

# **NON-TECHNICAL SUMMARY**

# **DOCUMENT 5.3**

The Northampton Gateway Rail Freight Interchange Order 201X

Regulation No: 5 (2) (q)

NON-TECHNICAL SUMMARY | MAY 2018

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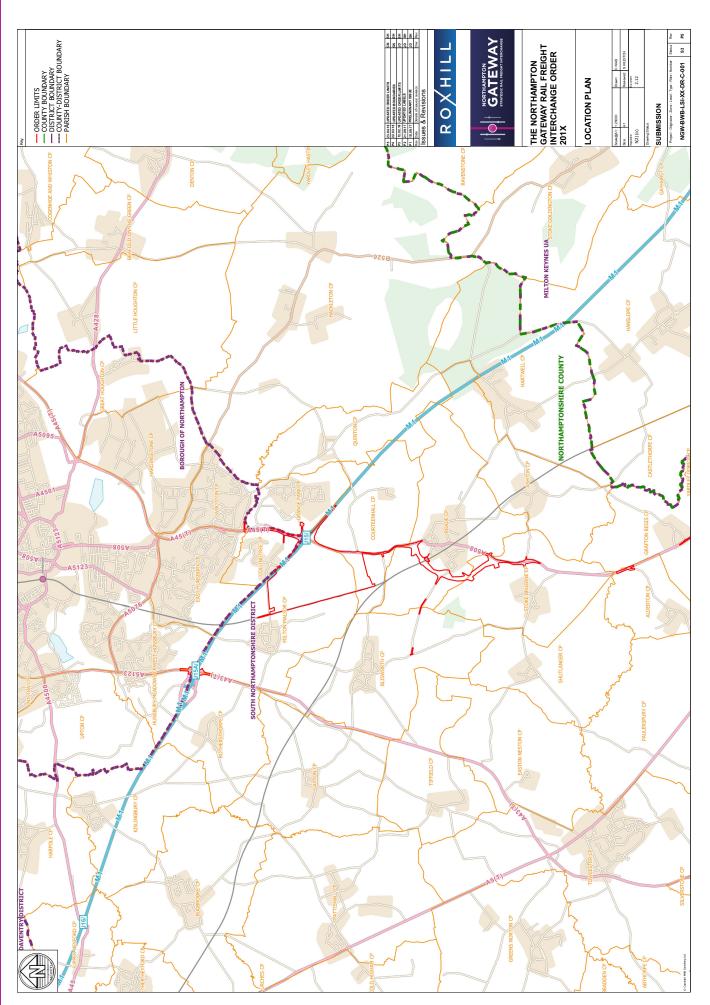
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# 1. Introduction and purpose

- 1.1 This non-technical summary (NTS) is intended to provide a straight-forward summary of the Environmental Statement which accompanies the Northampton Gateway Strategic Rail Freight Interchange (SRFI) proposals. It has been prepared by the promoters and applicant for the proposals, Roxhill (Junction 15) Ltd (referred to as 'Roxhill', or 'the Applicant').
- 1.2 The intention is that this NTS alone provides an overview and summary of the proposals and the main findings and mitigation recommendations from the Environmental Impact Assessment (EIA) process.
- 1.3 An NTS is required by the EIA regulations, and in simple terms is intended to provide a concise description of the process undertaken, and provide an effective outline of the Environmental Statement. In doing so, key elements required are:
  - (a) a description of the proposed development comprising information on the site, design, size and other relevant features of the development;
  - (b) a description of the likely significant effects of the proposed development on the environment;
  - (c) a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;
  - (d) a description of the reasonable alternatives studied by the applicant, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment;
- 1.4 The Northampton Gateway SRFI proposals meet the definition of a Nationally Significant Infrastructure Project (NSIP). This means that, rather than preparing a planning application for determination by the Local Planning Authority (South Northamptonshire Council, and Northampton Borough Council), an application for a Development Consent Order has been prepared. This application will be examined by the Planning Inspectorate before being determined by the Secretary of State for Transport.
- 1.5 Section 2 of this document includes further details about the Proposed Development, including a summary of the assessment of alternatives.
- 1.6 Section 3 provides an overview of the likely impacts and environmental effects of the Proposed Development as contained in the ES, with sections summarising each chapter from the ES.
- 1.7 Section 4 provides a concise summary of the overall findings of the ES, including the likely cumulative effects with other committed developments, and a summary of the assessment of the likely impacts on the climate change and human health agendas.

Figure 1 - Proposed Development Location Plan (Proposed Development outlined in red)



# 2. Description of the Northampton Gateway proposals

#### The Site

- 2.1 The Northampton Gateway Strategic Rail Freight Interchange (SRFI) is proposed on land to the west of Junction 15 of the M1, located to the east of the Northampton Loop railway and to the west of the A508 in Northamptonshire.
- 2.2 The proposed SRFI site (or 'Main Site' see below) has an area of approximately 219 hectares (541 acres). The villages of Milton Malsor and Blisworth are located to the west and south-west of the site respectively, both beyond the West Coast Main Line (WCML) railway. The village of Courteenhall is located to the east beyond the M1 which is situated immediately adjacent to the site, with the village of Roade further south along the A508.
- 2.3 As referred to below, the Proposed Development also includes a Roade Bypass around the western edge of Roade.
- 2.4 A site location context plan is included as Figure 1 (and as application Document 2.12) and shows the Main Site adjacent to Junction 15 of the M1 as well as the Roade Bypass and other highway mitigation works also outlined in red.

## **Description of the proposed development**

- 2.5 The land included in the Proposed Development is described below (and as shown on Figure 1 and on the Components of the Proposed Development Plan at Figure 4) includes a number of distinct but related elements which involve land in several locations.
- 2.6 The total area covered by the Proposed Development as a whole (Main Site, Bypass, and all Highways Mitigation Works) is 290.5 hectares.
- 2.7 The SRFI (proposed rail terminal and warehousing) is located on land to the west of Junction 15 of the M1 to the south of Northampton. This is referred to as the 'Main Site' and is located within South Northamptonshire District. However, some of the Highways Mitigation Works, which include improvements to Junction 15, the A45, and Junction 15a, include land within Northampton Borough.
- 2.8 The proposals include a Roade Bypass (also referred to as the 'Bypass corridor' or 'Bypass site') located around the western side of the village, and runs from the A508 to north of Roade across the WCML before rejoining the A508 to the south of the village.
- 2.9 The 'Highway Mitigation Measures' referred to above include a number of relatively small-scale improvements to junctions associated with the A508 corridor close to the site in addition to the large-scale improvements to Junction 15 and 15a of the M1, and the A45. The Highways Mitigation Measures also include a number of new HGV weight restrictions at local villages which don't currently have any such restrictions (Milton Malsor already has a weight restriction in place) in addition to the physical highways measures and improvements.
- 2.10 The Proposed Development a term used to describe all components of the proposals as a whole which is the subject of the application for a Development Consent Order comprises:
  - An intermodal freight terminal including container storage and HGV parking, rail sidings to serve individual warehouses, an aggregates facility as part of the intermodal freight terminal, and with the capability to also provide a 'rapid rail freight' facility;
  - Up to 468,000 sq m (approximately 5 million sq ft) (gross internal area) of warehousing and ancillary buildings, with additional floorspace provided in the form of mezzanines (155,000 sq.m.);

- A secure, dedicated, HGV parking area of approximately 120 spaces including driver welfare facilities to meet the needs of HGVs visiting the site or intermodal terminal;
- New road infrastructure and works to the existing road network, including the provision of a new
  access and associated works to the A508, a new bypass to the village of Roade, improvements
  to Junction 15 and to J15A of the M1 motorway, the A45, other highway improvements at
  junctions on the local highway network and related traffic management measures;
- · Strategic landscaping and tree planting, including diverted public rights of way;
- · Earthworks and demolition of existing structures on the SRFI site.
- 2.11 The number and precise location of the proposed buildings, and their detailed appearance, are not yet known or fixed, and the detail of these will be confirmed in response to occupier requirements following approval of the DCO. Such details will need to be agreed with the local authority. However, key characteristics and details regarding the proposed buildings, including the maximum building heights and minimum finished floor levels are fixed as part of the DCO application process, in addition to the location of the structural landscaping and earthworks which contain the Main Site. All of these details are defined on the 'Parameters Plan' which forms the basis of the Environmental Impact Assessment and is enclosed with this NTS as Figure 2 (and is application Document 2.10).
- 2.12 The Parameters Plan shows the location of the rail terminal, and the parts of the site where the buildings will be developed. As the internal road and rail layout will in part be informed by the final detail of the size and location of buildings, 'limits of deviation' are identified to create broader corridors or routes within which the roads will be located.
- 2.13 The Illustrative Masterplan (Figure 3) shows one potential form of development which would be in accordance with the proposed parameters. This plan is also included in the Application as Document 2.11.

### Why is Northampton Gateway a Nationally Significant Infrastructure Project?

- 2.14 Whether or not development is a "Nationally Significant Infrastructure Project" (NSIP) and needs a development consent through the Planning Act 2008 ("the Act"), rather than planning permission, depends upon whether or not development comes within the description of NSIPs set out in the Act.
- 2.15 Rail Freight Interchanges (often abbreviated to 'RFI' or 'SRFI') are considered to be NSIPs, and defined in Section 26 of the Act. Northampton Gateway is an SRFI and meets the definitions set out in legislation and Government guidance. Key characteristics of the definition of a Strategic Rail Freight Interchange in the Act include:
  - · The Site must be at least 60 hectares in area.
  - The rail freight interchange must be capable of handling—
  - · consignments of goods from more than one consignor and to more than one consignee, and
  - at least 4 goods trains per day.
  - The rail freight interchange must be part of the railway network in England.
  - The rail freight interchange must include warehouses to which goods can be delivered from the railway network in England either directly or by means of another form of transport.

