Rail Central:

Design & Access Statement

Rail Central
Northamptonshire

February 2018

PREPARED FOR

Ashfield Land Management Limited and Gazeley GLP Northampton s.à.r.l.

BY

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CONTENTS

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2.0 INTRODUCTION

The Applicant is making an application to the Secretary of State (SoS) via the Planning Inspectorate (PINS) for a development consent order (DCO) under the Planning Act 2008 (the 2008 Act) for the development of a new Strategic Rail Freight Interchange (SRFI) (which includes warehousing) on land located between the West Coast Main Line (WCML) and the Northampton Loop Line (NLL) and highway works in the vicinity of the A43 and 2 miles from Junction 15A of the M1, south of Northampton (the Project).

The key components of the scheme are:

- Up to 702,097 sqm (GEA) of rail connected and rail served warehousing and ancillary service buildings including a lorry park and bus terminal;
- An intermodal freight terminal with direct connections to the Northampton Loop Line, capable of accommodating up to 13 intermodal trains per day and trains of up to 775m long, including up to 3 gantry cranes, container storage, a train maintenance depot and facilities to transfer containers to Heavy Goods Vehicles (HGV);
- A potential express freight terminal with direct connections to the West Coast Main Line (WCML), capable of accommodating up to 13 trains per day and trains of up to 240m on the express terminal, a freight platform with associated loading and unloading facilities;
- New road infrastructure including a new separated access point on the A43 (T), an internal site underpass (under Northampton Road);
- Improvements to Junction 15A of the M1 Motorway;
- Other minor highway works in the surrounding area;
- Strategic and structural landscaping and developmpent of open space including alterations to public rights of way, the creation of publicly accessible open areas, flood attenuation, and the partial diversion of the Milton Malsor brook. This will mitigate some effects arising on biodiversity as a result of the Proposed Development within the Main SRFI Site; and
- Provision of an ecological area to the south-west of Junction 15A to mitigate habitat loss at the Main SRFI site

A 'parameters approach' has been applied to the Project whereby the development is described in terms of clearly defined parameters inside which future detailed development will be undertaken. This approach is used across a range of large infrastructure projects in order to ensure that the potential impacts of the project are identified and properly controlled whilst allowing flexibility in design options for future design development.

A parameters plans (30708-PL-DCO-113) has been developed which encapsulate the scheme's concept and which will form the 'envelope' within which the future design proposals will need to evolve.

The Parameter Plans (Figure 22) identify those elements of the scheme which are to be fixed or controlled as part of the DCO (i.e. the location of development plots and the framework of green infrastructure) and those elements which are subject to restrictions. The Parameters Plan which set out the design parameters are:

- Built Development Plan;
- Green Infrastructure Parameter Plan (Figure 19)

An illustrative masterplan (30708-PL-DCO-111 - Figure 17) has also been produced which demonstrates one way in which the Rail Central proposals could potentially come forward, in accordance with the controls set out within the Parameters Plans.

The following section provides further details in respect of the proposed individual component parts:

1. Intermodal freight terminal with connections to the Northampton Loop Line, container storage and parking

A freight terminal is proposed, to be connected to, and immediately west of the Northampton Loop Line which handles most of the freight and non-express passenger services at present.

The freight terminal is designed to accommodate up to 13 trains per day and to accommodate trains of up to 775m in length (the maximum length of UK intermodal trains). The freight terminal, through the provision of 6 rail sidings (all capable of accommodating a 775m length train) would enable the transfer of the freight from road to rail, and vice versa.

Trains will be able to access from either direction on the main line, with trains passing directly into or alongside the intermodal terminal to facilitate fast turnaround of trains once off the main line. Provision has been made in the track layout design to allow both diesel- and electrically-hauled trains to access the sidings.

In addition to serving operators of Rail Central itself, the freight terminal would be an open-access terminal that could serve a wider market, enabling the transfer, storage and distribution, as required of containers and other goods. Areas for container storage and a parking area are proposed at and adjacent to the rail terminal.

In order to facilitate the loading and unloading of containers, the freight terminal will accommodate up to 3 overhead gantry trains operating on rails and with the ability to span across all 6 rail sidings and the majority of the intermodal terminal apron areas. In addition reach staker cranes will be utilised to transfer containers to a temporary storage area, where containers will be stored at a maximum height of 12m over 20,000 sqm area. It is expected that normal operations would be below the maximum storage extent.

The intermodal terminal facility also includes a Railway Control Centre (RCC) providing administration and security facilities as well as amenities for staff and visitors and a traction and rolling stock depot which will enable the trains to be stabled, maintained and fuelled on site rather than at off-site locations.

At start up, and based on equivalent UK terminal operations, Rail Central is expected to handle the equivalent of 13 intermodal trains in and out of the site per day, starting from an initial phase of 4 trains per day. Further detail on the rail layout, connections and operation of the interchange terminal are contained in the Rail Report (Rail Operations Report, Regulation 5(2)(q).

2. Express freight terminal with connections to the West Coast Main Line (WCML), with loading/unloading platform

In addition to the intermodal facility, (and uniquely for a SRFI), Rail Central also makes provision for access to and from the WCML itself (known historically as the London to Rugby Line). This is mainly for a smaller number of express freight services, similar to those used by the Royal Mail between London, Warrington, Glasgow and Newcastle (and more recently used by Eddie Stobart, Sainsburys and TNT).

Access would again be provided from both directions of travel for diesel- and electrically-hauled express freight trains, the loop off the main line being of sufficient length to allow trains to enter and depart at higher speeds. A cross-dock platform would allow trains and goods vehicles to transfer goods quickly between modes. This facility would allow freight users to benefit from faster transits than possible with road haulage or traditional rail freight services.

Internal rail connection points will also be created within the site between the intermodal terminal and the express freight terminal.

3. Up to 702,097 sqm (Gross External Area) of rail connected and rail served warehousing and ancillary service buildings including a lorry park and bus terminal

The Project proposes up to 702,097 sqm (Gross External Area) of warehousing. Provision has been made for up to three of the larger warehouse units to be capable of direct rail siding access into / alongside, whilst the remainder will be served by a common-user, open-access intermodal facility.

Within Rail Central, a lorry park with capacity for 149 HGV spaces will be provided along with a bus terminus. The terminus will provide turning, pick up/drop off areas and layover space for buses serving the site.

The final and detailed configuration of the warehousing development plots would be determined in response to market demand but the expectation is that the development would comprise large floorspace buildings. The detailed approval of these buildings will be managed by the Local Authority through the discharge of Requirements of the DCO which requires the submission of details including access, layout, appearance, landscaping and scale.

The Application identifies a number of development plots within the site which are shown on the Parameters Plan (Figure 22). The Parameters Plan identifies and defines the maximum floorspace, building plateau levels, and building heights. The development plots provide for ancillary buildings and structures to support warehousing including gate-house, sprinkler tanks, substations, storage tanks and other necessary ancillary structures. The developed areas will also provide car parking, HGV tractor and trailer parking and cycle parking. Security fencing would be provided.

The illustrative masterplan (Figure 17) illustrates one way in which the Project could be delivered in accordance with the Parameters Plans.

4. New road infrastructure

The Project includes a number of road infrastructure elements which can be summarised as follows:

The main SRFI Site and its surroundings

- The creation of a grade separated roundabout on the A43 (T) comprising a single 7.3m wide carriageway with access to the four slip lanes and new dual carriageway descending into the Site.

- The provision of an estate road to serve the Site with an underpass beneath the existing Northampton Road and an emergency access to Northampton Road which would comprise a simple priority junction. It will be security gate controlled to prevent vehicle access other than in defined emergency situations. It will allow pedestrian and cycle access.

Other highways works (Figure 20)

- Improvements to Junction 15A of the M1 Motorway; and

- Junction improvements as follows;

M1 Junction 16
Junction Three – A4500 / Upton Way / Tollgate Way
Junction Four – A5076 / A5123 / Upton Way
Junction Five – M1 Junction 15A
Junction Six – A5076 / Hunsbury Hill Avenue / Hunsbarrow Road / Hunsbury Hill Road
Junction Seven – Towcester Road / A5076 / A5123 / Tesco
Junction Nine – A45 / Eagle Drive / Caswell Road
Junction Ten – Barnes Meadow Interchange
Junction Eleven – A45 / A43 / Ferris Row
Junction Twelve – M1 Junction 15
Junction Fourteen – Tove Roundabout
Junction Fifteen – Abthorpe Roundabout
Junction Nineteen – A5076 / Telford Way / Walter Tull Way / Duston Mill Lane
Junction Twenty – A5076 / High Street / Duston Mill
Junction Twenty Five – A508 / A5199
Junction 28 – A43 / Towcester Road
Junction 29 – A43 / St John's Road
Junction 31 – A43 / Northampton Road

5. J15 A Works and Ecology Mitigation Area

A number of improvements are proposed to the junction and will include such works as carriagway widening, reconfiguration of the roundabouts, signalisation and the provision of a new link road between the southern junction to M1 northbound on and off slips.

To the south of the junction a 26 hectare area of land (Figure 18) has been secured for ecological mitigation. This will seek to complement the onsite mitigation with additional hedgerow planting, retained farmland with enhanced habitat provision for ground nesting birds, grazed wildflower areas, woodland and scrub areas, marshland, proposed field edge ponds and ditches, renovated barns for bats and barn owls and the placing of standing deadwood and deadwood tree piles formed using felled trees and hedgerows on the main site.

Proposed native tree and shrub planting alongside the highway will connect up existing vegetation to create wildlife corridors whilst retained arable farmland will be managed to maximise the habitat potential for ground nesting birds with wildflower margins and smaller field sizes divided with new hedgerows and ditches.

2.1 PROJECT BACKGROUND

A SRFI is a large rail served distribution park linked into both rail and the strategic highways network, capable of accommodating the large warehousing necessary for the storage, processing and movement of goods for manufacturers, retailers and end consumers. The aim of SRFI is to optimise the use of rail in the freight journey by maximising rail trunk haul and minimising some elements of the secondary distribution leg (final delivery) 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 and are important in facilitating the transfer of freight from road to rail, thereby reducing trip mileage of freight movements on both the national and local road networks. SRFIs are also implicit within the Government's vision to achieve a low carbon sustainable transport system, that is an engine for economic growth, that is safer, and that improves quality of life in our communities.

The transfer of freight from road to rail has an important part of to play in a low carbon economy and therefore helping address climate change.

In order to address the on-going government policy objectives, and satisfy new market demand a network of SRFIs is needed across the regions to provide capacity and flexibility. The existing network of SRFIs will only have a finite capacity to expand floorspace and/or rail freight interchange facilities, such that further SRFIs such as Rail Central are needed to increase both the capacity and the wider network, bringing rail access closer to more local companies than is possible from these existing sites alone.

Development of Rail Central will therefore help to ensure greater opportunities to achieve further "modal shift" of long-distance freight from road to rail, with the associated environmental benefits, over the medium to long term. This site is therefore targeting a longer term provision of space to ensure continuity of supply in the market it serves.

The Decision Making Framework

The National Policy Statement for National Networks (December 2014) (the NPSNN) provides the primary basis for the consideration of a nationally significant SRFI. The NPSNN provides a bespoke policy framework for the infrastructure which is necessary to meet identified national needs. It contains detailed guidance by topic to guide both applicants and the decision maker in their detailed approach to nationally significant infrastructure projects (NSIPs) – in respect of their function, design, assessment and mitigation.

Under Section 104 of the 2008 Act, an application for a SRFI must be determined in accordance with the NPSNN, except in limited specific circumstances.

2.2 PURPOSE OF STATEMENT

Whilst there is no legal requirement for a Design and Access Statement (DAS) or design guidance to accompany an application for a DCO, regulation 5(2)(q) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 requires that the application must be accompanied by the submission of 'any other documents necessary to support the application'.

This Design and Access Statement (DAS) is such a document to describe the design approach that supports the proposal.

The content and structure of the DAS has been informed by Paragraphs 29-33 of Planning Practice Guidance "Making a Planning Application" dated March 2014, and CABE advice, "Design and Access Statements: How to Write, Read and Use Them" (CABE 2006). Together these provide advice on what a Design and Access Statement should include. In essence, there is a need to:

- Provide a review of the site's immediate and wider context in terms of its physical, social and economic characteristics and relevant planning policy and guidance
- Provide a rationale for the scheme's design
- Explain and illustrate the design principles in terms of the development's layout, density, scale, landscape and visual appearance
- Explain how future users of the site will be able to access the development from the existing transport network and why the main access points to the site and the layout of access routes have been chosen
- Explain how the developm ent will meet the local authority's planning and urban design objectives

This has informed the structure of the document and includes a consideration of issues, including:

Use: How will the buildings be used?

Amount: How much will be built on the site?

Layout: How will the buildings be arranged on the site and their relationship with the surrounding area?

Scale: How big the buildings and spaces will be?

Heights and Levels: What the proposed building heights and plot plateau's are likely to be?

Landscaping: How will landscaping be intrinsic to the development?

Appearance: What the development will look like?

Access Vehicular and Transport Links: How the proposed access points and routes have been selected and how the site will relate to the existing road network and public transport provision?

Internal Access: How access within the development will be provided offering safe passage for vehicles, pedestrians and cyclists?

Green Infrastructure: How does the proposed landscaping and ecological mitigation tie in with the Project?

Ecology: How will the development manage and improve the ecology of the site?

Drainage: How foul and surface water will be managed?

Sustainability: What measures will be considered as part of the development?

As no other specific guidance exists for the preparation of Design and Access Statements to support applications for a Development Consent Order, this document has taken account of guidance within The Town and Country Planning (Development Management Procedure) (England) Order 2015 and the DCLG Planning Practice Guidance on Design and Access Statements that identify the structure and content expected of these documents to support planning applications.

3.0 CONTEXT

3.1 SITE LOCATION

The application site is located approximately 20km northwest of Milton Keynes and approximately 6km South West of Northampton. The site is currently agricultural grazing land that lies between the villages of Blisworth (to the south) and Milton Malsor (to the north). The site is also bounded to the North West by the A43 and the Northampton Loop rail line to the east.

Included within the application site is a 26 hectare area of land to the south of Junction 15A which has been secured for ecological mitigation.

The proposed site has strategic connectivity to key transport infrastructure – namely the West Coast Main Line and Northampton Loop Lines, the A43 and the M1.

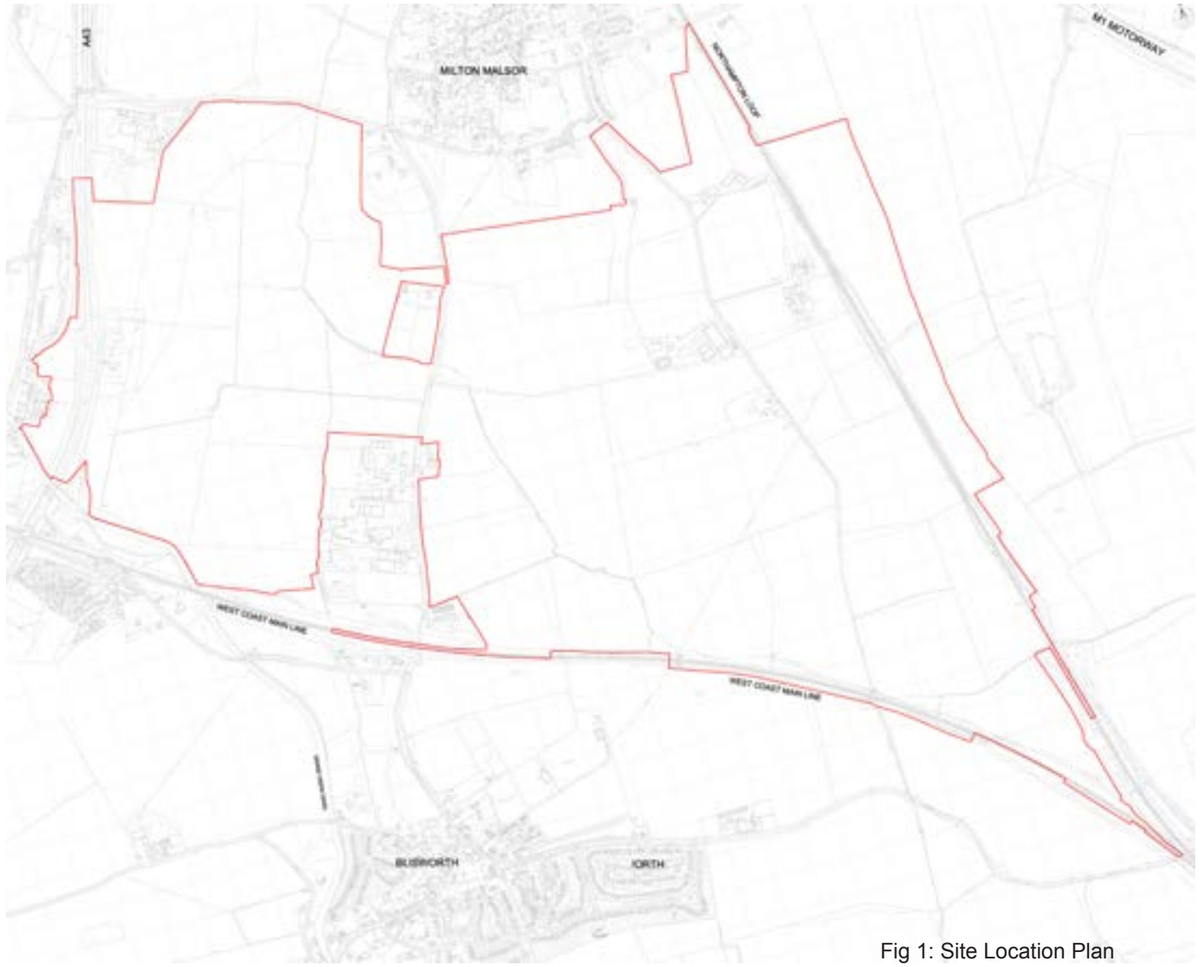


Fig 1: Site Location Plan

3.2 STRATEGIC CONTEXT

There is a national need and policy drive for growth in the use of rail for freight traffic, as set out in the NPSNN and the Logistics Growth Review, as supported by Network Rail's long-range market forecasts. Current planning policy looks to shift as much road-based freight as possible onto less carbon-intensive modes of transport, including rail and water transport.

