Local Centres can be created provided that they do not have adverse impact on existing centres.
- There is a need to consider the role of the site where the Channel Urban Village was to be located, as this area is critical as it links the corridor to the city centre. It is currently identified as a retail expansion area.
- Significant contamination issues exist along the whole of the corridor, particularly at Gaisby Lane which could restrict the redevelopment potential of some sites.

### **Green Infrastructure/Open Space**

#### National / Regional / Local Objectives:

- Minimise impacts on biodiversity and provide net gains where possible
- Protect existing open space and promote better use of open spaces and sports and recreational facilities. Existing open space/sports/recreational buildings/land, should not be built on unless it is surplus to requirements and the loss would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location.
- Improve the quality of the local environment for local communities and businesses.
- Increase the quality and accessibility of natural green space.
- Set out a strategic approach to green infrastructure.
- Enhance rights of way and cycling networks to encourage a modal shift to walking and cycling to enhance healthy lifestyles and wellbeing.
- Increase the area and quality of land regarded as being of high biodiversity value.
- Improve habitat connectivity to address issues of fragmentation and isolation of vulnerable species.

#### Implications for the Canal Road Corridor:

- The corridor benefits from having the large swathes of open land and a King George V Playing Field, which provides recreational opportunities within the corridor.
- On account of the level of population growth expected within the district there will be increased pressure on local wildlife and recreation resources.

- RUDP Policy OS2 Protection of Recreation Open Space – There are large swathes of land bounded by Valley Road and Crag Road / Poplar Road / Poplar Crescent that are allocated as recreational open space. Development on these sites is unlikely to be permitted unless the loss of recreation open space does not lead to or exacerbate a local deficiency in the availability of open space, therefore, this may restrict potential development opportunities in this area.
- RUDP Policy OS3 Protection of Playing Fields – The King George V Memorial Playing Fields next to the former Oswin Mills site is allocated as playing fields and protected from development under RUDP Policy OS3.
- RUDP Policy OS4 New Open Space Provision – Brow Wood and the land to the north of Poplars Park Road are identified as new sites for recreational open space and under policy OS4, permission will not be granted for the development or use of these areas for any other purpose.
- RUDP Policy OS6 Allotments – There are allotments to the north of Gaisby Lane, bounded by Canal Road, which are protected from development under policy OS6 unless alternative provision can be made or it can be demonstrated that community support for the allotments is negligible.
- RUDP Policy NE9 Other Sites of Landscape or Wildlife Interest – It must be demonstrated that development would not have an adverse impact on such sites.

## **Heritage**

### National / Regional / Local Objectives:

- Conserve and where appropriate enhance the historic, archaeological and architectural heritage of centres by providing a sense of place and a focus for the community and for civic activity.
- Development should be respectful of and incorporate existing historic features.
- Existing built assets should be conserved and efforts should be made to build upon the area's strengths by improving the quality, condition, access and use of natural and built assets. Such measures could include promoting the maintenance and re-use of historic buildings.

### Implications for the Canal Road Corridor:

- The AAP area is adjacent to four Conservation Areas and a number of Listed Buildings.
- The buffer zone for the Saltaire World Heritage Site (the area in which development might impact on the setting of the World Heritage Site) extends south in to Shipley and covers the northern part of the study area. Whilst landscape interventions would support the setting of Saltaire, there is a risk that built development could pose issues.

## Transport

### National / Regional / Local Objectives:

- Promote accessibility to jobs, shopping, leisure facilities amenities and services through public transport, walking and cycling.
- Encourage sustainable transport modes and focus on creating attractive walking and cycling routes.
- Encourage more sustainable patterns of development which reduce the need to travel.
- Seek improvements to rail links and services between the major cities, towns and rail accessed sites and premises.
- Improve public transport and promote cycling and walking and access to footpaths and bridleways.
- Enhance the appearance of public transport hubs and services to promote use of the public transport network.
- protect sites and routes critical in developing transport infrastructure.

### Implications for the Canal Road Corridor:

- Any development will need to ensure that significant impacts on CRC are minimised.
- There is unlikely to be significant public funds for major transport schemes in the short to medium term for the CRC, however smaller improvement schemes to improve congestion are planned in the LTP3 for CRC.
- Shipley is connected to the communities of Keighley, Bingley and Saltaire via the Airedale Greenway, a combined walking and cycling route, which follows the Leeds and Liverpool Canal and forms part of the National Cycle network.
- Promote the opening of new rail stations at Apperley Bridge, Manningham and Low Moor.

- UDP Policy TM10 National and local cycle network – Any development within the corridor will be expected to facilitate or incorporate the network and associated links.

## **Minerals and Waste**

### National / Regional / Local Objectives:

- Ensure high quality development through the efficient use of resources.
- Provide opportunities for the management of waste where it arises and consider opportunities for a broad range of locations including industrial sites, looking for opportunities to co-locate facilities together or with complementary activities.
- Promote the sustainable management of waste and recycling.

### Implications for the Canal Road Corridor:

- Bolton Woods Quarry is a Mineral Extraction Site, which plays an important role in the economy of the District. The Buffer Zone is protected from further quarry development to maintain social amenity for communities in close proximity.
- RUDP Policies BN/NR4 and S/NR4 restrict proposals for future development or quarrying within the Bolton Woods Quarry Buffer Zone.
- Although developments such as the existing waste transfer station are in accordance with the objectives of PPS10, due to the nature of the activity it may have a negative impact on any future development along this corridor.
- RUDP Policy P8 Waste Management Facilities – proposals for waste handling, transfer, processing and recycling and scrapyards will only be permitted if a number of criteria are satisfied. This requires the activity to be appropriately sited within an employment site; safety accessible from the primary road network and does not give rise to unacceptable adverse impacts on people and the environment.
- RUDP Policy P12 Waste Management Facilities – Operational Matters – this policy requires all planning applications for such uses to be accompanied by full details of the activity including the proposed control and mitigation measures.

## **Sustainability**

National / Regional / Local Objectives:

- At the heart of the NPPF is a presumption in favour of sustainable development. All plans should be based upon and reflect the presumption in favour of sustainable development, with clear policies that will guide how the presumption should be applied locally.
- Promote sustainable construction, energy efficient designs and proposals which use renewable energy.
- Prioritise development on previously developed land in order to ensure the most efficient and effective use is made of land.
- A sustainability appraisal which meets the requirements of the European Directive on strategic environmental assessment should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors.

Implications for the Canal Road Corridor:

- The CRC AAP should positively seek opportunities to meet objectively assessed development needs of the area unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits.
- Any development proposed within the corridor should accord with the principles set out within the Council's Climate Change Strategy and assist in helping Bradford to achieve its CO2 emissions reduction target of 40% by 2020.
- Developments will need to take full account of flood risk and climate change.
- Any decision-making undertaken as part of the CRC AAP process needs to be 'future proofed' against climate change.

### **3.0 Regeneration Context**

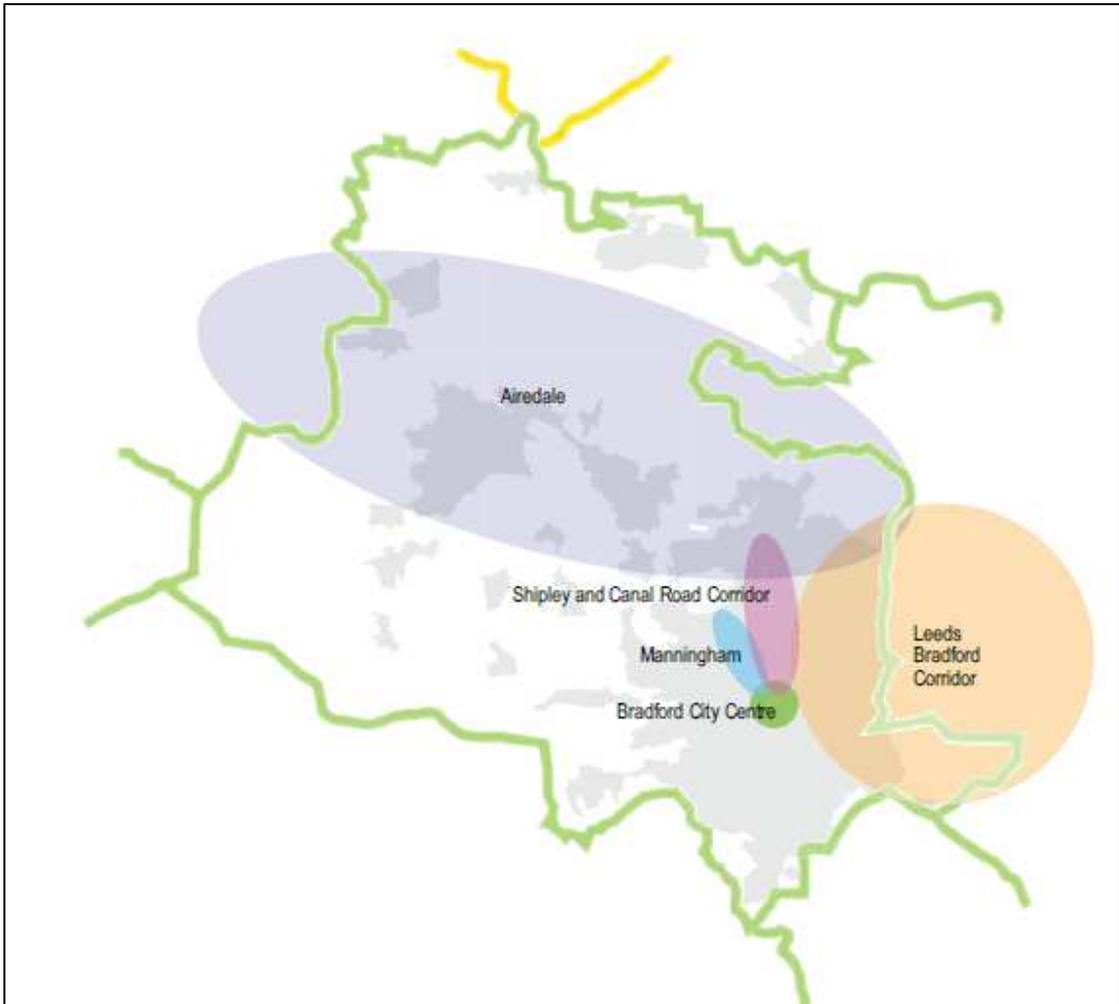
This section identifies and assesses a range of current and proposed regeneration initiatives affecting the future of the CRC.

In addition to the planning policy documents, a number of regeneration plans and strategies have been prepared that either cover specific areas of the Canal Road Corridor or are likely to influence development within the corridor. It is important to understand and reflect the recommendations from other masterplans and regeneration activities as development within the Canal Road Corridor will not occur in a vacuum, and is likely to have wider implications. The documents that have been reviewed include:

- Airedale Corridors Masterplan (Arup, 2004)
- Canal Road Masterplan (URBED, 2007)
- New Bolton Woods Masterplan (CRUVL 2012)
- Shipley Town Centre Strategy (Airedale Partnership, 2008)
- Shipley Area Action Plan (Shipley Area Committee, 2009)
- Bradford City Centre Masterplan (Alsop Architects, 2003)
- Manningham Masterplan (2005) and Neighbourhood Development Plan (DBA Associates, 2010)

The CRC is strategically placed both locally in linking up the Council's other three regeneration masterplan areas – City Centre, Manningham and Airedale and regionally being adjacent to the Leeds City Region. The CRC's relationship to the council's other masterplan areas is show in Figure 8.

Figure 8: Spatial relationship between CRC and other masterplans and strategies



Source: Core Strategy Further Engagement Draft (CBMDC)

### 3.1 Airedale Masterplan

In 2004, Arup were commissioned by the Airedale Partnership, City of Bradford District Council and Yorkshire Forward to develop a masterplan and strategy for Airedale.

The aim of the study was to identify how the 2020 vision for Bradford as set out in the Sustainable Community Strategy could be delivered for Airedale.

The overall vision for the Airedale masterplan was *“for Airedale to be established as a creative, connected and lifestyle corridor, with Shipley positioned as an*

*international gateway to Airedale*". The vision is premised upon the concept of three distinct corridors:

*Creative Corridor* - Internationally recognised for its focus on commercial research, design and development of products and services; a place specialising in innovation and business start-up driven by the widespread integration of digital technology in Airedale.

*Connected Corridor* - A model of integrated transport and communications for road, rail, air and broadband that supports the new and existing world-class companies within Airedale; a place where leadership is strong and committed to the regeneration of Airedale.

*Lifestyle Corridor* - Draws on the raw material of the outstanding rural landscape, town centres, World Heritage Site and waterways to provide a highly desirable quality of life; a place that is well educated, diverse and cosmopolitan in its outlook and proud of being Airedale.

The Airedale masterplan was supplemented by three detailed masterplans for the principal towns of Keighley, Bingley and Shipley. The masterplan report for Shipley town centre identified a number of key issues affecting Shipley.

These can be summarised as:

- Shipley town centre is surrounded to the immediate west and south by residential development. The lack of attractive walking routes from these residential areas to the town centre is a weakness and is exacerbated by the dominance and barrier effects of transport routes and rivers.
- Shipley town centre is enclosed on three sides by strategic roads. This serves to remove through traffic from the town centre but creates a barrier to access. Roads around the town are congested at many times of the day because of capacity-limited junctions.
- The quality of the public realm is generally poor and limited and struggles to make a positive impact on the overall perception of the town.
- Lack of a credible counter balance to the pull of Asda.
- Fragmented retail frontage along Well Croft that fails to effectively tie Asda into the town centre.
- Lack of a northern retail anchor or composite retail attractor.

- Disconnection between the town centre and Saltaire, the station and the canal and poor walking routes between these destinations.
- The under performance of the Market Square as the towns principal public open space.
- Lack of variety and quality of retail units.
- The absence of high quality built environment within the heart of the town and the domination of ugly and poor quality buildings.
- Parked cars and buses occupying key space in the heart of the town.
- The town centre of Shipley is generally well used. However many buildings that effect the setting of the central core appear to be under-utilised.
- Isolation of the railway station from the town centre by main roads and poor walking routes and the station infrastructure is dispersed and dominated by car parking.
- Levels of frontage activity are low and are generally confined to the blocks surrounding the market place. Inactive frontages close to the town centre make many routes feel unsafe and thus compound problems of disconnection.

The strengthening of Shipley town centre is seen as a priority project within the masterplan which will contribute to the re-invigoration of the valley as a whole. The vision for Shipley is to:

- Grow as a strong, diverse and attractive local shopping destination.
- Develop as an equal partner to Saltaire in a mutually supportive and beneficial partnership.
- Improve the quality of its central core and pedestrian access to and from it.
- Exploit its excellent rail communications to the full advantage of the town.

As a result of the specific issues facing Shipley, part of the Airedale masterplan focuses upon Shipley and sets out a vision for the town centre which seeks to establish an attractive context to encourage healthy retail, business, social and cultural activity, with the key aims being to:

- Make the heart of Shipley distinct, attractive, safe, accessible and vibrant.
- Connect the heart of Shipley to a diverse range of existing, potential and proposed catchments with high quality public realm and walking routes.
- Ensure that the retail performance of the town centre is developed as an effective complementary counterbalance to Asda.

- Capture the benefits of proximity derivable from Saltaire and the railway station.

In order to deliver this vision for Shipley, the masterplan identifies a range of physical interventions within the town centre which fall into three categories: Development Projects, Transport Projects and Environmental and Public Realm Projects.

### Development Projects

An overview of the key projects that form part of the masterplan strategy is provided below, these projects include:

#### *Town Centre*

- New Market Square – reduction in size of Market Square
- New Market Hall – new market building with retail and food/drink frontage, with two storey residential accommodation above
- New Town Square – new smaller square provided to the south of the proposed new market building offering opportunities for public outdoor activities
- Old Market Hall – removal of the existing market hall and provision of a new mixed use building with retail facilities fronting the Market Square
- Well Croft – Central Avenue – enhancements to retail area linking Asda to the market area / new market building
- Otley Road Developments – development of new Shipley College Creative Arts and Digital Building and adjacent business uses on opportunity sites to east of Otley Road
- Advanced Digital Institute - commercially-led design and development project supported by the major digital industries within the Shipley area and Yorkshire Forward to be located close to the proposed canal basin

#### *Dockfield Road*

- Shipley College - new college development close to the Shipley Interchange to allow the creation of a beacon of education overlooking Airedale
- Shipley Digital Village - area adjacent to Shipley Interchange could be developed for residential use with some office developments

- Mixed Use Development - an appropriate mix for the Dockfield Road area would be 50 percent office and 50 percent residential split. Through conversions or new build there should be consideration of provision for a post-graduate hall of residence to create affordable accommodation for graduates.

## **Transport Projects**

### *Shipley Eastern Link Road*

The proposed Shipley Eastern Link Road incorporates a second river crossing to the east of the area and provides vehicular access to the Dockfield Lane regeneration zone. The new link would provide traffic relief on the congested Otley Road around the town centre and provide opportunities to reallocate road space for cyclists, pedestrians and bus priority measures, as well as reconnecting the town centre to the railway station.

### *Shipley Gateway Interchange*

The proposed eastern link road will create an opportunity to develop the existing railway station as the Shipley Gateway Interchange. This project should include measures to improve pedestrian and cyclist links between the railway station and the town centre in conjunction with redevelopment of Otley Road frontage sites between the town and the station. A key feature of the interchange is the proposal to relocate the existing station car parking to a new multi-storey site between the town centre and the station. This could be topped by office space at the Otley Road frontage level and incorporate facilities for bus/rail interchange and easy-access through routes. It will also release the existing station triangle for mixed use allocations, creating a highly accessible residential and leisure area within the station site.

### *Improved Pedestrian Links*

Traffic reduction on Otley Road will allow for improved pedestrian links from the town centre to the proposed Shipley College site and interchange development.

### *Railway Station Link*

The town and the station must be better integrated with the provision of a direct and safe walking route.

## **Environmental Projects**

### *ShIPLEY-SALTAIRE LINK*

Central to strengthening the pedestrian links between Saltaire and Shipley is the physical transformation of Saltaire Road via the introduction of visual interest, activity and an improved environment. There is an opportunity for a new hotel, visitor car park and possible visitor centre to be located between the two settlements.

The Airedale Masterplan can be viewed in full at:

<http://www.airedalepartnership.org/masterplan.asp>

### **3.2 URBO and Canal Road Masterplan**

URBO is a joint venture between Balderstone PLC, Arnold Laver & Co. and ADG. Urbo have been working alongside the Council since 2005 to masterplan and deliver a revitalised central area of the Canal Road Corridor comprising some 40ha (100 acres) of land.

In 2006, Urbed were commissioned by URBO to look at the potential of the Arnold Laver depot on Canal Road in Bradford and the surrounding land. This resulted in the production of the Canal Road Corridor Masterplan which considered the future of the Canal Road Corridor for a mix of uses.

The two key drivers for the masterplan were Arnold Laver's intention to relocate operations from a range of sites on Canal Road to a single facility elsewhere in Bradford, as well as the proposals to reopen the Bradford Canal.

The key objectives of the masterplan were:

- To maximise the regeneration and development potential of the Canal;
- To encourage a complementary mix of uses to create both a sustainable and vibrant destination;
- To balance the existing and future roles of the Corridor as a strategic transport corridor and new waterside community;
- Maximise the linear and cross corridor links to ensure good access to adjacent communities and the City Centre; and,
- To satisfy the strategic objectives of Arnold Laver as key landowner and potential delivery partner.

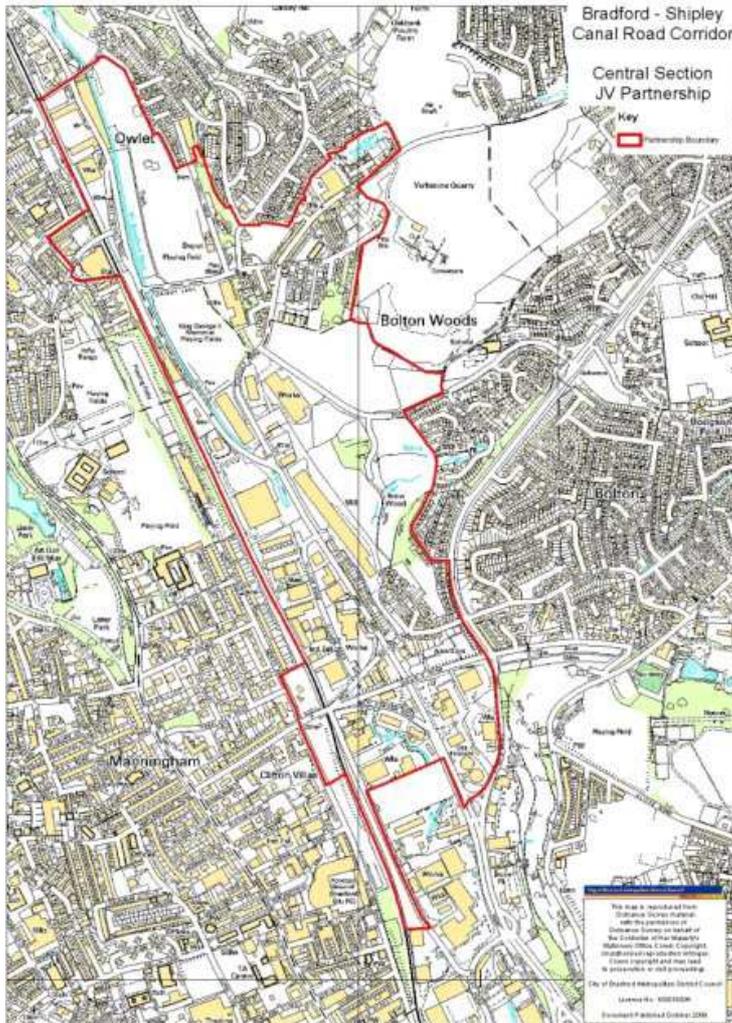
- The masterplan aimed to facilitate the development and implementation of the canal whilst capitalising on the regeneration and development opportunities, which the re-introduction of the canal would bring to the Canal Road Corridor.

<http://www.investinbradford.com/NR/rdonlyres/AA7C4B0A-4A47-4A2E-9963-8AF4DA78F220/0/CANALROADMASTERPLAN.pdf>

On the 17th November 2009 the council's Executive granted approval for the establishment of a Joint Venture Company (JVCo) with Urbo Regeneration Ltd as part of the preferred mechanism to pursue proposals to implement the comprehensive regeneration of the Bradford- Shipley Canal Road Corridor Area.

The fundamental principle behind the 'asset based' joint venture is to deliver large scale regeneration activities through maximising the development potential, latent value and borrowing capacity of the combined land assets of both parties within the designated Centre Section Joint Venture Partnership Area (shown edged red on the plan in Figure X). For the Council, this will mean the setting aside of its property assets within the Partnership Area until such time as they may be drawn down to deliver individual or phased development schemes.

Figure 9: Centre Section Joint Venture Partnership Area



Source: CBMDC

Known as Canal Road Urban Village Ltd, the joint venture company's first major task will be to produce a master development plan for the central area that will be prepared in parallel with and be guided by the Strategic Development Framework and ultimately the Area Action Plan.

A Masterplan for the comprehensive regeneration of the Centre Section has been prepared and submitted to the Council by Canal Road Urban Village Ltd (CRUVL). In October 2012 the Council Executive agreed to approve the 'New Bolton Woods Masterplan' becoming material consideration, which can be taken into account in decision making.

The Council has endorsed the emerging New Bolton Woods masterplan as a material consideration; however the masterplan has not yet been tested through

the statutory planning process. Further work is currently being undertaken on the masterplan in parallel with the AAP, and will inform future development proposals within this area.

In addition to the work undertaken on the development of the masterplan for the central part of the CRC, CRUVL have submitted a hybrid planning application for up to 139 residential dwellings on Land off Poplars Park Road, Bolton Woods, as part of Phase 1 of the New Bolton Woods development. The majority of this site was previously allocated as a housing site in Bradford's Replacement Unitary Development Plan (RUDP).

The hybrid planning application was submitted to BMDC on 7th September 2012 (planning reference no: 12/03708/MAF).

Further information can be found at:

[http://www.bradford.gov.uk/bmdc/regeneration/canal\\_road\\_corridor/latest\\_news](http://www.bradford.gov.uk/bmdc/regeneration/canal_road_corridor/latest_news)

And

<http://www.newboltonwoods.com/>

### **3.3 Bradford Canal Road Corridor Strategic Development Framework**

BDP supported by specialist economic, property and environmental partners have been commissioned by the council to produce a Strategic Development Framework (SDF) for the Bradford Shipley Regeneration Corridor. The SDF will provide a vision and framework to guide future investment in the corridor and assist in meeting the strategic needs of Bradford District and the local needs of the neighbourhoods along and adjacent to the corridor, including Shipley Town Centre. It will also influence development in the City Centre fringe.

This work will also inform future planning policy documents produced by the Council and the detailed masterplanning and development considerations of the Council's Centre Section Joint Venture Company and other development proposals as they come forward along the corridor.

The Emerging SDF and baseline evidence reports will form part of the evidence base for the CRC AAP Issues and Options Report.

Further information can be found at:

[http://www.bradford.gov.uk/bmdc/regeneration/canal\\_road\\_corridor/masterplan\\_and\\_appointment](http://www.bradford.gov.uk/bmdc/regeneration/canal_road_corridor/masterplan_and_appointment)

### **3.4 Bradford City Centre Masterplan**

The Bradford City Centre Masterplan was produced by Alsop Architects in 2003 and aimed to deliver the vision for Bradford.

The key objectives of the masterplan were to:

- Define the current and future role of Bradford.
- Identify what potential the City Centre has in terms of attracting and developing economic activity in all sectors including retail, leisure, commerce and housing.
- Clarify what the City should deliver in order to retain, capture and maximise activity; and articulate how the masterplan can be used in partnership with the various agencies and local communities for mutual benefit.

It is focused upon four individual areas within the City Centre, these areas referred to as 'fingers of intervention' are labelled:

1. The Bowl
2. The Channel
3. The Market
4. The Valley

Figure 10: City Centre Masterplan areas



Source: CBMDC

Each of these areas was subject to a Neighbourhood Development Framework.

#### The Bowl

The Masterplan proposed a lake around City Hall symbolising its position as a natural meeting point for the city. The pool was bounded by a Business Forest of new offices and a Pier built into the pool accommodated screens for digital performances. A strategy was explored to implement the lake by creating a 'mirror pool'.

#### The Channel

The Masterplan proposed a new urban village in the Channel along a reopened canal. As part of the NDF, the Channel Urban Village together with a new gateway development around Forster Square Station and proposals for Festival Square in Little Germany and the Cathedral Quarter Urban Village.

#### The Market

The Masterplan proposed the World Mile as a new shopping destination together with a Garden of Tranquillity over Drewton Road. The strategy within the NDF is

based on improving the public realm between these poles, particularly through Rawson Square together with the creation of an urban village around the northern fringe of the area.

#### The Valley

The plan proposed a valley park along the Bradford Beck, framed by the two towers of the Odeon. The park included ecology areas, an orchard and space for discovery, experimentation and learning. A learning bridge over the park linked the university and college to the city centre.

The key area of interest to the Canal Road Corridor study is 'The Channel'. Within this area, the masterplan seeks to:

- Re-introduce water back into Bradford City Centre.
- Inspire residential development on Cliffside and a new mixed tenure community at one end of a green swathe.
- Draw Forster Square Retail Park inwards, and extend the Broadway outwards.
- Create new routes to and from Forster Square Station and Interchange.
- Seamlessly link into, round and through the new Broadway development.
- Create a permeable, legible, fully accessible setting for the new and existing retail and leisure activities.

An overview of the key proposals for this area are summarised below:

- Canalside – possibility of reintroducing canal would create impetus for a new canalside community. This community would comprise of 360 family homes, live/work studios and apartments with mixed tenure and a range of local retail facilities, café/bars and restaurants and community facilities (local health centre, nursery school/crèche and local recycling centre). The Canalside Park could host a wide range of sports and activities. Forster Square retail park's usage could be developed with two new multi storey car parks, encased in an envelope of planting on one elevation and a projection screen on the other, creating a drive-in cinema for night time use.
- Broadway - The new Broadway will provide substantial new and high quality shopping space

- in the City Centre. The aim will be to create a truly mixed use development incorporating hotel, residential and office space, as well as an innovative shopping and leisure destination.
- Exchange Court / Hall Ings – Development of a new area adjacent to the Crown Courts; enabling the creation of new democratic spaces for the family and juvenile courts. In the longer term, a 20,000 sq. m conference centre with exhibition spaces, support spaces and a cultural industries business development centre would be developed on the corner of Shipley Airedale Road and Leeds Road.

Further information can be found at:

<http://www.investinbradford.com/develop-bradford/bradford-masterplans/Bradford+Masterplan>

### **3.5 Manningham Masterplan and Neighbourhood Development Plan**

In 2004, the City of Bradford Metropolitan District Council and Yorkshire Forward commissioned a masterplan for Manningham, which aimed to build on Manningham's assets, including Lister Mills and Lister Park and encourage investment in the housing stock. It was premised on a series of key objectives:

- encourage new business start up and the growth of existing businesses
- encourage investment in Manningham with businesses moving into the area
- bring back into use derelict sites and support projects improving the environment
- improve the housing in the area with new houses being built and existing houses improved
- overall improvements to the area including investment in the appearance of the major roads
- promote the involvement of local residents in decision making through neighbourhood management support efforts to enhance educational achievement and to create new learning opportunities
- maximise Manningham's Economic, Transport and Social linkages with Bradford and the West Yorkshire Sub-Region

Key Projects proposed as part of the Masterplan included:

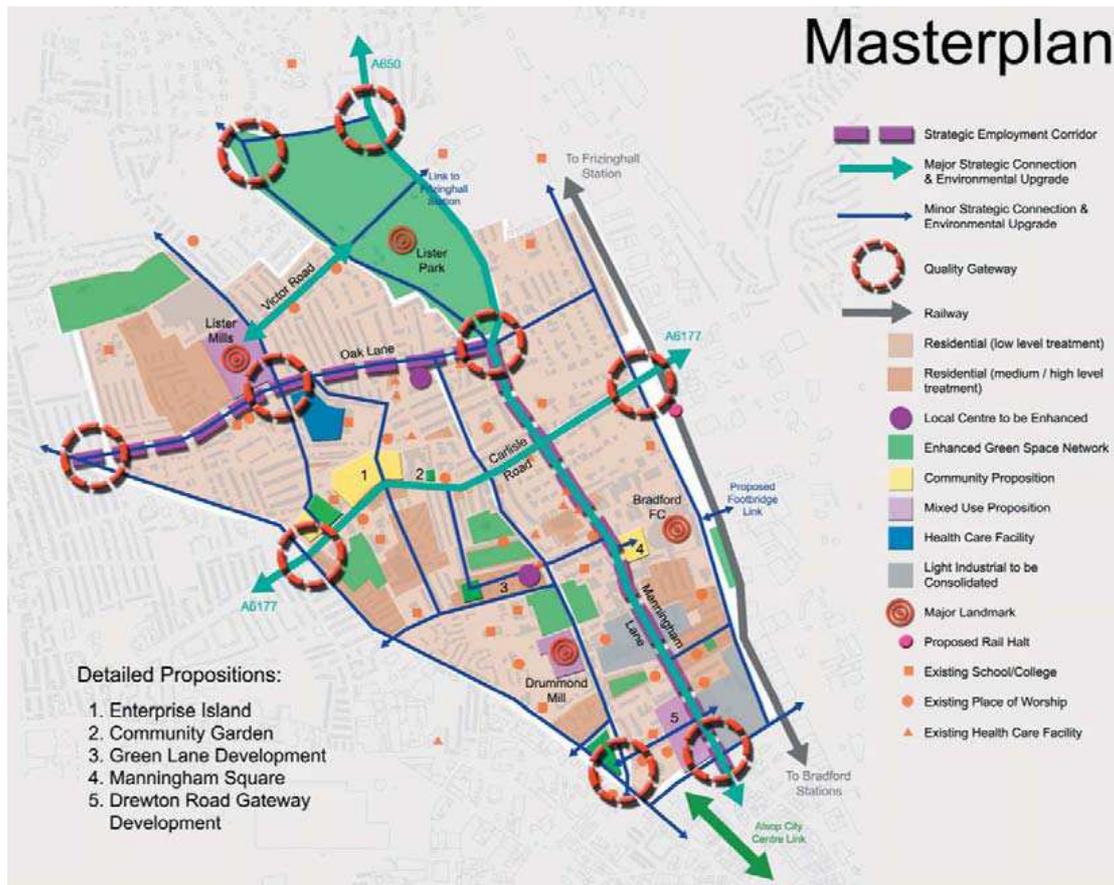
- Lister Mills Development – creation of a dynamic, viable and sustainable heart to Manningham, with the aim of creating significant quality employment opportunities for the local community and establishing a new housing market within the neighbourhood.
- Drummond Mill Development - redevelopment of Drummond Mill to provide residential accommodation in addition to improved business accommodation and a hub of activity which will support existing retail and leisure uses along Lumb Lane.

#### *Detailed Propositions*

At the time the masterplan was prepared, the five detailed masterplan propositions included:

- Encouraging a Brighter Future – Enterprise Island – development of contemporary iconic building which contains 5 internal zones to promote enterprise ideas
- Bringing People Together – Community Garden - opportunity to reuse the area of derelict land located on Carlisle Road to create an attractive place to meet, sit and stage small scale events through the creation of an Islamic inspire walled garden.
- Raising the Quality of Life – Green Lane Development – redevelopment of area to provide high quality homes and renewed community facilities.
- Bringing People Together – Manningham Square – provision of new square to accommodate outdoor events and activities.
- Link between Manningham and Bradford City Centre – Drewton Road Gateway Development - development of a new mixed use scheme on this corner to replace the existing retail sheds. The buildings would provide shopping and business opportunities.

Figure 11: Manningham Masterplan



In order to update the masterplan and take account of current economic conditions and the impact on the property market, the Council commissioned a follow up piece of work. The Manningham Neighbourhood Development Plan (NDP) was undertaken in 2010 by DBA Associates. Rather than seek to replace the masterplan, the NDP builds upon the achievements of the masterplan and seeks to provide a delivery framework for regeneration in the Manningham area, focusing upon identifying housing, property and environmental interventions with current potential to deliver in the immediate term, short terms and longer term. It does not address the enterprise and skills agenda.

Further details can be found at:

<http://www.manninghammasterplan.co.uk/>

### 3.6 Conclusion

From reviewing the various regeneration strategies that have been produced for the corridor, it is clear that the CRC AAP will an important document in helping to

facilitate the various proposals outlined within other masterplans / strategies listed in the section that either cover the corridor in its entirety or parts of the corridor or the areas directly adjacent to the study area.

#### Implications for the Emerging Vision and Objectives

As this report demonstrates, there are a number of regeneration plans and strategies that have been prepared that either cover specific areas of the CRC or the areas adjacent and are therefore likely to influence development within the corridor. This baseline report has therefore been used to draw out the key proposals and recommendations to emerge from these studies, as it is important that these are understood, as any development proposed within the CRC will not occur in a vacuum, it is likely to have wider implications.

This section draws conclusions on what are believed to be the key priorities for this area of Bradford:

- The CRC is identified as one of four priority regeneration areas by the council with the aim to develop the Canal Road Corridor as a key area for new housing centred on a new transportation infrastructure, supported by associated community facilities, shops, recreation and open space.
- A JVCo 'Canal Road Urban Village Ltd' has been established in the central section to implement comprehensive regeneration of the Bradford- Shipley Canal Road Corridor Area.

Key priorities include:

- To improve public transport and promote opportunities for walking and cycling within the corridor and improve access to footpaths and bridleways.
- To promote measures which encourage Shipley to grow as a strong, diverse and attractive local shopping destination, focusing upon improvements to the quality of the central core and pedestrian access to and from, as well as exploiting rail connections.
- To strengthen the physical connections between Shipley and the City Centre.
- To strengthen the physical connections between Shipley and Saltaire and enhance Shipley's image and brand identity so that it becomes a destination which offers a complementary but unique offer to that provided by Saltaire.

- To promote the growth of a range of key economic sectors including the environmental technologies sector.
- To enhance existing public open spaces and routes, landscapes and wildlife habitats to encourage the development of a green infrastructure network which supports opportunities for recreation, biodiversity and sustainable living and improve the attractiveness of the area, which in turn will help to support opportunities for sustained economic development.
- To deliver high quality sustainable development that helps to change perceptions of the area and raise overall aspirations.

#### **4.0 Socio Economic Context**

This appraisal is based on the analysis of a range of data on the socio-economic characteristics of the CRC. Data and statistics at the ward level have been discussed along with that of the district to make it comprehensive in relation to a wider setting. Where appropriate/relevant information on the ward or district was not available data for the Yorkshire and Humber region as a whole has been considered.

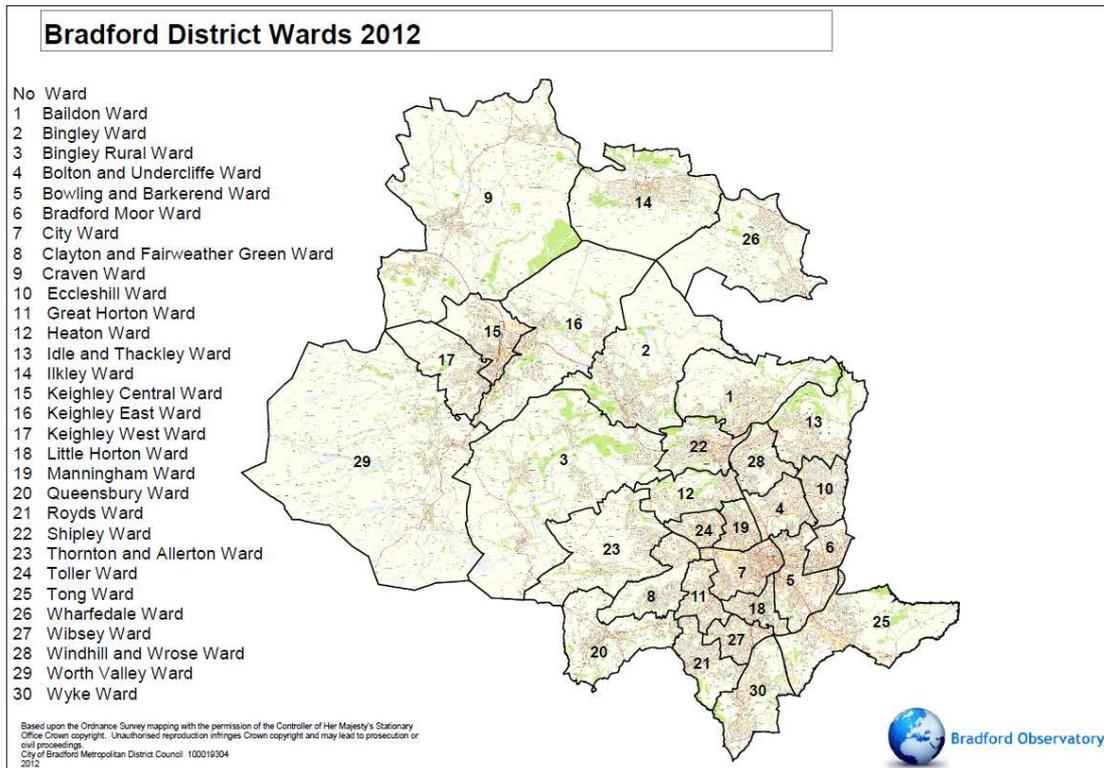
The baseline assessment of the socio-economic characteristics of the CRC has largely been a desk-base exercise using published data from a range of sources including-

- The Big Plan- Sustainable Community Strategy for Bradford 2008-11(CBMDC, 2008)
- Bradford Shipley Canal Road Corridor Strategic Development Framework (BDP ongoing)
- The State of the District Bradford District's Intelligence & Evidence Base (2010)
- Invest In Bradford Ward Profiles
- Bradford Observatory

As the CRC spans a large geographic area the analysis will include a wide catchment that will take in the following wards:

- Bolton and Undercliffe
- City
- Heaton
- Manningham
- Shipley
- Windhill and Wrose

Figure 12: Bradford District Wards



Source: Bradford Observatory

## 4.1 Demographic Characteristics

### 4.1.1 Population Structure

The Bradford District 2011 Census population estimate for the district is 522,500. This is a population increase of 51,700 since 2001, an increase of 11.0%.

- Bradford District remains the fourth largest metropolitan district in England after Birmingham, Leeds and Sheffield
- The figures show Bradford continues to have a youthful population.
- Bradford is the youngest metropolitan district in the country - with 22% of the population 0 -14 years of age.
- In the Bradford District 13.3% of the population is 65 years of age or over, compared to 16.4% for England and Wales.

The current age profile of Bradford District suggests that the population is generally younger than that of the region and England (Figure 13). Overall, 57.2% of the population are aged under 40 in comparison with 51.6% for the Region and 51.5% for England.

Figure 13: Bradford Age profile

Age Group	Bradford %	Calderdale %	Leeds %	Y & H %	England %
0-19	28.2	25.2	23.4	24.4	24.2
20-39	29.0	25.3	33.3	27.2	27.3
40-59	24.6	28.5	24.0	26.7	26.9
60-74	11.6	13.6	12.2	14.1	13.9
75+	6.6	7.4	7.1	7.6	7.8
Total	100.0	100.0	100.0	100.0	100.0
Base (000s)	497.4	200.1	761.2	5177.3	51092.0

Source: Bradford SHMA

#### 4.1.2 Working Age Population

The next area of analysis is the population statistics of the six wards which are regarded as the most immediate catchment area for the CRC. As the table below shows, each of the six wards have broadly the same proportion of working age residents, which is also in line with the Bradford District average of 61.2%. However, the City ward has a significantly larger working age population to the other wards and the district average, due mainly to a larger proportion of young people aged 16-29 years old.

Figure 14: CRC – Working Age population by Ward

Wards	Population (ONS Population Estimates 2010)	% Working-age, (ONS Population Estimates 2010)
Bolton and Undercliffe	16,404	60.8
City	21,625	71.5
Heaton	17,587	58.5
Manningham	18,784	62.0
Shipley	14,956	63.3
Windhill and Wrose	15,569	61.3
Bradford	51,2618	61.4
England	52234045	61.2

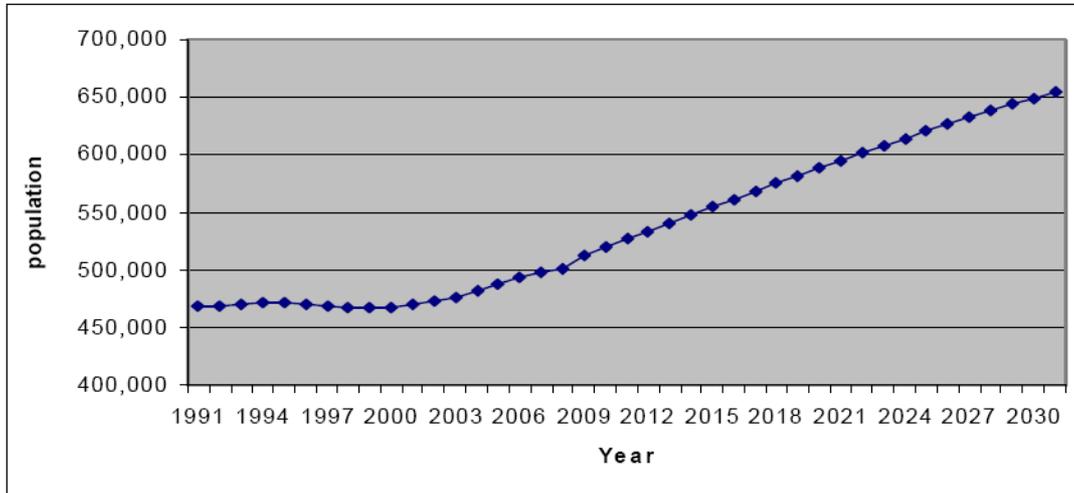
Source: Bradford Ward Profiles

#### 4.1.3 Population Trends

Although there was a small decline in population in the late 1990s, Bradford has grown steadily since 2000 and is expected to continue growing for the foreseeable

future with ONS forecasts to 2031 showing a further rise in the population to 655,100 by 2031, an increase of 27.8% since 2009.

Figure 15: Bradford District Population Trends 1991-2031 (ONS)



Source: State of the District Bradford District's Intelligence & Evidence Base VERSION 1.2 2010, p.20

Over a quarter of the projected growth is in the 60-plus age group, in common with national trends which also show a shift to a greater proportion of older people in the population.

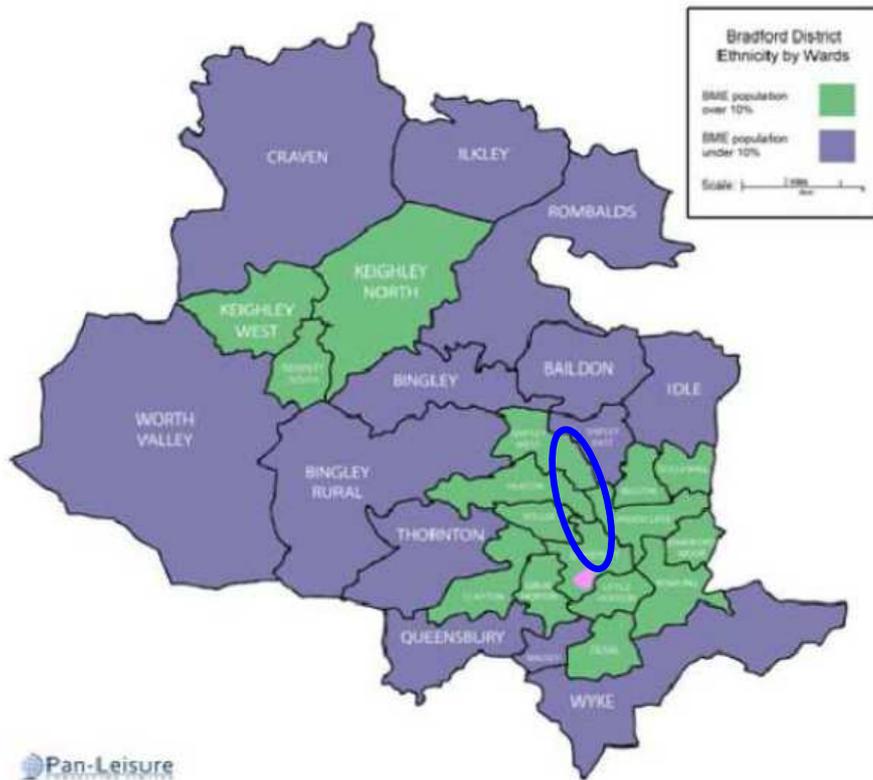
At the same time, over a quarter of the projected growth predicted will be amongst children and young people. This means that Bradford will continue to have a relatively young population and a growing number of working age people.

#### 4.1.4 Ethnicity and Religion

The ethnic structure of the Bradford population is diverse with a relatively high proportion from South-Asian background. The City has by far the largest Asian population in the region which is only second to London in England as a whole. According to the 2001 Census, 78.3% of the population living in the District have a White British heritage and 14.5% have a Pakistani ethnic background. Approximately 3% people in the district have an Indian heritage and 1% a Bangladeshi one. By way of contrast, the black population is very small at less than 1% of the population. The following map highlights the strong Black

Minority Ethnic (BME) concentrations in the centre of Bradford and in particular in many of the wards around the CRC.

Figure 16: Bradford District Ethnicity by Wards



Source: Bradford City Centre Pool Feasibility Study (Driver Jonas, May 2009)

## 4.2 Deprivation Indices

A key characteristic of Bradford District is a significant variation in the levels of deprivation, both between Bradford and other areas and between different neighbourhoods and communities within the district. There is a clear link between deprivation and differing experiences of health and wellbeing which presents Bradford District with the challenge of narrowing this gap in experience.

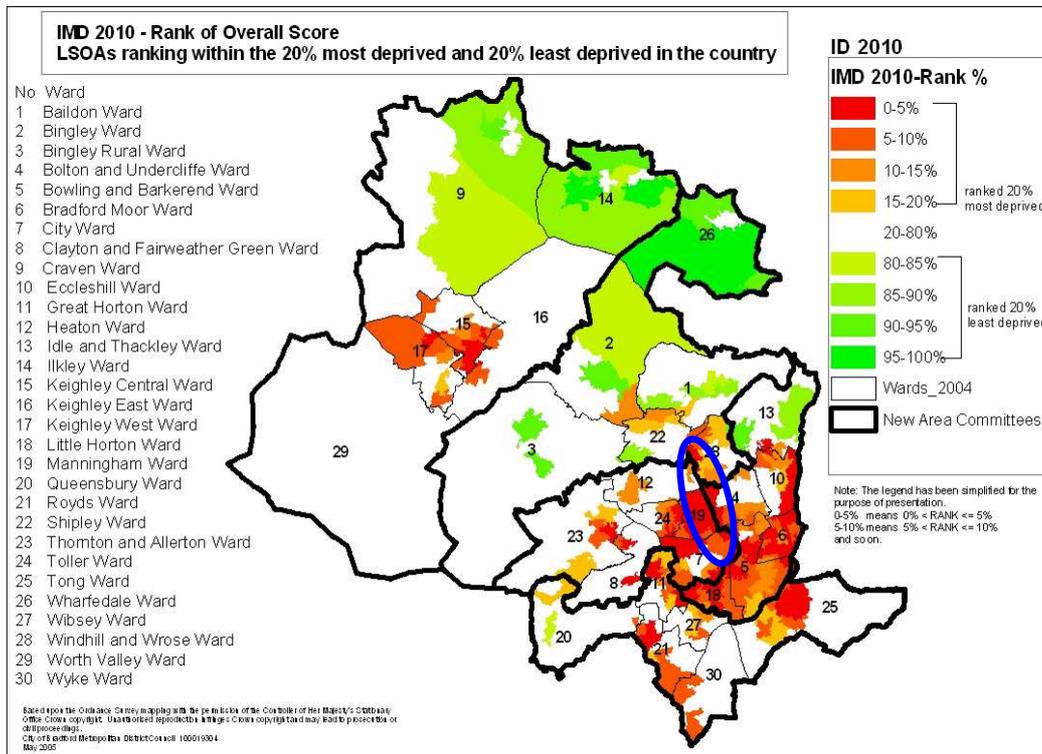
The IMD 2010 places Bradford 26th most deprived out of 326 local authority districts in England.

- Relative to other English districts Bradford's position has worsened by 6 places, moving up the rankings from 32nd place in 2007.

- Bradford has the widest gap between its most and least deprived LSOAs of any district in the country, showing a high degree of polarisation within the district.

The map below provides an overview of the findings of the English Indices of deprivation 2010 for Bradford District. The Indices of Deprivation 2010 are relative measures of deprivation.

Figure 17: Bradford IMD 2010

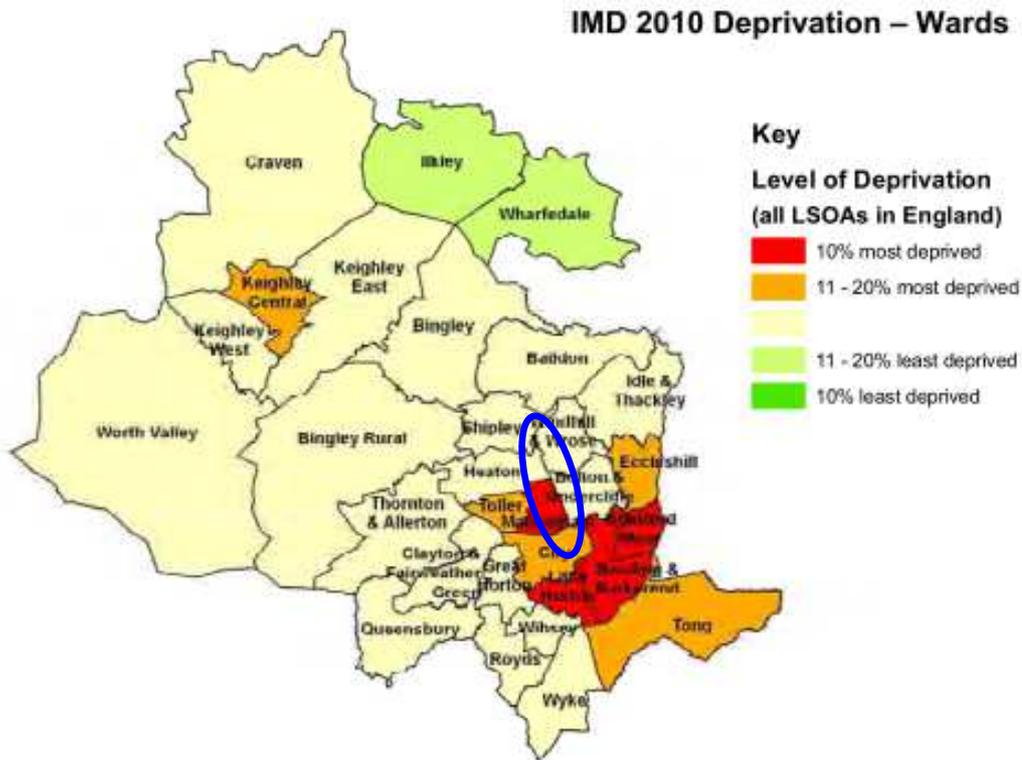


Source: Ward Profiles

This shows that a significant proportion of the Lower Super Output Areas (LSOA) in areas surrounding the CRC sit within the 10% most deprived, particularly in the southern end, City Ward, Manningham and parts of Bolton and Undercliffe.

The map below shows the distribution of deprivation by ward in Bradford district. An average rank for each ward has been calculated by aggregating the LSOA ranks (weighted by population) that fall within the ward boundaries. Manningham is ranked as the most deprived ward in Bradford, followed by Little Horton, Bowling and Barkerend and Bradford Moor – all close to or boarding the CRC. The least deprived wards in the district are Ilkley and Wharfedale.

Figure 18: Bradford IMD 2010 Wards



Source: Ward Profiles

Figures 17 and 18 show that the CRC AAP is set in the context of an area which has higher than average levels of deprivation in domains such as income, employment, skills and housing.

### 4.3 Education and Skills

To gain a better understanding of the ability of the local employment pool to access new employment opportunities, a variety of data sets are considered, including:

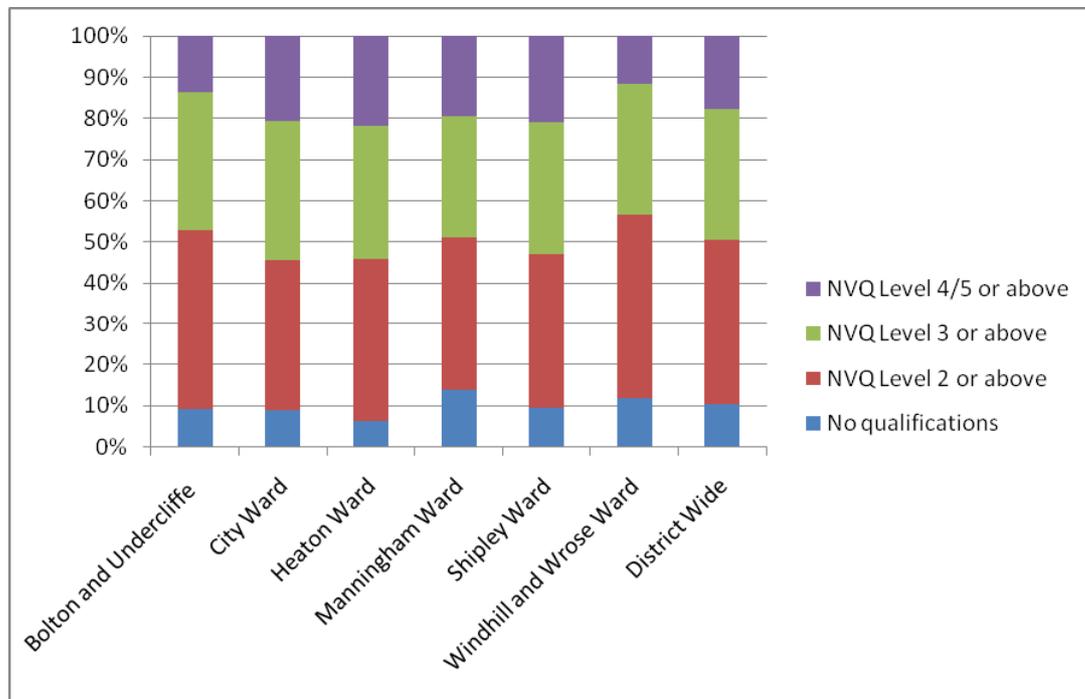
- Adult skill levels by NVQ level
- IMD 2007 data for Education, Skills and Training Deprivation
- Bradford Skills Survey – survey of 5,000 businesses undertaken by the Chamber of Commerce in 2010
- Business Survey with CRC residents undertaken by BDP for the Strategic Development Framework

In general, the skills base in the CRC employment pool is broadly in line with the district average although some wards demonstrate acute characteristics in regard to

household qualifications. In particular, Manningham has the largest number of households with no qualifications (17% compared to district average of 13%).

Furthermore both Bolton and Undercliffe and Windhill and Wrose wards have relatively fewer households with high level qualifications (NVQ 4&5) - the two wards have 15% and 13% respectively compared to a district average of 22%. This does suggest that future structural changes in employment may bring into sharper focus the perceived skills deficits in wards where generally unemployment is higher than the district average.

Figure 19: CRC – Skills Levels by Ward

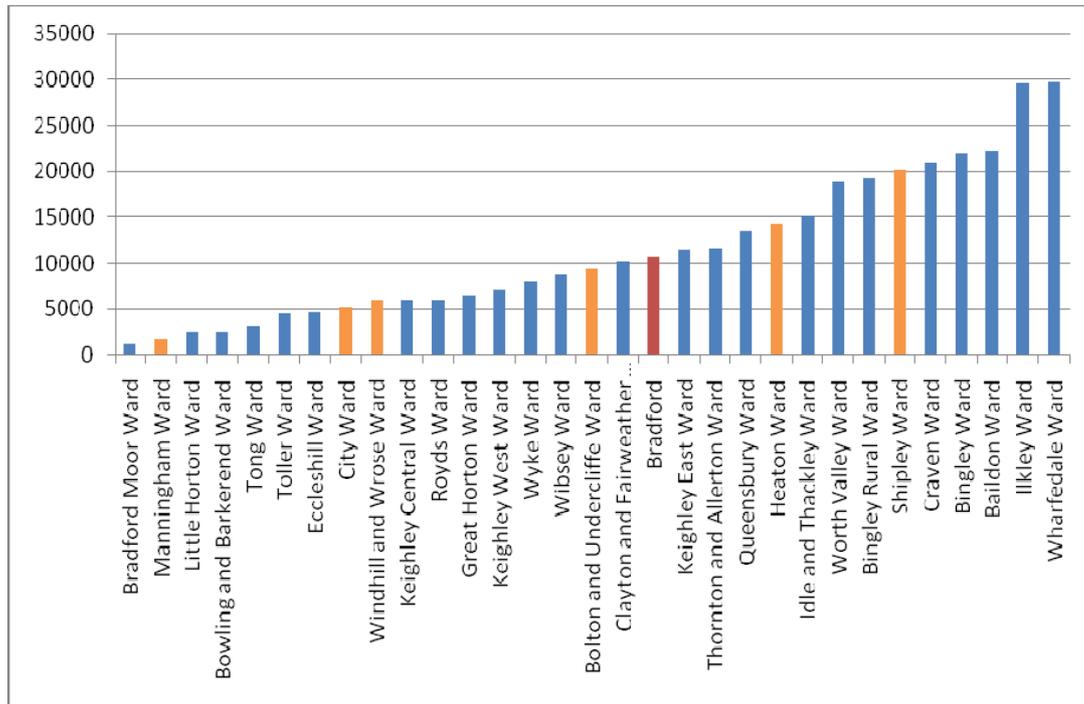


Source: Bradford Ward Profiles

Building on this assessment, a review of the IMD 2007 for education, skills and training deprivation gives a useful indication of skills levels in the area.

The figure below shows that four of the wards which form the CRC employment pool score lower than the district average for education, skills and training, according to IMD 2007. In particular, Manningham, City and Windhill and Wrose are characterised by particularly low scores. As such, this data gives an indication of wider, systemic issues around skills in the wards which occupy the southern sector of the CRC and provides further evidence that the changing nature of employment opportunities going forward will have implications in regard to local economic inclusion.

Figure 20: CRC – Wards Data by Skills



Source: IMD, 2007

The Bradford Skills Survey gives an indication of the current skills demands articulated by employers in the district as well as identifying the key requirements for the future. The headline messages show that:

- Of the businesses that had recruited people straight from education, 72% said that they were not fully ready for work
- Those businesses in the Professional and Financial Services sector with vacancies, cited that positions were difficult to fill due to a lack of key technical skills and experience.
- Those businesses with vacancies that were difficult to fill cited three main skills gaps – customer handling, problem solving and saving. Almost two thirds of businesses suggested that skills needs will change over the next two years with the most important areas comprising IT, leadership and management, technical and customer handling. In particular, the financial and professional services sector suggested they are more interested in professional and business related qualifications.

This suggests that businesses are currently experiencing skills issues with school, college and even university leavers and that the situation is likely to grow due to the

greater technical and professional qualifications required from the growing sectors in the CRC for example professional services. As such, it is crucial that resources and investment are available for the local workforce to up-skill to meet the changing demands of growing employment sectors.

However, there are more positive messages emerging from current employers in the CRC, which were captured through the survey by the BDP consultant team. In particular the following findings were obtained:

- A majority of employers confirmed that local people possess the necessary skills to enable them to recruit locally.
- Almost two thirds of CRC businesses suggested that their operations did not suffer from skills gaps.
- Greater access to local employment and training opportunities was identified as the lowest priority for the future operations of the business.

While these findings are encouraging, it should be noted that this feedback comes from the current business base which is set to change in composition in the coming years.