(Planning Act 2008, Part 3, Section 26)

2.16 As an NSIP the application is made to, and determined by, the Secretary of State for Transport rather than by the local planning authority. The Planning Inspectorate will receive the application on behalf of the Secretary of State, and will undertake a thorough examination process. As part

of the examination they will seek input from a range of consultees and other interested parties, including the local authority. On completion of the examination the Planning Inspectorate will issue a report and make a recommendation to the Secretary of State.

2.17 Further details about the process are available at: https://infrastructure.planninginspectorate.gov.uk/

### What is a Strategic Rail Freight Interchange?

- 2.18 In simple terms SRFIs operate like ports, with goods arriving and transferred from train to lorry, or vice versa, as part of the supply chain and distribution of freight and goods to, and within, the UK. The activity related to the movement of goods is often referred to as 'distribution' or 'logistics' and is an important economic sector and employer in its own right both in Northamptonshire but also nationally. The Northampton Gateway application includes a Market Analysis Report (Document 6.8) which helps explain the economic and market context and rationale for the Proposed Development.
- 2.19 Government policy is encouraging a shift of distribution activity from road to rail to both help deliver environmental improvements, such as air quality and climate change objectives, and to remove HGVs from the roads to help reduce congestion and improve reliability of the national road network. Also, the economic importance and value of the logistics and distribution sector is recognised by Government.
- 2.20 The National Policy Statement for National Networks of 2014 (referred to as 'the NPS') is a key policy document for the national road and rail networks, and includes an explicit recognition of "a compelling need for an expanded network of SRFIs" (paragraph 2.56 of the NPS).
- 2.21 The Government's policy is clear that part of the way in which rail freight will be used more often is through increasing the supply and availability of rail freight terminals. Further details of the policy context for the proposals are provided in Section 3.
- 2.22 SRFIs are expected to serve a potentially diverse range of customers or users, with the ultimate customer often being consumers through retail companies or other suppliers engaged in the growing online retail sector. However, users of SRFIs will also include large companies moving shipments of containerised traffic moving from or to the deep-sea ports on their way from manufacturing plants to distribution centres, or aggregates and construction companies who are moving bulk building materials across the UK.
- 2.23 Some goods will come to an SRFI and be stored before being collected or sent somewhere else at a later date, while others will only be at the SRFI long enough to be moved from one vehicle to another before continuing their journey. Some goods might be processed or packaged at, or close to, an SRFI before being moved again. The freight and goods which will use Northampton Gateway could come from, or be sent to, destinations around the UK via the road and/or rail network, including via one of the UK's key sea ports, many of which are connected to the rail freight network.
- 2.24 The Rail Terminal will be available for use both by occupiers of the proposed warehouses as well as other companies located elsewhere.

#### **Alternatives**

2.25 The EIA Regulations required applicants to provide an outline of the main alternatives studied by the applicant and an indication of the main reasons for the chosen proposal, taking into account the environmental effects. Chapter 2 of the ES provides these details, both with regard to alternative locations for an SRFI, but also site specific alternatives in terms of design or masterplanning options considered.

- In terms of the alternative locations considered by the Applicant, the starting point for the consideration of alternatives was to identify the area of search. The Market Analysis Report (Document 6.8) sets out the market area that it is anticipated will be served by this proposal and explains that the core catchment area of the strategic rail freight interchange is likely to be around 15km, with a secondary catchment area of around 50 km. It concludes that Northampton and locations to its south are not well served by existing SRFI's and development of an SRFI in this location would meet the needs of existing and future logistics businesses in the area and help to expand to the south, the network of SRFI's currently concentrated in the Midlands. In this regard locations which, due to distance, could not specifically serve this market area, were not considered.
- 2.27 The reasonable, realistic alternatives for an SRFI were:
  - · A site close to Junction 13 of the M1
  - A site being proposed for SRFI development on land between Blisworth and Milton Malsor referred to as 'Rail Central'.
- 2.28 The site at Junction 13, although large enough for an SRFI, and well located to both road and rail networks, had a range of other constraining factors, including landowner preferences and aspirations, but also a challenging local topographical context which would have been likely to create significant local visual impacts. Also, the site is located two junctions further south on the M1 the site is considered less well located to meet the markets identified in the Market Analysis Report.
- 2.29 The Rail Central site is intended to be the subject of a separate DCO application for an SRFI.

  Accordingly, a comparative analysis of the Rail Central proposals compared to Northampton Gateway has been undertaken having regard to the information available about the Rail Central Scheme at the time of writing. This comparative assessment is presented in the ES (at Appendix 2.4).
- 2.30 While there are many similarities in terms of proximity to market, and access to the rail network, there are some fundamental differences between the two sites, which brings the applicant to the conclusion that Rail Central is materially inferior and is not a preferable site to Northampton Gateway. The NPS recognises that due to their operational requirements SRFI's may need to be located in the countryside. Northampton Gateway and Rail Central are located in the countryside, where there will be loss of countryside and environmental effects resulting from the schemes. However Northampton Gateway has a particular context which means the impact of change would be significantly less than Rail Central.
- 2.31 The Rail Central site is a larger site than the chosen Northampton Gateway site, extending between the A43 and the Northampton Loop line. Whilst these features together with the West Coast Main Line provide a degree of containment, the effect of the scheme on existing landscape, on the character of the area and surrounding villages, on views and on local communities, will be far greater and cannot be mitigated to the same degree as Northampton Gateway.
- 2.32 In general terms, it is the Applicants view, supported by consideration of the emerging Rail Central proposals, that through scheme design and mitigation, the environmental effects of the Northampton Gateway scheme can be better mitigated than development at the Rail Central location. In simple terms, because of the inherent characteristics of the Northampton Gateway site, coupled with the approach to landscape and visual mitigation, it is a superior site with less adverse environmental affects, than the Rail Central site. Fuller details of the comparison are set out in ES Appendix 2.4.
- 2.33 With regard to the design and masterplanning alternatives considered, the Design and Access Statement (DAS) (Document 6.9), and the separate Planning Statement (Document 6.6), explain the evolution of the proposals, including reference to key reasons for the preferred, proposed approach to site design and layout. The proposal are intended to balance the functional needs and requirements of large scale logistics and freight distribution, to create a high quality, attractive development, while also seeking to minimise local environmental effects.

- 2.34 The evolution of the proposals is intrinsically linked to the work to understand the landscape and visual effects of the proposal. The scheme is underpinned by a strong landscape strategy with development plots surrounded by landscaped bunds which will both help screen and visually contain the site. Various options were also considered regarding the size and location of the proposed warehousing 'zone' within the site to find the most efficient and appropriate disposition of uses within the site. This included consideration of various options of how to configure the rail terminal and associated infrastructure, including the head-shunt and sidings. As shown in the DAS, the key components of the design of the Proposed Development evolved, with an early decision to ensure that as many buildings as possible had the potential to be directly rail connected. This approach has regard to the concerns raised by the Examining Authority in its report to the Secretary of State following the Examination into the East Midlands Gateway DCO application in 2015/16.
- Overall, the option taken forward for the Proposed Development balances a range of environmental and operational considerations based on the constraints and opportunities presented by the site. The site access and design proposals reflect the need to ensure that the development minimises the environmental impacts, and maximises the potential for design and/ or mitigation measures to be successful in delivering reductions in any adverse impacts and maximise any benefits from the proposals.

# 3. Policy Context and Summary of the Environmental Statement

3.1 This Section provides an overview of the Policy Context, and a summary of the Environmental Statement (ES), including with reference to the key mitigation or design measures proposed to help remove or reduce likely environmental effects, and a summary of the likely residual effects.

### **Policy Context**

#### **National Policy**

- 3.2 The Government published the National Policy Statement for National Networks ('the NPS') in December 2014. This is available via the Department for Transport's website, and a link is also provided in the project website (<a href="www.northampton-gateway.co.uk">www.northampton-gateway.co.uk</a>).
- 3.3 The NPS recognises the importance of SRFIs in terms of both economic development and addressing climate change, and makes explicit references to their role in facilitating the movement of freight from road to rail. This is seen as central to Government's vision for transport:

'Government's vision for transport is for a low carbon sustainable transport system that is an engine for economic growth, but is also safer and improves the quality of life in our communities. The Government therefore believes it is important to facilitate the development of the intermodal rail freight industry. The transfer of freight from road to rail has a part to play in a low carbon economy and help to address climate change.'

(NPS 2014, paragraph 2.53)

3.4 The NPS describes the aim of an SRFI as:

"...to optimise the use of rail in the freight journey by maximising rail trunk haul and minimising some elements of the secondary distribution leg by road, through co-location of other distribution and freight activities. SRFIs are a key element in reducing the cost to users of moving freight by rail, thereby reducing trip mileage of freight movements on both the national and local road networks"

(NPS 2014, paragraph 2.44)

- 3.5 The NPS describes the main drivers of demand and need for SRFIs, summarising them as:
  - · The changing needs of the logistics sector
  - · Rail freight growth
  - Environmental
  - · UK economy, national and local benefits jobs and growth
- 3.6 It is explicit in the NPS that Government has identified a 'compelling need for an expanded network of SRFIs' (para 2.56), and places SRFIs in the context of national economic and environmental objectives and priorities.
- 3.7 The NPS makes reference to key trends in the freight and distribution sector, as well as to environmental objectives and outcomes which Government is keen to deliver. For example, it says

"Rail transport has a crucial role to play in delivering significant reductions in pollution and congestion. Tonne for tonne, rail freight produces 70% less CO2 than road freight, up to fifteen times lower NO2 emissions and nearly 90% lower PM10 emissions. It also has de-congestion benefits – depending on its load, each freight train can remove between 43 and 77 HGVs from the road."