Northampton is recognised by the Local Economic Partnership as having a strong market for distribution and logistics, to meet both regional and national needs, based on its central geographic location and excellent transport connectivity. As a result of its strategic positioning within the country, it is possible to reach over 90% of the population of England and Wales within a two hour drive, three hours to the Port of Liverpool and Haven Ports and two hours drive to the deep ports of Southampton and Felixstowe. This is evident in the considerable amount of existing warehousing floorspace in Northamptonshire and surrounding areas – most of which has no prospect of rail access or use.

As the population and economy continues to expand, with business and consumers demanding ever-greater product choice and availability, so the consistent upward trend in demand for warehousing is expected to grow as a consequence, with much of this growth still concentrated in the Northamptonshire area at the geographic heart of Great Britain.

There are a limited number of sites in the UK with good access to rail and road networks. The core area of demand is the "golden triangle" (Spanning from Northamptonshire up the M1 to East Midlands Airport, and West as far as Tamworth area - Figure 3) but with equally strong locational characteristics, the wider East Midlands and West Midlands both show strong demand for rail and road based accommodation.

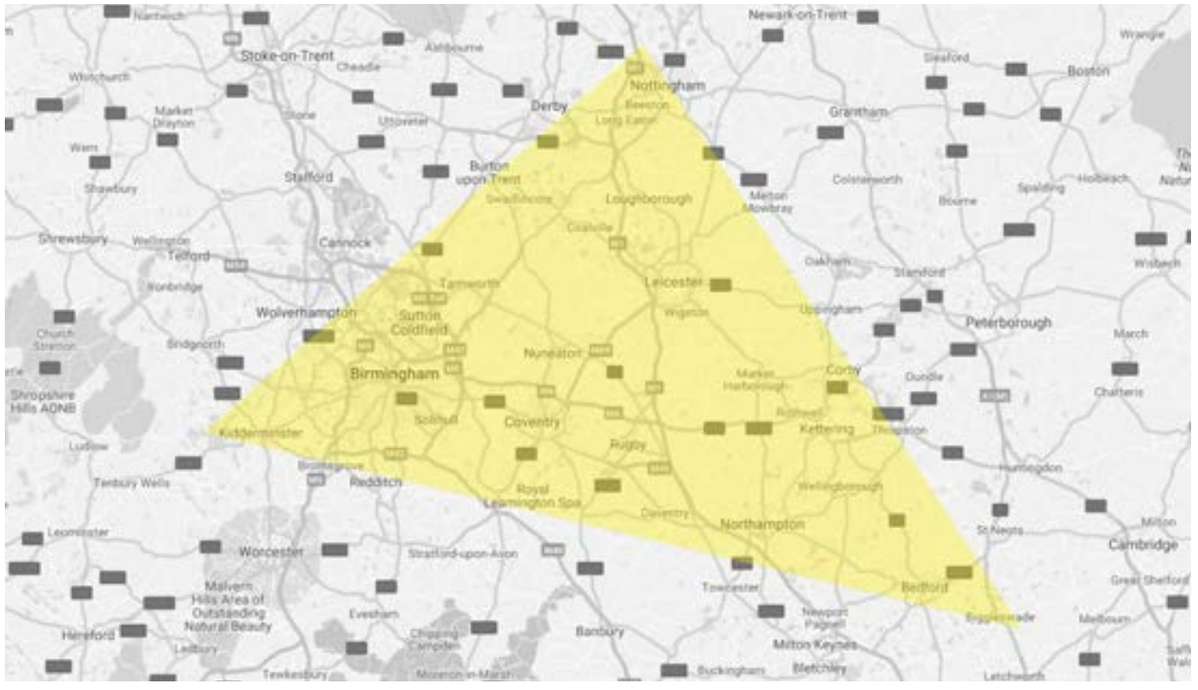


Fig 2: A Map Showing The Golden Triangle

3.3 SURROUNDINGS

Northamptonshire is a predominantly rural county situated in the heart of England. The western half of the County benefits from good north-south links, being on the spine of the M1/M6 motorway and West Coast Main Line, giving the County good access to the UK's two biggest cities, London and Birmingham.

The site is bounded to the east by the Northampton Loop Line (NLL) "slow lines" (also referred to as the Roade and Rugby New Line or the Northampton Loop) and to the south by the West Coast Main Line (WCML) "fast lines" (also referred to as the London to Rugby Line). All four lines are electrified with overhead 25kV AC catenary and cleared to W10 loading gauge (loading gauge is the maximum permitted cross-sectional profile of a rail vehicle and its load, and varies across the UK). The four WCML running lines split into two separate routes south of the main SRFI site at Roade Cutting, and re-join as a single route at Hilmorton Junction south of Rugby.

The WCML links London and the South East with the Midlands, North West and Scotland, and is the principal route for movement of north-south intermodal (containerised) and conventional wagon rail traffic of relevance to the small network of existing SRFI. The WCML forms a core part of the Trans-European Network (TEN-T), and south of Crewe to London is one of the few sections of the national network already cleared for 775m length trains (this being extended south to Southampton by the end of 'Control Period 5' (i.e. 2019).

North
To the north, the site is bound principally by the village of Milton Malsor, which is part designated as a Conservation Area. There are a number of Grade II Listed Buildings and one Grade II* Listed Building in the village (see tables at Appendix 2.1), and those closest to the site include The Old Rectory and Mortimers on Rectory Lane.

Gayton Road runs from east to west along the northern boundary of the site and intersects with Towcester Road/Northampton Road, where it then becomes Rectory Lane for the remainder of the site's northern boundary.

Milton Business Park abuts the site's north-western corner, which includes, amongst other uses, a vehicle service and parts centre. The residential dwellings of Gaytonway, Copper Beeches, Woodbury, Parley Pole and Spring Gardens run from north to south along Towcester Road at the intersection with Gayton Road/Rectory Lane.

A parcel of agricultural land, which is bisected by Barn Lane running from north to south, and Milton Football club complete the site's northern boundary to the north-east.
The County Town of Northampton lies approximately 6km to the north of the site.

East
The Northampton Loop Line (NLL) defines the site's eastern boundary, although some land to the east of the NLL is included in the Order Limits to facilitate the footpath diversion. The remaining farmland within the Order Limits on this side of the railway will be left as is. Beyond the NLL lies agricultural land and Junction 15 of the M1 Motorway.

The villages of Collingtree and Courteenhall lie approximately 2km to the north-west and 3km to the south-west respectively.

South
The West Coast Main Line (WCML) directly abuts the length of the southern boundary of the site running from east to west. Beyond this lies the village of Blisworth, which like Milton Malsor, is part designated as a Conservation Area. There are a total of thirty-seven Grade II Listed Buildings and one Grade II* Listed Building in the village, with the closest to the site being the Railway Bridge over Northampton Road and No.25 and No.27 Grafton Villas.

Station Road runs from west to east and terminates at a T-Junction with Northampton Road, which runs from north to south through the site. At the junction of Northampton Road and Station Road lie a number of residential dwellings, including Sumach, Glendale, Cartref and Traquair.

The Grand Union Canal (originally named the Grand Junction Canal) runs from north to south and forms the south-west boundary of the site. The canal was constructed between 1793 and 1805 to provide a more convenient trade route between London and the Midlands than the existing Oxford Canal and is a designated Conservation Area. Towcester lies approximately 7km to the south of the site, whilst the village of Roade lies approximately 3km to the south-west.

West

The A43 is adjacent to and within the Project area and defines the entire western boundary of the site. Beyond the A43 lies Arm Farm, a spur/branch of the Grand Union Canal known as ‘the Northampton Arm’, and Gayton Marina.

As set out above, the Grand Union Canal is a designated Conservation Area. The Milepost alongside the towpath and Bridge no.47 is Grade II Listed.

The town of Daventry lies approximately 18km to the north-west of the site, whilst the villages of Gayton and Rothersthorpe lie approximately 2.7km to the south-west and 2.3km to the north-west respectively.

3.4 EXISTING SITE FEATURES DESCRIPTION

The main SRFI site is within the administrative boundary of South Northamptonshire Council and the J15A area is within Northampton Borough Council.

The main site is approximately 291 hectares in size and is largely comprised of large-scale arable farmland, with some smaller scale pastoral fields located within its north-eastern extent, just to the south of the village of Milton Malsor.

Nearly three-quarters of the land is classified as moderate quality Subgrade 3b, with the remaining one-quarter classified as Best and Most Versatile land in Grades 2 and 3a.

The site is intersected by a watercourse which is named (for the purpose of the DAS) as the Milton Malsor Brook. The Milton Malsor Brook flows in a predominantly northerly direction through the approximate centre of the site before draining into a watercourse a short distance to the north. It is understood that the watercourse is referred to locally as the Shoal Creek.

3.5 SITE ACCESS

Current access to the site is via Towcester Road via Milton Malsor and Northampton Road via Blisworth although this road is not intended to be used for the development.

Road access to the main SRFI site will be taken from a new “grade separated” junction on the A43. This will provide access to a central spine road which will serve the Project. A truck park facility will be provided which will remove the potential for drivers arriving early from parking on the wider local road network.

Additional highway works to other junctions are required to ensure there is no impact elsewhere on the highway network.

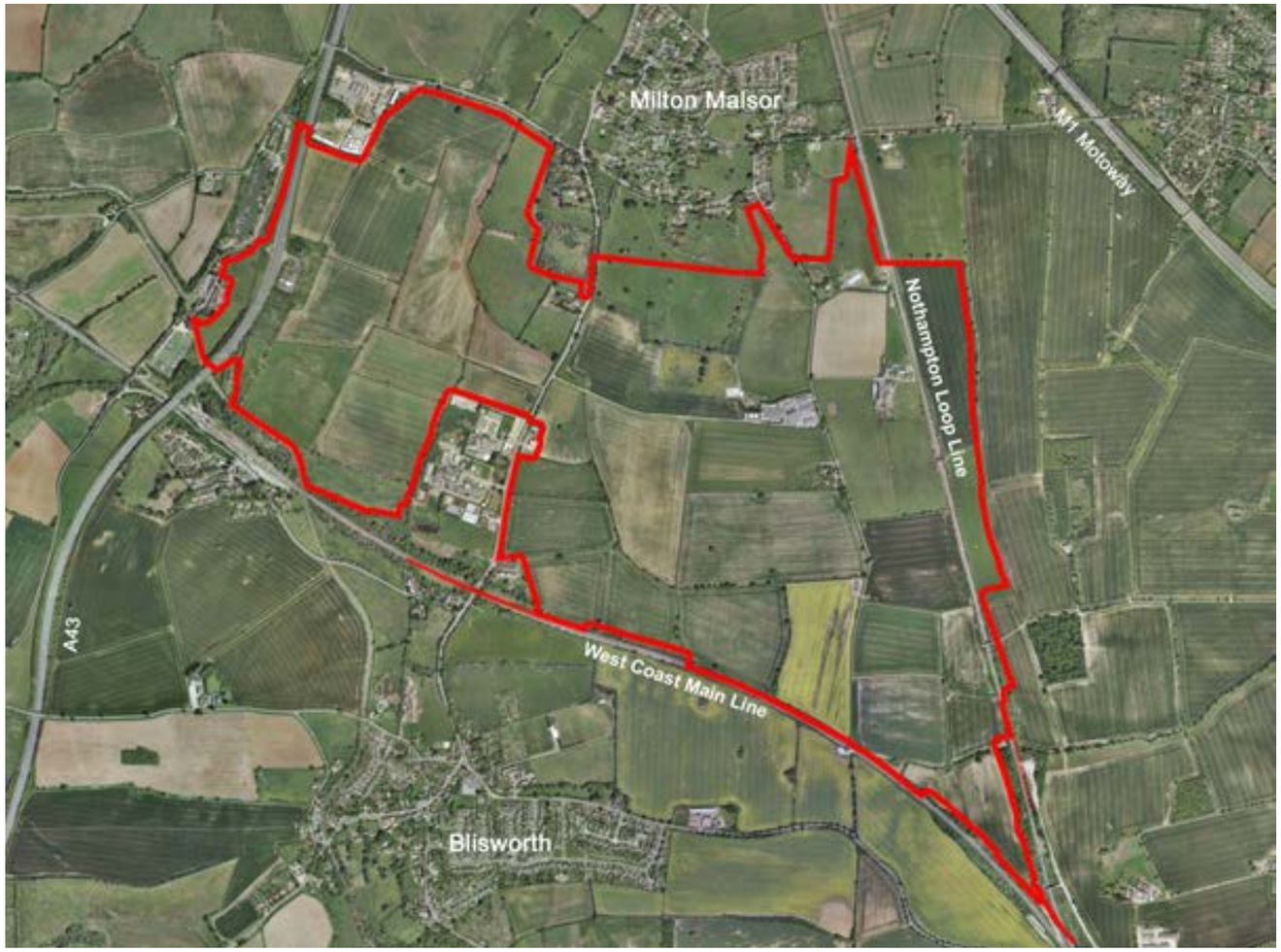


Fig 2: Site Aerial Plan

View from Barn Lane

View of Milton Malsor

3.6 LANDSCAPING

Landscape Designations

There are no national, regional or local designations within the site with no visual interaction between the site and surrounding landscape designations. However within the wider area there are Conservation Areas at both Blisworth and Milton Malsor with the potential to interact with the site. While these are primarily heritage designations, their setting is of relevance to the landscape design within the site. In addition to this there are several public rights of way that cross the site providing footpath links between adjacent villages.

Landscape Character

The site lies within the National Character Area 89: Northamptonshire Vales. In addition to this national character designation, the landscape is also considered at a county level where the majority of the site falls within Landscape Character Type 13: Undulating Hills and Valleys and specifically its character sub-division 13b: Bugbrooke and Daventry. The remaining south eastern part of the site falls within Landscape Character Type 6: Undulating Claylands and specifically its character sub-division 6a: Tove Catchment. The site's landscape character can be summarised in the following points:

- This is a gently undulating landscape. Views are more open to the north and north-west, however landform and vegetation frequently limit more extensive, panoramic views. In addition, some man-made landforms, such as road and rail embankments, provide an effective visual barrier;
- Land cover, particularly within the site, is a combination of both arable and pastoral farmland in fields of medium to large size. A noticeable variation in character within the site relates to changes in field types, which is evident in the north-eastern part of the site, just to the south of Milton Malsor. The majority of the site consists of large-scale (Average Size is 25 Acres), open arable fields, however the north-eastern part of the site includes smaller scale fields (Range from 7 Acres to 13 Acres) which have stronger field boundaries and are more commonly used for grazing;
- Woodland cover is relatively limited and consists mainly of small, predominantly broadleaved woodland copses sparsely scattered throughout. Field boundaries have intermittent tree and hedgerow cover, particularly within the site itself, with more extensive areas of planting being located adjacent to villages within the area and adjacent to infrastructure such as roads, railway and canals. Individual mature hedgerow trees are in evidence within hedgerows;

Fig 4: Surrounding Industrial Estates

- The study area is largely rural and consists of small villages, the closest of which to the site are Milton Malsor, Blisworth and Gayton. However, part of the northern extent of the study area includes the urban form of Northampton, the nearest point of which to the site is 2.0 km north. There are long-range views from the vicinity of the site of more elevated areas within Northampton, which therefore does have an influence on the character of the site and its immediate surroundings;
- There are examples of large industrial estates within the study area, which have an influence on landscape character, i.e. Grange Park, which is located approximately 1.3 km east of the site, and the Swan Valley Estate, which is located 1.5 km north north-west of the site; (Figure 4) and
- The site is located directly adjacent to some large scale transport routes which have an urbanising influence on it. These are:

- The West Coast Main Line, which is located directly adjacent to the southern boundary of the site, part of which is on embankment, raising it above the site;

- A local railway line (the Northampton Loop), which is located adjacent to the eastern boundary of the site and which is also located on an embankment. This line spurs off from the West Coast Main Line, approximately 0.5 km south-east of the site;

- The A43 road, which is located adjacent to the western boundary of the site and is also on an embankment;

- The M1 motorway, which is located 1.0 km north of the site, however it does have less influence on the site and study area as it is within cutting and surrounded by woodland for long extents; and

- The Grand Union Canal, which is located directly adjacent to the western boundary of the site.

Visual Context

The existing site is relatively contained due to a combination of natural topography, Field edge vegetation, other intermittent tree cover and man-made embankments of the adjacent West Coast Main Line, A43, Northampton Loop and M1 and associated vegetation. Users of these transport routes are likely to get passing views towards the site along with users of the Northampton Road that runs between Blisworth and Milton Malsor. In addition to views from these transport routes, there is the potential for views from the eastern extent of Blisworth and closer views from some properties within Milton Malsor, in particular along the southern edge. There is also the possibility of views from the Grand Union Canal as it passes along the south western edge of the site. Long distance views towards the site can also be obtained from a small area of properties within Northampton and from a footpath to the south of Rothersthorpe.

Full detail on the existing landscape and visual conditions along with an assessment of any likely effects can be found in the Landscape and Visual Impact Assessment Chapter of the Environmental Statement.

Ecological Context

Ecological habitats on the site are arable fields, improved agricultural grassland, semi improved or unimproved neutral agricultural grassland, rough grassland, amenity turf, broad-leaved woodland, broad leaved semi-natural woodland, recent broad-leaved plantation woodland, scrub and incipient secondary woodland. Scattered broad-leaved and coniferous trees, hedgerows, nettle-bed and other tall ruderal vegetation, ephemeral vegetation, streams, ditches, dry ditches and ponds are also present across the site.

There are likely habitats on site to support roosting, commuting and foraging bats, nesting birds, Great Crested Newts, reptiles and Water Voles with further information included in Chapter 16 and the associated appendices of the Environment Statement.