#### **4.4 Economic Activity**

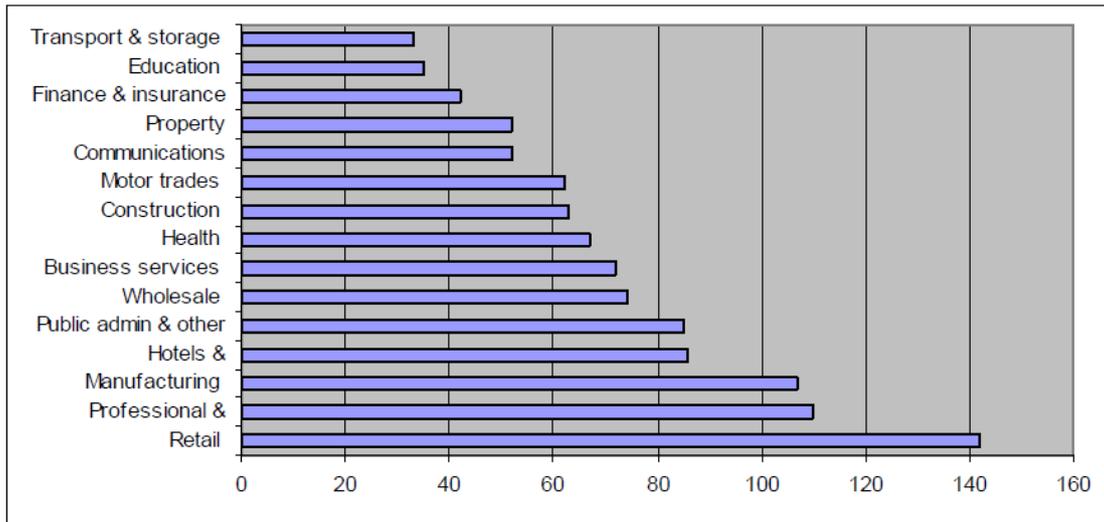
##### **4.4.1 Business Base**

As part of the BDP SDF Baseline Study an analysis has been undertaken to ascertain the business base within the CRC boundaries. Scrutiny of data at LSOA level reveals that the business base is as shown in Figure 21 below. In total there are 1,085 businesses within the CRC, which means that the area contains approximately 7% of Bradford's business base.

A review of the rating lists by the Council has revealed that there is circa 260,000sq.ft of office space and circa 1,850,000sq.ft of industrial space along the Corridor. In terms of retailing there is circa 1,000,000sq.ft of space along the corridor mainly concentrated around Forster Square and Shipley Town Centre.

Figure 21: CRC - Business Sectors by Number of Units

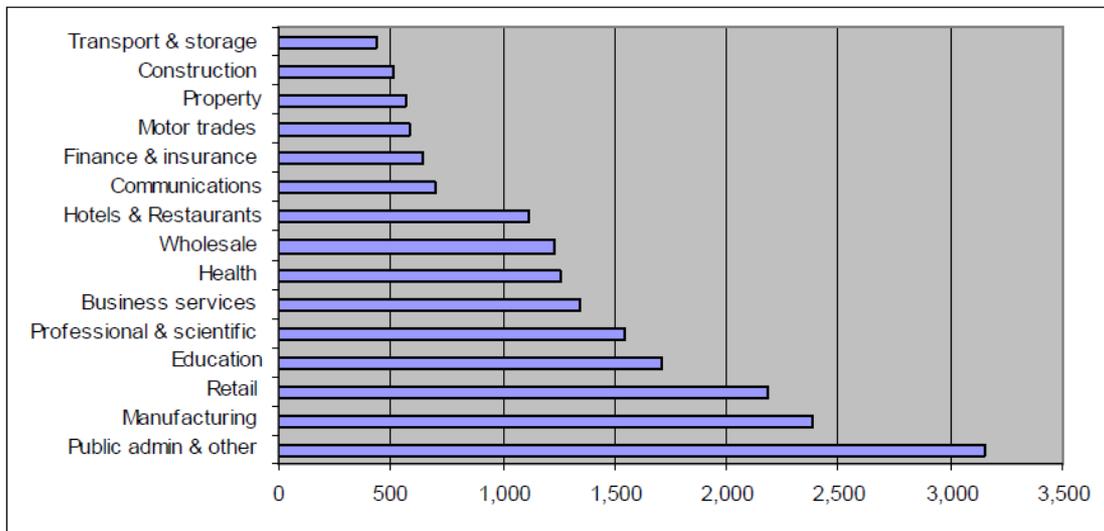
## Bradford District Local Plan



Source: ONS

Further analysis shows that there is a variance between the above and the order according to the number of people employed within the sectors within the CRC. This reveals that the area holds 10% of all jobs in Bradford.

Figure 22: Business Sectors by Number of Jobs



Source: ONS

In order to validate this information an analysis was undertaken of the business data which is available at ward level. It should be noted that the areas concerned traverse the CRC but have a wider “catchment” than the LSOAs. The following characteristics have been established from this assessment:

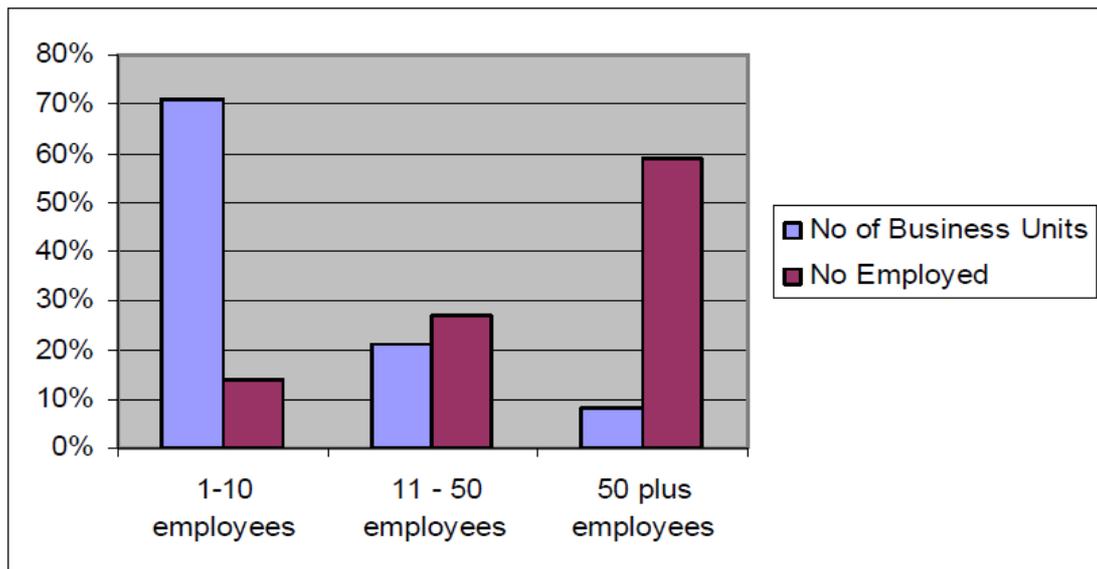
- Of the six wards adjacent to the CRC, four (Bolton and Undercliffe, Heaton, Shipley and Windhill and Wrose) have a larger manufacturing presence than

the district average - indeed in the case of Bolton and Undercliffe the number of jobs within the sector is more than double that for Bradford as a whole.

- The two remaining wards (City and Manningham) are close to the city centre and have a business demography which displays a closer fit with that for the district.
- Heaton is unusual in having significantly more public sector employees than the district average, closely followed by Manningham – all other wards are below the district average.
- Unsurprisingly Shipley, which includes its town centre and Saltaire has a higher proportion of employees working in hotels and restaurants.

However as a whole the trends at ward level appear to reflect the data at LSOA level.

Figure 23: CRC - Business Sectors by Size



Source: Inner City Solutions/ ONS

Figure 23 shows the number of businesses by size within the CRC. It can be seen of the estimated 1,085 organisations in the CRC, most employ between 1 and 10 workers. However there are several organisations which are responsible for the employment of significant numbers of staff – 8% of all organisations generate 59% of all employment. This may indicate that the CRC is susceptible to changes in its employment base, with consequences which may be felt at district level.

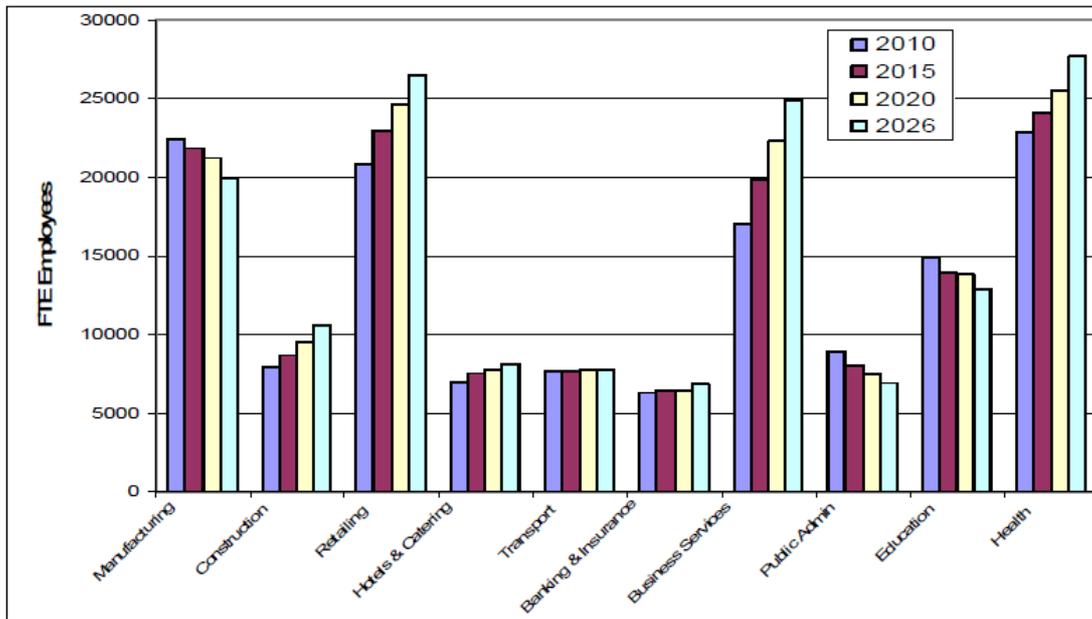
This evidence appears to be at odds with the primary analysis afforded by the survey of businesses. Here only 1 of the 13 organisations employed 10 or less workers, but 75% employed 11-50. 2 businesses had a workforce of over 50.

This figure is substantially higher than that at ward level, where there appears to be less reliance on major employers. Bolton and Undercliffe has approximately 4% of its businesses employing 50 plus workers, a trend which is evident in City (5%), Heaton (3%), Manningham (4%), Shipley (3%) and Windhill and Wrose (2%). The variance may be explained by the relatively smaller sample for the CRC, with large employers making a significant impact on the business demography.

#### **4.4.2 Economic Scenarios**

It is important to analyse the predicted trajectory of sectoral growth in order to establish the implications for the CRC. The report has used Yorkshire Futures/Experian Regional Econometric model which makes predictions as to growth to 2026. In this regard two time frames are used, being 2016 and 2021. The Regional Econometric Model predicts that at a district level, within the five year timeframe the largest sectors by employment will be health, retailing and manufacturing. Indeed retailing will have overtaken manufacturing and become the second largest employer. In the ten year timeframe, manufacturing will have declined to the point where it is the fourth largest employer, having been overtaken by the emergent business services sector, as revealed in the figure below.

Figure 24: Bradford – Industry Sector Change to 2021



Source: ONS

It can be seen that the fastest growing sectors are forecasted to be business services, health, and the financial sector. These sectors are high value and tend to require highly skilled employees.

In regard to manufacturing, recent analysis by the council suggests that the district has the seventh largest sector in Great Britain. Although the Forecasting Model indicates that manufacturing will decline from its present levels across the district, the “fine grain” analysis suggests that the high value manufacturing businesses will be stable. Interestingly over 70% of all manufacturing concerns in the district could be described as micro i.e. employing between 1-10 people, a position which is expected to be sustained as the number of large employers decline. The following figure establishes the position of the main sectors within the CRC as at 2016 and 2021, ranked in order of the sectors which show the strongest growth to 2016.

Figure 25: CRC – Change in Employment 2011-21

Business Sector	Plus/ minus	2016	Position	Plus/ minus	2021	Position
Retail	185	2,365	2	155	2,519	2
Business services	181	1,521	6	78	1,599	6
Professional & scientific	65	1,607	5	190	1,797	4
Health	58	1,317	7	74	1,391	7
Hotels & Restaurants	41	1,155	9	55	1,210	9
Transport & storage	39	475	15	43	519	15
Motor trades	39	622	12	21	642	12
Property	38	603	13	99	702	11
Construction	36	555	14	30	585	14
Communications	13	712	10	32	745	10
Wholesale	-8	1,221	8	42	1,262	8
Finance & insurance	-16	629	11	0	629	13
Manufacturing	-54	2,330	3	-78	2,252	3
Education	-89	1,625	4	17	1,642	5
Public admin & other	-321	2,834	1	-260	2,573	1
<b>Total</b>	<b>206</b>	<b>19,570</b>		<b>498</b>	<b>20,068</b>	

Source: Inner City Solutions/ ONS

It can be seen that as at 2016:

- Overall employment grows by 200 places, with the CRC providing 19,570 FTEs, representing net growth of approximately 1%.
- Public administration remains the largest employer but shows the greatest fall in numbers employed.
- Retailing shows the greatest growth and becomes the second largest employer, in line with analysis contained in the district Bradford Retail and Leisure Study.
- Manufacturing drops to third, similar to its position at the district level, and remains an important high value sector.
- Business services shows the second largest growth in employment but remains as the sixth largest sector, as is the case at 2011.

Furthermore in the period between 2016-21:

- Total employment grows by almost 500 places, with the CRC providing 20,070 FTEs, representing a net growth in jobs of approximately 2.5%.
- Public administration remains the largest sector but experiences the greatest fall.
- Retailing shows considerable growth but remains as the second largest employer.

- Professional and scientific services show the greatest growth and climbs to fourth.
- Manufacturing drops in terms of numbers employed but maintains its third place.
- There is increasing maturity in high value sectors such as property and business services.

#### **4.4.3 Additional Net Demand**

This section is important in using the data to establish the potential additional spatial requirements for the CRC. It begins by reviewing the current location of the largest and emergent sectors.

There are a number of facilities dedicated to public administration located at the south of the CRC. These tend to be bespoke offices and workspace which are in edge of centre secondary locations. Naturally the employment predictions would indicate the need to rationalise land assets accordingly.

The evidence suggests that retailing has the ability to grow significantly, to the benefit of CRC. This sector varies across the corridor but represents a significant asset, including:

- The southern section, which is dominated by large multiples clustered around Forster Square Retail Park, including an ageing Tesco superstore, and a large number of modern motor showrooms.
- The central section, which is home to a number of trade counters and DIY related uses.
- Shipley town centre, which has approximately 40,000 ft<sup>2</sup> of floorspace, supplemented by a strong convenience goods presence including an Asda superstore and a poorer comparison goods representation; the centre appears tired and in need of improvement to its offer generally.

Light industry is well represented in the CRC with a significant presence to the north of Forster Square, and close to Hillam Road.

The following table uses the Employment Densities Guide 2010 from Offpat / Homes and Communities Agency, in order to inform the potential net additional demand in

the main use classes based on sectoral growth between 2011-16. This methodology accords with that used in the district Employment Land Review 2011.

Figure 26: CRC – Growth in Demand by Use Class for Period 2011-16

Use class	Employment Growth	Area per FTE	New Demand (Sq. m)
A1 Retail	185	90	16,611
A2 Financial / Prof	0	16	0
A3 Restaurants / Cafes	21	18	371
B1 Business	-52 (269)	12	-628 (3,226)
B2 General Industrial	19	36	671
B8 Distribution <sup>8</sup>	31	70	2,157
C1 Hotels	21	2 beds	41 bedspaces

Source: Inner City Solutions

This shows that the sector with the greatest demand for accommodation is retailing. It is submitted that some caution is required here since the predictions for growth in retailing will include the City Centre which by its nature has the potential to absorb a proportion of the demand. As revealed by the Retail and Leisure Study the centre is indeed showing signs of underrepresentation in comparison goods to serve its catchment. However some growth in comparison goods, and in particular bulky goods is forecast, in line with the Retail and Leisure Study which would lead to development in the environs of Forster Square. Additionally there is scope to extend the convenience goods offer in Shipley, in order to improve the quality of the offer which is dominated by Asda.

The figures in respect of B1 show that during the period there is decommissioning of stock, shown as negative demand of 628 sq. m. However when the public sector contribution to this figure is removed, owing to job losses within the sector over the period, the table shows that there is demand for new business space to the tune of 3,226 sq. m. This may indeed be a factor since it could be argued that it is unlikely that the emergent business and professional services sectors will take up decommissioned public sector accommodation.

The requirement for General Industrial use is envisaged to show no material growth in the period.

Finally the analysis envisages growth in the hotel sector within the CRC, a trend which continues in to the subsequent period.

The table below shows the demand for accommodation as a result of employment growth between 2016-21. Again the figures for B1 Business Use are adjusted (in brackets) which means that if the loss of public sector jobs is ignored, there is a tangible requirement for additional space at over 4,000 sq. m.

Figure 27: CRC – Growth in Demand by Use Class for Period 2016-21

Use class	Employment Growth	Area per FTE	New Demand (Sq. m)
A1 Retail	155	90	13,935
A2 Financial / Prof	0	16	0
A3 Restaurants / Cafes	28	18	495
B1 Business	91 (351)	12	1,090 (4,296)
B2 General Industrial	5	36	195
B8 Distribution	85	70	5,946
C1 Hotels	28	2 beds	55 bedspaces

Source: Inner City Solutions

Within this period retailing leads the way in terms of additional requirements. The modelling envisages little change to the overall stock of General Industrial accommodation, in response to further rationalisation of employment numbers, but growth in B1 Business and B8 accommodation, which historically would be located to the south in the CRC, close to Bradford Business Park.

In line with practice in the Employment Land Review, the consultancy team has analysed the potential demand for land (measured in hectares) over the two timeframes for business use. In similar vein to the previous data, the B1 figures have been shown with the effects of the public sector employment reductions in the first

instance and without, assuming that this space is not available or suitable for private occupation.

Figure 28: CRC – Analysis of Demand for Additional Land

Use class	Plot Ratio	2016 – ha.	2021 – ha.
B1 Business	@ 60%	- 0.1 – +0.5	+0.2 –+0.7
B2 General Industrial	@35%	0.2	0.1
B8 Distribution	@35%	0.6	1.7
<b>Total</b>		0.7 -1.3	2.0 – 2.5

Source: Inner City Solutions

It can be seen that, based on this analysis, the additional demand requirements for business use will be relatively modest in the CRC. However, it should be emphasised that these sectors are relevant, given their ability to employ significant numbers of people.

#### 4.4.4 Demand from Existing Organisations in the CRC

The survey of businesses demonstrates the importance of nurturing the existing business base within these use classes. The evidence reveals that many of the organisations have a high degree of loyalty to the area. Most have been established here for 6 years and over – indeed 9 of the 13 respondents had been based in the CRC for 26 years or more. Furthermore they are useful in contributing to local employment – over 60% responded that their employees lived within 5 miles of their establishment in the CRC.

When asked whether they would consider leaving the area in the next 12 months, only 2 organisations stated they would consider moving elsewhere.

However over 50% said they would consider relocation (within the CRC) as a result of the size of their property. Moreover, the existing stock of accommodation available for business use within CRC is dated. Over a third of organisations are based in premises which are estimated to be over 50 years old, and 40% are in properties which are between 25-49 years old. This is reflected in the businesses priorities for the area, with the three most popular responses as priorities for the CRC being (improving):

- The wider environment.
- Transport and infrastructure.
- Improvements to properties.

However the highest priority was cited as improvements to the CRC's transport system, reflecting the fact that overwhelmingly, employees in the sample appear to arrive by car.

#### 4.4.5 Employment Land Review

The Employment Land Review (ELR) notes that the main take up of employment land in recent years has been in the M606 corridor, south of the city centre. The Review uses the pre 2010 parliamentary boundaries and therefore the areas which are relevant to the CRC are Bradford North and Shipley, although it should be noted that both encompass a much wider geography. The table below details the land supply in both these areas.

Figure 29: Employment Land Supply (sites allocated in RUDP) as at April 2011

	<b>Total Area</b>	<b>Number of Sites</b>	<b>Sites &lt; 1ha</b>	<b>Sites &gt; 1ha</b>	<b>Sites &gt; 5ha</b>
Bradford North	16.37	8	5	2	1
Bradford South	49.08	19	7	10	2
Bradford West	10.85	5	3	1	1
Keighley	23.29	14	6	7	1
Shipley	21.31	10	5	4	1
<b>Total</b>	<b>120.90</b>	<b>56</b>	<b>26</b>	<b>24</b>	<b>6</b>

Figure 29a: Windfall Employment Land as at April 2011

	<b>Total Area</b>	<b>Number of Sites</b>	<b>Sites &lt; 1ha</b>	<b>Sites &gt; 1ha</b>	<b>Sites &gt; 5ha</b>
Bradford North	3.81	5	4	1	0
Bradford South	3.79	6	5	0	1
Bradford West	4.67	4	2	2	0
Keighley	0.48	1	1	0	0
Shipley	0.73	1	1	0	0
<b>Total</b>	<b>13.48</b>	<b>17</b>	<b>13</b>	<b>3</b>	<b>1</b>

Source: Employment Land Review 2011 Update

This means that the wider Bradford North and Shipley area accounted for some 32% of all employment land supply. There are currently few sites allocated within the City centre and the Canal Road corridor.

In relation to the potential for future take up, the Review uses employment growth predictions to 2026 as afforded by the Yorkshire Futures Regional Econometric Model (REM). This estimates net additional jobs growth according to planning use class as shown in Figure 30 below. The most recent REM jobs growth projection figures were produced in March 2011 and were calculated until 2026 with a straight line projection until 2028 to include the complete plan period.

Figure 30 – Employment Land Review, Land Demand Scenarios

<b>Use Classes</b>	<b>Jobs Growth</b>	<b>Density - hectares</b>
B1 Plot Ratio – 60%	8439	16 m2 – 22 hectares
B2 Plot Ratio - 40%	3430	67 m2 – 57 hectares
B8 Plot Ratio – 40%	4482	67 m2 – 75 hectares
<b>Total Land Requirement</b>		<b>154 hectares</b>

Source: Employment Land Review, 2011 Update

Based on the Roger Tym & Partners jobs to floorspace ratios, the estimated land requirement for the District until 2028 is around 154 hectares. However, across the district there is a considerable vacancy rate within the property market in the supply of office space, industrial land and buildings and in warehousing units.

To generate a land target the ELR factors in a reduction of 5% in the total demand would indicate a requirement of approximately 146 hectares. This figure of 146 hectares lies close to the average of the demand figures in a constrained and unconstrained growth scenario as calculated by Arup in 2007 in their ELR. Such a target enables the District to plan for improved growth and be flexible enough to provide the right choice of sites to attract new investors in a more buoyant market.

The ELR Update states that the Canal Road Corridor will offer up sites which may be suitable for employment uses. These will be required to complement the existing stock and provide opportunities for new residents. Shipley does not have a ready supply of allocated employment land therefore interventions in Shipley will mean

identification of new sites. It is recognised as a transport hub which could provide a stimulus to new investment, building upon the digital industries already located there.

## 4.5 Employment and Earnings

### 4.5.1 Economic Activity and employment rates

At 71.0% Bradford has the lowest economic activity rate of all districts in the Yorkshire & Humber region, and is also lower than the UK average. However, the rate has risen over the 12 months to March 2012 as a result of a drop in the numbers economically inactive in the district.

Bradford's employment rate increased over the year to March 2012 from 61.2% to 62.2%. However, longer term trends show a significant decline in the district's employment rate, falling from (68.1%) in March 2006 to 62.2%, (203,900 in total) in March 2012. The rate of decline has been faster than the LCR, Y&H regional and UK rates of decline.

Figure 31: Key labour market data April 2011 to March 2012

Area	Economic activity		Employment		Unemployment		Economic inactivity	
	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
Bradford	232,500	71.0	203,900	62.2	28,700	12.3	95,200	29.0
Leeds City Region	1,465,600	75.2	1,320,600	67.8	145,000	9.9	482,200	24.8
Yorkshire & Humber	2,576,600	75.0	2,320,900	67.6	255,700	9.9	858,500	25.0
United Kingdom	30,678,600	76.4	28,162,600	70.1	2,516,100	8.2	9,501,900	23.6

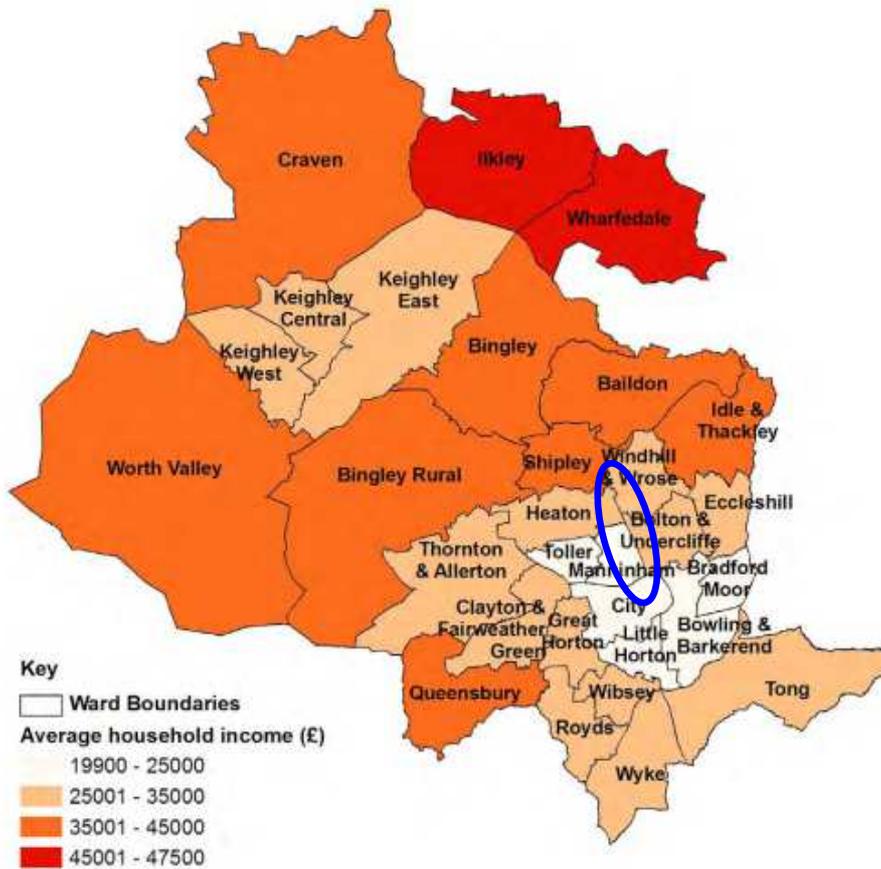
Source: Annual Population Survey, NOMIS

Source: NOMIS

### 4.5.2 Earnings & Income

The average household income in Bradford was 31,900 in 2011. Apart from Shipley the ward surrounding the CRC had lower average household incomes than the Bradford average with Mannigham and City Wards well below the average.

Figure 32: Mean gross annual Household income by ward



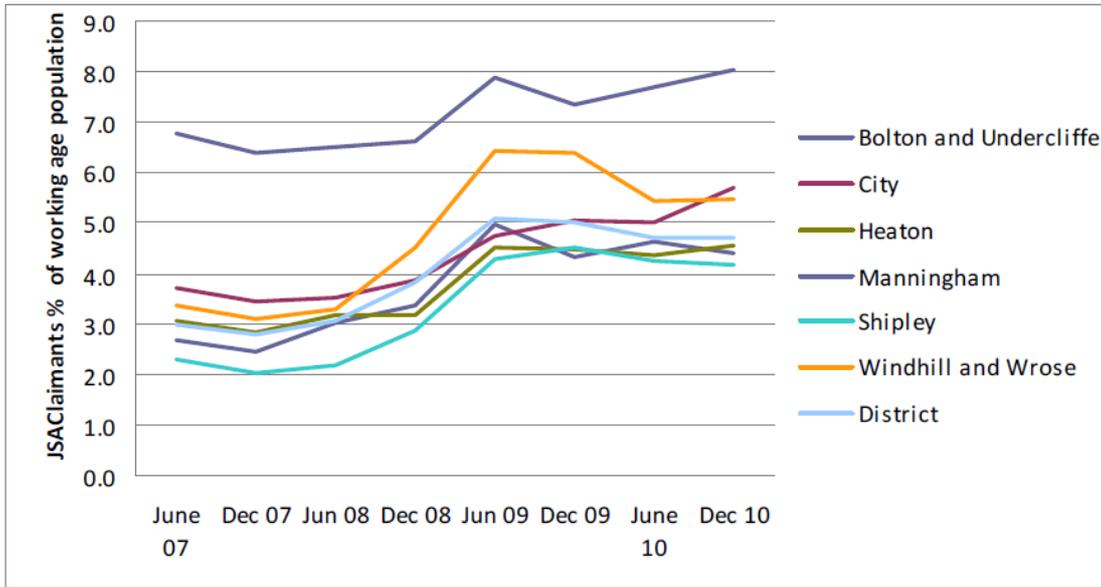
Source: Ward profiles 2012

### 4.5.3 Unemployment and Worklessness

The next characteristic to consider is the level of unemployment among the wider CRC labour pool. The figure below maps JSA claimants as a percentage of the working population over the last three years at six month intervals for each ward. Firstly, it can be inferred from the graph that most wards saw their unemployment peak in the summer of 2009, broadly in line with the district average. Again in the most part, unemployment levels have generally mirrored the Bradford average and the latest data (Dec 2010) shows a marginal fall from the summer 2009 peak.

However, it is important to note that in a number of wards JSA claimants are higher than the district average and in the case of City and Manningham wards, JSA claimants have increased quite considerably since December 2009 with latest unemployment figures the highest recorded since the recession hit in 2008. The lack of recovery in these wards, suggests that these labour markets are particularly vulnerable to the recession and may suggest issues around skill levels or mobility.

Figure 33: CRC - Unemployment Rates by Ward



Source: Nomis web.co.uk

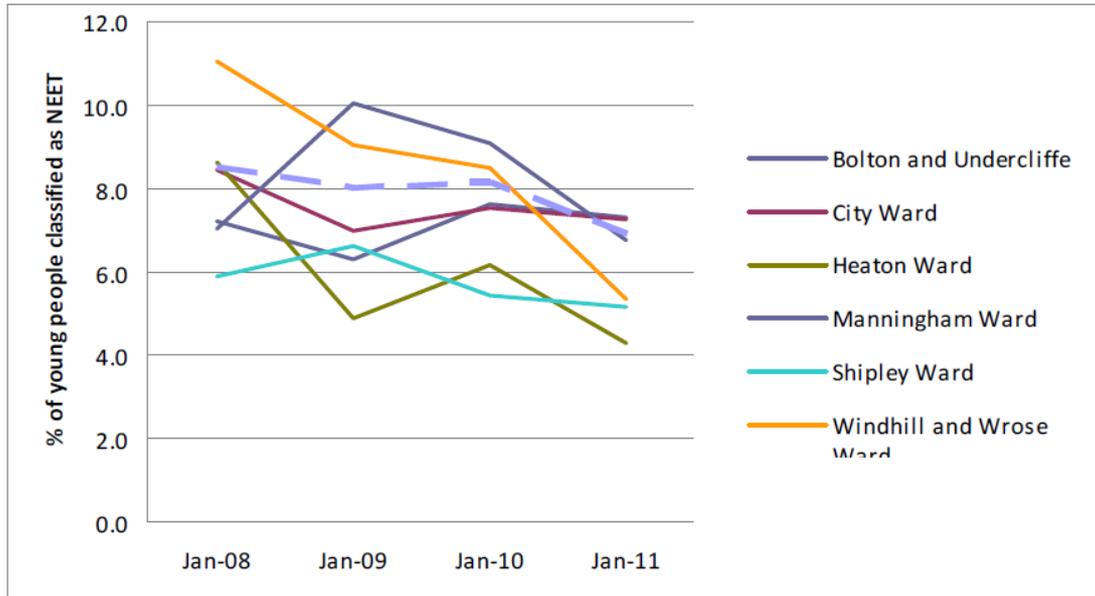
Considering these historic trends in conjunction with the employment forecasts, a number of conclusions can be drawn. As already outlined, the initial 5-year forecast (2011-2016) identifies marginal falls in employment in key sectors for the CRC such as manufacturing, public sector and wholesale. While increases in employment are identified in other sectors, namely retail and business services, the structural change in employment opportunities suggests that unemployment levels in the CRC could remain static or even increase in some areas.

Moving to the following 5-year period (2016-2021), the manufacturing and public administration sectors are predicted to shed further jobs. However, significantly, growth will be experienced in the professional, scientific and retail industries, providing relatively more employment opportunities than the previous 5-year period, which could in turn help reduce local employment levels. Therefore, the ability for the local workforce to capitalise on employment growth will depend on the relative skills base.

The figure below maps the percentage of young people classed as not in employment, education or training (NEET) over the last three years. While the district average has seen a fall in the total number of NEETs from a peak of 8.5% in Jan 2008 to 6.9% in Jan 2011, the individual ward data shows greater volatility. Yet despite this, only Bolton and Undercliffe displays a higher figure in Jan 2011 (7.3%)

than it was in Jan 2008 (7.2%). Four of the other wards have seen moderate falls in line with the district of about a 1-1.5% over the three year period. In Heaton and the Windhill and Wrose wards there has been a considerable fall.

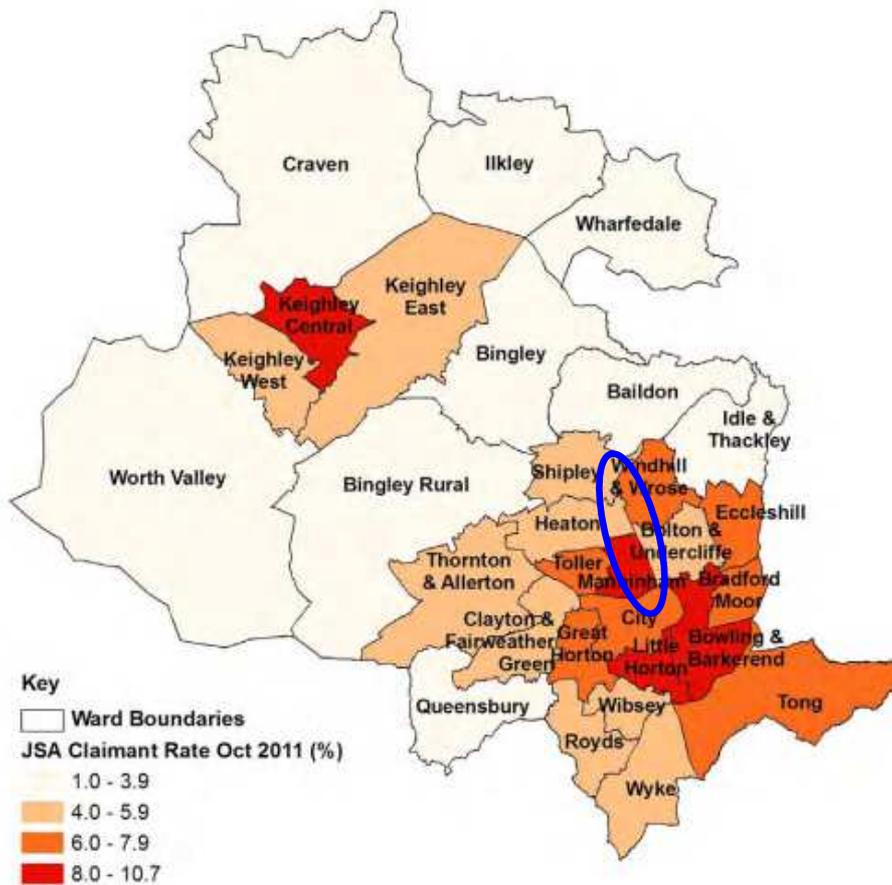
Figure 34: CRC – NEET Profiles by Ward



Source: Ward profiles

Numbers of claimants are highest in Manningham, City, Bowling & Barkerend, each having over 1,000 claimants. Manningham also has the highest claimant rate at 12.0%. Figure 35 shows that there are high levels of claimants in the wards surrounding the CRC.

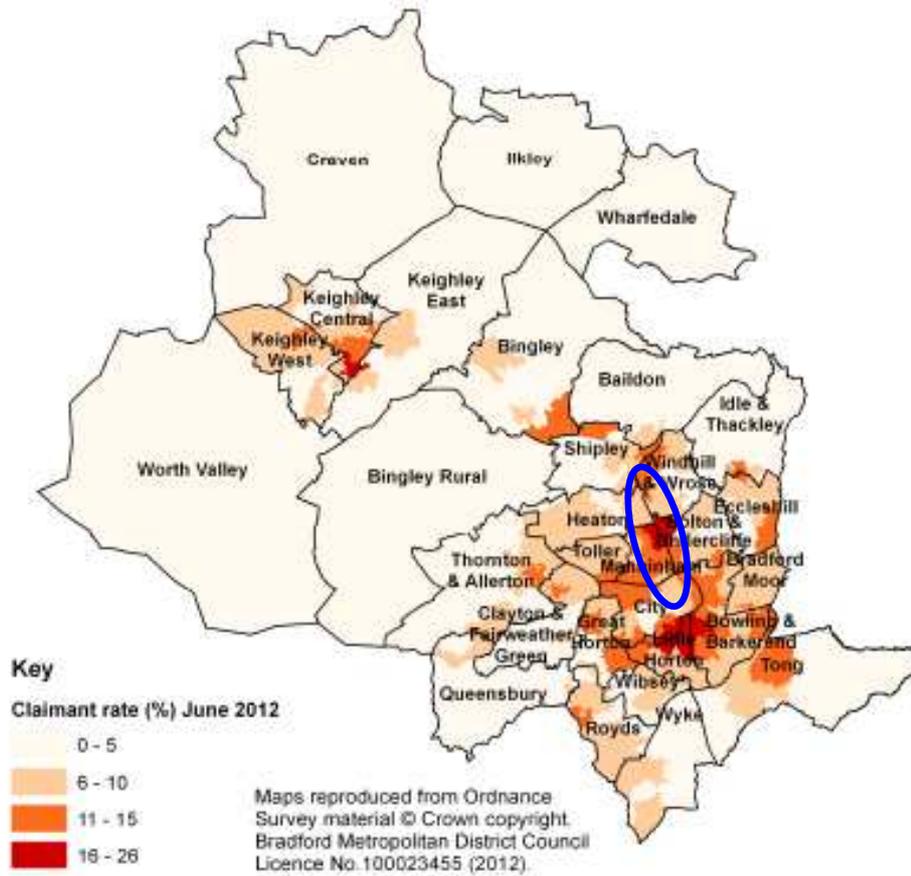
Figure 35: JSA Claimant Rate by Ward



Source: Ward profiles 2012

Even at ward level, small pockets of unemployment can be hidden. Figure 36 presents claimant rates at Lower Super Output Area (LSOA) level. The shows high levels of claimants along the CRC area, in particular in Manningham, Bolton and Undercliffe and Windhill and Wrose.

Figure 36: Bradford District Claimant Rates by LSOA June 2012

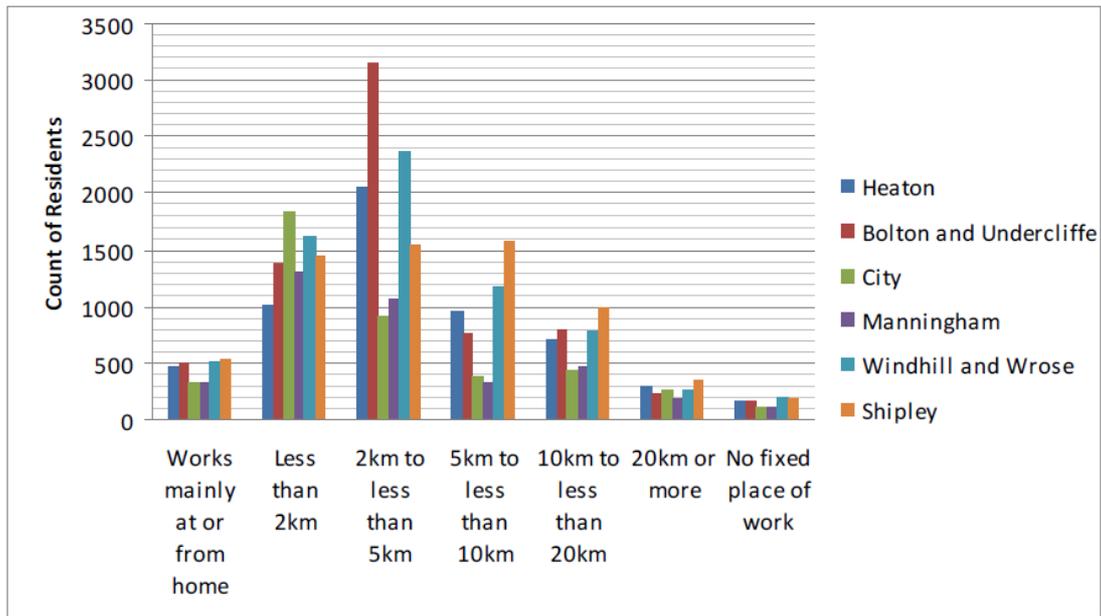


Source: Bradford District Claimant unemployment update, 2012

#### 4.6 Commuting

Analysing travel to work patterns from the 2001 Census provides some indication of the propensity of the workforce to commute to take on employment opportunities.

Figure 37: CRC – Travel to Work Patterns by Ward

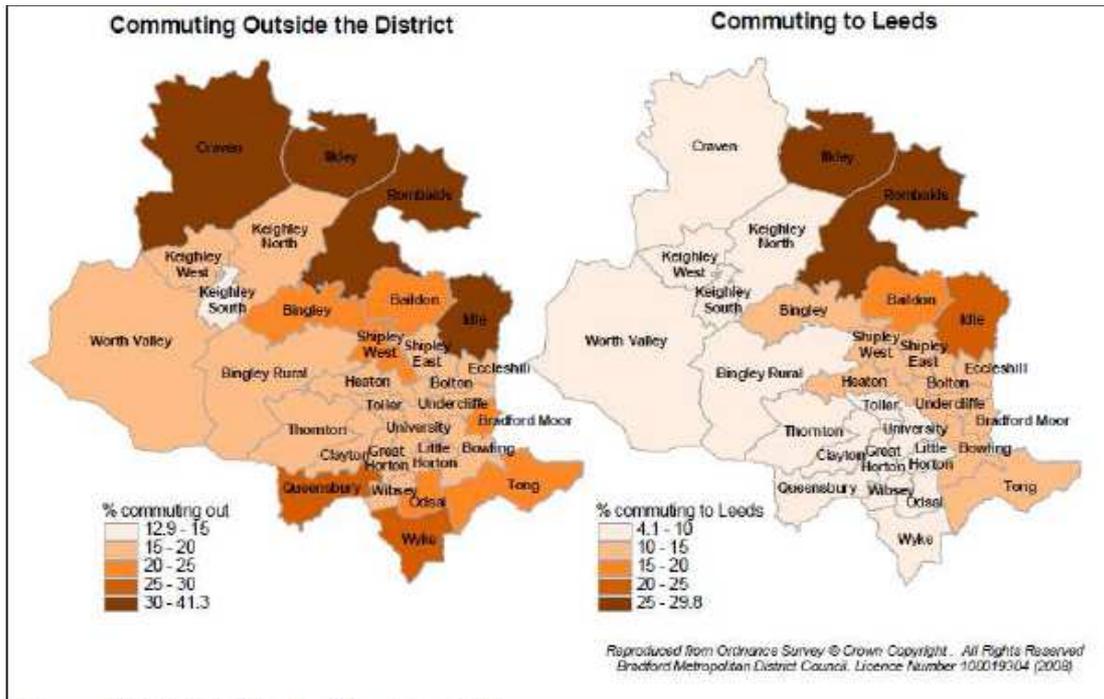


Source: Census 2001

The key findings which can be ascertained from the table above comprise:

- Relatively few residents across the CRC work at or from home
- Residents of the City ward are most likely to travel shorter distances which reflects the immediate employment opportunities in the locality
- Data for Bolton and Undercliffe suggests residents are most likely to take local employment demonstrated by a significant proportion travelling 2km to 5km for work. This is similar trend for Heaton, Manningham and Windhill and Wrose.
- Residents of Shipley are the most willing to travel larger distances, highlighting the fact that most employment opportunities are in Bradford City or further into Airedale.

Figure 38: % of employed residents in each ward commuting outside the district



Source: CBMDC statistical briefing Feb 2008

Figure 38 shows Leeds is a significant destination for out-commuters from all wards, however the wards along Wharfedale, and those on the east side of Bradford and around the CRC area have the highest proportion of residents commuting to Leeds.

These findings can be supplemented from responses captured as part of the business survey. In particular, businesses identified the following trends in travel-to-work patterns:

- Two-thirds of businesses' workforces live in the "local area" with an approximate travel-to-work area of 2 to 5 miles
- Car is by far the most popular transportation method (90% of respondents) followed by walking and cycling.

These messages, suggest that mobility is likely to be less of a constraint to the local workforce in accessing future employment opportunities. However, the data for the wards within the southern end of the CRC (which also demonstrate the highest levels of unemployment) suggest residents are less economically mobile. As such, there is a greater imperative to ensure there are the resources available to provide the skills

necessary to adapt to the structural change of a growth industries, where there are likely to be the most opportunities in the long term.

The predicted expansion of retailing in CRC dictates that the sector could provide a more immediate opportunity to local people, especially those located in the City and Manningham wards where unemployment is high and travel-to-work distances are low. That many of the retail employment prospects will gravitate towards the city centre does indicate that growth in this sector could help alleviate deprivation in the area to a certain extent, however in the long-term the ability of local people to access higher value service jobs will be fundamental to a more prominent reduction in deprivation for the area and this will require up-skilling across the CRC employment pool.

#### **4.7 Health**

The Bradford Health Profile 2012 gives a picture of health in the district.

##### Bradford at a glance

- The health of people in Bradford is mixed compared with the England average. Deprivation is higher than average and about 32,200 children live in poverty. Life expectancy for both men and women is lower than the England average.
- Life expectancy is 12.0 years lower for men and 8.3 years lower for women in the most deprived areas of Bradford than in the least deprived areas. Over the last 10 years, all cause mortality rates have fallen. Early death rates from cancer and from heart disease and stroke have fallen but the latter is worse than the England average.
- About 21.8% of Year 6 children are classified as obese, higher than the average for England. Levels of teenage and smoking in pregnancy are worse than the England pregnancy, GCSE attainment, breast feeding initiation average. The level of alcohol-specific hospital stays for those under 18 is better than the England average.
- Estimated levels of adult 'healthy eating' and obesity are worse than the England average. Rates of smoking related deaths and hospital stays for alcohol related harm are worse than the England average. The rate of sexually transmitted infections is better than the England average. The rates

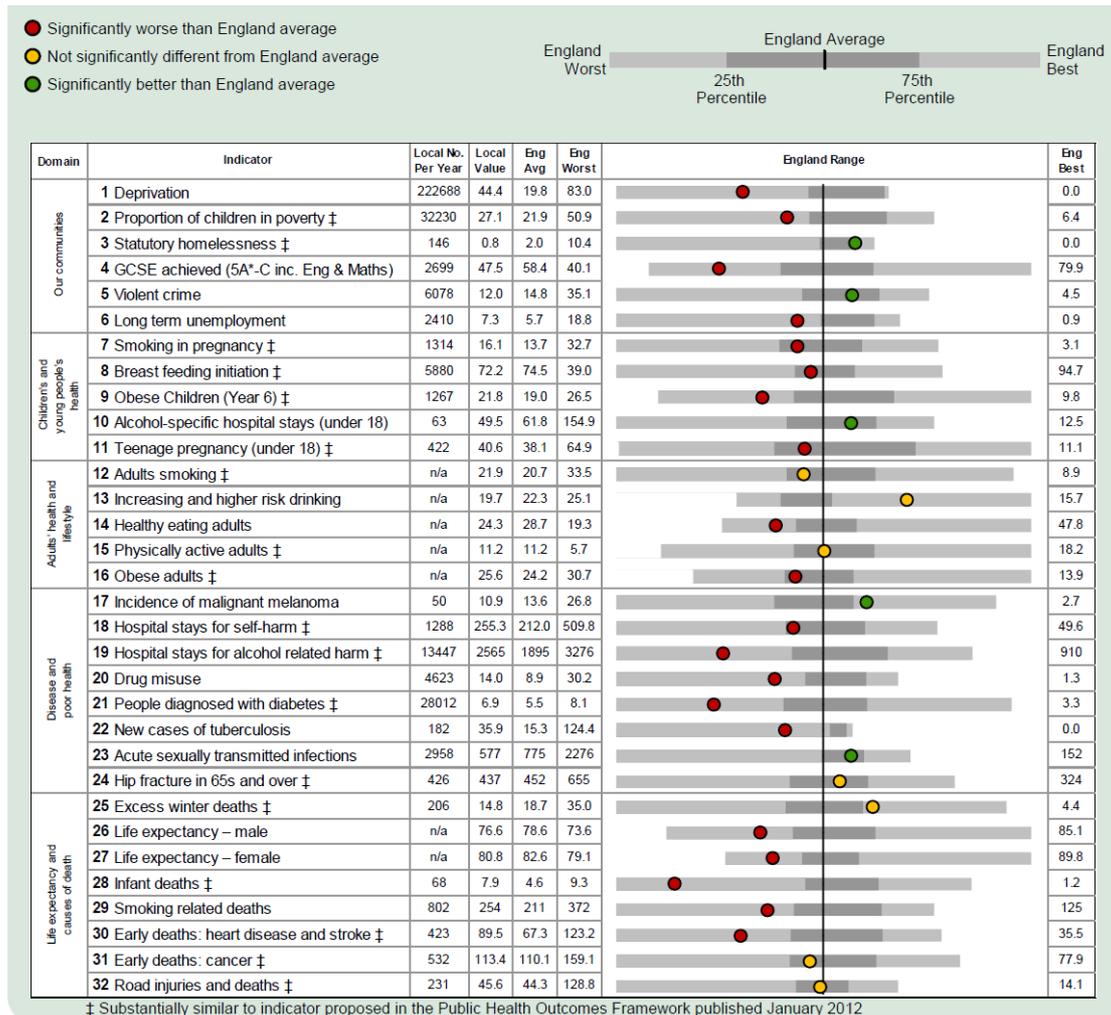
## Bradford District Local Plan

of statutory homelessness, violent crime and incidence of malignant melanoma are lower than average.

- Priorities in Bradford include addressing health inequalities, obesity, alcohol, tobacco and tackling infant mortality.

See [www.observatory.bradford.nhs.uk](http://www.observatory.bradford.nhs.uk)

The chart below shows how the health of people in this area compares with the rest of England.



Source: Bradford Health Profiles 2012

Health Profiles are produced by the English Public Health Observatories working in partnership. Further information can be found at:

[www.healthprofiles.info](http://www.healthprofiles.info)

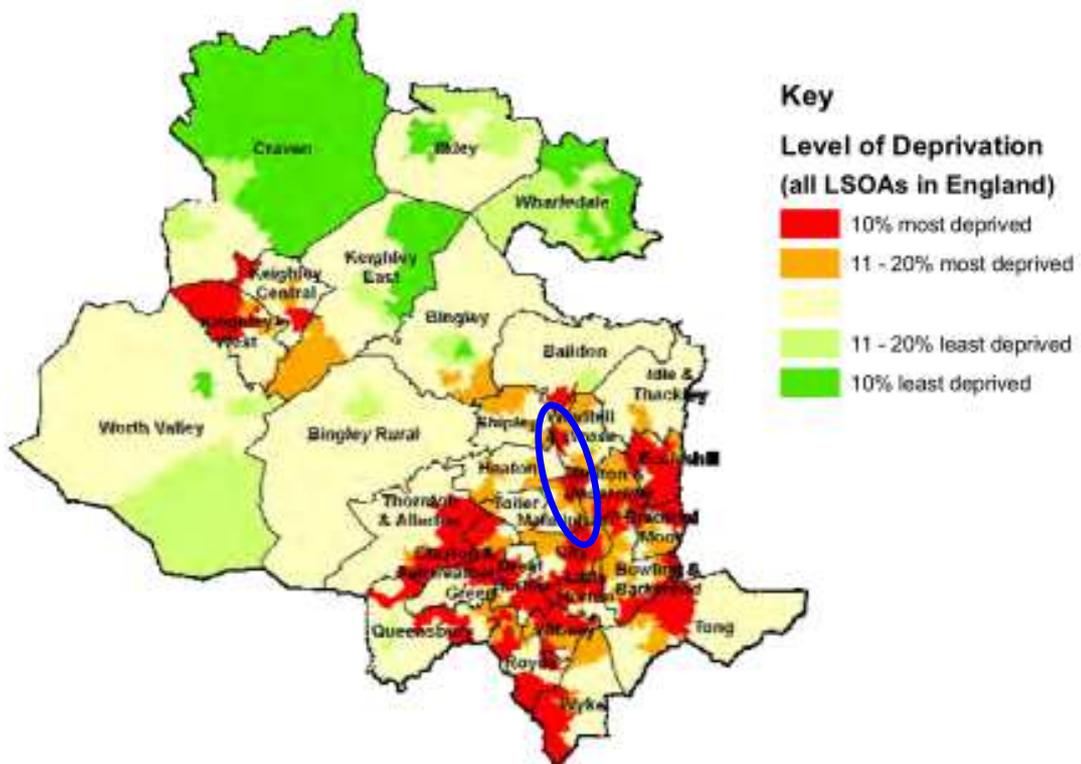
Health Impact Assessment

The Council are working with NHS colleagues to assess the impacts of the Local Plan on determinants of health and appropriate mitigations. A Health Impact Assessment will be produced to support the work of the Local Plan.

#### 4.8 Crime

The pattern of deprivation focusing on the crime domain is similar to the pattern of multiple deprivation, indicating that the highest crime rates are occurring in areas that suffer from the highest levels of multiple deprivation. The CRC area is generally surrounded by areas of the worst crime deprivation in the district.

Figure 39: Crime Deprivation in Bradford



Source: Ward Profiles

#### 4.9 Emergency Services- Capacity and Performances

##### 4.9.1 Fire and Rescue Service

The West Yorkshire Fire and Rescue Authority have the legal duty to provide fire and rescue service that meets the needs of local communities. It is an independent body which bears the responsibilities regarding the enforcement of fire prevention, petroleum and explosives legislation.

The fire stations located closest to the CRC are:

- Shipley
- Bradford

Figure 40: West Yorkshire Fire and Rescue Service Stations



Source: Core Strategy Baseline Report

The Fire Service states that the current operational capacity of the service is sufficient to cater for Bradford District and its potential growth.

Further details on the capacity and performances of the above fire stations are available by clicking on the link below:-

[http://www.westyorksfire.gov.uk/aboutUs/au\\_stations.htm](http://www.westyorksfire.gov.uk/aboutUs/au_stations.htm)

#### 4.9.2 Ambulance

Yorkshire Ambulance Service NHS Trust was formed on 1 July 2006 bringing together South Yorkshire Ambulance Service, West Yorkshire Metropolitan Ambulance Service and the North and East Yorkshire parts of Tees, East and North Yorkshire Ambulance Service.

YAS operate out of 22 ambulance stations (3 stations based in Bradford District) and in addition use numerous locations as standby points.

There is ambulance stations located near to the CRC, as follows:

1. Bradford

A Standby point has been confirmed to date on the following site :

- Canal Road, Bradford

The Air Support Unit operates out of Leeds Bradford International Airport. This unit operates one aircraft, but further aircrafts could be made available through the Northern Air Ambulance Support Group if required.

The current stations and the network of standby points provide a sufficient level of resource for the District. If demand increased permanently, Bradford would seek to commission additional resources to meet this demand through the Lead Commissioning arrangements.

The majority of the District is covered for a response time of 8 minutes by either a Bradford District or neighbouring Ambulance Station.

#### **4.10 Conclusions**

The following conclusions can be drawn from the socio-economic data:

- The district has a large and growing population that has a younger age profile than the Region.
- Over a quarter of the projected growth is in the 60-plus age group. At the same time, over a quarter of the projected growth predicted will be amongst children and young people. This means that Bradford will continue to have a relatively young population and a growing number of working age people.

- There is high percentage of BME population in the wards around the CRC area.
- Many of the LSOAs associated with the CRC are within the most deprived within the district.
- The CRC AAP is set in the context of an area which has higher than average levels of deprivation in domains such as income, employment, skills and housing.
- The working age population is for the most part in line with the average for the district – however in City ward it is significantly higher, owing to the greater number of young people in the 16-29 year cohort.
- Unemployment rates are broadly in line with the district average although in the case of Bolton and Undercliffe rates have remained higher throughout the last 3 years
- There are existing skills deficits in four of the wards compared to the district average – and further challenges will be evident as the sectoral composition of the CRC adapts
- Some growth sectors such as retailing have the ability to provide access to jobs for many of the residents of the wards adjacent to CRC, although, equally growth in higher value sectors will rely on skilled labour

In summary the following may be concluded in relation to the business base within the CRC:

- The area is significant since it provides over 10% of Bradford's employment, and is popular with many business sectors, as defined in the business survey.
- The industry base is diverse, although there is an indication that the cuts in public sector services will affect the current position – however there is the indication that net employment rates will grow in the CRC, albeit modestly to 2021.
- Retailing, professional and business services sectors are predicted to grow, whilst public administration and manufacturing will decline although retain their position in the top five employers by sector.
- Retailing in the CRC will be concentrated around Forster Square although there is evidence of demand within Shipley for a new foodstore and modern high street shopping formats subject to the availability of sites.
- Property demand for B1 space will depend to a degree on the stance of the public sector in reuse of its buildings in the light of job losses – the likelihood

is that new space for the emergent industries will be required, assuming market conditions allow.

- It is important to nurture the existing stock of businesses who are extremely loyal to the area – physical improvements to the environment in the round are important in this regard, particularly in established locations to the west of Canal Road.

## 5.0 Housing

The following section provides details of the types of residential properties in the CRC and details of the housing and household characteristics within the Corridor. It also highlights details of the National, Regional, Sub-regional and Local policy framework with which any future housing developments must conform, and outlines a detail analysis of the current Housing Market in the CRC.

### 5.1 National, Regional and Sub-regional Housing Policies and Strategies

This section contains details on

- National Policy
- NPPF
- Local Housing studies

The Government has a strong growth agenda around housing, and has introduced a range of measures and policy changes aimed at increasing housing supply. In terms of its stated aim, the Government wants to:

- Increase the number of houses available to buy and rent, including affordable housing;
- Improve the flexibility of social housing (increasing mobility and choice) and promote homeownership;
- Protect the vulnerable and disadvantaged by tackling homelessness and support people to stay in their homes; and
- Make sure that homes are of high quality and sustainable.

In November 2011, the Government published its Housing Strategy for England, *'Laying the Foundations'*, which set out its *'intended direction of travel for housing, its role in the wider economy and its contribution to social mobility. It sets out ideas on the shape of housing provision that the government wants to see, which involve the primacy of home ownership; social housing as welfare; and an increasing role for the private rented sector.'*<sup>3</sup>

The Strategy presented both existing initiatives and policies introduced by the Government since May 2010 and introduced a series of new interventions and approaches. These were set out under the following headings:

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<sup>3</sup> CIH *Summary Laying the Foundations: A Housing Strategy for England* November 2011

**Increasing supply, more homes, stable growth** included a new-build indemnity scheme led by the Home Builders Federation and Council for Mortgage Lenders to provide up to 95% loan to value mortgages for new build properties in England, backed by a house builder indemnity fund; and a £400m 'Get Britain Building investment fund;

**Social and affordable housing reform** which included implementing a programme of changes to amend the way social housing is allocated and the terms on which it is let; amending the Right to Buy regulations to encourage greater take up of the scheme alongside a requirement for each home sold to be replaced with a new affordable one;

**A thriving private rented sector**, through supporting investment in homes to rent, marketing new Built to Rent pilot sites, and encouraging local authorities to make full use of powers to tackle dangerous and poorly-maintained homes;

**A strategy for empty homes**, with a commitment to bring empty homes back into use through awarding the New Homes Bonus to empty properties brought back into use, providing information and practical advice to local authorities and communities, and proposing changes to Empty Dwelling Management Orders to tackle the worst long-term empty homes;

**Quality of housing experience and support**, through supporting the most vulnerable households to prevent and tackle homelessness and supporting older people with greater choice and support to live independently; and

**Quality, sustainability and design**, by encouraging the promotion of locally distinctive, well designed new homes and neighbourhoods; a commitment to Zero Carbon homes by 2016, and reviewing building regulations to further improve energy efficiency and carbon emission standards of new buildings.

### **National Planning Policy Framework**

The NPPF stresses the need for councils to work with communities and businesses to seek opportunities for sustainable growth to rebuild the economy; helping to deliver the homes, jobs, and infrastructure needed for a growing population whilst protecting the environment. A presumption in favour of sustainable development means that proposals should be approved promptly unless they compromise the twelve sustainable development principles set out in the NPPF.

The NPPF identifies three dimensions to sustainable development: economic, social and environmental. The social role is defined as: *‘supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations....’*<sup>4</sup> These three dimensions (or roles) are seen as mutually dependent.

Robust and comprehensive evidence bases (in particular Strategic Housing Market Assessments and Strategic Housing Land Availability Assessments) are seen as essential to ‘delivering a wide choice of high quality homes’; the Framework states that local planning authorities should *‘use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with policies set out within the Framework, including identifying key sites which are critical to the delivery of the housing strategy over the plan period.’*<sup>5</sup>

The need to *‘plan for a mix of housing based on current need and future demographic trends, market trends and the needs of different groups in the community’* is emphasised. The Frameworks also states that local planning authorities should:

- *‘identify the size, type, tenure and range of housing that is required in particular locations, reflecting local demand; and*
- *‘where they have identified that affordable housing is needed set policies for meeting this need on site...’*<sup>6</sup>

Authorities will need to illustrate the expected rate of housing delivery through a housing trajectory for the plan period and a Housing Implementation Strategy for the full range of housing.

New definitions of affordable housing are also included covering social rented housing, affordable rented housing and intermediate housing.

