

# Outline Application

NW Bicester Planning Application 1

Environmental Statement:  
Volume 0 Non-Technical Summary



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## A2Dominion Group

## NW Bicester

## Application 1 North of Railway

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### Non-Technical Summary

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# 1 Introduction

- 1.1.1 In July 2009, the Department for Communities and Local Government published 'Planning Policy Statement (PPS): eco-towns' as a supplement to PPS1 Delivering Sustainable Development. The PPS1 supplement includes requirements on sustainability, affordable housing, low and zero carbon technologies and public transport. Within the PPS1 supplement, eco-towns are defined as sustainable developments of at least 5,000 homes.
- 1.1.2 Four 'first wave' locations were identified with the potential to have an Eco-town; one of which was on land to the north-west of Bicester in Cherwell District. The North-West Bicester (NW Bicester) Eco Development lies to the north-west of Bicester, approximately 1.5km from the town centre, and comprises an area of approximately 406 hectares. The Eco Development is intended to provide a new form of sustainable community within Cherwell District, and to extend the benefits of this community to the existing town of Bicester.
- 1.1.3 Planning permission was received in July 2012 for the first phase of the NW Bicester development, the Exemplar Site, and is currently under construction. The remainder of the Masterplan area is to be brought forward subject to separate planning applications.

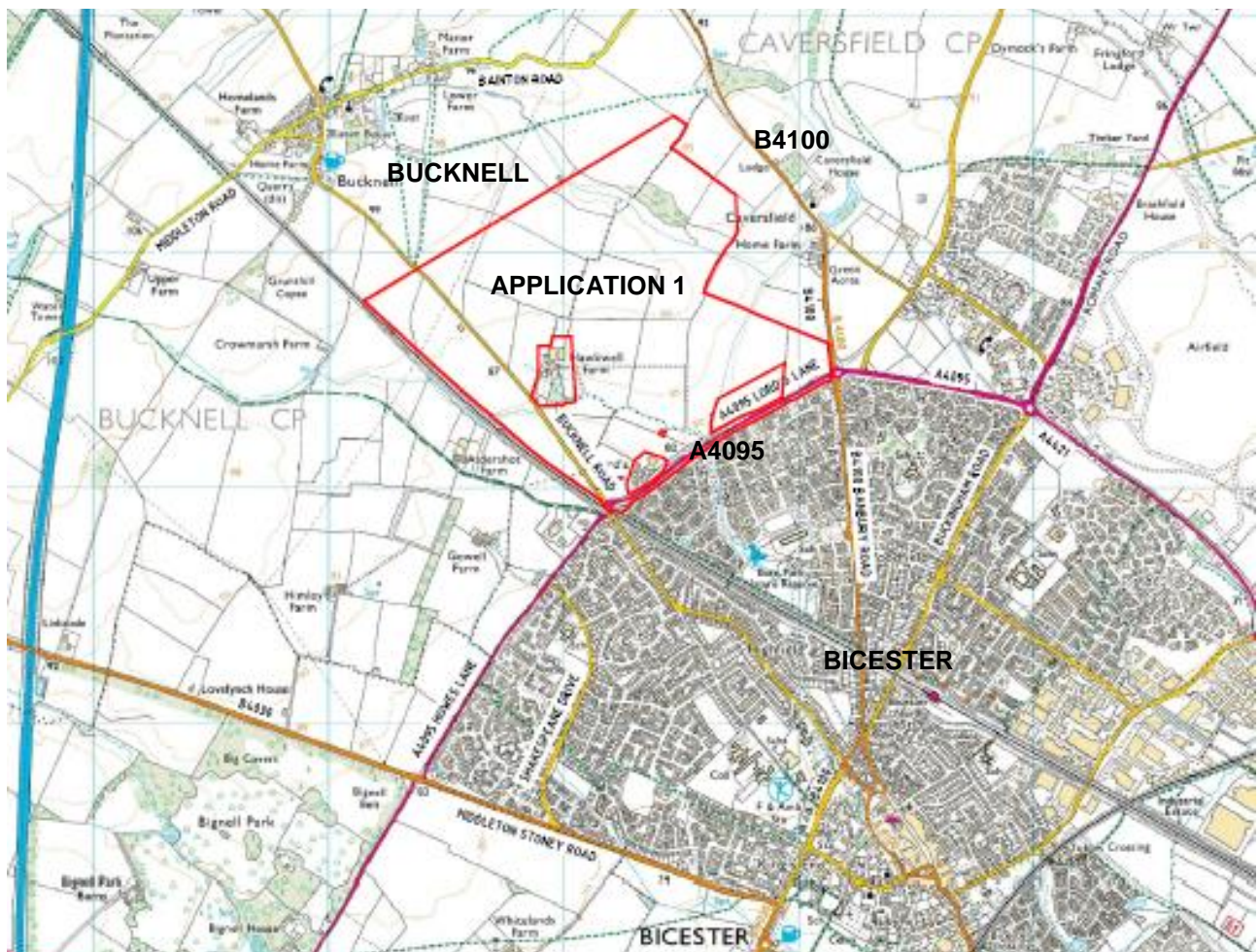


Figure 1: Application 1 Development Location

- 1.1.4 The Application 1 North of Railway Development, shown on Figure 1 above, is being brought forward by A2dominion Group, expected to be constructed in phases from 2018. The Development is proposed for area lying to the north of the railway, covering 154.82 hectares.
- 1.1.5 This document is the Non-Technical Summary of the Environmental Statement for the proposed Application 1 development, which is published in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (SI 2011 No.1824), which implement EU Directive 2011/92/EU and its amendment 2014/52/EU. The Environmental Statement presents in detail the findings of the Environmental Impact Assessment. There is a legal requirement to provide a Non-Technical Summary to ensure that the non-technical reader can fully appreciate the likely environmental effects of the new development before a decision is made by the Local Planning Authority.
- 1.1.6 The Environmental Statement has been prepared by Hyder Consulting Ltd in 2014 in relation to this Application 1 North of Railway development only, and therefore does not relate to the full extent of the NW Bicester Eco Development.