(NPS 2014, paragraph 2.35)

- 3.8 Separate to the NPS, Network Rail and the Department for Transport (DfT) have published a number of relevant documents which provide an evidential context for the Government's policy to encourage and enable more freight being moved by rail. These include the Department for Transport's *Rail Freight Strategy* of 2016 which forecasts that the volume of containers moved by rail will double by 2030.
- 3.9 Underpinning the Freight Strategy was a report prepared by AECOM and Arup for DfT entitled 'Future Potential for Modal Shift in the UK Rail Freight Market' (2016). The report details the changes over recent years in key sectors of the rail freight market, and identifies the prospects for further growth, including identification of current network capacity constraints and the actions required to overcome them and realise the potential for increasing shift from road to rail. In the context of intermodal (port and domestic) traffic the report identifies a key to unlocking the expected growth as "the creation and linking of a network of rail-connected distribution concentrations" which are SRFIs and regional terminals.
- 3.10 The report also states that the current lack of sufficient SRFIs generates more trunk haul distances by road, and recognises that the retail and logistics sectors are demanding new terminals, which is stimulating private sector to offer additional SRFIs. The report identifies the environmental and economic gains which could be delivered from an increase in the use of rail freight, and the gains which will develop as the critical mass of market activity grows, concluding that "rail-connected National Distribution Centres are fundamental to creating this virtuous circle of growth".
- 3.11 The NPS does not seek to identify specific sites or locations for SRFIs, and expects this to be driven by 'the market' who will also deliver SRFI. However, the NPS does include a number of generic criteria or characteristics to describe the type of locations in which they are expected to be developed. These can be summarised as locations which:
  - have good connectivity both with the road and rail network, in particular the strategic rail freight network (para 2.54);
  - are near the business markets they will serve major urban centres, or groups of centres and are linked to key supply chain routes (paragraph 2.56); and
  - are located alongside the major rail routes, close to major trunk roads as well as near to the conurbations that consume the goods (para 2.45).
- 3.12 More recently (February 2018), Network Rail published the Freight and National Passenger Operators Route Strategic Plan which identifies a range of issues and actions for Network Rail and other partners associated with continued investment and access to the railway, including with regard to increasing rail freight use in the UK. This includes reference to a number of specific priorities and actions for Network Rail, and the Appendix relating to the London North Western route includes a role for the organisation to "facilitate new terminal developments at Daventry, Northampton, West Midlands, and Parkside" (FNPO Strategic Plan, February 2018, page 121).

## **Local and Planning Policy Context**

- 3.13 The West Northamptonshire Joint Core Strategy (WNJCS) covers the local authorities of Northampton Borough, South Northamptonshire, and Daventry District, and was adopted in 2014.
- 3.14 The strategy plans for significant and ambitious growth over the period to 2029. The strategy focuses growth and development on locations in and adjacent to Northampton as the main centre for economic and population growth. Smaller settlements, such as Daventry and Towcester, play a supporting role in accommodating development of new homes and jobs across West Northamptonshire.
- 3.15 The SRFI at DIRFT is recognised in the adopted WNJCS, with reference made to there being no

expectation of further SRFI capacity within the plan period. However, the WNJCS refers to the intention of the local authorities to work with Network Rail and the freight industry "to consider and support further sustainable opportunities for rail freight interchanges in the longer-term" (WNJCS, paragraph 5.72).

3.16 A planned review of the WNJCS, understood to be programmed to begin in 2018, will take into account a range of national, sub-national and local issues. A key part of the emerging strategic picture is understood to be the Oxford – Milton Keynes - Cambridge Growth Corridor which will see significant additional growth of population, housing, and economic growth, supported by investment in strategic transport infrastructure (road and rail) over the period to 2050.

#### **Summary of the Environmental Statement**

### Socio-Economic issues

- 3.17 The completed development in operation could directly support around 7,400 full time equivalent jobs based on standard national densities of an average of one job per 77 sq.m. of floorspace. The socio-economic assessment concludes that around 60% of Travel to Work trips will originate from within the Northampton area. Around 90% of the jobs created are likely to be taken by people within the core 'study area' for the analysis of South Northamptonshire, Northampton Borough, Daventry District Council, the Borough Council of Wellingborough, Kettering Borough Council, and Milton Keynes Council, with only 10% of jobs benefiting people from further afield.
- 3.18 The construction process would generate approximately 120 permanent jobs, with many times more temporary construction jobs over the likely (approximate) 5 to 5 and a half year construction period.
- 3.19 Skills and qualification levels amongst the workforce would be improved through in-house and external training provision. Indeed, the Proposed Development would generate a range of jobs, requiring a range of skills and qualifications while around half of the jobs would be 'warehouse' jobs, the other half include a diverse range of roles including IT and other technical support roles, and managerial and administrative roles. More details are included in the Socio-Economic Chapter of the ES.
- 3.20 The Gross Value Added is estimated to be in order of £348 million annually. This is a measure of the economic value the development will add to the economy, and the vast majority of this benefit is expected to be seen in and around Northampton and South Northamptonshire. In addition, the scheme would generate significant additional Business Rate revenue every year of in excess of £12m per year which could play a direct role in supporting the service and investment priorities of the Local Authorities.
- 3.21 Northampton has strong strengths in the distribution and logistics sector, with well-established commercial supply-chains and networks, as well as skills profiles of direct relevance to the Proposed Development. This sectoral specialism creates market opportunities for further investment in the delivery of a new SRFI, with a large pool of existing labour, and local skills and training providers aware of the needs and requirements of logistics and distribution companies. While unemployment is not a particular issue locally there are areas of unemployment and in February 2018 within the Study Area there was a total of some 8,800 people claiming Jobseekers Allowance. Claimant count statistics showed approximately 2,750 claiming Jobseekers Allowance in Northampton (1.9%) and 2,775 (1.6%) in Milton Keynes.
- 3.22 The planned level of future housing growth in the area is considered adequate to meet any additional demand associated with new staff required. Taking into account the future increase in housing supply, impact on housing demand is considered to be negligible. Northampton Borough and the surrounding Districts are planning for significant growth through the adopted Core Strategy, and the Proposed Development, if approved, would begin generating jobs no earlier than 2021/22,

- with the levels of employment created increasing gradually over-time. The creation of new jobs at Northampton Gateway is expected to help provide opportunities for a reduced out-flow of commuters from South Northamptonshire to Northampton, and also outflows to Milton Keynes.
- 3.23 The Public Transport Strategy and Framework Travel Plan (referred to below in further detail) propose to increase the availability of bus access to the Proposed Development through provision of a new bus service, and new bus infrastructure (bus stops) to serve passing services. The proposals also include improved or new foot and cycle routes to the site. These measures will directly connect the site to the town centre and other parts of the Northampton urban area, enabling access to the site from a range of neighbourhoods, including by those without access to a car.
- 3.24 As a result of the above, socio-economic effects of the Proposed Development will be positive.

### Landscape and visual effects

- 3.25 The Landscape and Visual Impact assessment considers the likely effects of the Proposed Development as a whole. There are no specific statutory landscape designations that cover any part of the Northampton Gateway proposals.
- 3.26 The landscape of the proposed SRFI site comprises arable farmland, with the surrounding area mixed in character with existing major transport and development infrastructure, including the urban area of Northampton and the M1 motorway particularly apparent in the east and north of the site, and with railway infrastructure to the immediate west. Further to the west and south of the site the site is surrounded by village settlements, farmland and woodland. The Main Site contains two mature woodlands, Highgate Wood and Churchills Wood as well as some other mature trees and vegetation which are predominantly in the central and southern parts of the site. These main woodland areas and many existing mature trees are to be retained. The registered park and garden of Courteenhall is to the east of the A508, although largely screened and distant from the site as a result of tree planting and topographical changes.
- 3.27 Variations in ground levels create an important part of the Main Site's immediate landscape, with a ridge of ground extending along the western side and with the land generally falling back towards the urban edge of Northampton and Junction 15. The eastern edge of the site (close to the A508) is some 15-20m lower than the top of the ridge in the west. Only the far north-western corner of the Main Site falls away from the motorway towards Milton Malsor. Therefore, the Main Site sits in a shallow but enclosed landform setting, with a general aspect away from the nearest villages and towards the urban area, and separated in localised terms to the west and south. The village of Blisworth sits on higher ground, with most of the village on land falling away from the Main Site. Collingtree on the eastern side of the motorway sits at a similar level to the eastern part of the site, and generally falls away from the motorway and away from the Main Site.
- 3.28 The Roade Bypass is relatively more elevated and varied than the Main Site in terms of levels, with varying slopes and falls around the western side of Roade. The Bypass corridor stretches across two small dips and ridges in the landform to the north and west of Roade. The more rolling nature of the landscape provides scope for the Bypass to be relatively enclosed where it lies closer to the edge of the settlement.
- 3.29 The Proposed Development would clearly represent a change to the existing landscape, both through the earthworks and landscaping to create the bunding and other 'green infrastructure' areas, and through the proposed built development (rail terminal, buildings, and infrastructure).
- 3.30 At the local level, the effects will vary on different receptors at different stages of the development process. The scheme includes a range of mitigation measures, many of which are incorporated or embedded into the scheme design and layout. These include siting and heights of the Proposed Development, as well as the earthworks and ground modelling proposed.

