



# Preliminary Environmental Appraisal

Bath Park and Ride

January 2016

Bath and North East Somerset Council



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Lewis House,  
Manvers Street,  
Bath, BA1 1JG



# Issue and revision record

<b>Revision</b>	<b>Date</b>	<b>Originator</b>	<b>Checker</b>	<b>Approver</b>	<b>Description</b>
A	17/09/2015	Joshua Higgins	Julia Barrett	Giles Hewson	Final
B	18/01/2016	Katie Rogerson	Julia Barrett	Kim Hampton	Revised following addition of Option C and I

**Information class: Standard**

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# 1 Introduction

## 1.1 Background Information

The City of Bath has a number of challenging transport problems to address. One of these challenges is the need to improve access into the city from the east, particularly along London Road, which can often be subject to severe congestion and poor air quality.

Bath and North East Somerset Council (B&NES) has a very successful strategy of developing Park and Ride (P&R) sites around the city which has improved access from the north, south and west and helped to reduce traffic levels in some areas. Three existing P&R facilities have been expanded with an additional 230 spaces at Odd Down (completed in November 2012), an additional 390 spaces at Lansdown (completed February 2013) and a further 248 spaces at Newbridge (additional facilities now being completed) to provide a total of 2,860 P&R spaces. A further P&R Scheme has been considered in the context of the wider strategy to address the problems indicated above. Five sites are currently under consideration, and are further discussed under Section 1.2 below. Each of the P&R proposals has been considered against a set of objectives:

- To reduce congestion within the city and around our off-street car parking sites;
- To improve the city's environment;
- To reduce car use into the city centre and improve the proportion of journeys made by public transport;
- To reduce carbon emissions from transport;
- To support the city's economic development and Enterprise Area; and,
- To improve connectivity to support business and growth of the wider region.

Mott MacDonald has been commissioned by B&NES to complete a Preliminary Environmental Appraisal of five proposed P&R sites, which is the purpose of this report. This initial appraisal is based upon currently available information regarding each of the sites, but has not been informed by detailed environmental surveys such as protected species surveys (where these may be required), or a detailed scheme design or construction information. Conclusions regarding environmental risk for environmental topics have been drawn and presented on a Red Amber Green (RAG) scale.

This report was originally prepared in September 2015 to appraise three potential Park and Ride sites and was subsequently updated in January 2016 to include an additional two sites.

Once the preferred site has been confirmed, the P&R proposal will be subject to a Planning Application under the Town and Country Planning Act 1990 (as amended). A brief review of relevant National Planning Policy for relevant environmental disciplines has been included within this report. It is likely that further environmental assessment would be required (either statutory in the form of an Environmental Statement, or non-statutory as stand-alone reports) to support any Planning Application, which will build upon this Preliminary Appraisal.

## 1.2 Park and Ride Site Options

A report was produced by Halcrow in May 2013, referenced as 'Site Options: High Level Review, Document: 1 Version: 2 Bath Eastern Park and Ride Sites'. This report originally considered nine sites, referred to as Options A to I and provides a background to each site as well as outlining any environmental constraints.

Following the review undertaken by Halcrow, Mott MacDonald has been commissioned by B&NES to complete a Preliminary Environmental Appraisal of five of these P&R sites, four of which are situated to the east of the City and one to the north, as illustrated in Drawing MMD-343157-C-DR-ENV-0101 within Appendix A. Drawing MMD-343157-C-DR-ENV-0101 also identifies environmental constraints within a 2km radius of each option. Constraints are further discussed in Table 3.2. The five sites are as follows:

### Park and Ride Site A

The proposed Site A is situated between London Road West to the north and the River Avon to the south on land which is primarily used by a Rugby Club. Although a small portion of this site would extend as far west as Lambridge House, approximately 130m to the west of the A4/ A46 junction. The total area of the P&R at Site A would be 8.37Ha.

### Park and Ride Site B

The proposed Site B is enclosed between the River Avon to the north, the A4 to the south and Mill Lane to the east. The existing land use is currently pasture for livestock. The total area of the P&R at Site B would be 7.29Ha.

### Park and Ride Site C

The proposed Site C lies to the east of the A46 (Gloucester Road) and to the west of Charmy Down disused airfield. The existing land use is currently pasture for livestock. The approximate area of Site C is 16.4Ha.

### Park and Ride Site F

The proposed Site F is also enclosed between the River Avon to the north and the A4 to the south, but is located to the east of Mill Lane. The existing land use is currently pasture used for livestock. The total area of the P&R at Site F would be 8.53Ha.

### Park and Ride Site I

The proposed Site I lies to the south of A4 (Box Road) and By Brook, which is a tributary of the River Avon. The site lies adjacent to the Great Western Main Line (GWML) railway line as well as woodland blocks and hedgerows. The land is currently used for storing spoil. The site covers an area measuring approximately

4.4Ha. This land and the access junction with the A4 Box Road are wholly within the North Wiltshire District Council boundary.

### **1.3 Designations Overview**

Drawing MMD-343157-C-DR-ENV-0101 within Appendix A identifies statutory and non-statutory environmental designations within a 2km radius of each potential P&R location.

#### **1.3.1 Statutory Designations**

Statutory ecological designations include Bath and Bradford-on-Avon Bats Special Area of Conservation (SAC), which is located within 2km of all of the proposed P&R sites except for site C which is located within 4.7km. Mells Valley SAC, North Somerset and Mendip Bats SAC and Bath and Bradford-on-Avon Bats SAC are all designated for their bat populations and are located within 30km of the proposed sites. All SAC's (including those which are designated for their bat populations) are considered to be of very high value and of international importance. One geological Site of Special Scientific Interest (SSSI), namely Hampton Rocks Cutting SSSI, is located within 200m of Sites B and F, and is considered to be of high value and national importance. Monkswood Valley SSSI which is designated for its broadleaved, mixed and yew woodland is located 380m north of Site C. Monkswood Valley SSSI is considered to be of high value and regional importance.

The City of Bath World Heritage Site (WHS) is located within 1km of Sites A, B and F. The WHS lies approximately 2.1km from Site C and 2.3km from Site I. The City of Bath WHS, is of high value and international importance. There is a Slight Univallate Hillfort which is designated as a Scheduled Ancient Monument (SAM) within 2km of all Sites and Bathford Bridge, also a SAM, lies within 2km of Sites A, B and F. There are also numerous Listed Buildings situated within 1km of all proposed sites. SAM's are of high value and nationally important, whilst Listed Buildings vary depending on Grade and type of structure, but are generally of high value and also are nationally important. Four Conservation Areas (CA) are also located within 1km of the proposed sites, which are of medium sensitivity and are locally important.

Statutory landscape designations comprised one Area of Outstanding Natural Beauty (AONB). Sites C and I are within The Cotswolds AONB, with Sites A, B and F located within 1km of the AONB which is considered to be of high value and national importance. Statutory air quality designations include one Air Quality Management Area (AQMA), Bath AQMA, which is located within 1km of the Sites A, B and F which is declared for exceedances in nitrogen dioxide (NO<sub>2</sub>).

#### **1.3.2 Non-statutory Designations**

Non-statutory ecological designations within 1km of the proposed sites include one Local Nature Reserve (LNR) and numerous Biodiversity Action Plan (BAP) habitats which are of medium conservation value. Non-statutory heritage designations within 1km of the all three of the proposed sites include Bath Archaeological Character Area which is of medium sensitivity and are locally important.

Non-statutory noise designations within the vicinity of Scheme options comprise two Noise Important Areas (NIA's). Additional non-statutory designations include one river listed under the Water Framework Directive (WFD), the River Avon (GB109053027370), which is located adjacent to all three of the proposed sites, numerous Public Rights of Way (PRoW) and Grade 3 and 4 agricultural land which can be considered as being of medium sensitivity.

## 2 Policy Review

### 2.1 National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out the government's planning policies for England and how these are expected to be applied (Department for Communities and Local Government, 2012).

Table 2.1 below provides a summary of national policy relevant to each environmental topic.