## 2 Description of the Development

- 2.1.1 The Development will create a sustainable community, in accordance with PPS1: eco-town principles. The development proposals include provision for up to 2,600 residential units (including extra care housing), an energy centre, two primary schools, and an extension to the Exemplar Development primary school. There will be commercial land uses and social and community facilities. All these will be supported by associated means of access. Service infrastructure, lighting and car parking will also be installed. As well as the buildings, the development will incorporate amenity space and landscaping. Table 2-1 summarised the proposed land use and areas in Application 1.

**Table 2-1 Proposed Land Uses of Development**

<b>Use</b>	<b>Area (ha)</b>
Housing – Mixed Use with Flats	66.97
Primary School (excluding green infrastructure)	1.47
Care Home/Hotel/Other	0
Commercial/Business (excludes green infrastructure)	0.77
Social/Community	0.47
Retail/Leisure	0.25
Energy Production	0.2
Green Infrastructure	70.43
Existing Farms Mixed Use	0
Proposed Infrastructure / Roads	8.27
Existing Bucknell Road and Lords Lane	5.99



2.1.2 Figure 2 illustrates the Application 1 proposals.



**Figure 2: Artist's Impression of North of Railway Development**

2.1.3 The North of Railway Development planning application is being submitted in outline with all matters reserved.

## 2.2 Alternatives

2.2.1 A number of alternatives were considered during the development of the proposals. A summary of these alternatives is provided below.

2.2.2 **Weston Otmoor NW Bicester Development Site:** this was one of twelve original shortlisted eco-town locations proposed by the Government, located near the village of Weston-on-the-Green. Cherwell District Council objected to the proposal, suggesting an alternative location at NW Bicester. The site was considered not to demonstrate the potential to meet the sustainability and deliverability requirements for a successful development as an eco-town.

2.2.3 **Determining the Masterplan Site boundary:** during the development of the Masterplan Site proposals, A2Dominion Group considered a number of alternative boundaries for the site. The environmental consultants advising the design team were consulted at all stages to comment on proposed land parcel selection.

2.2.4 **Development of Site Layout - Previous Masterplan:** the Masterplan produced for consultation in 2010 suggested a concept of four villages separated by green spaces. The fragmentation of green areas did not relate well to the existing hedgerows and streams and the green space between housing areas were not of sufficient size to create a distinctive visual and environmental quality or to be suitable for green infrastructure uses. The four

villages would also have been below the optimum size needed to create a viable community.

2.2.5 **Masterplan Alternatives Considered since 2010:** since the consultation in 2010, design work has continued to evolve with a number of different alternative layouts and options being explored, taking into consideration the findings of consultation. Alternatives considered include locations and size of employment land in one or more locations within the Masterplan site; how to create good connections within the development and minimising traffic going through existing communities; and different options for the number of houses were studied.