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<sup>4</sup> CLG National Planning Policy Framework March 2012 para 7

<sup>5</sup> CLG National Planning Policy Framework March 2012 para 47

<sup>6</sup> CLG National Planning Policy Framework March 2012 para 50

## **Local Housing Studies**

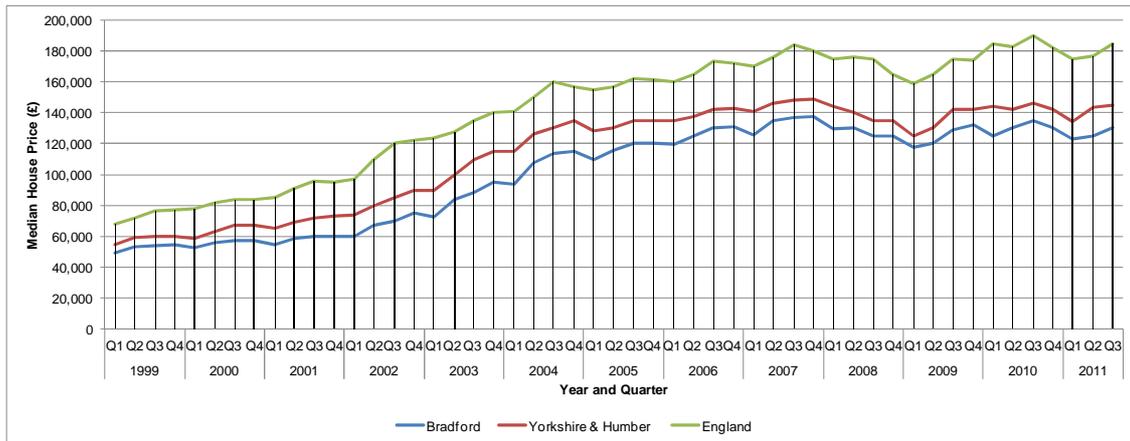
CBMDC has collected and produced substantial evidence on housing markets and housing need in the district. These include the following studies;

- **Bradford Strategic Housing Market Assessment 2010 (SHMA):** The SHMA is a key element of the LDF's evidence base. It analyses the housing market in Bradford advising on the types of housing needed in different areas and the amount and pattern of need for affordable housing
- **Affordable Housing Viability Assessment (AHEVA):** The purpose of the AHEVA is to provide a robust evidence base for determining appropriate and justifiable affordable housing targets in the LDF.
- **Private Sector Stock Condition Survey 2008:** Provides an updated picture on stock condition.
- **Housing Market Tracker:** A set of 55 indicators that track the state of the housing market in Bradford.
- **Joint Housing Strategy for Bradford 2008-2018:** The three key objectives in the strategy are more homes, quality and inclusion. The housing strategy outlines the future plans for growth, including five growth areas including The Canal Road Corridor.

### **5.2 Bradford Housing Market Overview**

Figure 41 shows how house prices across Bradford District have increased 165% over the period 1999 to 2011, with median prices peaking at £137,500 during 2007. The median price across the District has been consistently lower than both the regional and national median price.

Figure 41: House prices 1996 to 2011: Bradford, regional and national trends



Source: SHMA CBMDC

On the basis of a range of evidence the Bradford SHMA 2010 concluded that Bradford District can be considered as a self contained housing market area (albeit with strong links to adjoining areas within the Leeds City region). The SHMA however, identified that there are a number of sub areas within the district which exhibit broadly similar housing market characteristics. These are illustrated in Figure 42. The CRC area falls between the three sub areas of City Central, City North East and Bingley and Shipley.

Figure 42: Bradford SHMA Sub Areas



Source: Bradford SHMA 2010

The SHMA identified the key drivers for the Bradford housing market as demographic, economic and dwelling stock drivers.

With regard to demographic drivers the ONS suggests that there will be population increase across all age groups. The highest proportionate increase will be amongst the 75+ age group (42.5%). Growth will continue to occur within the district's BAME population, which is particularly concentrated in the City Central sub area, an area which also suffers from among the highest levels of overcrowding and poor quality stock in the district.

In terms of the dwelling stock drivers the current dwelling stock is dominated by houses (78.8%), particularly terraced properties. In terms of economic drivers, despite the current downturn, the district is expected to see significant growth in jobs

over the LDF period. A strategic priority for the LDF is to ensure that the district attracts and retains economically active households. The SHMA suggests that providing for an increase in 3 and 4 bedroom properties, and for detached, semi detached and flats / apartments across the district is needed to better match provision with aspiration and will help achieve this priority.

The SHMA has also identified 3 groups with specific needs which should be catered for in the Council and its partners' plans and programmes. These are families, older people and the Black and Minority Ethnic (BAME) households.

Families account for 42% of households across the district and given the likely level of population and household growth driven by natural change (births minus deaths) the current unmet demand for core family housing products such as detached and semi detached houses with sizes ranging from 2 to 4 bedrooms, will be considerably exacerbated if there is not a strong focus in future supply on family housing.

The level of increase in older people has been set out above and it is clear that the Council is faced by a major strategic challenge in ensuring that there is a range of appropriate housing provision for this part of the population. The council has recently produced a District Housing Strategy for the Over 50's Great Places to Grow Old. This estimates that the district needs at least a 31% growth in provision of specialist accommodation over the next 20 years simply to keep up with the growth in population.

### **5.3 Housing Profile of the CRC**

This section provides details on:

- The current housing stock
- Property type
- Tenure
- Stock Condition
- Vacancy
- Overcrowding
- Housing Characteristics
- Housing Market
- Building Activity

- Future Housing stock

The SHMA breaks the district into seven sub-areas using housing market functions and typology. The CRC borders 3 sub areas: Bradford City Central, City North East and Bingley and Shipley.

Some caution is required in adapting the sub area data and plotted characteristics for the CRC. City Central encompasses the majority of the CRC, but also takes in the city centre in its entirety, and runs to the boundary with neighbouring Kirklees. Bingley and Shipley takes in Shipley town centre, but also Bingley, plus a number of settlements, some of which could be described as rural. This leads to considerable disparity in the conclusion which may be drawn as to the housing market within the CRC. This baseline also uses ward level data for the same six wards as for the socio economic section.

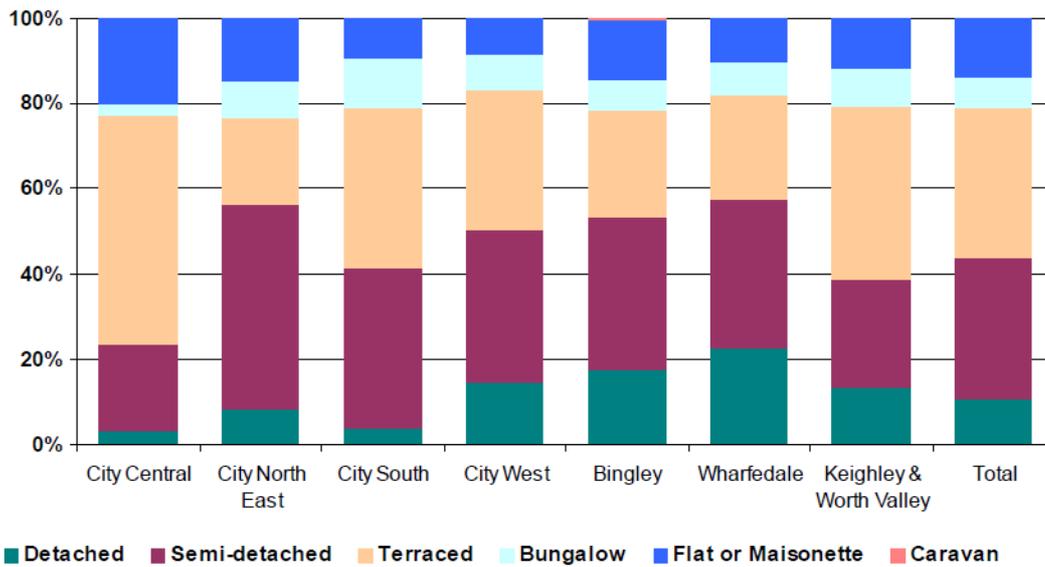
### **5.3.1 The current housing stock**

The total dwelling stock of the 6 wards bordering the CRC as at February 2012 was 39,965 residential dwellings.

### **5.3.2 Property type**

Figure 43 reviews the profile of occupied dwelling stock by size and type. The majority of the properties in the CRC sub areas are houses. City Central has the highest percentage of flats and terraced properties, whereas City North east has a majority of semi detached properties. Bingley and Shipley has the greatest balance in terms of a mix of house types across the district.

Figure 43: Property Type by sub area



Source: Bradford SHMA 2010

### 5.3.3 Tenure

Tenure profile varies to some extent across the sub areas (Figure 44). Proportions of social rented properties and renting privately are highest in City Central (24.2% and 22.1% respectively). Bingley and Shipley and City North East have high levels of home ownership.

Figure 44: Bradford District Tenure Profile by sub-area

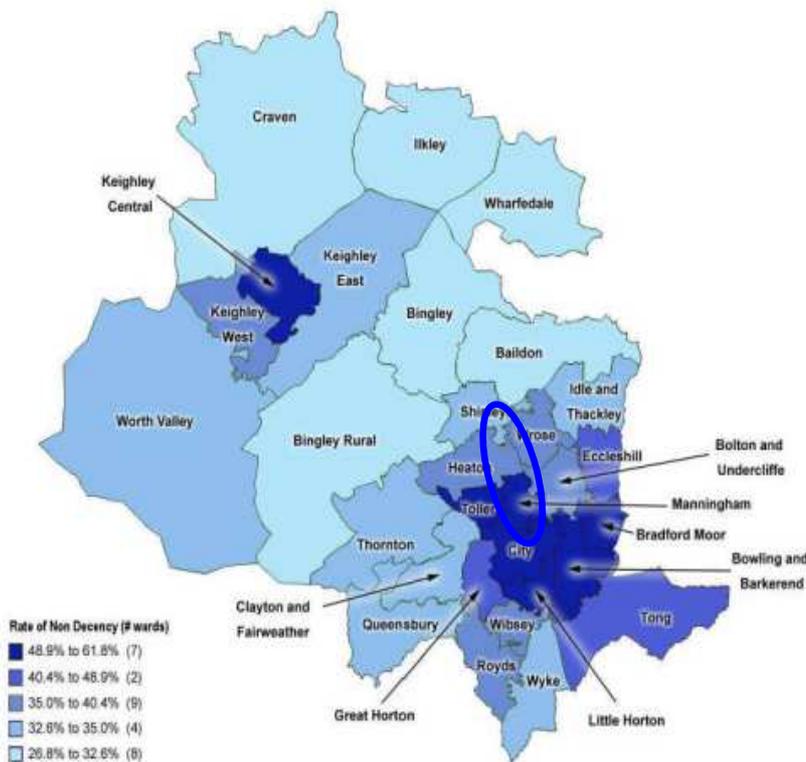


Source: Bradford SHMA 2010

### 5.3.4 Stock Condition

Figure 45 shows the percentage of non decent dwellings by ward. Manningham and City ward both have high levels of non decent housing. The level of non-decency is a reflection of the underlying stock profile of private sector dwellings. Across Bradford District, dwellings are proportionately older (39.6% built before 1919 compared with 24.9% nationally) and 48.8% of dwellings are terraced (compared with 28.9% nationally).

Figure 45: Non Decent Homes by Ward



Source: Bradford Private Sector Stock Condition Survey 2007

Back to back houses account for around 6% of private sector dwellings (11,070 properties) and around half are located in the City Central sub-area. These are small terraced houses built so that the rear of the property forms a party wall with another house behind, which faces onto the next street. 57.8% of back-to-back houses are non-decent.

Figure 46 shows energy efficiency of the housing stock follows a similar patten to non decency with Manning and City ward in particular having poor levels of energy efficiency.

Figure 46: Energy Efficiency: SAP rating by Ward



SOURCE: Bradford Private Sector Stock Condition Survey 2007

### 5.3.5 Vacancy

The overall vacancy rate of the district is around 6% which is much higher than the regional average of 4.1% and 3.9% of dwellings are classed as long-term empty (empty for at least 6 months). Figure 47 shows that the overall vacancy rate is highest in the City Central sub-area (9.3%). Bingley and Shipley sub area has the second lowest vacancy rates in the district.

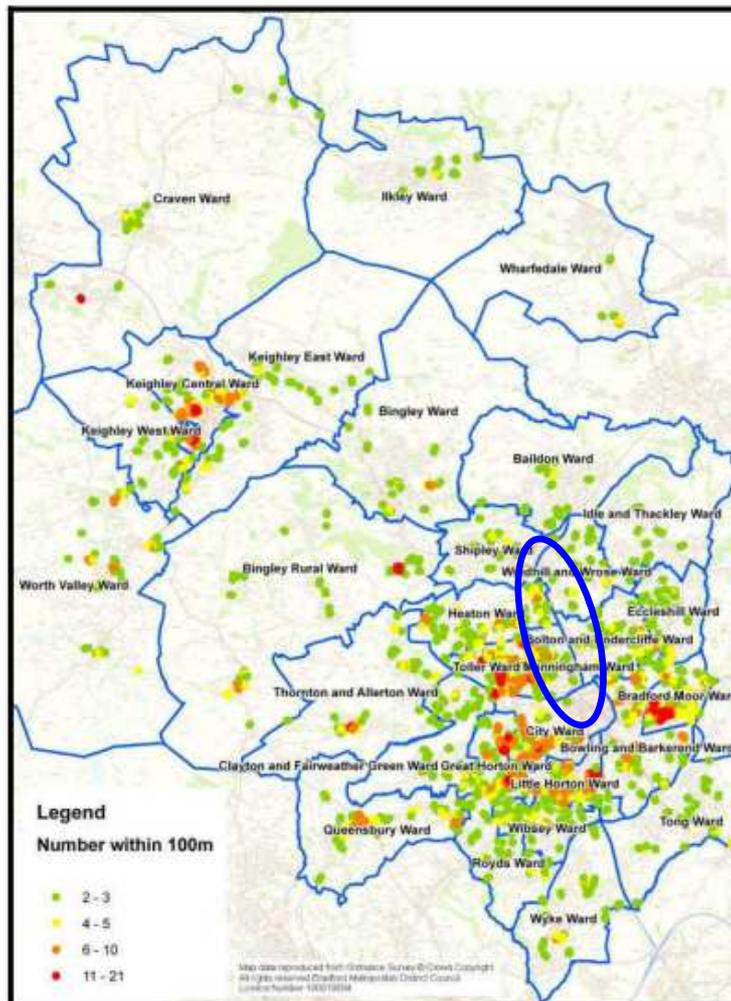
Figure 47: Vacancy Rates by sub-area

Sub-area	Total Self Contained Dwellings	Vacant for less than 6 months	Long-term vacant (>6 months)	Total vacant	% vacant	% Long-term empty
Bingley	30210	534	885	1419	4.7	2.9
City Central	53910	1541	3461	5002	9.3	6.4
City North East	28587	525	754	1279	4.5	2.6
City South	27084	547	822	1369	5.1	3.0
City West	20943	413	644	1057	5.0	3.1
Keighley & Worth Valley	27127	581	1044	1625	6.0	3.8
Wharfedale	19108	266	472	738	3.9	2.5
<b>Total</b>	<b>206969</b>	<b>4407</b>	<b>8082</b>	<b>12489</b>	<b>6.0</b>	<b>3.9</b>

Source: Bradford SHMA

Figure 48 shows concentrations of empty properties in the district. This shows concentrations of empty properties in areas boarding the CRC particularly in the Heaton and Manningham wards.

Figure 48: Empty Properties within 100m (Apr 2011)



Source: Bradford LIP 2011 CBMDC Council Tax

### 5.3.6 Overcrowding

The 2007/8 household survey identified a total of 9,181 households across Bradford District living in overcrowded conditions. Figure 49 shows that the proportion of households who were overcrowded averaged 4.8% across Bradford District and was highest in the City Central sub-area (10.7%).

Figure 49: Overcrowding by sub area

Sub-areas	No. Overcrowded Households	Total Households	% Over crowded
City Central	4644	43467	10.7
City North East	1047	29418	3.6
City South	941	24791	3.8
City West	705	22145	3.2
Bingley	770	28072	2.7
Wharfedale	436	18585	2.3
Keighley & Worth Valley	638	23239	2.7
Bradford	9181	189717	4.8

Source: Bradford SHMA 2010

## 5.4 Household characteristics

### 5.4.1 Household composition

The current age profile of Bradford District suggests that the population is generally younger than that of the region and England (Figure 50). Overall, 57.2% of the population are aged under 40 in comparison with 51.6% for the Region and 51.5% for England.

Figure 50: Bradford Age profile

Age Group	Bradford %	Calderdale %	Leeds %	Y & H %	England %
0-19	28.2	25.2	23.4	24.4	24.2
20-39	29.0	25.3	33.3	27.2	27.3
40-59	24.6	28.5	24.0	26.7	26.9
60-74	11.6	13.6	12.2	14.1	13.9
75+	6.6	7.4	7.1	7.6	7.8
Total	100.0	100.0	100.0	100.0	100.0
Base (000s)	497.4	200.1	761.2	5177.3	51092.0

Source: Bradford SHMA

#### 5.4.2 Future changes in household numbers

Population projections for Bradford District suggest that the total population will increase from 505,900 in 2008 to 626,300 by 2026 and 655,000 by 2031. What is particularly noticeable about Bradford's population projections is the expected increase in population across all age cohorts (Figure 51), with the biggest absolute increase in the 25-39 age group (31,100 increase to 2008- 2026) and the biggest proportionate increase will be amongst the 75+ age group (42.5% increase 2008-2026).

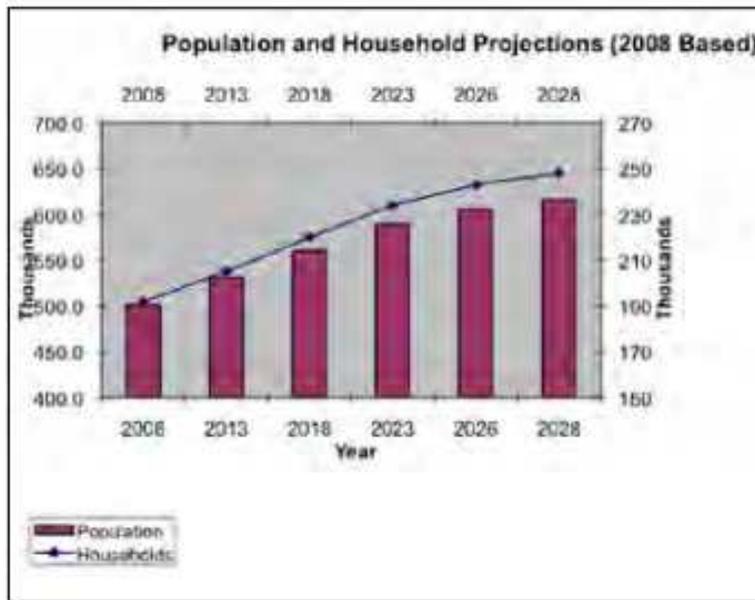
Figure 51: Bradford Population Growth

Age up	Year and population (000s)						Change in total no.		% Change	
	2008	2011	2016	2021	2026	2031	2008-26	2008-31	2008-26	2008-31
0-14	107.1	113.2	125.7	134.9	138.5	140.2	31.4	33.1	29.3	30.9
15-24	75.7	75.9	73	74.5	82.5	89.6	6.8	13.9	9.0	18.4
25-39	107	114.4	129.1	138.6	138.1	136.6	31.1	29.6	29.1	27.7
40-59	123.6	127	130.9	134.8	143.9	154.7	20.3	31.1	16.4	25.2
60-74	59.3	61.9	66.1	72.3	76	81	16.7	21.7	28.2	36.6
75+	33.2	34.4	36.9	40.2	47.3	52.9	14.1	19.7	42.5	59.3
<b>Total</b>	<b>505.9</b>	<b>526.8</b>	<b>561.7</b>	<b>595.3</b>	<b>626.3</b>	<b>655</b>	<b>120.4</b>	<b>149.1</b>	<b>23.8</b>	<b>29.5</b>

Source: SHMA 2010

The 2008 based ONS projections (Figure 52) suggest that population and household growth both within Bradford (and the Yorkshire and Humber Region as a whole) will occur at roughly the same rate as assumed within the Regional Spatial Strategy.

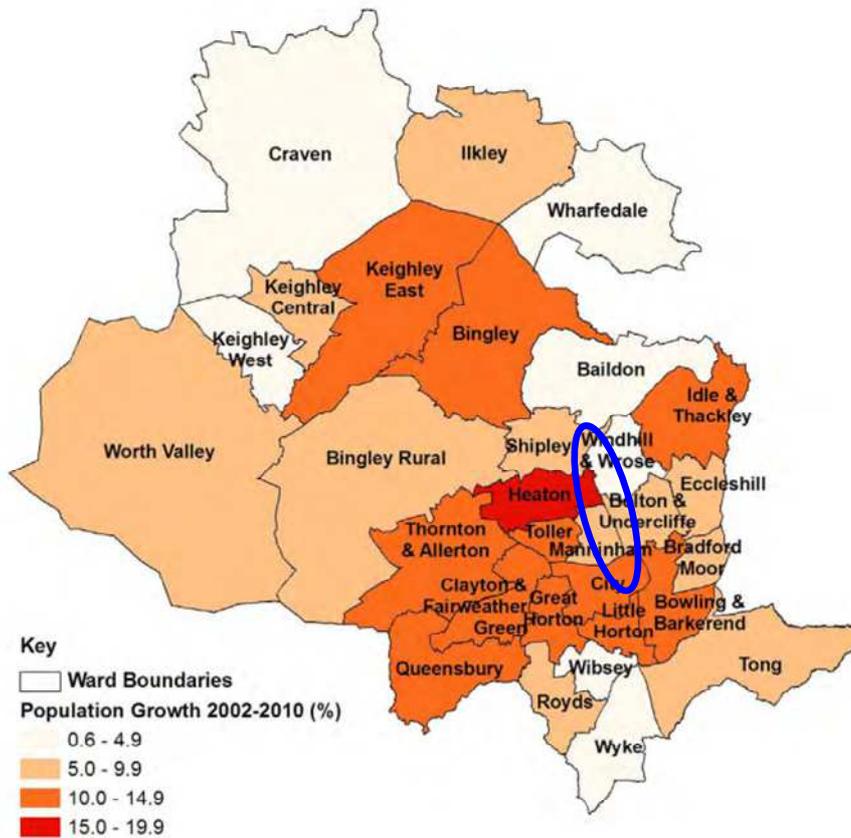
Figure 52: Bradford Population and Household Projections



Source: Core Strategy Further Engagement Draft

Figure 53 shows the population growth by ward from 2002 to 2012. This shows that there has been large percentage growth in the population in most of the wards around the CRC with growth particularly high in Heaton and City.

Figure 53: Population Growth by Ward 2002-2012



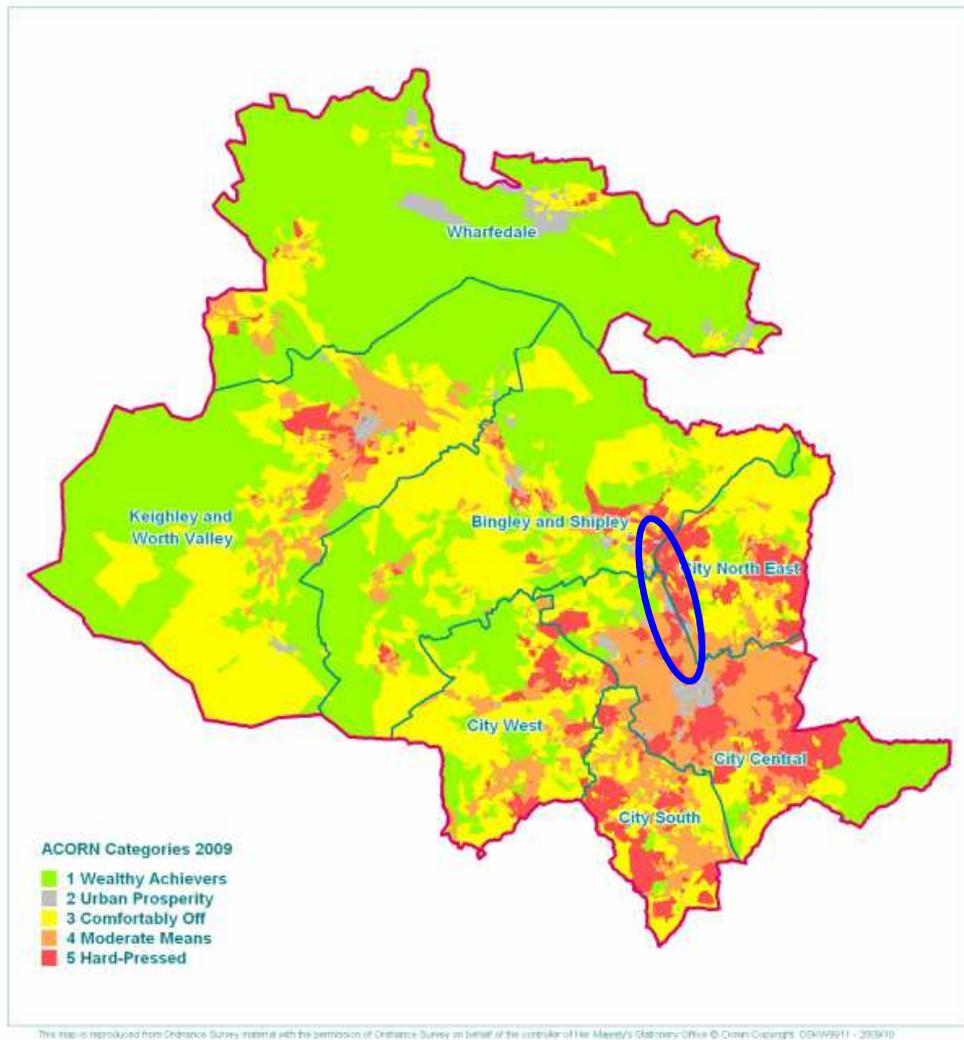
Source: Ward profiles

## 5.5 Housing Market

### 5.5.1 Household Composition

Figure 54 indicates the relative affluence of suburban and rural areas and the relative deprivation of inner city and town centre locations within Bradford District. It shows that the CRC area is bordered by concentrations of hard pressed and moderate means households.

Figure 54: Bradford District Acorn Characteristics



Source: Bradford SHMA 2010

### 5.5.2 House Prices

Figure 55 shows that the wards surrounding the CRC have some of the lowest average house prices in the district.

Figure 55: Mean house sale prices by ward 2011

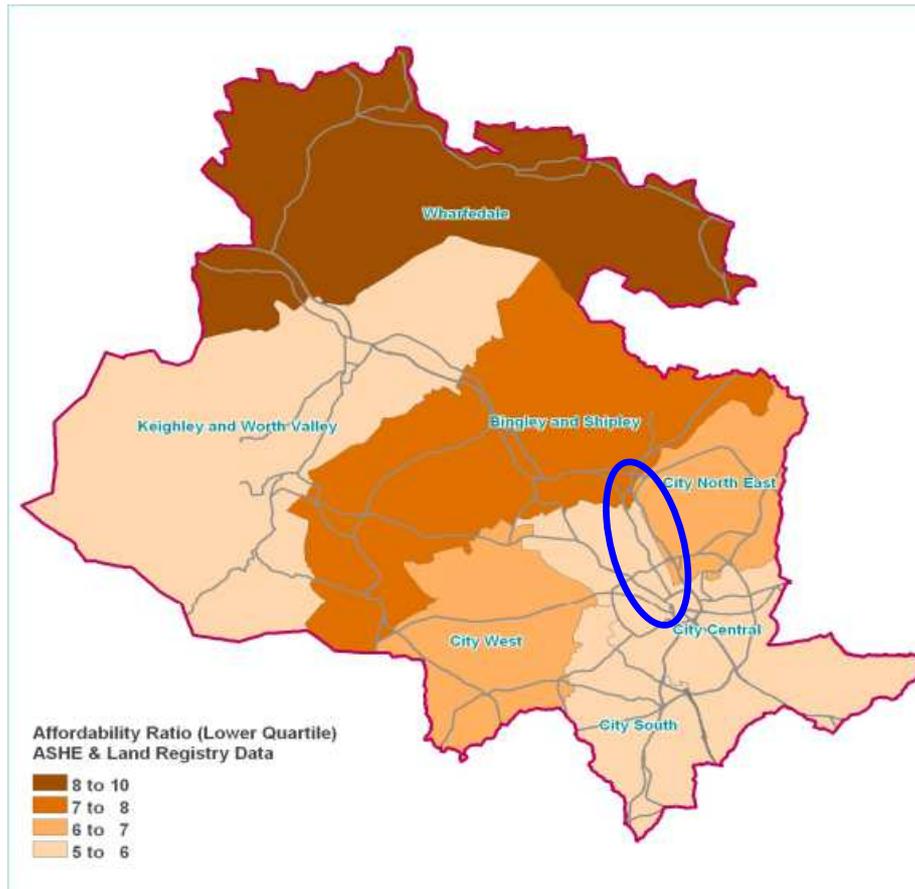


Source: Ward Profiles

### 5.5.3 Relative Affordability

In terms of affordability Figure 56 shows the relative affordability of properties by comparing district-wide lower quartile incomes with sub-area lower quartile property prices. This suggests a four-way split between highest ratios in Wharfedale (where lower quartile prices are 9.8 times a lower quartile income); a ratio of 7.9 in the Bingley and Shipley area; ratios of 6.1 in City West and City North East sub-areas; and ratios between 5.2 and 5.7 in remaining Bradford City areas and Keighley/Worth Valley.

Figure 56: Relative Affordability



Source: Bradford SHMA 2010

The SHMA identifies shortfalls in affordable housing across the District and policies need to be in place through the LDF to ensure future delivery. Analysis from the SHMA suggests an annual net shortfall of 749 affordable dwellings. Affordable housing policies within the Local Plan will need to be informed by this evidence. On the basis of a net shortfall of 749 each year and an RSS target of 2,700, an overall district-wide affordable target of 25%-30% for affordable housing is suggested.

#### 5.5.4 Viability

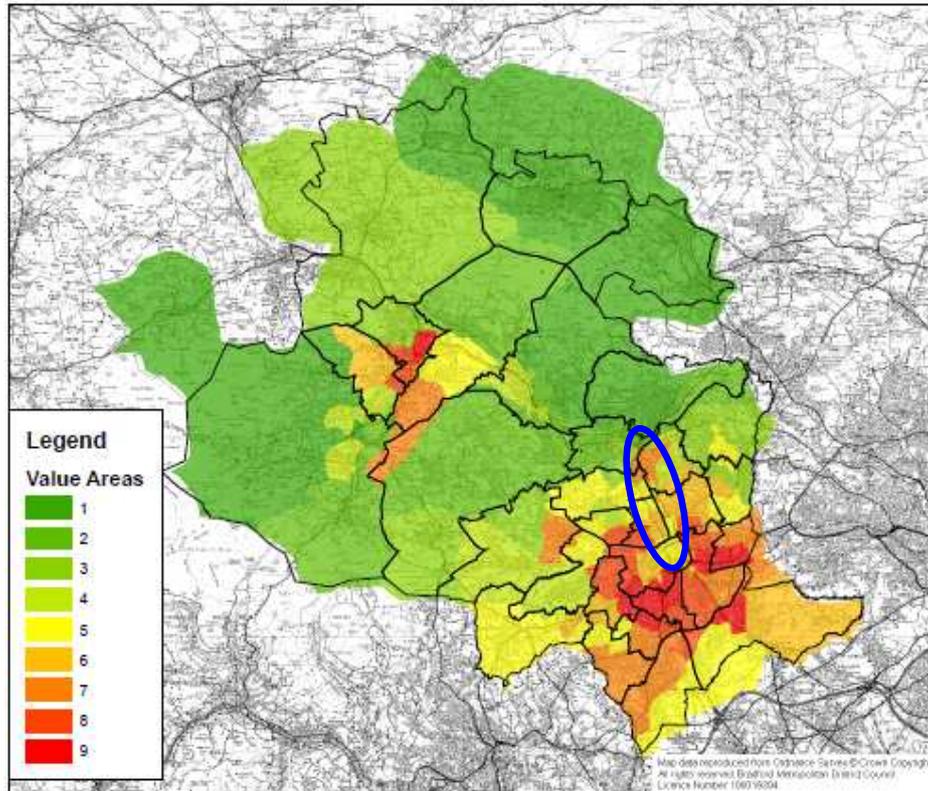
The Affordable Housing Economic Viability Assessment (AHEVA) made recommendations on the viability of the proportion of affordable housing, site thresholds and tenure splits in different locations and on a range of different site types across the district. Figures 57 and 58 below show 9 value areas of the district in terms sales values and the amount of affordable housing which it would be viable to achieve over the life of the Core Strategy in these areas. The CRC falls mainly in values areas 5 and 6 where up to 30% affordable housing maybe viable.

Figure 57: AHEVA Viability Results

Value Area	Baseline Position  (Nil grant, S106 contributions at 100% of the baseline level, Code for Sustainable Homes Requirements as mandatory timescale, 70:30 social rent:intermediate affordable housing mix, Lifetime Homes allowance £600 per unit and additional sustainability requirement of £1,200 per unit)
1	40% affordable housing is the likely maximum amount that could be achieved
2	40% affordable housing is the likely maximum amount that could be achieved
3	30% affordable housing is the likely maximum amount that could be achieved
4	30% affordable housing is the likely maximum amount that could be achieved
5	30% affordable housing is the likely maximum amount that could be achieved
6	20% affordable housing is the likely maximum amount that could be achieved
7	Between 10-20% affordable housing is the likely maximum amount that could be achieved
8	Between 0-10% affordable housing is the likely maximum amount that could be achieved
9	Between 0-10% affordable housing is the likely maximum amount that could be achieved

Source: Bradford AHEVA 2010

Figure 58: AHEVA Value Areas Map

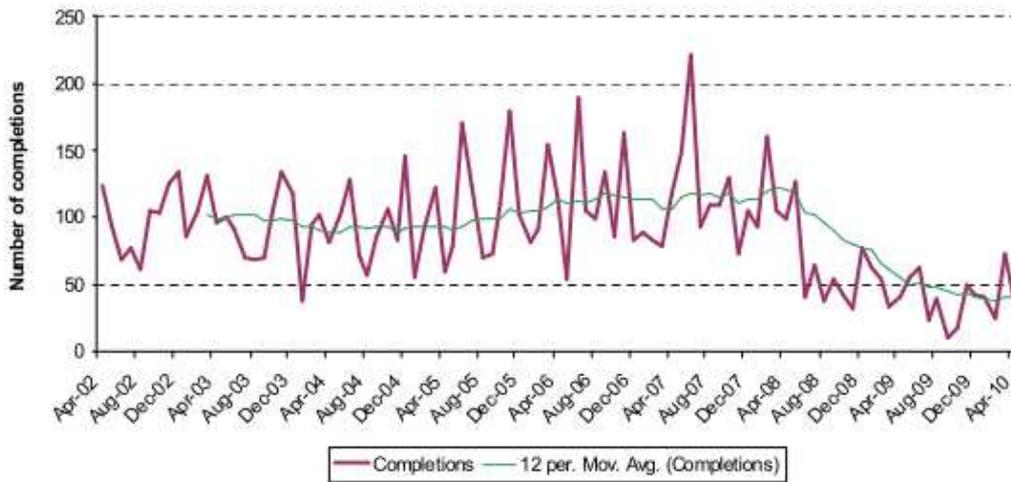


Source : Bradford AHEVA 2010

### 5.5.5 Building Activity

Figure 59 shows that the number of housing completions across the district has fallen significantly since a peak in August 2007. This reflects the impacts of the recession and the weak housing market nationally.

Figure 59: NHBC & CBMDC building control housing completions



SOURCE: CBMDC Planning

### 5.5.6 New Residential Developments

Analysis of major planning applications submitted within the last 6 years provides an indication of the scale of developer interest in the CRC. Planning applications over the period have proposed at least 550 residential units in 26 schemes (there have also been several other applications in which the number of units has not been specified). Of these, there are 285 units within 11 residential schemes located throughout the Corridor and 265 units within 5 mixed use schemes located at the Shipley and Bradford ends of the Corridor. However, the data must be treated with caution as only a small proportion of planning permissions are ever implemented. This is highlighted in some way by Gleeson’s proposals for Oswin Mills -permission was granted in 2007 for 106 apartments, this was not implemented and Gleeson now have permission for 46 houses on the site.

This highlights the changing development density on schemes since the height of the market. Some of these permissions were granted back in 2006/2007 and have not been implemented and will therefore have expired.

New residential developments underway in and around the Canal Road Corridor, give a general feel of development activity. There are a number of marketing websites that provide information on new residential developments either underway or proposed across the UK. Searches of Rightmove ([www.rightmove.co.uk](http://www.rightmove.co.uk)) and

Smart New Homes ([www.smartnewhomes.co.uk](http://www.smartnewhomes.co.uk)) for new developments around the CRC area (focusing on postcode districts BD1, BD2, BD3, BD9, BD10, BD17 and BD18) have identified the following developments, providing an illustration of the type of development activity underway in this part of Bradford.

Figure 60: New Residential Developments

Postcode District	Development Address	Developer	Details
BD1	Apartments in Bradford City Centre, Rawson Road and North Parade	MAC Property Developments	19 two bedroom apartments in Bradford City Centre. Prices start £99,950
BD2	Low Fold, Eccleshill, Bradford, BD2 4AD	Reynolds Homes (York)	Select Courtyard Development - £219,950
BD2	Thomfield Square, Bradford, BD2		Development of 6 properties, with a 4 bed detached house priced at £210,000
BD2	Moorside Meadows, Eccleshill, BD2 3JF	Jayco Homes	Two bedroom apartments from £124,950 and two bedroom bungalows £167,500 including conservatory.
BD3	North Allerton Road, Bradford, BD3 0JD		Two 5 bed semi detached properties both £149,950. Part of larger development of 6 properties.
BD3	Fairview Green, Bradford, Yorkshire, BD3 7AY	Taylor Wimpey	Development of 2, 3, and 4 bedroom properties, with prices starting at £72,246.
BD9	Crest Park, Thom Lane, BD9	Taylor Wimpey	Development of 2 bed apartments and 2,3 and 4 bed detached houses, with 4 bed houses priced at £309,995
BD10	Little Cote Farm, Thackley, BD10 8JP		Development of only 4 detached properties at £335,000
BD10	Pavillion Court, New Street, Idle, BD10	David Wilson Homes	4 bed detached at £216,995
BD17	Heritage View, Honey Pot Lane, West Lane, Baildon, BD17	David Wilson Homes	4 and 5 bedroom properties, with prices around £444,495
BD17	Lucy Hall Drive, Baildon, Shipley		6 property development, with a 3 bed semi detached at £245,000
BD18	Leeds Road/ Hall Lane, Shipley, BD18 2NP	Landstock	9 dwellings proposed; four townhouses; two pairs of semi detached; and one detached, all with garages - £325000

Source: BDP SDF Baseline Paper: Housing and Socio Economic

These developments are being undertaken by both regional and national housebuilders. However, other than the apartment development being undertaken by MAC Property Developments in Bradford city centre, it is difficult to identify any particular trends in the types of property being developed in different area. Most of the developments, particularly in postcode districts BD2, BD3, BD9 and BD18, offer a

mix of units ranging from two bedroom apartments and bungalows to two, three, four and even five bedroom semi-detached and detached houses. The developments underway in the more northerly postcode districts of BD10 and BD17 tend to comprise larger four and five bedroom detached properties.

### **5.5.7 Development Densities**

In general, older schemes dating back to late 2007 early 2008 have a development density in excess of 40 units per hectare, a level often achieved by developing apartments on sites. More recent schemes, including those which have been re-planned, generally have densities of 40 dwellings per hectare or less.

On large scale sites, developers are highly unlikely to build at one development density across the site. Developing high density product across a large site will have the effect on releasing a large amount of similar stock on to the market at once, effectively reducing values. Instead, a range of properties are likely to be developed ranging from 20-30 dwellings per hectare up to 40. Depending on the revival of the property market and whether apartments might once again become acceptable to developers and occupiers, densities in certain sections may increase towards 50/60 dwellings per hectare.

### **5.5.8 Developer Views**

As part of the Strategic Development Framework BDP have consulted with a number of developers active in the CRC area to obtain their views on the residential market in Bradford and in particular their thoughts on the CRC. The key comments where;

- At the height of the market in 2006/07, residential land values reached around £1m/acre in more affluent areas such as Shipley and Bailden,
- Along the Canal Corridor some areas, particularly Bolton Woods and Frizinghall still suffered from low land values at height of the market. Bolton Woods in particular is a deprived area with poor quality maisonettes and a stigma. While regeneration efforts have been made at either end of the Canal Road Corridor (Saltaire and the City Centre) the areas in between have been neglected. There is a need to increase the quality of the housing in these central areas and improve the local amenity

- At Victoria Mills, the best value that was achieved was £341psf (compared with e.g. £330psf at the Hacienda and Beetham Tower in Manchester) but the average value at the height of the market was £311psf. Values have fallen significantly as the residential market has struggled in recent years and values being achieved are now 220-250psf.
- Residential values fall as you leave Shipley and Bradford City Centre. In the city centre, values were around £240-250psf at schemes such as The Gatehouse
- Midland Mills is currently not viable for residential development due to the costs associated with its refurbishment. Values for apartments in this location would achieve circa £175psf
- Within the central area, there is potential to create aspirational family homes as an extension to Bolton Woods, but it would need re-branding and the creation of more local amenities. This is supported by other developer views, they have all said that developments of apartments in the area would not be viable or fundable.
- Values of £150-175psf for aspirational family houses in the central area could be achieved.
- Oswin Mills has started on site with values of £150-£160psf expected to be achieved. This is a low cost family housing scheme aimed at the bottom end of the market.
- The Corridor has historically been a focus for Social Housing, one of the developers stated that it is unlikely they would be interested in the area as they tend to focus on higher value areas, however if there was a comprehensive proposal that would deliver change to the area then they would like to understand the plans before they rule anything out despite their initial concerns.

In summary the development market expressed some concerns/reservations about the Canal Road Corridor as it stands. They were worried about the stigma attached to the area created through lack of investment. They all acknowledged that the area has potential and whilst one did have concerns about the delivery of high value housing there was a general view that family housing in the area would be the best solution. Development densities of between 30 and 40 units per hectare were suggested and limit the number of units that could be delivered in the corridor. Values that can be achieved in the short term are likely to be circa £150psf but given

the higher values achieved in Bradford centre and in particular the Shipley area then a comprehensive scheme including public realm and amenity space could change opinions of the area and raise values.

### **5.5.9 Future Housing stock**

As set out in the Core Strategy and Housing Strategy, the CRC will be an important component in Bradford's future housing provision. In this regard there are several generic factors which apply to all areas, and in this case the CRC, which dictate the ability to deliver new housing development including:

- The availability of suitable sites of a size and quality to encourage development
- Public perceptions of an area from housing to schools to crime
- Competition from rural and semi rural locations beyond inner Bradford district e.g. Bingley and Shipley, Wharfedale etc.

The above will be important if ambitions for an Eco settlement of circa 5000 units in the CRC are to be realised, since it can be seen that a development on that scale, over any reasonable period would have wider ramifications for the residential market in Bradford as a whole and potentially beyond. In January 2009, GVA reported on the deliverability of Eco settlements in the Leeds City Region. This found that the CRC required further work to establish its overall vision and objectives, potential beneficial impacts, market viability and scope for innovation.

In particular the potential to bring sites forward in a logical order will be critical, where substantial proportions of potential landholdings are privately owned.

The most significant stakeholders in this regard will be:

- InCommunities, the manager of former council housing in Bradford, which has responsibility for some landholdings in CRC, including some unpopular housing which is to be decommissioned
- The URBO development in partnership with Arnold Laver, which is seeking to develop 40 hectares of land, close to Bolton Woods on land in the ownership of Lavers and the Council
- The potential for new development around Shipley town centre which would appeal to a mature market.

In relation to the capacity of housebuilders to deliver in the CRC, evidence suggests that typical output from a single developer on a viable site in a stable market would be in the region of 40 dwellings per annum. It can be seen that in simple terms, five developers working within the corridor would develop up to 200 dwellings per annum.

In this example, it would take 10 years to complete a low density development of 2,000 homes with the CRC. If this were realised, the CRC would accommodate approximately 10% of the household growth predicted for the district year on year.

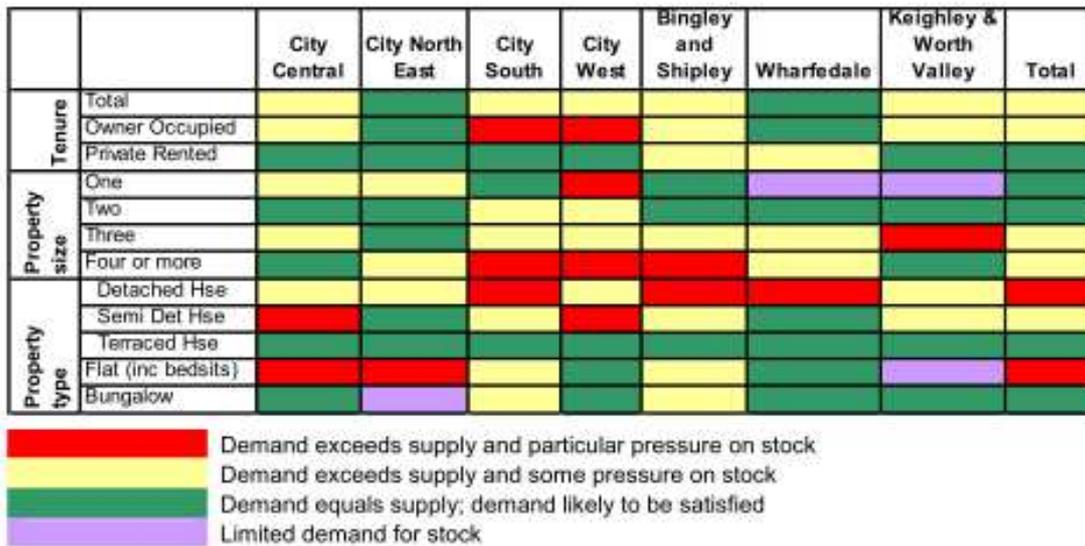
Assuming the URBO site is deliverable, such a development could provide new homes which meet this ambition, when allowance is made for open space and community amenities. Delivering a high quality development on this scale would represent a significant achievement in the context of CRC, given its relatively small population at present.

#### **5.5.10 Housing Supply and Demand**

Analysis of general market supply and demand suggests for CRC sub areas that:

- Across Bradford District, demand for open market accommodation exceeds supply, particularly in the City Central and Bingley and Shipley sub-areas;
- In City North East, demand generally matches supply;
- There is demand for flats particularly in city central and city north east sub areas.

Figure 61: Housing Supply and Demand



Source: SHMA 2010

### 5.5.11 Strategic Housing Land Availability Assessment

The Council has assessed its land supply via its Strategic Housing Land Availability Assessment (SHLAA). The SHLAA provides the main mechanism for identifying potential housing sites across the District and assessing their developability and deliverability.

The SHLAA is not a policy document – it does not make decisions on which sites should go forward and allocated for development but it does provide information and choices to help make those decisions. It is a key part of the evidence base since it supports and underpins both the Core Strategy and those DPD’s which allocate sites.

For the CRC 19 Sites were analysed in the SHLAA, these included sites put forward as having residential potential in the Canal Road Masterplan. In some cases these include land covered by buildings in existing use. A substantial number of sites analysed are not considered to be available for development across the trajectory period, whilst other have been ruled out as unsuitable, given the substantive constraints in bringing them forward for residential use.

9 sites remain as viable sites in the trajectory and total an average of 1191.5 potential units. A further 2115 units (average) could be generated from sites currently

ranked as uncertain and from sites which would continue to be built out beyond year 17. Further work will be required to ascertain whether there is any potential from these sites in the longer term.

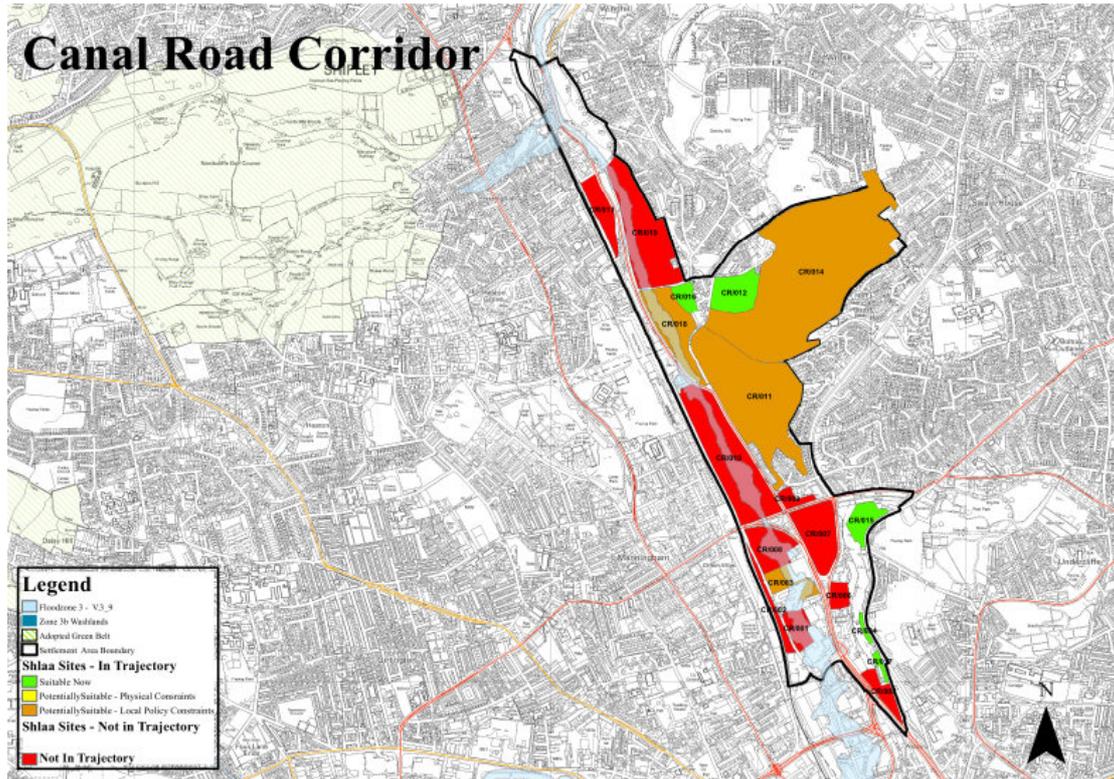
The sites which could generate the majority of new homes fall largely on greenfield areas covered by protection policies in the RUDP and compromised further by flood zone issues, consequently the expectation of new homes coming to the market cannot be expected before the middle period at the earliest.

Figure 62: SHLAA CRC Analysis

ALL SITES		SITES WITHIN TRAJECTORY (DELIVERABLE OR DEVELOPABLE)	
Total No Of Sites	19	No of Green Field Sites	4
Total Area (Ha)	115.01	No Of PDL Sites	2
RUDP Phase 1 Housing Sites	3	Mixed PDL / Green Field	3
RUDP Phase 2 Housing Sites			
Sites with Outline / Full pp for Housing	1	Wholly / mainly within flood zone 2	2
Suitable Now	8	Wholly / mainly within flood zone 3a	2
Potentially Suitable (Policy Constraints)	8	Wholly / mainly within flood zone 3b	
Potentially Suitable (Physical Constraints)		Within / partly within green belt	
Unsuitable	3	Within / partly within local wildlife designations	1
		Within partly within local green space designations	2

DWELLING CAPACITY (Based on Median of Upper and Lower)							
	No Of Sites	Hectares	Short	Medium	Long	Total	% of District Total
	9	74.54	109.5	360.5	721.5	1191.5	3.1

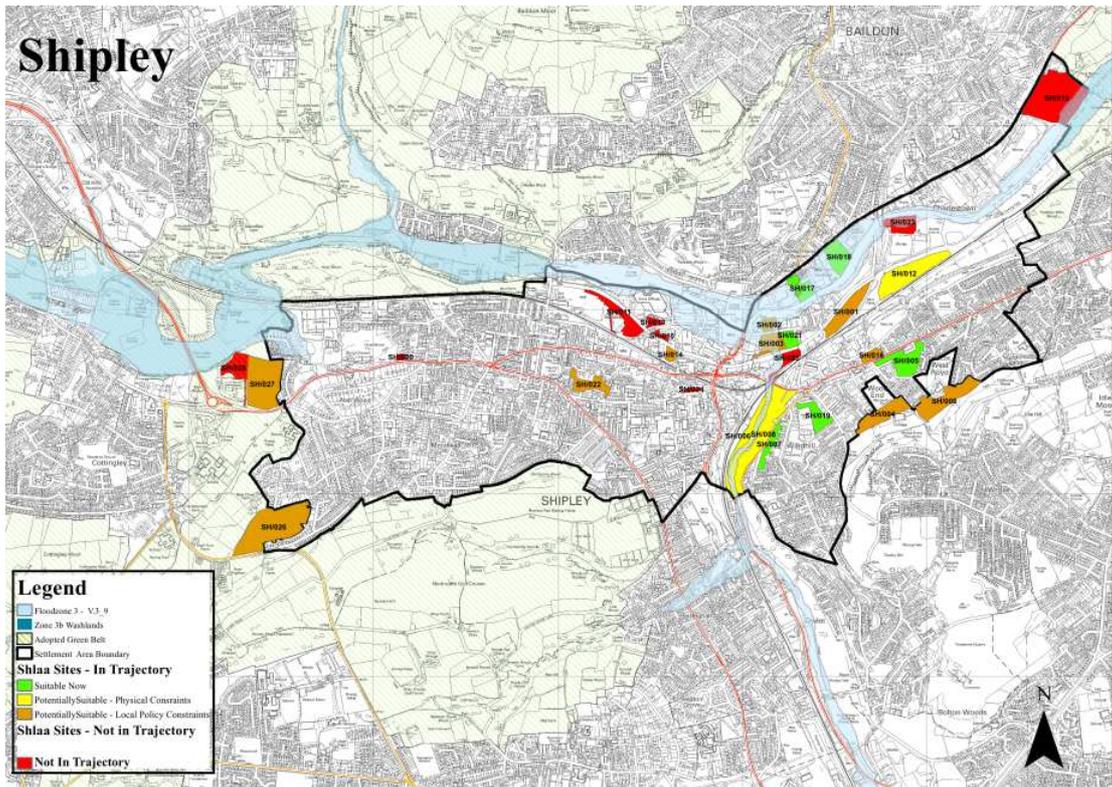


Source: CBMDC SHLAA

For Shipley 28 initial sites were analysed in the study, resulting in 19 in the final trajectory. The majority of sites are previously developed and further opportunities may still be available in the settlement to further boost this figure. However, some sites are crossed by flood zone areas which may limit the form or type of development that could be delivered on them. Of the sites with physical constraints, these are mostly limited to access issues that could be resolved. Overall the settlement offers a good mix of sites across a number of types to enable the right choice for new development in the future.

Figure 63: SHLAA Shipley Analysis

ALL SITES		SITES WITHIN TRAJECTORY (DELIVERABLE OR DEVELOPABLE)	
Total No Of Sites	28	No of Green Field Sites	7
Total Area (Ha)	53.57	No Of PDL Sites	10
RUDP Phase 1 Housing Sites		Mixed PDL / Green Field	2
RUDP Phase 2 Housing Sites			
Sites with Outline / Full pp for Housing		Wholly / mainly within flood zone 2	4
Suitable Now	11	Wholly / mainly within flood zone 3a	4
Potentially Suitable (Policy Constraints)	12	Wholly / mainly within flood zone 3b	
Potentially Suitable (Physical Constraints)	4	Within / partly within green belt	2
Unsuitable	1	Within / partly within local wildlife designations	
		Within partly within local green space designations	3

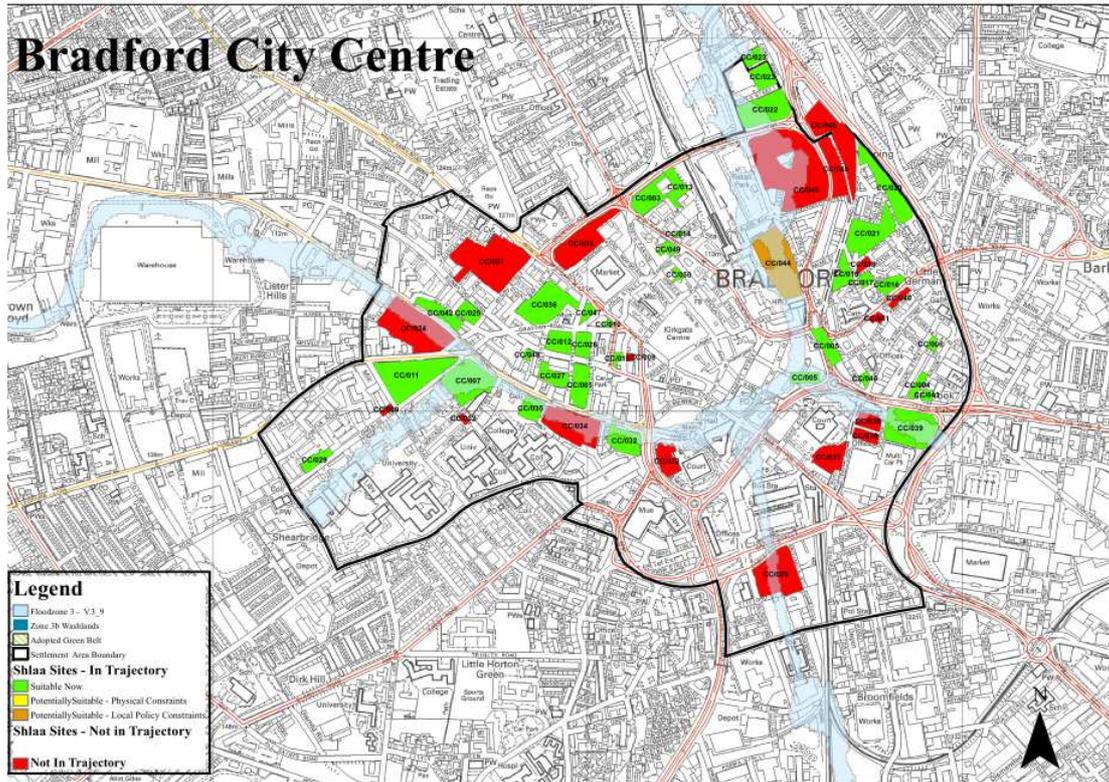


Source: CBMDC SHLAA

The City Centre has a substantial stock of existing buildings with apartment development potential. There are also a number of sites opportunities which have had permission for development but which have not been delivered as a result of weak market. The economic climate and the decline of demand in the apartment market in the city centre is not expected to improve until the medium term of the trajectory where the majority of new units are expected to be yielded. This situation however, is unpredictable and could alter to yield more units at a higher density in the earlier period from additional sites and opportunities elsewhere in the city.

Figure 64: SHLAA Bradford City Centre

ALL SITES		SITES WITHIN TRAJECTORY (DELIVERABLE OR DEVELOPABLE)	
Total No Of Sites	50	No of Green Field Sites	0
Total Area (Ha)	29.21	No Of PDL Sites	34
RUDP Phase 1 Housing Sites		Mixed PDL / Green Field	0
RUDP Phase 2 Housing Sites			
Sites with Outline / Full pp for Housing		Wholly / mainly within flood zone 2	7
Suitable Now	46	Wholly / mainly within flood zone 3a	7
Potentially Suitable (Policy Constraints)	4	Wholly / mainly within flood zone 3b	0
Potentially Suitable (Physical Constraints)		Within / partly within green belt	0
Unsuitable		Within / partly within local wildlife designations	0
		Within partly within local green space designations	0



Source: CBMDC SHLAA

## 5.6 Site Allocation Principles

The Core Strategy sets out the broad housing site allocation principles for DPDs including the Shipley and Canal Road Corridor AAP. Policy HO7 (see below) sets out some of the most important guiding principles which will be used to compare, contrast and evaluate alternative candidate sites for housing development within the Shipley & Canal Road AAP. The policy does not represent an exhaustive list of all the factors which will be used in selecting sites nor does it indicate a particular order of preference in applying these principles. Sites which score positively against one or more of these principles will not necessarily be considered suitable for allocation and equally sites may fall foul of a particular element of Policy HO7 but still have sufficient benefits to warrant allocation. The policy does however indicate the key considerations that will shape the allocation process given the particular challenges and issues facing the district.

### Policy HO7 – Housing Site Allocation Principles

In order to meet both the objectives of delivering housing growth and managing that growth in a sustainable way, sites will be identified, assessed, compared and allocated for housing development in the Allocations DPD, the Shipley & Canal Road AAP and the Bradford City Centre AAP based on a range of principles including:

1. The need to allocate sufficient deliverable and developable sites to meet the targets set out in Core Strategy Policies HO1 and HO3;
2. Prioritising the allocation of sites which would assist in the regeneration of the Plan area;
3. Maximising the use of previously developed land within the Plan area and prioritising their development via phasing policies - subject to the maintenance of a range of sites which meet local need and provision of a 5 year supply of deliverable sites;
4. Prioritising the allocation of sites which would remedy identified deficiencies in local infrastructure and services including open space, community and education facilities;
5. Maximising positive environmental benefits of development by prioritising the allocation of sustainably located sites which:
  - a. Would result in significant environmental improvements to an area for example by reclaiming derelict land;
  - b. Would enhance biodiversity or contribute to the aim of achieving no net loss of biodiversity;
  - c. Would provide opportunities to draw energy supply from decentralised and renewable / low carbon sources;
  - d. Would provide opportunities to create or enhance green infrastructure particularly those that link urban green spaces with the wider countryside.
6. Minimising the use of green belt land within the Plan area;
7. Minimising adverse environmental impacts of housing growth, in particular with regard to climate change, biodiversity and flood risk, by wherever possible:
  - a. Selecting sites accessible to a range of services and community facilities thereby reducing the need to travel;
  - b. Selecting sites accessible to quality public transport services;
  - c. Avoiding development of sites which would result in the fragmentation or isolation of natural habitats;
  - d. Minimising harm to the landscape context including the character and setting of the area in question;
  - e. Minimising the loss of trees and woodland;
  - f. Avoiding sites or locations which would pose unacceptable risk to health and safety;

## 5.7 Residential Market Summary

The prospects for the residential market are closely aligned to the wider economy and are therefore considered to be uncertain. Recent falls in house prices are resulting in reluctance amongst homeowners to put their houses on the market which may lead to shortages of new stock and therefore stabilising prices.

Activity levels, however, are expected to remain subdued. The average price of a house in the Metropolitan District of Bradford was around £145,000 at the end of 2010, well below the regional average of around £160,000 and the sub-regional average of around £155,000.

Furthermore, average house prices in Bradford fell slightly over the year comparing poorly with the sub-region for which prices remained stable. Whilst the sales prices of

flats and, to a lesser extent, detached properties, increased over the year, prices of semi-detached and terraced properties both fell. The number of sales fell dramatically over the year, however, in line with the wider sub-region. This fall in sales was seen across all property types, with apartment sales seeing by far the greatest fall in sales.