- 3.31 Construction effects, which are temporary, will be minimised through best practice measures relating to the management of site activities. This will include protection of retained trees and woodland areas through the construction process, and the phased but early delivery of the outer landscaping and earthwork bunds. Also, temporary screen fencing where relevant will be used.
- 3.32 Once the Proposed Development is operational the residual landscape and visual effects will reduce over time as the landscaping and planting matures, and this will be managed and maintained over the longer-term through the Landscape and Ecological Management Plan. The analysis shows that most effects will be reduced to views of the landscaping (earthworks bunding and planting) not of the proposed built development or terminal at the Main Site. Similarly, the bypass will be largely screened, with some parts in cutting, and the nearest receptors having views of the planting and screen fencing.
- 3.33 The conclusions regarding the residual effects of the Proposed Development show that receptors will experience, at worse, moderate long-term landscape or visual effects, with many likely to experience negligible or minor effects after mitigation. The closest receptors with direct views of the site will experience the largest effects, but in the majority of cases the landscaping and bunding will be effective in minimising the worst of the effects. The introduction of additional planting and woodland areas will result in some beneficial residual landscape effects.

# **Ecology and Nature Conservation**

- 3.34 The ES has been informed by a programme of desk-based and on-site surveys and assessments to ascertain the existing characteristics of the Proposed Development site, and to understand the likely effects of the proposals.
- 3.35 The Proposed Development site is dominated by arable farmland and boundary hedgerows, with some areas of grassland, scattered woodland blocks, mature trees and ponds. There are no statutory designated sites within or adjacent to the application site.
- 3.36 However, the Roade Cutting Site of Special Scientific Interest (SSSI), which is a site of geological (not ecological) interest, falls within the boundary of the Bypass Corridor. There are no non-statutory Local Wildlife Sites (LWSs) within the boundary of the Proposed Development, the closest being Collingtree Golf Course LWS and Roade Quarry LWS. The Upper Nene Valley Gravel Pits Special Protection Area (SPA)/Ramsar site is located approximately 5km from the west boundary of the Main Site.
- 3.37 There are a number of non-statutory potential LWSs (pLWSs) within the boundary of the Proposed Development, including 236/Unnamed pLWS of Highgate wood, Roade Cutting pLWS and Roade Field pLWS. Protected or notable species present include badgers, roosting and foraging bats, farmland and woodland birds, great crested newts (GCN), invertebrates, common lizard, grass snake and otter.
- 3.38 Good design of the extensive areas of green infrastructure within both the Main Site and the Bypass Corridor, will include the retention, protection and stand-off from notable habitats and the provision of extensive areas of habitat creation. The Landscape and Ecological Management Plan (Appendix 5.12 of the ES) includes the conservation-led prescriptions for the retained and created habitats. These measures will be sufficient to address the possible adverse effects to sensitive habitats, including to nearby designated sites that may be brought about by the Proposed Development, such as habitat loss and disturbance.
- 3.39 Adverse construction effects upon habitats and fauna will be managed by best practice measures, including the protection of retained features, the control of site drainage, management of accidental pollution events and suppression of construction dust. The submitted Construction Environmental Management Plan (CEMP) provides the details of measures taken to minimise the effects of construction.

- 3.40 Where appropriate, the use of Natural England protected species licences, e.g. for bats, GCN and badgers, will both ensure legal compliance and shall also maintain the conservation status of faunal species. The appropriate timing of clearance, supervision of works and/or sensitive management of vegetation and features will avoid disturbance to other protected fauna, including birds and reptiles.
- 3.41 Significant habitat losses during each phase of the Proposed Development will be off-set through the re-creation and favourable management of hedgerows, trees, grassland and wetland features. Where appropriate the most sensitive habitats (hedgerows and neutral grassland) will be retained by translocation into part of the sites green infrastructure. These measures and the retention or replacement of features used by fauna, such as bat roosts or terrestrial habitat used by GCN, will avoid significant effects upon the majority of dependent fauna.
- 3.42 The loss of arable fields will lead to the unavoidable displacement of some specialist farmland birds, including grey partridge, linnet, skylark, yellowhammer and yellow wagtail. In order to address some of these potential effects a number of measures will be introduced to benefit breeding birds, including the enhancement of nesting opportunities for a broad range of species. A series of winter surveys over three years have shown that the site is not regularly used as supporting habitat by important species (e.g. golden plover) associated with the Upper Nene Valley SPA.
- 3.43 Overall, the majority of adverse effects associated with the Proposed Development will be offset in the mid- to long-term through the creation and favourable management of existing and new ecological features. Sensitive management of the hedgerow network will benefit this habitat type and the wildlife that relies upon it, particularly bats. Further gains will be achieved through the establishment of woodland and wetland features will also provide improved habitat for local fauna, including amphibians and invertebrates. New hedgerow planting (13 km) and tree woodland planting (29 ha) will more than compensate for the losses.
- 3.44 Overall the proposed development provides an opportunity to establish new habitats of nature conservation interest and to deliver a net gain for biodiversity in the locality.

### Geology, Soils and Groundwater

- 3.45 The ES includes an assessment of the ground conditions of the Proposed Development site. This considered geological conditions, but also the characteristics and qualities of the soils, including the presence of any contamination. It also considers the presence and depth of groundwater in relation to the proposals. The assessment includes consideration of the suitability of the land for development, with regard to the type of development proposed, and the proposed end-uses. Invasive investigations and surveys were undertaken to inform this process.
- 3.46 The Assessment shows that there are no significant issues with regard to potential contamination, with any potential minor and limited in scope. This is in part a result of the majority of the Proposed Development site being a largely agricultural environment.
- 3.47 The project as described, and the mitigation measures proposed, are anticipated to result in negligible environmental impacts. In summary there are several key points set out in the following paragraphs.
- 3.48 The hard development does not sterilise any areas of land permitted or allocated for future provision of mineral or aggregate resource supply.
- 3.49 The earthworks cut and fill balance will negate the need for large amounts of lorry movements and removal of materials to landfill and importation of materials.
- 3.50 The reuse of clean natural soils will not cause any impact to surface waters or aquifers.

- 3.51 A project management team will oversee construction work and enforce appropriate environmental monitoring control measures. This will ensure that short term construction impacts to environmental receptors, including the public and adjacent site users, are managed and minimised or completely prevented.
- 3.52 The construction contractor will adhere to best construction practice. The submitted Construction Environmental Management Plan is of direct relevance to many of the issues considered by the assessment.

#### **Drainage & Water Resources**

- 3.53 The ES includes an assessment of the likely effects on drainage and water resources. This is informed by a Flood Risk Assessment, as well as a Sustainable Drainage Statement, and Water Framework Directive Compliance Assessment. The assessment considers both construction and operational phases of the Proposed Development.
- 3.54 The Proposed Development is located almost entirely within Flood Zone 1. Flood Zone 1 is defined as land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%) and is the lowest defined category of flood risk. All of the Main Site is in this zone. However, existing data and hydraulic modelling shows that there are some issues with flood-risk further downstream associated with the Wootton Brook. Only very small areas of the total Proposed Development area at the extreme north of the Order Limits, and the northern part of the Pury Rd junction improvement are outside of Flood Zone 1.
- 3.55 The Main Site includes the Courteenhall Brook which flows through Grange Park to the north-east of the M1 before joining the Wootton Brook. The proposed bypass crosses a small un-named ordinary watercourse referred to as Roade Brook.
- 3.56 As a result of the introduction of large areas of impermeable surfaces there would inevitably be an increase in the volume of surface water runoff post-development, and prior to mitigation.
- 3.57 However, the drainage strategy for the Main Site will use SuDS to provide betterment (i.e. an improvement compared to existing conditions) at higher return periods by restricting runoff from the site to the existing greenfield QBAR rate (approximately a 2 year return period) for all events up to and including the 1 in 200 year + 20% climate change event. The surface water drainage strategy will ensure that surface water will be managed appropriately to ensure that the rate of surface water emanating from Proposed Development is not increased, and the water quality not compromised.
- 3.58 Similarly, the bypass will also use SuDS measures to attenuate and store surface water run-off, and to prevent any adverse impacts off-site or nearby.
- 3.59 Pollution control methods will supplement the use of SuDS to provide pre-treatment to surface water from higher risk pollution areas such as highways and car parking areas.
- 3.60 The overall conclusion of the assessment is that any potential impacts likely to arise as part of the construction or operational phase would be negligible in nature once mitigation has been incorporated into the development. There are likely to be off-site (downstream) benefits in the form of a reduced risk of flooding in more extreme events as a result of reduced rates of discharge from the site into local watercourses and as a result of the drainage strategy which will store and hold water in basins before controlled release from the site. In particular a beneficial impact will be delivered, with better controlled and predicable discharge into the Wootton Brook with benefits for Collingtree village in terms of reduced likelihood of local flooding in the future.