2.2.6 A summary of the main changes in NW Bicester Masterplan from 2010 to 2014 include:

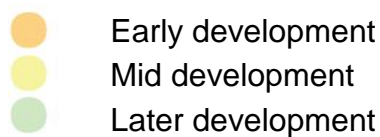
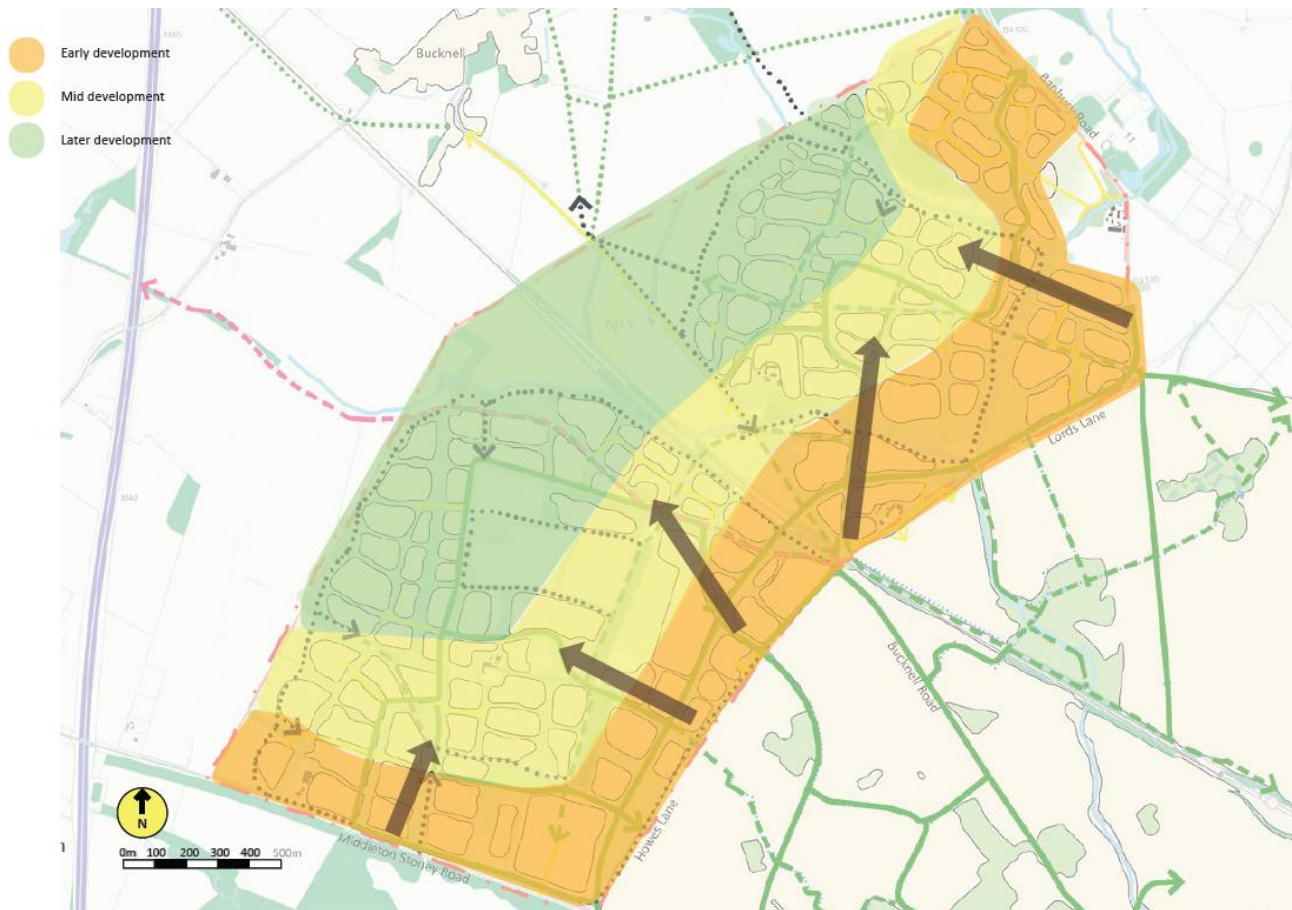
- An extended site area fully within the area proposed by NW Bicester Masterplan (approximately 400ha) increasing the masterplan potential to 6,000 homes
- The spatial layout has been revised to create two clusters of development instead of four villages, enabling green infrastructure to be grouped in larger quantities and two local centres would provide a larger footfall for retail and local amenities
- Realigned Howes Lane and a new crossing under the railway line, as part of the new A4095 NW Strategic Link Road.

2.2.7 These proposals were presented and discussed with the local community in consultation during December 2013. The principles were generally accepted subject to further detail being presented.