House prices are generally highest in the northern and western parts of the Metropolitan District, particularly in areas such as Bingley, Bailden and the more rural areas to the north but also in the areas around Shipley and Idle. The lowest house prices are generally found in the urban areas to the east, south and south west of Bradford city centre.

There are a number of residential developments currently being marketed around the edges of the Canal Road Corridor area by both national and regional housebuilders. However, it is difficult to identify any particular trends in the nature of these developments.

There is genuine market interest in the area although this is tempered with some concern about the type of residential development that could be focussed upon through the Masterplan. There is interest in family housing and a feeling that this could be successful in changing the area subject to investment in public realm and other amenities.

## **5.8 Conclusions**

The following conclusions can be drawn from the housing analysis:

- The growth of a new neighbourhood within the CRC is both economically and socially desirable for Bradford in order to attract and retain economically active residents.
- The housing market in the CRC is relatively undeveloped at present. The surrounding sub-areas and wards currently have low average house prices.
- Furthermore, based on predictions of population and household growth, development at some density in the CRC is important, particular when considering alternatives such as the greenbelt.
- Such development can bring further positives locally in providing a new pool of employees as well as bolstering the capacity of retail centres and community hubs.

- There appears to be an under supply of larger family housing generally, although the areas of the main CRC and Shipley are distinct, the former is concerned with place shaping and transformation, the latter with a mature housing market.
- The development market has a preference for family housing in the area, however there also appears to be a demand for flats/apartments.
- Evidence from the SHMA suggests that the following should be strategic housing priorities for the CRC AAP; delivering more family housing, delivering sufficient affordable housing, increasing the supply of larger homes, flats and apartments in accessible locations.
- There are shortfalls in affordable housing across the District. Any affordable housing policies in the AAP will need to be informed by this.
- At present the SHLAA shows limited housing supply in the short to medium term in the CRC. It will therefore be important for the AAP to test and identify viable and deliverable sites.
- The Urbo Joint Venture Company and INcommunities will be critical to delivery of future housing within the CRC.

## **6.0 Social and Community Facilities**

There are very limited provisions of community facilities within CRC area due to the relatively small population in the area. The facilities that do exist are primarily outdoor facilities such as outdoor sporting facilities and allotments/community gardens. People living within this area have to travel to neighbouring areas for essential facilities such as health care, education and other community facilities such as a library, or a post office.

### **6.1 Primary School**

Bradford Christian School and Shipley CofE Primary School are the only primary schools located within the boundary of SCRC area with a further five primary schools located within a 1.5 mile radius from the central part of the corridor including the nearby Poplars Farm Primary, Frizinghall Primary, Swainhouse Primary, Grovehouse Primary and St Francis Catholic Primary. There are also two primary schools located close to the boundary of the SCRC (High Craggs to the North-East and Westminster CofE Primary Schools to the South-East).

### **6.2 Secondary School**

There is no secondary school within the SCRC area. The nearest state secondary schools are Hanson School to the North and Feversham and Carlton-Bowling to the South-East of the corridor. A number of other secondary schools are located nearby including a number of faith schools e.g. Bradford Christian School, St Joseph's Catholic College and Immanuel CE College and Bradford Grammar School.

### **6.3 Health Facilities**

Although no existing health facilities are located within the SCRC area, there are three medical centres located close to the area and with easy accessibility. The Windhill Green Medical Centre and Shipley Medical Centre serve the north of the area while the Hillside Bridge Health Centre and Farrow Medical Centre covers the south of the corridor. The Frizinghall Medical Centre is also located approx 1 miles from the area to the west of Canal Road, the other side of the railway.

### **6.4 Community Facilities**

Existing community facilities within the SCRC area are limited with the Bolton Woods Community Centre, the main facility locally providing a mix of services including an early years nursery, crèche, youth group, programme of courses and advice, social events for the elderly and rooms for hire.

The area also maintains two social clubs the Bolton Woods Social Club and the Owlet Hall Social Club, which provide venues for a variety of social events.

Other social/community centres that are located close to the area with easy accessibility are Windhill Community Centre, Wrose Community Association and Greenwood Youth and Community Centre.

The Frizinghall Allotments located adjacent to Canal Road have been largely disused since 2000 due to contamination with arsenic and other toxic substances present due to historical operations at the former chemical works.

## **6.5 Sports and Leisure Facilities**

The area maintains large areas of public open space that include a number of sports and leisure facilities including the Bolton Woods Junior Football Club on Powell Road and the King George V Playing Fields off Canal Road that are home to a number of local sports clubs including Bolton Woods FC and the Bradford Indian Cricket Club.

In addition a privately run 5-a-side football centre is located to the east of the area owned and managed by Goals Soccer Centres with 13 5-a-side astro turf pitches and associated facilities.

A major gap in the provision of sports and leisure facilities is the lack of local children's play facilities with insufficient existing playgrounds located within the area.

### **Bradford Open Space, Sport and Recreation Assessment: Strategy and Action Plan**

The Bradford Open Space, Sport and Recreation Assessment was undertaken in 2006 by Knight, Kavanagh and Page (KKP). This report considers supply and demand issues for outdoor sports facilities, their ancillary facilities and recreational

parks sport provision in Bradford. This strategy however is not published by the Council as it was never fully completed and is currently waiting to be updated.

The key conclusions to draw from this study are that there is not an equal spread of playing pitches in Bradford, with a shortage being observed in

Central Bradford.

The Strategy and Action Plan set out a vision for the next ten years in relation to the provision and improvement of open space provision within Bradford. The vision is:

*'to develop a network of high quality open spaces, sport and recreational provision that supports the vision for Bradford as a district with a varied and thriving economy, with good quality housing, clean streets and attractive open spaces, where people enjoy good health and feel safe from crime, where pupils leave school well educated and highly skilled and adults have good jobs and money to spend'.*

Bradford Open Space, Sport and Recreation Study: Outdoor Sports Facilities Assessment Report

The area is divided into five key areas; those which are of relevance in the context of this study include Bradford West and Shipley.

Each of the five areas of Bradford has a Parks Manager who oversees the management, maintenance and development of parks, recreation grounds and other open spaces. Key issues raised by the area parks managers with regard to outdoor sports facilities include:

Bradford West

- There is considered to be poor quality provision of grass pitches in the Bradford West area with many sites suffering from waterlogging.
- Very few sites have changing facilities.
- Many of the primary schools are making good use of the ball courts and grass areas in Lister Park during the day.

Shipley area

- Northcliffe Park has a part time games attendant responsible for the pitch and putt course and tennis courts.
- The area has staff specifically trained in fine turf maintenance who work on bowling greens and cricket pitches.

- Better access to school playing pitches is required in order to meet local demand.
- There are no big multi-pitch sites in the area.

In terms of football pitch provision, some of the key issues to emerge include:

#### Bradford West

- There are no senior football pitches in Bradford West rated as good quality.
- None of the parks and recreation grounds have changing facilities. This is a significant factor in the attractiveness and usability of sites.
- The area has many single pitch sites making provision inefficient.

#### Shipley

- The current pitch stock has the capacity to accommodate strategic reserve, latent and future demand if improvements are made to existing sites.
- The area has a number of single pitch sites, which makes provision inefficient.
- There is a shortfall of senior rugby union pitches and junior rugby union pitches, with a significant shortfall observed in Bradford West.

The Council would be unlikely to have an issue with relocating playing pitch provision if it was necessary to facilitate potential development within the corridor provided the same or better quality could be delivered elsewhere within the corridor before any existing fields were developed. However, there is unlikely to be any other land within the boundary that would be suitable for use as a playing field if development was focused on the King George V Memorial Playing Field, particularly given that both the Bolton Woods Grounds and King George V Playing Fields are identified in the FA's Facilities

Management Plan for development as a centre of excellence.

#### *Bradford Open Space, Sport and Recreation Study: Open Space Assessment Report*

In total, there are 42 open spaces classified as natural and semi-natural greenspaces in Bradford West and 98 in Shipley, totalling 314.8 hectares.

In terms of parks and garden sites, the table below indicates the distribution of parks and gardens for Bradford West and Shipley.

Analysis Area	Local park		District park		Borough park		TOTAL provision	
	number	Size(ha)	number	Size(ha)	number	Size(ha)	number	Size(ha)
Bradford West	3	1.8830	2	17.0460	1	21.9000	6	40.8290
Shipley	4	3.8110	4	24.6030	1	220.4850	9	248.8990

The quality scores for parks and gardens indicate that sites located in Bradford West are all of high quality.

## 6.6 Other Facilities

The SCRC area is also served by the following emergency services:

- The nearest police station is located within the centre of Bradford on Nelson Street.
- The nearest fire stations are located on Leeds Road and Idle.
- The Bradford Royal Infirmary (BRI) and St. Luke's Hospital provide healthcare to this part of the city, with the BRI equipped to deal with emergency cases.

## 6.7 Conclusion

The development of an estimated 5000 new homes over the next 15-20 years or so within the CRC area would, together with forecast population growth, generate the need for additional school places that, based on the forecast of future capacity, will not be met by the existing primary school network. This would result in the need for additional school places which could be met through the expansion of the existing primary schools locally and/or through the development of new primary schools in future.

Discussions with the Council's Children's Services indicates that a new single form entry primary school will be required to meet the education needs of the new community based on the estimated 1,600 new housing numbers (and projected population growth) in the central part of the corridor (Bolton Woods) with public funding potentially available to deliver the new school. The dearth of existing local

health facilities will also result in a need for new health facilities to be developed locally to meet increasing demand for health services.

The need for new and/or enhanced community facilities will emerge with the population growth and expansion of residential communities. The exact type and nature of such facilities will be determined through consultations with the local community. The development could include proposals for the expansion and enhancement of existing facilities or even new community facilities if affordable to serve an expanded population locally.

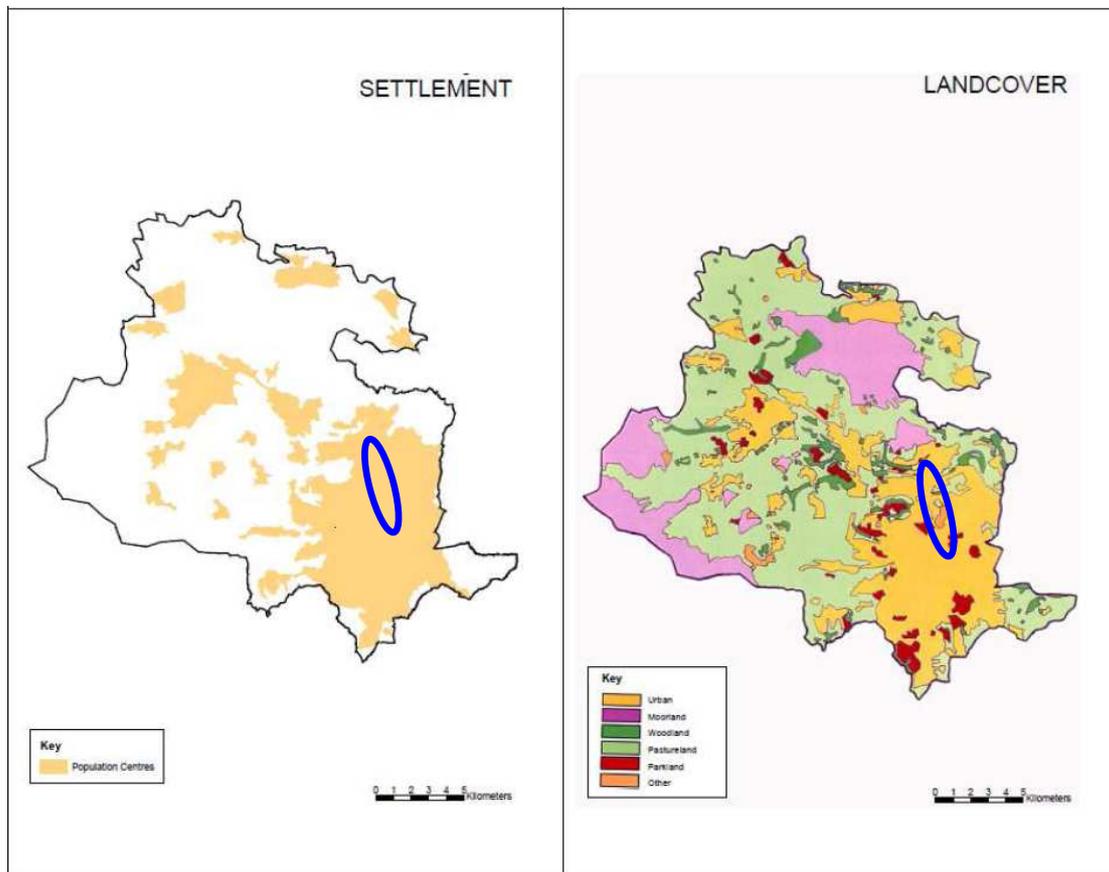
## 7.0 Landscape Character and Historic Environment

To understand the CRC as a place it is useful to understand the physical form and the landscape character of the area and also the influence of the historic environment and the built heritage of the district. This section therefore undertakes an assessment of the existing landscape and historic environment of the district and the contribution these aspects have on the overall shaping of the area.

### 7.1 General overview of Natural Landscape Elements

The City of Bradford Metropolitan District comprises about 370 km<sup>2</sup>. Only about one third of the District is built up but this area contains about 86% of the population. The main population areas of Bradford, Keighley, Shipley, Bingley and Ilkley are separated by areas of agricultural land, isolated villages, areas of undeveloped moorland, woodland and parkland (Figure 65). The CRC is located in a built up area of the district with the majority of landcover urban with small pockets of pastureland, woodland and other landcover present.

Figure 65: Settlement and Landcover



Source: Bradford Landscape Character SPD

## **7.2 Landform**

The District comprises a series of escarpments of plateaux with elevations up to 455m O.D., and a general decrease in the height of plateau in the east. The escarpments are dissected by the Rivers Aire and Wharfe and a number of smaller rivers, including Bradford Beck and the River Worth. The valley sides are commonly very steep, in contrast to the flat nature of the valley bottoms.

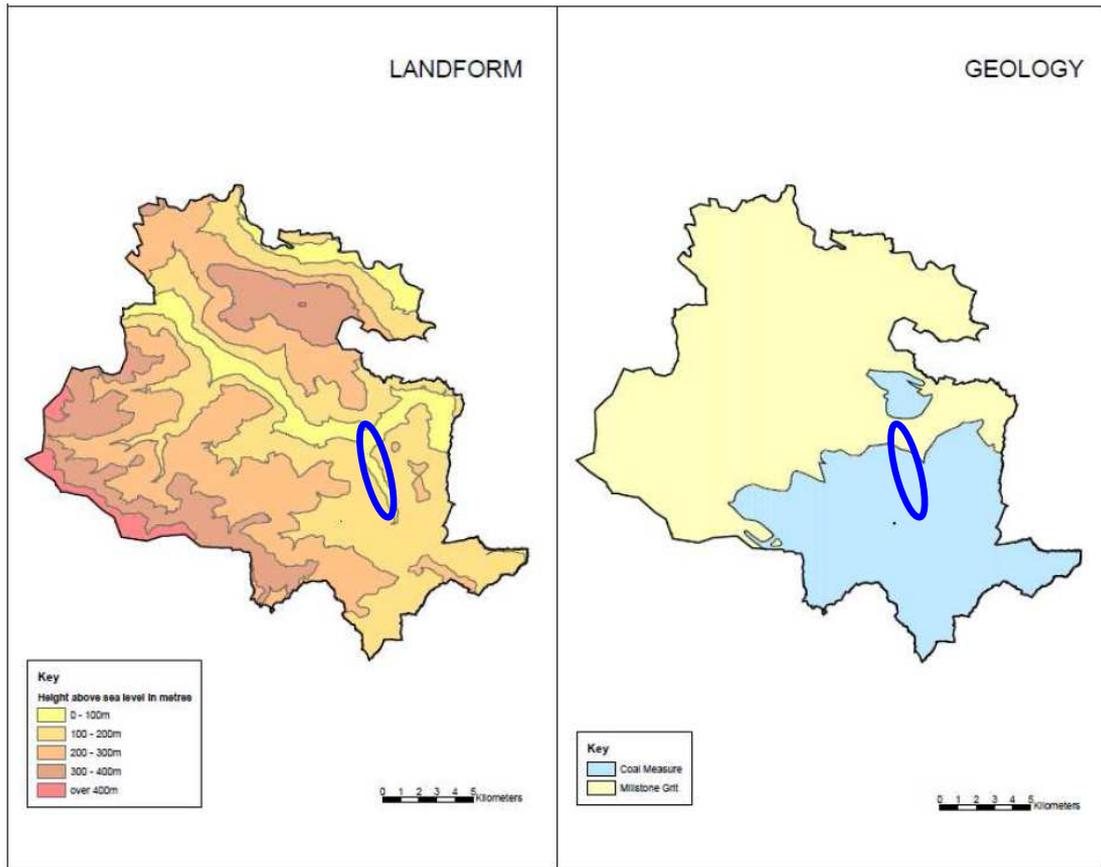
The main urban areas and transport routes occur within the valley floor of the district (Figure 65). This is the case with the CRC and Canal Road and railway line. Within these urbanised areas the topography has often been altered artificially, with large areas of made ground, disturbed ground and excavation.

## **7.3 Geology**

The bedrock is composed entirely of rocks deposited during the Upper Carboniferous period, about 315 to 310 million years ago.

The south east of the District, including the main Bradford conurbation and the CRC is underlain by Coal Measures. The District is located at the northern margin of the exposed Yorkshire Coalfield.

Figure 66: Landform and Geology

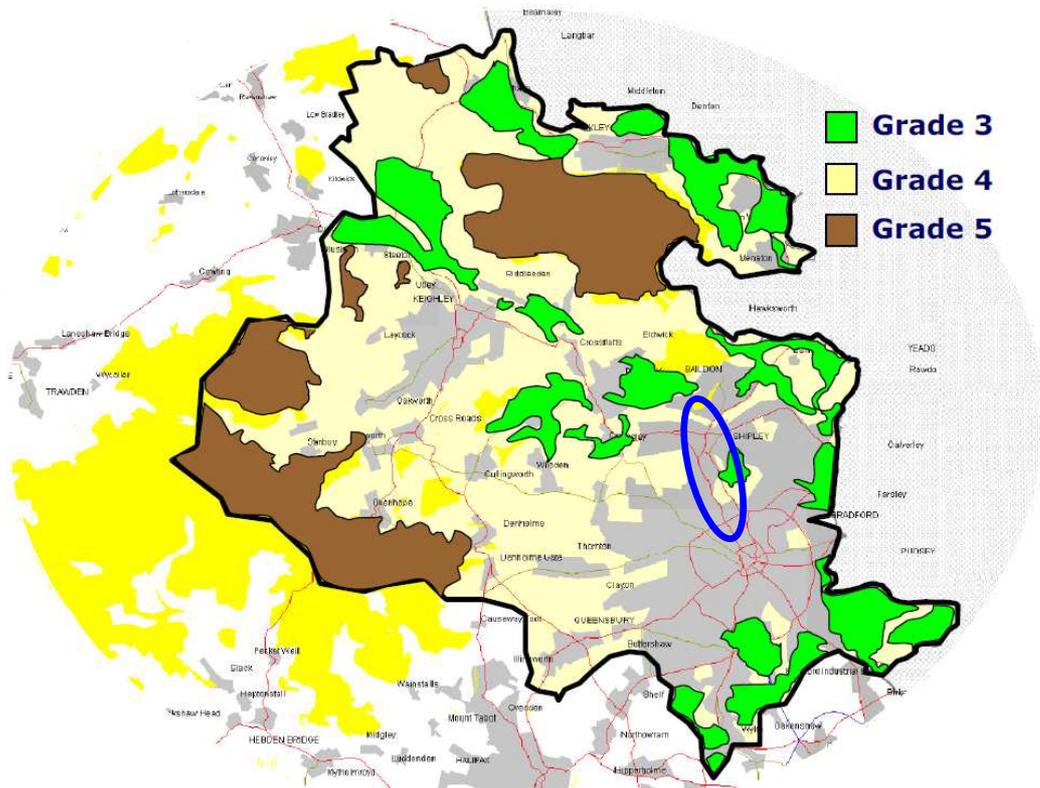


Source: Bradford Landscape Character SPD

#### 7.4 Soils and Agricultural Land Classification

Most of the farmland in Bradford District can be described as marginal, constrained by climate and physical topography. Nearly half of the farmland is classed as Grade 4 or 5; that is, land with severe limitations which significantly restrict the range of crops and is mainly suitable for pasture grazing. However, there are also some grade 3 lands made up of alluvial soils along the flood plains of the River Wharfe and River Aire which are more productive an area of Grade 3 farmland is located within the CRC (Figure 67)

Figure 67: Bradford agricultural land classification



Source: Bradford Landscape Character SPD

## 7.5 Climate

Microclimate conditions of the site have to be born in mind throughout the development of the AAP in order to enhance the environmental opportunities of the site, increase the sense of wellbeing in the local community and maximise the economical benefit of the site. A site-specific microclimate analysis has been carried out to identify possible passive and active opportunities for the site. Factors looked at include average temperatures and solar paths, average humidity and precipitation levels and predominant wind directions and average speeds. The most appropriate passive and active technologies have been highlighted accordingly.

The Bradford area enjoys long day-hours in the summer months as opposed to the relatively short day-hours in the winter period. The site also has a high average cloud covering factor resulting in solar gains from diffuse radiation – from overcast sky, being slightly higher than the solar gains from direct radiation – from clear sky. In light of this and in order to maximise solar benefits the site grid should be oriented north-south and east-west. Access routes parallel to the north-south axis should be wider in order to maximise the benefit from the natural daylight. The new buildings however should be oriented with their main axis parallel to the east-west axis to

maximise the solar gains in the southern façade. The heights of buildings should also consider the solar path in order to ensure daylight in all public spaces and that that no shadow overcast occurs. The lowest buildings should be located in the southern-most part of the site in order to prevent shadow cast on public ways or buildings and create social gathering areas.

Technology-wise, solar thermal collectors would be preferred over photovoltaic panels as the former take profit of direct as well as diffuse solar radiation and are a cheaper technology. Ideally the solar thermal collectors would be located in high spaces and rooftops to prevent damage and minimise shadow casting over them.

The average temperature range within the Bradford area fluctuates between 3°C in winter and 18°C in summer with an average temperature range of 5 degrees between day and night time temperatures. This in conjunction with average annual humidity levels of between 70% - 80% means that the proposed buildings should have the opportunity to be naturally ventilated during the warmest months of the year. Proposed developments should also be able to benefit from the thermal swing provided by the introduction of thermal mass in conjunction with night-time cooling systems.

Prevailing wind directions for the Bradford area are from the south at an average speed of 20km/h (5m/s). The relatively high surrounding hills could thus pose an opportunity for the introduction of wind farms, subject to other factors such as heritage and flight paths.

Annual average precipitation levels at Bradford are over 880mm. For new developments, rainwater should be harvested. Rainwater is a valuable source of water that can be used for toilet flushing and irrigation in draughts. Green roofs/façades would also improve the Bradford area by retaining water run-off and providing further insulation in new developments. In public spaces the introduction of Sustainable Urban Drainage systems such as permeable paving, balancing ponds and swales shall reduce the volume of water run-off in the municipal drainage system.

## **7.6 Biodiversity**

The biodiversity of the Bradford District is not only varied but also contains good quality habitats and an interesting range of wildlife, including many internationally, nationally and regionally notable species of flora and fauna.

Of particular note are the internationally important South Pennine Moors, a Special Protection Area of nearly 21,000 hectares (of which 4489 hectares are located within the Bradford District). This area is significant for the variety and rarity of its bird life, including the merlin and golden plover, which is supported by the diverse and extensive upland plant communities. The South Pennine Moors are also a Special Area of Conservation designated for the variety of the upland habitat mosaic.

Figure 68: Ecology and Heritage



Source: Core Strategy Baseline Report

There are 4 levels of designated nature conservation sites within Bradford District. In addition to the 4 SSSIs, there are 21 Sites of Ecological or Geological Importance and 16 Regionally Important Geological / Geomorphological Sites (RIGS). One of these SSSIs, the South Pennine Moors, represented by Rombalds Moor and Haworth Moor has been designated a Special Protection Area (SPA) due to the

importance of its breeding bird populations. It is also a Special Area of Conservation (SAC), under the European Habitats Directive because it contains habitats which are rare or threatened within a European context. There are also 152 sites of local nature conservation value, designated for both biodiversity interest and community benefits.

A detail assessment of the habitats and wildlife species in CRC is also discussed in the 'Environment' chapter of this baseline report.

### **7.6.1 Protected or Otherwise Notable Sites**

The closest statutory site to the CRC is Trench Meadows (approx. 1300m) which exists within 2km of the CRC site boundary. It is considered that due to the distance between the site and the CRC boundary the risk of impact is minimal.

One record of a non-statutory Site of Ecological or Geological Importance, the Leeds-Liverpool Canal exists within the Site Boundary. The Leeds-Liverpool Canal should be safeguarded to ensure that the ecology of the canal is not adversely impacted by the CRC AAP.

Three records of non-statutory Bradford Wildlife Sites exist within the Site Boundary (Figure 69), they include:

- Boars Well Urban Wildlife Reserve (BWA)
- Poplars Farm (BWA)
- Shipley Butterfly Reserve (BWA)

These sites should be safeguarded to take account of and minimise any adverse impacts of earthworks on the ecology of the areas.

Eight records of Ancient and Semi-Natural Woodland exist within 2km of the site boundary, as follows:

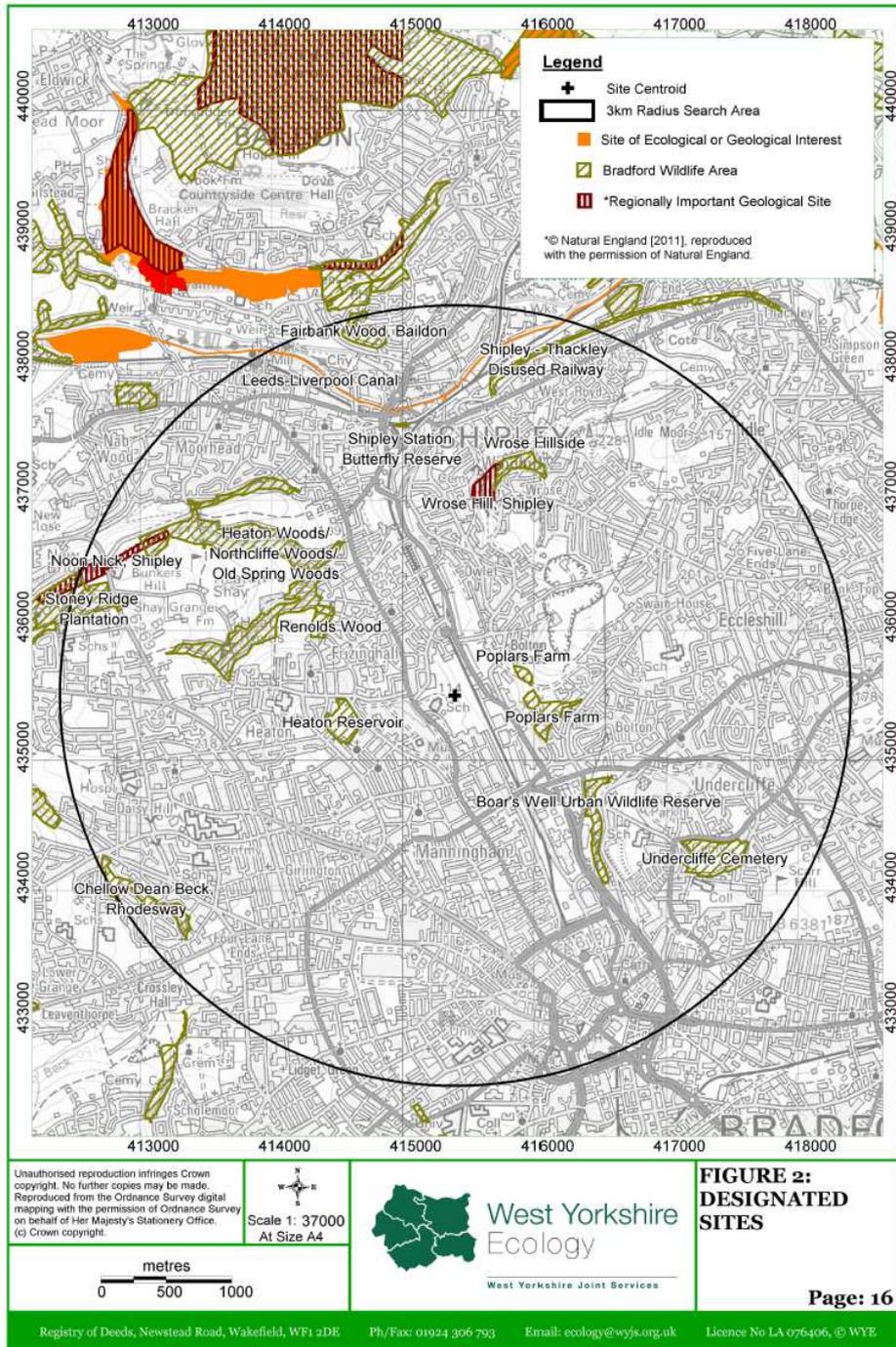
- Walker/Midgeley Woods (approx. 500m from boundary)
- Hirst Wood (approx. 1500m from boundary)
- Nab Wood (approx. 1300m from boundary)
- Old Spring Wood (approx. 250m from boundary)
- Northcliff, Dungeon and Low Woods (approx. 200m from boundary)

## Bradford District Local Plan

- Royds Cliff Wood (approx. 250m from boundary)
- Buck Wood (approx. 1400m from boundary)
- Thackley West Wood (approx. 700m from boundary)
- Fairbank Wood (approx. 200m from boundary)
- Heaton Woods (approx. 600m from boundary)
- Renolds Wood (approx. 500m from boundary)
- Stoney Ridge Plantation (approx. 2000m from boundary)

It is considered that due to the distance between these sites and the CRC boundary the risk of impact from the CRC is minimal.

Figure 69: CRC Designated Sites



Source: BDP SDF Baseline Report: Ecology/Biodiversity

## 7.7 Saltaire World Heritage Site

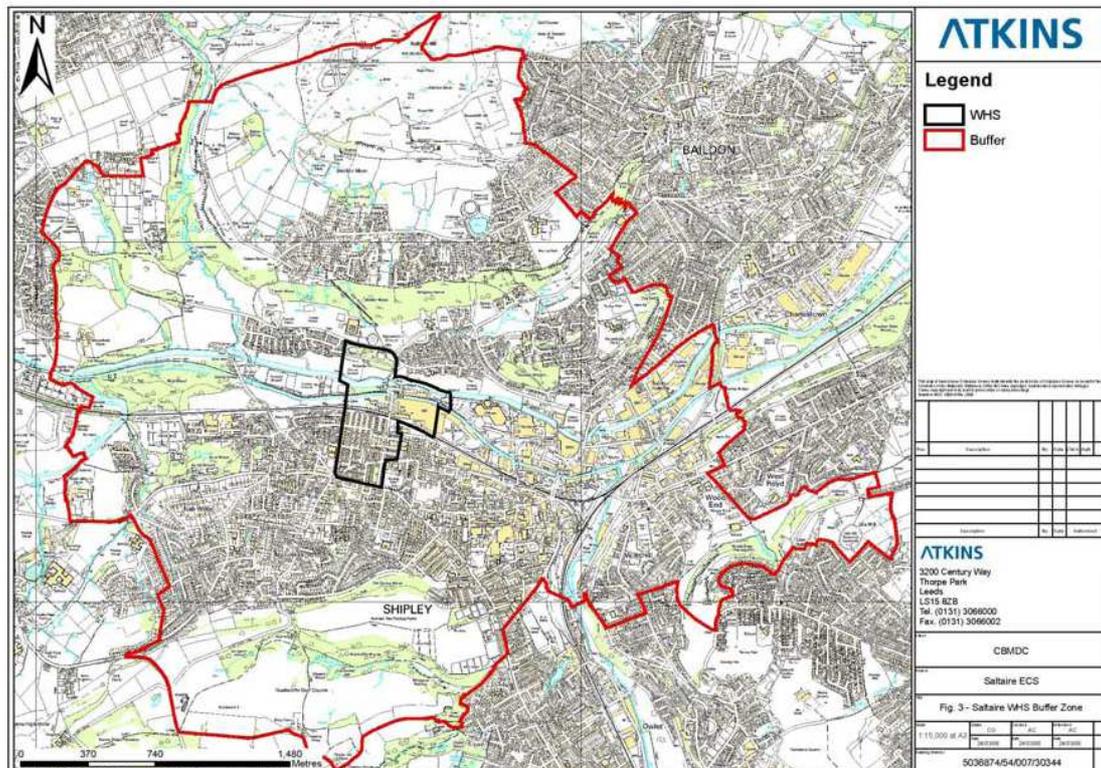
The World Heritage Site (WHS) of Saltaire is located to the west of Shipley Town Centre. A Buffer Zone has been defined around the World Heritage Site to ensure that planning decisions around the World Heritage Site fully consider the potential impact which they might have upon those elements which contribute to its

outstanding universal value. The northern reaches of the CRC fall within the Buffer Zone (Figure 70).

An Environmental Capacity Study (ECS) has been published to help guide the management of the Site and address a range of pressures and demands facing the Site due its location in a strategic corridor. The overall purpose of the ECS is to gain an appreciation of the level and type of change that can be accommodated within the WHS and its setting and to provide a mechanism to allow for positive change to take place, whilst putting management arrangements in place to monitor the impact of change and prevent change that exceeds the environmental capacity of the Site. Indeed, the use of Local Development Frameworks, Area Action Plans and Supplementary Planning

Documents is stated as a potential mechanism through which this long-term management and development control could occur, which will be of particular consequence to the CRC AAP.

Figure 70: World Heritage Site Buffer Zone



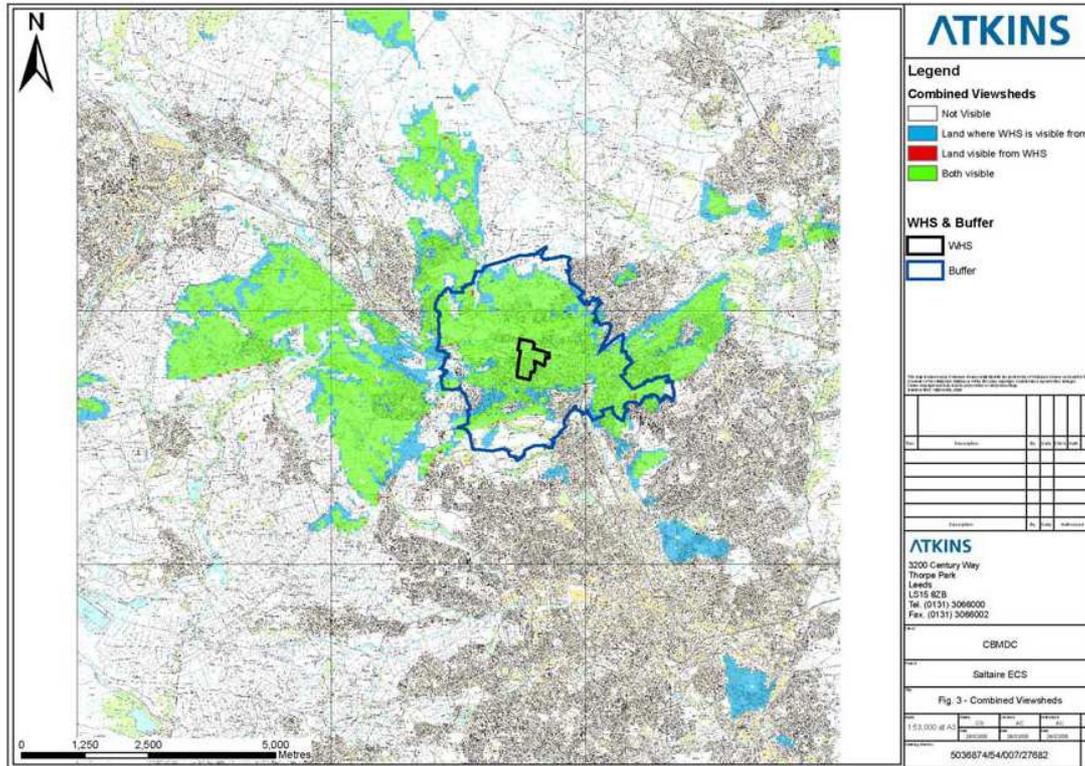
Source: BDP SDF Design

The setting of the WHS contributes to its character and sense of place and it is important to ensure that future change around the Site does not have a significant impact on its setting. This setting comprises:

- Views out of and across the Site;
- Views to the Site;
- Key backdrops for the views;
- Approaches and gateways to the Site;
- Immediate Setting; and
- Historically related features.

The Saltaire WHS is situated at the base of the River Aire valley and is surrounded in all directions by rising ground. To the east and west the River Aire runs along a relatively flat valley bottom surrounded by prominent and relatively steep valley sides that form a natural limit to views from the Site and notable backdrop for many of these views e.g. Windmill Hill. The topography is therefore very important in how it structures the setting of Saltaire, both in terms of views from the Site and views of the Site. A viewshed analysis has defined the maximum theoretical extent of the visual setting of the Site and also identified areas of land that may particularly contribute to the setting of the Site i.e. those from which all of the Site may be seen or land which may be seen from all of the Site when looking outwards (Figure X). As shown in Figure X, areas north of Market Square in Shipley, Dockfield Road and Bolton Woods Quarry are identified as providing views to and from the WHS, which will require considered design in these locations.

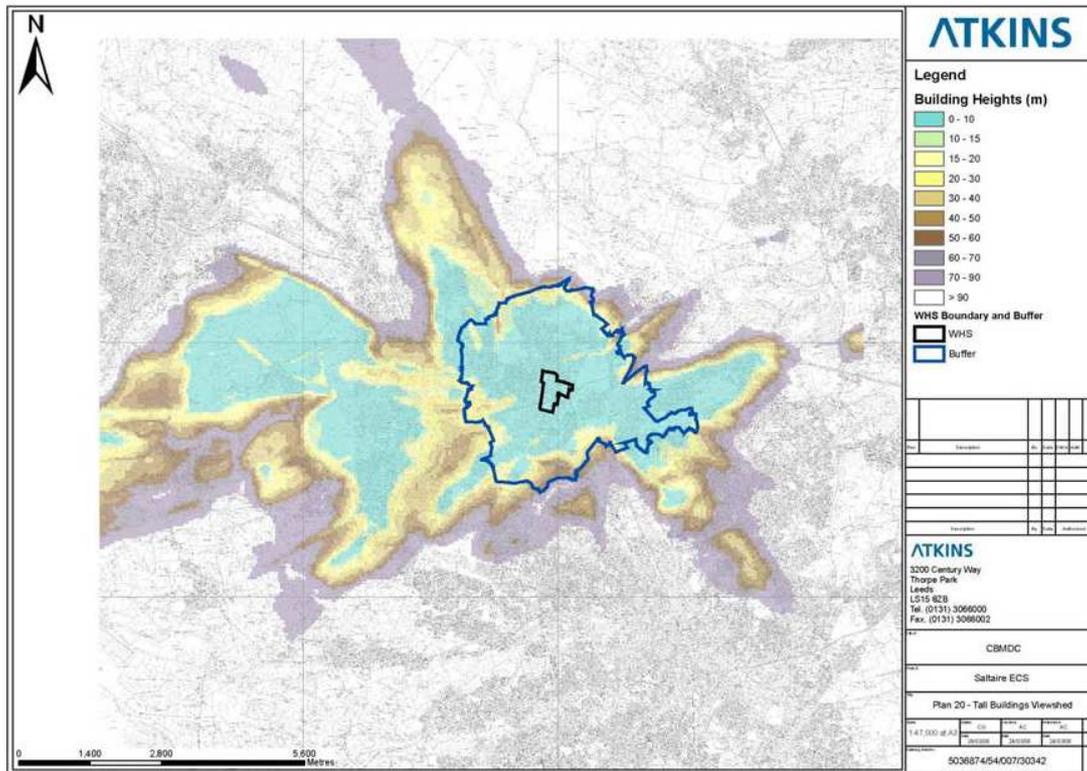
Figure 71: Combined Viewsheds



Source: BDP SDF Design

No areas with the CRC are identified as contributing to the rural backdrop of the WHS, but views from Wrose and Windhill are categorised as important (Grade B) and supply interesting views of the Site, in particular its principle buildings. This will be of consequence to building heights within Shipley Town Centre and a Tall Buildings viewshed model has been created, which defines building heights within the buffer zone that new proposals would have to exceed to impact on views of the WHS (see Figure 71). This will have implications on the design of buildings with Shipley Town Centre and Bolton Woods.

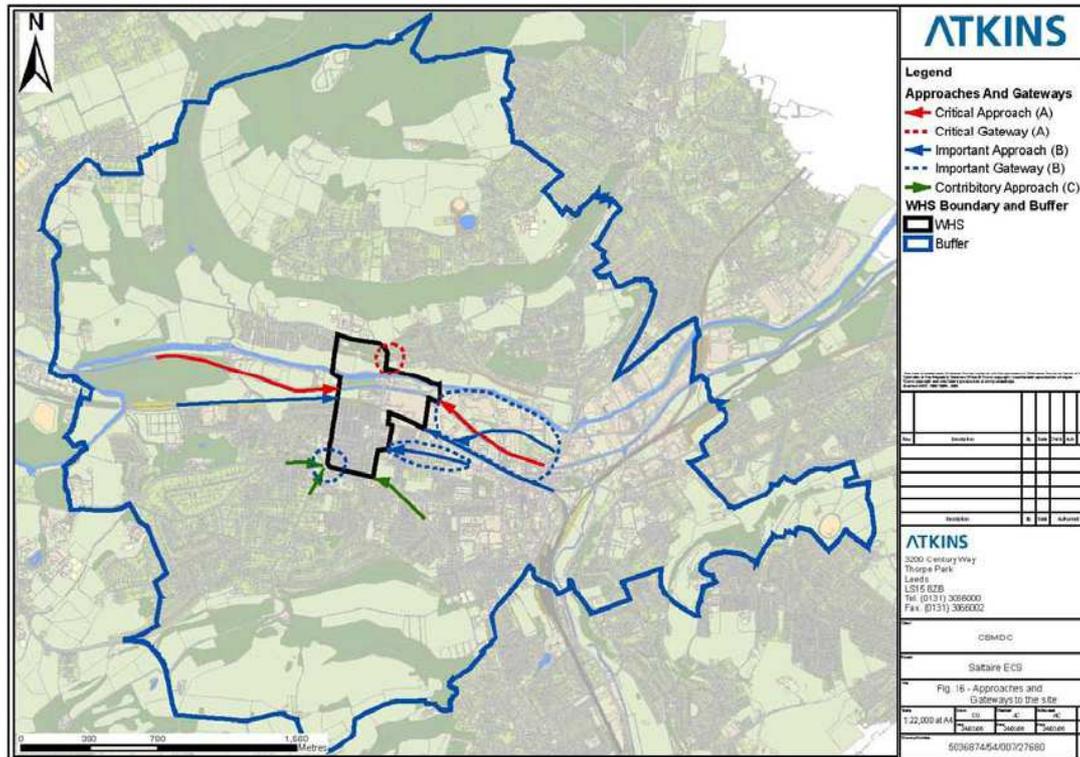
Figure 72: Tall buildings viewsheds



Source: BDP SDF Baseline Report: Design

The approaches and gateways to the Site are important to how people experience the Site (Figure 73). The Canal Corridor is stated as particularly important (Grade A) as it relates to the historic significance of the Site and provides a regularly used approach to the Site for walkers, cyclists and boats. The eastern approach along the canal includes areas within the CRC that form a key gateway to the Site, which will need to be observed in the masterplan.

Figure 73: Approaches and Gateways to the World Heritage Site



Source: BDP SDF Baseline Paper Design

The road approaches to the Site are the principal transport corridors into the Site. The approach along Saltaire Road (Grade B) provides a key access to the Site. Historically this route was closely related to the Site and predated its development; it is now heavily used by those passing through and visiting the Site. The road corridor is busy and regularly congested and as such it can provide a low quality experience for those who approach the Site along this route. The building frontages are of mixed quality with some recent shop fronts seeming distinctly at odds with the character of the area and the need to conserve the setting of the Site. This issue increases further east along the road but as this is further from the Site than the western parts of the road this is perhaps less of a concern to the management of the WHS.

In conclusion it is evident that development within some areas of the CRC will need to observe the conditions of the WHS and respond with sensitive, high quality development:

- Views to and from the WHS – This may impact on building heights and building design within Shipley Town Centre and Bolton Woods.

- Approaches to the WHS – This will impact on the design of buildings and public realm along the Canal Corridor and Saltaire Road.

## **7.8 Leeds Liverpool Canal Conservation Area**

The Leeds Liverpool Canal passes across the north of Shipley Town Centre. Within the CRC the canal along with an area of buildings north of Commercial Street, a cluster of buildings around Gallows Footbridge and a further cluster of buildings around Junction Bridge are allocated within the Leeds Liverpool Canal Conservation Area. The Conservation Area Appraisal states that it is important that the elements that contribute to the area's sense of place and special character are protected from inappropriate alteration. In this context there will be a strong presumption in favour of preserving both listed and unlisted buildings and spaces that contribute to the special interest of the conservation area as well as important and intrinsic elements of its setting.

Within the CRC these include:

- Canal warehouses Wharf Street (Grade II listed).
- Junction Bridge (Grade II listed).
- Former Canal Company Warehouse (by Victoria Street bridge)
- Commercial Mills (Upper Ashley Street)
- Tapas Tree restaurant, Rhodes Place
- Salvation Army Citadel and Young People's Hall
- 3-7 Wharf Street
- 19-24 Otley Road and 1 Wharf Street
- 60-68c Briggate
- Gallows Footbridge
- Glover's Wharf
- The Bull
- Canal House
- Junction House
- Junction Mills (Regent House)
- Dockfield Mills (Staveley House)
- Lock Keeper's Cottage
- Former Pumping Station
- Former Shipley and Windhill Station

- Dixon's Building

The CAA outlines that new development should relate to the geography and history of the place and the lie of the land and should be based on a careful evaluation of the site to ensure that it respects the context provided by the canal and its setting. Of consequence to the AAP, the CAA states that:

- New buildings or extensions should sit happily in the pattern of existing developments and routes.
- Important views and vistas within, across, into and out of the conservation area should be respected.
- The scale of neighbouring buildings should be respected.
- Materials and building techniques used should be as high quality as those used in existing buildings.
- New buildings should not impinge on any significant open spaces, or necessitate the destruction of buildings that contribute to the character or appearance of the place.

Issues identified in the area between Saltaire and Junction bridge, which lies within the CRC, and could be remedied by the AAP include:

- The vacancy and neglected state of the red brick warehouse and its wharf.
- The unsympathetic nature of some of the development outside of the conservation area and the negative
- impact made by poor, inappropriate inward facing modern development adjoining the conservation area.
- The physical neglect and under use of unlisted buildings and sites.
- The appearance of the car park at Wharf Street.
- The dark and uninviting underside of Shipley Bridge.
- Poor shopfronts and signage to some of the unlisted buildings.
- Inappropriate boundary features to some domestic, commercial and industrial properties.
- Visually poor modern concrete and tarmac street surfaces and basic modern street furniture, particularly at Otley Road and Commercial Street.
- Overgrown and neglected state of some of the canal banks.
- The polluted water of Bradford Beck and its concealment.
- The poor condition and narrowness of the towpath to the east of Dock Lane Bridge.

## **7.9 Manningham Conservation Areas**

The Conservation Areas of Apsley Crescent, Eldon Place, North Park Road, St Paul's and Southfield Square are within the neighbourhood of Manningham to the west of the CRC. Manningham is an ancient township that once extended as far as the Bradford Beck. It developed into a fashionable suburb during the 19th Century and this has resulted in a rich architectural heritage. Traditional building materials have been used throughout the five conservation areas and this contributes greatly to the image of the place, its character and overall unity.

Manningham's location on the sloping eastern valley side of Bradford Beck has inevitably had an impact upon the development and character of the area. As a consequence of this topography North Park Road and St Paul's conservation areas in particular have a strong west-east downward slope that opens up long distance views out of the areas and creates interesting streetscapes. Streets such as Cunliffe Road, Oak Avenue and Parkfield Road dropdown the valley side steeply, resulting in tall, imposing buildings and panoramic views eastwards towards Bolton and Undercliffe and the plateau on which Rosebank (the former Council Training and Development Centre) is identified as allowing good panoramic views out of the conservation area and across valley. Manningham Mills is located on the highest point within the conservation area and consequently dominates many of the views and vistas into and out of the conservation area. The mill chimney is an important local landmark visible for many miles around. Lister Park is designated as a Historic Park and Garden and experiences some of the most dramatic level changes and the views across the park and eastwards across to the opposite valley sides are in places spectacular.

Considering the topography of Manningham and its adjacency to the CRC, the masterplan should consider the impact of new development on views into and out of the Manningham conservation areas. This does not necessarily preclude development, but will demand sensitivity and quality. Indeed, looking to Manningham for inspiration, the distinct opportunity for the CRC is to build a twenty first century suburb that also leaves a rich architectural legacy.

## **7.10 Listed Buildings and Historic Environment**

Within the CRC there are few listed buildings, however, those to note include (all Grade II listed):

- Canal Warehouse, Wharf Street
- Junction Bridge
- Shipley Old Hall
- Former Wesleyan Reformed Church
- Conditioning House
- Midland Mills

There are three Registered Parks and Gardens, which lie just outside the AAP boundary whose character could potentially be affected by future development.

Whilst there are no Scheduled Monuments within the boundary of the Area Action Plan, this areas of the City has a rich history and there maybe non designated remains of some importance.

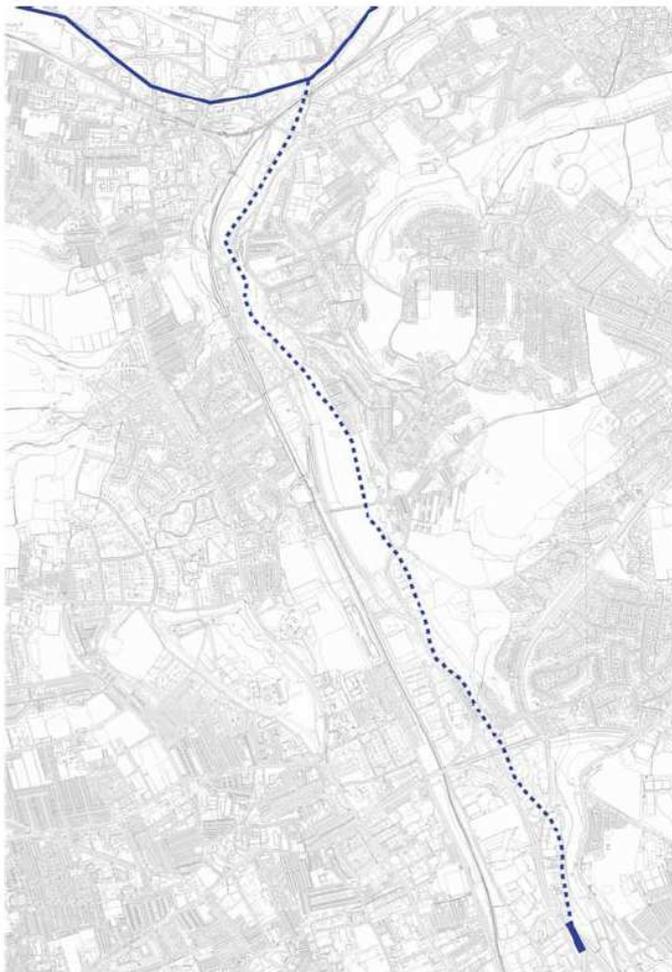
### **7.11 Historical Development**

During the 18th century, Bradford was becoming an important centre of the wool trade, but a combination of the cost of transport, lack of a river and being set deep within a valley had a impact on this trade. During 1760s and 1770s, the successful development of the Leeds and Liverpool Canal and its offshoot the Bradford Canal improved the town's communications.

The Bradford Canal opened for commercial traffic in 1774 and thrived for nearly a hundred years, being an important route for exporting goods produced in Bradford. The canal, however, continually had problems with water supply. When built, the intention was to draw water from Bowling Beck because the Bradford Beck was much polluted, but the Bowling Beck was unable to provide enough water to keep the locks working, so the canal company had to extract water from Bradford Beck. This meant that the canal itself became highly polluted. Eventually, due to the health problems it caused, the council served an order for the canal to stop extracting water from Bradford Beck. The canal had to close the top section (now around Forster Square) and becoming increasingly more difficult to run, the company closed it in 1867.

The canal was then taken over by a group of local businessmen and reopened in 1872. Water was back-pumped through the locks and as the original terminal basin had by this time been sold off, new wharfs were built presently the site of Shipley Airedale Road (just east of Midland Mills). The canal reached its peak usage in 1910, but had never actually made much of a profit since reopening, due to the cost of the back-pumping. Indeed, the cost of maintaining and operating the pumping engines was more than the income received from tolls and after most trade stopping during the First World War, the canal was officially closed in 1922. Over the preceding years the canal has been filled in to be developed for industry, road infrastructure and open space (see figure 74). Today, only a short arm of the canal remains where it joins the Leeds Liverpool Canal.

Figure 74: Former alignment of Bradford Canal (post 1872)



Source: BDP SDF Baseline Paper Design

Communications within the CRC were further enhanced by the Leeds to Bradford via Shipley railway line in 1843, which also made use of the only reasonably flat approach to Bradford. This development transformed the area into a major transportation corridor and the Bradford Beck became densely developed for cloth making industries. The textile trade also created demand for supporting professional services such as banks, insurance companies and legal firms and a dense and vibrant mix of commercial and industrial development was established. Mills and warehouses on Canal Road and Mill Lane sprang up including Midland Mills and the laboratory facility of the Conditioning House. The historic areas of Little Germany were built later predominantly as warehouses and showrooms in the late nineteenth century.

The railway development was substantial and extensive sidings were constructed along with the artificial cliff supported by impressive stone arches. The railway was the most dominant physical feature across the corridor during the late nineteenth and early twentieth century and although the basic lines remain, they have halved in number from four to two. The sidings at Manningham and Forster Square have also since been developed for industrial and commercial uses respectively and at Shipley used for alternative activities (waste recycling).

In contrast to the dominance of the railway, road infrastructure remained subordinate until the post war period. The basic alignment of Canal Road, Valley Road, Cragg Road and Queens Road has largely changed, but roads have been widened and the impact of modern highway engineering is most evidenced by the more intense townscape structure that previously existed on what is now the alignment of Shipley-Airedale Road (Figure X)

Figure 75: Comparison between 1889-94 and today (Manningham / City Centre)



Source: BDP SDF Baseline paper Design

By 1890 much of the land surrounding the railway line had been developed, particularly around the City Centre, Manningham and Frizinghall and then at Shipley. A large proportion of this development within the corridor was occupied by a number of works which included mills, dyeworks, gas works and sewage plants, whereas land to the south-western side at Manningham developed as a residential community. This suggests that the central section of the corridor have never had particular charm as a desirable place to live, being the site of these dispersed 'unfriendly' uses.

Post-war redevelopment led to the clearance and redevelopment of areas in Shipley, Windhill and around the Cathedral Quarter. These areas would have previously been more intense in character, comprising terraced back to back housing and industrial activities (Figure 76). Frizinghall Chemical and Dye Works, for example, previously existed to the east of Frizinghall Station and included a substantial Mill Pond that has since been filled in for open space. The townscape structure of Bolton Woods has largely endured, but the quarrying of the hillside has eventually led to the destruction of its namesake.

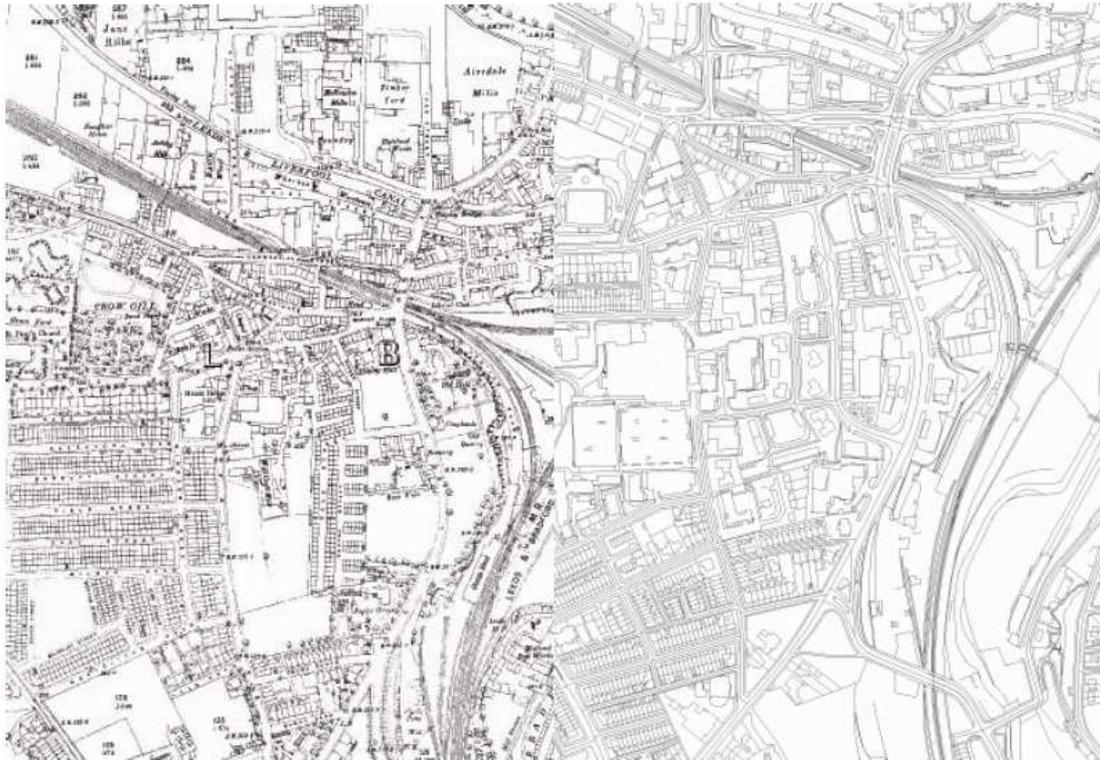
Figure 76: Comparison between 1889-94 and today (Shipley / Frizinghall)



Source: BDP SDF Baseline Paper Design

The post war redevelopment of Shipley Town Centre has had a significant impact on the town centre, causing the centre of gravity to shift southwards over the past century as Market Place and Asda introduced a much larger area of commercial activity and a new market square to the south west of the town centre (Figure 77). The preceding market place was smaller than today's market place and existed on Kirkgate and whilst the townscape of Westgate and Commercial Street has endured, the intensity of this area has been fractured by highway engineering. Today's Market Place was the site of Shipley Hall and the car park a piece of open space. The area to the south and west was housing and the site of Well Croft Mills, which have since been developed for newer housing, a supermarket and open space. Many former road arrangements were lost to larger blocks and less intensive uses, but this area was quite fractured before this redevelopment, permeability being restricted by the site of Well Croft Mills.

Figure 77: Comparison between 1889-94 and today (Shipley Town Centre)



Source: BDP SDF Baseline Paper Design

Key observations to draw from this historical analysis are:

- The corridor has been established primarily as a transport corridor for over two hundred years- initially the canal, then the railway and today the road.
- Since the closure and infilling of the canal, areas to the south have been developed over for employment development and road infrastructure, however, the northern route of the canal passes mostly through open space. In restoring the canal, an alternative route would be required to the south, if current development were to be retained.
- The railway has become subordinate to the highway network. The amount of land given over to highway infrastructure has increased quite significantly, whilst land once used for railway infrastructure has been developed for alternative uses.
- The intensive mixed use character of areas to the far north and south of the CRC has declined through redevelopment and road building.
- Sections of the corridor have been historically occupied by various polluting uses, which will have implications for land contamination.

- The townscape structure of Bolton Woods has largely endured, but the quarrying of the hillside has led to the destruction of its namesake.
- The main commercial area of Shipley Town Centre is a post war construct and the previous Town Centre and market was more tightly focused on Kirkgate.

## **7.12 Conclusions**

- The Land cover of the CRC is mainly urban underlain by coal measures. The main CRC area and transport routes occur within the valley floor of the district with relatively steep valley sides to the east.
- Given the distance from the CRC boundary, the risk of development in the CRC on statutory nature conservation sites is seen as minimal.
- Three Bradford wildlife Sites are located in the CRC these should be safeguarded and the impact minimised and mitigated against.
- The AAP area is adjacent to four Conservation Areas and a number of Listed Buildings.
- The buffer zone for the Saltaire World Heritage Site extends south in to Shipley and covers the northern part of the study area. Whilst landscape interventions would support the setting of Saltaire, there is a risk that built development could pose issues

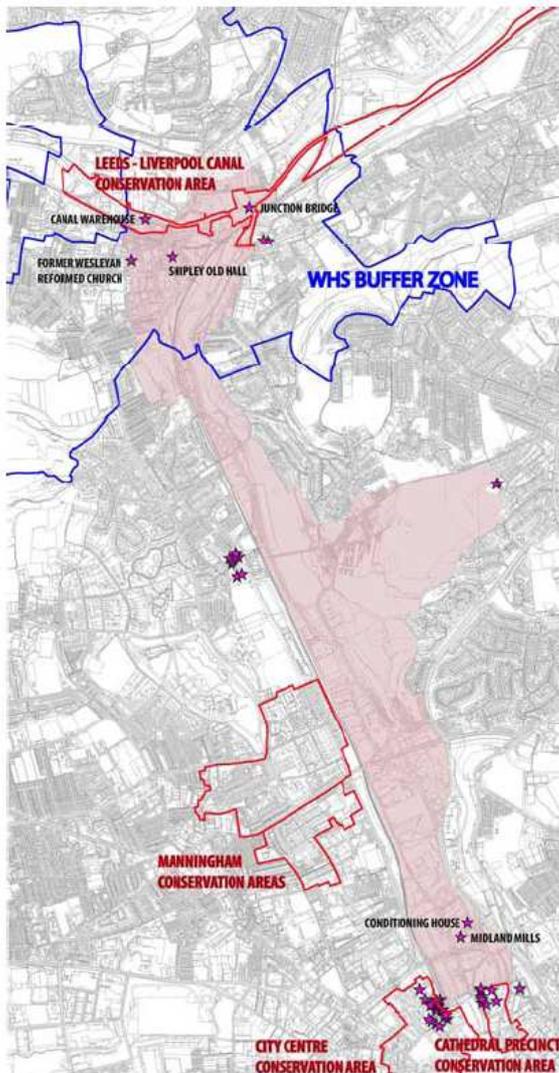
## 8.0 Urban Design Analysis

This section is drawn extensively from the BDP SDF Baseline Paper Design.