Table 2.1: Summary of National Policy

Topic	National Planning Policy Framework (NPPF) Review
Air Quality	Compliance with EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas (AQMAs) is a requirement (Paragraph 124). Developments which contribute to an unacceptable risk or unacceptable levels of air pollution should be prevented (Paragraph 109).
Cultural Heritage	Paragraphs 128 and 129 require an applicant to describe, identify and assess the significance of any heritage assets affected, including any contribution made to their setting. Significant weight should be given to the conservation of the asset (Paragraph 132) and where development will lead to less than substantial harm to the significance of a designated heritage asset, the harm should be weighed against the public benefits of the proposal (Paragraph 134). Refusal of consent is required when a Scheme would result in the substantial harm or total loss of significance of a designated heritage asset (Paragraph 133), unless substantial public benefits outweigh that harm or loss. The significance of non-designated heritage assets should be considered, and a balanced judgement would have to be made with regard to the scale of any harm or loss and the significance of the heritage asset (Paragraph 135).
Landscape and Visual	The planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, geological conservation interest and soils (Paragraph 109), whilst decisions should encourage the effective use of land by re-using land which has been previously developed (Paragraph 111). Great weight should be given to conserving landscape and scenic beauty in The Broads, Areas of Outstanding Natural Beauty (AONB) and National Parks (Paragraph 115). Whilst preparing local plans, local planning authorities should set out environmental criteria against which planning applications will be assessed to ensure permitted operations do not have unacceptable adverse impacts on visual intrusion (Paragraph 143).
Biodiversity	Paragraph 117 promotes the preservation, restoration and recreation of priority habitats, ecological networks and protection and recovery of priority species. However, consent should be refused if irreplaceable habitats such as ancient woodland and/ or veteran trees are lost or deteriorate in quality as a result of a Scheme (Paragraph 118), unless the benefits of the development clearly outweigh the loss. Additionally, if significant harm cannot be avoided, adequately mitigated, or (as a last resort) compensated for, then consent should be refused. Where a project would be likely to adversely affect an SSSI the development would not normally be permitted, unless the benefits of the development clearly outweigh impacts on the features of the qualifying features of the SSSI and/ or

Topic	National Planning Policy Framework (NPPF) Review
	broader impacts on the national network of SSSI's. Projects on land within or outside an ecological designation, but are likely to have an adverse effect upon the site (distinction between the hierarchy of international, national and local designations should be measured) are not favoured. The presumption in favour of sustainable development (Paragraph 14) does not apply where development requires Appropriate Assessment (AA) under the Birds or Habitats Directive.
Noise and Vibration	Paragraph 123 requires projects to avoid noise giving rise to significant adverse impacts on health and quality of life, to mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise, and to identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason. Developments which contribute to unacceptable levels or place unacceptable risk of adverse effects from noise pollution should be prevented. (Paragraph 109).
Water: Hydrology and Drainage	Paragraph 100 requires that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere (Paragraph 103). A Flood Risk Assessment (FRA) should support the proposal. Developments which contribute to unacceptable levels or place unacceptable risk of adverse effects from water pollution should be prevented (Paragraph 109). Through preparing local plans, local planning authorities should set out environmental planning criteria against which planning applications will be assessed to ensure permitted operations do not have unacceptable adverse impacts on increased flood risk and impacts on the flow and quantity of surface and groundwater (Paragraph 143).
Socio economic and Community Impacts	The Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth (Paragraph 19). Planning decisions should guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs (Paragraph 70), whilst protection and enhancement of Public Rights of Way (PRoW) and access and seeking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks, should be sought by the applicant (Paragraph 75).
Soils and Geology	The planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, geological conservation interest and soils (Paragraph 109), whilst local planning authorities should consider the benefits (such as economic) of the best and most versatile land (Paragraph 112). Where significant development is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality. Through preparing local plans, local planning authorities should set out environmental planning criteria against which planning applications will be assessed to ensure permitted operations do not have unacceptable adverse impacts on differential settlement of quarry backfill, mining subsidence and migration of contamination from the site (Paragraph 143).

## 2.2 Local Planning Policy Framework

### 2.2.1 Bath and North East Somerset

The B&NES Local Plan was adopted in 2007 and sets out policies which guide how and where developments should take place up to December 2011. The Council made a request to the Secretary of State in 2010 to extend the policies in the Local Plan beyond 2011 and ensure there is a continued comprehensive robust planning policy framework for the district.

The Core Strategy for B&NES was formally adopted by the council on the 10<sup>th</sup> July 2014 and forms part of the Development Plan for the District and will be used in the determination of all planning applications submitted to the council alongside relevant policies presented within the Joint Waste Core Strategy (2011) and Local Plan (2007) which have not been replaced by the Core Strategy.

Table 2.2 below provides a summary of the relevant local policies for each environmental topic. Only those policies that have been saved from the 2007 local plan are included under this heading.

Table 2.2 Summary of Local Policy (Bath and North East Somerset)

Topic	Local Policy Review
Air Quality	<p><b>Core Strategy</b></p> <p>Within the Core Strategy, Policy CP13 requires all new developments to be supported by necessary infrastructure, including forms of energy supply that help to reduce carbon emissions. Section 2G of the Core Strategy necessitates the implementation of the Air Quality Management Plan for Bath to enable the delivery of B&amp;NES spatial strategy through the delivery of proposals such as the creation of one or more P&amp;R's on the eastern side of the city (Page 73) or progressing improvements through Bath Transport Package (Page 72). Core policy 6f focuses on reductions to transport carbon emissions through the promotion of the Joint Local Transport Plan 3.</p> <p><b>Local Plan</b></p> <p>Policy ES.10 within the Local Plan continues to be used in conjunction with policies from the Core Strategy and Joint Waste Mineral Strategy and ensures that developments will not be permitted which are assessed under either of the following;</p> <ul style="list-style-type: none"> <li>(i) <i>have an adverse impact on health, the natural or built environment or amenity of existing or proposed uses by virtue of odour, dust and/ or other forms of air pollution or,</i></li> <li>(ii) <i>be likely to suffer unacceptable nuisance as a result of proximity to existing sources of odour, dust and/ or other forms of air pollution.</i></li> </ul>
Cultural Heritage	<p><b>Core Strategy</b></p> <p>Sustaining and enhancing the significance of The City of Bath WHS and the setting of the Conservation Area have been highlighted as a key challenge to B&amp;NES and as such, the Bath spatial strategy (Policy B1) seeks to support action proposed in the City of Bath WHS Management Plan (2010). As part of Policy B1, the enabling of enhanced facilities for interpretation of the WHS would contribute to Tourism, Culture and Sport within the City. Policy B4 states that where developments have a demonstrable public benefit, including</p>

Topic	Local Policy Review
	<p>mitigating and adapting to climate change, this benefit will be weighed against the level of harm to the Outstanding Universal Value of the WHS. Policy 6c reaffirms the importance of heritage assets to the distinctiveness of the city whilst Policy CP6 promotes the enhancement of the historic environment including the character and setting of designated and other heritage assets.</p> <p><a href="#">Local Plan</a></p> <p>Relevant policies relating to Cultural Heritage within the Local Plan include: Listed Buildings (Policies BH.2, BH. 3and BH. 4) and ensuring their long term preservation; Conservation Areas (Policies BH. 6 BH. 7 and BH. 8) which ensure the character and appearance of the Conservation Area is retained; Scheduled Ancient Monuments (SAMs) (Policy BH. 11) ensuring that the setting and preservation of SAMs and other sites of national importance is maintained; Archaeological remains (Policies BH. 12 and BH. 13) policies state that development which could harm important archaeological remains or their setting will not be permitted unless adverse impacts of a proposal can be mitigated and subsequently preserved.</p>
<p>Landscape and Visual</p>	<p><a href="#">Core Strategy</a></p> <p>The Councils strategy to sustain and enhance the significance of the city’s heritage assets includes great weight to be given to conserving the landscape and scenic beauty in the Cotswolds AONB (Policy B1), whilst the Place making Plan sets out how redevelopment of specific sites can respond to the urban character of streets, blocks and plots within the core of the city. Policy CP6 states that the distinctive character and quality of B&amp;NES landscapes will be conserved or enhanced. Green infrastructure which enhances landscape character has been identified by the council as a key way to benefit people and wildlife (Policy CP7).</p> <p><a href="#">Local Plan</a></p> <p>Policy NE.1 within the Local Plan has been retained and ensures that developments which do not either conserve or enhance the character and local distinctiveness of the landscape will not be permitted, whilst Policy NE.2 ensures the protection of the AONB and that any development which adversely affect the natural beauty of the landscape of the AONB will not be permitted. Policy BH. 15 also seeks to safeguard the contribution of sites which make up the local character.</p>
<p>Biodiversity</p>	<p><a href="#">Core Strategy</a></p> <p>The overarching strategy for B&amp;NES (Policy DW1) is to promote sustainable development through protecting and enhancing the Districts biodiversity resource including sites, habitats and species of European importance (this is also stated within Policy B1). Policy CP6 promotes enhancement to the quality, extent and robustness of protected sites and valued habitats through restoration or creation measures such as (not exclusively) enhancing connection between sites and creating new and valued habitats.</p> <p><a href="#">Local Plan</a></p> <p>Numerous polices have been brought forward by B&amp;NES which ensure the protection of trees woodlands (Policy NE. 4) and other habitats (Policy NE. 12) or the requirement for compensatory provision (if applicable), protection of SSSIs (Policy NE. 8) through only allowing developments which would not adversely affect SSSIs (after appropriate mitigation or compensation) or have imperative reasons of national importance for the development. The protection of SNCIs, RIGS and Local Nature Reserves by not permitting development which would adversely affect any of these (after mitigation or compensation),</p>