## 2.3 Construction

2.3.1 The construction of the Masterplan site will be developed in phases for over a twenty five year period, starting in 2018. A Construction Environmental Management Plan (CEMP) will be prepared and will incorporate the mitigation measures outlined in the ES.

2.3.2 The proposed construction phasing for Application 1 is illustrated in Figure 3 below, starting with early development covering areas nearest Howes Lane.



**Figure 3 Conceptual Phasing and Build Out**

## 3 Environmental Impact Assessment Findings

### 3.1 Landscape and Visual Impact

- 3.1.1 The landscape and visual implications of the Development have been considered through comprehensive landscape and visual impact assessment, in accordance with best practice guidance. The site falls within a landscape that is not designated and the Development would respond to landscape character through a carefully considered spatial layout, creation of a network of multi-functional green space/infrastructure, and a commitment to high quality built form.
- 3.1.2 In views to the Development, the high level of enclosure within the local landscape would generally serve to integrate built form with the rural landscape such that visual impacts would be localised, resulting in limited change to visual amenity overall. Overall, the significance of landscape effects is considered to be neutral and the significance of visual effects is considered to be slight adverse.

## 3.2 Ecology

- 3.2.1 The ecological impact assessment has influenced the Masterplan of the Development to reduce impacts on wildlife and habitats as far as possible. Its influence has also produced a design that incorporates habitat enhancement and creation measures that will result in proposals leading to a net gain in biodiversity, as required by statutory planning policies. Care has been taken to ensure that the habitats retained and created as part of the Development are resilient to the anticipated effects of climate change.
- 3.2.2 The existing site contains arable fields and improved grassland habitats, the River Bure and two tributaries, two small areas of broadleaved semi-natural woodland used by foraging bats and supporting three barn owl nest boxes, badger setts and a bat roost. Further bat roosts were found within the study area but outside the Site. The hedgerows and watercourses were used by foraging bats, with watercourses also found to be used by commuting bats. Species-rich hedgerows form the field boundaries. Surveys also found several uncommon invertebrate species, but most of the area supported few invertebrates. Small numbers of common lizards and grass snake were recorded on the field boundaries and it is likely that hedgehogs may also use these features. The Site supports eight bird species typically associated with the farmland habitat. Small numbers of nesting birds were recorded in the hedgerows, and the arable fields were also found to be of some value to ground nesting birds. Barn owl nest boxes will be relocated to ensure barn owls are not disturbed by the Development.
- 3.2.3 The Development, which includes the Energy Centre, will have no direct or indirect effect on designated sites of nature conservation importance. The design has sought to retain the hedgerow network (including moving and replanting nearby if existing hedgerows are crossed) with an appropriate buffer zone of semi-natural habitat. Each watercourse is only crossed once to provide road access and once for the pedestrian/ cycle network, so these natural wildlife corridors are retained. Sensitive lighting design will be used on bridges to retain dark corridors and avoid disturbance to nocturnal species, such as bats and badgers. Careful lighting design will also be used close to the hedgerows in order to maintain their value to wildlife.
- 3.2.4 The pond within the Site would be retained within the Country Park, with new habitats of value to the flora and fauna associated with the pond created within the Country Park. New habitats of value to wildlife would be created within a County Park, sustainable drainage features, areas of woodland and a wetland waste water treatment facility. Large numbers of trees and shrubs would also be planted within the areas of open space including the residential areas. Whilst their primary function is to provide an attractive environment for people, this planting would also provide habitats for wildlife and help to offset impacts of climate change. Similarly, although the primary function of the allotments and other food growing areas is for the benefit of the residents, they would also contain habitats and features of value to wildlife. Bird nest boxes and boxes for roosting bats would also be provided as part of the Development. These features would be located on and within buildings and trees in areas that have ready access to suitable foraging areas for these species, and where they can also be accessed for maintenance.

- 3.2.5 A CEMP would be produced to ensure that the retained habitats and species recorded within the Site are protected during site clearance and construction. A Landscape and Habitats Management Plan would be produced to ensure that the retained and newly created habitats are managed to benefit wildlife in the long-term. Implement of this plan would be monitored and remedial action taken as required where defects are identified. Monitoring would also take place to ensure that water quality within the watercourses is protected during construction.
- 3.2.6 It would not be possible to compensate for the loss of habitats used by farmland birds and habitats off site would be enhanced to benefit these species. The measures provided within the Development and the habitat enhancements offsite would ensure that there is a net gain in biodiversity as required by statutory planning policies.