### 8.1 Area Analysis

The purpose of the desk study is to analyse any statutory designations within and adjacent to the CRC that will have urban design implications. These designations include the World Heritage Site at Saltaire, the Leeds Liverpool Canal Conservation Area, the Manningham Conservation Area and listed buildings within the CRC (see Figure 78).

Figure 78: Statutory Designations bordering the CRC

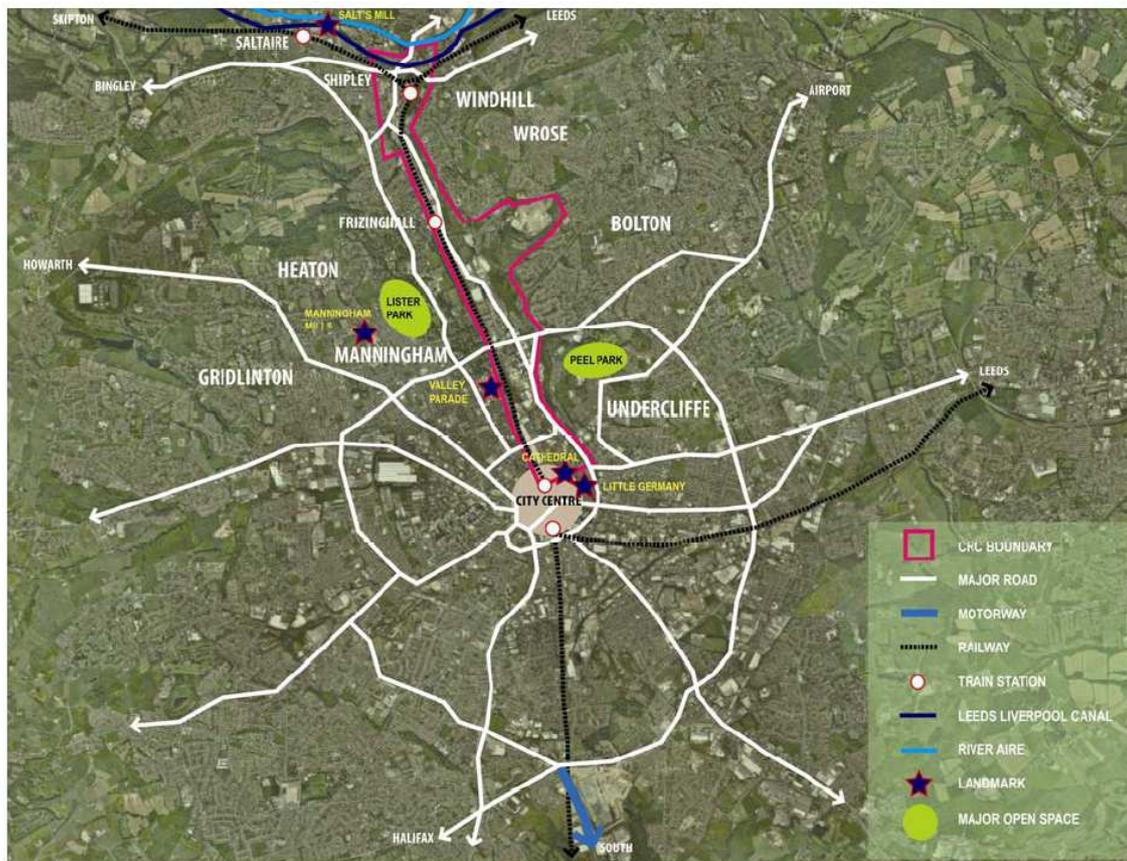


Source: BDP SDF Baseline Paper Design

#### 8.1.1 Area context

The CRC is located to the north of the City of Bradford and stretches from the northern fringe of the City Centre to the town of Shipley (Figure 79). Being a narrow plane within a valley and the only reasonably flat approach to Bradford, the area naturally developed as the location for the City’s northern transportation links. Today the area straddles not only the former alignment of the Bradford Canal, but also the Bradford – Shipley railway and the A6037 Canal Road, a major strategic route linking Airedale to Bradford.

Figure 79: The Canal Road Corridor in Context



Source: BDP SDF Baseline paper Design

The good accessibility offered by the CRC has encouraged the development of industry and the CRC is particularly distinctive as an employment area because it contrasts with the wholly residential character of the surrounding neighbourhoods to the east and west.

To the west the CRC is bordered by the neighbourhoods of Manningham and Frizinghall as well as Gridlington and Heaton further afield. Many of these areas developed as leafy Victorian suburbs and today contain many larger desirable types of housing. The attractive quality of these neighbourhoods can be observed from the CRC due to the topography of the valley, with distinctive landmarks such as Manningham Mills and Lister Park being viewable from many areas of the CRC. Lister Park is a Green Flag park and is considered to be one of the best parks in the country. It has many outstanding features including; Cartwright Hall, a boating lake and the Mughal Water Gardens.

Bradford City's football stadium at Manningham is also a major landmark and city attraction.

East of the CRC are the neighbourhoods of Windhill, Wrose Bolton and Undercliffe. Primarily these are residential areas, with a range of housing from older settlements to modern housing estates. The steep valley slopes of the valley are most evident towards Wrose, which sits on a hillside, offering views towards Shipley and the World Heritage Site of Saltaire. To the south, Peel Park in Undercliffe commands grand views across the CRC towards Manningham and is a major urban park with Green Flag status.

North of the CRC are the settlements of Shipley and Saltaire. Shipley is a self sustainable town within the Aire Valley, combining residential areas and a strong employment base, whilst also serving as a commuter settlement for Bradford and Leeds. It provides the link between Airedale, Bradford and Leeds as a communications corridor for road, rail and waterways, which led to its expansion from Victorian times to the town of today. The village of Saltaire developed as a planned model village to house worker's at the nearby Salt's Mill. The village is now designated as a World Heritage Site and is a key tourist destination - locally, regionally, nationally and internationally. Both the River Aire and Leeds Liverpool Canal pass through the area, providing links to the Bradford Beck and Bradford Canal within the CRC respectively.

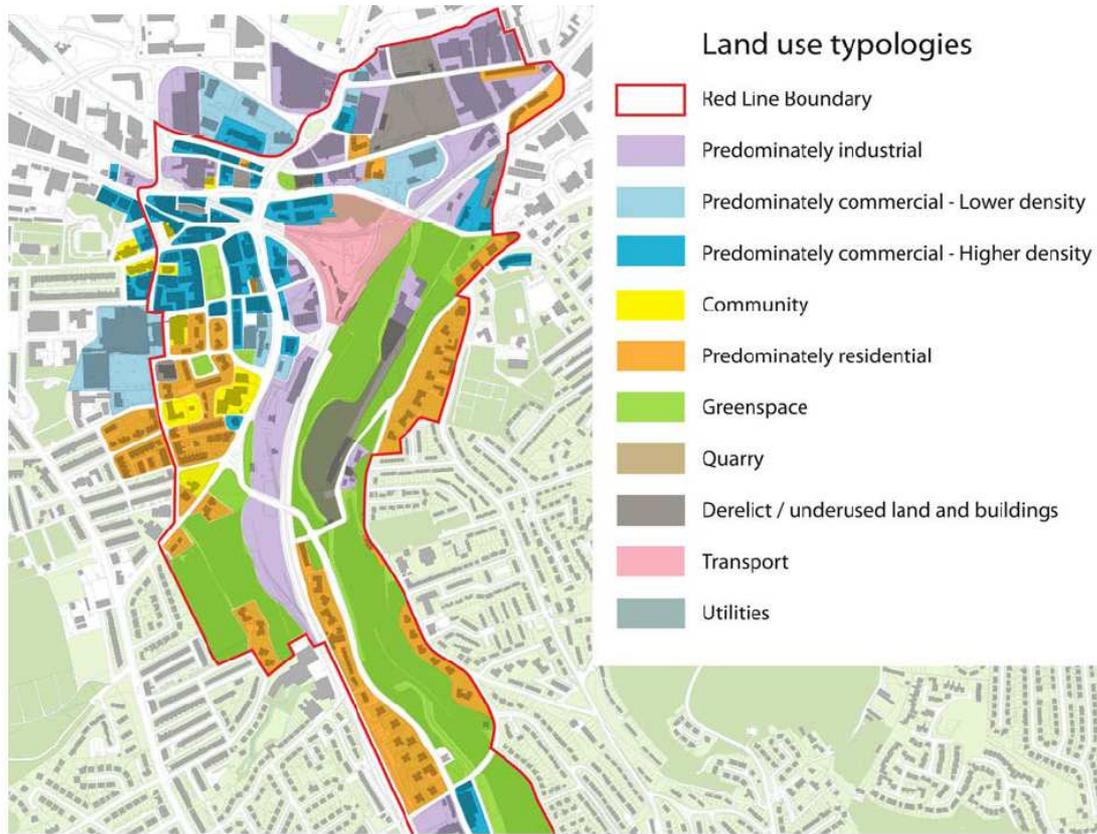
South of the CRC is Bradford City Centre and the area of Little Germany in particular. This characterful part of the city developed as Bradford rapidly industrialised and many of the buildings represent the prosperity and confidence of the time. The Cathedral Quarter adjacent to Little Germany is also of interest and a major City Centre landmark. South west of the CRC the built fabric of the City Centre is less

intense as a consequence of a stalled retail redevelopment, leaving a significant gap between the City Centre and CRC.

### **8.1.2 Land uses and activities**

As the main service centre for this part of the District, Shipley Town Centre includes areas of retail and other community uses such as the Town Hall, police station, library, swimming pool and train and bus stations. Retail uses are focused around Market Square and an Asda supermarket, which is linked to the square by Well Croft. The Market Square is supplemented by an internal Market Hall building to the north, although both are under-occupied for most of the week. South of Market Square is an area of town centre housing, but most upper floors to commercial buildings appear vacant. North of the Market Square a restaurant district is emerging along with a range of other complementary commercial uses. These add some vibrancy at night, but this is mainly confined to the edges of the Town Centre with the main retail area being largely unused and hence foreboding at night. Further north of the Town Centre an established character of industrial uses still dominates, particularly around Dockfield Road, but more recent developments around the canalside and Victoria Mills have introduced commercial office, showrooms and hotel uses, along with housing. To the west of this area, the visitor attraction of Salt's Mill is a major national destination, associated with the World Heritage Site of Saltaire.

Figure 80: Land use: Shipley Town Centre and CRC North



Source: BDP SDF Baseline Paper Design

The north end of the CRC has a strongly green character as a result of the steep topography of the valley and the exposed Bradford Beck. Stretching from Leeds Road in the north to Poplar Road to the south, this space provides a pleasant outlook for flats on Canal Road and Windhill to the east and a 'natural' open space resource for the wider communities. The edge of this open space is defined by Canal Road, which is overlooked by a linear strip of local authority built flats to the west and a few incongruous industrial and commercial uses. Canal Road rises where it meets the junction of Wharnccliffe Road and is given some feel of a 'meeting place' by a short parade of local shops.

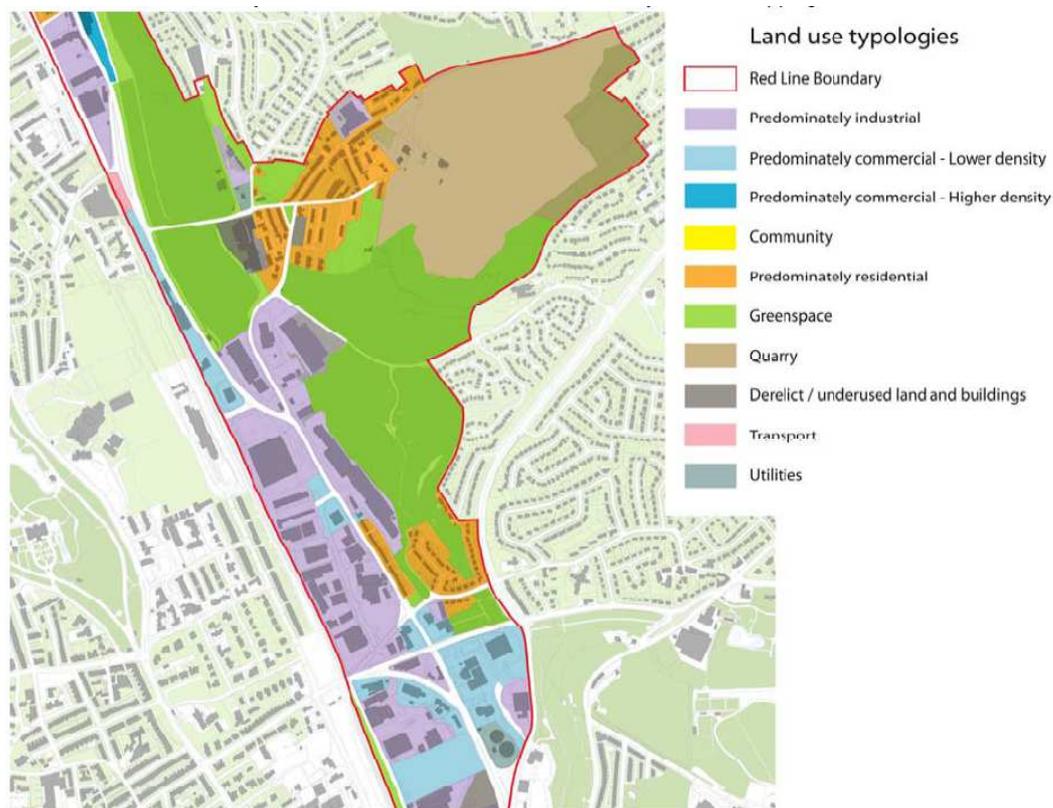
In general, however, the area lacks a neighbourhood focal point and feels detached from adjacent communities by the railway line to the west and topography to the east.

Continuing southward, the open space character of the corridor continues but it becomes more formal. Suburban housing to the east at Poplar Crescent overlooks an amenity parkland area, which gives way to football playing fields and further

sports pitches to the south of Gaisby Lane. An area of redundant allotments borders the playing fields north of Gaisby Lane. Frizinghall Station sits on higher ground to the west where the character of the corridor changes to employment uses, including offices at Airedale House, industrial uses (waste recycling) and showrooms.

It is at this point that the character of the CRC turns more industrial (Figure 81). Factories and warehouses overlook either side of the road, including Arnold Laver’s timber operations and an industrial estate that provides for a range of small and medium sized industrial operations at Hilam Road. This industrial character draws away to an area of agricultural land to the east of the Arnold Laver plant, which recedes further into open space and the natural banking of the Bolton Woods Quarry. The quarry itself is a major operational land use that exists east of the community of Bolton Woods. Bolton Woods is mainly a residential neighbourhood with some employment uses on Bolton Hall Road and some community uses such as a school, but little in the way of local shopping.

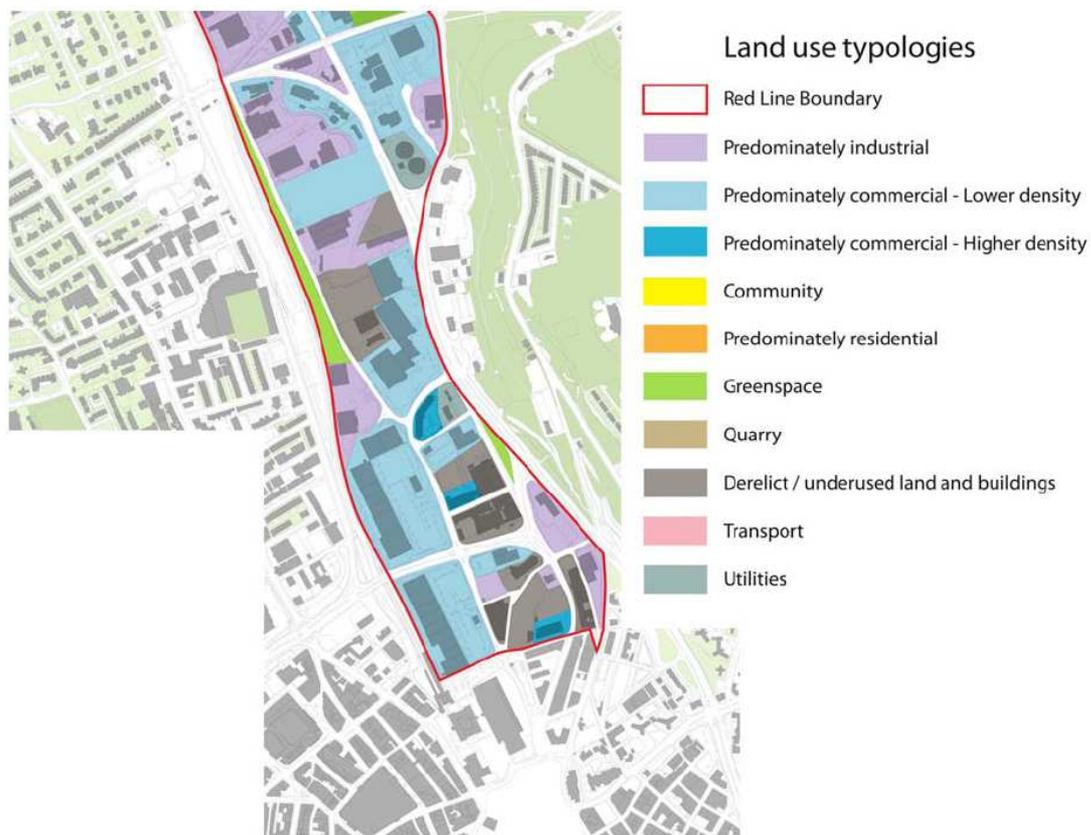
Figure 81: Land use: CRC Central



Source: BDP SDF Baseline Paper Design

The character of Canal Road continues as a focus for employment uses, but becomes more distinctly commercial south of Queens Road (Figure 82). Car showrooms are particularly prevalent and further south, the commercial character of this area is characterised by superstores to the west (including a large Tesco supermarket and retail park) and small scale office developments. Particular signs of under-investment within the corridor are exposed at Valley Road, where there are a number of vacant buildings and cleared sites. These are inter-dispersed with a variety of uses including a mail sorting facility, offices (both new build and refurbishment) and retail sheds.

Figure 82: Land use: CRC South



Source: BDP SDF Baseline Paper Design

Against urban design objectives the CRC exhibits the following issues in terms of land uses and activities.

*Strengths*

- Character: The adjacency to Salt’s Mill a distinctive visitor attraction of international significance.

- Quality of the public realm: Areas of open space and natural landscape that provide a 'breathing space' within a largely urbanised area.
- Diversity: The diversity and concentration of employment uses along the CRC. The mix of uses in Shipley Town Centre.

#### *Weaknesses*

- Character: The negative impact of industrial activity on communities within the corridor.
- Quality of the public realm: Vacant buildings and land across the CRC, but particularly to the south.
- Ease of movement: Housing within the CRC feels dislocated from adjacent neighbourhoods.
- Diversity: Lack of a decent neighbourhood focal point to housing on Canal Road and few neighbourhood facilities in Bolton Woods and Windhill. Under-occupancy and underuse in Shipley Town Centre such as the Market Square, Market Hall and upper floors.

### **8.1.3 Townscape and built fabric**

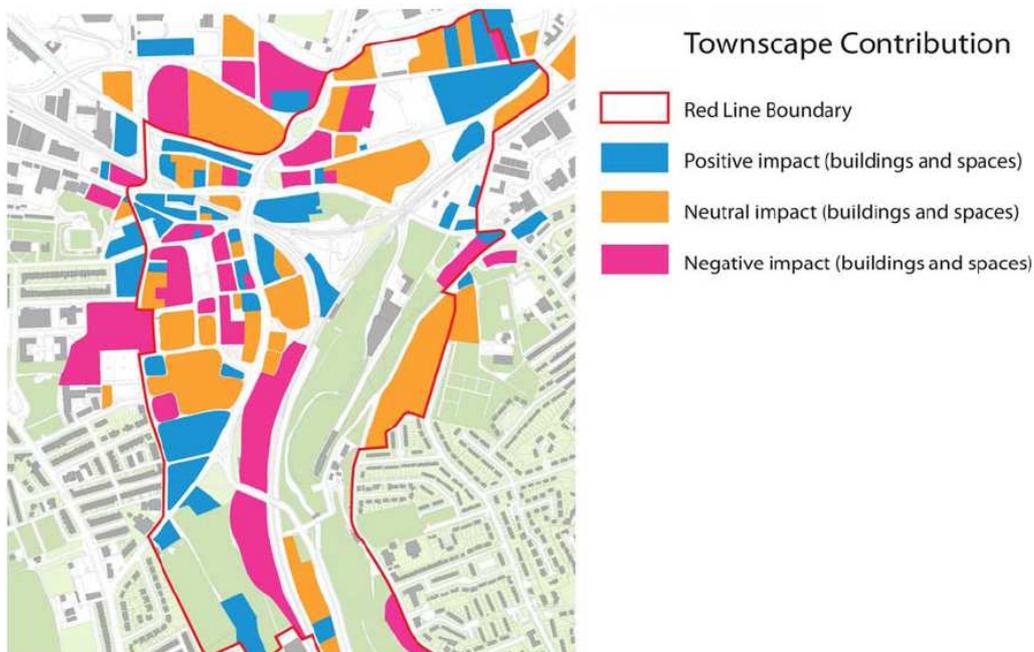
The townscape structure of Shipley Town Centre consists of a core that was substantially redeveloped in the 1950s and a periphery of traditional character buildings. The heart of the town centre is formed by Market Square, which is faced on four sides by 1950s buildings including the iconic clock tower. These buildings, with the exception of the clock tower, were designed with little architectural flare, have been poorly kept and now look dated. As a consequence the main retail area has a downmarket feel. This is little improved by the Asda superstore, which is of a standard layout and consequently looks away from the town centre and inward towards a car park.

Notwithstanding the poor quality of the town centre core, the edges have retained a considerable amount of traditional commercial and industrial buildings. As a consequence streets such as Westgate and Wharf Street retain interest and character, typified in local stone. Particularly notable buildings include the Grade II listed Canal Warehouse at Wharf Street, the Grade II listed Christian Life Centre (former Wesleyan Reformed Church) and other non listed buildings such as Shipley Town Hall and Shipley Baptist Church. A good amount of main road frontages within Shipley also retain a proportion of traditional architectural interest at Briggate,

Commercial Street, Saltaire Road and Otley Road, including the Grade II listed Shipley Old Hall.

The overall integrity of such frontages, however, is negated by insensitive alterations, gaps and dominant highways infrastructure. The canalside area of Shipley forms part of the Leeds Liverpool Canal Conservation Area. Continuing eastwards along the canal two particular clusters of distinctive stone built heritage buildings exist at Gallows Bridge and Junction Bridge. Gallows Bridge itself is an interesting iron and timber construction and buildings of note at this location include a group of vernacular cottages and workshops at 60-68C Bridgegate, stabling and warehousing at Glover’s Wharf and The Bull public house. Junction Bridge is a Grade II listed structure and forms the setting to a second character area, which includes Junction House (a substantial 3 storey vernacular style building), Junction Mills (a mill complex comprising a tapered square plan stone built chimney) and Dockfield Mills (an imposing 3 ½ storey tall mill). At both Gallows Bridge and Junction Bridge there are signs of underuse and physical neglect. Further north of the canal at Dockfield Road other stone and red brick faced industrial buildings complement the 19<sup>th</sup> century industrial character of Dockfield Mills. South of the canal, along the former alignment of the Bradford Canal other interesting character buildings include Lock Keeper’s Cottage, Former Pumping Station, Former Shipley and Windhill Railway Station and Dixon’s Buildings.

Figure 83: Townscape and built fabric: Shipley Town Centre and CRC North



Source: BDP SDF Baseline Paper Design

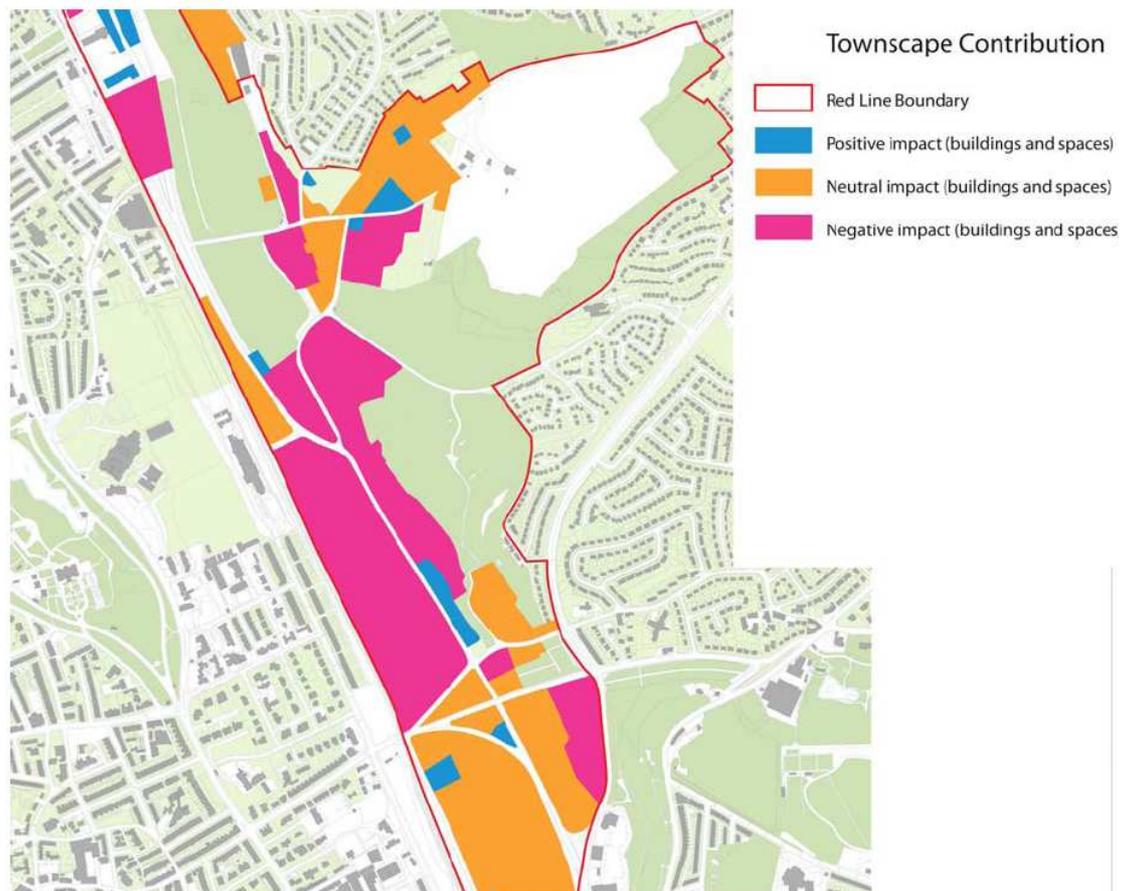
As an area defined by a confluence of transport corridors and industry, the built fabric of Canal Road is mostly characterised by its functional characteristics and generally the architectural aesthetic of the area is poor. This applies to most uses within the area, including the housing to the north of the corridor. These 1950s local authority built flats housing are typical of their era and the cruciform four storey blocks are especially unattractive due to poor quality materials and design. Continuing southward, the junction with Shipley Fields Road / Poplar Road is dominated by Airedale House, which at five storeys is a clear landmark in the essentially low scale of the immediate area. The Canal Road elevation of the building is faced in local stone, which mirrors an assemblage of architecturally interesting industrial and commercial buildings including the former Britannia Public House and Consortium House, which are both derelict.

The community of Bolton Woods to the east of the Canal Road corridor has a strong village character defined by the consistent use of local stone and a majority of traditional domestic scaled buildings. It is set on the side of the Bradford Beck valley, which creates appealing arrangements of buildings and spaces and allows for long range views across the valley towards Manningham and Frizinghall. Particular buildings of architectural interest include the New Vic public house, Bradford Christian School and the former mill on Bolton Hall Road. South of Livingstone Road an estate of 1960s flats is very unattractive and has a negative visual impact on Bolton Woods.

Continuing south on Canal Road, the townscape of the area is dominated by industrial sheds of varying age and condition, but commonly low design quality. A stretch of cottage dwellings (Midland Terrace) with unusual window detailing provides some architectural interest, but the cottages feel lost in an area that feels dominated by poor quality functional buildings. The southern boundary of this area is defined by the Queen's Road bridge, which due to the straightness of the road in this location is a strong landmark when heading in either direction. Passing under the Queen's Road bridge the carriageway broadens and buildings are set further back from the road, giving this section a more open aspect. Many of the buildings are car showrooms and less than a decade old. They are generally of a tidy and modern appearance, but are designed to function to the passing motorist and at a more intimate scale the

area feels inhospitable. Architectural interest is provided by Midland Mills and Conditioning House. These buildings are particularly important in terms of their scale and design quality to be Grade II listed. They serve to complement more distant views of other attractive buildings within the City Centre and Manningham, but with the exception of part of Midland Mills, the buildings are empty and in need of refurbishment. The strong townscape structure of these buildings is also diminished by the relative weakness of the rest of the area, which is further fractured by vacant lots, inactive street frontages and low scale traffic dominated uses such as Forster Square retail park. The massive vacant space that will one day be developed for the Westfield shopping centre, for example, serves in the interim as a significant barrier between the town centre and the Canal Road corridor and it is also notable that in adjacent Manningham, the townscape structure is degraded where it meets the Canal Road Corridor at Queen’s Road and Hamm Strasse.

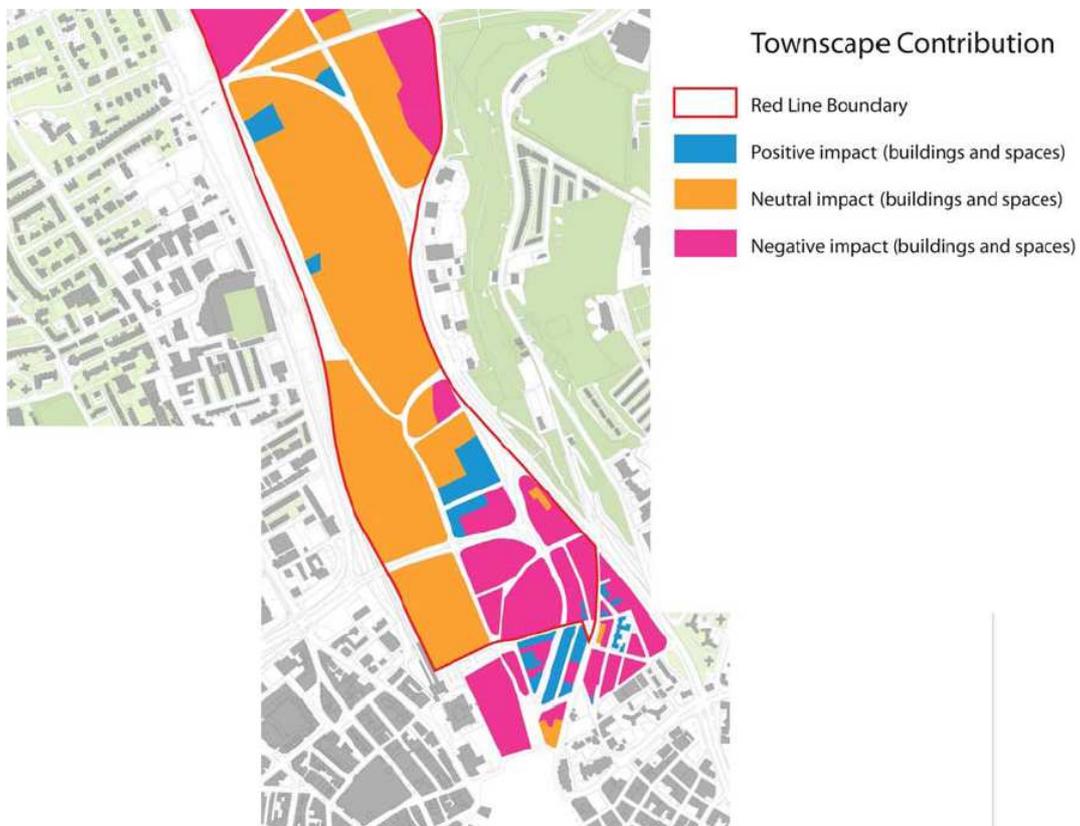
Figure 84: Townscape and built fabric: CRC Central



Source: BDP SDF Baseline Paper Design

Although the townscape structure is more intact to the south east of the corridor, topography and the orientation of streets prevents direct connectivity with the Cathedral Quarter and Little Germany. Little Germany is a dense collection of elegant, robust stone merchant warehouses, factories and commercial units with sloping topography, narrow streets and often imposing buildings that give the area a distinct quality. This character continues to the edges of the corridor at Mill Street and Canal Road where there are clusters of listed commercial and industrial buildings, including 14-22 Mill Street and 26 / 29 Canal Road. The Cathedral tower is a significant landmark, but its small and tranquil close stands feels detached.

Figure 85: Townscape and built fabric: CRC South



Source: BDP SDF Baseline Design

#### Strengths

- **Character:** There are attractive clusters of traditional stone buildings across the CRC, which give it character and distinctiveness such as the junction of Shipley Fields Road / Poplar Road, Valley Road (Midland Mills area), Bolton Woods Village, Wharf Street and Westgate in Shipley Town Centre and the

Gallows Bridge, Junction Bridge and Bradford Canal areas of the Leeds Liverpool Canal.

- Continuity and enclosure: Bolton Woods and the fringes of Shipley Town Centre constitute areas of strong townscape and the car showrooms to the south of the CRC also respond well to the scale of the road corridor.
- Legibility: Distant views of the City Centre and Manningham and of landmarks such as the Cathedral place the area in its local context.

#### Weaknesses

- Character: There is generally a poor architectural aesthetic across the corridor, including poor quality post war housing in Shipley and Bolton Woods, unattractive and poorly maintained industrial buildings within the central part of the corridor and dated commercial development in Shipley Town Centre
- Continuity and enclosure: Many areas of the CRC are fractured by vacant lots, inactive street frontages and low scale traffic dominated uses, particularly to the south of the CRC and the overall integrity of main road frontages in Shipley Town Centre is negated by insensitive alterations, gaps and dominant highways infrastructure.
- Ease of movement: The gap created by the halted Westfield development acts as a significant barrier between the CRC and City Centre.
- Adaptability: Midland Mills and Conditioning House are half occupied and in need of refurbishment.
- Diversity: There are signs of underuse and physical neglect across the CRC.

#### **8.1.4 Open space and landscape**

Within Shipley Town Centre there is no formal green space and the public realm is confined to hard open space such as Market Square as well as the semi-natural Canalside. Market Square consists of a central market space and car park fronted by retail to four sides. The market is cluttered with fixed stalls of poor visual quality that appear particularly forlorn when not in use for four days of the week. The stalls also limit the usability of the space for other events. The west side of Market Square and Well Croft are pedestrianised.

The landscape theme appears well maintained, but is not remarkable. Street furnishings and pedestrian surfaces within other streets are functional at best and pedestrian connectivity is severely impaired by roads such as Otley Road and

Commercial Street / Saltaire Road that limit connections to wider assets such as the canal, Salt's Mill and Shipley Railway Station.

The Leeds – Liverpool Canalside provides a semi-natural landscape feature and walking / cycling corridor through the Airedale Valley. Crucially it is a direct non trafficked route between Shipley and Saltaire, but linkages from the canal to the Town Centre are poor. The Otley Road Bridge, for example, has created a permanently dark and foreboding space beneath. The canal tow path runs to the north of the canal and is for the most part broad and surfaced in tarmac or gravel. It is flanked mostly by scrub verges that lend a natural characteristic, but which are overgrown and neglected in some locations.

The landscape character of the wider CRC is shaped by the topography of the valley and areas of historic flooding, which has restricted the practicality of built development in some areas of the corridor and has allowed nature to creep into the backdrop. To the north of the corridor this is most pronounced where the steep wooded banks of the valley and lowland meadows alongside the Beck form a band of greenspace stretching from Leeds Road to Poplars Park Road. As a natural resource it has some aesthetic interest, but the overall quality of these spaces is no more than moderate as the area appears to have developed with little direct intervention or design. The bank of the Bolton Woods quarry hillside, for example, is a dominant topographical feature viewable within and outside of the corridor, but there is little foliage of note to make this visually interesting. Of more interest is a small area of farmland to the east of the main Arnold Laver plant where a small copse is visible from Canal Road behind the main Arnold Lavers plant.

These open spaces run parallel to the CRC for almost half of its totality, lending the area a semi-rural ambiance. Indeed, the road itself to the north of the corridor consists of a simple two way carriageway with little noticeable highway engineering and as a consequence its visual impact is less pronounced despite its immediate adjacency to housing. Upon the junction with Stanley Road, however, Canal Road becomes harsher and more industrialised.

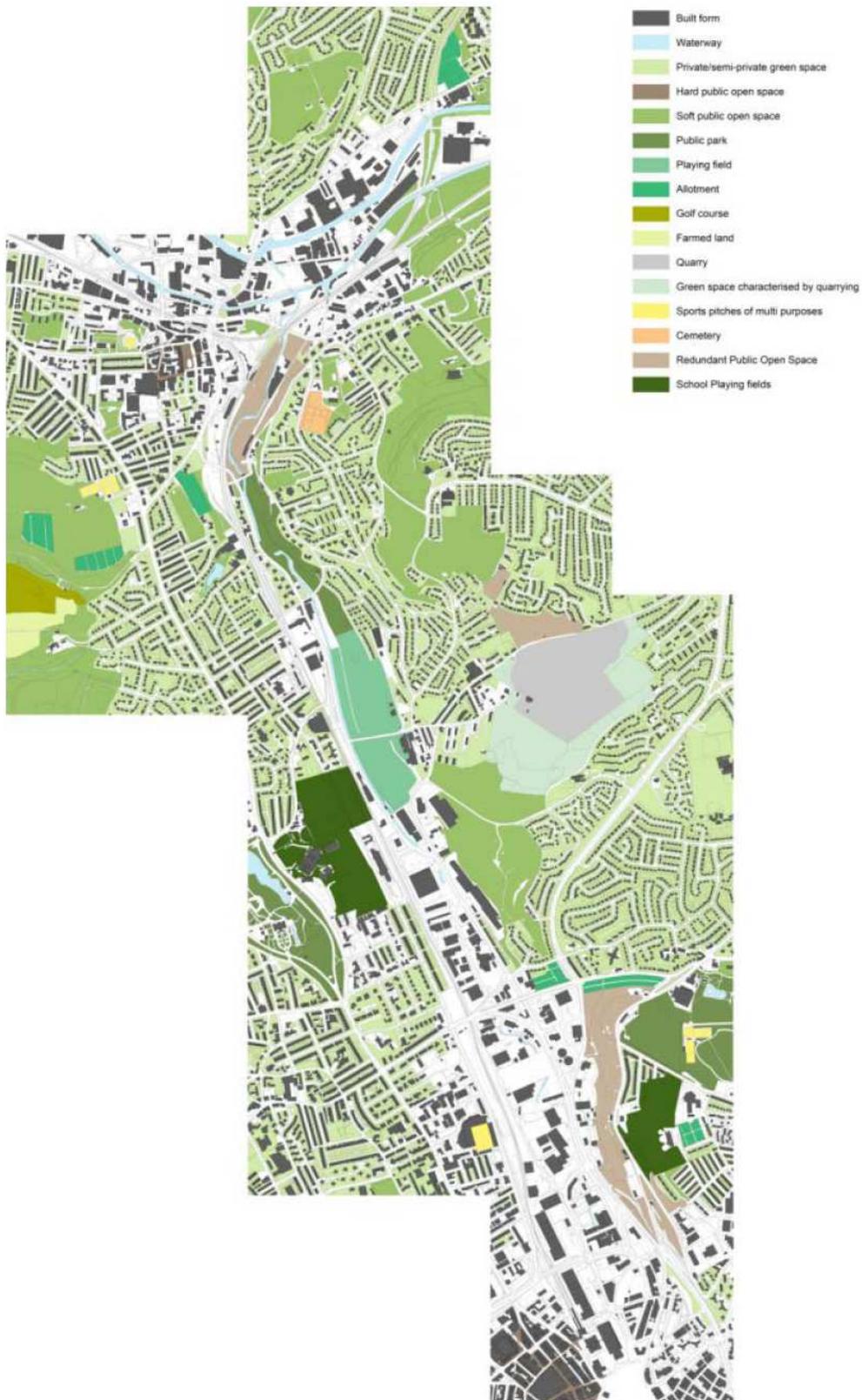
The character of boundary treatments moves away from hedges, trees and stone walls to palisade fencing and corporate signage. The carriageway of Canal Road sits

up hard against the cottages at Midland Terrace and industrial buildings to the west and the road becomes more dominant as a (negative) landscape feature.

The road widens to a dual and then triple lane highway to the south, taking on an increasingly more divisive and dominant character, which is further emphasised by the design of Queen's Road and Hamm Strasse. The impact of heavy, noisy and fast flowing traffic impairs interaction across the road and the forming of a 'place.' Buildings are generally set within bland open landscapes such as a surface car parking that emphasise the visual dominance of cars and a lack of public realm for the enjoyment of pedestrians. Indeed, the poor quality and legibility of the pedestrian environment severs linkages to the City Centre and other assets such as Forster Square station, which is largely hidden.

In addition to the road the Bradford Beck is a consistent landscape feature that runs through the area. From Shipley / Windhill to just south of Frizinghall Station at Gaisby Lane it has some attractiveness as a natural water feature. For the rest of the area, however, the Beck is containerised and of little visual impact.

Figure 86: Open space typologies



Source: BDP SDF Baseline paper Design

### Strengths

- Character: The CRC retains a semi-natural ambiance of open space, woods and farmland particularly to the north of the corridor and due to the topography of the valley a continuous line of greenspace runs alongside the CRC.
- Quality of the public realm: The low visual impact of Valley / Canal Road to the north of the corridor is fairly attractive in contrast to the south of the corridor.
- Ease of movement: The Leeds – Liverpool Canalside creates a semi-natural landscape feature and walking / cycling corridor through the Airedale Valley.
- Legibility: The Bolton Woods hillside is an interesting visual feature.

### Weaknesses

- Character: The cluttered and poor quality of Market Square impacts negatively on the character of Shipley Town Centre.
- Continuity and enclosure: Harsh, unattractive and clashing boundary treatments to the central section of the corridor, create a poor identity for the CRC.
- Quality of the public realm: Existing open spaces are of moderate visual quality as opposed to being especially attractive. Buildings in the southern section are generally set within bland open landscapes such as a surface car parking that emphasise the visual dominance of cars and a lack of public realm for the enjoyment of pedestrians. The Bradford Beck is largely containerised and of little visual impact. Street furnishings and pedestrian surfaces within most streets are functional at best. The canal is flanked mostly by scrub verges that lend a natural characteristic, but which are overgrown and neglected in some locations.
- Ease of movement: Canal Road (as well as Queen's Road and Hamm Strasse) is more dominant as an engineered highway to the central and southern sections, where the impact of heavy, noisy and fast flowing traffic impairs the pedestrian experience and visual attractiveness of the CRC. Pedestrian connectivity is also severely impaired towards the edges of Shipley Town Centre, resulting in poor pedestrian linkages between Shipley Town Centre and the canalside.

### 8.1.5 Conclusion

The characteristics of the CRC pose a variety of issues for masterplanning. In summary the key issues to draw from the area analysis are:

#### Character

There is generally a poor architectural aesthetic across the corridor, including unappealing post war housing in Shipley and Bolton Woods, unattractive and poorly maintained industrial buildings within the central and southern areas of the corridor and dated buildings and open spaces in Shipley Town Centre such as at Market Square. These poor quality environments all have a negative impact on the image and desirability of the CRC. There are, however, isolated clusters of architecturally interesting buildings across the CRC and the CRC sits adjacent to some areas of particularly high townscape quality such as Manningham, Saltaire and Little Germany. Opportunities for the AAP include:

- Define a new identity and sense of character for the CRC working with existing assets (e.g. greenspace, transport hubs, townscape, topography, hydrology).
- Utilise areas of townscape interest as a focus for placemaking within the CRC e.g. Shipley Canalside, Bolton Woods and Valley Road.
- Extend areas of high quality into the CRC by identifying opportunities for new development corridors between the CRC and key placemaking assets (e.g. Saltaire, Little Germany).
- Redevelop areas of particularly poor townscape quality e.g. Market Square, Canal Road (central area) and Valley Road.

#### Continuity and enclosure

The functional aesthetic of the CRC and the dominant nature of vehicular access have resulted in a degraded and fractured townscape. This translates into inactive and poorly defined streets and poor architectural quality, particularly towards the central and southern sections of the CRC. Areas of better townscape structure include the human scale of development in Bolton Woods and parts of Shipley Town Centre and the car showrooms to the south of the CRC. Opportunities for the AAP include:

- Have cognisance of historic building lines and street patterns to rebuild the lost grain of the CRC e.g. Valley Road, Shipley Town Centre.
- Define a hierarchy of streets and spaces through the scale and proportions of new buildings and streets
- Repair areas of fracture with new active frontages.
- Enhance the security and amenity value of the public realm by fronting new development on to streets and open space.

#### Quality of the public realm

The CRC has a semi-natural character shaped by the wooded valley edges and interlinked areas of open space that run parallel to the Bradford Beck from Shipley to Bradford City Centre. The River Aire / Leeds Liverpool Canal corridor also forms a complementary role in this regard. There is considerable value in these green linkages as a natural and recreational resource for the City and scope to enhance the overall quality and diversity of these assets for the benefit of existing and new communities within the area. Notwithstanding the natural qualities of the CRC, the rest of the public realm is at best mediocre, focused on cars rather than people, which results in a poor pedestrian environment that restricts movement and enjoyment of the area. Opportunities for the AAP include:

- Retain valuable areas of open space and create linkages between green assets to form strategic greenspace / wildlife corridors of District significance.
- Enhance the quality and value of open spaces to create a multifunctional resource for the local area.
- Utilise the Bolton Woods hillside as a distinctive landscape feature and setting for new development e.g. wood, arboretum, botanical gardens.
- Consider the long term potential of Bolton Woods quarry as a green resource e.g. leisure / recreation uses and natural habitat.
- Open up the Bradford Beck and naturalise its banking to make it more attractive open space feature.
- Enhance the environmental quality of the Leeds Liverpool Canal.
- Enhance the overall identify and structure of Canal Road with high quality environmental improvements e.g. lighting, formal tree planting, boundary improvements.

#### Ease of movement

Canal Road forms part of a strategic road route between the Airedale Valley and M62. The impact of heavy, noisy and fast flowing traffic has a negative impact at street level and the quality of the pedestrian environment is generally poor. There is scope to enhance the environmental quality of the road in order to challenge its dominance; the lesser impact of Valley Road to the north of the corridor being a good example. As well as a road corridor, the CRC is also a rail corridor with stations at Forster Square, Frizinghall and Shipley, but accessibility is impaired by road infrastructure and topography. The Opportunities for the masterplan include:

- Narrow the main carriageway of Canal Road and other main roads to their minimum dimensions in order to create more space for other forms of more sustainable transport e.g. cycle / walking paths.
- Improve pedestrian accessibility at key interfaces e.g. Shipley Town Centre / Canalside / Train Station, Bolton Woods / Frizinghall Station, Valley Road / City Centre.
- Utilise the train stations as public transport hubs.
- Create a Green Way through the CRC composed of high quality walking and cycling links set within open space.
- Define a hierarchy of streets that separates local and through traffic and priorities pedestrians in residential areas.

### Legibility

The topography of the valley places the CRC in its local context, offering views of key landmarks such as Manningham Mills and Bradford Cathedral. The identity of the CRC itself, however, is not as strong or particularly positive. Opportunities for the masterplan include:

- Potential for landmarks and 'star' buildings to define particular areas e.g. Shipley Town Centre, Bolton Woods, Valley Road.
- Protect and enhance major views into and out of the area e.g. Manningham, Saltaire.
- Utilise the Bolton Woods hillside as a notable visual feature for the CRC e.g. natural planting, public art.
- Enhance gateways between the CRC and adjacent areas e.g. Manningham, Bolton, Saltaire.

## Adaptability

The CRC has adapted to change over a period of more than 200 years, although some areas have endured to a lesser extent. The potential for significant new development created by the masterplan should best exhibit sustainable development principles to ensure new development can adapt in the future. Opportunities for the masterplan include:

- Bring attractive vacant buildings and sites back to life e.g. Midland Mills, Shipley Canalside.
- Refurbish and enhance poor quality townscape e.g. the industrial areas with central CRC.
- Orientate new street grids and building facades to maximise solar gain.
- Identify opportunities for renewable energy e.g. solar roof collectors, wind turbines.
- Reduce water run-off through green roofs and façades.
- Incorporate Sustainable Urban Drainage systems within the green infrastructure of the CRC.

## Diversity

The CRC is quite diverse in terms of land uses and economic activity, but this does not necessarily translate into a vibrant and animated district. Shipley has a mix of uses, but the market is under occupied and night time activity is dispersed to the edges of the Town Centre. The central area around Bolton Woods is poorly served and the vacancy and fractured townscape to the south of the CRC is also an issue. Opportunities for the masterplan include:

- Redevelop the Market Square area to bring in a better quality and mix of uses e.g. residential, leisure.
- Create a new neighbourhood centre for Bolton Woods.

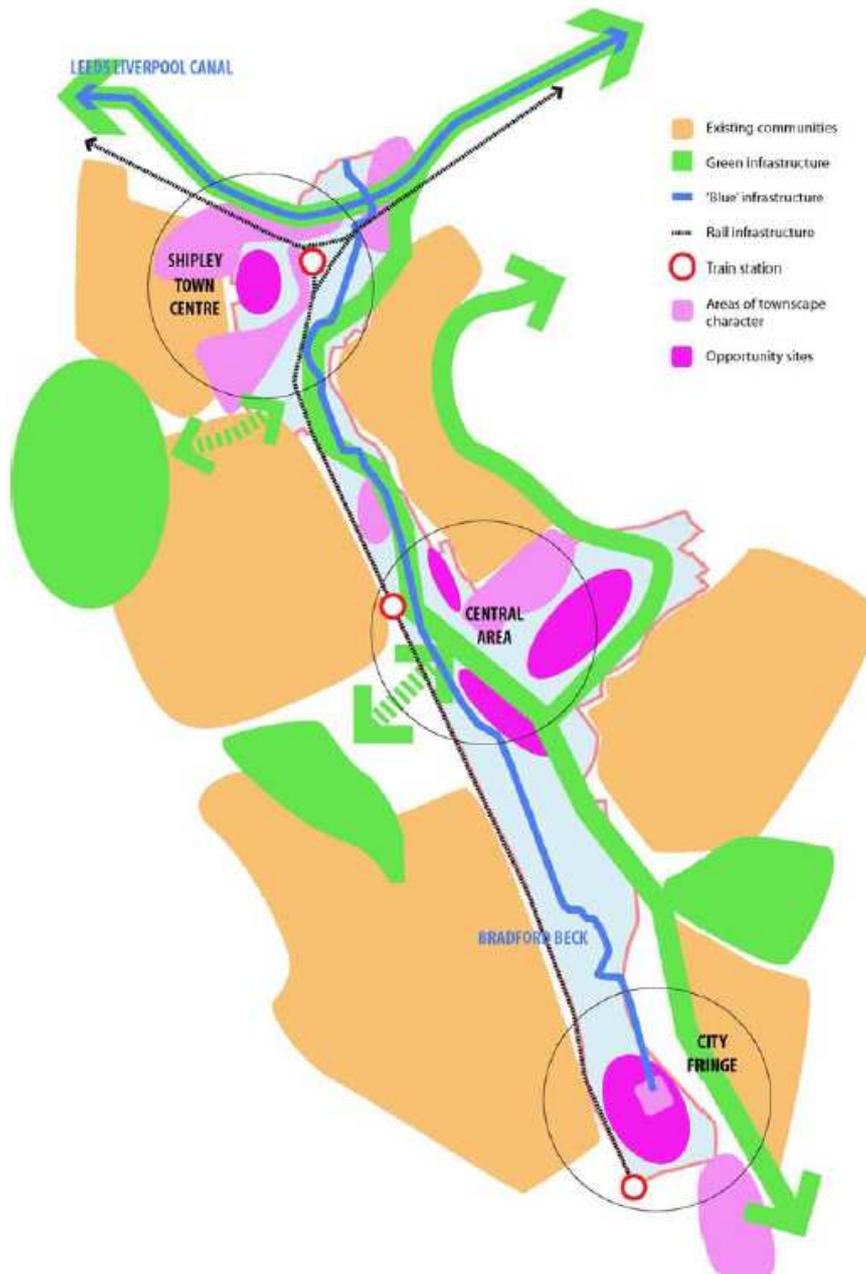
## 8.2 Conclusion

The document review, desk study and area analysis undertaken as part of this report has identified a number of positive and negative environmental characteristics within the CRC, which will influence the development of the CRC AAP. Some of these

issues are common across the CRC, but generally there is a clustering of urban design issues and opportunities within three key areas of the CRC (Figure 87):

- Shipley Town Centre and its fringes including the canalside and train station.
- The Central area of Canal Road around Bolton Woods, Gaisby Lane and Frizinghall Station.
- The southern area of the CRC bordering the City Centre (City Fringe).

Figure 87: Placemaking opportunities



Source: BDPS SDF Baseline Design

**8.2.1 Shipley Town Centre**

Shipley Town Centre retains a good amount of design interest, principally towards the Leeds Liverpool Canal and Saltaire and on account of these qualities a burgeoning restaurant quarter is emerging along with other commercial enterprises to the north and west. Shipley also benefits from good transport connections by rail via Shipley Train Station on the eastern side of the Town Centre. One would thus expect the Town Centre to be a thriving node between this activity, but pedestrian connections are severely limited by the severance caused by major busy roads to the north (Saltaire Road) and east (Otley Road) and the principal shopping area is undermined by its dated appearance. The principal opportunity for Shipley Town Centre is to consider the restructuring of Market Square and its vicinity in order to revitalise the town’s offer and improve its connectivity to areas of success.

<b>Emerging Issues (strengths / weaknesses)</b>	<b>Opportunities</b>	<b>Constraints</b>
Post war redevelopment has resulted in an increasingly dated building stock that is unfit building stock for modern retailing  (Market Square area).	Redevelop areas around Market Square for new mixed use commercial development.	Land ownerships, market conditions,.
Higher quality traditional development to the north and west of the Town Centre and Canalside Conservation Area, but some vacancy and inappropriate development.	Sensitive repair of traditional buildings and restoration of historic street structure to enhance continuity and enclosure.	Land ownerships, market conditions, heritage considerations.
The Clock Tower is a distinctive Shipley landmark.	Retain as part of new development or create a new Town Centre landmark.	Land ownerships, heritage considerations.
Employment land and informal open space create a poor first impression of the Town Centre.	Redevelop underused / redundant land for new uses.	Land ownerships, market conditions.
Negative visual impact of the largely unused permanent stalls in Market Square.	Remove stalls and remodel Market Square (current market is a 1950s conception).	Impact on market traders, funding.
Generally mediocre quality of public realm.	Create a series of distinctive, high quality streets and public spaces.	Funding.
The Leeds – Liverpool Canalside provides a semi-natural landscape feature and walking / cycling corridor through the Airedale Valley.	Enhance this corridor as a greenway with onward connections to the rest of the CRC.	Land ownerships, funding.
The dominance of highways infrastructure creates poor pedestrian linkages.	Enhance pedestrian connections at key nodes / desire lines	Impact on traffic flow, funding.
Poorly managed service areas and informal car parking.	Redevelop areas as part of comprehensive development.	Land ownerships.
Shipley train station is divorced from the Town Centre.	Create a strong pedestrian desire line to the Town Centre from the train station.	Highways infrastructure, topography, land ownerships.
Adjacency to Salt’s Mill and Saltaire (international visitor attraction).	Create strong pedestrian linkages between Saltaire / Canalside and the Town Centre and enhance the overall setting and gateway to Saltaire, which passes through Shipley.	Land ownerships, funding, impact on traffic flow.
The Core Town Centre lacks evening activities, but there is a burgeoning restaurant quarter to the fringes of the Town Centre.	Encourage further development and diversification of the evening economy.	
Shipley Town Centre lies within WHS Buffer Zone.	Complement the setting of the WHS.	Restriction on building heights.

### 8.2.2 Central Area

The opportunity to deliver new development in this area is afforded by a proposed joint venture agreement, but in place making terms there are a number of interesting features that enhance the potential of this proposal. The village of Bolton Woods has an established traditional character of some architectural interest and the green characteristics of the corridor are particularly prevalent in this location, including the potential to utilise the hillside and quarry. There is thus an opportunity to seize these assets in a positive manner that best integrates them into a desirable place.

<b>Emerging Issues (strengths / weaknesses)</b>	<b>Opportunities</b>	<b>Constraints</b>
Areas of poor quality industrial / residential development and some vacancy.	Redevelop such areas for new development.	Land ownerships, funding, ground contamination.
Lack of a neighbourhood focal point and community amenities.	Create a new neighbourhood centre for existing and proposed development.	Funding, small existing local catchment (although likely to grow).
Attractive village quality of Bolton Woods.	Sensitive new development around Bolton Woods to maintain its distinctiveness.	
Walking distance of Frizinghall station, but poor cross valley linkages between Bolton Woods and Frizinghall.	Create new / improved cross valley linkages e.g. bridge link.	Railway line, highways infrastructure, settlement patterns.
Restrictions on building due to topographical conditions.	Distinctive building types that overcome topographical issues.	Buildability, cost.
Green landscape setting, but of little more than visual amenity value.	Retain and enhance a chain of interconnected green spaces (wildlife corridor) by redistributing some areas of open space and integrating open space with new development.	Scarcity of flat development land.
The topography of the Bolton Woods hillside.	Utilise the hillside to create a high quality landmark for the CRC.	Funding.
Bolton Woods lies within the viewshed of the WHS.	Complement the setting of the WHS with appropriate development.	Potential restriction on building heights.
Impact of the quarry on the residential environment.	Accelerated quarrying would free up the quarry for redevelopment e.g. new residential development, open space.	Ground conditions, access.

### 8.2.3 City Centre Fringe

The southern portion of the Canal Road Corridor is particularly fractured in terms of its uses, townscape and movement structure. There is a higher proportion of derelict land and buildings in relation to other parts of the corridor, but this offers great scope to reinvent this area. In the medium term the delivery of the Westfield Shopping Centre will enhance linkages to the City Centre and there is also scope to draw in the character of Little Germany and the Cathedral Quarter, which border this area.

## Bradford District Local Plan

<b>Emerging Issues (strengths / weaknesses)</b>	<b>Opportunities</b>	<b>Constraints</b>
Area lacks a positive identity.	Identify uses / building typologies that will reinvent the area's image and intensify activity.	Land ownerships, market conditions.
Fragmented built form / vacant lots / inactive frontages.	Sensitive repair of traditional buildings and restoration of historic street structure to enhance continuity and enclosure. Clustering to create areas of critical mass.	Land ownerships, market conditions, heritage considerations.
Poor pedestrian environment and severance caused by highways.	Extend the City Centre pedestrian priority area into the City Fringe and enhance pedestrian desire lines.	Impact on traffic flow, funding.
Distinctive areas of character: Little Germany, Cathedral Close, Midland Mills area.	Utilise built assets to reinforce street patterns and placemaking.	Land ownerships, market conditions, heritage considerations.
Severance caused by incomplete Westfield development.	Open up new pedestrian routes that improve connectivity between the City Centre, Cathedral Quarter, Little Germany and CRC.	Market conditions.
Beck is containerised.	Open up the Bradford Beck to create a landscape feature.	Cost.

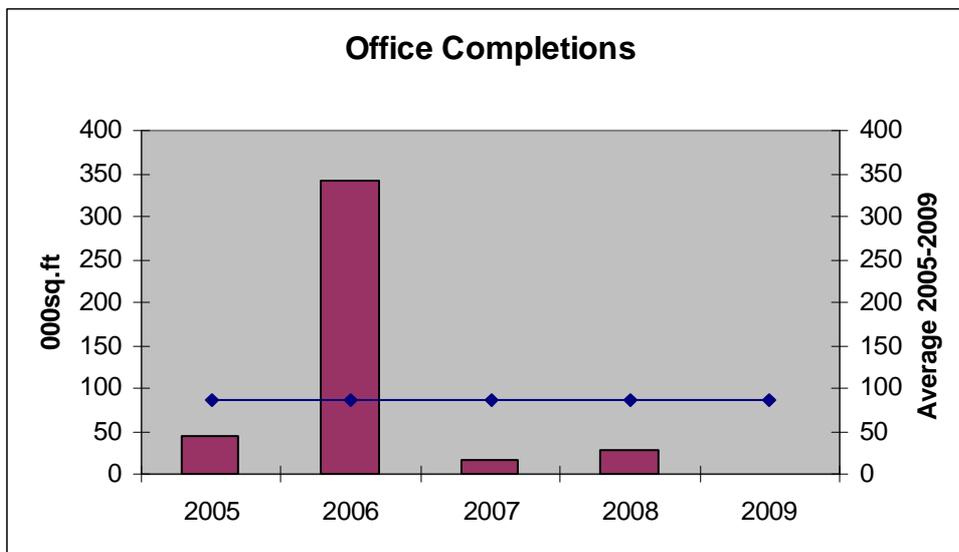
## 9.0 Commercial Appraisal

This section provides a property market context for the Bradford-Shipley Canal Road Corridor AAP by providing an overview of the office, industrial and retail markets across Bradford, with a particular focus on the Canal Road Corridor itself. The section concludes by considering the implications of the property market on the future potential of the CRC.

### 9.1 Office Market

Bradford has historically suffered from a poor quality and ageing office stock, particularly in the city centre. Just 5% of its office stock has been completed in the last five years and can therefore be considered new, according to Promis, and there were no completions at all in 2009. This compares to an average completion rate of 86,000sq.ft per annum over the last five years.

Figure 88: Office Completions 2005-09



Source: Promis/live Bradford Office Report

Office development activity over recent years has largely taken place outside of Bradford city centre and a number of new locations have begun to emerge providing office stock that is superior to that available in the city centre. These include the Salts Mill area of Shipley, where there have been a number of development and refurbishment schemes, the area around the M606 motorway, where schemes such as Link 606 and Premier Point have been developed, and Thornbury to the east of

Bradford, where schemes such as Keyland Development's Mid Point has been developed.