Topic	Local Policy Review
	<p>unless material factors are sufficient to override the local biological/ geomorphological and community/ amenity value of the site is included in Policy NE. 9. Refusal of consent for developments which would adversely affect in internationally or nationally protected species or their habitat (Policy NE. 10) or species of importance to B&amp;NES, unless the importance of the development and its need for that particular location is sufficient to override the local value of the species (policy NE. 11).</p>
<p>Noise and Vibration</p>	<p><b>Core Strategy</b></p> <p>As part of the spatial vision for the city (section 1c), B&amp;NES seek to protect and enhance the District's natural, built and cultural assets and provide green infrastructure which would help to avoid noise pollution.</p> <p><b>Local Plan</b></p> <p>Policy ES. 12 within the Local Plan sets out the Council's position on proposals coming forward where noise is a material consideration:</p> <p><i>Development which adversely affect health, the natural or built environment or general amenity as a result of an unacceptable increase in levels of noise and/ or vibration will not be permitted and, proposals for new noise sensitive development which would be subject to unacceptable levels of noise or vibration, both now and in the foreseeable future, from an existing noise source or source will result from a proposed use will not be permitted.</i></p> <p>Policy ES. 9 states BANES will refuse permission to those developments which would pose unacceptable risks of pollution to other existing or proposed land uses or be at unacceptable risk from existing or potential sources of pollution or nuisance.</p>
<p>Water: Hydrology and Drainage</p>	<p><b>Core Strategy</b></p> <p>Policy CP2 of the Core Strategy regards Sustainable Construction. Sustainable design and construction will be integral to new development in Bath &amp; North East Somerset. All planning applications should include evidence that certain standards will be met, including conserving water resources and minimising vulnerability to flooding.</p> <p>Policy CP5 covers Flood Risk Management. Development in the District will follow a sequential approach to flood risk management, avoiding inappropriate development in areas at risk of flooding and directing development away from areas at highest risk in line with Government policy (NPPF). Any development in areas at risk of flooding will be expected to be made safe throughout its lifetime, by incorporating mitigation measures, which may take the form of on-site flood defence works and / or a contribution towards or a commitment to undertake such off-site measures as may be necessary. All development will be expected to incorporate sustainable drainage systems to reduce surface water run-off and minimise its contribution to flood risks elsewhere. All development should be informed by the information and recommendations of the B&amp;NES Strategic Flood Risk Assessments and Flood Risk Management Strategy.</p> <p><b>Local Plan</b></p> <p>Policy ES.5 states that Development will not be permitted where:</p> <p><i>i) there is inadequate provision made for sustainable foul and surface water sewerage infrastructure; and</i></p> <p><i>ii) it would result in foul or surface water problems on or off site.</i></p>
<p>Socio economic and</p>	<p><b>Core Strategy</b></p> <p>Policy CP7 of the Core Strategy addresses Green Infrastructure. The integrity, multi-functionality, quality and connectivity of the strategic Green Infrastructure (GI) network will</p>

Topic	Local Policy Review
<p>Community Impacts</p>	<p>be maintained, protected and enhanced. Opportunities will be taken to connect with, improve and extend the network. Existing and new GI must be planned, delivered and managed as an integral part of creating sustainable communities.</p> <p><b>Local Plan</b> Policy CF.1 of the Local Plan states that development involving the loss of a site used, or last used, for community purposes will be permitted only where:</p> <ul style="list-style-type: none"> <li><i>i) there is adequate existing local provision of community facilities;</i></li> <li><i>or</i></li> <li><i>ii) there is a local need for additional community facilities, but the site is unsuitable to serve that need or there is no realistic prospect of it being used for that local need; or</i></li> <li><i>iii) alternative facilities of equivalent community benefit will be provided; or</i></li> <li><i>iv) the proposed loss is an integral part of changes by a public service provider which will improve the overall quality or accessibility of public services in the District.</i></li> </ul>
<p>Geology and soils</p>	<p><b>Local Plan</b> Policy ES.15 on land known to be or strongly suspected of being contaminated, or where development may result in the release of contaminants from adjoining land, development will only be permitted where:</p> <ul style="list-style-type: none"> <li><i>(i) it would not give rise to significant harm or significant risk of significant harm to health or the environment or cause pollution of any watercourse, water body or aquifer; and</i></li> <li><i>(ii) any remedial action required:</i> <ul style="list-style-type: none"> <li><i>(a) safeguards users or occupiers of the site or neighbouring land; and</i></li> <li><i>(b) protects the environment and any buildings or services from contamination during its implementation and in the future.</i></li> </ul> </li> </ul>

### 2.2.2 North Wiltshire

The Wiltshire Core Strategy Development Plan was formally adopted by Wiltshire Council on the 20<sup>th</sup> January 2015 and is the most important part of the Local Development Framework (LDF). The plan provides a positive and flexible overarching planning policy framework for Wiltshire for the period up to 2026.

The Wiltshire Core Strategy replaces a number of policies from the former district council's local plans, one of which is the North Wiltshire Local Plan 2011. Some of the policies from this local plan have remained saved as part of the Wiltshire Core Strategy.

Table 2.3 Summary of Local Policy (North Wiltshire)

Topic	Local Policy Review
<p>Air Quality</p>	<p><b>Core Strategy</b> Under strategic objective 5 of the Spatial Vision for Wiltshire, maintenance of good air quality and progress in treating areas of risk through air quality management plans is identified as a key outcome.</p>

Topic	Local Policy Review
	<p>Core Policy 55 of the Core Strategy requires that development proposals likely to exacerbate existing areas of poor air quality to demonstrate measures can be taken to effectively mitigate emission levels. Mitigation measures should demonstrate how they will make a positive contribution to the aims of the Air Quality Strategy for Wiltshire and where relevant, the Wiltshire Air Quality Plan.</p> <p>Green infrastructure, addressed in Core Policy 52, has a recognised benefit of reducing air pollution.</p> <p><b>Local Plan</b> Policy NE18 within the local plan states that development will only be permitted where it would not generate, or itself be subject to, harm upon public health or cause pollution to the environment by the emission of excessive noise, light intrusion, smoke, fumes, other forms of air pollution, heat, radiation, effluent or vibration.</p>
<p><b>Cultural Heritage</b></p>	<p><b>Core Strategy</b> Features and areas of historical and cultural value will be conserved and where possible enhanced, as an outcome of strategic objective 5 of the Spatial Vision for Wiltshire.</p> <p>Core Policy 58 ensures the conservation of the historic environments, stating that development should protect, conserve and where possible enhance the historic environment. Designated heritage assets and their settings will be conserved, and where appropriate enhanced in a manner appropriate to their significance, including:</p> <ol style="list-style-type: none"> <li>I. Nationally significant archaeological remains;</li> <li>II. WHS within and adjacent to Wiltshire;</li> <li>III. Buildings and structures of special architectural or historic interest;</li> <li>IV. The special character or appearance of conservation areas;</li> <li>V. Historic parks and gardens; and</li> <li>VI. Important landscapes, including registered battlefields and townscapes.</li> </ol> <p>Heritage assets at risk will be monitored and development proposals that improve their condition will be encouraged. The advice of statutory and local consultees will be sought in consideration of such applications.</p> <p>Core Policy 57 ensures high quality design and place shaping, with developments expected to create a strong sense of place through drawing local context and being complimentary to locality.</p>
<p><b>Landscape and Visual</b></p>	<p><b>Core Strategy</b> The landscape character will be protected and enhanced, particularly Areas of Outstanding Natural Beauty (ANOB's), as a key outcome of strategic objective 5 as part of the Spatial Vision for Wiltshire.</p> <p>Core Policy 51 within the Core Strategy outlines the measures to protect, conserve and enhance Wiltshire's landscape, with 10 Landscape Character Assessments (LCAs) currently covering Wiltshire. Proposals should be informed by and sympathetic to the distinctive character areas identified in the relevant Landscape Character Assessment(s) and any other relevant assessments and studies.</p>