### 3.3 Flood Risk and Hydrology

- 3.3.1 The River Bure and associated tributaries drain the Development study area. The Development is restricted to areas of low flood risk on the site, so the development will have a low risk of flooding from fluvial sources.
- 3.3.2 The Development can be undertaken without increasing the flood risk elsewhere by maintaining surface water runoff at or better than greenfield rates. The drainage strategy will provide attenuation at source, infiltration and treatment through the Sustainable Drainage Systems (SuDS) measures which are also likely to result in an improvement over the existing water quality which is affected by agricultural activity. A CEMP will be produced to reduce potential impacts on water resources during the construction phase.
- 3.3.3 There is no access to water-based recreation in the area of the Development at present, but this will be transformed by the development, which will use the watercourse as an asset and provide beneficial recreational opportunities in the Eco Development.



**Figure 3: Green Infrastructure Plan for NW Bicester Masterplan**

## 3.4 Air Quality

- 3.4.1 The development has the potential for air quality impacts through construction and operational (traffic and energy generation) activities. The air quality assessment identified that, although there was a risk of dust generation during certain construction activities, suitable mitigation measures would control emissions, resulting in a neutral impact.
- 3.4.2 During the operational phase, negligible impacts were predicted on annual mean Nitrogen Dioxide (NO<sub>2</sub>) and Particulate Matter (PM<sub>10</sub>) concentrations from road traffic exhaust emissions at all human receptor locations. No significant impacts were predicted as a result of annual mean Nitrogen Oxide (NO<sub>x</sub>) concentrations from the Energy Centre, in accordance with Highways Agency guidance. Impacts on annual nitrogen deposition were predicted to be negligible at all ecological designations.
- 3.4.3 Potential cumulative impacts associated with other committed and proposed developments in the vicinity of the Site were also assessed. The cumulative air quality impacts associated with fugitive dust emissions during construction are considered to be of neutral significance.
- 3.4.4 Potential cumulative impacts associated with NO<sub>2</sub> and PM<sub>10</sub> emissions from road traffic exhaust emissions and NO<sub>x</sub> emissions from the Energy Centres

were assessed. This indicated impacts were similar to those predicted when only the Development was assessed. As such, it is considered cumulative impacts would not be any greater to those associated with the current proposals.

## 3.5 Noise and Vibration

- 3.5.1 The noise and vibration assessment was carried out to identify and assess the suitability of the existing noise and vibration levels across the Development for residential use and also assess the impact upon road traffic noise levels and the effects of construction noise at existing receptors within the local area.
- 3.5.2 The assessment considers the suitability of the site for residential development and also considers both construction and operational noise impacts associated with the Development.
- 3.5.3 Noise modelling has been used to assess the suitability of the site for the Development. The predictions consider noise levels in the future with the Development fully occupied and operational. The noise modelling indicates that the majority of the site will fall within a noise range by which development would be permitted. Parts of the site closer to busy roads would require simple mitigation measures to be incorporated into building design, such as improved glazing, to ensure the amenity of residents.
- 3.5.4 The construction impacts were assessed in accordance with British Standard 5228: 2009 +A1 2014. Assumptions were made regarding the construction plant that would typically be used for developments of this nature. The construction noise impacts will depend on proximity of the construction works to receptors, the nature or intensity of the construction, the type of plant being used and the time of day. Construction noise impacts are generally of fairly short duration at each sensitive receptor and can be mitigated against. Mitigation measures will be set out in the CEMP.
- 3.5.5 The operational impacts will arise from increased road traffic and from fixed plant and similar installations to be constructed on site. Operational traffic noise impacts have been assessed and shown no significant impacts on neighbouring receptors when assessed against the relevant standards. No mitigation measures will be required for road traffic noise.
- 3.5.6 Noise from operational plant, including the Energy Centre, was assessed in accordance with British Standard 4142: 1997. Once details of the operational plant to be installed on site are confirmed, a more detailed assessment can be carried out in accordance with BS 4142. Operational noise limits will need to be agreed with the local Environmental Health Officer.

## 3.6 Built Heritage and Archaeology

- 3.6.1 The assessment of effects on cultural heritage assets within the Development and the surrounding study area has been carried out using a combination of desk-based work, aerial photograph analysis and archaeological field evaluation.