Fig 5: View across the site towards Blisworth

Fig 6: View of the Grand Union Canal from Blisworth Marina

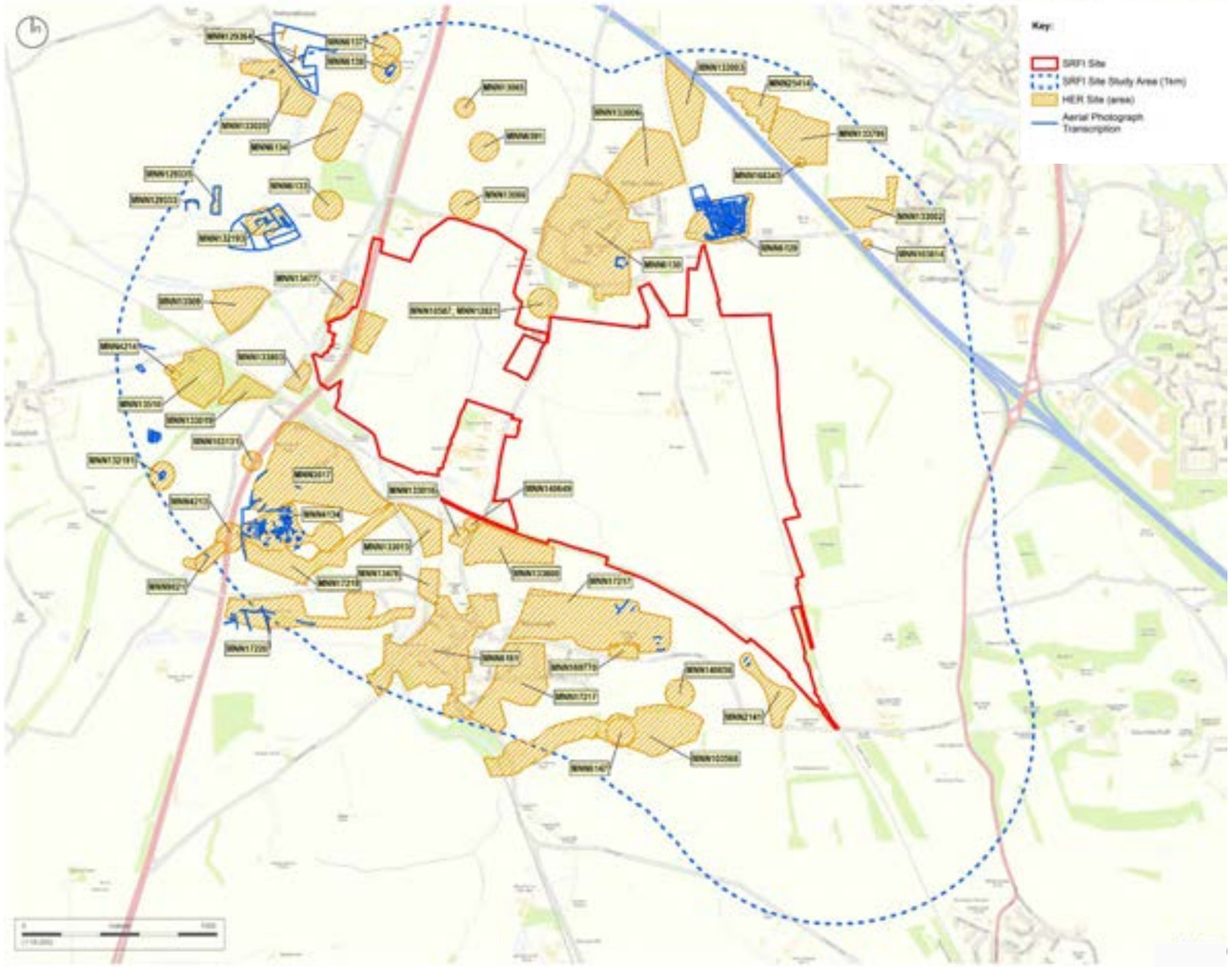


Fig 7: Archaeological Sites and Features within 1km of the Main SRFI Site

3.7 ARCHAEOLOGY

A desk based assessment carried out on the site showed a potential for archaeological remains on the site. A programme of further investigation work, agreed with the County Council's Archaeologist, which consisted of geophysical survey and trial trenching evaluation has been completed. The results of the geophysical survey and trial trenching evaluation are addressed in the ES chapter.

A programme of archaeological mitigation will be agreed with the County Council's Archaeologist, which will consist of:

- Preservation in situ of archaeological sites, where possible;
- Set piece excavation of archaeological sites, where necessary to allow development to proceed;
- Post-excavation analyses; and
- Publication.

The detailed approach to the mitigation works will be set out in one or more Written Schemes of Investigation (WSIs), to be approved by the County Council's Archaeologist.

3.8 RECENT SITE HISTORY

The village of Milton Malsor that lies to the north comprises mainly of residential housing, commercial and light industrial premises along Towcester Road which bisects the site from north to south, and there is an industrial estate adjacent to the north-western corner of the site. Further afield there are a number of scattered houses, farms and plant nurseries plus a disused dual-carriageway service area.

The West Coast Main Line largely borders the settlement to the east and south, and the A43 dual-carriageway main road does so to the east. Adjacent to the south-western corner of the site is the canal and marina complex of Blisworth and towpaths that bound the site in some places.

3.9 SITE PHOTOGRAPHS

The following site photographs were taken at the approximate locations shown using a standard digital camera.

These photographs are provided to give an overview of the site and its context.

For additional photographs demonstrating views to the site from important visual receptors, please refer to Chapter 17 of the Environmental Statement and the associated appendices.

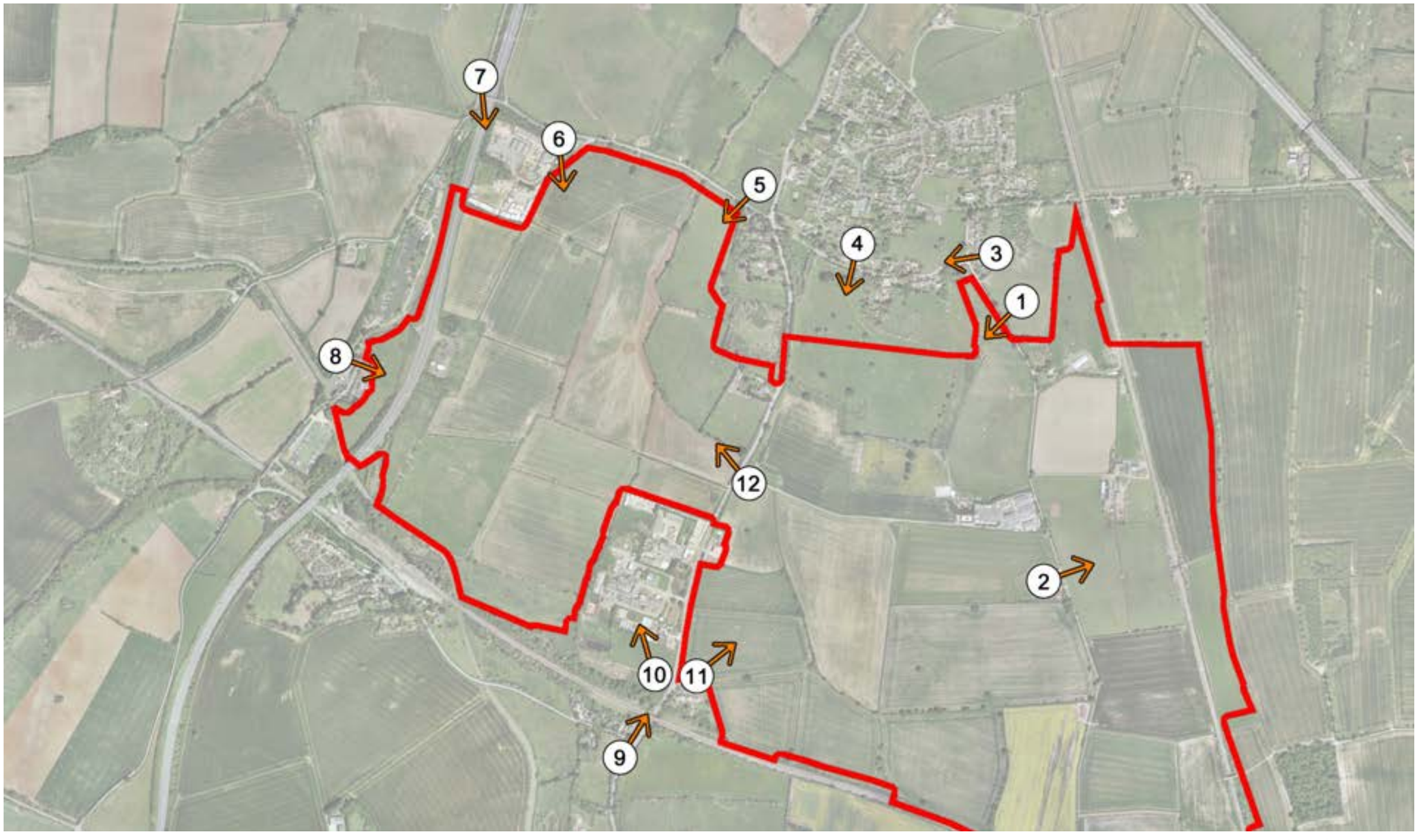


Fig 8: Location of Photographs

1: View across the main site from Barn Lane

2: View towards the West Coast Main Line from Barn Lane

3: View of Rectory Lane

4: View of the site from Rectory Lane

5: View of site from Gayton Road

6: View of site from Milton Business Park

7: View of the A43 heading towards Towcester

8: View of the A43 and the site beyond from Gayton Marina

9: View of Northampton Road and the Northampton Loop rail line

10: View of site from Northampton Road

11: View of site from Northampton Road

12: View of site from Northampton Road

3.10 OPPORTUNITIES AND CONSTRAINTS

There are a number of opportunities that influence the choice of this site including:

- Access to and from J15A of the M1;
- Access to two stretches of W10 railway, the Northampton Loop and the West Coast Main Line;
- Access directly off the A43
- The site size and topography

Whilst the site offers great potential it is understood that there are a number of constraints that will need to be addressed and appropriate mitigations put in place.

The plan (Figure 9) shows the various constraints that have been identified including:

- Key viewpoints
- Public Rights of Way
- Areas of Flood Zone 2 and 3 running along the Milton Malsor brook corridor
- Roade Cutting SSSI at the southern end of the site
- A listed railway bridge to the south of the site; and
- A number of listed buildings in Milton Malsor

The above site opportunities and constraints will be discussed in further detail in Sections 4.1 and 4.2 of this DAS.

View of the listed railway bridge on Northampton Road

View towards Milton Malsor from Towcester Road

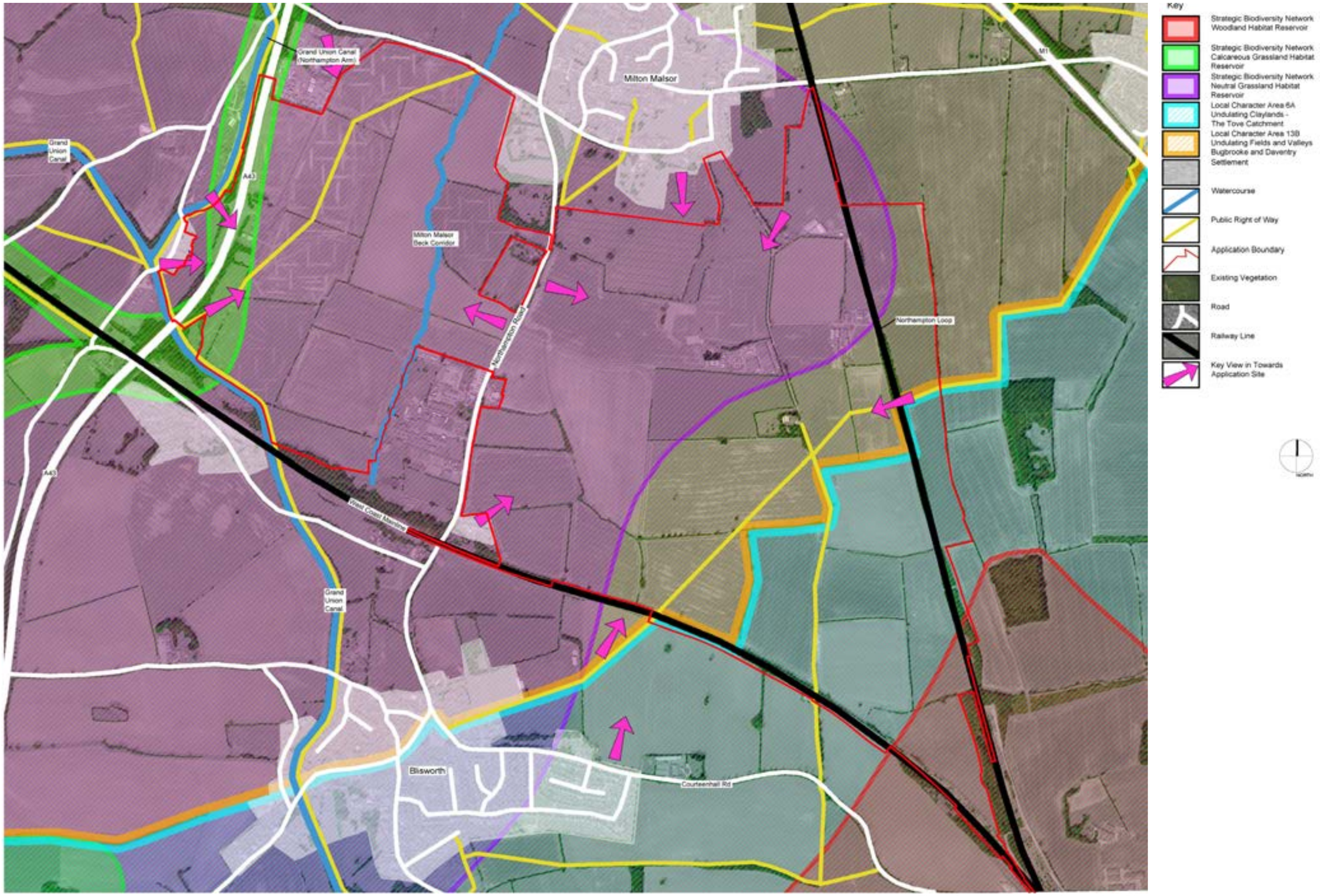


Fig 9: Opportunities and Constraints Plan

4.0 PLANNING POLICY

Although the main site is located within the local authority area of South Northamptonshire Council (SNC) and the J15A highways improvements lie within both SNC and Northampton Borough Council, this application will be submitted directly to the Planning Inspectorate (PINS) for a Development Consent Order (DCO) under the Planning Act 2008 (PA2008).

The NPS NN is the principal source of policy guidance for the Project and will form the primary basis for decision-making by the SoS. The Project will therefore be determined in accordance with the policy framework provided in the NPS NN, taking into account relevant representations made.

Within this context, and having due regard to paragraph 4.89 of the National Policy Statement for National Networks, the Rail Central project (the Project);

- is located within England;
- is in excess of 60 hectares in area;
- will be capable of handling consignments of goods from more than one consignor and to more than one consignee;
- will be capable of handling at least four trains per day and will be capable of increasing the number of trains handled;
- will be capable of handling 775 metre trains with appropriately configured on-site infrastructure and layout;
- will be part of the railway network within England;
- will include warehouses to which goods can be delivered from the railway network in England either directly or by means of another form of transport; and will not be part of a military establishment.

With regards to NSIP 2 (J15A Highways Works):

The PA 2008, confirms the thresholds for determining whether Highways Works comprise an NSIP in their own right. In this regard, Section 22(4)(b) confirms that Highways Works should be considered an NSIP where "…the construction or alteration of a highway, other than a motorway, where the speed limit for any class of vehicle is expected to be 50 miles per hour or greater, is 12.5 hectares".

Section 22(9)(b) of the PA 2008 confirms that "in relation to alteration of a highway, means the land on which the part of the highway to be altered is situated and any adjoining land expected to be used in connection with its alteration". Therefore the area for the Highways Works should include the site of the Works and all associated land (i.e. areas for landscaping, construction compounds etc.). The proposed Highways Works at Junction 15A comprise a combined area of 16.5 ha, which exceeds the threshold set by Section 22 of the PA 2008, and is therefore deemed to be a NSIP in its own right.

The development of SRFI forms a component of a wider national need in support of economic and environmental objectives. The development of SRFI in Great Britain reflects a successful synergy of;

- public policy and commercial drivers
- ensuring an efficient logistics sector on which the wider economy relies upon
- ensures continued growth in mode shift of freight from road to rail for economic and environmental reasons – the common theme being the need for much greater levels of rail-served floorspace at SRFI

The evolution of a positive and supportive public policy framework for SRFI development (culminating in the National Policy Statement for National Networks or NPS NN) has, in turn, created favourable conditions for SRFI development and use. Each of the 6 SRFI developed to date in Great Britain has attracted occupiers and investment, generated employment and new rail freight services which this Project would also do.

Further details and analysis of the relevant national and local planning policy is set out in Sections 5 – 7 of the submitted Planning Statement.

4.1 CONSTRAINTS & OPPORTUNITIES

As noted earlier in the report there are a number of constraints that must be addressed in order to ensure the site can deliver the future development.

The main constraints are as follows:

- There are a number of viewpoints towards the site from key locations nearby that could be affected by the visual impact of the development
- There are number of Public Rights of way that traverse the site and which will need be diverted or changed as part of the future development
- There are areas along Milton Malsor brook corridor that are prone to flooding and therefore the new development will need to be accommodate this
- Road Cutting SSSI at the southern most point of the site, which will require mitigation measures within the strategy of the new development
- A listed railway bridge to the South of the site, will need to be considered when designing and constructing the development
- A number of listed buildings in Milton Malsor will need to be considered when designing and constructing the development

These constraints have been considered throughout the masterplan evolution and evidence can be seen through the scheme evolution which is discussed in further detail in Section 5.1.

With regards to opportunities, there are a number that make this site a strategic location.

The main opportunities are as follows:

- The Project would help deliver the need for SRFI as stated in Government Policy
- The site will be accessed from the A43 and is approximately 1.9km away from Junction 15 of the M1 Motorway. This proximity provides direct and easy access for transferring goods and freight from the proposed Intermodal terminal on to the wider national road infrastructure
- The new road junction access on the A43 will provide the site with exclusive access and egress for vehicles within the Rail central development. This gives the opportunity for transport to avoid the small local roads network and therefore conserving the traffic flow through the nearby villages of Milton Malsor and Blisworth
- The site has the rare opportunity to access both the West Coast Main Line, a major part of the fast moving countrywide rail network and the Northampton Loop Line, a local rail line that allows slower moving rail freight, which in turn allows access to the intermodal terminal without impacting the faster moving trains of the WCML
- The main site is 291 hectares in size; this provides the opportunity to develop a nationally strategic rail freight facility and large distribution park with the same site, therefore reducing the distance between each and subsequently reducing carbon emissions
- The site is mainly made up of large undulating open fields, providing the opportunity to accommodate large plateaus, upon which storage and distribution facilities can be built that are big enough to service the adjacent intermodal terminal
- The site has boundaries alongside and parallel to both the national and local rail infrastructure, providing an opportunity to filter trains to and from the intermodal platforms with minimal amounts of connecting track

These opportunities can be seen through the progression of the masterplan whilst managing the constraints. Further evidence can be seen through the scheme evolution which is discussed in detail in Section 5.1.