The Salts Mill area of Shipley is located immediately to the north of the Canal Road Corridor and has attracted a number of development and refurbishment schemes over recent years, including GMI Developments' The Waterfront. GMI Developments acquired the 50,000sq.ft office building three years ago and embarked on a programme of refurbishment to create units ranging from 4,000sq.ft upwards. It has attracted a range of local and national occupiers, in particular those with a historic presence in the Bradford area with a requirement for consolidation to modern high quality premises. Occupiers include Baker Tilly, Macmillan Cancer Support, the Advanced Digital Institute and Switch2 along with a number of other technology companies and rents of £14psf have been achieved on 5 and 10 year leases with rent free incentives. Only around 10,000sq.ft of office space now remains at The Waterfront. Fujitsu and the Inland Revenue also have a large presence in this area and an Ibis Hotel has recently been developed.

Deals completed at Mid Point in Thornbury during 2010 include lettings of 10,000sq.ft and 14,000sq.ft to Univar UK Holdings and 10,000sq.ft to Morrisons and current asking rents here range from £13.50psf to £11.75psf. Asking rents for office space at Premier Point close to the M606, meanwhile, are reported to be as high as £16psf for units of 6,000sq.ft and 10,000sq.ft.

Closer to the city centre, office development has included Jack Lunn Construction's Bradford Business Park, a number of refurbishments in the Valley Road area including that occupied by the Department of Work and Pensions and Mi7's Listerhills Science Park near the University. The 1980s former Abbey National building, on Valley Road, has now been on the market for a couple of years but with little interest. Despite being marketed at £9.75psf, the view is that it is more likely to achieve £8psf or £8.50psf. There is currently interest from a private college and from a gym operator but demand from traditional office occupiers has not been forthcoming.

Bradford Business Park is located on the edge of Bradford city centre and sits within the southern tip of the Canal Road Corridor. Its development commenced around 1990 with the construction of two buildings which were occupied by Raven Computers and Pearl Assurance, both local businesses. A further building was developed in the late 1990s for local company Shorts Lifts. No further development

then took place until 2008 when 6,000sq.ft was built speculatively but let to Yorkshire Bank prior to completion. A rent of £14.50psf was achieved on a lease of around 20 years and the building was subsequently sold in the height of the market at 6.25%. The final phase of Bradford Business Park was developed about 18 months ago, comprising a 3 storey semi-detached office block. 7,000sq.ft was let to Driver Hire, a northern England recruitment company with a base in Bradford, for £11.50psf. 3,000sq.ft was let to Greenwood Menswear, another local firm, at £12.50psf but with greater incentives. There is now around 6,000sq.ft remaining which is being marketed at £12.50psf but, in the current market, a rent of £10psf is thought to be more realistic.

Despite the tendency towards out of town development over recent years, there is currently a swing back towards the city centre, a trend which is very much in line with the Council's ambition to create a new Central Business District in the city. The £45 million Southgate scheme on Godwin Street, developed on a pre-let basis by McAleer and Rushe, provided a 117,000sq.ft headquarters for Provident Financial and a 200 bed Jury's Hotel. The pre-let to Provident Financial was reported to have been agreed at record rents of £17.25psf. Meanwhile, the £15 million No. 1 Hamm Strasse is being built by The Property Group to provide 121,000sq.ft city centre office space along with a 3 star 100 bed hotel. Construction is currently underway on Hallgate House, the first phase of the Hamm Strasse scheme. There have also been several small scale office refurbishments within the Little Germany area, achieving rents of between £6psf and £7psf.

There are other development proposals also in the pipeline for Bradford city centre. Langtree Artisan have outline planning permission for a £55 million mixed use scheme known as New Victoria Place to include a 100 bed mid-range hotel, 90,000sq.ft offices, ground floor retail and leisure uses and 36 apartments. Development is unlikely to start on site for at least 18 months, depending on securing pre-lets, although there is understood to be potential interest in the office space from a public sector occupier. Developer Manoj Aggarwal has proposals to convert High Point, the former headquarters of Yorkshire Building Society, into a £7 million mixed use leisure scheme including a 96 bedroom hotel with office and retail space in a 9 storey building.

The office market in Shipley town centre is very limited and largely confined to space above retail units. The only 'modern' office accommodation within the town centre is

provided by a two storey development near Asda which dates from the 1980s where rents are thought to be around £7.50psf and vacancies understood to be around 80%. One of the key issues facing the office market in Shipley town centre is the lack of car parking. Stanhope House, for example, is currently vacant as a result of poor car parking provision in the town centre.

Despite being within walking distance of Shipley town centre, the office development that has taken place in the Salts Mill area over recent years (discussed above) is generally considered to be one of Bradford's out of town locations, with little or no relation to Shipley town centre. This is exacerbated, according to agents, by the poor pedestrian linkages between the two areas and the lack of parking in the town centre.

### **9.1.1 Office Market Summary**

Office development over recent years has largely taken place outside of Bradford city centre, with Saltaire in particular establishing as a successful office location which has attracted a range of local and national occupiers (albeit often with Bradford connections) at rents of up to £14psf. Even more recently, however, there has been a shift of development activity back towards the city centre with a number of schemes either under construction or in the pipeline.

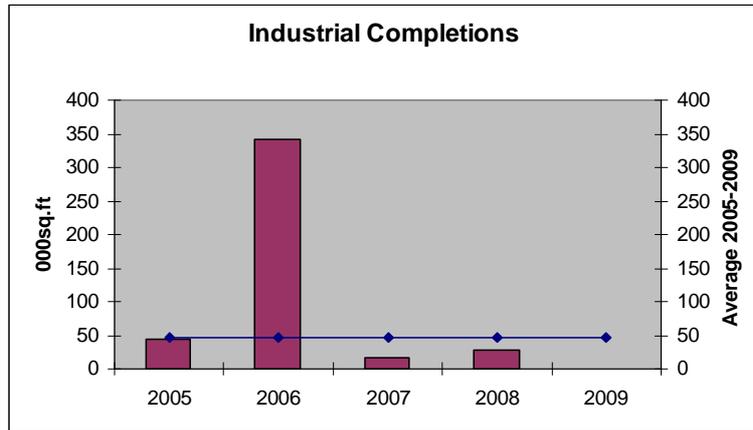
Within the Canal Road Corridor itself, office accommodation is largely confined to Bradford Business Park which is located on the edge of the city centre. Whilst it is now fully developed out and almost fully let, its development has been a gradual process over the last twenty years or so and it has suffered from being neither a city centre nor an out of town location. In the current market, achievable rental values here are thought to be around £10psf.

The office market in Shipley town centre is very limited – the only 'modern' accommodation is a two storey 1980s development near Asda where rents are thought to be around £7.50psf. Despite being within walking distance of Shipley town centre, the office development that has taken place at Saltaire is generally considered to be one of Bradford's out of town locations, with little or no relation to Shipley town centre.

## **9.2 Industrial Market**

Just 0.4% of Bradford’s industrial stock is new, having been built in the last five years, according to Promis which also reports no completions at all in 2009. This compares to an average completion rate of 46,000sq.ft per annum over the last five years.

Figure 89: Industrial Completions 2005-09



Source: Promis/live Bradford Industrial Report

Development activity over recent years has increasingly been focused around the M606 motorway to the south of Bradford. The last few years have seen significant take-up, despite the economic downturn, of large scale warehouses including 1.1 million sq.ft at Prologis Park, pre-let to Marks and Spencer in 2007 which completed in 2010, and 144,600sq.ft at 606 on Euroway Trading Estate let to Advanced Processing at £4psf. 50,000sq.ft. here has also now been let to Astonish and 100,000sq.ft has been let to Expect Logistics. This area has also seen a number of smaller lettings of units of around 5,000sq.ft at rents of £5.95psf.

Industrial development elsewhere in Bradford over recent years includes Wellington Business Park on Sticker Lane to the east of the city centre, where Martree Properties have speculatively developed eight units totalling 22,500sq.ft where rents of £6.50psf have been achieved. At Wilsden Business Park on Shay Lane to the north east of Bradford, Landmark Development Project and Leeds & Regional Properties have speculatively developed 13,500sq.ft. in nine units of 1,500sq.ft achieving rents of up to £12psf on small units. At Thornton Road Industrial Estate, to the west of the city, rents of up to £7.25psf or even higher have been achieved for small units.

Within the Canal Road Corridor, the main focus of industrial activity is the Hillam Road Industrial Estate. This is a mixed estate that has been developed over a number of decades and is occupied by local, national and international occupiers providing services to a local market. Hillam Court provides a number of smaller units dating from the 1980s and ranging from 500sq.ft to 4,000sq.ft at rents of between £4.80psf and £6psf. Elsewhere on the estate, a 15,000sq.ft is currently on the market for sale but, according to the agent, would be likely to achieve a rent of between £3.50psf and £4psf. Local agents report a healthy demand for industrial accommodation in this area, from local and start-up businesses in particular, and are very much of the view that the area has an important role to play in the future.

Although industrial activity is found throughout the Canal Road Corridor, the other main concentration of activity is the Dockfield Road area of Shipley. This is considered by local agents to be a vibrant industrial area that serves an important local role by providing low cost industrial (and office) accommodation. As a result, demand is healthy and availability is limited.

There is no significant industrial development in the pipeline in Bradford, at least over the short term. At a regional level, however, industrial developers are reported to be establishing positions that will enable them to develop as and when demand picks up by, for example, securing agreement with landowners.

### **9.2.1 Industrial Market Summary**

Industrial development activity over recent years has increasingly been focused around the M606 to the south of Bradford. Despite the economic downturn, take-up here has been strong with a number of large scale warehouses being let. Elsewhere in Bradford, development has tended to be smaller scale light industrial uses.

Within the Canal Road Corridor, the industrial market is focused around Hillam Road Industrial Estate where rents range from around £4psf to £6psf for 1980s premises. Demand is reported to be relatively healthy for smaller units and local agents consider the area to have an important role to play in the future.

There is also a concentration of industrial uses in the Dockfield Road area of Shipley. Although an area of lower value industrial activity, local agents report reasonable demand from local businesses.

### **9.3 Retail Market**

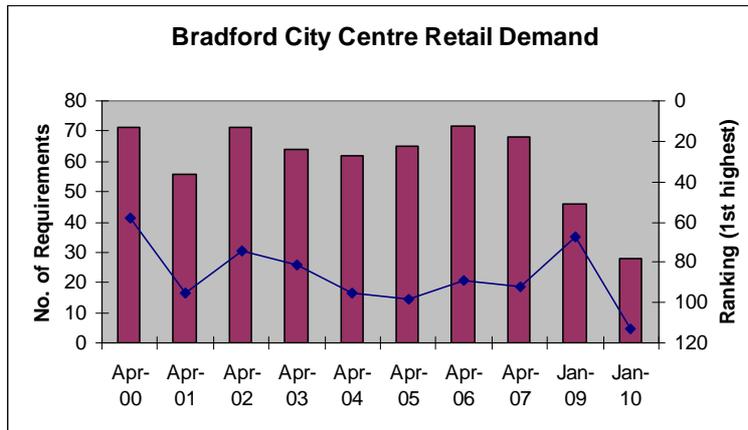
Bradford is generally considered to have a poor quality and quantity of retail provision in its city centre with a poor representation of national multiples, an above average vacancy rate and a dominance of small retail units which are often unsuitable for modern retailers. For several years, the most significant retail scheme in the pipeline for the city centre has been the proposed redevelopment by Westfield of the former Broadway Shopping Centre.

The scheme was to provide 500,000sq.ft of retail floorspace, anchored by Debenhams and Marks and Spencer. Site clearance began in 2004 but the development was eventually put on hold in 2008 as a result of the economic downturn. This has left a temporary gap in the city centre which is having an adverse impact on the retail market. There is also now a question mark over the future of the Post Office Sorting Office site which has previously been reserved for a second phase of development.

Bradford's Retail and Leisure Study of 2008 (undertaken by White Young Green) concluded that the future growth of Bradford city centre will be restricted unless new, high quality, large retail outlets can be brought into the city centre and acknowledged that the new Broadway development proposed by Westfield could deliver these. It also recognised, however, that inactivity on the site has led to a significant reduction in retail floorspace that has not been replaced and that investment in the city centre is being stifled by the lack of development progress.

Prime retail rents in Bradford are estimated to be £90psf Zone A, according to Promis, having fallen from around £100psf Zone A in 2009 and £130-£140psf Zone A prior to this. There are currently only around 30 retailer requirements for Bradford, according to Promis, placing it at just 117th in the retailer requirements ranking, its lowest position for the last ten years.

Figure 90: Retailer Requirements 2000-09



Source: *Promisive* Bradford Retail Report

The traditional city centre offer is, however, supplemented by British Land's Forster Square Retail Park which is located immediately to the north of the city centre and within the southern tip of the Canal Road Corridor. One of the best performing retail schemes in the UK, it was developed in the late 1990s in two phases, separated by Hamm Strasse, and now provides a total of 240,000sq.ft retail warehouse space. Occupiers include Currys, TK Maxx, First Choice, Next, Clarks and Asda Living along with food and drink operators such as Costa Coffee, McDonalds and Subway. The most recent letting to take place in Forster Square was in 2009, achieving a rent of £21psf, down from the £28psf being achieved at the beginning of 2008.

Directly adjacent to Forster Square, across Valley Road, further retail provision includes Farmfoods, Aldi and Carphone Warehouse. To the north of Forster Square, also on Valley Road, is a small and out-dated Tesco store. Tesco currently has planning permission for a new store on its existing site which we understand has not been implemented to date because of the very good performance of the existing store. Other retail warehouse provision here includes PC World and Staples. Rental levels away from Forster Square are thought to be in the region of £14psf.

Also in this area, there are proposals (not yet at planning stage) to develop the former Channel Urban Village site.

In Shipley town centre, at the northern end of the Canal Road Corridor, retail provision is dominated by Asda on Manor Road and by small retail units of under 1,000sq.ft. Asda was developed around 25 years ago on the edge of the town centre

and, since 2004, has had 24 hour opening. Other town centre provision is focused around the 1960s Market Square, which is owned freehold by the Council but with individual blocks owned on long leaseholds by private landowners with occupational leases generally running to 2016. Whilst we have not had the opportunity to consult with these long leaseholders, we understand that they include Schroders, London and Manchester Property Holdings, Oak Apple and the Co-operative.

The town centre also has a permanent indoor market as well as an outdoor market in Market Square. The dated indoor market suffers from very low footfall and very high vacancy rates. We understand that London & Manchester Property Holdings, owners of the indoor market and clock tower, did consider remodelling/redeveloping their property several years ago. The outdoor market comprises permanent stalls situated in Market Square and operates for three days per week.

National multiple presence in the town is limited but includes retailers such as Argos, Boots, Superdrug, Wilkinson, Phones 4 U and Clinton Cards along with numerous charity shops. A recent development on the edge of the town centre has provided two retail units occupied by Laura Ashley and Bathstore and there is reported to be a current requirement from Bon Marche.

The Retail and Leisure Study of 2008 found that the proportion of convenience, retail service and financial and business service floorspace in Shipley town centre is above the national average, whilst the proportion of comparison and leisure service floorspace is below the national average. It also found that, although the town centre does show signs of vitality and viability, there are a number of indicators which suggest that it is vulnerable and that a diversification of town centre uses is required. In terms of future retail provision, the study recommended that there is scope to enhance the current position of Shipley as a comparison goods destination through both the redevelopment and expansion of the existing town centre.

The view of local agents is that Shipley town centre is struggling in retail terms. At the height of the market, retail rents were around £55psf Zone A in Market Place and around £30-35psf Zone A in Market Square, but even these rental levels would be unlikely to be achieved in the current market.

There are a number of key challenges facing Shipley town centre, according to local agents. Firstly, it is very poor architecturally with much of it dating from the 1960s

making it an unattractive retail destination. Secondly, existing retail units tend to be around 1,000sq.ft which is generally too small for modern retailer requirements which are often for around 3,000sq.ft up to around 7,000sq.ft. Thirdly, its traditional retailers face competition from Asda which has drawn trade away from the town centre core. Fourthly, it suffers from poor pedestrian linkages from both the railway station and from the new office developments around the waterfront, which prevent it from capturing significant additional spending potential. Finally, there is a view that it also lacks the niche shops that would attract these potential shoppers and that independent retailers are not able to afford even the low rental values being sought by landlords.

Foodstore provision within the Canal Road Corridor is largely catered for by Tesco on Valley Road and by Asda in Shipley town centre. Whilst Asda is understood to trade very successfully from its Shipley store, it is a relatively small store with no potential for expansion. Despite the popularity of the store, its poor linkages with the rest of the town centre mean that there are relatively few linked trips and therefore few wider town centre benefits. Additional retail provision within the area is provided by Aldi and Farmfoods near Forster Square and by Aldi on Briggate just outside Shipley. The Retail and Leisure Study of 2008 concluded that there is a quantitative need to provide a new foodstore in Bradford city centre and both a quantitative and qualitative need to improve provision in Shipley town centre. There is thought to be interest from foodstore operators on sites around the edge of Shipley.

There is also a notable presence of car showrooms within the Canal Road Corridor, particularly to the southern end of Canal Road at its junction with the ring road. Dealerships in this area include Audi, Citroen and Volvo. Two vacant sites of 1.28 acres and 1.86 acres adjacent to the Audi showroom are currently being marketed with outline planning permission for car dealerships. Further up Canal Road is a Skoda dealership and there are several other car dealerships in Shipley.

### **9.3.1 Retail Market Summary**

The lack of progress on Westfield's city centre retail development has left a temporary 'hole' in the city centre which is having an adverse impact on the retail market with increasing vacancy rates and a stifling of investment. Despite this, however, the success of Forster Square Retail Park continues, the most recent deal

being at £21psf, and there are early stage proposals for further development on the Channel Urban Village site.

The retail market in Shipley town centre faces many challenges including its outdated architecture, the dominance of Asda and its failure to capture potential expenditure from its relatively wealthy catchment area, office workers at Saltaire and station users. As a result, retailer demand is limited, rents are low and the quality of retail provision is poor.

There is reported to be significant interest in the Canal Road Corridor from foodstore operators such as Tesco and Sainsbury's, particularly in relation to sites around the edge of Shipley and towards Bradford city centre. The Corridor has also proved to be particularly attractive to car dealerships.

#### **9.4 Implications for the Canal Road Corridor**

The following section considers the implications of Bradford's property market in terms of the future potential of the Canal Road Corridor. It looks at the challenges and opportunities facing office, industrial and retail development and makes conclusions on what we believe are the key opportunity areas within the Corridor.

##### **9.4.1 Office**

Bradford's office market faces a number of challenges, not least of which are the difficult economic climate and competition from Leeds. However, the Canal Road Corridor faces a further challenge which is the fact it is neither a city centre location, which would benefit from public transport accessibility and city centre facilities, nor an out of town location which would typically benefit from better car parking provision and more limited congestion.

There is also an argument that potential office development should be concentrated primarily within Bradford city centre. Allowing any significant development outside of the city centre, even within the Channel Urban Village area, would risk diluting the impact of the new Central Business District concept being promoted by Bradford Council. The exception to this within the Canal Road Corridor would be Shipley town centre, where it may be appropriate to encourage some small scale office

development to help add to the vibrancy and mix of uses in the town centre and to help establish the town centre as a business location.

#### **9.4.2 Industrial**

Industrial uses are found throughout the Canal Road Corridor but are concentrated primarily around Hillam Road and areas to the north and east of Shipley town centre. Hillam Road Industrial Estate appears to be well occupied and, although slightly dated, is home to a wide range of occupiers, with a relatively healthy level of demand given the current economic climate. Consequently, it is unlikely to be financially viable to acquire industrial sites in this area in the short to medium term and, as such, is unlikely to be an area earmarked for change unless in the longer term.

The industrial areas around Shipley town centre, such as Dockfield Road, appear to be occupied by lower value uses and may therefore offer more potential for change, although we understand that these areas do still provide an important local role with a healthy level of demand for space. The key challenge facing any redevelopment of this area will be its poor accessibility.

Whilst large scale industrial development activity over recent years has increasingly been focused around the M606, there has been some smaller scale development in other parts of the district and the view of local agents is that there could be potential for development of smaller scale light industrial uses in the Canal Road Corridor.

#### **9.4.3 Retail**

The lack of progress on Westfield's city centre retail development has left a temporary gap in the city centre which is having an adverse impact on the retail market with increasing vacancy rates and a stifling of investment. Despite the lack of progress on the Westfield scheme and the adverse impact it is having on the city centre retail market, the success of Forster Square Retail Park continues and there are early stage proposals for further retail warehouse development on the Channel Urban Village site.

The Channel Urban Village site, however, is one of the few opportunity sites within the southern part of the Canal Road Corridor. It is also the key linkage between the Corridor and the City Centre, as such, will be crucial to the success of the Canal

Road Corridor. Any proposals for the future development of this site should therefore be considered very carefully. Development opportunities elsewhere in the southern part of the Canal Road Corridor are limited by the existing concentration of high value retail warehousing and car showroom uses.

Shipley town centre, at the northern end of the Canal Road Corridor, represents the other key area of retail opportunity. Retail provision in the town centre is currently dominated by an Asda foodstore and by small, dated and unattractive retail units around Market Square which are unsuited to modern retailer requirements. The town centre is currently failing to capture expenditure from the many commuters passing through Shipley Railway Station, from the large population of office workers at Saltaire, from shoppers visiting Asda and more generally from Airedale's relatively affluent population.

#### **9.4.4 Conclusion**

##### Areas of Opportunity

These property market implications lead to concluding that there are two key Areas of Opportunity, in property market terms, within the Canal Road Corridor:

- Channel Urban Village: The Channel Urban Village site is one of the few opportunity sites within the southern part of the Canal Road Corridor. Any proposals for the future use of this site should be considered very carefully as it is essentially the key linkage between the City Centre and the Canal Road Corridor and therefore arguably crucial to the future success of the Corridor
- Shipley Town Centre: There is potential for a significant redevelopment scheme within Shipley town centre focused around the Market Square. This should incorporate new retail units suited to modern retailer requirements and should aim to encourage high quality national multiples, independent niche retailers and small scale leisure uses such as coffee shops, bars and restaurants into the town centre. Particular attention will need to be paid to urban design issues in order to improve linkages between the town centre, the station, Saltaire and Asda.

There is likely to be a third Area of Opportunity identified in the Central Area, based around the Urbo Joint venture company site. However, proposals for this area are still at an early stage.

The analysis also identifies a number of areas in which significant change is unlikely in the short to medium term. These include:

- Hllam Road Industrial Estate: It is unlikely to be financially viable to acquire sites/businesses within the Hllam Road area in the short to medium term. However, this could be a potential area of change in the longer term
- Forster Square Retail Park: This is one of the best performing retail warehouse schemes in the UK and, as such, it would be neither desirable nor financially viable to encourage change in this area.
- Car Showroom Cluster: There is a distinctive cluster of car showrooms in the southern part of the Corridor and, whilst this is not an ideal land use, it does arguably provide a high quality gateway into the Canal Road Corridor. Furthermore, the high values associated with this type of land use means that it would not be financially viable to encourage change.

## **10.0 Transport and Accessibility**

This section assesses key aspects of transport in the CRC by discussing the key opportunities and issues faced by the various transportation methods and identifying gaps in the promotion of sustainable transport infrastructure. The section also outlines detail national, regional and local transport policies which will mould the way these transport systems develop in the years to come.

A range of documents, studies and reports has provided valuable information for this section of the base line report. Some of the main documents are-

- BDP SDF Baseline Transport
- The West Yorkshire Local Transport Plan 2011-2026 (Wyltp, 2011)
- The LTP Bradford Local Implementation Plan 2011-2014 (BMDC, 2011)
- Bradford District Transport Study 2009

### **10.1 Policy Context**

#### **The West Yorkshire Local Transport Plan 2011-2026 and Bradford Local Implementation Plan 2011-2014**

The first Bradford Local LTP Implementation Plan (2011-2014) has been approved in June 2011 which, as well as setting out an overview of the transport issues in the District, can be used when engaging local stakeholders and communities on transport issues. LTP3 thus provides greater flexibility for ITAs to determine the scope, nature and duration of its strategy and implementation plans.

The Bradford Local Implementation Plan 2011-2014 lists all the schemes that are programmed under the above strategic elements.

Schemes proposed for delivery in the first 3 year Implementation Plan period include:

- Improvements to Canal Road corridor to ease congestion and provide better walking and cycling facilities.
- Improvements to Saltaire Roundabout and surrounding area (West Yorkshire Strategic Programme of Schemes).

See appendix A of the Bradford Local LTP Implementation Plan 2011-2014 for detail.

The Local Transport Plan states that there is likely to be an absence of significant levels of Government funding for new major transport schemes in the District at least in the early part of the Local Transport Plan period. It is therefore envisaged that more expensive transport infrastructure enhancements (such as link roads or bypasses) would only be implemented if substantially funded by the private sector through emerging Community Infrastructure Levies or Tax Incremental Financing. Such schemes will be developed through planning agreements, or through partnership arrangements, identified in the Local Development Framework, which support new housing or create jobs.

Masterplans for Airedale and the Canal Road corridor will, for example, influence the provision of transport enhancements within these areas over the Local Transport Plan period (eg Shipley Eastern Relief Road and further improvements to Canal Road).

### **Connecting Airedale**

There are five stages to Connecting Airedale but all are at an early point in their development and require Government Department for Transport funding for their progression. The schemes indicated in the documents accessed via these web pages are at the concept stage and are likely to change as a result of the scheme development and consultation process. As such they should not be viewed as definitive proposals. The Stages are as follows:

- [Stage 1 – Shipley Town Centre & Saltaire Improvements](#)
- [Stage 2 – Manningham Rail Station](#)
- [Stage 3 – Canal Road Improvement and A650 Quality Bus Corridor](#)
- [Stage 4 – Shipley Eastern Relief Road/Leeds Road High Occupancy Vehicle Lane/Otley Road Bus Lanes](#)
- [Keighley Transport Improvements](#)

### **Bradford District Transport Study 2009**

The Bradford District Transport Study forms part of the evidence base for the Core Strategy.

The Study has identified eight major radial routes to and from central Bradford as being the most important transport corridors within the district. Canal Road was

identified as one of these major radial routes. Of those eight radial routes, three were identified in the West Yorkshire Local Transport Plan as having regional significance and designated 'Congestion Corridors'.

The radial routes and congestion corridors within the Bradford district are:

- 1: A647 Leeds Road (Congestion Corridor);
- 2: A650 Wakefield Road;
- 3: A641 Manchester Road (Congestion Corridor is Little Horton Lane);
- 4: A647 Great Horton Road;
- 5: B6145 Thornton Road;
- 6: A650 Aire Valley Road (Congestion Corridor);
- 7: A6037 Canal Road;
- 8: A658 Harrogate Road.

The report made qualitative recommendations for areas identified for development in the Core Strategy. The report stated that the Canal Road Corridor is well placed to take advantage of existing and potential future public transport opportunities in the area. Bus accessibility is generally very good, and rail access is provided in the north at Frizinghall and in the south at Forster Square. Because of these public transport opportunities the report recommend that development in the area is planned to encourage lower rates of car ownership and usage through, for instance, the introduction of restricted car parking allocations

In addition to the intention to develop low cost junction improvements along this corridor, there are a number of potential transport schemes are planned in this area which would support development by providing better highways linkage, and improved public transport accessibility:

- Shipley Eastern Relief Road and Canal Road improvement;
- New rail station at Manningham;
- Improved interchange at Shipley;
- Extended availability of parking at rail stations.

All of these schemes support not only Canal Road development, but also development in north Bradford, and the Airedale and Wharfedale corridors.

In terms of Comparison of the Core Strategy Spatial Options the report found that:

- None of the five spatial options tested is significantly better or worse in comparison to the other options;
- The Preferred Option has local impacts on areas designated to already be problematic in terms of road safety policy;
- Any option taken forward will cause significant local impacts on the transport network which will require mitigation in terms of improved public transport provision and in some cases improvements to the highways network

The Airedale corridor, north Bradford and Canal Road were identified as those areas for development which could be 'clustered' to both make best use of the existing public transport system, and also to provide for the possibility of using instruments such as the Community Infrastructure Levy to make improvements to that system.

In terms of taking forward the Core Strategy Preferred Option Shipley and Canal Road Area Action Plan the report noted that for the CRC AAP new major scheme bids are unlikely in the current and medium term financial climate and so the focus in key development areas should be on developer funded interventions and making best use of existing and programmed infrastructure. Micro-simulation corridor models could be developed to help demonstrate problems, get buy in from local communities, influence design infrastructure/engineering solutions and assess the level of individual developer contributions

## **10.2 BDP SDF Baseline Transport and Movement**

This next section of the report provides a summary and conclusion of the BDP Transport and Movement Evidence Papers findings.

These have drawn up on the information from the following:

A Review of Documents and Data, focussing on:

- CBMDC Policy and Guidance Documents;
- Existing Major Scheme Proposals;
- Traffic Counts and Movements;
- Accident Data;
- Waterways.

Primary Analysis and Site Observations

- An assessment of the Highway network and its operation;
- Pedestrian and cycle movements and behaviour of vulnerable modes;
- An assessment of Public Transport facilities, services and patronage.

### **10.2.1 Major Scheme Proposals**

CBMDC Highways currently have 2 major scheme aspirations:

- Improvements to the Queens Road / Canal Road highway interchange;
- Shipley Eastern Relief Road (c£60m).

Both schemes will require significant investment to be brought forward. Due to the economic climate, central government funding through DfT for major schemes is to be reduced over the coming years which may make their delivery questionable if CBMDC are responsible for the bulk of cost. However it should be noted these two schemes if constructed would deliver major improvements to traffic movements across the Canal Corridor and wider Bradford highway network.

#### **Queens Road Grade Separation Interchange**

CBMDC have identified a requirement to upgrade this bottleneck junction where two key routes meet. There are existing design proposals that have been developed under previous masterplanning schemes and will be fully reviewed to determine if this is still considered to be a requirement as part of this masterplan's proposals. CBMDC have identified a desire to have this scheme in place within the next 15 – 20 years.

#### **Shipley Eastern Relief Road**

The Shipley bypass has an approximate construction cost of £60m and is Stage 4 of the 'Connecting Airedale' strategy. The council have determined a preferred alignment but are yet to prepare a business case to seek government funding towards the scheme, it is also unlikely that the private sector will be willing or able to contribute a significant proportion of the construction cost of the road. Although it will be retained in future highways policy documents it is unlikely that the scheme will be delivered in the next 15n years.

#### **Low Cost Alternatives to Major Schemes**

Due to the current economic climate and reductions in capital spend on highway schemes by central and regional government there is limited monies available for

major highway schemes. CMBDC Transport Planning therefore are currently in the process of preparing an Aimsun model for a number of junctions along the Canal Road Corridor which will be used to identify where 'quick win' highway improvements could be implemented to ease existing problems in the short term, until funding is again available for longer term solutions. These 'quick wins' may include changes to individual junction such as layout, maximising use of road space, altering turning movements, signalisation and dedicated turning lanes.

Details of the model and its results are expected to be completed in mid 2011 and will assist in informing the options development stage. The potential improvements identified will be considered as part of any proposed highways projects by the project team to maximise their benefits and compliment the masterplanning development proposals.

### **10.2.2 Traffic Counts and Movements**

To appreciate the volume of traffic currently using the Canal Road corridor, CBMDC as part of preparing a local traffic model have completed a number of traffic count surveys at key junctions. Three junctions have been summarised in this section, one from the north, central and south of the masterplan area.

The counts are detailed on the following two pages, the count locations provided are:

- Junction of Valley Road / Otley Road
- Junction of Canal Road / Stanley Road
- Junction of Canal Road / Kings Road

## Bradford District Local Plan

**Table 2: Traffic Count for Valley Road / Otley Road – AM Peak 8:00 – 9:00 (Source: CBMDC)**

Approach	Pedal Cycles	M/C's Scooters Moped	Cars and Light Vans	Commercial Under 7.5 tonnes	H.G.V.s Under 16.5 tonnes (2 axles)	H.G.V.s Over 16.5 tonnes (3+ axles)	P.S.V.s & coaches inc S.S	Total Vehs	Total P.C.U.s	Percentage Commercial vehicles & PSV > 30 cwt
Valley Road East	3	5	722	21	25	21	4	801	869	8.9%
Otley Rd SW	0	3	408	8	4	18	5	446	482	7.8%
Sunny Bank	0	0	94	2	0	0	1	97	99	3.1%
Otley Rd NE	3	5	1021	8	7	7	17	1068	1101	3.7%
<b>TOTAL</b>	<b>6</b>	<b>13</b>	<b>2245</b>	<b>39</b>	<b>36</b>	<b>46</b>	<b>27</b>	<b>2412</b>	<b>2551</b>	<b>6.1%</b>

**Table 3: Traffic Count for Valley Road / Otley Road – PM Peak 16:30 – 17:30 (Source: CBMDC)**

Approach	Pedal Cycles	M/C's Scooters Moped	Cars and Light Vans	Commercial Under 7.5 tonnes	H.G.V.s Under 16.5 tonnes (2 axles)	H.G.V.s Over 16.5 tonnes (3+ axles)	P.S.V.s & coaches inc S.S	Total Vehs	Total P.C.U.s	Percentage Commercial vehicles & PSV > 30 cwt
Valley Road East	2	11	1015	13	8	14	4	1067	1098	3.7%
Otley Rd SW	0	4	594	10	8	15	5	636	674	6.0%
Sunny Bank	0	1	71	0	0	0	1	73	73	1.4%
Otley Rd NE	1	9	986	9	6	12	13	1036	1071	3.9%
<b>TOTAL</b>	<b>3</b>	<b>25</b>	<b>2666</b>	<b>32</b>	<b>22</b>	<b>41</b>	<b>23</b>	<b>2812</b>	<b>2915</b>	<b>4.2%</b>

**Table 4: Traffic Count for Canal Road / Stanley Road – AM Peak 8:00 – 9:00 (Source: CBMDC)**

Approach	Pedal Cycles	M/C's Scooters Moped	Cars and Light Vans	Commercial Under 7.5 tonnes	H.G.V.s Under 16.5 tonnes (2 axles)	H.G.V.s Over 16.5 tonnes (3+ axles)	P.S.V.s & coaches inc S.S	Total Vehs	Total P.C.U.s	Percentage Commercial vehicles & PSV > 30 cwt
Stanley Road	0	2	450	4	2	0	5	463	471	2.4%
Canal Road (S)	6	3	1031	34	24	29	8	1135	1221	8.4%
Canal Road (N)	4	5	734	24	8	33	4	812	874	8.5%
<b>TOTAL</b>	<b>10</b>	<b>10</b>	<b>2215</b>	<b>62</b>	<b>34</b>	<b>62</b>	<b>17</b>	<b>2410</b>	<b>2567</b>	<b>7.3%</b>

**Table 5: Traffic Count for Canal Road / Stanley Road – PM Peak 16:30 – 17:30 (Source: CBMDC)**

Approach	Pedal Cycles	M/C's Scooters Moped	Cars and Light Vans	Commercial Under 7.5 tonnes	H.G.V.s Under 16.5 tonnes (2 axles)	H.G.V.s Over 16.5 tonnes (3+ axles)	P.S.V.s & coaches inc S.S	Total Vehs	Total P.C.U.s	Percentage Commercial vehicles & PSV > 30 cwt
Stanley Road	2	155	3	0	0	0	4	164	73	2.4%
Canal Road (S)	10	9	1256	17	6	15	6	1319	1345	3.3%
Canal Road (N)	2	9	855	18	7	14	3	908	940	4.6%
<b>TOTAL</b>	<b>14</b>	<b>173</b>	<b>2114</b>	<b>35</b>	<b>13</b>	<b>29</b>	<b>13</b>	<b>2391</b>	<b>2358</b>	<b>3.8%</b>

**Table 6: Traffic Count for Canal Road / Kings Road – AM Peak 8:00 – 9:00 (Source: CBMDC)**

Approach	Pedal Cycles	M/C's Scooters Moped	Cars and Light Vans	Commercial Under 7.5 tonnes	H.G.V.s Under 16.5 tonnes (2 axles)	H.G.V.s Over 16.5 tonnes (3+ axles)	P.S.V.s & coaches inc S.S	Total Vehs	Total P.C.U.s	Percentage Commercial vehicles & PSV > 30 cwt
Canal Road North	1	4	1125	19	11	19	9	1188	1242	4.9%
Kings Road West	0	2	770	7	5	4	8	796	818	3.0%
Canal Road South	4	6	1351	33	36	29	12	1471	1576	7.5%
<b>TOTAL</b>	<b>5</b>	<b>12</b>	<b>3246</b>	<b>59</b>	<b>52</b>	<b>52</b>	<b>29</b>	<b>3455</b>	<b>3637</b>	<b>5.6%</b>

**Table 7: Traffic Count for Canal Road / Kings Road – PM Peak 16:30 – 17:30 (Source: CBMDC)**

Approach	Pedal Cycles	M/C's Scooters Moped	Cars and Light Vans	Commercial Under 7.5 tonnes	H.G.V.s Under 16.5 tonnes (2 axles)	H.G.V.s Over 16.5 tonnes (3+ axles)	P.S.V.s & coaches inc S.S	Total Vehs	Total P.C.U.s	Percentage Commercial vehicles & PSV > 30 cwt
Canal Road North	2	11	1004	16	9	23	6	1071	1118	5.0%
Kings Road West	1	1	391	4	0	2	4	403	410	2.5%
Canal Road South	3	10	1646	17	11	19	10	1716	1765	3.3%
<b>TOTAL</b>	<b>6</b>	<b>22</b>	<b>3041</b>	<b>37</b>	<b>20</b>	<b>44</b>	<b>20</b>	<b>3190</b>	<b>3293</b>	<b>3.8%</b>

Tables 2 to 7 provide site specific count data which shows the level of traffic at three key points on the Canal Road corridor. The figures show that there are significant variances in the volume of traffic between these areas.

The Valley Road / Otley Road (Tables 2 and 3) junction experiences an 19% increase in traffic movements in the PM peak compared to the AM peak and based

on site observations runs well over capacity during these peak periods causing queuing and delay on each arm. This junction will require further analysis during the options development stage and be included in the CBMDC Aimsun model.

The Canal Road / Stanley Road (Tables 4 and 5) junction is just south of the centre of the masterplan area and is a key junction for access to residential and industrial areas located to the east of Canal Road. Traffic flows observed here in the AM Peak are similar to the Otley Road junction, but in the PM Peak are approximately 21% lower. Site observations have shown traffic flows here to be more free flowing during peak periods than Otley Road, but can on occasion suffer from congestion as a result of vehicles queuing at the bottleneck of the Queens Road viaduct where a number of movements occur, all based around priority junctions.

The Canal Road / Kings Road (Tables 6 and 7) junction is located on approach to the city centre and to the south of the Canal Road corridor. It carries significantly more movements than the other two junctions highlighted due to its strategic location. It has a much higher capacity and does not particularly suffer from congestion during any period of the day.

It is considered that there are a significant number of cross valley east / west movements across the whole masterplan area which are limited to locations where the barrier of Canal / Airedale Road can be crossed. These are both at strategic junctions such as Otley Road and Queens Road and more local junctions such as Gaisby Lane, Frizinghall Road, Stanley Road, Bolton Lane. The latter more local junctions are likely to suffer from rat running to avoid strategic routes and junctions, but demand on these routes has an impact on the residential areas that these roads run through. Demand for cross valley movements is evident during peak periods at most junctions and improvements or a new strategy to ease these movements could be explored as part of the options development with potential input from the CMBDC's modelling team.

### **10.2.3 Accident Data**

Accident data was obtained and reviewed for the last 5 years (October 2005 – May 2010) for the whole study area, the total number of accidents and those affecting vulnerable road users are shown in Table

Figure 91: Accident Data 2005 – 2010 (Source: CBMDC)

Accident Severity	Total	Involving Vulnerable Road Users
Slight	107 (84.25%)	10 (including 7 Cyclists)
Severe	19 (14.9%)	4 (all Pedestrians)
Fatal	1 (0.8%)	1 Pedestrian
<b>TOTAL</b>	<b>127</b>	<b>15</b>

Source: BDP SDF Baseline Transport

Figure 91 shows that there were a total of 127 accidents within the masterplan study area over the 5 year period, with an average of approximately 25 total accidents per year, of which involve 3 vulnerable road users. It is considered that this total is reasonable for the size of the study area and that it carries considerable traffic volumes.

There are no specific accident clusters identifiable across the study area, with many a result of queuing / turning traffic approaching junctions. There is also no pattern or specific area attributable to vulnerable road user accidents.

There is scope to seek an improvement in accident numbers in the future this should be a key consideration of any options developed as part of the masterplan.

#### 10.2.4 Air Quality Management Areas

There are 2 Air Quality Management Areas (AQMA) within close proximity of the masterplan boundary, these have been designated due to the volume of traffic that use these key junctions and the congestion caused by the level of demand. The AQMAs are located at:

- Signalised junction at Shipley Airedale Road / Otley Road ;
- Signalised Junction of Queens Road / Manningham Lane.

Any proposals that would impact on traffic movements within the Canal Corridor that could have a potential impact on the level of traffic moving through these two AQMAs would need specific consideration as to the potential impact on these areas which are already highly sensitive.

FIGURE 92: LOCATION OF AIR QUALITY MANAGEMENT AREAS IN BRADFORD



Source: Bradford District Transport Study 2009

### 10.2.5 Waterways

#### Leeds – Liverpool Canal

The Leeds – Liverpool Canal is located to the north of Shipley town centre running parallel to the Leeds Road / Saltaire Road alignment. This is a navigable waterway which is still used by a number of boats throughout the year, with some mooring up for extended stays in the local area.

The canal is used by a number of walkers, runners and cyclists for leisure purposes and to access other local destinations. The towpath is of good quality and can be used to access Leeds city centre, Bingley and Keighley and other more local destinations en-route.

#### Shipley – Bradford Canal

Now filled in, the historical Bradford Canal ran from the Leeds – Liverpool Canal in Shipley close to Fox’s Corner through to the outskirts of Bradford City Centre along the Canal Road Corridor, now only a 20m turning head remains. There is however still significant evidence of the canal’s alignment along the corridor and basin as detailed by aerial mapping and the ground conditions report.

The 2006 report ‘Bradford Vision 2012’ had aspirational proposals to reinstate the original canal between Shipley and Bradford city centre and therefore the original alignment has been protected for potential future redevelopment. This proposal has been supported by a number of key stakeholders citing the regeneration benefits it would deliver. However it is also important to recognise that the canal would also provide a further obstacle to east / west movement should this impact upon future masterplan proposals.

#### Bradford Beck

Un-navigable watercourse that roughly follows the alignment of Canal Road. If improved this may provide an attractive feature to encourage walking and cycling movements along its alignment between Shipley and the city centre.

The feasibility of reinstating the Bradford Canal and the possible development of the existing Bradford Beck will be assessed by the project team as part of the masterplan.

### **10.2.6 Primary Analysis**

This section of the baseline report provides a site analysis of the masterplan area.

This analysis has included the following:

- An assessment of the Highway network and its operation;
- Pedestrian and cycle movements and behaviour of vulnerable modes
- An assessment of Public Transport facilities, services and patronage

The following sub-section provides details on the existing highway network.

#### Existing Highway Network

The existing highway network has been observed through a number of site visits, with local knowledge and experience provided by CBMDC officers.

The masterplan area covers a significant stretch of one of Bradford's strategic routes from Shipley in the north to the city centre and heading towards the motorway network to the south. The Canal Road Corridor feeds into 2 of only 3 routes which cross the River Aire to the north of the Bradford District which leads to significant demand in this area, The existing highway network within the masterplan area is diverse, relating to its surrounding land uses and constraints.

Bradford has two primary routes to the city centre from the North. The first, Manningham Lane / Bradford Road (A650) is located to the west of the masterplan site and is the primary public transport corridor to Shipley. The second is Canal Road (A6037), which is the focus of this masterplan. Both experience varying levels of demand throughout the day, with delay and congestion occurring during almost all peak periods at key junctions.

Canal Road provides a link between Shipley, the city centre and linkages to the M606. Currently the route is dominated by industrial and commercial uses with residential estates on the periphery. These uses generate trips to and from these sites which include a higher proportion of HGV movements.

5 At the southern end of the corridor, Canal Road meets Shipley Airedale Road (A650) which forms part of the Bradford Inner Ring Road. From here vehicles accessing the M606 travel along Wakefield Road to the Outer Ring Road (A6177) Rooley Lane and onto the M606 (approx 5km from Canal Road). The M606 provides direct access to the M62 (3.8km) and strategic destinations such as Manchester, Leeds and Huddersfield. It also provides links via the M62 to other wider strategic routes including the M1, A1 and M621.

The Canal Road corridor does not have a uniform road layout. This is due to the change in land uses bounding Canal Road and certain locations requiring increased levels of capacity and traffic management / control. Land uses vary between residential, commercial, industrial, brownfield and greenfield, each putting different demands on the existing infrastructure. The requirement to balance these contrasting

uses will be a key focus of this masterplan, particularly with new development plan proposals.

An Aimsun model is currently being developed by CBMDC for the Canal Road corridor, which contains all key junctions along its route. This model will provide an indication of where current highways capacity issues exist and where improvements are required both now and in future years when considering development and traffic growth. This model is intended to be used to assess the junctions on this route to enable the development of a business case to seek funding for road improvements most likely through LTP3.

### 10.2.7 Journey to Work Data

To establish the current travel patterns for people living within the masterplan area and also those travelling to work within the masterplan area, we have analysed the Journey to Work data from the census. This information provides a guide as to the general travel patterns for commuting behaviour and would provide a guide as to the general patterns of trip distribution for the new development trips. From the data it is possible to look at the masterplan area as both an origin of trips as well as a destination.

It should be recognised that there are many other alternative trip patterns that also occur, such as leisure and education trips and these will be considered with the future options analysis.

The Journey to Work information for the residential trips from the masterplan area travelling out towards work based destinations are as follows in Figure 93.

Figure 93: Journey to Work Distribution for Residential Trips travelling out of the Masterplan area

To Shipley and the north	12%
To Manningham and the West	5%
To Leeds and the East	32%
To Bradford and the South	51%

Source: BDP SDF Baseline Paper Transport

The reverse flows for people commuting into the masterplan area are as follows in Figure 94:

Figure 94: Journey to Work Distribution for work trips to the Masterplan Area

From Shipley and the north	21%
From Manningham and the West	21%
From Leeds and the East	33%
From Bradford and the South	25%

Source: BDP SDF Baseline Paper Transport

### 10.2.8 Pedestrian Movement

The level of pedestrian movement differs significantly throughout the study area due to the contrasting land uses within the Canal Corridor. The highest levels of pedestrian movement are observed in the district centre of Shipley and in proximity to the Forster Square retail park.

In Shipley, Fox's Corner is a large signalised crossroads which causes severance to the north and east of the town centre. It is a particularly unwelcoming pedestrian environment, who if wanting to walk to the town centre and railway station may have to cross up to 12 lanes of traffic.

The section of road between Fox's Corner to Valley Road is dualled to cater for traffic demand. This provides a barrier to pedestrian movement as many of the crossing points are informal by central refuge island where desire lines exist.

From the junction of Otley Road and Valley Road, along Canal Road to Forster Square, pedestrian movements are not particularly significant in number with minimal movements observed. Movements that do exist relate to people accessing local services on Canal Road from surrounding residential areas, mainly for convenience goods. The majority of the Canal Road route from Valley Road is single carriageway but heavily trafficked by cars and HGVs moving from the north of the city to the centre and motorway network. This provides some sections of the route which are intimidating and unattractive to pedestrians and will need to be addressed by the masterplan and its proposals.

At the junction of Canal Road and Kings Road the carriageway again becomes much wider, with up to 7 lanes of traffic. Formal signalised crossings are not provided at appropriate points as this would reduce highways capacity and impact on the operation of the network. There are a few pedestrian movements between the City Centre, Undercliffe and Barkerend.

It should also be noted that currently, given existing land use types, there are minimal destinations on the route for people to walk to. Existing residential areas are on the edge of the masterplan boundary and would use other modes of transport to access their destinations. If walking they would use existing alternative routes in closer proximity to residential areas.

The route has the potential to be a key pedestrian route along with other sustainable modes of transport, particularly if the masterplan proposes residential development along the corridor.

### **10.2.9 Cycling**

Bradford is generally considered (or perceived) as a challenging place to cycle due to the topography of the city. The LTP has over the plan period sought to promote cycling through the development of cycling infrastructure across the city, particularly on key strategic routes to increase the modal share of cycling and encourage more trips to be made by bike.

However within the masterplan boundary there is a lack of infrastructure for cyclists, with minimal provision of facilities along the corridor consisting of a couple of pedestrian / cycle crossings, short off road routes (50m) and short sections of cycle lane.

Canal Road however provides arguably the best topography in the city for cycling with minimal changes in levels along the entirety of the route. Therefore there is significant potential to provide cycling infrastructure on this route, to support cycle use and to support further future development in the area. This has been identified by both CMBDC and Sustrans both of whom have aspirations to extend the existing NCN route 66 between Shipley and the city centre, significant investment has already been committed to the route to the south of the city centre through the Low Moor link to Spen Valley Greenway and Connect2 living streets project.

Similarly to bus services, Manningham Lane / Bradford Road has on street cycle lanes along almost the entire route between the city centre and Shipley town centre. This route was developed due to the wider residential catchment on this route that could be captured. Should the Canal Corridor be developed further, cycling infrastructure becomes more feasible in terms of delivering a successful scheme.

The national cycle network (NCN) has two routes which run through Bradford. Route 696 runs from east to west across the north of Fox Corner along the canal linking Bingley, Saltaire, Shipley, Baildon and Thackley. The second route is 66 which runs from Oakenshaw (South Bradford) to the city centre, there is a desire to extend this route to the north of the city to provide a linkage with route 696, this could potentially be delivered through the masterplan. Sustrans has also suggested a desire to reinstate the Bradford Canal Towpath as a future cycle route to connect Shipley to the city centre.

Cycling in Bradford is considered by the Council and Sustrans to be an undervalued mode of transport and they are continuing their efforts to promote cycle use, this should be fully supported by the masterplan this includes not just north / south movements but also cross valley and boundary movements where appropriate. Sustrans and the CBMDC Transport Planning officers will be consulted throughout the masterplan development.

#### **10.2.10 Public Transport – Rail Services**

Within the study area there are three existing railway stations on the Leeds / Bradford and Wharfedale lines, providing services to various local and regional destinations.

These are:

- Shipley – located to the east of Shipley town centre (Shipley also provides access to the Airedale and Leeds to Morecambe lines);
- Frizinghall – located to the east of Frizinghall and Heaton Grove; and
- Bradford Forster Square – located to the east of the city centre within the Forster Square retail park.

Shipley station provides services to the following key local and regional destinations – Leeds, Saltaire, Keighley, Skipton, Bramley, New Pudsey, Guiseley, Menston,

Ilkley. The key linkage relating to the Canal Corridor is the route between Shipley, Frizinghall and Forster Square where the railway line follows the valley basin in to the city centre.

There are a minimum of 4 services per hour during the day between Forster Square, Shipley and Leeds, during peak periods up to 7 services (some requiring change at Shipley). The journey times from Forster

Square are Frizinghall 3 minutes, Shipley 7 minutes and Leeds 23 minutes. This shows that the service is a viable route for travel between the Canal Corridor and 2 city centres. During peak periods demand for services to Leeds is significant, with many services running over capacity, this is a key issue as demand must be catered for to maximise movements by sustainable modes.

Further to this the rolling stock used on these routes are modern (mainly class 333) of high quality and are an attractive mode of transport for users. This has been shown by the increased demand at Shipley Station with year on year increases in passenger numbers, rising from 0.863m passengers in 2005/06 to 1.275m passengers in 2008/09. Patronage level surveys are limited, but these figures show the potential for attracting further passenger numbers on this strategic regional rail link should capacity be able to be increased.

The Connecting Airedale Strategy has identified the potential re-introduction of a station located in Manningham around the existing Queens Road railway bridge at a cost of approximately £11.8m, producing a cost benefit ratio of 2.2:1. This scheme would provide a local and accessible service to the surrounding catchment, which are identified as some of the most deprived wards in Bradford. The future feasibility of this station should be investigated further as part of the options development stage.

Currently there is no direct rail linkage between the Bradford Interchange (located in the town centre) and Bradford Foster Square station, therefore there has been a desire to determine the feasibility of establishing a rail link between the two stations. Recently interest in the scheme has again resurfaced and early feasibility has determined the scheme to be technically viable and deliver a number of benefits.

However it is our view that given cuts in transport expenditure, it is not expected that a high enough cost benefit could be achieved to promote the scheme for government

funding. This linkage is currently provided by the free city bus with services running every 10 minutes 7am to 7pm and currently appears to cater for demand.

### **10.2.11 Public Transport – Bus Services**

There are a number of bus companies operating services across the city. Within Shipley and on the Canal Corridor, services are predominantly operated by First Bus running north to south to and from the city centre.

In Shipley Town Centre there are approximately 24 services operating from the Market Place with varying levels of frequency to different destinations in the district. Services and bus stops appear to be well utilised.

On Canal Road, services are more limited with peak services running only 3 buses per hour, these services provide good linkages between Shipley and the city centre, but suffer from unreliable journey times due to the congestion and delay that occurs on the route. Demand for services by passengers is also limited on Canal Road as other services running parallel to Canal Road service existing catchments. The development proposals that come out of the masterplan should seek to utilise this underutilised bus route and maximise sustainable modes movement, with improvements to existing journey times, particularly in their consistency, this will be undertaken through consultation with Metro.

Along the corridor, Canal Road has bus stops spaced out at approximately equal distances through to Bradford Forster Square. There are also a number of stops on side roads which connect into Canal Road which link the other residential areas along the edges of the corridor. There are however no formal bus priority measures such as bus lanes or priority signals on the route.

It should be noted that running parallel to Canal Road to the west, Manningham Lane / Bradford Road provides significantly more services operating with a higher level of frequency between Shipley, the city centre and surrounding suburbs and has a much larger residential catchment surrounding this route. There is also an hourly service to the airport from Canal Road and Shipley Market Place.

Due to the commercial sensitivity of patronage levels, there is no quantifiable public data readily available for analysis. However to gain an understanding of bus usage

on Canal Road, the centre of the corridor, patronage levels we surveyed at the road side with the following results:

Figure 95: Canal Road Patronage Levels (Source: CBMDC)

Time Period	Total Passengers (Average Occupancy)
Inbound (07.30-09.30)	224 (14.3)
Outbound (16.00-18.00)	305 (19.1)

Source: BDP SDF baseline Paper Transport

As the masterplan is developed, bus services will play a vital role in ensuring the delivery of sustainable development and encourage those travelling to and from the area to opt for public transport services. A strategy for implementing public transport will be developed in the options stage to complement land use proposals and minimise reliance on the private car.

### 10.2.12 SWOT Analysis

A SWOT analysis has been undertaken based on the evidence base.

#### Strengths

The following strengths have been identified:

- The route currently operates as a strategic traffic route from the city centre to the north of the city to outlying suburbs and smaller settlements (with peak congestion);
- Traffic movements for much of the route are free flowing until bottlenecks are reached;
- From the corridor the motorway network can be reached easily to the south;
- Asset of an existing rail line with strategically located stations;
- Shipley and Forster Square have reasonably good access to bus services and destinations, although Shipley has scope for improved linkages;
- There is no pattern or correlation of accidents in the area;
- An Aimsun model is being developed for the corridor which will assist in determining where improvements to the network should be implemented;
- Rail services are well used with some available capacity on trains heading to Forster Square station during peak periods;
- The topography is flat along the valley basin allowing easy cycling and walking trips to be made in comparison to other parts of the city.

## **Weaknesses**

The following weaknesses have been identified:

- The corridor is a traffic dominated route and perceived as such. Is a complete image change required to facilitate change?
- Major scheme aspirations are good proposals, but costly and require government funding;
- There are a number of bottlenecks on the existing highway along the Canal Corridor which cause congestion and delay;
- If developed, waterways are unlikely to be operational for transport modes, rather being used to encourage walking and cycling movements (for pleasure / commuting);
- Unattractive pedestrian and cycle environment. Little evidence on site visits of people using Canal Road to walk or cycle;
- Access to Shipley railway station is severed from the town centre, improvements to linkages may increase public transport usage. Bus / Rail integration requires improvement to encourage public transport linked trips;
- A general lack of bus services along the Canal Road Corridor, those which exist lack reliable journey times and compete directly with train services, frequent services are provided on Manningham Lane to the west;
- No provision of formal on road cycling infrastructure.

## **Opportunities**

The following opportunities have been identified:

- To create a more attractive Corridor and change peoples perceptions of the environment;
- Use of the CBMDC Aimsun model to determine where individual highway improvements will have the maximum benefit;
- Implementation of highway schemes that increase capacity and improve traffic movements across the Corridor;
- Retain the corridor as a strategic road route, but also be part of an improved environment that caters for all transport modes and land uses;
- Improvements to public transport, particularly connecting future masterplan proposals to the city centre without the need for a private car;

- Encourage further pedestrian and cycle movements by ensuring masterplan development proposals are sustainable;
- Connect existing land uses and improve cross boundary interconnectivity;
- Complimentary land uses to stop trips being made in the first place.

### **Threats**

The following threats have been identified:

- Modelling shows the route cannot accommodate development due to capacity constraints without significant investment;
- The route is only considered as a strategic road route, a potential opportunity missed to create a better environment?
- Changes to land uses exacerbate existing highway capacity problems if appropriate mitigation is not identified and implemented;
- Major scheme proposals unlikely with current central government funding cuts.

### **10.2.13 Conclusion**

The previous sub sections have provided a baseline assessment of the existing transport and movement elements within the masterplan area. It has identified some to be raised that will be assessed as part of the options development stage, including:

- How can new development be accommodated on an already congested network, particularly a large residential scheme?
- Some key junction improvements have already been identified. Will these still be relevant based on the CRC AAP proposals? Are more required?
- How can sustainable modes movement and public transport use be maximised, and delivered by project proposals?
- How can the right mix of land uses be achieved so that people are able to walk to meet their needs without having to use motorised transport?

### **Conclusions**

- The Canal Corridor is a Strategic Transport Route (road and rail) in the district.
- The Railway line is a key asset with conveniently located rail stations.

- Canal Road Corridor is well placed to take advantage of existing and potential future public transport opportunities in the area. Bus accessibility is generally very good, and rail access is provided in the north at Frizinghall and in the south at Forster Square.
- The CRC topography offers the best opportunity to develop cycling in Bradford. The Area has been identified by the council and Sustrans for a new high quality cycle route.
- The Transport Study found that any Core Strategy option taken forward will cause significant local impacts on the transport network which will require mitigation in terms of improved public transport provision and in some cases improvements to the highways network.
- The CRC AAP will need to ensure that significant impacts on CRC are minimised.
- There is unlikely to be significant public funds for major transport schemes in the short to medium term for the CRC, however smaller improvement schemes to improve congestion are planned in the LTP3 for CRC.
- High traffic volumes lead to congestion and delay on the highways and also at times limited capacity on the railways.
- Stations along the corridor have limited parking or are severed by major highways / topography.
- A package of smaller highway improvements along the corridor could improve operation and meet the demands for additional development traffic.
- There are 2 Air Quality Management Areas (AQMA) within close proximity of the masterplan boundary. Any proposals that would impact on traffic movements within the Canal Corridor that could have a potential impact on the level of traffic moving through these two AQMAs would need specific consideration as to the potential impact on these areas

## 11.0 Environment

This section of the report appraises the current environmental situation across the CRC and also reviews the existing and ongoing studies that deal with the issues. A wide range of research and study materials have been investigated to compile the facts on these subject areas. Some of the reports are-

- Air quality action plan – consultation draft July 2009  
<http://www.bradford.gov.uk/NR/rdonlyres/087E4D90-F5EE-4AF8-B13A-E129B262D65E/0/CompleteDraftAirQualityActionPlanv6FinalDraft.pdf>
- Low Carbon & Renewable Energy Capacity in Yorkshire and Humber.  
AECOM. Local Government Yorkshire and Humber  
<http://www.yourclimate.org/pages/low-carbon-renewable-energy-capacity-yh>
- Saltaire Hydropower Feasibility Study Final Report June 2012, CBMDC  
[http://www.bradford.gov.uk/bmdc/the\\_environment/climate\\_change/Hydro\\_Power\\_Scheme](http://www.bradford.gov.uk/bmdc/the_environment/climate_change/Hydro_Power_Scheme)

### 11.1 Air Quality

The Environment Act 1995 introduced the National Air Quality Strategy and the requirement for local authorities to determine if statutory air quality objectives are likely to be exceeded. All local authorities now report to DEFRA on an annual basis, and have the obligation to declare Air Quality Management Areas and develop action plans for improvement of air quality if objectives are likely to be exceeded.

Bradford has prepared an Air Quality Action Plan in draft that aims to make progress towards achieving the annual mean NO<sub>2</sub> objective within the district as whole and the Air Quality Management Areas (AQMAs) in particular.