- 3.6.2 The archaeological investigations indicated various concentrations of archaeological features within the Site. There is an area of possible Bronze Age ritual activity, two small areas of early – middle Iron Age activity, probably indicating dispersed use of the landscape in the form of small farmsteads, a large concentration of Roman settlement activity and another small area of Roman and Iron Age activity, probably indicating a small outlying farmstead.
- 3.6.3 In addition to this evidence of medieval and post medieval agriculture, in the form of ridge and furrow field systems and field boundaries, was recorded by further work within the Site. These indicate the longevity of arable agriculture within the Site.
- 3.6.4 A programme of mitigation measures has been designed for the areas of archaeological activity. This will comprise archaeological excavation and recording. Following this mitigation the findings of the excavation will be reported and will add to our knowledge of the archaeological resource in the Bicester and wider Oxfordshire area. With mitigation the archaeological remains within the site will experience a moderate adverse impact.
- 3.6.5 Four listed buildings are located in Bucknell and Caversfield. Those in Bucknell would not be impacted by the Development but the Development would have a negative impact on the settings of the buildings in Caversfield, St Lawrence's Church and Home Farmhouse, although it would not have any physical impact on them. Design mitigation measures have been included in the development to reduce these impacts. These include maintaining a key view from St Lawrence's Church and preserving an area of green space between Home Farmhouse and the development. As a result these assets will experience slight adverse impacts on their setting.
- 3.6.6 The historic landscape resource within the study area is primarily an 18th century agricultural landscape with little time depth. Key features within the landscape include the historic settlements of Caversfield and Bucknell and the historic field boundaries. This landscape has been assessed as being of low value. Design mitigation measures have been included to preserve as many of the historic field boundaries as possible within the development to allow some legibility of the historic landscape to remain. In addition not all of the landscape will be impacted by the development. As a result of the development the historic landscape will experience slight adverse impacts.

## 3.7 Contaminated Land

- 3.7.1 The contamination assessment set out to identify the potential risks to human health and controlled waters that the proposed North of Railway Development may present. The baseline conditions for the Development and vicinity have been determined based on a Phase 1 Desk Study and from laboratory testing results obtained from a follow-up preliminary intrusive ground investigation undertaken on site in August 2010. Consideration has also been given to the results from a further investigation undertaken in 2014 on an area identified as a landfill. This is located approximately 100m to the south of the site boundary.
- 3.7.2 In those areas of the site covered by the intrusive ground investigation, no significant contaminated soil or groundwater was discovered. In those



unexplored areas of the site, it cannot be conclusively stated that there are no contaminants present. However, should localised contaminated areas be encountered, the degree of contamination is not expected to be major, and it is considered that mitigation measures would significantly reduce or completely mitigate any potential impacts. No residual effects are identified.

- 3.7.3 Based on information to date, the vulnerability risk rating for the proposed cemetery is moderate increasing to high when the anticipated annual burials are considered. Subject to investigation and agreement with the EA, it may be possible to either adjust this rating or to design measures to mitigate the risk to groundwater.
- 3.7.4 Construction impacts are considered to be slight adverse and will be mitigated through the use of appropriate personal protective equipment (PPE) and good site management practices, and will be set out in the CEMP.
- 3.7.5 Operational impacts are considered to be slight adverse and therefore require no mitigation measures.
- 3.7.6 Overall, the contamination risks associated with the North of the Railway development are considered to be low, though the risks from naturally occurring radon gas require basic radon protection measures to be incorporated in the construction of new dwellings and extensions.

## 3.8 Agriculture and Land Use

- 3.8.1 The soils across the site are fairly uniform, with only approximately 3% being classed as Grade 3a land. Grade 3 agricultural land is subdivided into two classifications, namely Grade 3a considered good quality Best and Most Versatile (BMV) agricultural land and Grade 3b considered moderate quality agricultural land. The main limitation on land productivity relates to soil depth, and only where deeper alluvial soils are present can the land be classed as BMV. Given the small area (approx 4.7ha) of BMV land affected, it is considered that the proposals would have no more than a permanent minor adverse impact on agricultural land. The proposal to include areas for local food production, and provide advisory support for residents in relation to soil management, will further mitigate the loss of this land.
- 3.8.2 During construction, appropriate soil handling methodologies will be used, in line with current guidance, to ensure the sustainable re-use of soils and maximise the value of the soil resource within the proposed design. This will ensure the use of soils with the optimum characteristics are allocated for the given end use, such as food production, habitat creation or SuDS. Assuming that the phasing of construction and the notice periods provided will allow the agricultural enterprises present to adapt or move such that the economic performance of the business remains unaffected, it is considered that there would be no more than a short-term minor adverse impact on farm viability as they adapt through the changes required.
- 3.8.3 In addition, a considerate construction approach would be used to minimise potential impacts on the agricultural enterprise, which will focus on limiting disturbance to livestock and ease of access for the farmer.