4.3 VISION

The vision for Rail Central project is to maximise the benefits of the unique, strategic location to provide a best in class, next generation rail freight interchange of national importance and significance having regard to the quality of the connectivity, the scale of the proposals, and the strength of the commercial market in line with the Government's policy for delivering a much needed SRFI.

We believe Rail Central would be capable of serving regional, national and potentially international markets and would become a major asset to the economy of the area. A SRFI of this scale and quality would be capable of supporting over 8,000 jobs directly and achieving a major shift in the movement of goods from road to rail. It could also serve as a facility of enormous value to industry and commerce in the area.

The key market requirements necessary at Rail Central are as follows:

- Ability to connect accommodate freight traffic from both the Northampton Loop and the WCML
- Ability to construct direct rail connected warehousing
- Rail terminal capable of handling 775m length trains
- Rail terminal with the capacity to store and process containers
- Development zones capable of accommodating single building footprints up to c 93,000 sqm (1million sqft)
- Development height zones to accommodate buildings up to 18.5m tall to allow for the latest warehouse mechanical handling equipment
- Development plots capable of allowing for 50m deep HGV yards which accommodate the latest extra long length trailers
- Infrastructure corridors that allow the safe and quick flow of vehicles

Development Principles

This section translates the vision for Rail Central into a series of 'high-order' development principles which then informs the scheme development that shapes and structures the parameters and masterplan for Rail Central.

The vision for Rail Central is based on a flexible approach to the form of development with a firm commitment to delivering a quality working environment.
Rail Central will be:

- a well integrated development – contextually sensitive proposals that recognise and protect local factors as much as possible such as neighbouring uses and environments whilst capturing the economic potential of the strategic location
- a sustainable place - a balance of social economic and environmental factors that combine to create a truly sustainable environment;
- connected and legible – Rail Central needs to be linked to existing routes of all modes ensuring convenience, integration and safety for all users of the development.
- protecting residential amenity – Rail Central is located between two residential villages. The principle is to demonstrate a solution that respects the amenity of neighbours.
- respecting the landscape – the Site is in large part undeveloped open land within a range of natural farmland and landscape features. The design process is intended to strengthen and diversify the identity and structure of the landscape and minimise any adverse effects.
- recreation and ecological enhancements – The guiding principle is to mitigate impacts and to facilitate an enhancement of recreational opportunities and ecological diversity

Transportation of containers

Railway deport infrastructure

Design and Access Principles

The final masterplan and layout of each building will need to take account of market expectations for modern industrial and logistics buildings in terms of shape, height, the proportions of buildings and arrangements for access, loading and parking.

The height and massing of the Project will need to consider the surrounding context whilst providing future tenants the opportunity for a bespoke building to cater for their operations.

The visual appearance of future buildings will also need to consider the surrounding context whilst utilising a design code which will be established to set a design policy for the site in order to set the highest standards of architectural design.

The aspirations of the applicant are based on a vision to provide a modern industrial and distribution park where good quality and sustainable materials are specified to offer flexibility and respond to business needs.

The development will be fully accessible to occupiers and visitors providing safe vehicular and pedestrian access around the development. Cycle lanes will be provided from access routes to cycle shelters located near to offices.

Access will connect to existing footpaths outside of the site to provide convenient links to local public transport and the wider community.

Accessibility into each building will comply with Approved Document Part M, Equality Act and British Standards to ensure provisions for disabled people are meet within the building design.

Consideration will be given to the layout of the development to ensure personal safety. This relates to design and layout to minimise crime and a safe environment for occupiers and visitors.

Landscaping will be instrumental to the development providing robust structural landscaping zones to the perimeter of the site along with strategic planting to the estate road, the development zones and within the mitigation area south of Junction 15 A

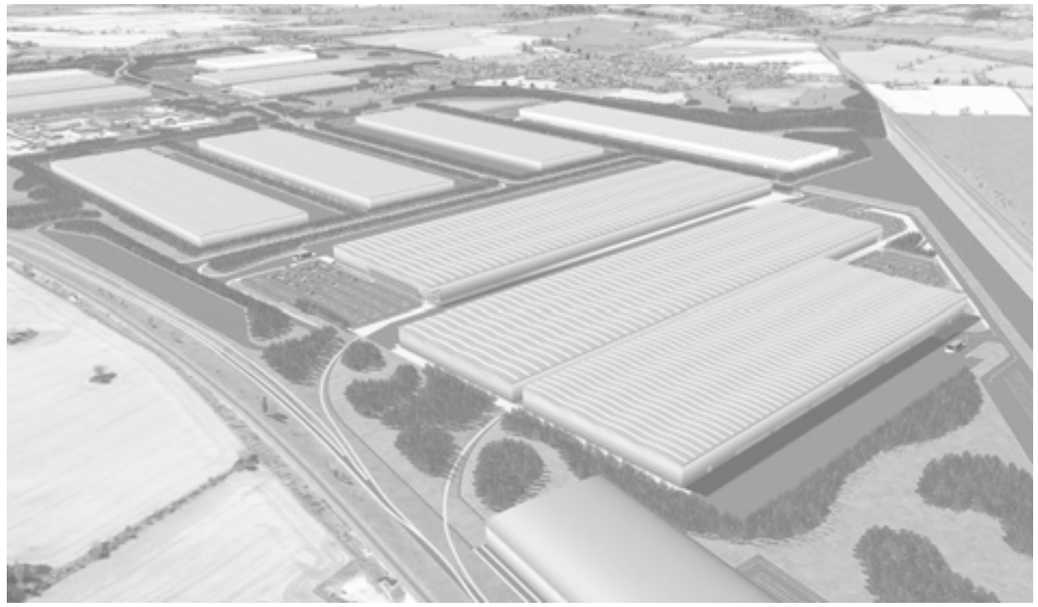
Account will be given to sustainability to ensure future buildings are capable of reducing CO2 emissions.

Design Guide Principles

A Design Guide has been included as part of this document. It sets out and establishes the scope, parameters and design intent for any future development based on the parameters plan.

It will be used as a working tool to support the delivery of each phase of the development during the detailed design stage. The key principles are as follows;

- Design Principles
- Design Standards
- Building Form & Appearance
- Development Components
- Sustainable Building Design
- Building Materials
- External Materials
- Landscaping & Ecology
- Intermodal Terminal Parameters



Aerial view of the CGI model

5.0 CONSULTATION

In line with the requirements of the Planning Act 2008, the Applicant has undertaken a structured and comprehensive programme of pre-application consultation with the local community and stakeholders (Figures 10 & 11).

The Applicant has been in dialogue with a number of stakeholders over a period of several years regarding the Project. These discussions have taken place in order to raise awareness and provide initial information on the Project and the planning process, and to establish basic scheme feasibility to ensure that the Applicant could bring forward an application for Development Consent in line with the requirements of the NSIP process and the PA 2008.

The Applicant's two stage consultation on Preliminary Environmental Information (PEI) includes:

Section 47 Consultation ('Phase One') (April – October 2016)

As part of the Phase One of Section 47 Consultation, Ashfield Land consulted on 'baseline' environmental information. The draft preliminary environmental impact report (PEIR) and a non-technical summary document (NTS PEIR) (Ref. 4.2) were made available to view at the consultation events, on the project website (Ref.4.3) and at identified public viewing locations throughout the consultation period.

Section 42 & Section 47 Consultation ('Phase Two') (March – April 2018)

As part of the Section 42 and Section 47 consultation (Phase Two), Ashfield Land is consulting on further details, which includes the preliminary conclusions of the EIA, including any likely significant effects of the project on the environment and any mitigation which is proposed. A non-technical summary will also be produced at this stage which will be available to the public.

This two-stage process has enabled further surveys, data and consultation comments to be collected and considered to inform the evolving scheme design.

Consultation regarding the EIA has also been undertaken in accordance with the EIA Regulations 2017 (Ref. 4.4) as part of the Scoping exercise.

Ongoing consultation has also been undertaken with statutory and non-statutory consultees in relation to the scope of the technical assessments and the methods to be used. This is reported in full in the technical topic chapters of the ES, Chapters 9-25, and is not therefore repeated here.

Fig 10: Pre Application Consultation Workshop

Fig 11: Pre Application Consultation Workshop

5.1 SCHEME DEVELOPMENT

Pre-Consultation

The scheme development has evolved over a period of three years. Initial feasibilities were produced at conception to show how the site could be developed with access to the rail network. Various iterations were created with input from various specialist and technical disciplines. This included input from specialist survey information as it became available.

An initial design was based on a proposed rail layout that positioned the intermodal area and rail access centrally in the eastern part of the site (Figure 12). Landscaped buffer zones were indicated approximately to the north and south for visual screening from the nearby villages and for ecological mitigation and flood mitigation.

Access from the A43 was taken through the western site but it was not developed with building layout at this stage.

A new road layout proposed by the highways consultant incorporated a spine road to serve the development which enabled the Western part of the site to be added to the masterplan.

The next iteration took into account the topography of the land (Figure 13) . It informed the redesign of the rail layout and intermodal area. The new layout considered potential earthworks and rail gradients to develop large rail-served warehouses in the central part of the eastern site. The western site was relatively unchanged at this stage.

Further iterations were generated to look at options for the rail layout, intermodal area and building positions. Various rudimentary layouts were considered with the topography, landscaping and visual impact as design constraints. These constraints were informed by the work being carried out for the environmental assessment. An option was considered to reposition the intermodal area so that it could be adjacent to the West Coast Main Line (Figure 14).

Fig 12: Initial Concept Plan

Fig 13: Feasibility Iteration

Fig 14: Feasibility Iteration

Changes were made to reduce the unit size on the eastern part of the development in response to the land having a higher elevation and steeper topography, therefore smaller sizes being more economical to construct and having less visual impact.

The development of the Grand Junction Site was also incorporated into the masterplan and a truck park and hotel facilities were added to serve the potential requirements from the park.

The need to improve the rail connections led to a reconsideration of the Rail Access and Intermodal Area. This facility was moved to the eastern edge of the site next to the Northampton Loop, to facilitate faster access of trains between the main line and the Intermodal Area, affording reduced gradients and less visual impact. A Train Maintenance Depot (TMD) was included adjacent to the Intermodal area to encapsulate as much of the rail-related activities on site as possible, to minimise off-site movements of trains to and from other maintenance facilities.

Landscaped bunding was also incorporated between Milton Malsor village and the development to create a visual screen.

The next iteration added a truck park facility at the site entrance close to the A43 junction. This was a response to public concerns that HGVs may park on local roads. The rail layout was further updated to include sidings to three of the warehouse units that were closest to the intermodal area. In response to this the units concerned were increased in size to maximise the opportunities for trainload-quantity freight activity.

An express freight platform was included in the masterplan as an extra facility for loading/ unloading express freight trains, expediting direct horizontal transfer of roll cages and palletised goods between trains and waiting HGVs. This was positioned on the western edge of the site and linked directly to the West Coast Main Line Fast Lines at each end. The rail layout to the east was updated to access units from the south; this layout provided shallower gradients and longer lengths of track suitable for shunting freight trains. Units 8 & 9 were reoriented to reduce noise transmission from the service yards to Milton Malsor village and landscape bunding between the development and Milton Malsor were enhanced for better visual screening. Milton Malsor Brook was diverted around unit 8 to allow for an optimum sized development plateau. Attenuation ponds were relocated close to the Grand Union Canal to contain surface water volumes.

Units 3 & 4 were reduced in size to create an alternative layout. Alternative permutations of unit sizes were also considered throughout the site to accommodate potential market requirements.

Conference facilities were included in the Grand Junction site to the west of the A43 to accommodate potential business uses related to Rail Central. An underpass crossing beneath Northampton Road replaced the previously indicated roundabout, its purpose to connect the east and west sites and prevent disruption to traffic flowing north and south.

The flood attenuation was relocated to the northern part of the western site in accordance with the drainage strategy and the attenuation capacity was increased to achieve the necessary capacity required to contain surface water run-off.

Fig 15: Draft Illustrative Masterplan

It is worth noting that the illustrative masterplan is simply an illustration as to how the site could be developed. It has helped inform the parameters plan which informs the relevant restrictions and constraints of the scheme as a whole.

Whilst the masterplan is a good representation of how the project may evolve changes within the set parameters may take place.

Stage One Consultation

Following Stage 1 Consultation, which included a series of eight public exhibitions in Blisworth, Milton Malsor, Roade, Collingtree and Towcester, a number of changes were made to the draft illustrative masterplan (Figure 17) in response to the comments received.

Northampton Road Greenway

A green corridor parallel to Northampton Road was enhanced to create a landscape and walking route linking the villages of Blisworth and Milton Malsor. The Northampton Road links Milton Malsor to Blisworth. The existing route is defined with strong highway hedges broken up by intermittent areas of commercial and residential development. The proposed development has been set back from the existing road to provide a landscape buffer that will reduce the potential impact on landscape character between the two villages. Mitigation mounding will wrap around the edge of the development zones to the east of Northampton Road which will aid with screening views across towards the proposed units and associated infrastructure. Existing hedgerows and hedgerow trees along Northampton Road will be protected and retained where feasible and reinforced with small pockets of new woodland planting. The bridge over the underpass linking the two development zones to the east and west of Northampton Road will be wide enough to accommodate a grass verge between the road and footpath and also a native hedgerow to aid with screening views back towards the development and to provide continuation for pedestrians and road users. The footpath link between the two villages will be upgraded to a combined cycleway / footpath providing an 'off road' cycle link between the two villages and into the Project;

Arm Farm Pocket Park

A number of concerns were raised about the prospect of providing any built development on the parcel of land to the west of the A43 (Grand Junction) and consequently, the applicant confirmed that it would not be redeveloped for possible hotel and public house/restaurant, or training and innovation centre. The site will instead be safeguarded to provide landscaping and ecological mitigation and an informal pocket park for use by local residents. The proximity of this land parcel to the canal makes it of particular importance for bat mitigation with the potential to construct purpose made features. The proposed park will be low key and kept informal with native planting. The Northamptonshire Green Infrastructure Plan aspires to create a corridor of calcareous grassland along either side of the A43.

Fig 16: Feasibility Iteration

Lorry Park

The capacity of the lorry park to the south of Unit 10 was increased from 89 spaces to 149 spaces to further alleviate concerns over HGVs parking on local roads as they waited to gain access to the Rail Central site.

Reorientation of Warehouse Units

In an effort to reduce the visual impact on the Railway cottages and Northampton Road, the distance between the closest buildings (Units 3 and 4) and these receptors has been increased. Unit 4, which is closest to the Railway Cottages has also been reduced in size.

Public Rights of Way

A number of concerns were raised about the impact of Rail Central on local Public Rights of Way (PROW) and Bridle Paths. The project team has taken great care to ensure that any diversion or rerouting of PROWs or Bridle Paths preserves their accessibility and character. Indeed, the Applicant's approach to PROWs and Bridle Paths has been influenced by consultation with Natural England, Northamptonshire Ramblers and the Ramblers Association, as well as local residents.

The rerouting of elements of the existing PROW will ensure that the Project is able to provide a continuous route around the development. Indeed, approximately 66.2 hectares, or just over half of the structural landscape around the periphery of the site, will become publicly accessible amenity land.

Landscaping Bunds

Concerns were raised about the visual impact on the surrounding villages of Milton Malsor and Blisworth. In response to these concerns, the size and amount of landscaped bunds have been increased in an effort to further screen the development visually from Milton Malsor and Blisworth.

Barn Lane Bus Stops

In May 2017, members of the Rail Central Local Liaison Group raised concerns that unmarked bus stops are situated at a location at Barn Lane where the sheltered parking for the Project was initially proposed. As a result of this dialogue, the scheme design has been revised to result in the re-location of the proposed parking at Barn Lane so that the current position of the bus stops remains.

Additional Changes to the Illustrative Masterplan

In addition to those changes described above that were brought about following comments received at Stage 1 Consultation, a number of other changes have been made to the Illustrative Masterplan (Figure 15) as the scheme has developed and further environmental survey work has been completed. These changes are outlined below:

- Elements of green colour shades and gradations to the proposed warehouse buildings were considered to give the effect of blending in with natural surroundings.
- The masterplan was updated in response to traffic engineering. The main gatehouse into the development was removed to allow a free flow of traffic. The central spine road was widened to ensure it could accommodate the traffic. The cycleway/footway running along Northampton Road was extended to link the eastern site into the cycle network.
- A shuttle bus service and bus turning area were added to facilitate people using the site.
- Parking numbers were updated to provide a ratio of spaces that accord with Local Authority Standards. The bus facility on the western site was redesigned to take up less land to allow for a landscape screen to the north. Emergency access points from Northampton Road were created solely in the event of an emergency.
- A further iteration included provision for a future High Output Operating Base (HOOB) for Network Rail. It is a facility to stable and service specialist equipment needed to maintain the rail network. Having proven the capability of the site to accommodate a HOOB facility if required in future, the masterplan and track layout was returned to its previous configuration.
- Units 11 & 13 were updated to allow for the gradients required to achieve safe access from the spine road for HGVs. Unit 10 was reduced in size to allow the public right of way more space to navigate around the western side of the unit.
- An update to the Intermodal Area and Train Maintenance Depot were considered to allow for a longer intermodal area and rail accessibility and an electricity substation was added to the development to serve the power needs of the site.