Topic	Local Policy Review
	<p>Wiltshire’s landscape is acknowledged as nationally significant; 44% of the area administered by Wiltshire Council is designated as an AONB. Subsequently great weight is given to conserving landscape and scenic beauty in these areas in accordance with paragraphs 115 and 116 of the National Planning Policy Framework (NPPF). Proposals for development within or affecting the AONBs must demonstrate that they have taken account of the objectives, policies and actions set out in the relevant Management Plans for these areas.</p>
Biodiversity	<p><b>Core Strategy</b></p> <p>Strategic objective 5 of the core strategy aims to direct development away from Wiltshire’s most sensitive and valuable natural assets, habitats and species. New developments are to contribute to the delivery of the Wiltshire Biodiversity Action Plan (BAP) targets while it is aimed that local biodiversity and wildlife corridors will be incorporated into new development.</p> <p>Core Policy 50 states that development proposals must demonstrate how they protect features of nature conservation as part of the design rationale and incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats. Proposed development on land within or outside a SSSI likely to have an adverse effect on a SSSI will be determined in accordance with the requirements of paragraph 118 of the NPPF and Circular 06/2005.</p> <p>Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance set out in paragraphs 6.75-6.77 above where possible, otherwise bespoke measures must be provided to demonstrate that the proposals would have no adverse effect upon the Natura 2000 network. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy.</p> <p><b>Local Plan</b></p> <p>From the North Wiltshire Local Plan 2011, policy NE12 has been saved. The creation, conservation, enhancement and positive management of woodlands across the district will be supported. In particular, areas of ancient and semi-natural woodland should be protected. The retention of the visual amenity and nature conservation value will be sought in particular at the following:</p> <ul style="list-style-type: none"> <li>i) Bird's Marsh Wood, Chippenham;</li> <li>ii) Vincient's Wood, Chippenham;</li> <li>iii) Pockeredge Drive Wood, Corsham; and</li> <li>iv) Woodland within Braydon Forest.</li> </ul> <p>Another saved policy, NE14, states that permission will not be granted for proposals that would result, or be likely to result, in the loss of trees, hedges, lakes/ponds or other important landscape or ecological features that could be successfully and appropriately incorporated into the design of a development. Planning conditions will be imposed and Tree Preservation Orders made, for safeguarding single and small groups of trees in the interests of public amenity.</p>

Topic	Local Policy Review
<p>Noise and Vibration</p>	<p><b>Core Strategy</b> Within Core Policy 52, one of the highlighted socio economic and cultural benefits of green infrastructure is a reduction in noise and air pollution.</p> <p><b>Local Plan</b> Policy NE18 from the local plan states that development will only be permitted where it would not generate, or itself be subject to, harm upon public health or cause pollution to the environment by the emission of excessive noise, light intrusion, smoke, fumes, other forms of air pollution, heat, radiation, effluent or vibration.</p>
<p>Water: Hydrology and Drainage</p>	<p><b>Core Strategy</b> A key outcome of strategic objective 5 of the Spatial Vision for Wiltshire is improving the quality and quantity of Wiltshire’s ground and surface water, to achieve objectives of the Water Framework Directive.</p> <p>Flood risk is outlined in Core Policy 67, stating that developments proposed in Flood Zones 2 and 3, as identified within the Strategic Flood Risk Assessment, will need to refer to the Strategic Land Availability Assessment when providing evidence to the local planning authority in order to apply the sequential test in line with the requirements of national policy and established best practice. All new development will include measures to reduce the rate of rainwater run-off and improve rainwater infiltration to soil and ground (sustainable urban drainage) unless site or environmental conditions make these measures unsuitable.</p> <p>Core Policy 68 addresses water resources. Development must not prejudice the delivery of the actions and targets of the relevant River Basin or Catchment Management Plan, and should contribute towards their delivery where possible. Non-residential development will be required to incorporate water efficiency measures. Developers will be expected to submit details of how water efficiency has been taken into account during the design of proposals. Development proposals within a Source Protection Zone, Safeguard Zone or Water Protection Zone must assess any risk to groundwater resources and groundwater quality and demonstrate that these would be protected throughout the construction and operational phases of development.</p>
<p>Socio economic and Community Impacts</p>	<p><b>Core Strategy</b> Under strategic objective 5 of Wiltshire’s Spatial Vision, the green infrastructure network should be maintained, enhanced and expanded to contribute towards the Wiltshire Green Infrastructure Strategy.</p> <p>Core Policy 52 states that development shall make provision for the retention and enhancement of Wiltshire’s green infrastructure network, and shall ensure that suitable links to the network are provided and maintained. If damage or loss of existing green infrastructure is unavoidable, the creation of new or replacement green infrastructure equal to or above its current value and quality, that maintains the integrity and functionality of the green infrastructure network, will be required.</p> <p>Within Core Policy 49, development proposals that involve the loss of a community service or facility will only be supported where it can be demonstrated that the site/building is no longer economically viable for an alternative community use. Preference will be given to</p>

Topic	Local Policy Review
	<p>retaining the existing use in the first instance, then for an alternative community use. Where this is not possible, a mixed use, which still retains a substantial portion of the community facility/service, will be supported. Redevelopment for non-community service/facility use will only be permitted as a last resort and where all other options have been exhausted.</p>
<p>Geology and soils</p>	<p><b>Core Strategy</b></p> <p>Core Policy 56 explains that development proposals which are likely to be on or adjacent to land which may have been subject to contamination will need to demonstrate that measures can be taken to effectively mitigate the impacts of land contamination.</p> <p>Developers will be required to demonstrate that the development site is, or will be, made suitable for the proposed final use and will need to provide one or more of the following documents:</p> <ul style="list-style-type: none"> <li>• Detailed site history identifying possibly contaminative uses;</li> <li>• Site characterisation: The nature and extent of any contamination and the hazards and risks posed;</li> <li>• Detailed remediation scheme: Including methodology and quality assurance;</li> <li>• Methodology to report unexpected contamination;</li> <li>• Methodology to ensure verification of remedial works; and</li> <li>• Details of long term monitoring and maintenance proposals (where necessary).</li> </ul>

# 3 Environmental Constraints, Predicted Effects and Proposed Mitigation

## 3.1 Predicted Effects

For each environmental topic presented within Table 3.2, baseline environmental conditions and constraints have been described within an appropriate study area. Subsequently, based on the locations and likely scope of works known at this stage (preliminary details only), potential environment effects for each environmental topic have been considered, with potential mitigation requirements also outlined. At this early stage of design, opportunities and enhancements have also been considered which could be incorporated into the design to ensure a sustainable final Scheme.

A Red Amber Green (RAG) system has been applied to each environmental topic which will assist in determining environmental issues from the outset and will ensure that potential issues are appropriately addressed. Table 3.1 below presents the criteria which have been used to determine RAG ratings for individual environmental topics.

Table 3.1: RAG criteria used for each environmental topic

RAG rating	Criteria for each rating
<b>Red</b>	A Red rating is for those environmental topics in which overall environmental effects (during construction and/ or operation phases) are likely to be significantly adverse, and which would be difficult to mitigate sufficiently (i.e. significant residual effects would be likely).
<b>Amber</b>	An Amber rating has been given to environmental topics where overall effects (during construction and/ or operation phases) would be potentially significant adverse, but can be appropriately mitigated.
<b>Green</b>	A Green rating has been attributed to environmental topics where overall effects (both construction and/ or operation phase) are likely to be either Neutral or Beneficial (Slight, Moderate or Major) based on the current design.