#### Noise & Vibration

- 3.61 A comprehensive set of noise and vibration surveys were undertaken around the Proposed Development site to establish the existing (baseline) conditions, and to form the basis of an assessment of the potential impacts and effects that may arise from the construction and operation of the proposed Northampton Gateway.
- 3.62 The results of the surveys showed that a range of noise conditions exist in the areas around the Proposed Development. The noise environment at most locations is typically dominated by road traffic noise from the M1 motorway, particularly around the Main Site. Other locations are affected by the noise from the A508 which runs through the centre of Roade, as well as railway noise from both the West Coast Main Line and Northampton Loop line.
- 3.63 Any current vibration effects are primarily associated with trains passing sensitive receptors that are close to the railway lines.
- 3.64 The Proposed Development would change the noise environment to some extent through the expected increase of road and railway traffic, as well as introducing new sources of noise associated with the operation of the SRFI. There would also be temporary sources of noise and vibration during the construction process.
- 3.65 Using relevant methodologies for each type of source, the expected levels of noise and vibration have been predicted at sensitive receptors around the Proposed Development site. Using the results, the associated potential impacts and effects have been assessed.
- 3.66 The assessment of construction noise has shown that, in general, there would be no adverse effects due to noise from the works associated with the Proposed Development at nearby receptors. For a small number of locations, adverse and significant adverse temporary effects that have been predicted, mainly around the centre of the proposed Roade Bypass site near the junction with Blisworth Road. To manage the impact at these locations, Best Practicable Means would be used to mitigate and minimise the effects. In addition, the effects around the Main Site would be reduced by the phased implementation of the earthworks bunding around the boundary.
- 3.67 The change in the number of freight trains expected to use the Northampton Loop line from operation of the SRFI has been found to be unlikely to result in any adverse impacts or effects associated with increases in railway noise or vibration at nearby receptors. The exception is at a few locations where there could be a significant adverse effect at night due to the maximum noise levels from the train pass-bys. However, the assessment methodology took no account of the likely reduction in train noise due to new, quieter rolling stock coming into use. Consequently, it is felt that any adverse effects will not be as great as assumed.
- 3.68 The assessment of the expected change in road traffic noise at receptors around the Main Site and associated with the Highway Mitigation Measures has indicated largely negligible impacts due to the Proposed Development. Significant adverse effects have been predicted at just three receptors, with one of these being a temporary effect and mitigated by the opening of the Roade Bypass relatively soon after. At the other two receptors, both located on a section of the A508 just south of the Main Site, it is possible that the significant adverse effects will be avoided and mitigated under the Noise Insulation Regulations.
- 3.69 For the receptors in and around Roade, the opening of the Roade Bypass is predicted to result in a range of effects reflecting the removal of road traffic current travelling on the A508 through the centre of the village onto the new bypass to the west. No significant adverse effects have been indicated as likely. Some major adverse impacts are predicted at receptors close to the bypass site where levels of road traffic noise are currently relatively low. However, careful use of landscaping and additional fencing around key sections of the bypass would mitigate and minimise those adverse effects.

- 3.70 The construction of the Roade Bypass will reduce the traffic noise currently experienced by receptors closest to the A508 running through the centre of Roade. Reductions in road traffic noise of between 3 and 10 dB(A) are expected.
- 3.71 No significant adverse effects have been predicted as a result of sound from operational activities taking place at the SRFI on the Main Site. Some adverse impacts have been predicted at receptors to the west of the Main Site under broadly south-westerly winds when the underlying road traffic noise from the M1 is typically lower. The design of the Main Site includes landscape bunds around the SRFI, particularly on the west side, to help mitigate and minimise the impacts by screening the associated operational sources from the nearby receptors.
- 3.72 Overall, the assessment of the likely impacts and effects from noise and vibration associated with the Proposed Development identified potentially significant adverse effects at only a few locations. For each, mitigation has been proposed, which would avoid these significant adverse effects. Elsewhere, where practicable, measures have been identified to mitigate and minimise other adverse impacts.

### Air Quality

- 3.73 Baseline surveys of air quality undertaken both by the local authorities, and the Applicant, show that current overall air quality in the area surrounding the Proposed Development is good. However, there are two existing Air Quality Management Areas (AQMA) close to the site because of breaches of national air quality standards (AQS) for nitrogen dioxide (NO2). Other pollutants, such as PM10, are known to be well below these standards and limits.
- 3.74 NO2 is closely associated with road traffic emissions on major roads. The closest AQMA to the site is found adjacent to the M1 and is focused on properties along a stretch of the motorway running north-west from Junction 15 in Collingtree. The other AQMA of direct relevance is found on a stretch of the A45 at Wootton to the north of Junction 15 within the urban area of Northampton Borough. There is also an AQMA at Towcester some way distant from the Proposed Development, and is associated with the A43 corridor, to the south.
- 3.75 Air quality in the surrounding villages is good, with local monitoring data showing levels consistently below set standards or limits, even at roadside locations. Air quality is mainly an issue associated primarily where people are living in close proximity to major roads and motorways. Therefore, current air quality issues relate to road traffic emissions which create adverse impacts for a small number of properties, namely those closest to the motorway in Collingtree. However, local monitoring data shows that pollution from the M1 disperses quickly with distance resulting in air quality across the majority of Collingtree being good overall.
- 3.76 As discussed in the Transport section below, as an SRFI the Proposed Development has a range of effects and impacts ranging from the very strategic level to the very local. By enabling and encouraging a shift away from road to rail freight, the Proposed Development will reduce the mileage of HGVs on the national network by an estimated 92 million miles per year. This would deliver air quality improvements at AQMAs across a large part of the UK, particularly on major strategic routes, and those on routes serving major ports.
- 3.77 At the local level, the Proposed Development will generate additional traffic and improvements to the local highway network which will result in a redistribution of existing traffic. The overall impact of these changes on air quality locally is anticipated to be negligible. The local air quality impacts vary, with the majority of locations showing little change in air quality, but with notable improvements in air quality through the village of Roade as a result of the proposed bypass.
- 3.78 Mitigation measures are also proposed to help further reduce total emissions and minimise the air quality effects on local populations. The proposed mitigation is centered around a range of

measures which complement and support the Northampton Borough Low Emissions Strategy (LES). The proposed mitigation measures could form the basis of a site specific LES and will guide and manage both construction and operational phases of the Proposed Development. The actions cover a range of issues from building design to public transport. A range of measures is proposed or under active investigation, such as:

- generous (above standard) provision of electric vehicle charging points on-site for employees;
- the feasibility of a range of such measures is under active investigation including provision of LPG re-fueling, and battery storage of solar energy on-site to encourage and enable alternative fuels for HGVs (both on and off-site);
- provision of a new rapid bus service linking the site to the town centre to transport staff and visitors to the site as well as some additional enhanced local bus services;
- provision of pedestrian and cycle routes for easier site access, and provision of secure cycle parking facilities on-site;
- provision of real time information on public transport on-site;
- appointment of a travel coordinator to oversee the development and implement the Travel Plan and associated schemes to encourage and facilitate use of non-car modes and car-sharing.
- 3.79 The overall summary of the assessment is that the Proposed Development will provide an overall national and regional improvement in air quality, by transferring freight from HGV traffic to rail. There is the potential for some adverse impacts on local air quality; however the proposed mitigation measures, which include extensive support for Northampton Borough's Low Emissions Strategy, will help to offset these impacts. Furthermore, proposed highway mitigation measures, such as the M1 J15 and J15A improvements and a Roade by-pass will result in reduced localised emissions, thereby having a positive effect on air quality in a number of locations and communities.

## **Cultural Heritage**

- 3.80 The Cultural Heritage Chapter considers both archaeological and built heritage impacts. The assessment contained in the Chapter is informed by the results of desk-top studies, site visits to view relevant receptors or assets, a geophysical survey (Main Site and Bypass Site), an archaeological trial trench evaluation (Main Site and Bypass Site), and archaeological monitoring of ground investigations.
- 3.81 There are no designated archaeological assets (Scheduled Monuments, Registered Battlefields etc.) within the application site and the Proposed Development will not impact on the settings of any designated archaeological assets within the wider study area.
- 3.82 Work undertaken to inform the ES has, however, determined that there are archaeological remains within the Main Site which will be impacted by the Proposed Development. The archaeological desk-based assessment suggested a potential for buried archaeological remains on the application site and this was corroborated by the results of a geophysical survey which identified a number of foci of archaeological activity indicative of late Prehistoric and/or Roman settlement.
- 3.83 The archaeological trial trench evaluation confirmed the results of the geophysical survey. Pottery fragments and other finds dated the activity on site to range between the middle Iron Age and Roman periods, with the majority of occupation of these areas evidently having taken place during the late Iron Age and early Roman transition.
- 3.84 If the DCO application is approved the archaeological remains present on the Main Site will be removed as part of the groundworks relating to the Proposed Development. However, based on the work already undertaken, these remains are not considered to be of high archaeological interest and can be satisfactorily dealt with through a programme of further evaluation trenching,

- undertaken post-consent, followed by targeted archaeological excavation to investigate where relevant to do so elsewhere within the Main Site.
- 3.85 Within a 1km radius of the Main Site, there are 51 listed buildings, three Conservation Areas, and a Registered Park and Garden. The majority of these will not be affected by the Proposed Development due to a lack of any visual or functional association between them. The Proposed Development will require the demolition of the two non-designated barns on the Main Site, however while of heritage interest they are not considered to be of high heritage value.
- 3.86 The Bypass Corridor contains the grade II listed Roade Aqueduct.
- 3.87 The Proposed Development will result in no more than a minor impact on the identified listed buildings and conservation areas, with many effects having been identified as negligible.

  A beneficial effect has been identified for the Roade Conservation Area as the proposed development will draw traffic away from its centre.
- 3.88 The highways mitigation measures included as part of the application will not result in any greater significance of effect than already identified due to distance from heritage assets, or already assessed as part of the development at the Main Site.

### Lighting

- 3.89 The ES includes an assessment of the likely impacts from external lighting associated with the Proposed Development. Informed by the characteristics of the site and surrounding area a Lighting Strategy has been devised to help minimise or eliminate the effects, employing the best technical lighting solutions and best practice.
- 3.90 Although the Main Site itself is currently unlit, the environment around it to the north and east is quite well lit, and other approved or committed developments will add to that. As a result of the effectiveness of the proposed Lighting Strategy, existing light sources will continue to dominate the night time view, even if the Proposed Development is approved and implemented.
- 3.91 All lighting will be of the type that only emits light downwards and will be directed onto the areas that specifically require lighting, thus preventing any light pollution. The Main Site will be lit throughout the hours of darkness to ensure safety and security of both people and property. This includes internal roads, car parks, the rail terminal, service yards and footpaths. The lighting will be designed to ensure there will be negligible upwards emitted light, negligible light spill and no glare. The height of lighting units within the Main Site will be kept to the minimum necessary for adequate illumination.
- 3.92 Some new lighting on the Main Site may be glimpsed from certain properties in or near Milton Malsor and Blisworth that currently have clear views of the site. However, for all other viewpoints, new earthwork bunding (mounding) will combine with the natural local topography to screen such views. Some sky glow will be observable over the site on misty nights but this will be small in comparison to the existing situation.
- 3.93 The improved A508 (dualling) from the site to M1 Junction 15 will be lit, while the only lighting on the Roade Bypass will be on the three proposed roundabouts (required to meet highways standards). Again, this lighting will be of the type that only emits light downwards. Some roundabout highways lighting will inevitably be visible in the early years from certain properties on the outskirts of Roade but, as new planting matures, they too will become screened from view. Those effects will be 'light presence' effects (lighting being visible in otherwise dark views), with no nuisance or more intrusive effects such as glare or spill onto or towards properties or gardens.
- 3.94 No significant lighting effects are predicted associated with the Main Site, and the most notable effects associated with the Proposed Development are considered minor or at worst moderate at a small number of receptors, with the majority of receptors experiencing negligible change.