5.2 SCHEME PARAMETERS

The Project comprises the following key elements:

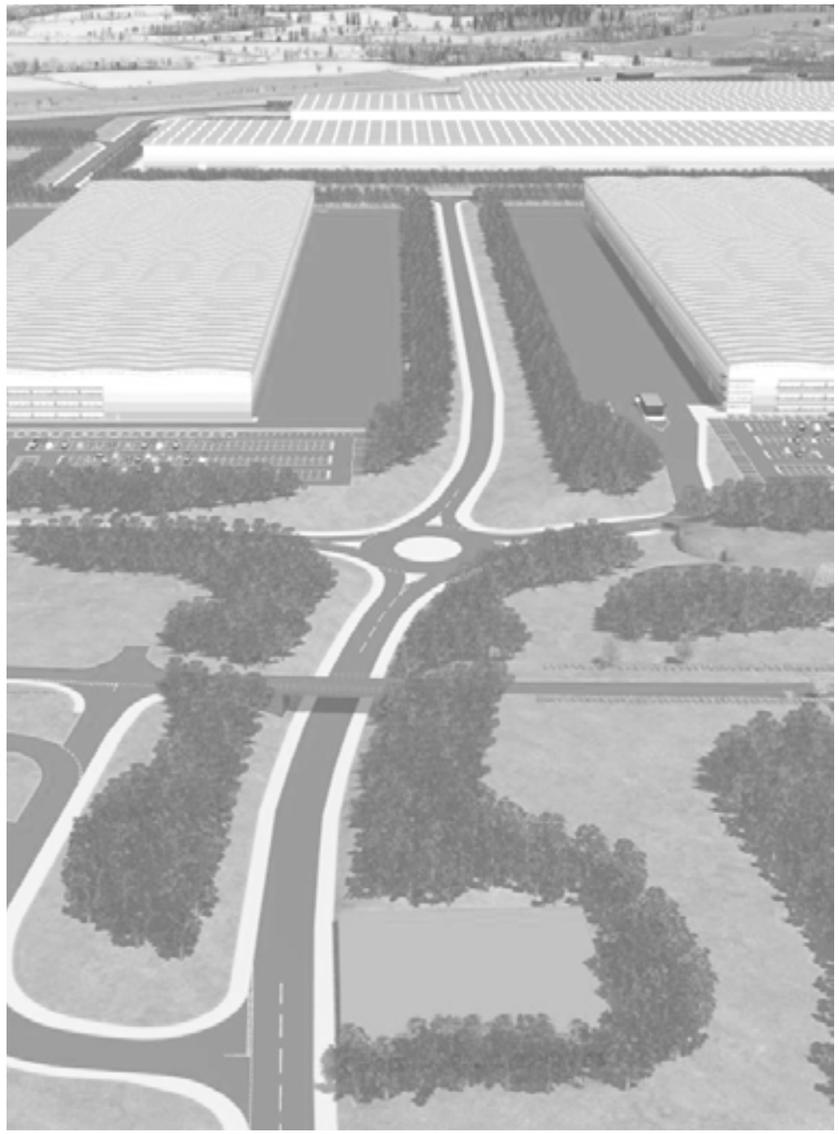
- A Rail to Road intermodal facility, including connections to the Northampton Loop Line, new rail sidings, up to 3 gantry cranes, a container storage area, a Train Maintenance Depot (TMD) and facilities to transfer containers to Heavy Goods Vehicles (HGV);
- An Express Freight Terminal, including connections to the West Coast Main Line, a freight platform with associated loading and unloading facilities;
- Up to 702,097 sqm (Gross Extermal Area) of rail served logistics development;
- A new grade separated access point on the A43;
- Improvements to J15A of the M1 and creation of an Ecological Mitigation Area;
- Other off site highways works;
- A lorry park;
- Control building/centre;
- Strategic open space and landscaping;
- Infrastructure to serve the development, including roads, an underpass, bus terminal and utilities infrastructure.

The Project can be broken down into the following key elements:

- The ‘main SRFI site’ on which the SRFI will be delivered (including A43 access and all rail infrastructure);
- Highway works at J15A of the M1 and creation of an Ecological Mitigation Area; and
- Other minor highways works (described later in this chapter)

The extent of the Project for which consent is being sought is defined by a series of parameters as shown on the Parameters Plan. The illustrative masterplan which has been prepared for the application illustrates one way in which the Proposed Development could be delivered within those parameters.

Construction of the Project will be phased over a number of years. Within the framework of the parameters, flexibility is required to enable floor space to be delivered that meets specific occupier requirements that will only be known after Development Consent has been granted.



Aerial view of the CGI model

6.0 THE MASTERPLAN

This application seeks for approval of a Parameters Plan (Figure 22). Any details of layout and design will be reserved for future consideration. However, consideration has been taken to establish a series of parameters to set the maximum amount of development that can be achieved on the site.

A design code will take account of the development form, layout and orientation. In establishing this code, the following will need to be taken into account:

- The operational and commercial aspects of the brief so that buildings and transport infrastructure suit the needs of modern business, and allow flexibility for changes in building use and management by future occupiers;
- Commercial advice provided to the applicant in respect of individual building sizes and layouts. It is required that the development should be capable of accommodating buildings both large and small, to cater for a variety of national, regional and local business needs;
- The existing public right of way that crosses the site, and the its connections with the wider network;
- Sensitivities in respect of the development's impact on the adjacent villages, countryside, and;
- Views out of the development to neighbouring uses

6.1 DEVELOPMENT ZONES

The Parameters Schedule indicated on the Parameters Plan (Figure 22) indicates the following areas for future development; Development Zones to cater for buildings, associated servicing and parking areas and the Intermodal Area to cater for the rail interchange and associated buildings.

The precise form and number of units will be defined as potential occupiers are identified. The Parameters Plan provides sufficient detail to demonstrate how the proposed land uses will be brought forward as part of the scheme. It also provides sufficient detail to allow assessment of the significant environmental effects within the supporting Environmental Impact Assessment (EIA).

6.2 LAND USE

The majority of the Project would take place on agricultural land currently mainly in arable production. The Order Limits includes the following land-holdings:

Farm name	Farm type	Tenure	Area farmed	Other enterprises
Arm Farm	*Arable/Grass*	*Tenanted*	*65.8ha*	
Manor Farm	*Arable*	*Share farmed*	*32.4ha*	
Hill Farm	*Arable*	*Tenanted*	*197.9ha*	
Lodge Farm	*Mixed Arable / Livestock*	*Owner Occupied*	*85.0ha*	
Rathvilly Farm	*Grazing*	*Owner Occupied*	*6.3ha*	*Buildings let to marquee hire company*
Corteenhall Estate	*Arable*	*Owner Occupied*	*850.0ha*	*Large estate with a variety of other enterprises including wedding and events venue*

Table 10.12 of the ES (Replicated below) states that overall, approximately 75% (200ha) of the main SRFI site is moderate quality agricultural land in sub-grade 3b, with the remainder in sub-grade 3a (36ha), 2 (28ha) and 1 (2ha).

In summary, therefore, the Project will result in a loss of 266ha of agricultural land.

ALC Grade	Hectares	% of agricultural land
Grade 1	*2*	*<1*
Grade 2	*28*	*11*
Subgrade 3a	*36*	*14*
Subgrade 3b	*200*	*75*
Total agricultural land	*266*	*100*

The applicant's proposal is to convert this use to business use B8 (storage and distribution).

6.3 AMOUNT

The Parameters Schedule identifies the minimum and maximum number of units that will be provided within each of the development zones. It also includes information on the maximum plateau levels and building heights from finished floor level. The maximum quantum of floor area has also been noted which has been determined from the illustrative masterplan.

6.4 HEIGHT AND LEVELS

Generally, the maximum height of the proposed buildings will be 18.5 metres above finished floor level. The maximum height of other structures (such as gantry cranes) on the site will be 27 metres above ground level.

The maximum building height and resultant internal haunch height of approximately 15 metres enables the accommodation of modern racking systems, product handling equipment and high level sprinklers.

To provide some certainty to project stakeholders, the following minimum finished floor levels and maximum building heights are set for each zone, defining levels within which buildings can be developed.

The visual impact of the development on the adjoining villages and adjacent countryside has also been considered when setting the proposed heights relative to proposed site levels. Heights, massing and orientation of the buildings will influence this and therefore proper regard has been given to establishing the main parameters of the development.

Street view of the CGI model

Fig 17: Illustrative Masterplan

6.5 MOVEMENT AND ACCESSIBILITY

Rail Central will form part of the ever growing distribution chain facilitating the storage and distribution of material and goods. The intermodal terminal will, via rail, dispatch and receive goods to and from mainland Europe along with ports and other inland terminals.

Due to the nature of rail and road movements careful consideration is required to ensure there is minimal conflict between both transport modes. Because of the nature of rail transport, any informal exchange between it and other movement modes is not feasible. Rail is therefore segregated from all other movement corridors, except at the freight terminal where it is necessary.

Aside from this, all other forms of movement will function within a hierarchy. Pedestrians and cyclists must receive the greatest priority, followed in order by public transport, cars and HGVs. Additionally, emergency and refuse vehicles with their own specific requirements will be accommodated.

Inclusive access throughout the site will be achieved, with footways leading pedestrians from the car parks to the main office entrances. Cycle lanes will be provided from access routes to cycle shelters located near to offices.

A shuttle bus service within the development will be accommodated within the internal estate road. However, the positioning of bus stops and shelters will not obstruct the continuity of footway and cycle path routes.

Bus stops will be located, through consultation with the bus service providers, at suitable locations throughout the site in order to provide good access to all development zones. The potential for providing real time information to both bus shelters and offices via the internet will be explored.

Car park areas, where practicable, will be screened through the use of fencing and/or planting. Soft landscaping will be integrated into the car parking areas to enhance the visual appearance. Car parking, motorcycle and cycling provisions will be provided in accordance with local authority standards. The position of bicycle storage areas will be located in close proximity to the office accommodation entrances to encourage use as well as to enhance security. Showers, changing facilities and lockers will be provided to encourage non-car travel.

The intermodal terminal will be equipped with multiple sidings capable of handling freight trains. All of the non-electrified sidings would be accessible for overhead gantry crane operation, providing efficient interchange of containers between road and rail. Space will be provided alongside the sidings for containers to be stored temporarily if required between road and rail interchange. The intermodal terminal will also have facilities for secure parking of HGVs awaiting entry to the handling area, along with ancillary facilities including driver amenities, maintenance, administration and workshop buildings.

The express freight platform would be where trains loop off the main line and can enter and depart at higher speeds. A cross-dock platform will allow trains and goods vehicles to transfer goods quickly between modes. This facility will allow freight users to benefit from faster transits than possible with road haulage or traditional rail freight services.

Additional rail formations on site will then allow for direct siding access into or alongside some of the larger warehouse units, or to provide stabling and servicing facilities for locomotives and rolling stock.

It is proposed that the site access will be located on the A43 to facilitate access to the site from the west. This location was chosen as the A43 is an existing principle route used by HGVs which provides a direct link to the M1 motorway to the north of the development site. Two emergency access points will be provided onto Northampton Road and Towcester Road between the two villages. These access points will be controlled only by the emergency services with barriers and used by vehicles only in the event of an emergency at the discretion of the emergency services.

The emergency access points on Northampton Road and Towcester Road will be open to pedestrians and cyclists facilitating access to both sections of the site either side of Northampton Road and the bus terminal located within the site. This will ensure that there is sufficient opportunity for trips to be made by walking and cycling, rather than by private car.

A number of Public Rights of Way (PROWs) currently cross the site. These will be diverted to ensure pedestrians can travel across and around the site via traffic free routes.

6.6 LANDSCAPING, GREEN INFRASTRUCTURE AND ECOLOGY

While the Project will inevitably result in the loss of a large area of farmland and associated field edge vegetation the proposals look to offset this through the development of ecologically rich landscapes. These can be seen on Green Infrastructure Plan (Figure 19) along with the extent of retained vegetation, native structural planting belts, proposed mitigation mounding, proposed public footpath routes and the Milton Malsor Brook and are summarised below.

Publically Accessible Structural Landscape Zones

The largest part of the structural landscape and largely follows the re-routed public footpaths around the periphery of the site. Each area of this zone will be designed to create a rich mosaic of differing habitats while also providing a setting for the re-routed footpaths and the necessary screening mounds to aid with softening potential views from Milton Malsor and the Northampton Road. Habitat creation within these areas will include species rich neutral grassland, calcareous grassland, woodland and woodland edge habitat, along with new hedgerow planting, scrubland and wetland areas.

The proposed diverted footpath routes will maintain existing connectivity across the site along with additional links around the southern edge of Milton Malsor and the provision of a combined 'off road' cycleway / footway adjacent to the Northampton Road to connect Blisworth and Milton Malsor.

The publicly accessible land will feature numerous interpretation boards that explain local heritage features and also provide opportunities for use as an educational and recreational resource for the local community

Structural Landscaping Zones

In addition to the publicly accessible areas there will be structural landscape zones along the southern boundary with the West Coast Main Line and Grand Union Canal and along Milton Malsor Brook where access is restricted. These areas will be utilised for providing screen planting to the Project and for creating a variety of differing interconnecting habitats. The area adjacent to the canal will be managed as a dark zone to minimise any potential light spill into areas of soft landscape in recognition of the importance of the canal corridor as a commuting route for bats.

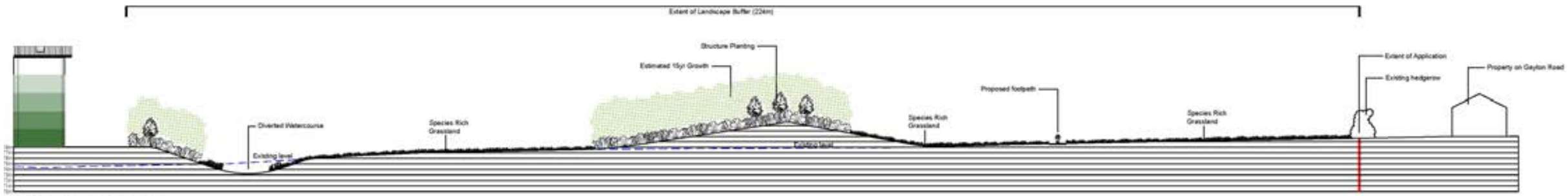
Ecological Mitigation Area

As noted earlier in the document a 26 hectare area of land to the south of Junction 15A (Figure 18) has been secured for ecological mitigation. This will seek to complement the onsite mitigation with additional hedgerow planting, retained farmland with enhanced habitat provision for ground nesting birds, grazed wildflower areas, woodland and scrub areas, marshland, proposed field edge ponds and ditches, renovated barns for bats and barn owls and the placing of standing deadwood and deadwood tree piles formed using felled trees and hedgerows on the main site. More detail can be found in Appendix A.

Fig 18: Junction 15A Illustrative Landscape Masterplan

Estate Road Landscaping

The internal landscape will follow a graded level of formality with the main estate road most formal with less formal landscape radiating out towards the periphery of the development. To aid with the mitigation for hedgerow loss interconnectivity between the varying areas of landscape will be maintained through the use of oversized culverts running under road and rail infrastructure.



Indicative Site Section

Green Infrastructure

Key to the developments successful integration into the surrounding landscape will be the interaction with surrounding green infrastructure.

The landscape design has sought to achieve this by the following key objectives;

1.The design will add to the woodland, calcareous grassland and neutral grassland habitat reservoirs identified in Northamptonshire GI strategy

2. The loss of existing field edge vegetation will be partially mitigated by the creation of interlinked habitat corridors running around the periphery of the site and along the side of estate roads. This will be linked by oversized culverts under road and rail infrastructure;

3. Landscape adjacent to the Grand Union Canal Blueway[1] will provide additional complementary habitat with consideration given to transient wildlife that uses the canal such as bats;

4. Footpath links will be diverted rather than stopped to ensure continued connectivity within the surrounding landscape;

5. New publicly accessible space will be created within the site adjacent to re-routed footpaths. These will connect into the key green infrastructure links surrounding the site.

A Green Infrastructure Plan (Figure 19) has been produced to demonstrate the various principles described above and how they would be applied to a typical development layout.

More detail on each of the zones explained above along with a breakdown of specific landscape and ecological proposals can be found in the Landscape and Ecological Infrastructure Strategy in Appendix A.

To ensure the successful establishment and ongoing maintenance of the soft landscape areas, a 15 year Soft Landscape Maintenance, Ecological Enhancement and Overall Management Plan has been produced.

[1] The Grand Union Canal Blueway is defined online within the Northamptonshire Environmental Character and Green Infrastructure Suite.

Fig 19: Green Infrastructure Plan

6.7 DRAINAGE

Surface Water

The area is currently undeveloped and served by a number of watercourses which cross the site, including the Milton Malsor Brook, which is classed as Main River by the Environment Agency. Rain falling on the land will naturally infiltrate the ground until the capacity of the underlying soils is reached, after which runoff will shed off into the local ditches and watercourses.

The Project of the site will inevitably lead to an increase in surface water runoff rates and volumes due to the provision of buildings, highways and other hardstanding areas. This increase in generated water will be managed within the Project infrastructure drainage systems such that there will be no detrimental impact to third parties downstream of the site.

Soil investigations have shown that there is no meaningful ability to infiltrate surface water runoff to ground and therefore the proposed drainage will be via positive systems which will ultimately discharge to the existing ditches and watercourses over time.

At this stage of the design process it is assumed that, generally, each building unit and its associated hardstanding areas will contain storage features which will deal with their own attenuation requirements with restricted discharge rates. In the majority of cases, because of the land use, the storage will be a combination of surface water lagoons, ditches, oversized pipes and underground tanks.

An assessment has been undertaken to determine the magnitude of surface water storage volumes that will be required in order to limit post-development runoff rates to values that are no greater than the existing greenfield situation.

In a number of locations there should be the opportunity to include attenuation ponds/basins which will be able to provide additional storage and deliver the ability to improve water quality before discharging to the existing watercourses within the site. It is also intended to include swales or similar features as conveyance systems and to provide water treatment benefits where there are appropriate areas within the layout.

It is proposed that any discharge from the site be restricted to mimic the existing greenfield QBAR runoff rate with attenuation being provided to cater for the 1 in 200 year plus 40% allowance for climate change storm event. This ensures that the proposal meets the criteria set out by Northamptonshire County Council in their role as the LLFA.

Due to the scale of the development, a number of watercourses will need to be diverted. The proposed scheme will include the rerouting of such watercourses in order to maintain the current flows from one side of the site to the other.

Foul Water

As the existing site is undeveloped, it is unlikely that there are any foul drainage systems directly serving the land to be developed. However, 300mm diameter public foul sewer does cross the site in a south to north direction running west of and approximately parallel to the Milton Malsor Brook.

The provision of the development will generate new foul flows and it is proposed to discharge these flows to the existing public sewer. Due to the topography of the site it will be necessary to pump from a number of points around the site.

Anglian Water has been consulted about the connection of additional flows to the existing foul sewer and a Pre-Development Enquiry has been submitted to the Company.

The resulting report indicated that there is likely to be insufficient capacity in the system to cater for the new development and that upgrading works may be required. Following this, Anglian Water was requested to carry out a Drainage Impact Assessment to determine the potential works required.