Table 3.2: Environmental Constraints, Predicted Effects and Proposed Mitigation Measures

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
<p><b>Air Quality</b></p>	<p>Bath AQMA, designated for exceedances in nitrogen dioxide (NO<sub>2</sub>), is present within 1km of all three proposed sites. Part of the proposed Site A would be located within the Bath AQMA.</p> <p>Approximately 90 residential properties and two farms have been identified within 200m of the proposed sites.</p> <p>No SSSIs or Natura 2000 sites designated for their habitats or flora have been identified within 200m of the proposed sites.</p>	<p><b>Construction</b></p> <p>Construction plant and machinery have the potential to temporarily reduce air quality at nearby receptors, including Bath AQMA, through emissions of nitrogen oxides (NO<sub>x</sub>), particulates (PM<sub>10</sub> and PM<sub>2.5</sub>) and other combustion related pollutants. The likely duration of works and Traffic Management (TM) arrangements are still to be finalised, but could influence mitigation requirements during construction.</p> <p>Adverse effects resulting from dust emissions attributed to the Scheme may also occur although the employment of good practice measures would reduce adverse effects. Assuming works are carried out in accordance with best practice and a CEMP is strictly implemented overall effects are likely to be Slight Adverse.</p> <p><b>Operational</b></p> <p>There is potential for the proposed Scheme to alter traffic flows by more than 1000 Average Annual Daily Traffic (AADT) for cars and more than 200 AADT for HGV's (buses) through the incorporation of an access road (as part of the Scheme) onto the A4. Residential receptors located within 200m of the potential P&amp;R sites may experience a permanent benefit in terms of air quality impacts, although other roads may experience adverse effects. Consideration for the wider area should also be given when assessing air quality and as such, the P&amp;R has the potential to result in a reduction in traffic entering the City centre, and could therefore improve the air quality within the Bath AQMA, with traffic potentially diverted away from the area. At this stage in the assessment of Scheme options, the overall effects upon Air Quality are difficult to determine. However, a full assessment of the potential effects of the Scheme upon Air Quality receptors, including the AQMA, will be completed as part any Planning</p>	<p><b>Mitigation</b></p> <p>Strict implementation of a Construction Environmental Management Plan (CEMP) during construction.</p> <p><b>Opportunities and Enhancement</b></p> <p>Operational monitoring of air quality within the vicinity of the chosen proposed site to fully realise the effects of mitigation.</p> <p>Reducing NO<sub>x</sub> and PM<sub>10</sub> emissions within Bath AQMA as a result of the Scheme.</p> <p>Use of a bus fleet equipped with newer technology to reduce air quality/ greenhouse gas emissions.</p>	<p><b>Green</b></p> <p>A Green rating has been given for Air Quality. Overall effects are likely to be Slight Adverse during construction. Operational effects have the potential to be beneficial as a result of reduced congestion along London Road. However, given the preliminary nature of the Scheme, operation phase effects cannot be fully determined at this stage.</p> <p>At this stage in the assessment of site options, it is not considered likely that there would be a substantial difference in the likely Air Quality effects between the three sites. All sites are therefore considered to be Green.</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
		Application for the preferred site, which will take account of air quality monitoring data and traffic data.		
<p><b>Archaeology and Cultural Heritage</b></p>	<p>Site A would be entirely located within the City of Bath WHS extents whilst Sites B and F would be located within 150m of the WHS.</p> <p>Two SAMs are located within 1km of the proposed sites, Bathford Bridge SAM 630m east and Slight Univallate Hillfort (190m north west of Westleigh) located 900m to the north of Site A.</p> <p>43 Listed Buildings have been identified within 300m of the proposed sites. There are two listed buildings within 95m of Site I, which are located to the north east of the site.</p> <p>All proposed sites are located within the Bath Archaeological Character Area extents.</p> <p>Four Conservation Areas have been identified within 1km of the proposed sites, comprising Bath Conservation Area, Bathampton Conservation Area, Batheaston Conservation Area and</p>	<p><b>Construction</b></p> <p>During construction, there is potential for the setting of heritage assets (i.e. the WHS, Scheduled Ancient Monuments and Listed Buildings) to be adversely effected for a temporary period due to the presence of construction plant and machinery for all sites. However, given the likely scope and scale of proposed works and the implementation of appropriate mitigation measures such as temporary fencing, adverse effects are likely to be reduced.</p> <p>All sites have the potential for unearthing high quality unknown archaeological remnants (particularly with Roman finds within the vicinity of the three sites). Therefore appropriate measures such as geophysical survey, trial trenching, an archaeological watching brief or archaeological recording are likely to be required, following consultation with the local planning authority which would ensure that effects on archaeology are appropriately mitigated.</p> <p><b>Operational</b></p> <p>During the operational phase of the proposed Scheme, there is potential for any one of the sites to permanently alter the setting of existing heritage assets within the vicinity of the Scheme, such as Bath WHS and the Slight Univallate Hillfort (190m north west of Westleigh) SAM located at the top of Little Solsbury Hill, due to the likely installation of above ground infrastructure which would include lighting, bus shelters and potentially welfare facilities. Site A would be most likely to adversely affect the City of Bath WHS since the P&amp;R would be entirely located within the designated area. However, consideration of existing infrastructure such as the A4 road/overpass and pylons and the topography of the local area will be taken into account for the further assessment of the historic</p>	<p><b>Mitigation</b></p> <p>Strict implementation of a Construction Environmental Management Plan (CEMP) during construction.</p> <p>A Written Scheme of Investigation (WSI) is likely to be required during construction.</p> <p>Temporary or permanent fencing and screening may be necessary.</p> <p>Turning off lighting during night time hours (e.g. 11-6).</p> <p><b>Opportunities and Enhancement</b></p> <p>Improving the setting of existing heritage assets through providing new screening at the proposed P&amp;R.</p> <p>Information boards could be provided post-works for heritage assets.</p>	<p><b>Amber</b></p> <p>On balance, an Amber rating has been attributed to archaeology and Cultural Heritage. Overall, effects during construction would be potentially significant, with the potential for high quality archaeological finds to be uncovered and damaged during construction. The setting of high value heritage receptors (SAMs and the WHS) potentially affected. Mitigation would be likely to reduce all adverse effects.</p> <p>Whilst an overall Amber rating is considered appropriate, the location of Site A within Bath WHS should be noted as a potential higher risk to the delivery of the Scheme (<b>Red</b> rating).</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
	<p>Bathford Conservation Area.</p> <p>There are no Registered Parks and Gardens or Registered Battlefields within 1km of the proposed sites.</p> <p>Several known archaeological finds have been identified within the vicinity of the proposed sites including a possible Romano- British site.</p>	<p>environment, which would be undertaken in support of any Planning Application. Mitigation measures such as screening and the sensitive design of associated amenities such as welfare facilities, to respond to the local vernacular and reflect the historic setting, could potentially minimise operational effects on heritage assets resulting from the implementation of the Scheme.</p>		
<p>Landscape and Visual</p>	<p>Sites C and I lie within the Cotswolds Area of Outstanding Natural beauty (AONB). Sites A, B and F are located within 1km of the AONB.</p> <p>No National Parks have been identified within 1km of the proposed sites.</p> <p>Numerous visual receptors (including residential properties, Public Rights of Way, SAMs and Listed Buildings) are located within all five of the sites' theoretical Zone of Visual Influence (ZVI).</p> <p>The five options are situated within the National Character Area number 107, Cotswolds. The Cotswolds form the best-known section of the predominantly oolitic</p>	<p><b>Construction</b></p> <p>The presence of construction machinery, plant and stockpiling of materials would be likely to adversely impact upon the Landscape Character of the surrounding area, including Cotswolds AONB and two SAM's (including the SAM on top of Little Solsbury Hill). Temporary changes to the landscape are considered to be unavoidable as a result of the potential Scheme during the construction period, particularly given the varied elevation of the surrounding area. The clearance of vegetation during construction is likely to open up views of the works area and would result in visual impacts on numerous receptors (high value receptors include residential properties and PRowS). Vegetation clearance and construction machinery would also be visible from the Cotswolds AONB during construction which would be likely to result in adverse effects on landscape character for a temporary period. An effective mitigation strategy to minimise effects through screening and minimising the storage of materials for example, would be developed as part of the Planning Application and consent for the Scheme.</p> <p><b>Operational</b></p> <p>The proposed Scheme has potential to permanently alter the landscape character of the surrounding area through a</p>	<p><b>Mitigation</b></p> <p>Earthworks and mitigation planting.</p> <p>Temporary or permanent fencing and screening may be necessary on site.</p> <p><b>Opportunities and Enhancement</b></p> <p>Replanting of landscape receptors (i.e. hedgerows/ trees) on a net gain basis.</p> <p>Providing new screening for residential receptors.</p>	<p><b>Amber</b></p> <p>An Amber rating has been attributed to the Landscape and Visual topic. Overall, effects during construction and operation have potential to be significant adverse. However, given the context of the location and with appropriate mitigation measures and enhancements put in place, adverse effects are likely to be reduced.</p> <p>At this stage in the assessment of site options, it is not considered likely that there would be a substantial difference in the likely landscape and visual effects between any of the proposed sites. All sites</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
	<p>Jurassic Limestone belt that stretches from the Dorset coast to Lincolnshire. The dominant pattern of the Cotswold landscape is of a steep scarp crowned by a high, open wold; the beginning of a long and rolling dip slope cut by a series of increasingly wooded valleys.</p> <p>Site C and Site I are within areas designated as Green Belt within the North Wiltshire Local Plan (2011).</p>	<p>perceptible visual increase in the area of pavement and the addition of above ground infrastructure such as lighting. Additionally, visual impacts are likely to be unavoidable given the varied elevation of the surrounding area and locations of the proposed P&amp;R sites A, B and F at low points within the Avon valley. Proposed site C is located in an elevated position with prominent views from the opposing valley side. Proposed site I is located at the base of the valley adjacent to By Brook, and is surrounded by mature vegetation. Elevated views are afforded from PRow and residential receptors to the south.</p> <p>Mature trees may be affected by the proposals, and therefore detrimental visual effects for a number of receptors may be unavoidable until reinstatement screening vegetation has matured (15 years). There is also potential for night time visual effects with the installation of new lighting as part of the Scheme. Given the urban nature of sites A, B and F, and the presence of road, rail and communications infrastructure within the locality, the tranquillity of the local area is not anticipated to be affected any further by the proposed Scheme. Sites C and I are locations within the Green Belt and the Cotswold AONB which would result in potential adverse effects upon tranquillity if these sites were to be developed.</p> <p>Mitigation measures such as replanting would reduce permanent effects for many receptors in the long term. Overall, given the high value local and surrounding landscape, the presence of numerous high value receptors, including the Cotswolds AONB and the permanent installation of above ground infrastructure associated with the Scheme, there is potential for significant adverse landscape character and visual operational impacts on receptors without adequate mitigation. This would be fully developed as part of the Landscape and Visual Impact Assessment that would be prepared in support of the Planning Application for the Scheme.</p>		<p>are therefore considered to be Amber.</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