The action plan states that measurements and projections of air quality suggest that the air quality objective for NO<sub>2</sub> may be achieved by 2010 in the Manningham Lane and Thornton Road AQMAs under business as usual projections meaning additional local measures to reduce emissions in these AQMAs are of lower priority in terms of local air quality management. However, air quality in the remaining two AQMAs – Mayo Avenue and Shipley Airedale Road is predicted to exceed the objective through until at least 2015 unless action is taken to reduce pollutant contributions (NO<sub>2</sub> in particular) from road transport by 25-40%. Therefore additional measures to

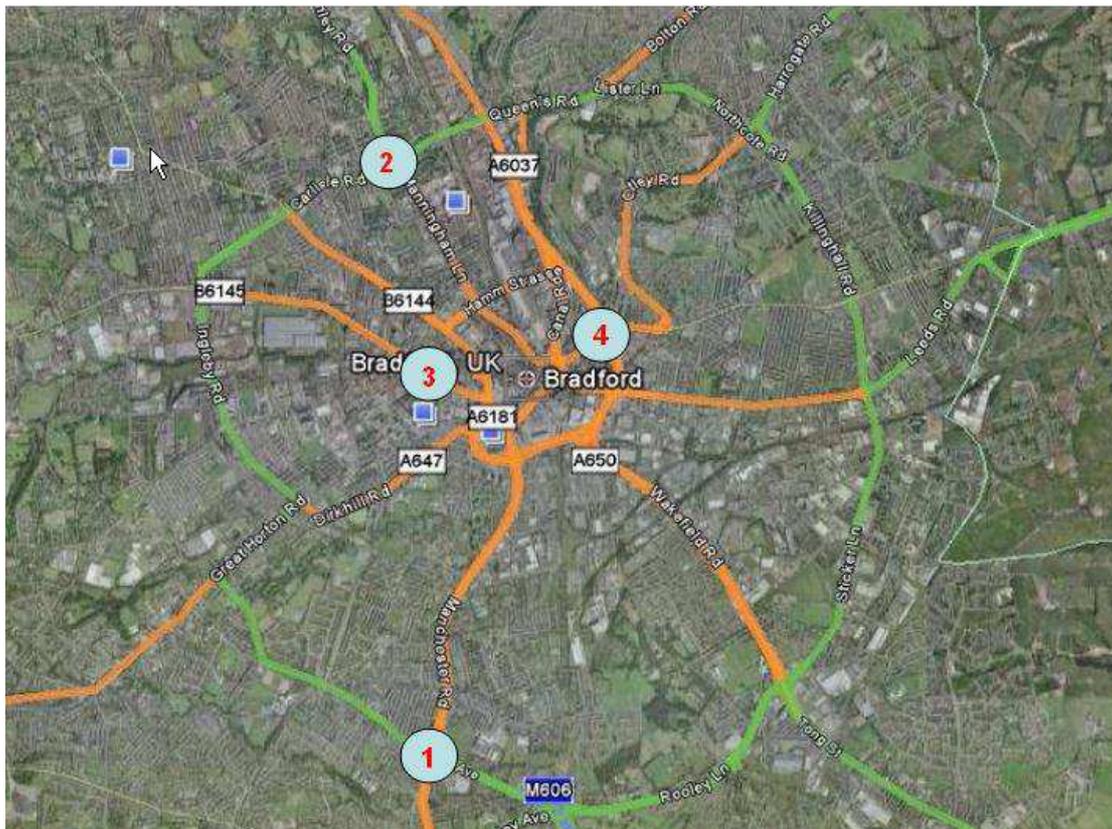
reduce emissions in these AQMAs are a higher priority in terms of local air quality management.

There are 2 AQMA within close proximity of the masterplan boundary, these have been designated due to the volume of traffic that use these key junctions and the congestion caused by the level of demand. The AQMAs are located at:

- Signalised junction at Shipley Airedale Road / Otley Road ;
- Signalised Junction of Queens Road / Manningham Lane.

Any proposals that would impact on traffic movements within the Canal Corridor that could have a potential impact on the level of traffic moving through these two AQMAs would need specific consideration as to the potential impact on these areas which are already highly sensitive.

FIGURE 96: LOCATION OF AIR QUALITY MANAGEMENT AREAS IN BRADFORD



Source: Bradford District Transport Study 2009

## 11.2 River and Water Quality

The water and ecological quality of the Bradford Beck is classified as poor by the Environment Agency. A summary of their monthly data can be seen on the *What's in your backyard* part of their website (<http://www.environment-agency.gov.uk>). The Beck does not reach the target grade of "good" due to excessive concentrations of ammonia and cypermethrin and to poor invertebrate quality.

The Aire Rivers Trust, with the help of volunteers and the University of Sheffield, is intensively monitoring a wide range of water quality parameters during the latter part of 2012. Results from the first four sampling rounds confirms that water quality is poor, with high levels of organic matter, ammonia, phosphorus and some metals. There appears to be industrial waste waters entering via the Westbrook, Eastbrook and Bowling Beck tributaries, and some residential waste waters through misconnected drainage. At least two major pollution incidents with sewage and construction discharges direct to the Beck, have occurred in the period. A full interpretation of the survey, including analysis of organic chemicals, will be available by the end of 2012.

The Beck is classified as "poor ecological quality" under the Water Framework Directive. The Aire Rivers Trust is currently working with the Environment Agency, Yorkshire Water, CBMDC and others to create an agreed catchment plan to address these and related issues of flooding and urban redevelopment. This plan represents an opportunity to understand how the Beck might be restored.

### **11.3 Renewable Energy**

Low Carbon & Renewable Energy Capacity in Yorkshire and Humber study provides a description of the renewable energy resource for each local authority in Yorkshire and Humber. These should be considered a high level summary of the resource and only facilities above 1 MW are discussed.

The technologies have been categorised as follows.

- Commercial scale wind energy;
- Hydro energy (small scale, low head);
- Biomass (including energy crops, managed woodland, industrial wood waste and agricultural arisings, or straw);

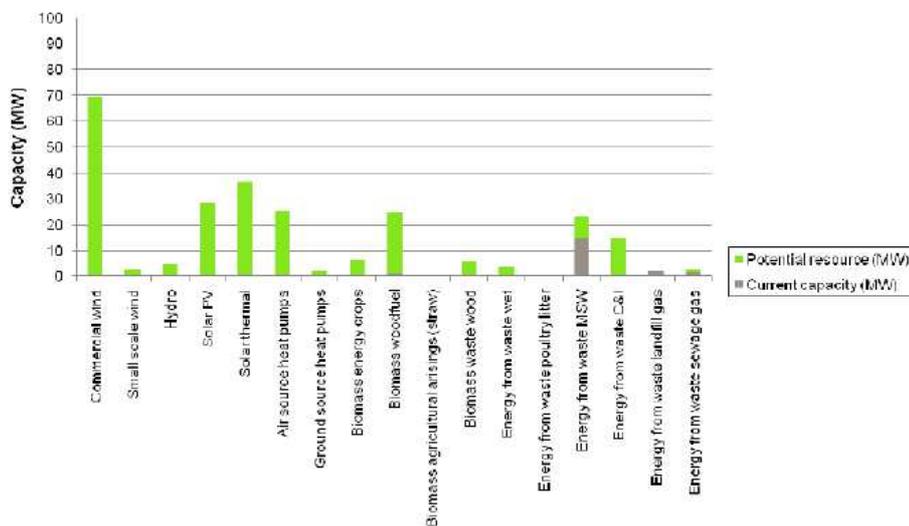
- Energy from waste (including AD from slurry, food and drinks waste, poultry litter, municipal solid waste, commercial and industrial waste arisings, landfill gas production and sewage gas production);
- Microgeneration (including small scale wind energy, solar, heat pumps and small scale biomass boilers).

The report states that the city of Bradford has the density necessary to support district heating networks. The Energy Opportunities Plan shows that there are many public buildings in the city that could provide anchor loads for such networks. Other renewable energy opportunities in the district include wind and hydro opportunities. There is currently one hydro generation plant operating in Esholt, and a potential site identified at Greenholme Mills on the border with Harrogate district.

Bradford’s hydro potential is among the best in the region and their installation should be sought and supported wherever feasible.

Planning permission was granted to BioGen Power in April 2010, to build the world's largest gasification based Energy Recovery Facility to be fuelled by residual waste in Bradford, capable of processing 160,000 tonnes of residual waste.

Figure 97: Current Capacity and energy Resource in Bradford



Source: Low Carbon & Renewable Energy Capacity in Y&H

A set of Energy Opportunities Plans has been produced to act as spatial planning tools that will allow assessment and prioritisation of energy opportunities. They show the economically viable resource for those renewable energy technologies that are restricted by geographical constraints.

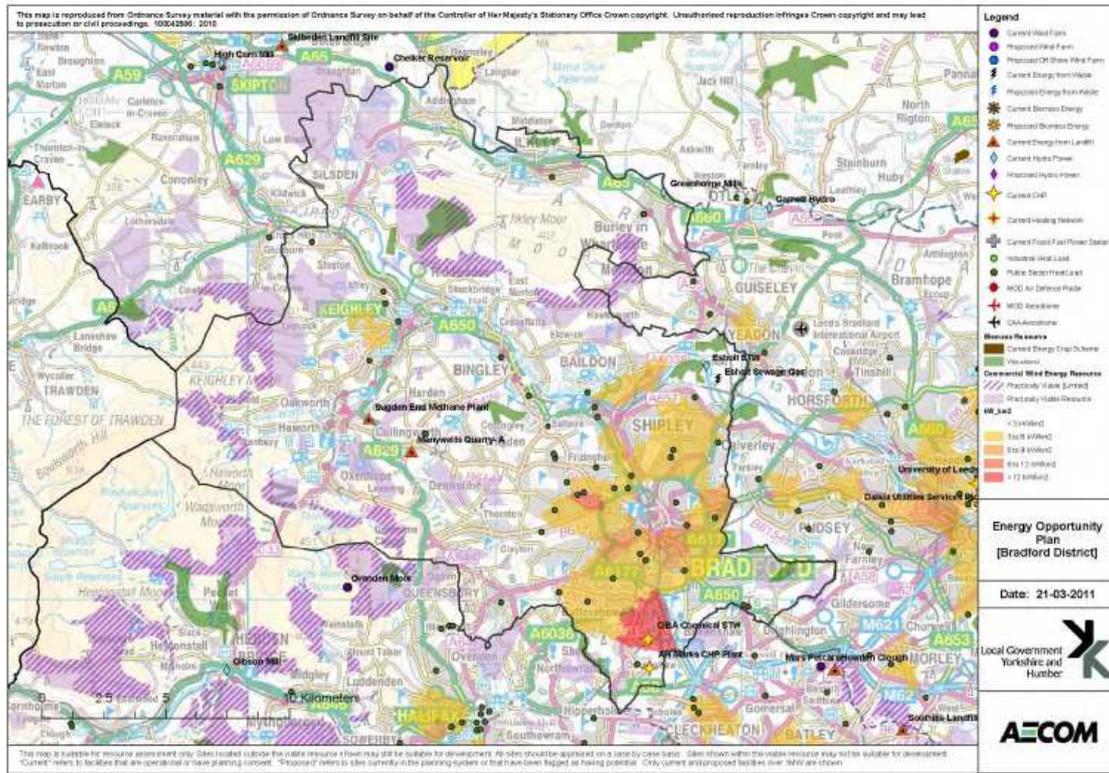
They should assist in developing planning policies, targets and delivery mechanisms within the LDF process of local authorities, and can bring added benefit and support to regional and sub-regional strategy and policies and related corporate documents.

The following information is shown on the Energy Opportunities

Plans:

- Current fossil fuel power plants over 1MW (grey cross symbols).
- Current and proposed energy from waste plants over 1MW (black and blue lightning bolt symbols).
- Current and proposed wind farms over 1MW (purple circle symbols).
- Current and proposed biomass plants over 1MW (brown asterisk symbols). Sites where biofuels could be produced are not shown as assessment of these are outside the scope of the study.
- Current landfill sites (orange triangle symbols).
- Current CHP plants over 1MW (yellow star symbols).
- Current district heating or communal heating networks (red star symbols).
- Areas of woodland that could provide biomass (dark green shading).
- Areas of existing energy crop schemes that could provide biomass (brown shading).
- Areas where commercial scale wind turbines could be economically viable (purple shading).
- Areas where commercial scale wind turbines could be economically viable, but the size and scale of turbines may be restricted due to landscape sensitivity or environmental sensitivity concerns (purple, hatched shading).
- Areas with potential for hydropower (blue diamond symbols).
- Areas where there is sufficient heat demand from existing buildings to justify establishing a district heating network with CHP that could be economically viable (red, orange shading).
- Possible heat anchor loads, including public sector assets, leisure centres, schools and hospitals (dark green dot symbols).

Figure 98: Energy Opportunities Plan



Source: Low Carbon & Renewable Energy Capacity in Y&H

The energy Opportunity Plan for Bradford shows that the CRC has the potential for establishing a district heating network.

### 11.4 Microclimate

Microclimate conditions of the site have to be born in mind throughout the development of the masterplan in order to enhance the environmental opportunities of the site, increase the sense of wellbeing in the local community and maximise the economical benefit of the site. A site-specific microclimate analysis has been carried out to identify possible passive and active opportunities for the site. Factors looked at include average temperatures and solar paths, average humidity and precipitation levels and predominant wind directions and average speeds. The most appropriate passive and active technologies have been highlighted accordingly.

The Bradford area enjoys long day-hours in the summer months as opposed to the relatively short day-hours in the winter period. The site also has a high average cloud covering factor resulting in solar gains from diffuse radiation –

from overcast sky, being slightly higher than the solar gains from direct radiation – from clear sky.

Technology-wise, solar thermal collectors would be preferred over photovoltaic panels as the former take profit of direct as well as diffuse solar radiation and are a cheaper technology. Ideally the solar thermal collectors would be located in high spaces and rooftops to prevent damage and minimise shadow casting over them.

Prevailing wind directions for the Bradford area are from the south at an average speed of 20km/h (5m/s). The relatively high surrounding hills could thus pose an opportunity for the introduction of wind farms, subject to other factors such as heritage and flight paths.

### **11.5 Renewable Energy Projects**

In terms of specific proposals for renewable energy in the CRC area the council is currently consulting on a proposal to install an Archimedes Screw-type turbine and fish pass in Saltaire on the river Aire next to the Roberts Park side of the weir. The turbine would harness power from the flow of the River Aire at Saltaire Weir to generate approx 371,000 KWh a year of electricity.

The scheme would contribute to the council's renewable energy targets of generating 20% of its energy needs by renewable energy sources by 2020.

A Feasibility Study has been produced for the turbine

[http://www.bradford.gov.uk/bmdc/the\\_environment/climate\\_change/Hydro\\_Power\\_Scheme](http://www.bradford.gov.uk/bmdc/the_environment/climate_change/Hydro_Power_Scheme)

### **11.6 Land Contamination**

The information presented within this section is based on the BDP SDF Ground Conditions Baseline Paper and Infrastructure and Constraints Paper which reviewed the available sources listed below.

- A Geological Background for Planning and Development in the City of Bradford Metropolitan District. C. N. Waters et al / British Geological Survey 1996 WA/96/1
- Mining in the Elland Flags: A Forgotten Yorkshire Industry C. G. Godwin / British Geological Survey 1984 BGS Reports Volume 16 No 4

- Contaminated Land - A Guide to Submitting Planning Applications for Development on Contaminated Land City of Bradford Metropolitan Council Undated Unreferenced Leaflet

### Former Land Uses

Former land uses have been categorised into potentially high, medium and low risk for future development. The areas affected by potentially high risk former land use categories are indicated in Figures X to X in res. Other Brownfield sites considered to be lower risk e.g. works, mills, depots etc have also been identified on this plan, but these are shaded orange.

It should be noted that potential risk has been categorised on the basis of former land use mapping sources only. Due to the size of the subject area, the number of sites within the area and the variety of former industrial uses, it is not within the scope of this report to establish which sites may already have been the subject of investigation and remediation. Consequently some sites identified as potentially high risk on the basis of former land use, may have been subject to intrusive investigations and/or remediated.

A number of sites are likely to be subject to, or scheduled for Part 2A inspections. However, it is understood that none of the sites in the study area have been determined as contaminated land by the Local Authority as yet. As such it is likely that remediation within the Masterplanning area would be regulated mainly via the planning process, through the use of appropriate planning conditions relating to

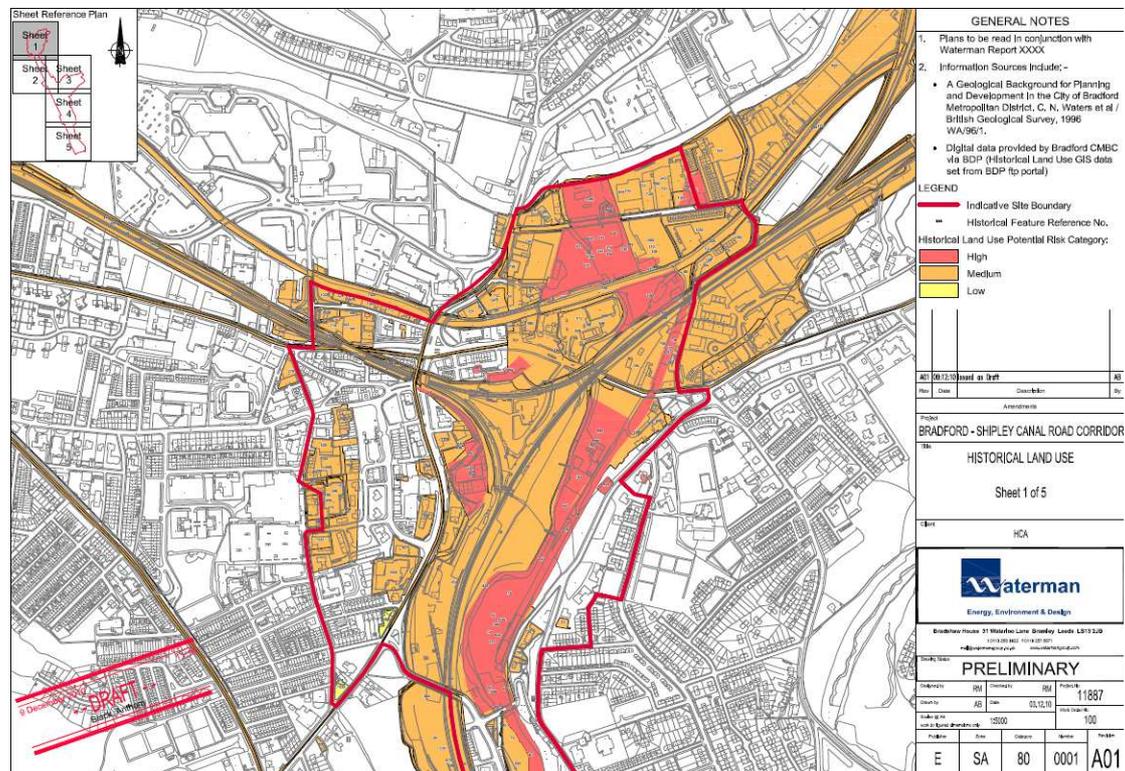
- Adequate investigation and risk assessment;
- Development of a suitable remediation strategy;
- Submission of investigation and strategy reports to the Local Authority for approval; and,
- Implementation and validation of the strategy.

Bradford has a complex industrial past therefore the Council provides guidance and recommend a proactive approach when dealing with brownfield sites through the planning process. Even where there is only suspicion of contamination, the planning authority encourages developers to submit a Phase 2 Site Investigation Report prior to any grant of planning permission.

The categories of former land use shown on Figures 99 to 103 provide a high level assessment of potential risk only. However, for Masterplanning purposes, sites indicated as high risk should be expected to arise as a potential liability and require remediation prior to redevelopment unless proven otherwise through direct investigation. The positive effect of any such remediation would be to bring land back into beneficial use, increasing the opportunities available within the wider Masterplan.

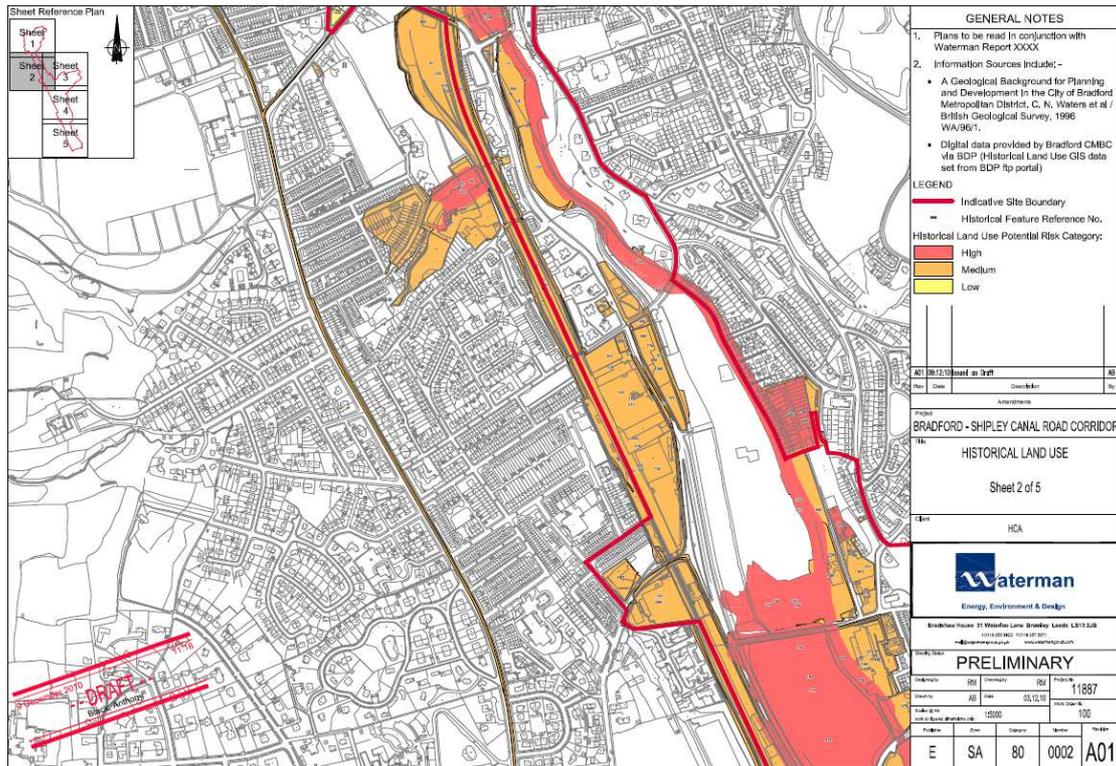
Sites indicated as medium risk should also be expected to require remediation although the level of remediation may be lower.

Figure 99: Former Industrial Site Uses Drawings



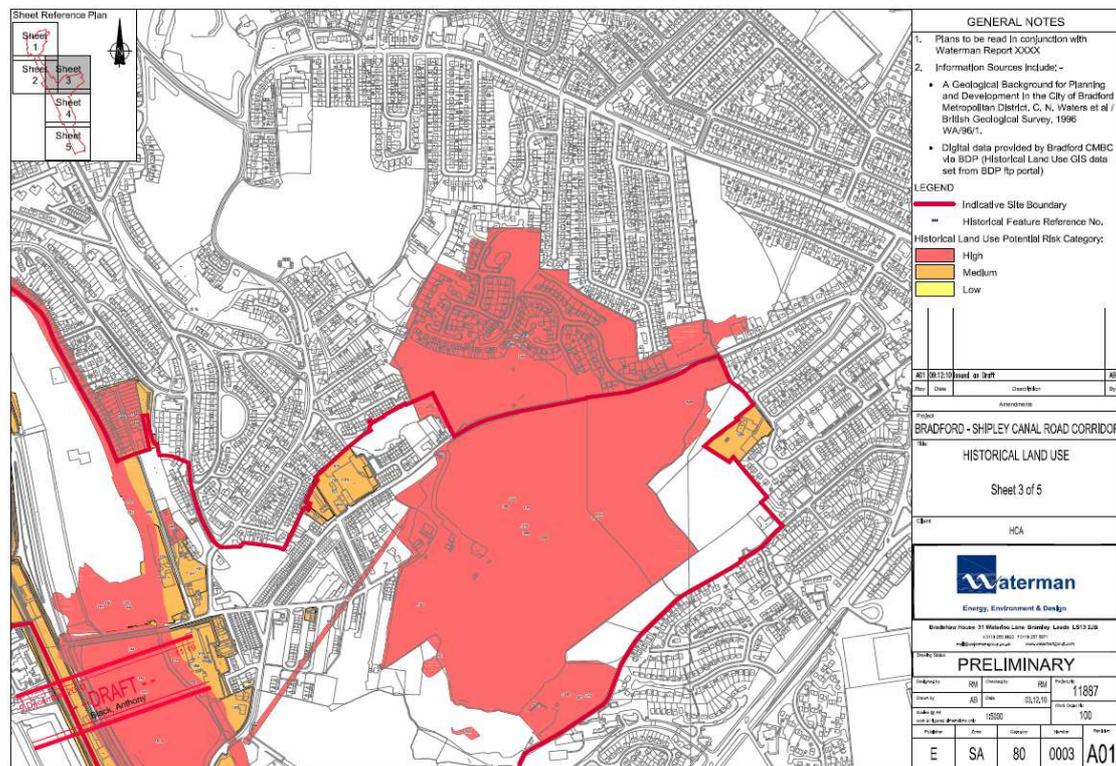
Source: BDP SDF Baseline Paper: Ground Conditions

Figure 100: Former Industrial Site Uses Drawings



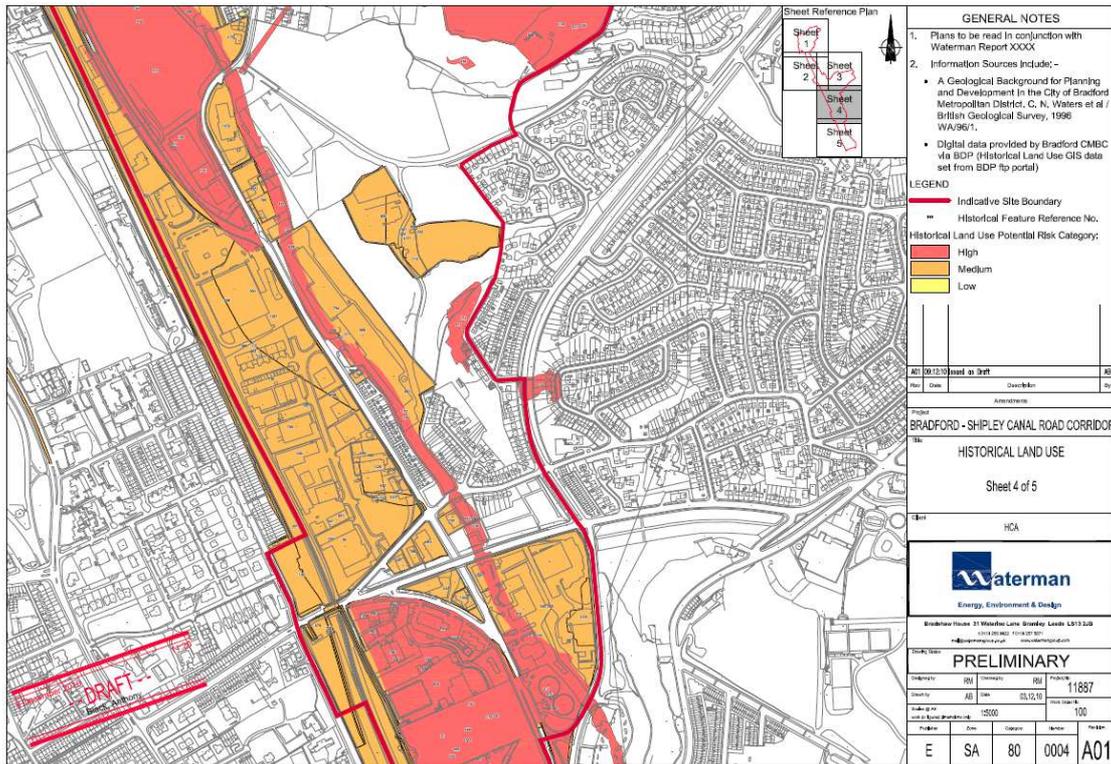
Source: BDP SDF Baseline Paper: Ground Conditions

Figure 101: Former Industrial Site Uses Drawings



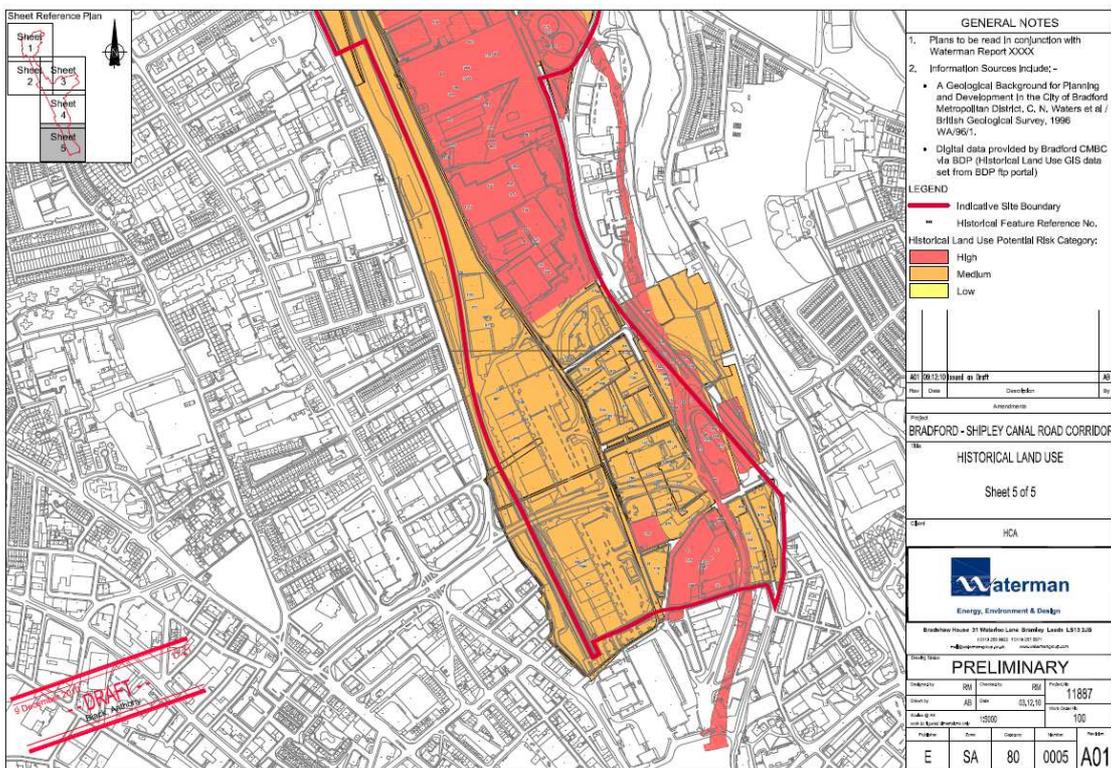
Source: BDP SDF Baseline Paper: Ground Conditions

Figure 102: Former Industrial Site Uses Drawings



Source: BDP SDF Baseline Paper: Ground Conditions

Figure 103: Former Industrial Site Uses Drawings



Source: BDP SDF Baseline Paper: Ground Conditions

## 11.7 Ground Conditions/Former Industrial Land Uses

### Ground Conditions

In addition to issues associated with mining and quarrying discussed above, the superficial deposits prevalent through the study area include:

- Made Ground / Filled Ground;
- Alluvial Deposits; and,
- Glacial Deposits.

The presence of made ground / filled ground should be anticipated in former quarries, areas subject to earthworks, demolition, mining, quarrying or waste disposal activity as indicated on the drawings. However the depth and nature of made ground / filled ground is likely to be highly variable; as such it can only be addressed on a site specific basis and is not considered further here.

Alluvial deposits however occur extensively through the central part of the study area running along the channel and floodplain of Bradford Beck, which has been culverted and artificially channelized along much of its length. Alluvial deposits are extremely variable in composition, typically consisting of very soft to firm sandy, silty clays and silts, in places reaching significant depth (possibly 15-20m in thickness).

Alluvial deposits are characterised by significant groundwater content, low bearing capacities and high compressibility. Foundations in these areas may therefore be required to mitigate the effects of high total and differential settlements and allowances should be made for: deep foundations such as piles, ground improvement; groundwater control; increase capping to trafficked areas and shoring of excavations. Additionally, alluvium is generally unsuitable for use as an engineered fill material.

### Gradient

The western flank of Bolton Woods is affected by significant gradients.

Sites affected by gradients of around 1 in 8 are likely to require extensive earthworks and stabilisation to mitigate risks associated with slope stability and to provide sufficiently level development platforms. Sites including extensive areas steeper than

this may not prove suitable for built development and alternative end-uses may need to be identified.

Sites affected by significant gradients and potential slope instability can also be regulated through the planning process, for example through planning conditions relating to development on unstable land. It should be noted that even relatively flat lying areas may need to be shown to be adequately stable if they are close to land affected by steep gradients.

### **11.8 Hazardous Installations**

Within the District there are certain sites and pipelines for example High Pressure Gas pipelines designated by the Health and Safety Executive (HSE) as notifiable hazardous installations because of the quantities of hazardous substances stored, used or transmitted.

Hazardous substances and their specified quantities are set down in The Planning (Hazardous Substances) Regulations 1992 as amended by The Planning (Control of Major- Accident Hazards) Regulations 1999 (COMAH). These latter regulations implemented the land use planning requirements of the Seveso II Directive [Council Directive 96/82/EC of 9 December 1996]. The notifiable installations under these regulations, as at April 2002, are listed below and shown on the RUDP proposals maps.

Sites within CRC Designated Under the Control of Major Accident Hazards (Planning) Regulations 1999 (Comah) (*Sites As At April 2002*).

#### Bradford North

- . British Gas Plc, Canal Road, Bradford BN/P3.2

#### Shipley

- . Filtronic Comtek Uk Ltd, Woolcombers Shed, Salts Mill, Saltaire S/P3.1
- . Woolcombers Shed, Salts Mill, Saltaire

Bradford also has a number of sites where significant quantities of potential hazardous chemicals are used and stored. These chemical plants are a major source of local employment but the storage and use of these chemicals can place significant

restrictions on certain kinds of development in the vicinity. When considering development on land in the vicinity of COMAH sites the council aims to strike the proper balance taking account of the costs and benefits and the nature of the risk as well as the level of risk. Unacceptable risk is determined with regard to what is considered to be an acceptable level of safety in relation to the potential accident affects on people in the surrounding area, taking account of HSE advice and appropriate comparable acceptable levels of risk.

## **11.9 Flood Risk**

This section of the baseline summarises the key issues relating to flood risk and water management that will need to be addressed in development of the Masterplan.

### **11.9.1 Bradford's Drainage System**

Flood risk in Bradford is influenced by the relatively steep natural topography of the Bradford Basin, but more so by the impacts of the rapid growth in industry in the 19th century. The catchment is heavily urbanised, with an unusually large proportion of hard surfaces that produce large quantities of runoff, which are drained to Bradford's combined sewer system.

The sewer system was unable to cope with the rapid increase in population and a large number of overflows were constructed to relieve the system during heavy rainfall. While these reduced the effects of flooding directly from the sewer system, the untreated flows were directed into the culverted Bradford Beck and its tributaries, which did not have sufficient capacity to deal with them. This resulted in significant flooding from the Bradford Beck, which affected the City Centre on average once every ten years.

To reduce the impact of flooding, the Bradford Beck Flood Alleviation Scheme was constructed in the early 1990s, which consisted of a diversion tunnel designed to allow storm flows to bypass the City Centre and prevent flooding for up to a 1 in 50 annual probability event.

### **11.9.2 Sources of Flood Risk**

Fluvial Flooding

The main source of flood risk to the Masterplan is from the Bradford Beck, which is culverted along the majority of its length from the City Centre to Queens Road. From here to its confluence with the River Aire at Shipley, the Beck is predominantly a lined open channel, although with some culverted sections.

The risk of flooding from the Bradford Beck has been significantly reduced by the diversion tunnel, however there are two areas within the Masterplan which do not achieve this standard of flood defence:

- A 300m length of culvert along Canal Road between the junctions of Holdsworth Street and Valley Road, which has a 1 in 20 year capacity; and
- The channel at Perseverance Mills adjacent to Shipley Gauging Station, which floods during storm events exceeding the 1 in 1 year event.

The alleviation scheme included proposals to raise the standard of defence in both these sections to 1 in 50 annual probability; however CBMDC have advised that these works have not yet been carried out.

CBMDC have confirmed that Perseverance Mill adjacent to Shipley Gauging Station suffered flooding in 2005; Oswin Mill and land adjacent to Poplar Road were also affected. Private flood defences have since been constructed at Oswin Mill to increase its level of protection.

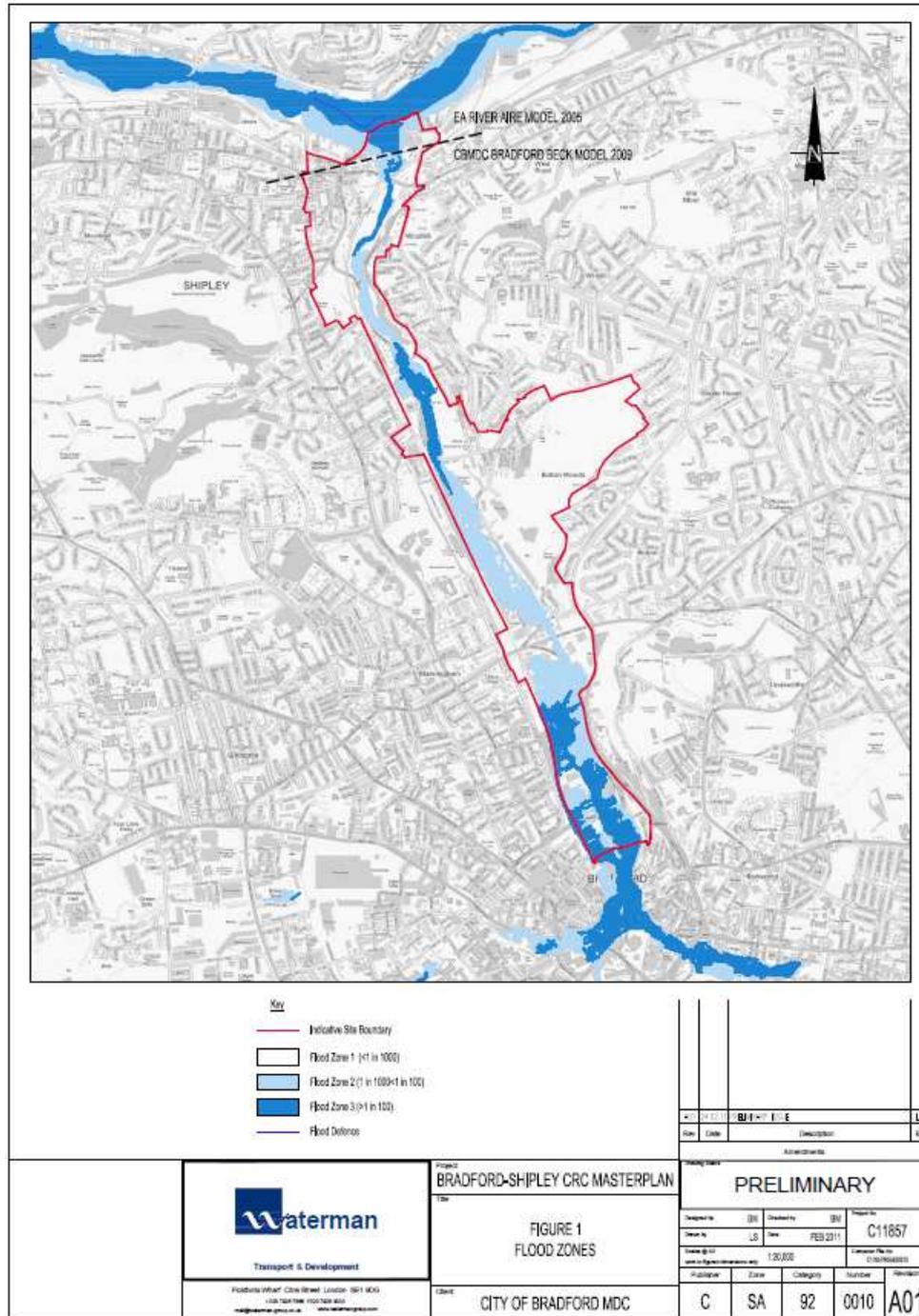
Shipley is also at risk of fluvial flooding, but from the River Aire rather than the Bradford Beck. Although there are few formal flood defences along the river, there are significant washlands upstream of Bradford to the west, which help to hold back and reduce the peak flood flows. At Shipley there are some local private flood defences which the EA have advised should prevent flooding for up to the 1 in 50 event.

Mapping provided by the EA confirms that Shipley was not affected by the November 2000 floods; however a narrow strip of land along the northern Masterplan boundary was affected in February 2002.

Flood modelling and mapping by the EA and CBMDC confirms that significant areas of the Masterplan are within Flood Zones 2 and 3 (Figure 104) and that there are also

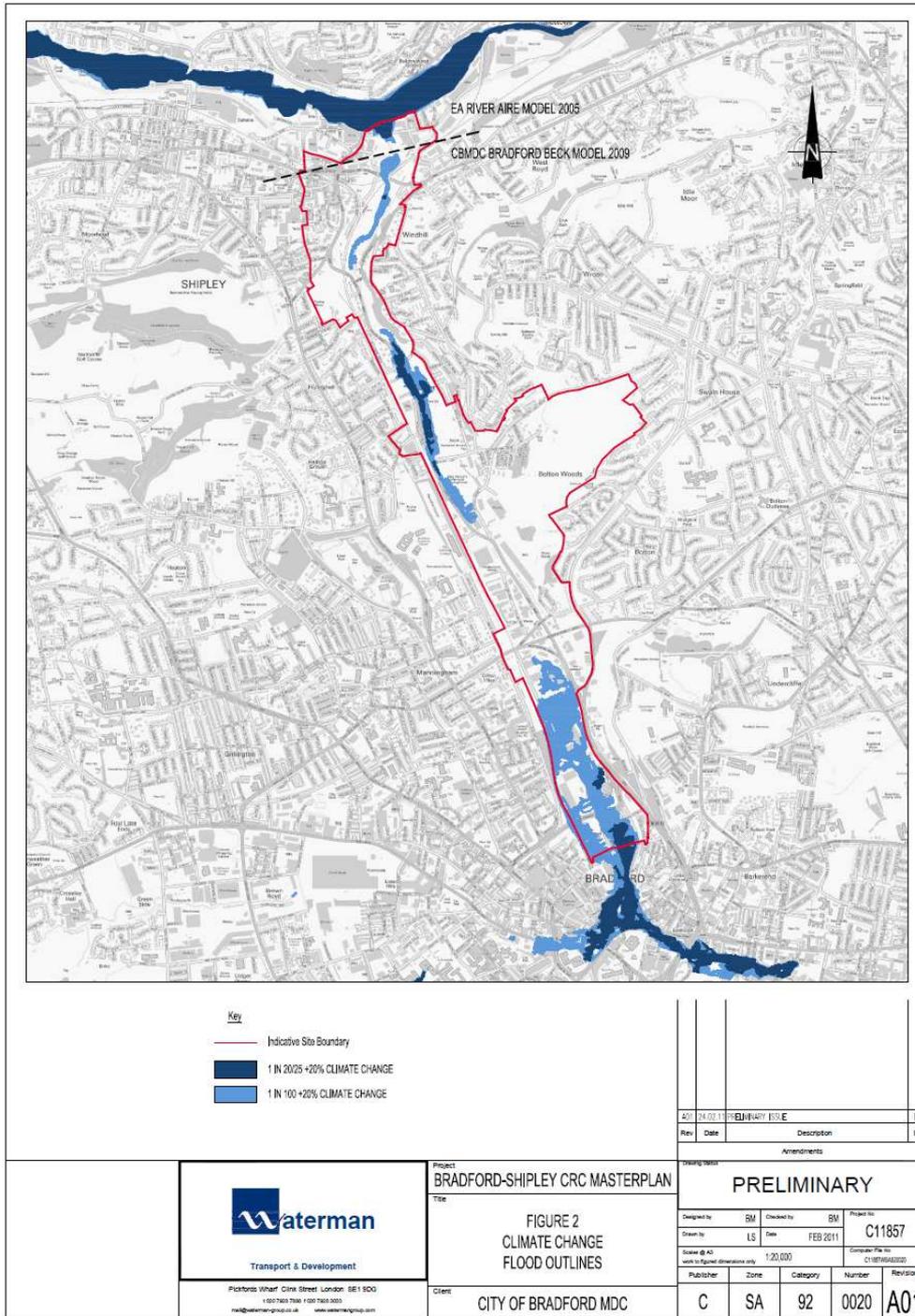
limited areas within the functional floodplain which would be expected to flood during a 1 in 25 annual probability event or less (Figure 105).

Figure 104: CRC Flood Zones



Source: BDP SDF Baseline Paper: Flood Risk

Figure 105: CRC Climate Change flood outlines



Source: BDP SDF Baseline Paper: Flood Risk

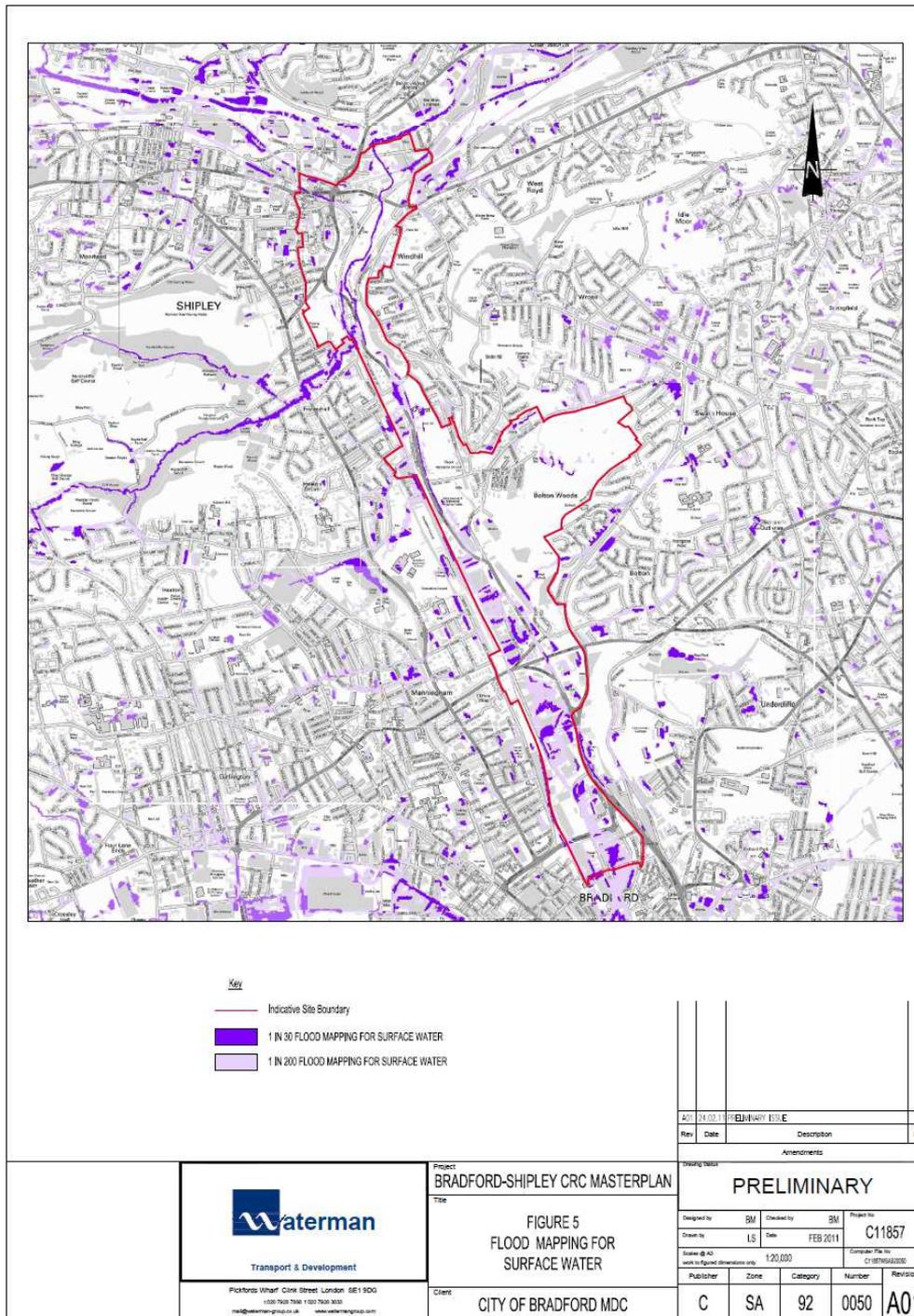
This elevated flood risk will have implications on the siting of new development in accordance with national and local planning policy.

Pluvial Flooding

Pluvial flooding is caused by rainfall but does not emanate from watercourses, instead being generated by surface water flows which can be exacerbated by water surcharging from the sewer system. In Bradford's case, the combined sewer system is relieved by CSOs to the Bradford Beck so pluvial flooding would generally be caused by rainfall that exceeds the capacity of the local drainage systems.

Figure 106 indicates the potential extent of pluvial flooding in Bradford during the 1 in 30 and 1 in 200 rainfall events. It should be noted that the accuracy of this mapping is likely to be lower than that of the fluvial flood outlines because the surface water mapping is based on general assumptions of runoff coefficients and sewer capacity; however it is useful in indicating likely overland flow routes.

Figure 106: Flood Mapping for Surface Water



Source: BDP SDF Baseline Paper: Flood Risk

### Groundwater Flooding

There is relatively little groundwater recharge within the catchment due to the very high proportion of hard surfaces and groundwater levels are understood to be low.

The EA were unable to advise on any locations where there is an elevated risk of groundwater flooding in Bradford. Groundwater flooding is usually associated with permeable catchments within which groundwater levels can slowly rise following significant wet spells of weather. However, Bradford's geology comprises superficial boulder clays and alluvial deposits overlaying mudstones and shales, which are likely to form an aquiclude, preventing groundwater from rising sufficiently to cause problems above ground.

A Surface Water Management Plan (SWMP) is being undertaken, which will ensure that all forms of flooding are appropriately assessed and that information is shared between the partners (CBMDC, the EA and Yorkshire Water) and stakeholders.

### **11.9.3 Constraints to Development**

The Technical Guidance to the NPPF retains key elements of Planning Policy Statement 25 which requires that the sequential and exception test should be undertaken for all new development proposed within Flood Zones 2 and 3. The policy assumption is that development should be steered away from areas at risk of flooding. Where development is proposed in these areas, the sequential test would need to demonstrate that there are no alternative sites that would be suitable for that development type at a lower risk of flooding.

As shown in Figure 104, there are significant areas within Flood Zones 2 and 3 and it is recommended that a Masterplan-wide sequential test should be undertaken so that any policy led restrictions in development can be fully understood. It is anticipated that the Strategic Flood Risk Assessment (SFRA) that is due to be published shortly will advise further on this issue.

Figure 105 shows land at risk of flooding in the 1 in 20/25 and 1 in 100 annual probability events, including for the impacts of climate change. New development is not considered appropriate within the functional floodplain (Flood Zone 3b – 1 in 20/25), so this land should be set aside for water compatible development, e.g. public open space.

The EA's current policy is that any development within the 1 in 100 plus climate change flood outline must not reduce the available flood storage. Therefore, ground raising should be avoided in this area, as should any increase in building footprint.

However, compensatory floodplain storage could be provided to offset any loss of storage if development was strictly necessary in these areas.

Although floodplain compensation is not strictly required for development within the pluvial floodplain, the impacts of such flooding on development should be accounted for. For example, development should not block the natural flow routes identified in Figure X and the ability of emergency vehicles to negotiate flood water flowing across the highway should be considered.

#### **11.9.4 Potential Mitigation Measures**

The first assumption should be to avoid new development within the floodplain. However, where this is necessary due to a lack of available alternatives a strategy for flood mitigation could be developed. This should first consider strategic flood risk management (e.g. flood defences, upstream storage) and then local measures within the development plots, i.e. flood resilient design.

Flood defences could be considered adjacent to the open stretches of the Bradford Beck north of Gaisby Lane and along the south bank of the River Aire at Shipley, however the areas that would benefit would be relatively limited. The main area of flood risk in an area that would otherwise be easy to redevelop is located south of Queens Road, where the vast majority of the Bradford Beck is culverted and ground raising would be a better alternative.

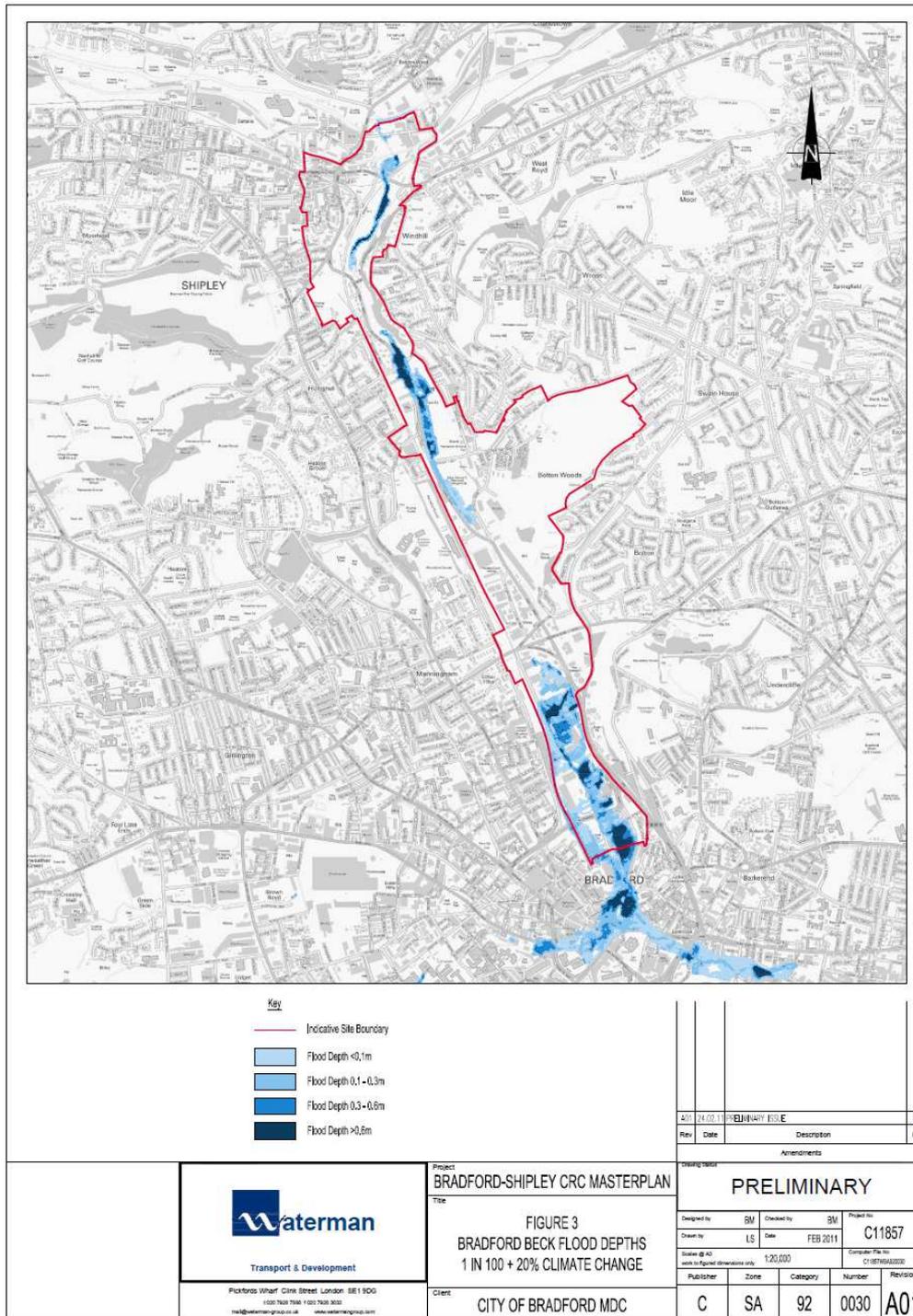
However, in each case the resulting loss of flood storage would need to be reinstated, requiring sacrificial land outside the floodplain to achieve level for level compensation. Buildings could potentially be built on stilts to allow flood water to pass beneath them, however the EA would object to this in accordance with their Policy and Practice for the Protection of Floodplains. Therefore, unless there are any very specific development drivers, it is likely to be more straightforward to develop the higher land in preference to that which is currently at risk of flooding.

Providing flood compensation storage at a more strategic level to maximise development potential while reducing flood risk will be considered further as the AAP develops, however it should also be borne in mind that the Bradford Beck receives large quantities of untreated sewage during times of flood and the environmental and public health impacts would need to be fully considered.

As described in the Bradford Beck Flood Alleviation Scheme report, the probability of flooding could be reduced to 1 in 50 along the entire Bradford Beck by implementing the proposed improvement works. The recommended works at Perseverance Mill would enable redevelopment of that area at a comparatively low cost; however Yorkshire Water would need to implement their Eastern Interceptor Sewer or similar scheme in Canal Road. CBMDC have advised that that this not included in their current programme of works.

The ability to achieve flood resilience in buildings is dependent on the depth of flood water outside the building. Flood depths up to 0.3m can be suitably protected but for depths exceeding 0.6m it is recommended that water is allowed to enter the building. Figure 107 indicates predicted flood depths and hence the areas where flood resilience measures would be appropriate (<0.3m) and where built development should be avoided (>0.6m).

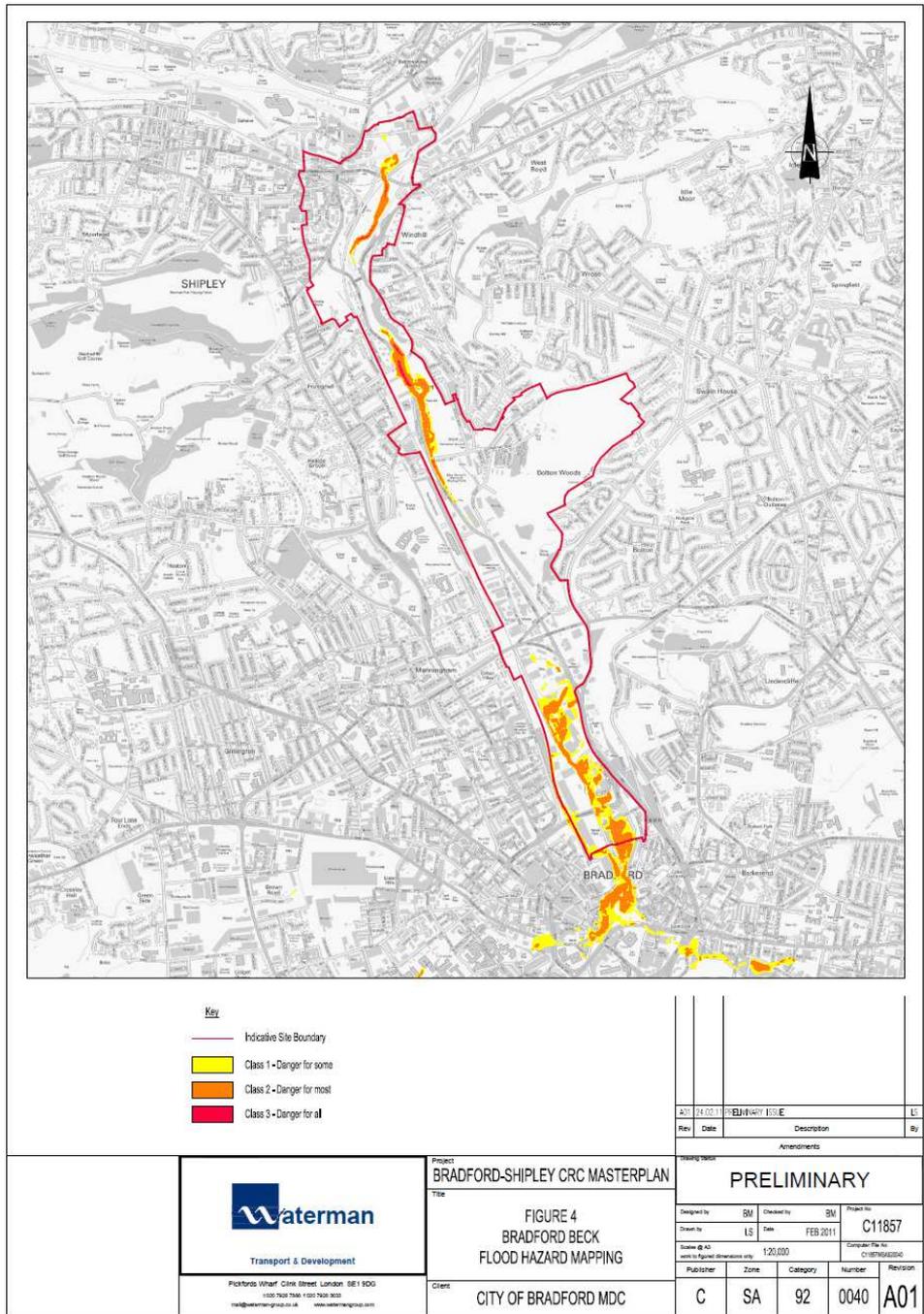
Figure 107: Bradford Beck Flood Depths



Source: BDP SDF Baseline Paper: Flood Risk

The hazard to people caused by flood water should also be considered when locating new development, ensuring that areas of deep, fast flowing water are avoided (i.e. the orange and red areas shown in Figure 108).