This assessment recommended that additional offline storage be provided near the proposed point of connection to the existing sewer. This proposal will be included in the final drainage strategy design.

Example of an attenuation pond within a development

6.8 NOISE

The nearest residential properties to the Project are the Railway Cottages on Northampton Road, which are around 80m from the nearest service yard. Other nearby residential properties within 100m from proposed yards are also located on Northampton Road, which runs centrally through the proposed site.

Nearby communities include Milton Malsor, around 100m north of the proposed site boundary, Blisworth, around 400m to the south, and the residential area behind the Walnut Tree Inn, off Station Road, Blisworth, which is around 150m south of the site boundary. There are also some residential properties around 100m to the west of the proposed site boundary, on the Blisworth Arm, by the canal, and also Gayton Marina and the canal itself, where there is significant noise from existing road traffic on the A43.

On-site operational noise mitigation will be provided in the form of earth bunding around the boundary of the proposed site, particularly to provide screening to Milton Malsor to the north and to the nearby residential properties on Northampton Road, where additional acoustic screening may also be installed.

Additional screening of yards to nearby recreational receptors may be provided by considering the orientation of the warehouses. However, where warehouses are orientated such that there is direct line of sight between yards and nearby recreational receptors, acoustic screens would be installed.

6.9 SUSTAINABILITY

Sustainability will be an important consideration for the development. Careful consideration of future energy use and analysis of the potential for the use of renewable sources of energy, along with conscientious specification of material and construction techniques will be required to achieve these targets.

As referred to above, the design strategy for the development should also take account of improving biodiversity on the site and complementing nearby areas of landscape value. Further detail is explained in the Sustainability Statement which accompanies the application.

6.10 PERSONAL SAFETY

Consideration has been given to the layout of the development to ensure personal safety and site security as whole. This relates not only to ensuring that the layout of the development does not create an environment conducive to crime, but also to how occupiers and visitors to the estate can move freely without risk of injury.

In particular, the intermodal terminal will be operated as a Restricted Zone (RZ) in line with strict Government standards governing the security of movement of freight via the Channel Tunnel; once operational, Government officials will make random inspections to check these security arrangements, which would limit access to the RZ to approved personnel only.

Such considerations are given to the design of public areas to ensure that they are overlooked by occupied premises; that the layout removes the risks posed by concealed entrances; that the development is secured; that comprehensive management measures are installed to ensure road and public routes are carefully monitored; and, that highway design and the layout of footpaths ensure that the risk to injury to road users is reduced to a minimum.

Example of a Gantry Crane for Rail Freight

7.0 HIGHWAY WORKS

As part of the development proposals, it is anticipated that highway mitigation works as shown on Figure 20 will be required at a range of on and offsite locations.

These proposed works are described in detailed in the Transport Assessment prepared by Transport Planning Associates.

The proposed junction mitigation schemes to be implemented are to follows;

(i) M1 Junction 16

(ii) Junction Three – A4500 / Upton Way / Tollgate Way

(iii) Junction Four – A5076 / A5123 / Upton Way

(iv) Junction Five – M1 Junction 15A

(v) Junction Six – A5076 / Hunsbury Hill Avenue / Hunsbarrow Road / Hunsbury Hill Road

(vi) Junction Seven – Towcester Road / A5076 / A5123 / Tesco

(vii) Junction Nine – A45 / Eagle Drive / Caswell Road

(viii) Junction Ten – Barnes Meadow Interchange

(ix) Junction Eleven – A45 / A43 / Ferris Row

(x) Junction Twelve – M1 Junction 15

(xi) Junction Fourteen – Tove Roundabout

(xii) Junction Fifteen – Abthorpe Roundabout

(xiii) Junction Nineteen – A5076 / Telford Way / Walter Tull Way / Duston Mill Lane

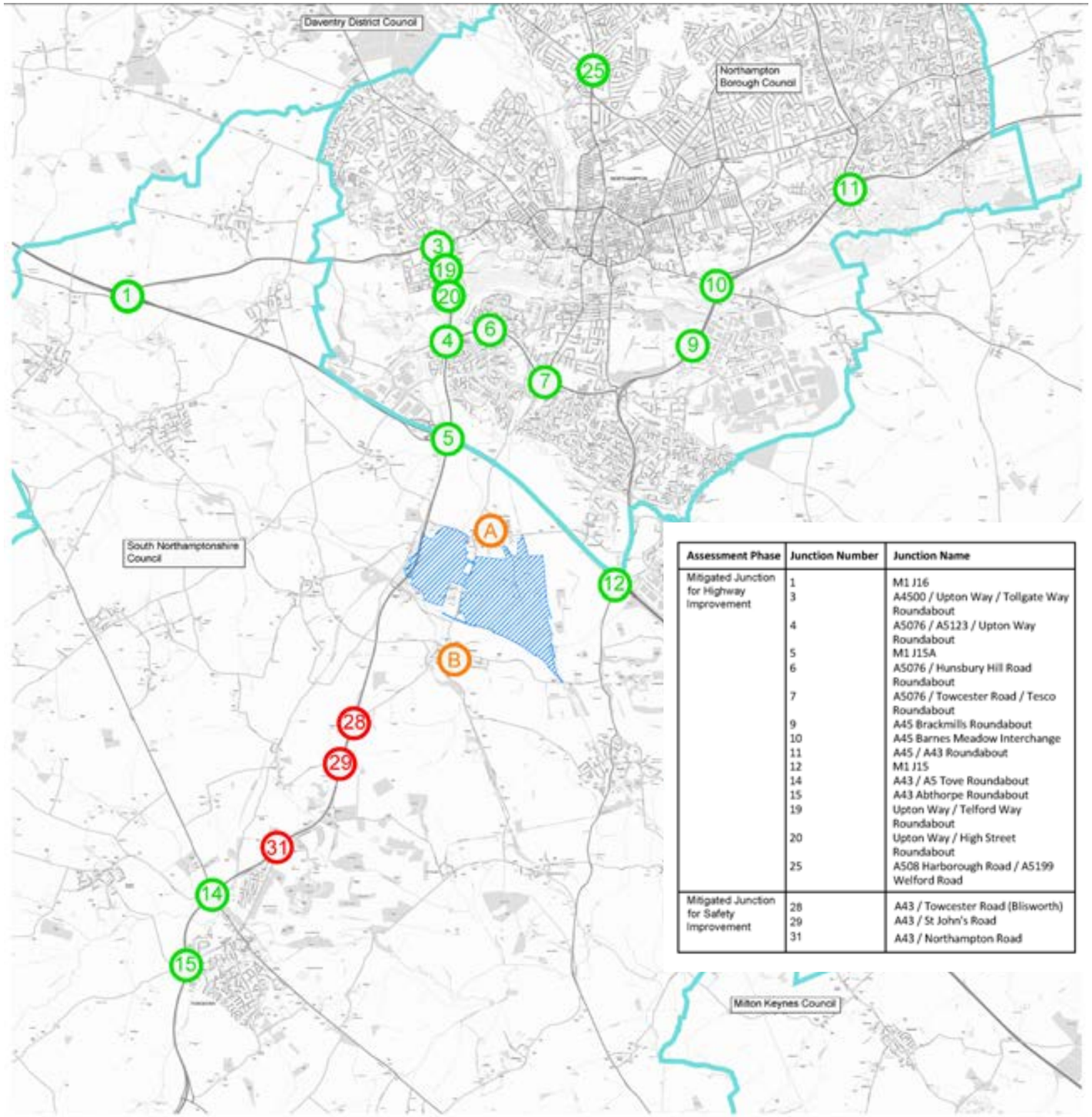
(xiv) Junction Twenty – A5076 / High Street / Duston Mill

(xv) Junction Twenty Five – A508 / A5199

(xvi) Junction 28 – A43 / Towcester Road

(xvii) Junction 29 – A43 / St John's Road

(xviii) Junction 31 – A43 / Northampton Road



Assessment Phase	Junction Number	Junction Name
Mitigated Junction for Highway Improvement	1	M1 J16
	3	A4500 / Upton Way / Tollgate Way Roundabout
	4	A5076 / A5123 / Upton Way Roundabout
	5	M1 J15A
	6	A5076 / Hunsbury Hill Road Roundabout
	7	A5076 / Towcester Road / Tesco Roundabout
	9	A45 Brackmills Roundabout
	10	A45 Barnes Meadow Interchange
	11	A45 / A43 Roundabout
	12	M1 J15
	14	A43 / A5 Tove Roundabout
	15	A43 Abthorpe Roundabout
	19	Upton Way / Telford Way Roundabout
	20	Upton Way / High Street Roundabout
	25	A508 Harborough Road / A5199 Welford Road
Mitigated Junction for Safety Improvement	28	A43 / Towcester Road (Blisworth)
	29	A43 / St John's Road
	31	A43 / Northampton Road

Figure 20: Junction Mitigation Location Plan

8.0 PHASING

It is currently anticipated that the first stage of works will take an initial construction access from the A43. This will use the former petrol filling station left in/left out access point. This will allow the establishment of a construction compound to the east of the access point. Thereafter a new left in/left out construction access point will be implemented to the north of the existing access. Works will then start with the creation of the main site access from the A43, which will facilitate the main road based access for the construction phase.

A central haul road will then be created to Northampton Road, to allow works on the underpass to begin. Once complete, this will allow access to the eastern area of the main SRFI site.

Construction access will then be taken to the eastern boundary and another construction compound created. This will allow works to begin on creating the rail infrastructure for the intermodal terminal. These initial rail works will in turn allow the use of rail for some construction activity, potentially including bulk deliveries or exports. The first phase of rail works will involve the creation of a first phase intermodal facility and will provide direct rail access to the main SRFI site.

The creation of development plateau and perimeter bunds will require bulk earth works. These will also be undertaken on a phased basis, although it is likely that this will be limited to one or two main earth work phases, providing levelled and profiled areas for the eastern and western parts of the site. Once each phase is complete, it is proposed that advance landscaping will be provided where possible to maximise maturing time. Precise details of landscaping and timing of delivery will be confirmed after consent has been granted.

The anticipated phasing of development is shown on the illustrative Construction Phasing Plan (Figure 21) and is listed below;

Phase 1 – New junction on A43 to provide access into the site;
Phase 2 – Haul road from site access to serve the construction of an underpass beneath the Northampton Road (old A43)
Phase 3 – Underpass Construction
Phase 4 – Haul road from under pass to Rail Freight Area
Phase 5 – Rail freight terminal and maintenance depot
Phase 6 – Units 6 & 7 adjacent to rail freight terminal
Phase 7 – Units 10, 11 & 12 to site frontage adjacent to A43
Phase 8 – Unit 5 rail served unit
Phase 9 – Units 3 &4
Phase 10 – Units 8, 9 & 11
Phase 11 – Units 1 & 2

Figure 21: Construction Phasing Development Plan

9.0 DESIGN GUIDE

9.1 PURPOSE OF THE DESIGN GUIDE

The purpose of this Design Guide is to provide a framework for the future development.

The framework provided by this design guide establishes the scope, parameters and design intent for the future development. It should be read in conjunction with the approved parameter plan drawings. It will be used as a working tool to support the delivery of each phase of the development during the detailed design stage. Each reserved matters application that is prepared will need to demonstrate its compliance with this guide

The Design Guide will also provide certainty for the local authority, the local community and potential occupiers as to how the future form and design of the completed development will look. The framework will not restrict the detail however it will provide clear guidelines to work within.

In order to keep the Design Guide relevant and current with emerging technologies and materials, advancing thinking on building design and changing occupier operational demands, a periodic review process will be conducted. This will also account for changing legislation such the United Kingdom Building Regulations.

10.0 ZONES

The Parameters Plan (Figure 22) indicates the following areas for future development; Development Zones to cater for buildings, associated servicing areas and parking and the Intermodal Area to cater for the rail interchange and associated buildings.

Development Zones

Zones 1 & 2

Located adjacent to the A43 this area of the site will be bounded by structured landscaping to screen the Project. Access will be via the internal spine road that serves the entire development.

A “Building Line” is proposed across the A43 frontage to prevent buildings from being constructed. This was informed following a detailed LVIA to ensure the Project does not impact on the surrounding areas.

The orientation of future buildings will need to consider the estate road and therefore offices should located facing the estate road to provide a consistent streetscape creating a park style environment.

Car and HGV access to the development zones will be directly from the estate road with access into each plot being designed to provide ensure separate access and safe ingress/egress.

Landscaping on either side of the estate road providing screening to the individual plots should be considered and implemented. Attenuation ponds will also be located to the north of Zone 1 set within the landscaping.

PARAMETERS SCHEDULE

Zone	Number of Units	Maximum Development Floorspace (in m2)	Plateau level (metres above Ordnance Datum)	Maximum Building Height to ridge (metres above finished floor level)
1	2 to 4		77.540	18.5
1a - Truck parking	2		77.540	6.5
2	1 to 3		80.300	18.5
3	1 to 4		82.500	18.5
4	1 to 3		84.250	18.5
5	2 to 3		90.700	18.5
5a	1 to 2		88.550	
6	1		92.500	18.5
6a- Gantry crane	3		91.300	27
7-Express Freight	0		94.330	0
TOTAL	12 TO 23	TOTAL 702,097		

AOD: " ABOVE ORDNANCE DATUM" ORDNANCE DATUM (0.000m) = AVERAGE SEA LEVEL

Fig 22: Parameters Plan

Zones 3 & 4

Located in the centre of the site and fronting Towcester Road these zones will follow the same principles as 1 & 2.

Landscaping will be provided adjacent to the Towcester Road creating a natural setback for development. As with Zones 1 & 2 a “Building Line” has been proposed across the frontage to prevent development beyond this line.

Access will be via the internal spine road that serves the entire development. A new roundabout will be in place to allow the estate road to serve both plots and final zones.

The orientation of future buildings must consider the villages of Milton Malsor and Blisworth and therefore the units need to be positioned to screen activity. The offices should be located fronting Towcester Road for prominence and to maintain a consistent streetscape following Zones 1 & 2.

Car and HGV access to the development zones will again be directly from the estate road with access into each plot being designed to ensure separate access and safe ingress/egress.

Structured landscaping along Towcester Road will be implemented whilst strategic planting should be considered and implemented to provide additional screening to the individual plots.

Attenuation ponds will also be located to the north of Zone 1 set within the landscaping.

Zones 5A & 5B

Located in the southeast corner of the overall site these zones are integral to the rail Intermodal Area and dictate the layout of the plots and estate road.

Structured landscaping will be provided to the perimeter of the zones creating a natural setback for development. Strategic planting should be considered and implemented within each zone to provide additional screening.

Access will be via the internal spine road that will serve both zones and the Intermodal Area the entire development.

Car and HGV access to the development zones will again be directly from the estate road with access into each plot being designed to ensure separate access and safe ingress/egress.

As the estate road will serve the Intermodal Area it is imperative access into the plots does not have any impact on traffic movement.

The orientation of future buildings will be dictated by the proposed rail links into each plot. The proposed estate road is likely to determine where the offices will be located for ease of access and visibility of rail infrastructure.

Zones 6, 6A & 7

These Zones are specific to the Intermodal operations and are located adjacent to the Northampton Loop and West Coast Main Line.

Structured landscaping will be provided to the perimeter of the zones to follow the landscape strategy for the whole site.

Access will be via two spurs off the internal spine road to serve each zone.

HGV access to the development zones will be designed to ensure safe ingress/egress and prevent impact onto the estate road.

In terms of development Zone 6 will cater for a Train Maintenance Depot which will be designed to cater for the necessary operations. The built form should consider the rest of the Project including elevational treatment and external finishes.

11.0 DESIGN PRINCIPLES

Industrial and Distribution buildings are often perceived as monolithic boxes or sheds that pay little attention to location or orientation. Due to the nature of their form architectural articulation can also be neglected. It is intended that the buildings at Rail Central will attempt to redress this perception.

To create a consistency and unity between the buildings, scale and layout will need to be considered carefully. The form, size and height of the buildings will generally be informed by the functional and operational requirements of end-users. Where units are to be developed speculatively, the design team will deliver relevant buildings based upon the market needs within the logistics sector.

It is the ambition of the client and the design team to achieve a strong and consistent design identity and language across the whole development. This will include all aspects, from hard and soft landscaping, through to street furniture and building design.

The building design will provide robust and high quality structures that will give future occupiers flexibility whilst creating a strong identity throughout the development.

It is the intention to utilise a high degree of standardisation throughout the design to ensure very high standards are achieved both in specification and building performance.

12.0 DESIGN STANDARDS

The following criteria will be used to inform how each of the zones will be developed to accommodate the design principles. These standards are considered institutional based on what is currently used for this type of development and what occupiers expect. Where a tenant is known and a building becomes bespoke the standards may change to suit their operational needs.