#### Transport

- 3.95 A Transport Assessment (TA) has been prepared as part of the application and explains the likely transport and traffic impacts of the Proposed Development. It also sets out the mitigation measures proposed to minimise or eliminate adverse impacts, and the likely residual changes as a result of the proposals.
- 3.96 The TA uses the Northamptonshire Strategic Transport Model (NSTM2) which is operated and maintained by WSP Ltd on behalf of the County Council as Local Highways Authority. Further detailed analysis of key junctions has also been undertaken using VISSIM micro-simulation and industry standard assessment tools, supported by a Walking, Cycling and Horse Riding Assessment and Review, and a Stage 1 Road Safety Audit.
- 3.97 The assessment and modelling work was overseen by a Transport Working Group including Highways England and the County Council.
- 3.98 In the modelling the likely traffic generated by the Proposed Development has been added to the traffic already on the network, and that predicted in the future as a result of the new homes and other developments already planned or approved in Northamptonshire (known as 'commitments').
- 3.99 The proposed SRFI is located adjacent to Junction 15 of the M1 which suffers with a constrained physical design with tight radii on the roundabouts and a somewhat confusing layout, and it sees very high traffic demand at peak hours. The Junction is regularly operating well over its design capacity (27% above on a regular basis), resulting in significant queuing and congestion, with poor journey times and reliability. Queues on the A508 can often be in excess of 400m long, and the junction is well known locally as a regular congestion 'hot-spot'.
- 3.100 The Northampton Gateway proposals include a substantial upgrade to Junction 15 and A45 as part of a comprehensive package of highways works and improvements. In addition, the Proposed Development would also deliver improvements at M1 Junction 15A where lane widening and new signals at both the northern and southern roundabouts would prevent predicted queuing onto the M1 in the longer-term.
- 3.101 A key component of the highways works would see a number of improvements focused on the A508 corridor heading south from Junction 15. This includes a number of small scale junction and other improvements at existing junctions already known to create problems or safety concerns.
- 3.102 The mitigation package also includes a new bypass to the village of Roade. The Bypass would be a single carriageway road (60mph speed limit) around the western side of the village, and would include tree planting and landscaping, including earthwork bunding to help mitigate visual and noise effects, and drainage swales and attenuation features.
- 3.103 Roxhill is committed to delivering the bypass, and has proposed binding triggers or deadlines for its delivery which mean it will be delivered and open no later than 2 years after first occupation of the SRFI site (or within 4 years of the start of construction works to Junction 15), whichever is earliest. In practice, work to deliver the Bypass is expected to begin as part of the first phase of infrastructure works on commencement of development. The proposed M1 Junction and A45 upgrade would be completed prior to first occupation of the SRFI site.
- 3.104 Detailed plans showing the wider A508 route upgrade are included in the submitted application and include:
  - Alteration to the A508/Blisworth Road (Courteenhall) T-junction to become a 'left-in left-out' only junction;
  - Alterations to Stoke Road/Knock Lane (Blisworth Road) priority T-junction to widen the carriageway and improve the highway drainage, and additional widening to Knock Lane/ Blisworth Road;

- A capacity and road safety improvement scheme at the A508/Rookery Lane/Ashton Road crossroads;
- Alteration to the A508/Pury Road ghost island T-junction to increase the storage area for traffic turning right from the A508;
- A new pedestrian refuge on the A508 at Grafton Regis to assist with crossing to the northbound bus stop, and provision of a right turn harbourage facility for northbound traffic from the A508 turning into Church Lane.
- 3.105 The proposed SRFI site access on the A508 will be configured to require all departing HGV traffic to travel north, supported by automatic number plate recognition cameras and an enforcement regime to deter HGV U-turning movements at M1 Junction 15. This system would be operational 24 hours a day and would minimise development HGV impacts to the south of the site.
- 3.106 The following new 7.5T environmental weight restrictions are proposed on the local roads to the south and north of the SRFI site:
  - · throughout Roade;
  - along Knock Lane/Blisworth Road between Roade Bypass and Stoke Road;
  - along Blisworth Road and Courteenhall Road between the A508 and High Street, including parts of Blisworth;
  - along the unnamed road between the A508 and Quinton;
  - · throughout Stoke Bruerne and Shutlanger; and
  - Wootton and East Hunsbury, to the west of the A45, east of Towcester Road and south of the A5076.
- 3.107 These measures will complement the existing environmental weight restrictions that are in place on Watering Lane and Pury Road (and in Milton Malsor), which in combination with the configuration of the SRFI access and camera enforcement, will restrict HGV through traffic from accessing unsuitable local roads, many of which pass through the surrounding villages. HGVs arriving at the SRFI from the south will be restricted to use the A508, including the new Roade Bypass, and departing HGVs will be required to exit the SRFI site to the north via the A508 and M1 Junction 15.
- 3.108 The Proposed Development would also provide a financial contribution to Northamptonshire County Council for:
  - improvement schemes at the A45 Queen Eleanor Interchange and at junctions along the A5076, extending between the A45 and A5123; and
  - a Knock Lane and Blisworth Road maintenance and minor works fund, to be used in the
    event that the increased use of the roads should advance the need for maintenance or other
    remedial works.
- 3.109 The package of highway mitigation works has been tested in the NSTM2, and is shown to remove existing congestion 'bottlenecks' on the highway network, particularly at M1 Junction 15 and 15A, and at Roade. As a result, existing traffic is shown to 'reassign' to the principal road network consisting of the A508 between the A5 and M1 Junction 15, and at M1 Junction 15 and 15A. This is a desirable outcome, as the A508 is a primary route, and this reassignment is shown to lead to a consequential reduction in traffic on many of the surrounding local roads and the villages of Milton Malsor, Blisworth, Roade and Ashton. In simple terms, as a result of the package of highways improvements which the Proposed Development would deliver, the villages would see less through-traffic in the future than they would otherwise see without the Proposed Development, with beneficial impacts in terms of congestion reduction, as well as improvements in terms of noise and air quality for many village residents.

- 3.110 As well as providing improvements to the reliability of car travel the Proposed Development would also enable and encourage travel by a range of alternative modes. A Framework Travel Plan has been prepared in draft to encourage and enable access by a range of modes, and the proposals include new walking and cycling routes to (and within) the site as part of the wider infrastructure provision. In addition, a Public Transport Strategy has been prepared to ensure bus services serve the site, with new bus stops on the A508 also proposed for passing services.
- 3.111 However, to ensure a robust assessment which makes worst-case assumptions about the likely levels of car traffic, the Transport Assessment does not assume any shift of travel by employees away from the car to these other modes. This ensures that the highways mitigation works and improvements are designed to cater for the highest likely (worst-case) levels of traffic.
- 3.112 Overall, development of a SRFI at Northampton Gateway, once fully operational, would remove over 92 million HGV miles per year from the highway network equating to over £50 million in monetised environmental benefits per year as calculated using the methodology set out in the Department for Transport's Guide to the Mode Shift Revenue Support Scheme. The proposed development would provide a distribution hub, meaning that HGV journey distances would be reduced, reducing overall HGV mileage on the road network and helping to achieve the Government's objective of a modal shift from road freight to rail. This is expected to have economic as well as environmental (such as climate change and air quality) benefits.

#### **Agricultural Land**

- 3.113 The quality of the agricultural land affected by the Proposed Development has been assessed, and the likely impacts identified. Most of the Main Site and the Bypass site are in agricultural use, whereas the Highways Mitigation Measures are focused on land already within the highway (existing footways, roads, or highway verges).
- 3.114 The land affected by the proposals include approximately 220ha of agricultural land, and if approved, all but an area of 24ha in the southern end of the Main Site would be lost from agricultural use. The 24ha area is to be retained in agricultural use, with some peripheral areas used to accommodate landscaping and screening earthworks, but the existing soil resource will be retained.
- 3.115 The agricultural land across the Proposed Development site is known to vary in quality, with 33ha (approx. 12% of the total Proposed Development area) within the highest quality categories which are often referred to as the 'best and most versatile' land. Although significant at the site specific level, when viewed in the context of Northamptonshire as a whole where there are considerable areas of land in grades 1 3a, the loss of 33ha of grade 2 and 3a land is not considered to be of particular significance. Of this total, only 4% is the more sensitive Grade 2. There is no grade 1 land on the Proposed Development site.
- 3.116 The figures quoted above include the Bypass site, most of which is outside of the best and most versatile category (2.4 ha is grade 3a, while 23.4ha is grade 3b land).
- 3.117 The loss of agricultural land cannot be mitigated against, but measures are proposed to ensure that as much of the soil resource on-site as possible is available for re-use as part of the landscaping and other planted areas. Soil Management measures form part of the Construction Environmental Management Plan (CEMP) to limit permanent damage to the soil resources.