<p><b>Biodiversity</b></p>	<p>Bath and Bradford-on-Avon Bats SAC is located within 2km of all the proposed sites.</p> <p>Mells Valley Special Area of Conservation (SAC), North Somerset SAC, Mendip Bats SAC and Bath and Bradford-on-Avon Bats SAC are all designated for bat populations and are located within 30km of all three of the proposed sites.</p> <p>Kensington Meadows LNR is located within 1km of the proposed sites.</p> <p>No Special Protection Areas, Ramsar or National Nature Reserves have been identified within the vicinity of the proposed sites.</p> <p>Deciduous Woodland priority habitat is located within 200m of the proposed sites.</p> <p>The River Avon SNCI is located adjacent to Site A and within 200m of Sites B and F.</p> <p>Monkswood Valley SSSI is located 390m north of Site C and is designated for deciduous, mixed and yew woodland.</p> <p>It should be noted that</p>	<p><b>Construction</b></p> <p>Potential effects on the single Natura 2000 site within 2km, Bath and Bradford-on Avon Bats and on the additional two SACs designated for their bat populations within 30km of the Scheme would be considered in further detail., A Habitats Regulations Assessment (Screening) would therefore be undertaken for the proposed Scheme. There is potential for adverse effects upon protected species, in the absence of mitigation, on bats, dormice, great crested newts, otter, water voles, badgers, breeding birds and reptiles during works with the potential requirement for removal of species rich hedgerows, scrub and mature trees, as well at disturbance from temporary construction machinery and lighting. Targeted ecological surveys for protected species would be undertaken in advance of the Planning Application for the Scheme, which would inform any derogation licence that may be required (should protected species be confirmed at the site). There is potential for the River Avon SNCI habitat within Site A and deciduous woodland within Sites A, B and I to be directly affected, and therefore adequate mitigation in the form of replanting could potentially be required in these locations. With appropriate mitigation and enhancement measures, and with works undertaken at an appropriate time of year (which would minimise effects to relevant protected species, if present), overall effects on nature conservation are likely to be minimised.</p> <p><b>Operational</b></p> <p>Operational impacts resulting from the proposed Scheme are likely to include direct loss of habitat for reptiles for all sites, and also the potential loss of habitat for bats, dormice, badgers, great crested newts and breeding birds, if confirmed to be present. Therefore, there is potential for habitat creation and enhancement to be a requirement for the Scheme, to ensure that the project achieves a net biodiversity gain (which is in line with national policy). Assuming this mitigation and/ or</p>	<p><b>Mitigation</b></p> <p>Works undertaken in accordance with Best Practice Measures.</p> <p>Presence of an Ecological Clerk of Works during any vegetation clearance.</p> <p>Potential requirement for Natural England derogation licence(s).</p> <p>Lighting designed to minimise disturbance to bats.</p> <p>Sensitive timing of works and vegetation clearance.</p> <p><b>Opportunities and Enhancement</b></p> <p>Operational monitoring for protected species present within the vicinity of the chosen site.</p> <p>Habitat creation beyond standard mitigation requirements e.g. swale and wetland habitat.</p> <p>Addition of protected species nesting boxes such as bird and bat boxes.</p>	<p><b>Amber</b></p> <p>An Amber rating has been attributed to Biodiversity. Overall, effects during construction and operation phases have the potential to be significantly adverse. However, with appropriate mitigation and enhancement measures put in place, adverse effects are likely to be reduced.</p> <p>At this stage in the assessment of site options, it is not considered likely that there would be a substantial difference in the likely impacts upon nature conservation features between any of the proposed sites. All sites are therefore considered to be Amber.</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
	protected species data and Sites of Nature Conservation Importance (SNCI) information will be required to inform the Planning Application for the Scheme.	enhancement measures are put in place, overall effects on protected species and habitats are likely to be minimised. Operational effects on Natura 2000 sites within the vicinity of the Scheme are likely to not be significant given the scope and scale of works.		
Noise and Vibration	Two Noise Important Areas (NIAs) are located within 300m of the sites. Approximately 200 residential properties, three farms, two places of worship, one school and numerous commercial dwellings have been identified within 500m of the proposed sites.	<p><b>Construction</b></p> <p>Numerous sensitive receptors are located within close proximity of all sites. The proposed Scheme is likely to alter noise and vibration baseline levels during construction, through construction activities and the presence of construction machinery and vehicles, although the varied topography of the area is likely to have implications on the noise conditions at receptors as a result of the Scheme. The effect upon the noise environment for sensitive receptors would be dependent on the type of construction plants involved, timing of day in which works would be undertaken and duration of works. Measures setting out noise restrictions would need to be agreed through consultation with the B&amp;NES prior to construction. At this stage in the assessment of Scheme options, the overall effects upon Noise sensitive receptors are difficult to determine. However, a full assessment of the potential Noise and Vibration effects of the Scheme would be completed as part of any Planning Application for the preferred site, which will include appropriate mitigation requirements.</p> <p><b>Operational</b></p> <p>During the operation phase, the proposed Scheme would be likely to result in a change in noise and vibration levels, through the presence of numerous sensitive receptors within close proximity of the Scheme. Therefore monitoring of the baseline noise and vibration levels within the study area would be necessary to ensure operational noise and vibration levels are adequately assessed. With appropriate mitigation, potentially including acoustic fencing or bunds or secondary</p>	<p><b>Mitigation</b></p> <p>Strict implementation of a CEMP during construction. Acoustic barriers may be required to protect properties within very close vicinity; one is within 10m of Site A. The use of noise sensitive surfacing for access roads (thin surface course) would minimise adverse effects. Potential compensation to local residents in the form of double glazing</p> <p><b>Opportunities and Enhancement</b></p> <p>Operational noise monitoring at receptors. Improvements to noise conditions for the two NIAs within the vicinity of the Scheme.</p>	<p><b>Amber</b></p> <p>An Amber rating has been attributed to Noise and Vibration. There is the potential for the Scheme to result in significant effects during construction and operation. However, with appropriate mitigation put in place adverse effects are likely to be reduced to an acceptable level.</p> <p>At this stage in the assessment of site options, it is not considered likely that there would be a substantial difference in the likely impacts upon the noise and vibration environment for sensitive receptors between any of the proposed sites. All sites are therefore considered to be Amber.</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
		glazing for adversely effected properties, the overall effects are likely to be minimised.		
<p><b>Water: Hydrology and Drainage</b></p>	<p>Site A would be located in Flood Zone 2 and 3. Site F is partially located in Flood Zone 2 and the remainder in Flood Zone 1, whilst Site B, C and I are entirely located in Flood Zone 1. The proposed sites are located within a Surface Water Nitrate Vulnerable Zone and Bath Hot Springs Protection Area.</p> <p>Two Water Framework Directive (WFD) waterbodies, the River Avon and the Kennett and Avon Canal, run within 200m of the proposed sites. Site A is immediately adjacent to the River Avon.</p> <p>Several drains and culverts are located within the vicinity of the proposed sites.</p>	<p><b>Construction</b></p> <p>Several waterbodies are located within close proximity of the proposed Scheme. Of particular interest are the River Avon and Kennet and Avon Canal WFD watercourses. One tertiary river (ordinary watercourse) would be affected by the Site A. Despite the close proximity of these watercourses to the proposed Scheme, with strict adherence to the CEMP during construction, which would include site specific pollution prevention measures in line with the Environment Agency's Pollution Prevention Guidelines, the risk of pollution to nearby waterbodies would be low. No waterbodies are likely to be directly affected, whilst excavations are unlikely to affect the underlying Bath Hot Springs..</p> <p><b>Operational</b></p> <p>The proposed Scheme would result in an increase in the area of hardstanding (and impermeable area) which is likely to increase the risk of flooding. A Flood Risk Assessment (FRA) would be required for the final Scheme if Site A or F are taken forward. Whilst a new drainage system is also likely to be required for the proposed Scheme, which would ensure that the concentration of pollutant runoff would not adversely affect the water environment. The use of Sustainable Drainage Systems (SuDs) should be used where possible. Additional measures such as the installation of an attenuation pond would reduce impacts relating to flood risk and would reduce the concentration of pollutants entering the water environment. Site A would permanently affect one ordinary watercourse and suitable mitigation would be required to ensure permanent adverse effects are minimised. Overall long term effects are likely to be minimised if mitigation measures and appropriate drainage design are put in place.</p>	<p><b>Mitigation</b></p> <p>Strict implementation of a CEMP during construction.</p> <p>Any drainage systems required for the P&amp;R would therefore be designed to manage the concentration of pollutants being discharged into this primary river.</p> <p>The use of Sustainable Drainage Systems (SUDs) is advised.</p> <p><b>Opportunities and Enhancement</b></p> <p>Installation of new attenuation ponds to reduce flood risk and improve water quality locally.</p>	<p><b>Green</b></p> <p>A Green rating has been attributed to Water, Hydrology and Drainage. With appropriate mitigation put in place adverse effects are likely to be reduced to an acceptable level. However, whilst an overall Green rating is considered appropriate, the location of Site A within Flood Zone 3 (in part) and immediately adjacent to the River Avon should be noted as a potential higher risk to the delivery of the Scheme (<b>Amber</b> rating).</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
<p><b>Socio economic and community impacts</b></p>	<p>Local communities including Batheaston, Bathampton, Lambrook, Bailbrook and Bath are present within the vicinity of the proposed sites. Approximately 90 residential properties and two farms have been identified within 200m of the proposed sites. The land uses within the area are believed to predominantly comprise agricultural pastoral land used for livestock and recreational land in the form of a rugby pitch.</p>	<p><b>Construction</b></p> <p>During construction, the proposed Scheme is likely to result in an increase in construction jobs which is likely to benefit the local economy. Community assets are not anticipated to be severed during construction. However, disturbance as a result of construction related activities and machinery may temporarily affect receptors within the vicinity of the Scheme including 200 residential properties, three farms, two places of worship and one school. There is also the potential for community land to be temporarily affected, for instance Site A would be located on land which is used by a Rugby club.</p> <p><b>Operational</b></p> <p>The proposed Scheme is likely to benefit the local community with the provision of new public transport services, potential employment for P&amp;R staff, and with potential for wider benefits for pedestrians and cyclists travelling in Bath City. The potential reduction in congestion along London Road would also benefit the community. There is potential for a loss in green space which is used by the community, i.e. Site A is currently used as a recreational ground, resulting in adverse community effects, which may require mitigation. Therefore long term effects may vary, but on balance they are likely to benefit the community, particularly with the potential creation of new jobs and a new community service.</p>	<p><b>Mitigation</b></p> <p>Compulsory Purchase Order process (CPO) would ensure that compensatory mitigation is viable.</p> <p>Improved access to properties adjacent to scheme.</p> <p><b>Opportunities and Enhancement</b></p> <p>Provision of numerous long term jobs through the Scheme</p> <p>Further opening up of land for community purposes as a result of the Scheme.</p>	<p><b>Green</b></p> <p>A Green rating has been attributed to Socio economic and community impacts. During the construction phase a Slight Adverse effect is anticipated as a result of disturbances for the local community. Long term effects may vary, but on balance they are likely to benefit the community. However, whilst an overall Green rating is considered appropriate, the location of Site A upon recreational land should be noted as a potential higher risk to the delivery of the Scheme (<b>Amber</b> rating).</p>
<p><b>Soils &amp; Geology</b></p>	<p>One Geological SSSI, Hampton Rocks Cutting has been identified within 200m of the potential sites. No Regionally Important Geological and Geomorphological Sites (RIGS) have been identified within 1km of all three of the proposed sites.</p>	<p><b>Construction</b></p> <p>Excavations would be required for the proposed Scheme, although it is not known to what depth this is required. Given the distance of the Hampton Rocks Cutting SSSI and landfills from the site, adverse effects are not anticipated for these geological features. There is potential for contaminated land to be present within the site extents, and as a result, it will be necessary to consult with the Local Authority's Contaminated Land Specialist and / or the Environment Agency to determine appropriate soil sampling requirements for the Scheme. A</p>	<p><b>Mitigation</b></p> <p>Strict implementation of a CEMP during construction.</p> <p><b>Opportunities and Enhancement</b></p> <p>Remediation of land post works.</p>	<p><b>Green</b></p> <p>A Green rating has been attributed to Soils and Geology. Overall, there is potential for a Slight Adverse effect during construction, with the potential disturbance of contaminated land. However, with appropriate</p>