Typical Building Grids:
Portal spacing generally between 28m and 40m; sub-grid typically of 8m

Typical Haunch Height: (the clear internal height of the building)
12.5m (consider for units up to 300,000ft²)
15.0m (consider for units over 300,000ft²)

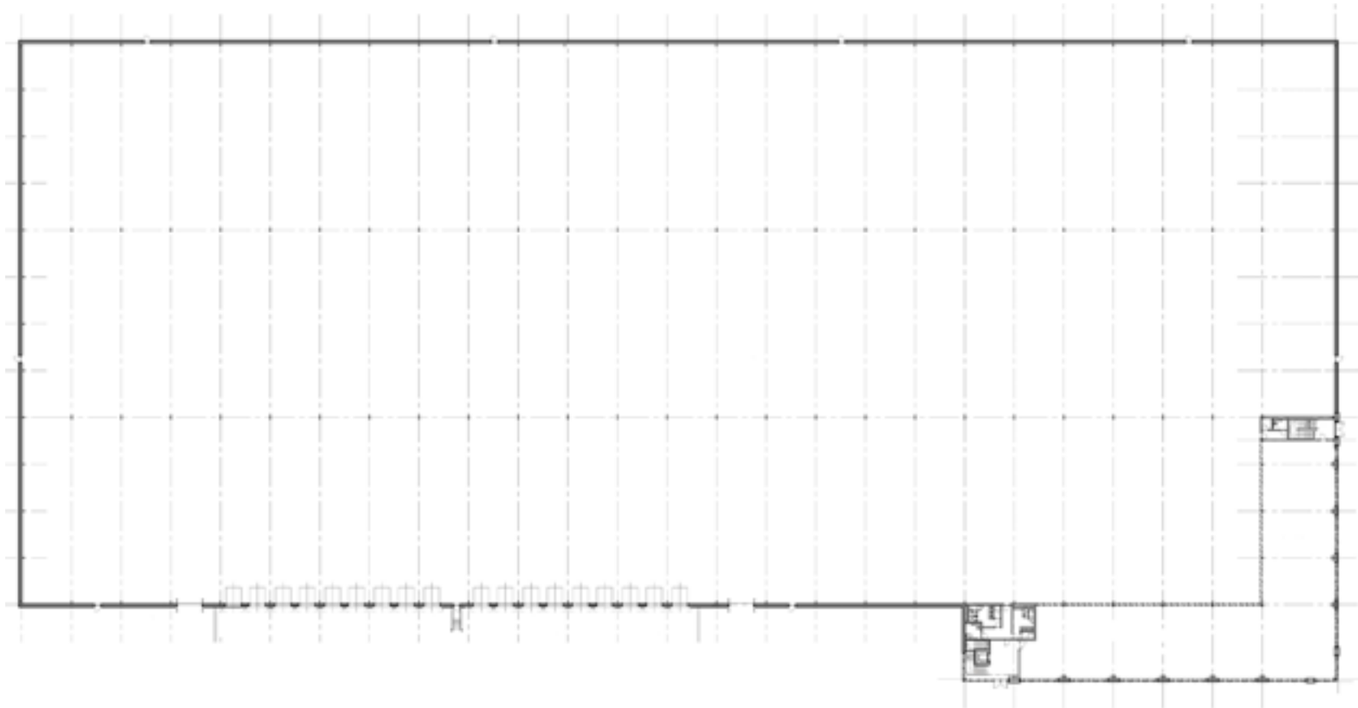
Typical Offices:
Generally, 5% of warehouse floor area which may include hub offices
Office design and floor layout to maximise open plan

Typical Dock Leveller Provision:
Generally: 1 per 10,000ft²/929m²

Typical Level Access Door Provision:
Generally, 1 per 75,000ft²
Usually, minimum 2 per side; 1 positioned either side of dock doors

Typical Gatehouse:
A base for future provision usually provided for all units

Typical Service Yards:
Single Sided Unit: Typically 50m depth
Cross dock Unit: Typically 50m depth to long sides with 35m yard to second (short) side where applicable
Where external dock pods are incorporated: Typically 50m depth



Typical ground floor layout

13.0 BUILDING FORM & APPEARANCE

Due to the size of the development zones it is clear that buildings of substantial volume and mass can be accommodated.

Market demands have changed with many occupiers requiring larger buildings to satisfy storage requirements to fully automated services.

The proposed heights, scale and floor areas for each zone have been selected to provide the flexibility to cope with market demands within the parameter controls.

Large spans are necessary to minimise the number of columns in a warehouse space in order to provide institutional standard, flexible industrial accommodation for future occupier requirements. To achieve this a lightweight structure and envelope is required to reduce dead loads, which is therefore best provided by structural steelwork and larger roofing and wall components such as metal cladding and decking products.

The footprint of each unit will be based on maximising the servicing capability. Typically the loading docks and level access doors are located on the long elevations giving access to most of the internal areas.

External servicing areas will be sized to provide sufficient vehicular access and movement along with parking and external storage if required.

The height of a building is generally dictated by the overall size/footprint of the building. The internal height is key to enabling an occupier to fit out the space to suit their operations and provide mezzanines if required. Clear internal heights will be 15m.

The roof type for most warehouse buildings tends to be a 6 degree roof pitch to provide the necessary structural spans. Whilst this is the most common roof style curved roofs should be considered where appropriate and applicable. The roofs should also be capable of accommodation roof mounted Solar technologies depending on the sustainable design strategy of the building which, in turn, is influenced by the end-user.

Typically the design of the ancillary offices tend to have different architectural language to the main body of the building. This offers the opportunity to provide a focal point for each building and create an identity to connect all the buildings together.

The offices should be at least two storeys for smaller sized buildings and up to four storeys for the largest buildings. As noted earlier the position of offices should create a prominent feature and ideally front the access road.

Office floor depths must be sufficiently shallow to maximise natural daylight penetration and where appropriate, natural ventilation. Footprints may vary between 7.5m and 15m overall depth depending on the size of the overall building.

Office entrances should address key views into the site and provide a strong visual cue for visitors. They should be designed so that they are also located to overlook public routes, car parking areas and entrance spaces to create interest and thus contribute to designing-out crime. Careful positioning of offices could also provide an opportunity to form appropriate screening to service yards.

Example of an internal warehouse area

Example of office detailing

14.0 DEVELOPMENT COMPONENTS

Access Roads

The main estate roads that run through the site will be designed and constructed to accommodate the types of vehicles that will use this development. Access off the estate roads will be designed to ensure vehicles can turn on and off without detriment to other road users. Whilst the development will operate 24/7 during the construction traffic will operate to limited times.

Service Yards

Service yard areas are typically areas of concrete to cater for vehicular operational use. This can create unattractive views and there screening where possible should be considered. The use of landscaping and building orientation can assist with screening. Consideration has be given to the location of service areas to ensure that both noise and light do not impact on the local area outside of the development.

Service yards are generally set out to a depth of 50m to accommodate the full turning circle of an HGV within the parking and circulation zones while allowing vehicles to carry on loading at the adjacent loading docks along with lorry parking.

Access to service yard areas will be via a dedicated access of the estate road to prevent and discourage public access. This access point is likely to be managed by a gatehouse to help ensure no unauthorised access is permitted.

Car Parking Areas

Car parking areas will be located in close proximity to the office areas. Footpaths will be designed to create ‘pedestrian-friendly’ areas through car parks leading pedestrians to the offices.

Where practicable soft landscaping will be integrated into the car parking areas to enhance the visual appearance and assist with screening.

Car parking will be provided in accordance with local authority standards unless agreed otherwise. The provision of disabled parking bays will be provided to a minimum of 5% of the total car parking number and be positioned in close proximity to the office entrance.

The position of bicycle storage areas will be located in close proximity to the office accommodation entrances to encourage use as well as enhance security. Changing facilities will be provided to encourage non-car travel to the extent required by BREEAM and the sustainable transportation strategy.

Pedestrian Access

Each building and their immediate surroundings, including car park areas and building approaches, will be designed to be accessible by all staff and visitors. These spaces will meet all current UK Building Regulations and respond to the latest version and provisions of the Disability Discrimination Act.

Best practice design ensures that access is available to all regardless of any special mobility problems or restrictions. Level thresholds, gentle slopes or ramps and ambulant disabled stairs will be designed in as standard.

Typical example of a service yard area

Example of pedestrain access and car parking to an office area

There are to be no physical barriers to users of the development or to those that serve the development such as the emergency services. There will be no special access points for wheelchair users who will use the same front doors as everyone else.

Storage & Refuse

The provision of refuse and re-cycling facilities will be tailored to future occupier's operational requirements. Typically this would include dedicated skips and compactors located in the service yards.

External Lighting

It is anticipated that the development will be occupied by a range of businesses that do not work typical hours of 9am to 5pm. The development therefore needs to be fit for purpose and be capable of operation 24 hours a day, seven days a week.

The detailed lighting design should consider best practice standards and technology, as appropriate. The external lighting specification(s) and design(s) for the Project should be prepared by a specialist lighting engineer with due regard to the sensitivities of surrounding receptors.

The lighting specification should include the appropriate selection of column heights, light fittings and luminaire design to ensure that the intensity and direction of the lighting is controlled through retaining tilting angles close to the horizontal to ensure that the effects of light spill, glare and sky glow are minimised.

All lighting will comply with the latest British Standards and CIBSE Guidance to ensure the appropriate lighting levels are provided, ensuring that the required levels of illumination are delivered to achieve the required task and avoid any unnecessary over lighting.

Consideration should be given to best practice guidance and standards to ensure the prevention of obtrusive light impacts, such as the Institution of Lighting Professional: Guidance Notes for the Reduction of Obtrusive Light GN01:2011.

15.0 SUSTAINABLE BUILDING DESIGN

The development will consider and incorporate as far as possible a strategy for sustainable design including measures to adapt to and mitigate the impacts of climate change. The design of the buildings should take into account the impacts of climate change including the potential for increased annual average temperatures, an increase in the frequency of extreme temperature and rainfall, an increase in winter rainfall and an increase in dry spells during the summer.

Furthermore the design should include measures to reduce water use and energy consumption during the occupation of the buildings through the use high standards of specification that will exceed the Building Regulations and help secure the BREEAM rating.

Example of street lighting integration

Example building mounted lighting

A range of sustainability measures will be considered during the design of the buildings:

- The potential for natural ventilation in the offices, by incorporation of opening windows
- Optimisation of use of natural lighting and minimise use of artificial lighting in daylight hours
- Roof lights to equate to 15% of the floor area within the warehouse, reducing reliance on artificial lighting
- Achieving higher level of thermal insulation than the maxima set in the Building Regulations
- Use of highly efficient LED lighting throughout with automatic sensors
- Achieving high levels of air tightness in the building in excess of Building Regulations
- Reduction of solar gain by specification of solar shading and tinted glass on other elevations
- Adaptation to the impacts of climate change, including consideration of potential overheating

This strategy will include guidelines for the building design and performance to maximise flexibility, longevity and it will be matched by specifications that will determine the most sustainable choice of construction materials by virtue of their source and their impact on the environment. This will include:

- Ensuring that timber is sourced from sustainable forestry, by carrying the Forest Stewardship Council certificate
- The use of steel as the major structural material, which is made of 80% recycled product
- Prohibiting materials containing CFCs and HCFCs
- Remediation and re-distribution of soil from ground modelling as fill material to minimise the carting away and disposal of waste

A strategy for alternative forms of non-operational travel to the site is set out in the accompanying Travel Plan Framework which will be incorporated into a Green Travel Plan.

The following sustainable design principles will be considered when the layout and detailed design of buildings follow:

- Promotion of a variety of means of transport including consideration of electric vehicle charging infrastructure
- Avoiding flood risk and reducing run off, ensuring surface water management systems are designed to adapt to the impacts of climate change
- Use of improved fabric, energy efficiency and low carbon renewable energy technologies such as Solar PV to achieve a 10% reduction in carbon emissions beyond the requirements of Part L of the 2013 Building Regulations to mitigate the impacts of climate change
- Conservation of water resources (e.g. specification of water saving fittings and investigating opportunities for reusing water) to achieve a minimum 25% reduction in water use in accordance with BREEAM
- Sustainable choices of building materials and surfaces
- Incorporation of opportunities for energy efficient design minimising the need for heating and cooling of buildings (orientation, insulation, colour of materials, specification of lighting)

Further to the above measures each building will be designed and constructed to target a minimum BREEAM standard of ‘Very Good’ in accordance with BREEAM New Construction 2014 and constructed to target the best EPC rating possible within its size category.

Example of a PV roof installation

Example of roof lights to the warehouse area

16.0 BUILDING MATERIALS

External materials will be of metal cladding with a consistent and common palette of colours and cladding types. Elevational design will be kept to a minimal and modern in appearance. The concept is to keep the building simple and clean, with uncluttered elevations giving it a modern and high tech appearance, using colours to provide emphasis where necessary.

In most cases, each unit will have ancillary offices located in a prominent part of building to provide a sense of arrival. The office elevation will offer the opportunity to use glazing and windows to counterbalance areas of solid wall used on the main body of the building.

The external appearance of the offices will be designed in a way to integrate this use class with other building types, in order to complement the aesthetic vision of the development.

Offices will normally be located with frontages overlooking main estate roads to provide a strong visual reference point for visitors. The offices will be located to screen car parking and/or service areas where practicable.

These design principles will be followed as part of the detailed design for offices: Elevational designs will clearly address the public face of the building on any edge that abuts the public domain.

- Where possible, areas of glazing will be combined to counterbalance the areas of solid walls
- Glazing will be used to provide a high standard of natural light within the internal office areas and quality of appearance to the external elevations. High performance coated glass may be used to reduce solar gain.
- Entrance areas will be clearly defined by the use of canopies and architectural elements, such as full height glazing.
- Forms of solar shading, such as brise soleil or canopies, will be considered on the south, east and west facing elevations, in order to reduce solar gain in to buildings. This can also be used as an architectural device to add quality and interest to cladding and glazing.

The external presentation of office buildings will normally consist of a combination of finishes. Thought will be given to the treatment of prominent facades to ensure an appropriate level of visual interest and quality of presentation.

The entrance area for an office, similar to the industrial units, is expected to be treated separately to provide a distinction to the main elevations.

This will be achieved by using a combination of finishes such as glazing, rain screen cladding of different colours or metal cladding with varying profiles and texture.

Examples of different elevational treatment

17.0 EXTERNAL MATERIALS

Car Parking Areas

Car parking areas roadways will be surfaced with 80mm thick coloured concrete block paving laid in herringbone pattern.

Parking bays will be surfaced in macadam and will be defined by white thermoplastic lines and precast concrete kerbs will be used with dropped kerbs at pedestrian cross-overs and at intersections with cycle routes.

Pedestrian footpaths will be surfaced using contrast coloured concrete block paving and brushed concrete will be used for ancillary paths and margins around the warehouse.

Cycle Shelters

Covered cycle shelters will be provided in close proximity to the office entrance areas. The shelters will be constructed from galvanised steel with a polycarbonate panels.

The cycle racks will also be galvanised steel with the type and size to be provided to meet the requirements of the BREEAM and local authority standards.

Bus Terminus

The bus terminus will be provided to encourage and cater for passengers using the bus network.

A shelter will be provided with internal lighting and timetable casing, signage and notice boards with the capability for real-time display.

Boundary Treatment

Security fencing will be provided for each building to secure the service yard areas. Typically security fencing is c.2.4m high and in welded mesh.

Soft landscape boundary treatment will be used to other areas to provide a natural buffer from the estate road.

Landscaping will be used where possible adjacent to the fencing to add further screening however consideration should be given to avoid security risks.

600mm high timber posts should be used in areas where light security may be required and secure fencing is deemed unnecessary.

Examples of external treatment

Site Security

The security of each building will eventually depend upon the requirements of the occupier.

It is anticipated that most occupiers will require CCTV coverage and the use of camera masts where required should be integrated with landscape features in order to minimise their visual impact.

The layout of car park areas and other pedestrian routes will be designed to ensure that soft landscaping in these areas do not obscure visibility and that there are no hiding places particularly in landscaped areas adjacent to footpaths and car parking.

Offices should look over car park areas to provide passive surveillance. The proposed lighting scheme will be designed to avoid glare to adjacent plots and particularly to distant residential areas. The lighting scheme should also provide good colour rendition to complement any CCTV scheme.

The Intermodal Areas will be totally secure for safety and security purposes and will include 2.4m high weldmesh fencing as a minimum.

Building and Site Signage

It is anticipated that future tenants will want to install signage as part of their fit out. Signage should enhance and not detract from the quality of the development and setting as a whole. Whilst tenant signage will be subject to an Advertisement Consent, all proposals will require approval from the development team prior to submission.

An on-site directional signage scheme will be prepared across the site to manage vehicle movements.

Pedestrian and cycle routes will also be a part of this scheme to ensuring separation and safety. Signage will be kept to minimum and will be clear in location and type to avoid confusion.

It is likely a large totem style sign will be installed at the site entrance to identify the occupiers on site.

Examples of security measures

18.0 LANDSCAPING & ECOLOGY

The proposed landscape design will provide a quality setting for the development with ecology led design principles to ensure a high percentage of native species with an emphasis on local provenance.

The site comprises of a number of distinctive zones that have been designed to achieve the following key objectives:

- Provide interconnectivity between different habitat areas within the site that link back to surrounding green infrastructure;
- Contribute to the Northamptonshire Green Infrastructure strategy through the creation of new woodland, neutral grassland and calcareous grassland;
- Provide robust screening for sensitive boundaries with Milton Malsor and Northampton Road through the placement of mounding and robust woodland planting;
- Larger stature trees and higher percentages of evergreen species will be used at key points to provide additional screening;
- Outward facing slopes will be tied back to existing undulations in the landscape with slope gradients set at a maximum of 1 in 5 to aid with the assimilation into the existing environment;
- Feature planting will be used to emphasis plot and office entrances including non-native species to provide year round interest;
- Publicly accessible landscape areas adjacent to re-routed and new footpath links will create a setting for footpaths and new amenity spaces for surrounding communities;
- Ensure safety by design in car park areas and other publicly accessible spaces by providing unobstructed views across the surrounding space;
- Acoustic barriers and security fencing will be incorporated into wooded areas where possible to soften their impact as the woodland develops;

A series of interconnecting habitats and habitat features will be established within the soft landscape areas around the periphery of the site and running through the site along the edge of estate roads and plot boundaries.

Examples of Infrastructure Landscaping

These habitats and habitat features will comprise of:

- Woodland areas that incorporate habitat features such as rides, clearings, hibernaculum and wet scrapes;
- Species rich neutral grassland areas. To include plug planting of locally rare species once sward established
- Species rich calcareous grassland areas, soil placement to include limestone or chalk chippings to create more calcareous conditions;
- Scrub and thicket areas to provide transitionary zone between species rich grassland areas and woodland;
- Enhancements to attenuation ponds through the inclusion of gradually shelving profiles and deep centres;
- Refurbishment of existing barns close to barn land to provide nesting possibilities for barn owls and roosting opportunities for bats
- Wildlife hedgerows comprising both predominantly Hawthorn and predominantly Blackthorn hedgerow mixes. Hedges to be planted on banked earth with adjacent ditch line to replicate field edge vegetation;
- Retained Milton Malsor Brook profile will be protected and re-routed brook profile enhanced to provide differing depths and flow rates;
- Oversized culverts with shelving running under road and rail construction will provide interconnectivity between habitat areas.
- Creation of an ecological mitigation area to the south of Junction 15A

In order to ensure that these habitats are maintained and managed in a manner that will maximise establishment and ecological benefit please refer to the '15 year soft landscape maintenance, ecological enhancement and overall management plan for main SRFI site'.

A key component of this is the ongoing monitoring of the landscape as it establishes and a triannual review involving the project landscape architect, project ecologist and key local stakeholders to ensure the appropriateness of the management regime.