- 3.8.4 As the land around Bicester is likely to predominantly be Grade 3b or lower (i.e. not BMV) the potential for cumulative impacts is limited.

## 3.9 Human Health

- 3.9.1 The potential effects on human health of the construction and operational phases of the proposed Application 1 development have been assessed. A number of mitigation measures have been incorporated into the design process to maximise potential health benefits and to minimise the likelihood of adverse health effects occurring.
- 3.9.2 During the construction phase, health effects were assessed as positive with regard to the potential employment opportunities that will be created and the wider upskilling benefits that may be delivered. The impacts on the following health determinants were assessed as having a neutral effect on health: safety and security, air quality, noise and vibration, physical environment and urban design, healthy lifestyles, transport and access, waste management and contamination, community and social infrastructure and access to and provision of health facilities and services. These assessments were informed by the results presented in the other Environmental Statement chapters and the likelihood of there being a change to health status.
- 3.9.3 During operation the Application 1 development will generate a number of jobs and could potentially attract a significant amount of new investment within the immediate area. Therefore indirect positive health effects were predicted. Positive health effects are also likely to occur (both physical and mental) as a result of the commitment within the design to creating a site where walking and cycling are encouraged, the provision of community facilities that will provide opportunities for community engagement and interaction, the use of Secured by Design principles that will help to reduce levels of crime and control perceptions of fear of crime and as a result of the comprehensive green infrastructure strategy that will provide a high quality environment and areas for informal sport and recreation. The air quality, noise and vibration and traffic and transport assessments also concluded that there would be no significant adverse effects during operation and this will also help to reduce the risk of potential associated adverse health effects for the population living at the proposed Application 1 development and those communities living in the vicinity of it.

## 3.10 Socio-Economics and Community

- 3.10.1 The socio-economic impact assessment has assessed the potential impact of the proposals on local businesses, industry, housing, existing facilities and services, and identified development and change likely to be facilitated or inhibited by the proposal.
- 3.10.2 The potential impacts identified during the construction phase of the proposal will be short term and temporary in their nature. Adverse impacts such as the potential to generate local disturbances, reduce public safety and undermine the nature of local amenities will be minimised through the implementation of identified mitigation measures. Impacts on employment generation and local expenditure generated during the construction phase are considered to be more beneficial.

- 3.10.3 Potential impacts during the operation of the proposal will depend on the nature of identified receptors but overall, the operational stage of the proposal has the potential to generate a number of significant benefits for the local and regional socio-economic environment. This includes the generation of a range of employment opportunities on site but also off-site as a result of associated construction works. Additional impacts include the expansion in the quality and capacity of education facilities, a net increase in the provision of affordable housing, the potential to generate healthier active lifestyles for residents including through community and outdoor play facilities.
- 3.10.4 Overall, it is considered that with the appropriate mitigation measures, the potential impacts of the proposal on the defined social and economic environment would be positive.

## 3.11 Waste

- 3.11.1 The potential environmental effects resulting from waste materials during the construction and operational phases of the North of Railway development has been assessed. A Preliminary Site Waste Management Plan (SWMP) has been prepared for the development to plan, implement, monitor and review waste minimisation and management during construction. A Sustainable Waste and Resources Plan (SWRP) for the Bicester Masterplan Eco-development and a SWRP Covering Report for the development have been prepared to set targets for residual waste levels, recycling levels and landfill diversion, and demonstrate how these targets will be achieved.
- 3.11.2 During the construction period there are two key phases of development which could result in impacts upon the generation of waste and capacity of the local waste management infrastructure to accommodate this material. These are the excavation phase and the construction phase. There would be a neutral effect resulting from the excavation phase as excavation volumes have been minimised through design and any excavation materials will be reused on site. There will be a slight adverse effect resulting from construction waste, but the SWMP will manage, monitor and audit the construction waste generated.
- 3.11.3 During the operational phase, waste arising from the North of Railway development would result in a slight adverse effect upon waste disposal facilities. The SWRP and the SWRP Covering Report would be implemented, ensuring waste minimisation targets are met. The Cherwell District Council recycling and waste collection system will be extended into the North of Railway development, initial recycling and composting targets of 70% will be set, initial residual waste level target of 300 kg will be set per household and a community re-use centre (Bicester Green) and a community composting project will be established.