#### Waste

- 3.118 The Waste ES Chapter presents an assessment of the potential effects predicted to arise from waste generation and resource use, resulting from the construction, demolition and operational phases of the Proposed Development.
- 3.119 The waste chapter presents the results of the assessment of the potential environmental effects related to construction and operational waste resulting in terms of:
  - · The likely quantities of waste arising;
  - · The proposed management of the waste on Site; and
  - · The regional capacity to treat or dispose of residual waste.
- 3.120 The chapter presents the results of the assessment, with the potential effects of each development phase summarised as follows:
  - Construction and Demolition Waste The assessment has assumed a 89% recycling rates detailed in the UK waste statistics, this would reduce the volume of waste from 82,670.00 tonnes, (before recycling) to approximately 9,093.00 tonnes which equates to approximately 0.7% of the current baseline, (1.35 MT). When considering local and regional landfill capacity alongside waste management practice the construction phase waste management effects would not be significant and can be considered negligible. Therefore, the residual effect is considered negligible and is therefore considered not significant.
  - Excavation Waste it is considered that there will not be any waste arising's from on-site
    excavation activities, due to the waste either being re-used on-site or exported off site for reuse. It is therefore considered that the environmental effect resulting from the proposals can be
    considered negligible. Therefore, the impact resulting from excavation waste is considered not
    significant.
  - Operational (Commercial) Waste Waste from commercial activities would be controlled
    and monitored through the specific operators and occupants. At this stage the resulting
    waste amounts are based on estimations and more specific operational waste volumes
    can be calculated once tenants of the units are confirmed. With the presence of mitigation
    measures outlined in the assessment the effect can be considered negligible and the potential
    environmental impact considered as not significant.
  - Cumulative Impacts The waste assessment considers The Northampton Sustainable Urban Extension, (SUE), the Northampton South of Brackmills SUE and a "with" and "without" Rail Central development scenario as part of the cumulative assessment. This concluded that with mitigation measures and best practice that for both scenarios a minor adverse cumulative effect can be anticipated, which is considered not significant.
- 3.121 The waste assessment concludes that the construction, demolition and operation of the Proposed Development is assessed as not significant. Following the implementation of applicable impact avoidance and mitigation measures, all potential residual waste management effects associated with the Proposed Development are assessed as being negligible (i.e. not significant).

# 4. Summary of Conclusions from the ES

- 4.1 This section of the NTS summarises the key findings from the ES, drawing on the more detailed summary provided in Section 3.
- 4.2 This includes information about the likely cumulative effects with other committed developments, and with an emerging alternative SRFI located nearby ('Rail Central'), as well as information about the alternatives considered by the Applicant and the reasons for choosing the option now proposed.

#### **Cumulative Impacts**

- 4.3 The ES includes an assessment of the likely cumulative impacts of the Proposed Development. This considers the range of likely residual effects identified across the ES as a whole and seeks to provide an assessment of the potential for cumulative effects on some key receptors. This is to ensure that in addition to the topic specific effects a more holistic approach is also taken, and is intended to provide a useful overview of how some representative receptors might be affected in several different ways.
- 4.4 Some receptors are highly contained and site specific, and unlikely to be affected in different ways by the Proposed Development, whereas others can experience change in a number of ways. Chapter 15 of the ES sets out a summary of the likely cumulative impacts on a number of representative receptors, including residents close to the Main Site, the Bypass, and on-site ecological receptors. This shows that there is a range of likely effects on receptors on-site and close to the Proposed Development, but suggests that few if any receptors are likely to experience numerous adverse effects beyond minor magnitude.
- 4.5 The effects of the construction process will be managed carefully, as proposed through the CEMP, to minimise effects, but will inevitably generate some adverse (temporary) effects. However, the assessment undertaken shows that in terms of likely residual effects on those representative sensitive receptors the Proposed Development is likely to generate a range of negligible effects some (mostly minor) adverse effects, as well as a number of beneficial effects.

### Assessment of likely effects with other developments

- 4.6 Chapter 15 also gives a narrative summary of the likely cumulative effects of the Proposed Development with other relevant committed developments these are sites or proposals which are allocated in local development plans, or which have planning permission which may generate environmental effects on the same receptors in combination with the Proposed Development. This assessment uses the conclusions from across the ES chapters, all of which consider cumulative effects with the following commitments:
  - 'Northampton South' Sustainable Urban Extension (SUE) located at Collingtree on the
    opposite side of the M1 from the Proposed Development, for approx. 1,000 dwellings, with a
    new local centre and primary school. This site is located on the opposite side of the M1 to the
    Northampton Gateway main site, and further north-west, to the west of Collingtree;
  - 'South of Brackmills' SUE located on the eastern edge of Northampton adjacent to the Brackmills industrial area, for approximately 1300 dwellings, new local centre and primary school. This site is located some 5km from the Northampton Gateway site, separated by Wooton and Grange Park.

- 4.7 In addition to the above commitments, the assessment also includes consideration of the emerging and separate Rail Central SRFI proposed on land to the west of the Proposed Development. Although not a commitment, the applicant has been specifically asked to consider the potential for cumulative effects on the basis that, at least theoretically, both proposed SRFIs could be approved.
- 4.8 It is important to note that an extensive list of planned and committed developments are directly taken into account in the Transport Assessment. This includes not only the two SUEs named above but all of the growth planned or allocated through the West Northamptonshire Joint Core Strategy, as well as other relevant sites with planning permission and expected 'background growth' in traffic. All of that traffic growth already forms part of the Northamptonshire Strategic Transport Model (owned and operated by the County Council) which has been used to undertake the Applicant's assessment of the traffic and transport impacts, and to inform the package of mitigation.
- 4.9 The Transport Assessment and ES chapter show that as a result of the proposed mitigation works and measures, including substantial infrastructure improvements at Junction 15 of the M1, an upgrade to Junction 15A, and the Roade Bypass, that the transport effects of the Proposed Development would be beneficial, with reduced congestion, improved capacity, and more reliable journeys at some key existing congestion 'hot-spots'.
- 4.10 The transport strategy would also see reduced 'rat-running' through the nearby villages compared to that likely in the future without the Proposed Development as a result of the A508 improvements and Bypass attracting traffic back to this corridor and away from less appropriate routes.
- 4.11 The Air Quality assessment, and a large component of the Noise and Vibration assessment, uses data from the Transport modelling which as described above, considers the future conditions taking into account all planned and committed growth as well as the Proposed Development. In this context, cumulative effects are explicitly assessed, and as described in Section 3 of this non-technical statement shown to be largely negligible, including some beneficial effects.
- 4.12 With regard to topics other than transport, other likely cumulative effects with the committed developments named above are likely to be limited. Indeed, there are no likely cumulative effects with the South of Brackmills SUE given proximity from the Proposed Development site beyond an increase in the amount of agricultural land lost to development.
- 4.13 Many aspects of the environmental impact assessment are highly site specific and will not contribute to any direct cumulative effects with other sites, even where they are physically close together. For example, buried archaeology (Cultural Heritage), geology (soils) and ground conditions.
- 4.14 With regard to those issues where there could be cumulative effects, any landscape effects of the Proposed Development with the closer Northampton South SUE are likely to be limited to a small landscape area focused along a short stretch of the motorway corridor. This landscape is already dominated by the motorway with other nearby urbanising influences and there would be no significant cumulative landscape effect arising from the Proposed Development and the South Northampton SUE. There could be some very limited and localised cumulative visual effects for users of the M1 motorway and Ash Lane/ Collingtree Road, with restricted or glimpsed views towards both developments close to the bridge over the motorway. However, given the limited intervisibility of the two sites there would be no significant cumulative visual effects.
- 4.15 Similarly, the remainder of the ES concludes that the cumulative effects with the committed developments are either negligible or minor, with no significant effects likely. This is in part because planning policies, regulations, or best practice require all developments to minimise or eliminate as many adverse effects as possible through design and other measures. Therefore, with regards to sometimes sensitive issues such as biodiversity, flood-risk, noise, and lighting, the ES concludes that any cumulative effects with the committed developments are limited.

- 4.16 However, some cumulative effects with Rail Central, if approved, could be more significant. The assessment is at this stage tentative and interim, as much of the Rail Central environmental information is incomplete or not yet available in final form. However, most notably, the likely combined landscape and visual effects could be major adverse, driven by the more significant impacts of the Rail Central scheme which is in a more prominent and exposed location in relation to many local receptors in Milton Malsor and Blisworth.
- 4.17 Also, were both Rail Central approved in addition to Northampton Gateway and the committed developments the transport benefits delivered by the proposed infrastructure improvements are likely to be less significant than the benefits seen with Northampton Gateway alone. Notwithstanding this reduction in the scale of the likely transport benefits, with both schemes (as well as committed developments) the transport network seems likely to operate better than is likely if neither project were approved, particularly around the M1 and Junctions 15 and 15A where committed growth is likely to create a gradual worsening of congestion and delays.
- 4.18 There would also be some likely local changes to the noise impacts, with some minor increases to some nearest receptors both during the day and at night.
- 4.19 The cumulative air quality effects are unlikely to be significant, but to assess them fully requires final detail of the highways impacts of Rail Central which is not currently available.
- 4.20 Were the Rail Central site also approved it would result in a greater loss of agricultural land in the same local area, but in the wider context this is not considered significant, especially as the loss of the highest-quality land categories which dominates much of Northamptonshire would be very small.
- 4.21 Similarly, in most other respects, the cumulative effects with Rail Central included in the assessment are not significantly different to the likely residual effects of the Northampton Gateway with the committed developments. As referred to above, this is because best practice, policy, and other material considerations requires all development to seek to minimise or eliminate as many adverse effects as possible through design and mitigation measures.