Environmental Topic	Environmental Constraints	Predicted Effects	Proposed Mitigation and Enhancement Measures	RAG rating
	<p>No historic or authorised landfills have been identified within the extent of the proposed sites.</p> <p>Agricultural Land Classification (ALC) surveys indicate that the land around the proposed sites is mostly Grade 4 (Poor), urban or Grade 3 (Good to Moderate).</p>	<p>contaminated Land Risk Assessment would be prepared in advance of works, and where necessary, an appropriate remediation strategy put in place.</p> <p><b>Operational</b></p> <p>Contaminants are unlikely to become permanently mobilised as a result of the Scheme, with soils likely to be regraded (where possible) to their previous quality. The Scheme has potential to result in the permanent loss of agricultural land, if Site B or F is taken forward, although this would be appropriately compensated so that the long term effects are minimised.</p>		<p>mitigation put in place adverse effects are likely to be reduced to an acceptable level.</p> <p>At this stage in the assessment of site options, it is not considered likely that there would be a substantial difference in the likely impacts upon geology and soils between any of the proposed sites. All sites are therefore considered to be Green.</p>

## 4 Conclusions

### 4.1 Summary

Table 4.1 below presents a summary of the environmental risks for each of the proposed sites.

Table 4.1: Summary of Environmental Risk

Environmental Topic	Site A	Site B	Site C	Site F	Site I
Air Quality	Green	Green	Green	Green	Green
Archaeology and Cultural Heritage	Red	Amber	Amber	Amber	Amber
Landscape and Visual	Amber	Amber	Amber	Amber	Amber
Biodiversity	Amber	Amber	Amber	Amber	Amber
Noise and Vibration	Amber	Amber	Amber	Amber	Amber
Water: Hydrology and drainage	Amber	Green	Green	Green	Green
Socio-economic and community impacts	Amber	Green	Green	Green	Green
Soils and geology	Green	Green	Green	Green	Green
<b>Summary</b>	Site A is located within the Bath WHS, an AQMA and also predominantly within Flood Zone 3 and immediately adjacent to the River Avon. Partially located on recreational ground. The River Avon SNCI is located adjacent to Site A.	Site B is located within 150m of the WHS. The River Avon SNCI is located within 200m of Site B. Site B is entirely located in Flood Zone 1.	Site C lies within the Cotswolds AONB. Site C is within an area designated as Green Belt within the North Wiltshire Local Plan (2011). Monkswood Valley SSSI is located 390m north of Site C.	Site F would be located within 150m of the WHS. The River Avon SNCI is located within 200m of Site F. Site F is partially located in Flood Zone 2 and the remainder in Flood Zone 1.	Site I lies within the Cotswolds AONB. Site I is within an area designated as Green Belt within the North Wiltshire Local Plan (2011).

On balance, the environmental risk of each of the proposed sites at this stage is considered to be Amber/Green for all sites except for Site A, which is considered to be Amber. This is based on the assumption that appropriate mitigation would be included as part of the Scheme design and construction methodology, and would be fully developed as the Scheme progresses. Mitigation may take the form of a CEMP to be implemented by the Contractor during construction, and a fully integrated landscape and ecological design, which would minimise long term adverse effects upon nature conservation and the local landscape, and would provide opportunities for biodiversity enhancements. However, residual risks remain that would require further investigation/ environmental assessment, to fully determine the likely scope and scale of mitigation requirements, such as the potential requirement for acoustic attenuation or archaeological investigations. Protected species surveys may also be required, which would inform the potential requirement for works to be progressed under a derogation licence to be granted by Natural England (where protected species are present), with appropriate mitigation and monitoring in place.