Figure 108: Bradford Beck Flood Depths

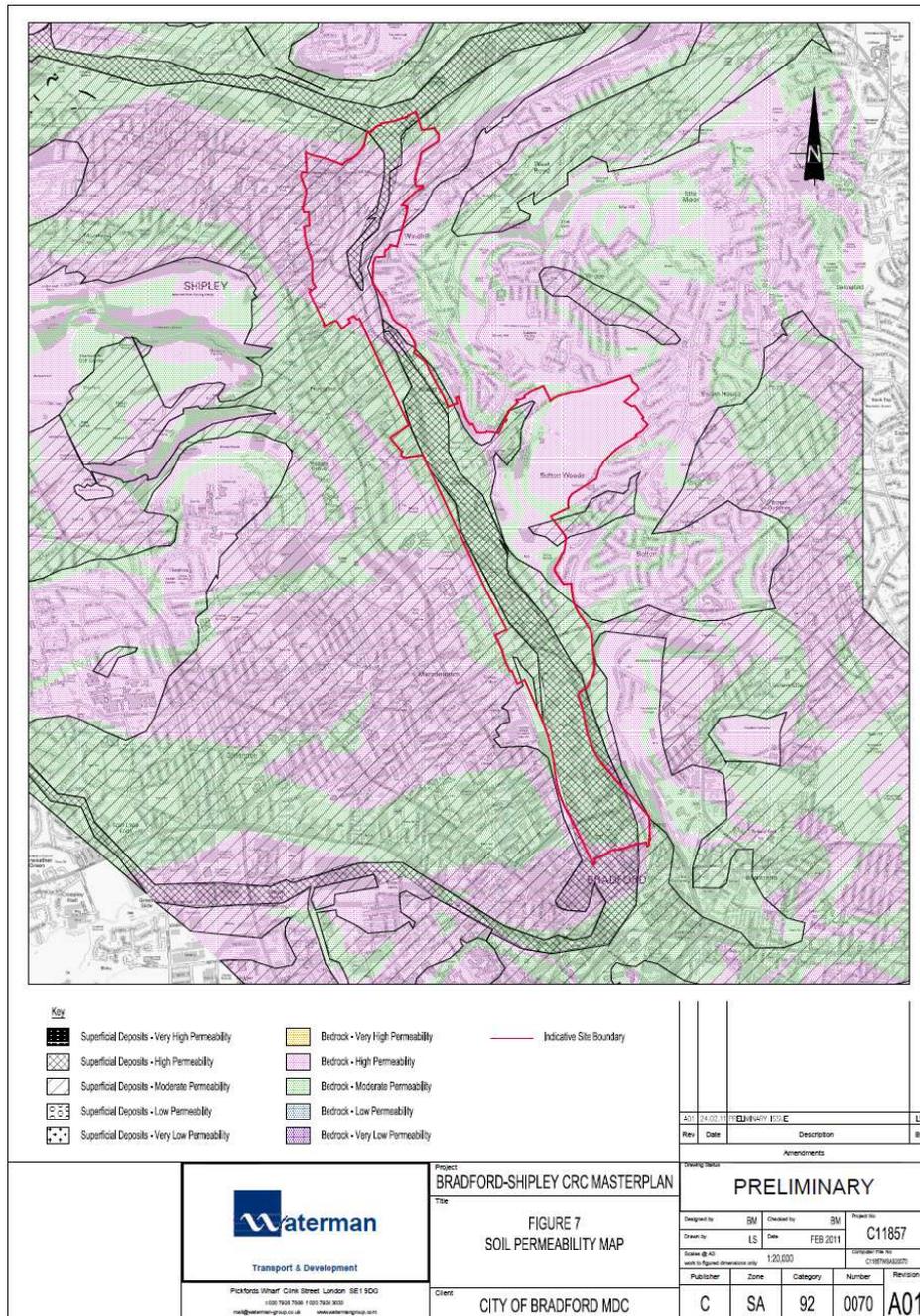


Source: BDP SDF Baseline Paper: Flood Risk

There are some good examples of suitable strategies in DCLG's and Yorkshire Futures' Flood Resilient Design guidance documents, which include ideas on how to marry architecture and flood risk engineering to maximise development potential within the floodplain, these will be considered further in the next stage of AAP development. This will also include assessment of how the provision of strategic-scale SUDS such as large ponds, basins or wetlands could potentially reduce flood

risk across the Masterplan area. Figure 109 highlights some areas where infiltration based SUDS could prove feasible, subject to further investigation. The advantage of infiltration methods is that the overall volume as well as the peak rate of runoff is reduced and groundwater is recharged.

Figure 109: Soil Permeability



Source: BDP SDF Baseline Paper: Flood Risk

### 11.9.5 Water Quality

As well as reducing the volume of water discharged to watercourses and sewers through infiltration and reducing the peak discharge through attenuation of runoff, SUDS can improve the quality of runoff discharged and a strategy will be implemented across the AAP area that will include source control measures within the plots (e.g. green roofs, permeable paving, rainwater harvesting), permeable conveyance (e.g. swales, filter drains) and passive treatment (e.g. ponds, basins, wetlands). These SUDS would form part of a treatment train to ensure that runoff was treated to an appropriate standard prior to discharge. For example, relatively clean water from roofs requires less treatment than that from a busy main road or service yard.

Figure 110 below describes some commonly used SUDS and these would be further considered in the next stage, in accordance with the hierarchical approach outlined in The SUDS Manual CIRIA C697.

Figure 110: Commonly Used SUDS

Type	Device	Description
Source Control	Living roofs	Provide soft landscaping at roof level and attenuate flows within the substrate and drainage layers.
	Infiltration devices	Store runoff and allow water to percolate into the ground.
	Pervious surfaces	Storm water is allowed to infiltrate through the surface into a storage layer, from which it can either infiltrate or release to sewers.
	Rainwater harvesting	Reduces the annual average rate of runoff from the Site by reusing water for non-potable uses e.g. toilet flushing.
Permeable Conveyance	Filter strips	Wide gently sloping areas of grass or dense vegetation that treat runoff from adjacent impermeable areas.
	Swales	Broad shallow channels, designed to convey / store runoff, and can infiltrate water (ground conditions permitting).
	Filter drains & perforated pipes	Trenches filled with permeable material, which are designed to take flows from adjacent impermeable areas.
Passive treatment / end of pipe treatment	Infiltration basins	Depressions in the surface designed to store runoff and allow infiltration.
	Balancing ponds	Basins that have a permanent pool of water for water quality treatment. They provide temporary storage above the permanent water level.
	Constructed wetlands	Ponds which have shallow areas and wetland vegetation to improve pollutant removal and wildlife habitat.
	Underground attenuation	Engineered storage structures used when the SUDS specified above cannot be installed with sufficient volumes to restrict to the required rate.

Source: BDP SDF Baseline Paper: Flood Risk

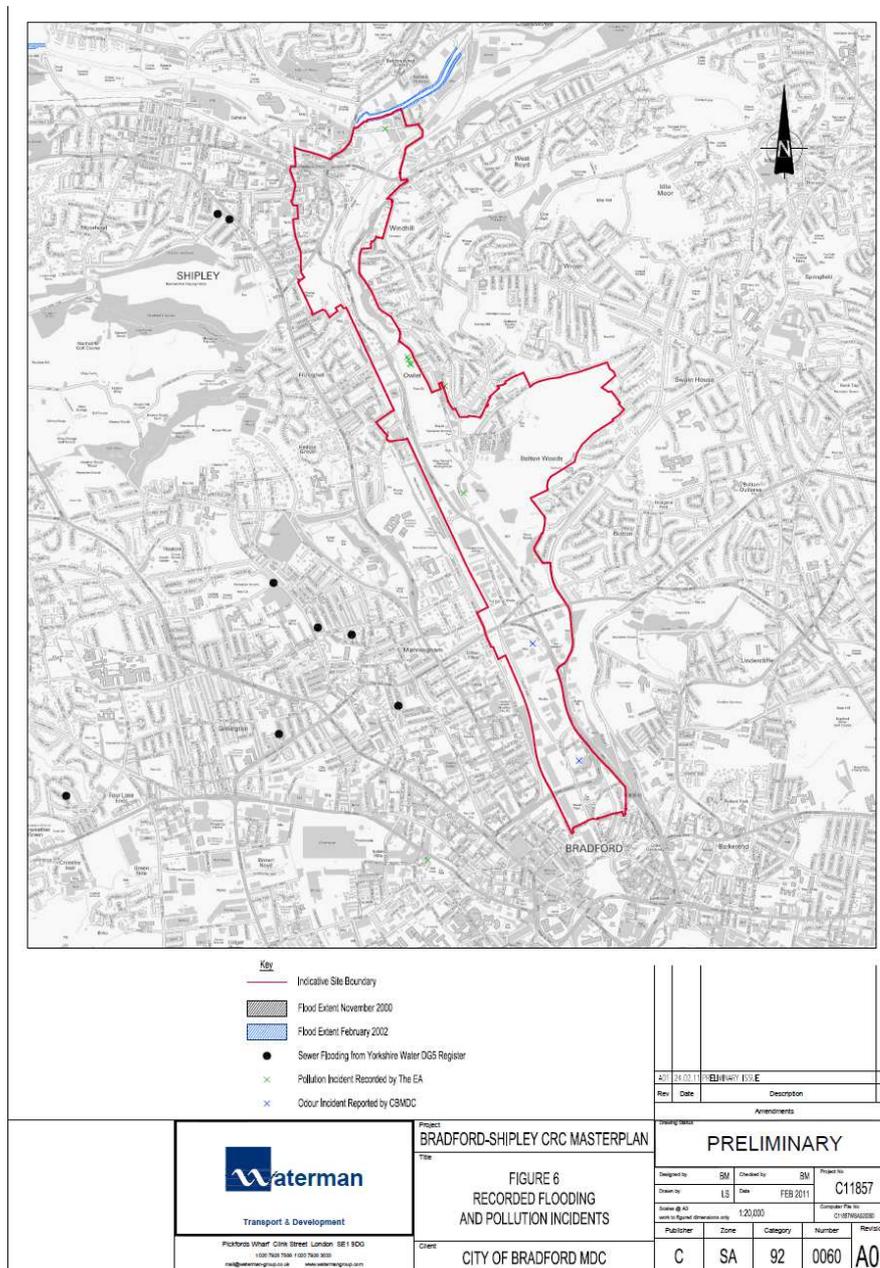
It is recommended that source control methods should be utilised on all plots throughout the AAP area. However, passive treatment features such as large ponds and basins could be provided on a strategic basis on sacrificial land, rather than being required on every individual plot, to free up development space. There is no groundwater Source Protection Zone (SPZ) in Bradford due to the lack of abstraction boreholes for potable water supply, therefore drainage by infiltration may prove feasible should ground conditions prove conducive (see Figure 110).

The management and maintenance of such systems would need to be carefully considered if they were to be located within different land ownerships. However,

under the Flood and Water Management Act it will be the responsibility of CBMDC as Lead Local Flood Authority to adopt SUDS, which would allow for a coordinated approach to management and maintenance of SUDS across the Masterplan area.

Figure 111 shows the locations of pollution incidents reported to the EA and CBMDC. The redevelopment of these industrial areas will reduce the risk of pollution from accidental spills, however the risk of pollution from sewage will remain during rainfall events until Yorkshire Water are able to remove or reduce/modernise their CSOs.

Figure 111: Flooding and Sewage Incidents



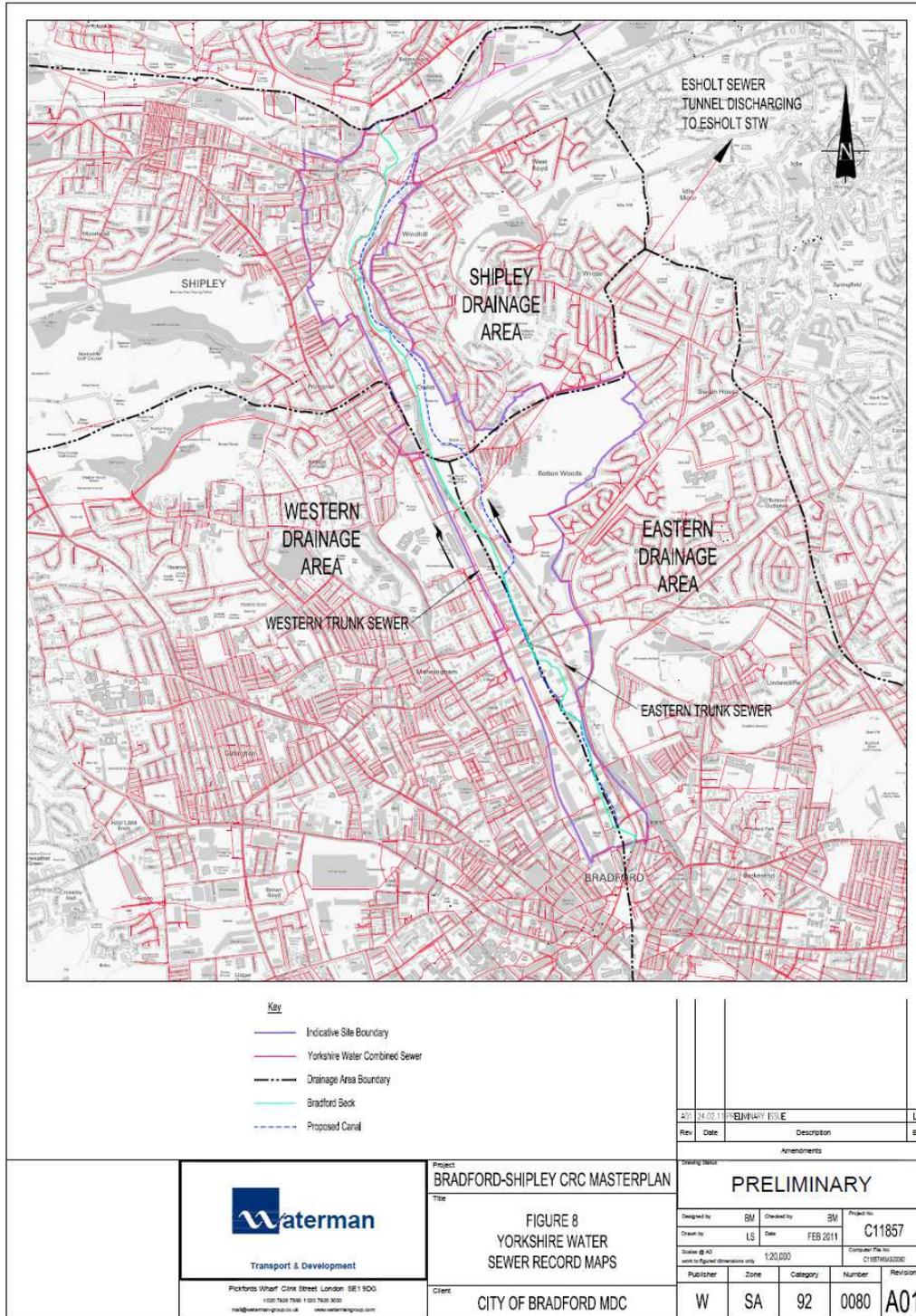
Source: BDP SDF Baseline Paper: Flood Risk

The Bradford Beck receives vast quantities of untreated sewage during flood events and so is a low quality receptor. The benefits of the SUDS strategy would therefore be amplified by any improvement in the quality of the Bradford Beck waters. This could be achieved by separating the foul and surface water drainage systems and draining clean surface water runoff directly into the Bradford Beck, which would increase the dilution and hence reduce pollutant concentrations during overspill events.

#### **11.9.6 Water Based Infrastructure**

Within the Masterplan area, approximately 65% of the Bradford Beck and its tributaries are culverted and the locations of these watercourses are shown in Figure 112. This includes the 1.3km length of 3.7m diameter diversion tunnel constructed in the early 1990s that transfers flows from Westbrook and Bradford Beck away from the City Centre.

Figure 112: Yorkshire Water Sewer Record Maps



Source: BDP SDF Baseline Paper: Flood Risk

Also shown in Figure 112 are Yorkshire Water’s Sewer Record Maps. These sewers vary in size from small brick invert sewers (around 450mm high) to the Eastern and Western Trunk Sewers and the Esholt Sewer Tunnel, which is 3.05m in diameter.

The pipe sizes and manhole details have been omitted from the plan for clarity but the drainage catchment boundaries have been added.

Yorkshire Water have advised that the Shipley catchment drains to the Dockfield Road pumping station, whose capacity is limited to 600 l/s, however to date they have been unable to confirm how much spare capacity is available. This will need to be clarified to confirm whether it could limit the potential for regeneration of the Shipley area. However, Yorkshire Water have advised CBMDC that they would not object to development due to any lack of capacity in their sewer system and that they will address any issues either themselves through the capital investment programme, or by developer funding through sewer requisitions.

CBMDC undertook condition assessments of the sewer network in the 1980s under their Agency agreement with Yorkshire Water but have only surveyed 11% of the critical sewers by 1987. These were found to be in a variable condition, with the brick barrel and egg shaped sewers in reasonably good condition but the smaller brick invert sewers showing signs of serious deterioration. Due to their propensity for sudden collapse, it is recommended that Yorkshire Water are consulted further regarding the condition of their sewer network so that any required rehabilitation works can be undertaken prior to redevelopment, rather than risking future collapse.

In the absence of such survey information, the buildings should be located such that they would not suffer damage in the event of a sudden sewer collapse. Similarly, the opportunity to improve access to the culverted Bradford Beck should be taken by removing buildings sitting above it and allowing sufficient space for maintenance.

The EA's policy is to minimise new culverting and to restore existing culverts to open, natural watercourses to allow for environmental enhancement, amenity and improved access for maintenance. Opportunities for such enhancement should be investigated, however it should also be considered that odour problems have been reported by CBMDC and that there may be potential public health risks associated with opening up a watercourse that conveys large volumes of untreated sewage during even medium intensity rainfall events (one CSO is reported by CBMDC to overflow more than 200 times a year).

The Bradford Beck is a Critical Ordinary Watercourse and responsibility for its maintenance rests with the riparian owners, i.e. the owners of the land through which

it passes. However, CBMDC have discretionary powers of maintenance as the operating authority and it is understood that they take an active role in the management of the watercourse. Nevertheless, any proposed alterations to the watercourse would require the approval of the EA under the Land Drainage Act.

As well as avoiding building over sewers, it is recommended that space should be allocated in the Masterplan for potential improvements. For example, a corridor could be provided for Yorkshire Water to construct the previously proposed Eastern Interceptor Sewer and any associated detention tanks, which would reduce flood risk to the Masterplan area.

#### **11.9.7 Re-opening of the Bradford Canal**

The Feasibility Study and Preliminary Design reports suggest that reintroducing the Bradford Canal would be technically and economically feasible and that it is required as a catalyst for regeneration of the Canal Road corridor.

The canal would be fed from groundwater, the Bradford Bowl (which is currently under construction at Forster Square) and the Bradford Beck. The canal would require a baseflow of 20 l/s and a peak supply of 75 l/s, however, it is recognised that the baseflow in the Bradford Beck would not be sufficient on its own.

To accommodate the revitalised canal it would be necessary to divert the culverted Bradford Beck over a length of 800m between Singleton Street and Station Road, potentially beneath the canal tow path. It will be necessary to ensure that connections can be remade and confirm who would become responsible for maintenance of it under riparian ownership.

The canal would be in close proximity to the Bradford Beck and its associated floodplain (see Figure X). It may be possible for the canal to hold flood water from the Beck, however the sewage content of the flood water would have an adverse impact on the quality of the canal water and it will also be necessary to confirm that the canal structure would not reduce the existing floodplain storage.

#### **11.10 Biodiversity and Wildlife**

This ecology/biodiversity assessment presents the findings of an evidence based desk study of the Bradford - Shipley Canal Road Corridor Masterplan (BSCRCM) project area from the BDP SDF Baseline Ecology Evidence Paper. The evidence based desk study has involved gathering and analysing ecological information from the following sources; NBN Gateway, Nature on the Map, Magic Interactive Maps, West Yorkshire Ecology (Local Record Centre), review of the Re-Opening of Bradford Canal Phase 1 Habitat Survey Report and consultation with Anne Heeley, Senior Countryside Officer at Bradford Metropolitan District Council.

#### **11.10.1 Legal Obligations**

A framework of international and domestic legislation protects biodiversity at a landscape, habitat and species level. The following is a summary of the relevant legislation:

##### **Wildlife and Countryside Act 1981 (as amended)**

The Wildlife and Countryside Act 1981 (as amended) is the principle mechanism for the legislative protection of wildlife in Great Britain.

##### **Countryside and Rights of Way Act 2000**

The Countryside and Rights of Way Act 2000 strengthens the existing protection of Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty and wildlife legislation.

##### **The Protection of Badgers Act 1992**

The Protection of Badgers Act 1992 consolidates previous legislation, it makes it an offence to wilfully kill, injure or attempt to kill, injure or take a badger, or to interfere with a badger sett by damaging, destroying, obstructing, disturbing an occupied sett either by intent or by negligence.

##### **The Conservation (Natural Habitats etc) Regulations 1994**

The Conservation (Natural Habitats, &c.) Regulations 1994 transpose European Wildlife Legislation (EC Habitats Directive) on the conservation of natural habitats and of wild fauna and flora into British law.

### **UK and Bradford Biodiversity Action Plans (BAP)**

The UK BAP is the UK Government's response to the Convention on Biological Diversity. The Convention called for the development and enforcement of national strategies and associated action plans to identify, conserve and protect existing biological diversity, and to enhance it wherever possible. The Bradford BAP sets UK BAP strategies into a local context.

#### **11.10.2 The Re-Opening of Bradford Canal Phase 1 Habitat Survey**

A Phase 1 Habitat survey was undertaken by Arup in April and May 2007. The investigation was based on the proposed re-opening of the Bradford canal. The majority of the Bradford canal re-opening area is included in the CRC areas and therefore the report provides recent robust evidence for the study site.

#### **Protected or Otherwise Notable Sites**

No statutory designated sites such as sites of special scientific (tier 1), or local nature reserves (tier 2) were identified within 1km of the study area.

However there is one non-statutory site (tier 3) specifically the Leeds-Liverpool Canal a Site of Ecological or Geological Importance (SEGI). It has been designated a SEGI due to diverse range of communities and a number of nationally rare plants including flowering rush *Butomus umbellatus* and arrowhead *Sagittaria sagittifolia*. Additionally, a number of protected species including Water Vole *Arvicola terrestris* and white-clawed crayfish have been recorded. The canal provides an important wildlife corridor, linking a number of SEGIs within Bradford and the wider area.

Three Bradford Wildlife Areas (BWA) were identified within 250m of the proposed canal alignment:

- Shipley Station Butterfly Reserve
- Poplars Farm
- Boars Well Urban Wildlife Reserve

## Protected Species

The Phase 1 Habitat Desk study revealed three records of protected species, as follows:

Protected Species			
Site	Record	Species/Date	Distance from Site
Owlet Region	Building (not roost)	Pipistrellus sp. (Sept 1996)	100m
	Unknown	Unknown sp. (May 1994)	250m
	Building (not roost)	Pipistrellus sp. (May 1995)	125m

## Field Survey

A field survey was undertaken in Spring 2007. Subsequently the following habitats were identified:

- Improved grassland
- Semi-improved grassland
- Marshy (wet) grassland
- Scattered scrub/ Tall herb
- Dense continuous scrub
- Mixed semi-natural woodland
- Bracken/Tall herb
- Running water
- Buildings/hardstanding

## Flora

During the site visit several plant species included on Schedule 9 of the (Countryside and Wildlife Act 1981), as follows:

- Japanese Knotweed *Japonica fallopia*
- Giant Hogweed *Heracleum mantegazzianum*
- Himalayan Balsam *Impatiens glandulifera*

## Fauna

During the site visit signs of protected fauna were recorded as observed or potential presence has been suggested due to habitat associations.

### **Otter**

The Phase 1 Habitat report deemed it was unlikely that Otter would be using Bradford Beck.

### **Water Vole**

The Phase 1 Habitat report deemed no definitive evidence of Water Vole was recorded on Bradford Beck.

### **Bats**

The Phase 1 Habitat report deemed that all of the mature trees both within and along the woodland/edges and isolated trees, and buildings and existing structures such as bridges; may provide Bat roosting opportunities.

### **Grass Snake / Common Lizard**

The Phase 1 Habitat report deemed several areas of the site have 'good suitability' in terms of supporting Grass Snake and Common Lizard.

### **Great Crested Newt**

The Phase 1 Habitat report deemed no suitable water bodies within 500m of the site were identified and it is therefore the site and its habitats are unfavourable to GCN.

## **11.10.3 Primary Analysis**

### **Protected or Otherwise Notable Sites**

The closest statutory site is Trench Meadows (approx. 1300m) which exists within 2km of the BSCRCM site boundary. It is considered that due to the distance between the site and the BSCRCM boundary the risk of impact is minimal.

One record of a non-statutory Site of Ecological or Geological Importance, the Leeds-Liverpool Canal exists within the Site Boundary. The Leeds-Liverpool Canal should be safeguarded to ensure that the ecology of the canal is not adversely impacted by the BSCRCM.

Three records of non-statutory Bradford Wildlife Sites exist within the Site

- Boars Well Urban Wildlife Reserve (BWA)

- Poplars Farm (BWA)
- Shipley Butterfly Reserve (BWA)

These sites should be safeguarded to take account of and minimise any adverse impacts of earthworks on the ecology of the areas.

Eight records of Ancient and Semi-Natural Woodland exist within 2km of the site boundary, as follows:

- Walker/Midgeley Woods (approx. 500m from boundary)
- Hirst Wood (approx. 1500m from boundary)
- Nab Wood (approx. 1300m from boundary)
- Old Spring Wood (approx. 250m from boundary)
- Northcliff, Dungeon and Low Woods (approx. 200m from boundary)
- Royds Cliff Wood (approx. 250m from boundary)
- Buck Wood (approx. 1400m from boundary)
- Thackley West Wood (approx. 700m from boundary)
- Fairbank Wood (approx. 200m from boundary)
- Heaton Woods (approx. 600m from boundary)
- Renolds Wood (approx. 500m from boundary)
- Stoney Ridge Plantation (approx. 2000m from boundary)

It is considered that due to the distance between these sites and the CRC boundary the risk of impact from CRC is minimal.

## **Protected Species**

### **Bats**

West Yorkshire Ecology provided 48 combined roosts and general Bat records within the 2km of the project area. NBN Gateways provided 28 general Bat records within or adjacent to the project area. Bats should be considered if existing trees/building are to be impacted by earthworks during the development of the AAP.

### **Great Crested Newt**

NBN Gateways provided 3 records of Great Crested Newt within or adjacent to the site boundary, however, the latest record is from 1958. The Bradford Canal Phase 1 Habitat report states that due to the essentially urban context of the development and

lack of connectedness, the immediate terrestrial habitats are all largely inimical to great crested newts.

### **Slow Worm**

NBN Gateways provided 1 record of Slow Worm within or adjacent to the site boundary. This record is from 1973 and the Bradford Canal Phase 1 Habitat Survey states slow-worm is highly unlikely to be present in the study area.

### **Grass Snake and Common Lizard**

West Yorkshire Ecology provided 4 Grass Snake records within the 2km of the project area. NBN Gateways provided 4 records of Grass Snake and one record of Common Lizard within or adjacent to the site

boundary. The latest record is from 1974. The Bradford Canal Phase 1 Habitat Survey identified the Owlet and derelict land south of Shipley Train Station as two areas that have a 'good suitability' in terms of supporting Grass Snake and Common Lizard. Grass Snake and Common Lizard are both protected by law. Further survey work is required on the Owlet and derelict land south of Shipley Train Station should these areas be impacted by earthworks to establish the importance of these features for Grass Snake.

### **Water Vole**

NBN Gateways provided 27 records of Water Vole within or adjacent to the site boundary. The latest record is from 2002. The Bradford Canal Phase 1 Habitat Survey identified Bradford Beck as having potential to supporting Water Vole and further survey work will be required on the Beck should this area be impacted by earthworks to establish the importance of these features for Water Vole.

### **Otter**

NBN Gateways provided 3 records of Otter within or adjacent to the site boundary. The latest record is from 1936. However the Bradford Canal Phase 1 Habitat Survey states that it is deemed unlikely that otter are using Bradford Beck due to the nature of the water body.

### **White-clawed crayfish**

West Yorkshire Ecology provided 1 White-clawed crayfish record within the 2km of the project area. NBN Gateways provided 1 record of White-clawed crayfish within or adjacent to the site boundary. The record is from 2006. Should the Leeds-Liverpool

Canal be impacted by earthworks further survey work will be required to establish its importance for White-clawed crayfish.

### **Badger**

NBN Gateways provided 4 records of Badger within or adjacent to the site boundary. The latest record is from 1974. The Bradford Canal Phase 1 Habitat Survey states that there was no definitive evidence of badgers within the general survey corridor. Specifically no setts, foraging signs or badger paths were recorded where access was obtained.

#### **11.10.4 Habitats**

The Bradford Canal Phase 1 Habitat Survey identified several habitats in the study area, these included:

- Improved Grassland (amenity);
- Semi-improved grassland
- Marshy (wet) grassland;
- Scattered scrub/Tall herb;
- Dense continuous scrub
- Mixed semi-natural woodland
- Bracken/Tall herb
- Running water (Bradford Beck);
- Buildings/hardstanding;

These habitats present on site are common throughout the UK.

#### **11.10.5 Controlled Species**

During the site visit several plant species included on Schedule 9 of the (Countryside and Wildlife Act 1981), as

follows:

- Japanese Knotweed *Japonica fallopia*
- Giant Hogweed *Heracleum mantegazzianum*
- Himalayan Balsam *Impatiens glandulifera*

It is an offence to cause the spread of Japanese Knotweed, Giant Hogweed and Himalayan Balsam under the Wildlife and Countryside Act (1981). Additionally under the Environmental Protection Act (1990), cut Japanese Knotweed material and soil containing the rhizomes must be disposed of as controlled waste. Further survey works should be undertaken to determine their distribution to avoid earthworks impacting these species.

#### **11.10.6 Ecological Enhancements**

Landuse changes have been criticised for the global decline in biodiversity such as the spread of urban settlements and intensification of farming practices. Incorporating ecological enhancement during regeneration enriches habitats for various species whilst improving the social wellbeing of a community; the value of which is difficult to quantify economically.

The Yorkshire and Humber Regional Biodiversity Strategy provides guidance for the enhancement and restoration of habitats in the Yorkshire region. The CRC AAP should consider providing/integrating the following ecological enhancements;

#### **The Enhancement of Bradford Beck**

Bradford Beck runs parallel to the former Bradford Canal, from the Leeds-Liverpool Canal in Shipley into Bradford City Centre. Bradford Beck should be improved as a green corridor such as strengthening the woodland, scrub and grassland along the beck to provide connectivity between the pockets of green space within and surrounding the project area.

Bradford Beck has potential to provide habitat for Water Vole and Otter both of which are protected by British legislation and both included in the UK BAP due to the decline of both species. An improvement of the green corridors within the CRC AAP would benefit Water Vole and Otter especially the former which require large territories to sustain their ecological requirements.

#### **Sustainable Urban Drainage (SUDs)**

SUDs are designed to replicate natural drainage systems which collect, store and clean surface water run-off before releasing it back into the environment. SUDs are

particularly relevant where an increase in hard landscaping is proposed such as new developments, although SUDs should also be considered throughout the existing project area as they increase ecological value. SUDs which should be considered to help increase the water quality and attenuate flood risk include reed beds, managed wetlands, swales and attenuation ponds.

### **Notable Species Habitat**

A number of notable species have been recorded to exist within or adjacent to the project area such as Bats, Grass Snake, Water Vole, Otter and White-clawed crayfish. Where opportunity allows in the AAP these species should be accommodated through the inclusion of suitable habitat. Consideration should be given to the provision of tree/shrub planting throughout the AAP, especially native species and species known to benefit native wildlife. Trees and shrubs provide a food source for invertebrates which in turn will provide foraging habitat for birds and Bats, the provision of nest and roost boxes within areas of woodland will also facilitate nesting birds and roosting Bats. White-clawed crayfish have been recorded in the Leeds-Liverpool Canal, the species has declined mainly due to the introduction of the non-native Crayfish and also to reduction of suitable habitat. Artificial refugia should be provided such as the provision of bricks, PVC pipes and woven baskets to maximise suitable habitat along the canal.

The provision of an interpretation board providing detail of the habitat creation for instance, providing information applicable to White-clawed crayfish habitat creation. These initiatives will engage the public in the local environment. Interpretation boards should be provided at appropriate sites within the project area.

### **Notable Habitats**

The Yorkshire and Humber Regional Biodiversity Strategy and Bradford Habitat Action Plans include a number of habitats which should be enhanced/restored within the region. The following appropriate habitats have been taken from the documents and should be considered as part of the Masterplan;

- Native Woodland; although the Masterplan is constrained by space native tree species should be preferred to non-natives. In areas where the space allows native copses and woodlands should be provided.
- Lowland meadows; native meadow planting should be specified along Bradford Beck to enhance the project area for invertebrates, this would consequently improve the overall biodiversity.

- Reedbeds; small areas of reedbeds could be provided within the project areas, such as within and adjacent to Bradford Beck. The reedbeds could also be integrated into SUD systems.

When designing habitats the Yorkshire and Humber Regional Biodiversity Strategy and Bradford Habitat Action Plans should be referred to as a source for further information.

### **Gardens**

The Bradford Shipley Masterplan will include residential dwellings. Residential Gardens play an important role in providing habitat for a wide range of wildlife, including garden birds, Bats and hedgehogs. Developers should be encouraged to maximise the size of the garden they provide to increase the value for local wildlife. Furthermore if developers are providing soft landscaping then they should specify plants that are valuable to the local wildlife.

### **11.11 Statutory Utility Services**

Mains utility services are located in the majority of highways within the study area. The highways which serve as the areas main transport links also provide a major route network for utility services throughout the study area (i.e. electric, gas, water & telecom). Highways within the study area that have significant utility corridors are:

- Otley Road (A6038);
- Valley Road (A6037);
- Craig Road;
- Canal Road (A6037);
- Queens Road (A6177);
- Kings Road; and,
- Valley Road.

In addition to the local utility distribution network, some regional utility supplies are located in or cross the study area;

- National Grid overhead and underground electricity transmission – overhead power lines / pylons cross the eastern extremity of the study area and terminate on the east side of Canal Road (A6037) adjacent to a transformer substation on Singleton Street. An underground connection is assumed to link the substation under Canal Road with the sub-station (details TBC);

- A second electricity transformer substation is located in Frizinghall on Powell Road at its junction with Livingstone Road;
- A Gas Holder storage facility is located on Canal Road (A6037) at its junction with Kings Road;
- A regional high pressure gas main links with the Canal Road Gas Holder site and runs north along Canal Road / Craig Road and through Shipley (east of town centre). The gas main divides into 2 pipes just north of Shipley centre (limit of record plans received);
- A regional intermittent pressure gas main links with the Canal Road Gas Holder site and takes a staggered route west out of the study area; and,
- Some potable water mains (24" diameter) are located across areas of open ground to the east of Frizinghall. These mains are assumed to lie within easements crossing land in third party ownership.

Bradford Beck is extensively culverted through the study area.

Yorkshire Water provides the potable water and public sewerage system within the study area. Water mains and sewers are present in virtually all highways. The public sewers consist mainly of a combined system (surface and foul water discharged in a single sewer).

Northern Gas Networks is the undertaker responsible for the local area low pressure gas distribution network. Low pressure gas mains are located in the majority of highways within the study area.

British Telecom have an extensive network of cables serving and majority of the study area, and buried cables are present in virtually every highway. Although the majority of the BT cables will be 'copper wire' cables, the BT record plans do not differentiate which of their cables are fibre optic services. It is considered likely however that BT services located along main highway corridors will contain fibre optic cables.

A telephone Exchange is located in Shipley at the northern end of Manor Lane.

Telecom Services of other utility providers are also located in the study area;

- Global Crossing / Fibrenet – a service is located adjacent to the Bradford – Shipley railway line.

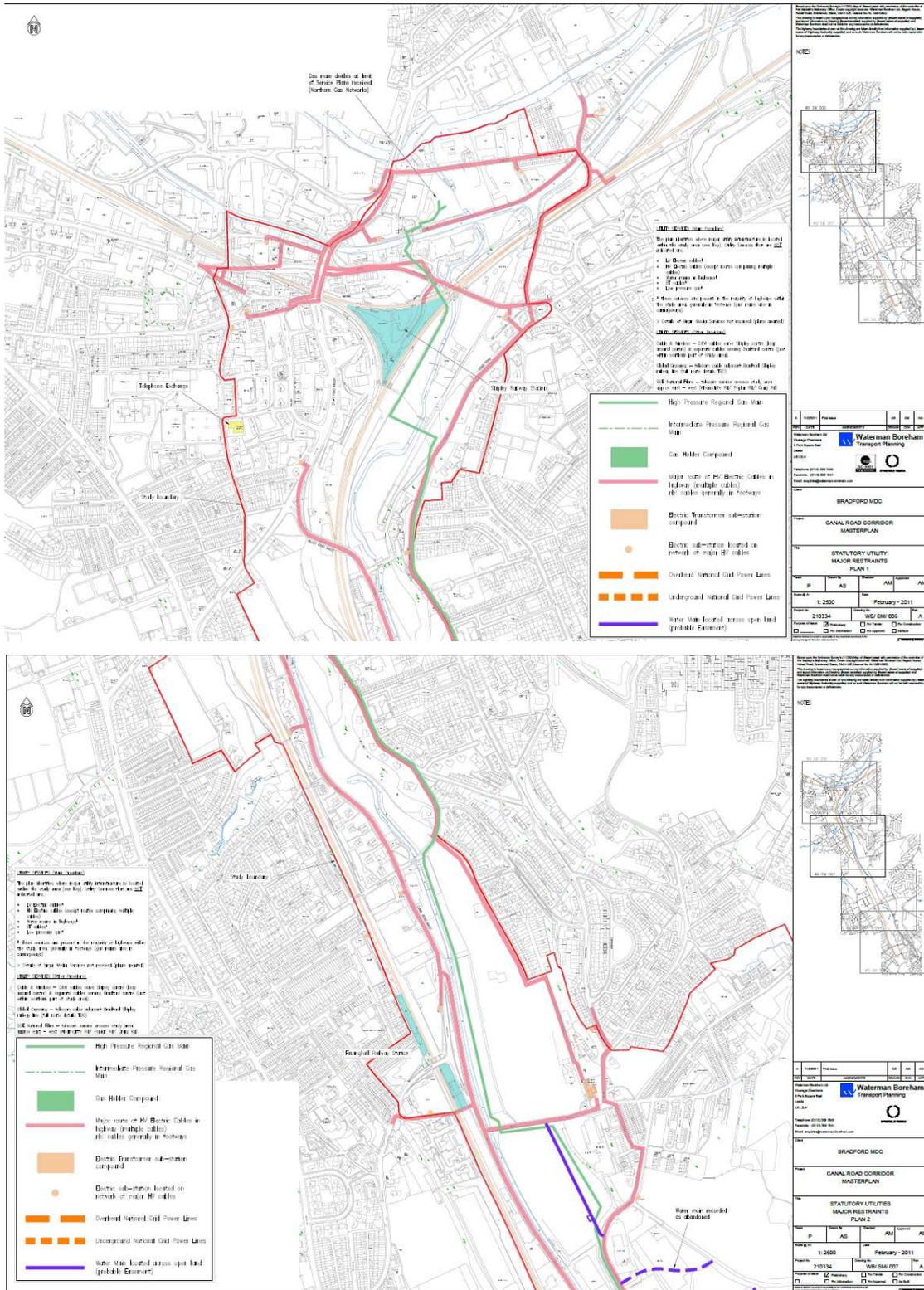
Details of the full extent / route of the service is awaited;

- Cable & Wireless – C&W services form a closed ‘box’ around the Shipley Town Centre. A separate service is partially located within the study area south of Bradford Forster Square Station (serving Bradford centre)
- Scottish & Southern – an SSE National Fibre service crosses the study area roughly east – west (crosses the railway line at Wharnccliffe Rd/ Wallbank Dr (assumed route TBC) and into Poplar Rd / Craig Rd)
- Virgin Media – details of Virgin Media utility services are currently awaited.

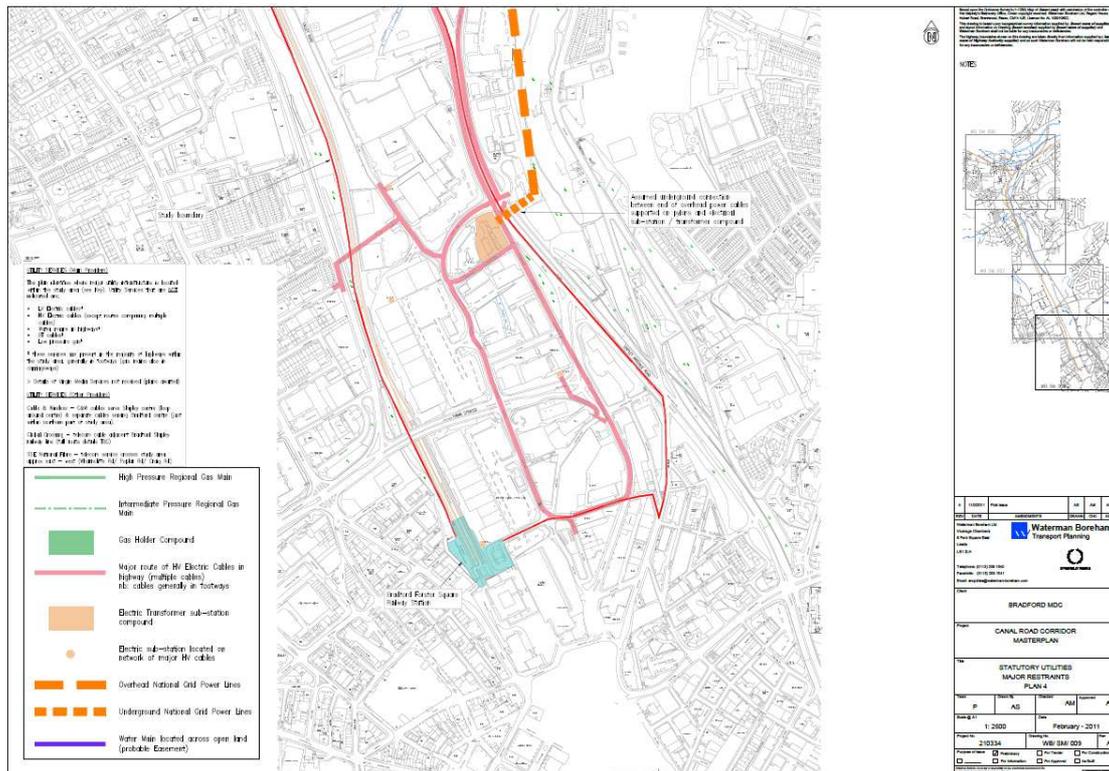
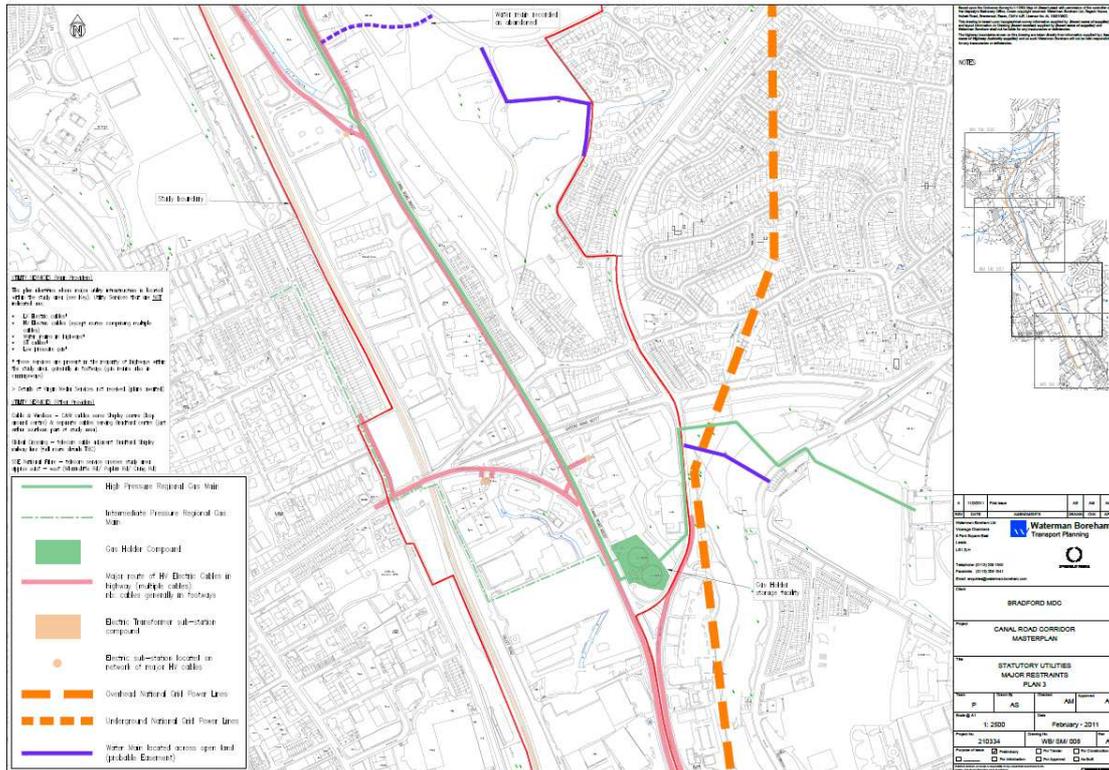
Figure 113 show route details of the significant Statutory Utilities Services located in the study area, which are considered to be a major restraint upon the cost feasibility of redevelopment (i.e. where development would require relocation or diversion of these services).

These plans are intended as a guide to the CRC AAP development. Where cost is a critical item the early involvement of the respective Utility Authorities is recommended for any development proposal that might have an impact on these major utility services to ascertain the scale of costs that any diversion or protection measures might require.

Figure 113: CRC Statutory Utilities Constraints



# Bradford District Local Plan



Source: BDP SDF Baseline Papers: Infrastructure and Constraints

## 11.12 Conclusions

### Renewable Energy

- The energy Opportunity Plan for Bradford shows that the CRC has the potential for establishing a district heating network.

#### Ground conditions

- The study area has a complex industrial heritage, containing former land uses which could be classified into high, medium and low potential risk.
- None of the sites within the study area have been determined by the Local Authority as being 'contaminated land'. It is likely that remediation within the Masterplanning area would be regulated mainly via the planning process through the use of appropriate planning conditions;
- The Elland Flags Sandstone outcrops directly beneath some parts of the study area, and it is recommended that any proposed development includes an investigation of the potential presence of underground workings associated with the Elland Flags
- The extraction of coal has also historically been very important to the industrial development of Bradford. Parts of the site thought to be affected by shallow mining include areas around Frizinghall, Owlet, Bolton Woods and Lister Park. More detailed assessments of mining risk will be required prior to finalising development layouts.
- The western flank of Bolton Woods is affected by significant gradients.
- Alluvial deposits however occur extensively through the central part of the study area running along the channel and floodplain of Bradford Beck.
- Provided allowances are made to mitigate the effects of the above, it is concluded that these ground related issues need not constrain the CRC AAP significantly.

#### Water and Flood Risk

- The water and ecological quality of the Bradford Beck is classified as poor
- Parts of the canal road corridor are at risk of flooding from fluvial and pluvial sources, particularly south of Queens Road. The main source of flood risk to the Masterplan is from the Bradford Beck.
- The Sequential test would need to be passed to allow development within the floodplain.
- The introduction of SuDS could improve amenity and biodiversity while reducing flood risk.
- The re-opening of the Bradford Canal is technically feasible.
- Any proposed alterations to the Bradford Beck would require the approval of the EA under the Land Drainage Act.

#### Biodiversity and Wildlife

- The desk study identified one statutory protected site within 2km of the site however due to the distance between Trench Meadows and the project area there is a minimal risk of impact. There are four non-statutory sites within the study area; these sites should be protected from impact during earth works and consideration given to enhancing the biodiversity value of these sites through the Masterplan process.
- The desk study identified the following protected species as potential constraints to development within the site; Bats, Grass Snake and White-clawed crayfish. The constraints of these species can only be determined once specific earthworks plans have been produced, however, consideration should be given to enhancing the habitat for relevant species through the CRC AAP process in unity with the Yorkshire and Humber Regional Biodiversity Strategy.
- The desk study identified all habitats on site as being common throughout the UK, nevertheless habitat improvement with guidance sought from the Yorkshire and Humber Regional Biodiversity Strategy and Bradford Habitat Action Plan and Local BAP.
- The desk study and site walkover identified a number of controlled species; Japanese Knotweed, Giant Hogweed and Himalayan Balsam. Measures should be taken to prevent the spread of these species during earthworks.
- This desk top study provides ecological guidance based on historic information. It is recommended that a new Phase 1 Habitat Survey is carried out of the CRC project area to ensure the latest ecological information is available.

## 12.0 Minerals and Waste

This section of the report provides details about the existing Minerals resources within the CRC.

### 12.1 Minerals

The CRC is underlain by the Coal Measures geological series which comprises sequential beds of sandstone, shale, coal and fireclay. The British Geological Survey have assessed that the area contains a secondary coal resource which the Coal Authority believe to be potentially workable by surface extraction methods. The CRC is also in an area within which the Coal Authority caution that unrecorded mining related hazards may exist. Historical maps indicate that past minerals extraction activities in and around the CRC were mainly confined to the Bolton Woods, Gaisby Hill and Wrose Hill areas on the upper valley side to the east of Canal Road. Minerals working appears to have taken place by both surface and underground methods, with the most notable surface features being:

- The Wrose Hill Brick Works/ Fireclay Works at grid ref. SE156370
- The Wrose Brow Brick Works at grid ref. SE160374
- The Gaisby Hill Quarry at grid ref. SE157366
- The Wrose Hill Quarries at grid ref. SE159366
- The Bolton Woods Quarries at grid ref. SE162361

An airshaft is shown to the south of the Wrose Hill brick works on a map dating from the late 19<sup>th</sup> century and therefore it is possible that underground clay/ coal workings extend south from the brick works. Historical maps also reveal the presence of an old shaft adjacent to the Gaisby Hill Quarry and therefore underground stone workings may also be present in this area.

Due to the historical surface and underground minerals working in the area, the heavy industrial activity which has taken place along the corridor, and the past waste disposal activity (as discussed below), it is likely that most sites which become available for new development within the CRC will require some level of remediation. Shallow coal seams may also occur beneath sites within the CRC and developers should assess the viability of extracting any accessible coal resources beneath development sites as a potentially cost effective method of site remediation.

The only remaining active minerals extraction site within the CRC is the southern part of the Bolton Woods Quarries (the northern part already having been restored and re-developed for housing) which produces building stones and construction aggregates. The 19 hectare quarry area comprises an open quarry void subject to sporadic extraction activity, an operational minerals processing area and numerous large stockpiles of mineral waste/ overburden. The most prominent of these stockpiles is an 18 metre high mound of material occupying the south-western corner of the site at the top of a steep hill slope overlooking the southern approach to the CRC.

The site has the benefit of several old planning permissions which allow quarrying to continue until February 2042. The operator has put forward a working scheme which would involve the extension of the quarry into an un-worked area to the north-east, the deepening of the existing quarry void and the re-working of the stockpiles of mineral waste to recover saleable aggregate. However in a recent representation in response to the Core Strategy Further Engagement Draft an agent acting on behalf of the operator described the quarry as “an existing working quarry approaching the end of its life and will become available for redevelopment in the short to medium term”.

The strong, durable, fine to medium grained sandstone which has been quarried at Bolton Woods for over a century has been used as a building stone in many of Bradford’s historic buildings including City Hall. Any proposals for the re-development of the quarry site should provide for the prior extraction of any remaining high quality stone reserves. There may be opportunities to utilise remaining mineral waste stockpiles as engineered fill and for any remaining stone reserves to be used to produce walling stone for use in the redevelopment of the site.

## **12.2 Waste**

Several areas within the CRC have historically been subject to landfill activities. Most notably parts of the open land to the east and south of Frizinghall station are believed to have been used for the disposal of domestic refuse. This historic landfill activity is believed to have taken place at least 50 years ago and therefore the deposited waste is unlikely to still be actively affecting surrounding land through the production of leachate or ground gas contamination. However any proposals for future development upon land which has previously been used for waste disposal would be

likely to require some level of remediation before any future potentially sensitive development could take place.

Current waste management activities along the CRC are largely confined to a single materials recovery facility (MRF) operated by Associated Waste Management (AWM) located to the north of Frizinghall Station (SE152363). This site receives both mixed skip waste and municipal waste and processes the waste through a series of magnets, trommels and screens in order to recover any recyclable material. The site has in the past been the cause of numerous complaints in relation to dust, noise and odour problems. These problems have arisen partly due to a lack of insulation within the building housing the MRF equipment but mainly due to the practice of storing waste and recovered material in the site's large open yard area.

In order to resolve these problems the operator has recently undertaken works to insulate the MRF building and has begun construction of an enclosure over the yard area including a filtered ventilation system. A revised Environmental Permit has been issued by the Environment Agency which will require all waste to be stored within the new yard enclosure in the future. Once the yard enclosure has been completed the impact of waste management activities at the site on the quality of the environment within the CRC should be substantially reduced.

### **12.3 Conclusion**

#### National / Regional / Local Objectives

- Ensure that specific minerals resources of local and national importance are not needlessly sterilised by non-mineral development (NPPF p.143);
- Recognise the small-scale nature and impact of building and roofing stone quarries, and the need for a flexible approach to the potentially long duration of planning permissions reflecting the intermittent or low rate of working at many sites (NPPF p.144);
- Prevent both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability (NPPF p.109);
- Remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land, where appropriate (NPPF p.109);

- Provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities (PPS10 p.3);
- Consider the likely impact of proposed, non-waste related, development on existing waste management facilities, and on sites and areas allocated for waste management (PPS10 p.33)
- Ensure that new development makes sufficient provision for waste management and promote designs and layouts that secure the integration of waste management facilities without adverse impact on the street scene or, in less developed areas, the local landscape (PPS10 p.35).

*Implications for the Canal Road Corridor:*

- Bolton Woods Quarry represents a potential future development site and provides opportunities for the environmental improvement of the CRC through removing a spoil heap which represents a significant landscape detractor and potentially providing new attractive landscape/ recreational features as part of the site restoration/ redevelopment.
- However any redevelopment of the Bolton Woods Quarry site will have to include proposals for the prior extraction of any remaining valuable sandstone resources for either use in the construction of the new development or stockpiling elsewhere.
- Whilst the quarry is still operational no new development should be permitted which would constrain the extraction of the remaining sandstone reserves at the site.
- Historic minerals extraction, landfill and heavy industrial activities within the CRC are likely to have left a legacy of geo-environmental constraints which may require remediation as part of future development projects.
- The CRC is underlain by the coal measures geological series which could theoretically contain coal seams which would be viable for prior extraction as part of any future development projects within the CRC, potentially offsetting some of the costs of site remediation.
- The ongoing works to enclose the external stockpiling areas at the AWM MRF within the CRC should result in a significant improvement of the environment within the Frizinghall and Owlet areas which should increase the viability of future development within this area.

- Any new development within the CRC should maximise opportunities for use of recycled aggregates, and local stone resources and should incorporate facilities which promote the separation and collection of recyclable materials.

## **13.0 SUSTAINABILITY**

- 13.1 Area Action Plans must undergo Sustainability Appraisal, as described under Section 19(5) of the Planning and Compulsory Purchase Act 2004, in recognition of their role within Local Development Frameworks. This ensures that any significant environmental, social and economic effects have been considered during the preparation of planning policy documents consistent with European Directive 2001/42/EC relating to Strategic Environmental Assessments (SEA).
- 13.2 This report has presented all the policy context and baseline information that will inform the Sustainability Appraisal (SA) relevant to the Shipley and Canal Road Corridor (SCRC) Area Action Plan. At this stage, it is also appropriate to outline the broad sustainability issues that the forthcoming options for the SCRC Area Action Plan will seek to address. This will help draft a list of sustainability objectives for the Plan which will be refined and agreed upon as part of the next stage of the SA work.
- 13.3 The key messages and sustainability issues have been identified from the review of national, regional and local policies, aspirations and targets, and have been adapted to reflect the character and needs of the Shipley and Canal Road Corridor area:

	<b>Key Message / Sustainability Issues</b>		<b>Sources</b>
<b>Social</b>	Population and Deprivation	<ul style="list-style-type: none"> <li>• Relatively young population in Bradford, with highest growth projected among the youngest age groups.</li> <li>• Deprivation in inner urban areas of the City of Bradford; mostly in areas surrounding the SCRC.</li> </ul>	ONS Population Projection; The Big Plan; IMD 2010 etc.
	Health, Housing and Quality of Life	<ul style="list-style-type: none"> <li>• There is a need to live within environmental limits, ensure a strong healthy and just society, achieve a sustainable economy, promote good governance and use sound science responsibly.</li> </ul>	NPPF (paragraph 21); PPS1 Supplement: Planning for Ecotowns; One Future – Different Paths: UK’s Shared Framework for Sustainable Development; Sustainable Communities: People, Places and Prosperity etc
		<ul style="list-style-type: none"> <li>• Health and regeneration necessary, along with addressing inequality, improving the health of black and minority ethnic people</li> </ul>	NPPF (paragraph 69-70); Bradford and Airedale Joint Strategic Needs Assessment etc.
		<ul style="list-style-type: none"> <li>• It is essential to provide for the needs of all the community, including needs relating to age, sex, ethnic background, religion, disability and income.</li> </ul>	The Big Plan etc.
		<ul style="list-style-type: none"> <li>• Plan to meet the housing requirements of the whole community, and provide greater choice and a better mix in the size, type and location of housing.</li> </ul>	NPPF (paragraph 47, 50, 52 ); PPS1 Supplement: Planning for Ecotowns; Laying the Foundations: A Housing Strategy for England; Lifetime Homes, Lifetime Neighbourhoods: National Strategy for Housing within an Aging Society ; Homes for the Future: More Affordable, More Sustainable - Housing Green Paper; Bradford District Joint Housing Strategy etc.

		<ul style="list-style-type: none"> <li>Affordability of housing is a key issue in SCRC.</li> </ul>	NPPF (paragraph 47); Bradford District Joint Housing Strategy etc.
<b>Environmental</b>	Climate Change, Waste, Pollution and Energy Efficiency	<ul style="list-style-type: none"> <li>Plan with an aim to secure that SCRC is resilient to the impacts of climate change and through its own efforts to reduce the impact on climate change the SCRC enhances the District's wellbeing.</li> </ul>	NPPF (paragraph 93-94,99); The UK Low Carbon Transition Plan: National Strategy for Climate and Energy; Bradford District Climate Change Strategy (Draft) etc.
		<ul style="list-style-type: none"> <li>Policies should direct new development so it is not exposed unnecessarily to flooding and so it does not increase flood risk. Functional floodplains should be protected.</li> </ul>	NPPF (paragraph 94, 99-100); PPS25 Development and Flood Risk-Practice Guide; Bradford Strategic Flood Risk Assessment (Level-1) etc.
		<ul style="list-style-type: none"> <li>There is a need to reduce pollution from industry and enhance land, air and water quality.</li> </ul>	NPPF (paragraph 120-121, 124);
		<ul style="list-style-type: none"> <li>Urgently need to divert waste from landfill – reduce waste generated, re-use, recycle and recover energy from waste (in that order)</li> </ul>	PPS 10 Planning for Sustainable Waste Management; Waste DPD (publication draft); Bradford District Municipal Waste Management Strategy etc.
		<ul style="list-style-type: none"> <li>New development must be energy efficient, minimise trips generated by vehicles and avoid adding to congestion.</li> </ul>	NPPF (paragraph 30, 41); Delivering a Sustainable Transport System; WY Local Transport Plan; Bradford District Transport Strategy etc.
	Use of Resources	<ul style="list-style-type: none"> <li>Include design policies that ensure a better living environment with enriched urban spaces, places for people, safe, active and healthy communities and adaptability.</li> </ul>	NPPF (paragraph 60-62); Sustainable Communities: People, Places and Prosperity; World Class Places: The Government's Strategy for Improving Quality of Places etc.

		<ul style="list-style-type: none"> <li>• Include policies that aim to ensure the environmental impact of buildings is minimised.</li> </ul>	NPPF (paragraph 56-58); Building a Greener Future; Code for Sustainable Homes, etc.
		<ul style="list-style-type: none"> <li>• Develop policies that encourage increased use of renewable energy resources and more efficient use of resources including energy and water.</li> </ul>	NPPF (paragraph 95, 97); The UK Low Carbon Transition Plan: National Strategy for Climate and Energy; UK Renewable Energy Strategy; Regional Energy Infrastructure Strategy etc.
	Biodiversity, Landscape and Heritage Asset.	<ul style="list-style-type: none"> <li>• Consider how plan can maintain and enhance natural habitats and biodiversity and protect wildlife and geological conservation interests, including incorporating features into development.</li> </ul>	NPPF (paragraph 109-114, 117-118); Natural Environment White Paper 2011; Biodiversity 2020: A strategy for England's Wildlife and Ecosystems Services; Bradford Local BAP (Draft) etc.
		<ul style="list-style-type: none"> <li>• Open spaces need to be provided / protected in order to promote health / well-being, support urban renewal, encourage social cohesion and also benefit biodiversity.</li> </ul>	NPPF (paragraph 73, 74); PPS1 Supplement: Planning for Ecotowns; Bradford Open Space, Sports and Recreation Study etc.
	<ul style="list-style-type: none"> <li>• There is a need to protect and enhance the historic environment.</li> </ul>	NPPF (paragraph 126, 129-130, 136-138); UK Governments Statement on the Historic Environment for England 2010; Saltaire WHS Environmental Capacity Study.	
<b>Economic</b>	Transport and Accessibility	<ul style="list-style-type: none"> <li>• Increase accessibility by sustainable modes and reduce congestion and the need to travel.</li> </ul>	NPPF (paragraph 29-32, 34-38); Delivering a Sustainable Transport System; WY Local Transport Plan; Bradford District Transport Strategy etc.

		<ul style="list-style-type: none"> <li>There is a need to address accessibility to jobs, health, housing, education, shops, leisure and community facilities (both in terms of location and physical access) for all members of the community.</li> </ul>	NPPF (paragraph 50); World Class Places: The Government's Strategy for Improving Quality of Places; The Big Plan; Bradford District Economic Assessment etc.
	Employment and Skill Development	<ul style="list-style-type: none"> <li>Employment, incomes and skill levels needs to be increased in communities suffering high level of deprivation.</li> </ul>	The Big Plan; Bradford District Economic Strategy etc.
		<ul style="list-style-type: none"> <li>Produce policy that is flexible with early community/stakeholder involvement and promotes development of high growth and high productivity sectors and assists education and skills training required to meet business needs.</li> </ul>	NPPF (paragraph 155); The Big Plan; Bradford District Economic Strategy etc.

13.4 Detail analysis of all these sustainability issues and how they would be addressed in the AAP are discussed in the SA Scoping report.

13.5 The scoping stage of the sustainability appraisal will also outline sustainability objectives for the SCRC Area Action Plan based on these broad sustainability issues. The objectives will be further revised and refined at later stages of the appraisal process through consultations of the various options designed to meet the plan objectives.

13.6 Each option will meet the range of objectives in different ways. Some of the objectives may conflict, and so each option will meet each objective to a differing extent. This provides an opportunity to test and measure each option against each objective, providing an outline Sustainability Appraisal of the options. The outline appraisal report will suggest mitigation and monitoring methodologies and identify the preferred option. This will be carried out and reported upon as part of the community consultation process. Therefore the Sustainability Appraisal will be integrated into the process. The final SA report of the SCRC Area Action Plan will be integrated with the Sustainability Appraisal of the entire LDF.

## **14. CONCLUSION**

- 14.1 The key issues identified within this report will be addressed through the approach being undertaken to prepare the AAP. This combines a collaborative consultation process and evaluation to prepare the emerging development options. The baseline analysis and the evaluation of key will help determine development priorities for the CRC and influence spatial distribution of the planned growth proposed by the AAP.
- 14.2 As part of the ongoing consultation which is being undertaken, this report will be made publicly available for comment and review. Any additional information, factual corrections or further thoughts will be welcomed by Bradford Metropolitan District Council.
- 14.3 At the present time, this report has been deliberately left in 'Draft' and will be supplemented with additional information during the course of the preparation of the AAP submission report. This report and its findings will be the subject of further extensive public consultation and engagement.