#### **Human Health**

- 4.22 In accordance with the 2017 EIA Regulations the ES considers the likely impacts on human health across the relevant chapters, and Chapter 15 summarises the overall likely impacts.
- 4.23 The Proposed Development is likely to have a negligible effect on human health overall, but in relation to several categories of potential impacts are likely to have a positive effect. The assessment has considered potential direct health impacts, but also opportunities to enable and encourage health and healthy lifestyles (the 'health promotion' agenda) which can have less direct impacts on health.
- 4.24 Key examples of the ways in which the Proposed Development is likely to produce positive health impacts are under the 'Socio-economic aspects', where provision of new employment and skills opportunities is seen as a direct and positive part of the wider health and well-being agenda. The proposals are not in a deprived area, but there are pockets of relative deprivation relatively nearby, and if approved the project would generate positive opportunities to further improve health and well-being.
- 4.25 The provision of new employment so close to Northampton and other communities will allow local people opportunities to work nearer home, reducing the need for out-commuting from South Northants to other areas, or, for example, from Northampton to Milton Keynes. This ability to work closer to home can also have positive, ableit less direct well-being and lifestyle impacts.
- 4.26 Related in part to these same issues, the Proposed Development would deliver new links and opportunities for walking and cycling. This not only includes links to and from the SRFI site from

Collingtree and Northampton, but also includes a new link between Roade and the Main Site (alongside the A508). Also, diverted rights of way would be retained and extended with new links provided within the main site, and new connectivity offered. This would include retained links to the west of the main site, enabling walking to and from Milton Malsor and Blisworth.

- 4.27 The landscaping areas within the site will incorporate some of these new and diverted routes, creating a resource for local people, but also for employees of the site. This will support health initiatives relating to exercise and access to open spaces, with potentially positive physical as well as mental health outcomes.
- 4.28 Related to the Bypass the design of the proposals will retained the existing bridleway via an underpass below the new road to protect access to the countryside and wider rights of way network to the west of Roade. This bypass will therefore protect existing walking, cycling and equestrian access to and from the village, and will retain this health and recreational benefit for local people. Other existing routes will be incorporated into the bypass with crossing points as well as footway alongside the bypass itself.
- 4.29 Potentially adverse effects which can effect health and well-being are addressed and mitigated through the Proposed Development. For example, adverse impacts on the amenity of local residents could have a potentially adverse effect on health in general terms, and in that context noise, and lighting (visual) effects are of relevance, in addition to the potential for more direct impacts on health were there to be a significant adverse impact on air quality.
- 4.30 In fact, the assessment suggests that impacts on air quality from Northampton Gateway will be negligible overall, albeit with notable benefits in some areas as a result of the transport strategy which will stimulate a redistribution of traffic which will have positive outcomes for many local communities. Reductions in through-traffic in villages is likely to deliver localised improvements to congestion, and to associated air quality and noise, which will be beneficial with regard to health and well-being.
- 4.31 Similarly, through best practice design and specification of the lighting strategy, the impacts on amenity will be limited, with no significant intrusive effects such as glare or direct light-spill on residential properties or gardens. Effects will be limited to 'light-presence' effects, and mostly negligible in significance.

#### **Climate Change**

- 4.32 The ES considers the implications on climate change, both as an intrinsic part of the EIA process, but also by inclusion of an explicit summary of the ways in which the Proposed Development might affect climate change. Chapters 1, 2 and Chapter 15 refer to this in general terms, but more detailed issues relating to climate change are also identified in a number of the topic specific chapters (such as Air Quality, Drainage and Water Resources, and Transport).
- As a Strategic Rail Freight Interchange (SRFI), the Proposed Development could make a direct and meaningful contribution towards implementing an important component of national policies regarding climate change. Through enabling and supporting a shift from road to rail for the movement of freight, SRFIs are seen by national policy (the National Policy Statement referred to above) as a type of development of direct relevance to addressing the role of transport in the causes of climate change. As each freight train can remove between 43 and 77 HGVs from the road¹, and with rail transport much more efficient in terms of carbon emissions than road transport², it is clear that SRFIs like Northampton Gateway would make a positive contribution to reducing carbon emissions.

<sup>1</sup> NPS, paragraph 2.35

<sup>2</sup> NPS paragraph 2.35 – rail freight produces 70% less  ${\rm CO_2}$  than road freight.

- 4.34 Added to this, through the reduction in HGV mileage on the national network, Northampton Gateway would also have decongestion benefits helping improve reliability and efficiency of the road network. The ES estimates that the Proposed Development could remove 92 million HGV miles from the national network every year once fully operational.
- 4.35 With regard to other aspects of the climate change agenda, the potential impacts on drainage and flood-risk have also been assessed, and the Flood Risk Assessment and drainage strategy proposed include an explicit allowance for the effects of climate change in terms of rainfall intensity. The drainage strategy proposed is designed to enable the site to manage surface water in such a way as to ensure no downstream flood-risks or issues are either exacerbated, or created. Indeed, through better management of surface water, the proposals are likely to create some improvements (i.e. reduced risk) for downstream areas associated with the Wootton Brook.
- 4.36 Although detailed design of the buildings (appearance, materials, etc) is not part of the application, a framework is provided which will translate into a range of measures which will directly address climate change issues. Chapter 2 includes a Sustainability Strategy related to the delivery of BREEAM 'Very Good' standards on-site through energy efficient design and materials as well as incorporating technology to increase energy efficiency and use of renewables. This includes delivering electric car charging points, with the potential for this to be tied in with on-site power generation through photo-voltaic panels. Further to this, the proposals also include walking and cycling links and infrastructure, and new public transport provision, all of which will also contribute to the ways in which the Northampton Gateway proposals address climate change.
- 4.37 Therefore, the ES underlines a range of ways in which both strategic or 'macro-level' outcomes and local, site-specific and 'micro' level actions will be taken in response to the climate change agenda.

Figure 2 – Parameters Plan

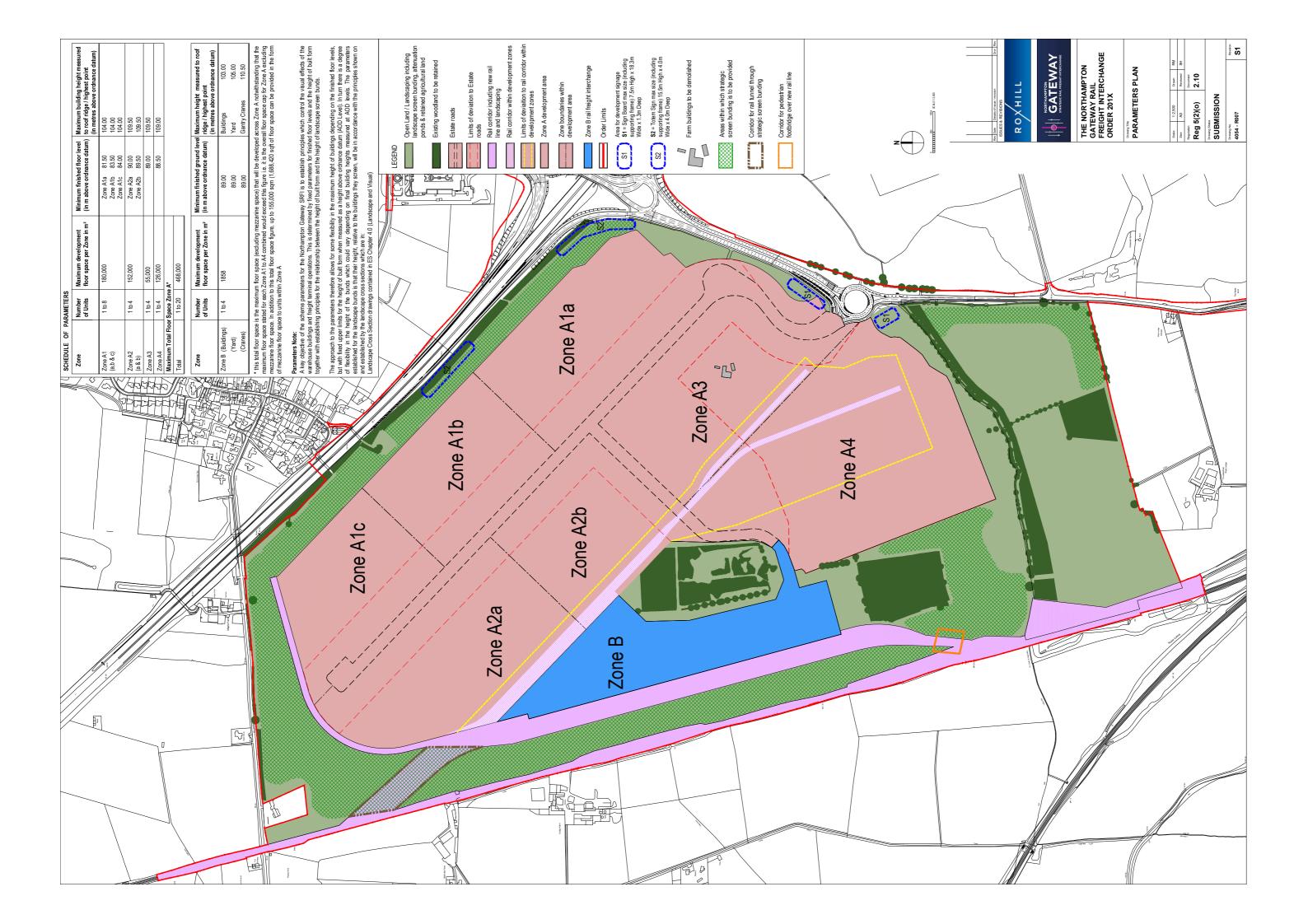


Figure 3 Illustrative Masterplan



Figure 4 Components of the Proposed Development