It should be noted that this preliminary assessment has identified that there are a number of additional constraints for Site A when compared to Sites B, C, F and I that present a greater risk to the delivery of the Scheme. Site A is located within the Bath WHS, and also predominantly within Flood Zone 3 and immediately adjacent to the River Avon. This site is also partially located on recreational ground. As a result, the environmental risk for this site is (on balance) considered to be Amber.

## 4.2 Further Environmental Assessment Requirements

This risk rating for all Scheme options is preliminary and will need to be revised following more detailed environmental assessment. Once the preferred site has been confirmed, it is likely that the P&R proposal will be subject to a Planning Application under the Town and Country Planning Act 1990 (as amended). To support any Planning Application, further environmental assessment would be required for those environmental topics where there is potential for environmental effects.

If required, further environmental assessment may take the form of statutory or non-statutory Environmental Impact Assessment (EIA). EIA can be defined as an assessment of those consequences of a major project which affect the natural, built and social environment. The Town and Country Planning (EIA) Regulations 2011 (as amended) (the EIA Regulations) require an assessment of the effects of certain public and private projects, which are likely to have significant effects on the environment, before development consent is granted. Regulation 2(1) of the EIA Regulations defines “EIA development” as either:

- (a) *Schedule 1 development; or,*
- (b) *Schedule 2 developments likely to have significant effects on the environment by virtue of factors such as its nature, size or location.*

Regulation 2(1) defines “Schedule 2 development” as:

*Development, other than exempt development, of a description mentioned in Column 1 of the table in Schedule 2 where:*

- (a) *Any part of that development is to be carried out in a sensitive area; or,*
- (b) *Any applicable threshold or criterion in the corresponding part of Column 2 of that table is respectively exceeded or met in relation to that development.*

Under Part 10 of Schedule 2 of the EIA Regulations, the following relevant criteria is listed:

*10. Infrastructure projects: b) Urban development projects, including the construction of shopping centres and **car parks**, sports stadiums, leisure centres and multiplex cinemas. Indicative criteria and threshold:*

- (iii) the overall area of the development exceeds 5 hectares.*

Each of the proposed sites (except for Site I) would exceed the threshold of 5 hectares of development. As a result, any of the proposals would be considered as Schedule 2 development under the EIA Regulations, and will require Screening for Statutory EIA. The Screening Opinion will be made by the Local Planning Authority (LPA), and will be determined according to the likelihood of the proposals to result in significant adverse effects upon the environment. Where statutory EIA is required, this would be prepared in the form of an Environmental Statement (ES), to be submitted to the LPA in support of any Planning Application. Where statutory EIA is not required, stand-alone environmental assessments may still be required to accompany any Planning Application.

## 5 References

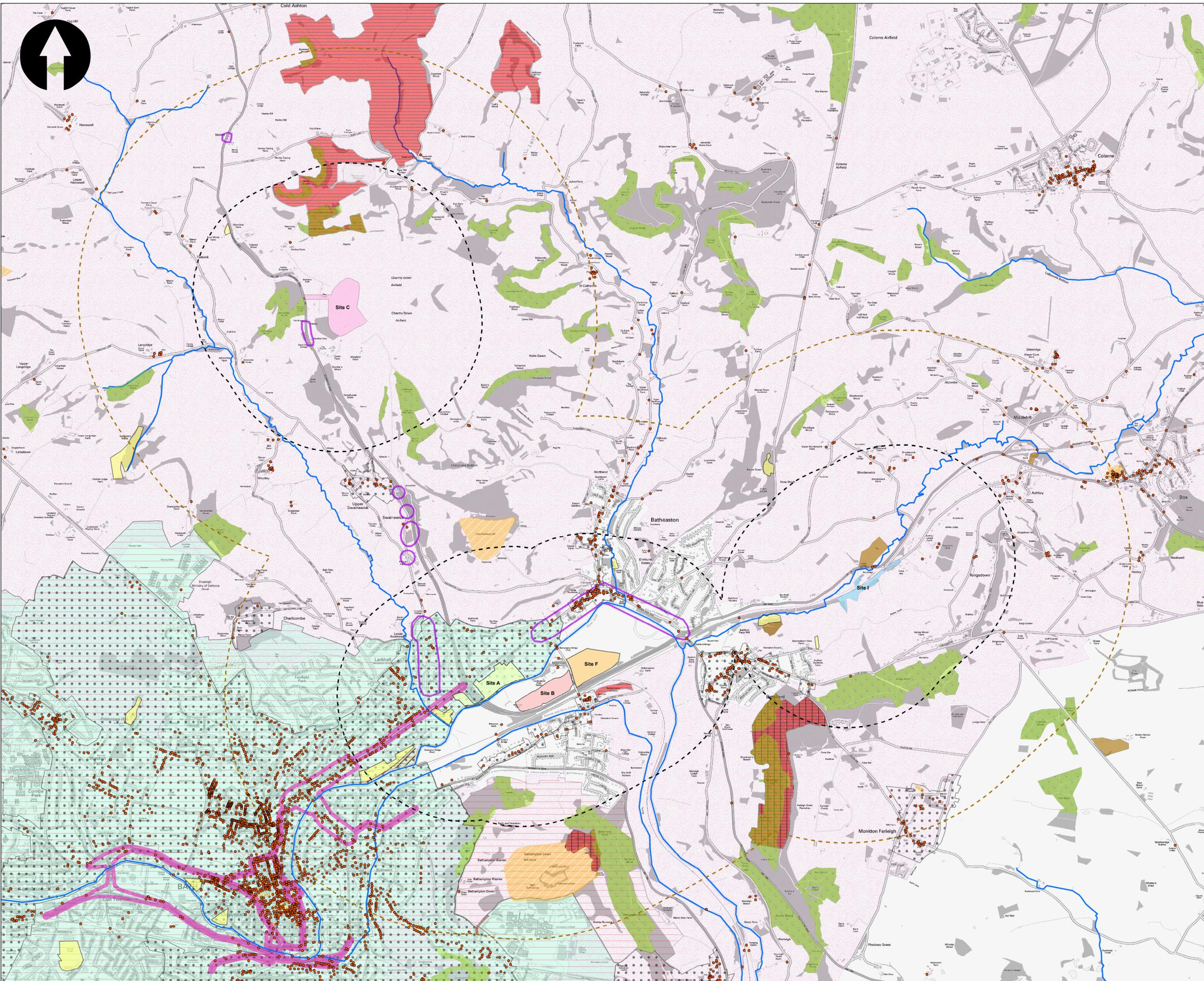
Department for Communities and Local Government (2012) Communities and Local Government: National Planning Policy Framework. [online] Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6077/2116950.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf) (Last accessed 19/08/2015).

Halcrow (Lear, D) (May 2013) 'Site Options: High Level Review, Document: 1 Version: 2 Bath Eastern Park and Ride Sites'.

# Appendices

Appendix A. Environmental Constraints Plan \_\_\_\_\_ 29

# Appendix A. Environmental Constraints Plan



**Notes**

**Key to Symbols**

- 1km Buffer
- 2km Buffer
- Site A
- Site B
- Site C
- Site F
- Site I
- Listed Buildings
- Ancient Woodland
- Authorised Landfill
- Special Area of Conservation (SAC)
- Site of Special Scientific Interest (SSSI)
- Watercourses
- Local Nature Reserve (LNR)
- Air Quality Management Areas (AQMA)
- Noise Important Areas
- Scheduled Ancient Monument (SAM)
- Bath Archaeological Character
- Historic Landfill
- Conservation Area
- Area of Outstanding Natural Beauty (AONB)
- World Heritage Site

Rev	Date	Drawn	Description	Ch'k'd	App'd
01	10/12/15	BH	Bath Constraints Plan	KR	JIB

Environment Division  
 Stoneham Place  
 Eastleigh, SO50 9NW  
 United Kingdom  
 T: +44 (0)2380 628800  
 W: www.mottmac.com

Client

**Bath & North East Somerset Council**

Project Title

**Park and Ride to the East of Bath**

Drawing Title

**Bath P&R Environmental Constraints Plan**

Designed	BH	Eng Check	
Drawn	KR	Coordination	JH
GIS Check	KR	Approved	JIB
Scale at A3	Status	Rev	
	INF	B	

Drawing No. **MMD-343157-C-DR-ENV-0102**

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