## 3.12 Traffic and Transport

- 3.12.1 The traffic and transport assessment has considered the potential impacts associated with the Application 1 proposals and the predicted associated effects on sensitive receptors in the area. The assessment has used Base Year 2012 and future year 2031 traffic flows from the Bicester Saturn Model, with and

without the Application 1 Development. Accident data has also been analysed for the study area and an overview of the existing road network is given. Following a screening exercise of where traffic impacts would be more than 10% from the Development in comparison to the Reference Case of no NW Bicester but other planned growth on road links, further assessment was undertaken of nine links in the study area.

- 3.12.2 The assessment found that the Application 1 Development traffic is forecast to have a significant impact on pedestrian severance and amenity on Middleton Stoney Road, west of Howes Lane but this is considered to be unlikely to arise in reality from the Development assessed in this chapter as the increase from the Masterplan in this area is due to the access points into the western parts of the overall NW Bicester development. Moreover, Middleton Stoney Road forms the western extent of NW Bicester and there are no properties on the western side of the road. Thus the actual impact of severance is likely to be minimal. Nonetheless, as access points are provided from Middleton Stoney Road west of Howes Lane, there will be a need to introduce the built up area speed limit to the north west and appropriate speed reduction measures on this section.
- 3.12.3 Driver delay is anticipated to be increased on Banbury Road both north and south of the A4095 junction, given the increase in traffic in this area from both the Reference Case and the NW Bicester development. A potential scheme to replace the roundabout junction with a traffic signalised cross roads is set out in the Transport Assessment, in order to increase the junction capacity and reduce driver delay in this area.
- 3.12.4 The level of traffic increase forecast on Shakespeare Drive at the western end is anticipated to have a significant impact on pedestrian severance and amenity. It is proposed that measures are introduced in the area to mitigate impacts on pedestrians and cyclists which may include speed reduction measures (built outs for example), widened footways/ cycle route and crossing points.
- 3.12.5 The traffic assessment forecasts a significant increase in traffic routing through Bucknell village and using Middleton Road both in the Reference Case and with the Development. It is considered likely that the model does not fully take account of the difficult alignment of Bainton Road as an access to the village and may be over-predicting traffic movements. Nonetheless it is recognised that the NW Bicester development is in close proximity to the village and the routes westwards towards J10 of the M40/ south to the A34 via the village may be used to an extent by Development traffic. In order to minimise this impact it is proposed to introduce traffic calming measures in the village, the nature and extent of which will be agreed with OCC and the Parish Council.

## 3.13 Cumulative Effects

- 3.13.1 Cumulative effects associated with Application 1 North of Railway Development have been considered. These are the combined effects of Application 1 with other developments within the vicinity of the site, the combined effects of Application 1 with NW Bicester Application 2 and A4095 NW Strategic Link Road, and the combined effects of different environmental aspects of Application 1 development on a particular receptor. The baseline for the

assessment included other future developments in the vicinity. The potential cumulative effects with other elements in NW Bicester Eco Development relate to the following cumulative impact areas; landscape, ecology, hydrology, air quality, noise and vibration, heritage, soils and contamination, agriculture and land use, human health, socio-economics, waste and transport.

- 3.13.2 The potential cumulative effects with other developments are likely to be during the construction phase on traffic and transport, air quality and noise and vibration associated with the combined effect of construction vehicles and operation of machinery. Potential beneficial cumulative effects were identified for human health and socio-economics. No likely cumulative effects are anticipated during the operational phase of these other developments.
- 3.13.3 Combined or impact interactions are likely to occur during the construction phase. Each environmental chapter has identified mitigation measures to reduce impacts. Following implementation of these mitigation measures, the iteration effects are considered to be mostly negligible.

## 4 Consultation

- 4.1.1 A full copy of the Environmental Statement is available to view at the following deposit locations via the Cherwell District Council online 'Public Access' system.
- Cherwell District Council, Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA
  - Banbury (Castlequay) Linkpoint, 43 Castle Quay, Banbury, Oxfordshire, OX16 5UW
  - Bicester Linkpoint, 38 Market Street, Bicester, OX26 6AL
  - Kidlington Linkpoint, Exeter Hall, Oxford Road, Kidlington, OX5 1AB
- 4.1.2 A full set of drawings will be available at Bicester Town Council, The Garth, Launton Road, Bicester, Oxon, OX26 6PS.
- 4.1.3 The Environmental Statement will also be available to view in the Planning section on CDC's website; [www.cherwell.gov.uk](http://www.cherwell.gov.uk). The Planning Application will also be available to view on the NW Bicester website; [www.nwbicester.co.uk](http://www.nwbicester.co.uk).