The 26 hectare area of land to the south of Junction 15A (Figure 18) secured for ecological mitigation will seek to complement the onsite mitigation with additional hedgerow planting, retained farmland with enhanced habitat provision for ground nesting birds, grazed wildflower areas, woodland and scrub areas, marshland, proposed field edge ponds and ditches, renovated barns for bats and barn owls and the placing of standing deadwood and deadwood tree piles formed using felled trees and hedgerows on the main site. More detail can be found in Appendix A.

Examples of Infrastructure Landscaping

19.0 INTERMODAL TERMINAL PARAMETERS

The Intermodal Terminal will be connected to the West Coast Main Line (Northampton Loop) at either end, allowing direct access for trains from either direction of travel, as well as from the West Coast Main Line (Fast Lines) using the internal access chord. Diesel-hauled trains (and bimodal-hauled trains operating in diesel traction mode) could operate directly between the main line and any one of the Terminal sidings. Electrically-hauled trains would operate into any of the four electrified arrival / departure sidings located adjacent to the West Coast Main Line (WCML) on either side of the site, before shunting into the Terminal sidings via the internal chord lines linking both sides of the site.

From the main line connections (Northampton Loop), the single track formation splits into 6 handling sidings within the Intermodal Terminal itself (all at least 800m in length), together with 2 electrified arrival / departure sidings. Additional electrified tracks then connect the Intermodal Terminal and arrival / departure sidings to the Traction Maintenance Depot (TMD), Rail-Linked Warehousing, Express Freight Terminal and the Fast Line arrival / departure sidings and main line connections. Each of the sidings is spaced to facilitate access by groundstaff to the trains to unlock or secure containers as required, or to carry out train pre-departure inspection. Provision is made for shunt necks and/or cripple sidings at either end of the intermodal terminal, where defective (known in the industry as ‘crippled’) wagons can be stored pending attention either within the sidings, or within the TMD.

Once a train has berthed inside the Intermodal Terminal on one of the handling sidings, the main line locomotive will either detach and “run round” from one end of the train to the other via the points at each end of the Terminal, using one of the parallel handling or arrival / departure sidings (in the case of trains operating to and from the same offsite origin/ destination). Alternatively, the locomotive may stay with the train (in the case of a train stopping at Rail Central en route to its final destination), detach and move onto another train ready for departure, or move to the TMD for servicing / berthing / crew change.

Within the Intermodal Terminal, containers will be lifted on and off the trains by rail mounted gantry cranes (RMGs), augmented by reachstackers (RS) as required. Containers will be stored in 5 lanes under the gantry cranes up to 5 high, together with an additional storage area operated with RS located to the west of the gantry crane area. Storage capacity is estimated at around 4,200 Twenty-foot Equivalent Unit (TEU).

RAIL LINKED WAREHOUSING

The Rail-Linked Warehousing will be connected to the rest of the on-site trackwork by a single-track chord, each unit having a dedicated handling siding running parallel to the longest face of the building. Trains would be propelled into the units by main line or on-site diesel locomotives as required. The handling sidings would either enter the buildings or run alongside the outside yard, housed under a canopy projected off the building if required.

TRACTION MAINTENANCE DEPOT

The Traction Maintenance Depot (TMD) will be connected to the rest of the on-site trackwork by a double-track chord, with locomotives and rolling stock being stabled either longitudinally alongside the TMD or moved sideways in and out of the TMD internal sidings via a Traverser. The TMD is anticipated to be equipped with facilities for refuelling, maintenance and traincrew sign-on / sign-off.

Examples of Intermodal Terminals

EXPRESS FREIGHT TERMINAL

The Express Freight Terminal (EFT) will be connected directly to the main line via the WCML Fast Lines arrival / departure sidings, as well as the WCML Northampton Loop arrival / departure sidings via the internal access chords. The siding serving the EFT will be electrified. The EFT will comprise a covered platform level with the internal floor height of the trains, allowing roll cages and pallet trucks level access for quick movement of goods on and off the trains, the opposite face of the platform allowing goods vehicles to dock onto the EFT to similarly achieve quick movement of goods. A one-way internal access road layout would allow goods vehicles access to the rest of the site.

20.0 RAIL FREIGHT INTERCHANGE OVERVIEW

As noted earlier in the statement the development of SRFI forms a component of a wider national need in support of economic and environmental objectives. The development of SRFI in Great Britain reflects a successful synergy of public policy and commercial drivers, as much to ensure an efficient logistics sector on which the wider economy relies, as to ensure continued growth in mode shift of freight from road to rail for economic and environmental reasons – the common theme being the need for much greater levels of rail-served floorspace at SRFI.

The evolution of a positive and supportive public policy framework for SRFI development (culminating in the National Policy Statement for National Networks or NPS NN) has, in turn, created favourable conditions for SRFI development and use. Each of the 6 SRFI developed to date in Great Britain has attracted occupiers and investment, generated employment and new rail freight services. This small network of interconnected SRFI now provides rail service linkages between the regions, the main deepsea ports and mainland Europe via the Channel Tunnel.

Like other road-served distribution parks, the network of SRFI includes sites which have successfully secured their respective occupiers, users and rail services, despite in some cases being in close proximity to other SRFI and RFI (eg Hams Hall, Birch Coppice and Lawley Street). In some cases, proximity has enabled some to be served by joint services (eg from Italy to DIRFT and Hams Hall).

The potential maximum scale of SRFI development, and associated contribution to mode shift of freight from road to rail, has been addressed by Network Rail in their 2013 Freight Market Study, which identifies a pipeline of SRFI opportunities (including Rail Central) capable of increasing the level of rail-served floorspace. Network Rail's forecasts suggest the potential for significant increase in floorspace could grow rail freight traffic from 2.9 million tonnes per annum at present to over 75 million tonnes over the next 30 years – the largest single source of rail freight growth.

The Government has endorsed the forecasting approach as robust, demonstrating the scale of pressure to deliver an expanded network of large SRFIs across the regions, to accommodate the long-term growth in rail freight. The Government has recently expressed concerns in the 2016 Rail Freight Strategy that without much faster and greater expansion of the network of SRFI in the coming years, only a fraction of the associated mode shift of freight to rail will be achieved. Through the NPS NN and recent Rail Freight Strategy, Government has therefore reiterated the need for an expanded network of large SRFIs across the regions, to serve regional, sub-regional and cross-regional markets.

Like wider road-served distribution parks, the ability to expand SRFI is finite, not least due to surrounding site constraints. As the existing first-generation SRFI exhaust their respective capacity for floorspace and rail freight services, so additional sites for SRFI such as Rail Central will need to be brought forward.

Examples Rail Freight Activity

How a Strategic Rail Freight Interchange (RFI) Works

Within the non-bulk sector of the rail freight market most relevant to SRFI (ie excluding bulk commodities such as coal, aggregates, steel and petrochemicals), three main types of rail-based distribution service are used:

- Movement between rail-served production and/or distribution sites;
- Movement of containers between ports and inland interchanges;
- Movement of goods between non rail-served premises, using rail transport for the primary ‘trunk’ haul.

The range of activities associated with SRFI typically include:

Road and rail haulage services;
- Road / rail interchange facilities;
- Receiving of loads into warehousing;
- Breaking down large deliveries for redistribution (“break bulk”);
- Storage of goods for later processing / distribution;
- Processing of goods (eg re-labelling, repackaging;
- Resorting goods into consolidated outbound deliveries;
- Despatching of loads from warehousing;
- Management and planning of distribution activities up and down the supply chain.

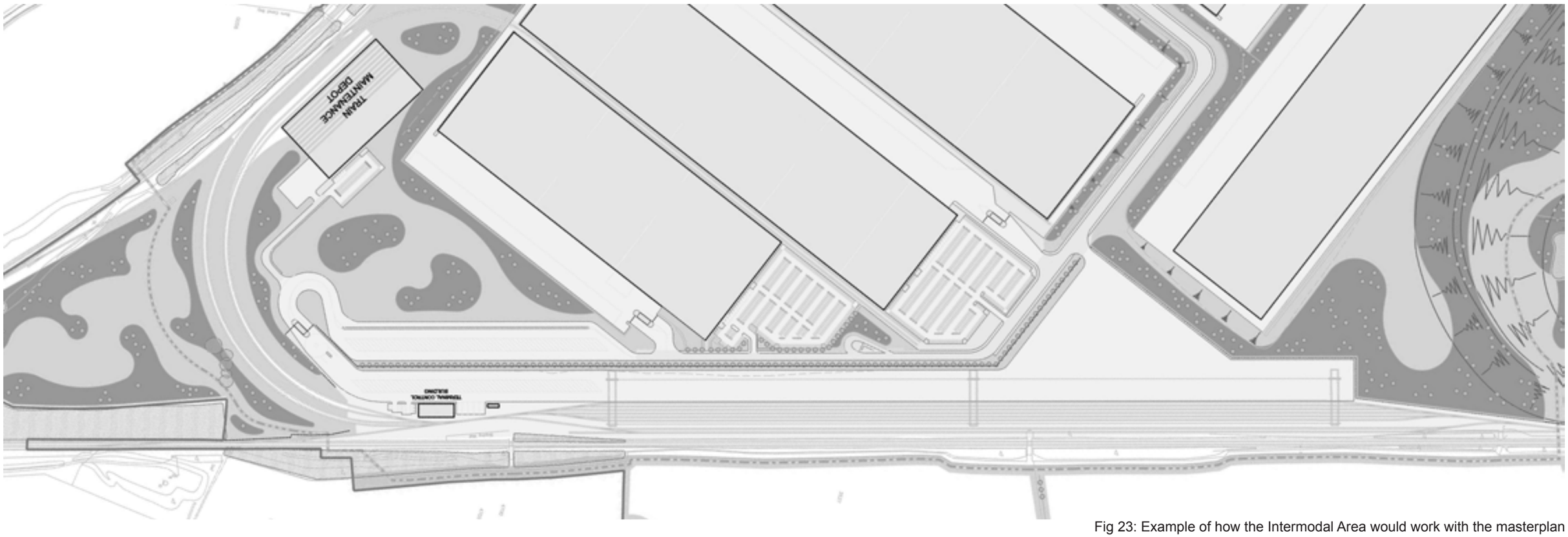


Fig 23: Example of how the Intermodal Area would work with the masterplan

SRFI provide rail freight interchange facilities for both on-site and off-site users, moving freight to and from the site by rail and road. The three main types of rail service which SRFI such as Rail Central can cater for include:

- Intermodal services, moving containers of goods across multiple modes of transport;
- Conventional wagon services, containing goods moved between production and distribution facilities with no intermediate use of road haulage;
- Express freight services, moving time-sensitive goods at high speeds between distribution hubs and satellite terminals serving urban areas.

Intermodal Terminal

The Terminal will be equipped with Rail-Mounted Gantry cranes (RMG), spanning the 6 handling sidings and adjacent container storage and HGV access lanes, allowing fast transfer of containers between modes and intermediate storage.

The RMGs will be supplemented by use of reachstackers serving an adjacent container storage area. Internal Movement Vehicles (IMVs or “tugmasters”) can be used to move containers between the Terminal and any of the warehouse units on site, alongside standard HGVs moving containers to and from site to other companies located in the surrounding area. Segregation of road and rail vehicle movements, together with a one-way circulation of HGVs through the Terminal handling area will optimise operations and avoid conflicting movements.

The Railway Sidings

The site will be connected to the West Coast Main Line (Northampton Loop and Fast Lines) at either end, allowing direct access for trains from either direction of travel, linked by a double-track internal access chord for maximum flexibility within the site. The main line connections, arrival / departure lines and internal access chord will be electrified, allowing use of diesel, electric and bimodal locomotives and rolling stock to access relevant parts of the site.

The Intermodal Terminal is provided with 6 handling sidings, all at least 800m in length, removing the need to split trains into sections for handling.

The Rail-Linked Warehouse units are each provided with a dedicated handling siding running parallel to (inside or alongside) the longest face of the building, again to remove the need to split trains into sections for handling.

The Express Freight Terminal has a dedicated siding forming a loop off the West Coast Main Line (Fast Lines), allowing quick access for trains to and from site, serving a platform of 400m in length affording quick cross-docking with HGVs on the opposite side of the platform.

The Traction Maintenance Depot (TMD) has a double-track access chord to the building, from where traction and rolling stock would be stabled alongside the building or moved inside on a traverser.

Each of the sidings is spaced to facilitate access by groundstaff to the trains to unlock or secure containers as required, or to carry out train pre-departure inspection. Provision is made for shunt necks and/or cripple sidings at either end of the intermodal terminal, where defective (known in the industry as ‘crippled’) wagons can be stored pending attention either within the sidings, or within the TMD.

Public rights of way across the site have been routed so as to avoid conflict and security hazards and to maximise the attraction of passing through the scheme.

Private Road Network

The network of roads within the site will remain private. This will provide the economic benefit of enabling occupiers to employ IMVs operating on “red diesel”.

21.0 SUMMARY

In summary the key components of the proposed scheme are to provide:

- Up to 702,097 sqm (GEA) of rail connected and rail served warehousing and ancillary service buildings including a lorry park and bus terminal;
- An intermodal freight terminal with direct connections to the Northampton Loop Line, capable of accommodating up to 13 intermodal trains per day and trains of up to 775m long, including up to 3 gantry cranes, container storage, a train maintenance depot and facilities to transfer containers to Heavy Goods Vehicles (HGV);
- A potential express freight terminal with direct connections to the West Coast Main Line (WCML), capable of accommodating up to 13 trains per day and trains of up to 240m on the express terminal, a freight platform with associated loading and unloading facilities;
- New road infrastructure including a new separated access point on the A43 (T), an internal site underpass (under Northampton Road);
- Improvements to Junction 15A of the M1 Motorway;
- Other minor highway works in the surrounding area;
- Strategic and structural landscaping and developmpent of open space including alterations to public rights of way, the creation of publicly accessible open areas, flood attenuation, and the partial diversion of the Milton Malsor brook. This will mitigate some effects arising on biodiversity as a result of the Proposed Development within the Main SRFI Site; and
- Provision of an ecological area to the south-west of Junction 15A to mitigate habitat loss at the Main SRFI site

Rail Central will provide a flexible approach to the form of development with a firm commitment to delivering a quality working environment that will take advantage of the opportunities the site presents whilst addressing the key constraints. In doing so the scheme will seek to provide:

- a well-integrated development
- a sustainable place
- connectivity
- protecting residential amenity
- respecting the landscaping
- recreation and ecological enhancements

The landscape design will be key to the success of the developments integration in to the surrounding area. The following key objectives will be implemented:

- add to the woodland, calcareous grassland and neutral grassland habitat reservoirs
- mitigate the loss of existing field edge vegetation by the creation of interlinked habitat corridors
- utilise the Grand Union Canal Blueway to provide additional complementary habitat and transient wildlife
- diversion of footpath links to ensure continued connectivity within the surrounding landscape
- creation of new publicly accessible space within the site adjacent to re-routed footpaths connecting into the key green infrastructure links surrounding the site
- creation of a new ecological mitigation area

The proposed scheme will also look to include attenuation ponds/basins to provide additional storage and deliver the ability to improve water quality. It is also intended to include swales or similar features as conveyance systems and to provide water treatment benefits. A number of watercourses will need to be diverted to maintain the current flows from one side of the site to the other to maintain connectivity.

Key works to the existing highway will be undertaken to ensure deliverability of the scheme whilst improving the current road network. Mitigation measures to several junctions within the wider context of the site have been identified and will be agreed with the relevant authorities to support the application.

In terms of the design of the future development of Rail Central the details set out in the Design Guide provide a clear framework and outline the requirements that future planning and reserved matters applications shall adhere to.

The Design Guide section provides certainty for the local authority, people living nearby, owners of existing buildings and incoming occupiers as to the eventual form of the completed development.

22.0 CONCLUSION

We believe Rail Central is capable of becoming a major asset to Northamponshire and the surrounding areas. A SRFI of this scale and quality would not only create over 8,000 jobs but would generate enormous investment to the area and local economy.

The development would provide a major shift in the movement of goods from road to rail which is fast becoming a vital component in a more sustainable future.

It can be seen from other SRFI's in the country that there is a high demand from the supply chains within the logistics industry for quick and efficient methods to move goods. Rail Central would offer this provision and therefore assist with the demand.

There are clear benefits to the scheme due its strategic location to both the major road networks, rail links and the nature of the site, an important factor for accommodating a new intermodal terminal.

Rail Central would provide efficient and state-of-the-art intermodal facilities, and importantly, would enable logistic operators and local businesses to take advantage of the benefits of a rail served logistics park.

Whilst the scale of this development will have an effect and impact upon the local community, our proposal demonstrates how it has been thoroughly considered as part of the Environmental Impact Assessment and then carefully mitigated.

The vision and design principles that have been set out will ensure Rail Central will become an exemplar facility providing for the local area, wider region and UK as a whole.

APPENDIX A

Rail Central:

Landscape and Ecological Infrastructure Strategy

Rail Central
Northamptonshire

February 2018

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Introduction

The proposed development will have a series of landscape corridors focused around the periphery of the site and adjacent to internal road corridors. The landscape proposals for these zones will be based on the following key design principles.

- To minimise the effect of the development on the adjacent landscape character and on views towards the site through the use of mitigation mounding and native structural planting belts.
- To integrate drainage and acoustic mitigation into the design to provide a holistic landscape strategy that responds to the existing site constraints and surrounding receptors.
- To maximise the ecological mitigation within the landscape zones through the retention and enhancement of the existing vegetation framework and field pattern where feasible.
- To provide connectivity for wildlife through the creation of a matrix of different habitats providing inter connectivity between the different zones and into the wider area. Mitigation will be implemented where required to respond to individual species needs and provide a robust site specific solution.
- To provide connectivity both through the site and into surrounding areas. The development will incorporate a number of diverted footpaths along with new footpath links. Footpaths around the periphery of the site will be placed in broad landscape corridors to retain openness and provide a setting.
- In order to minimise the engineered look of the proposed mitigation mounding, external slopes will be kept to a maximum slope of 1 in 5. The mounding will also follow existing contouring on site to create a more naturalised landscape edge to the proposed development. Slopes facing in towards the proposed development will be a maximum of 1 in 3 to ensure that the proposed mounding can achieve the intended level of visual mitigation of key views towards the development and also support structural vegetation. Mounding will be kept close to the development edge to ensure the maximum amount of amenity space can be created around the periphery of the site.
- To implement the landscape proposals in accordance with current best practice.

The successful implementation of the landscape strategy will depend upon the continuation of these key design principles into the detailed design process and the subsequent maintenance and management plans put in place to ensure the landscape establishes through to maturity.

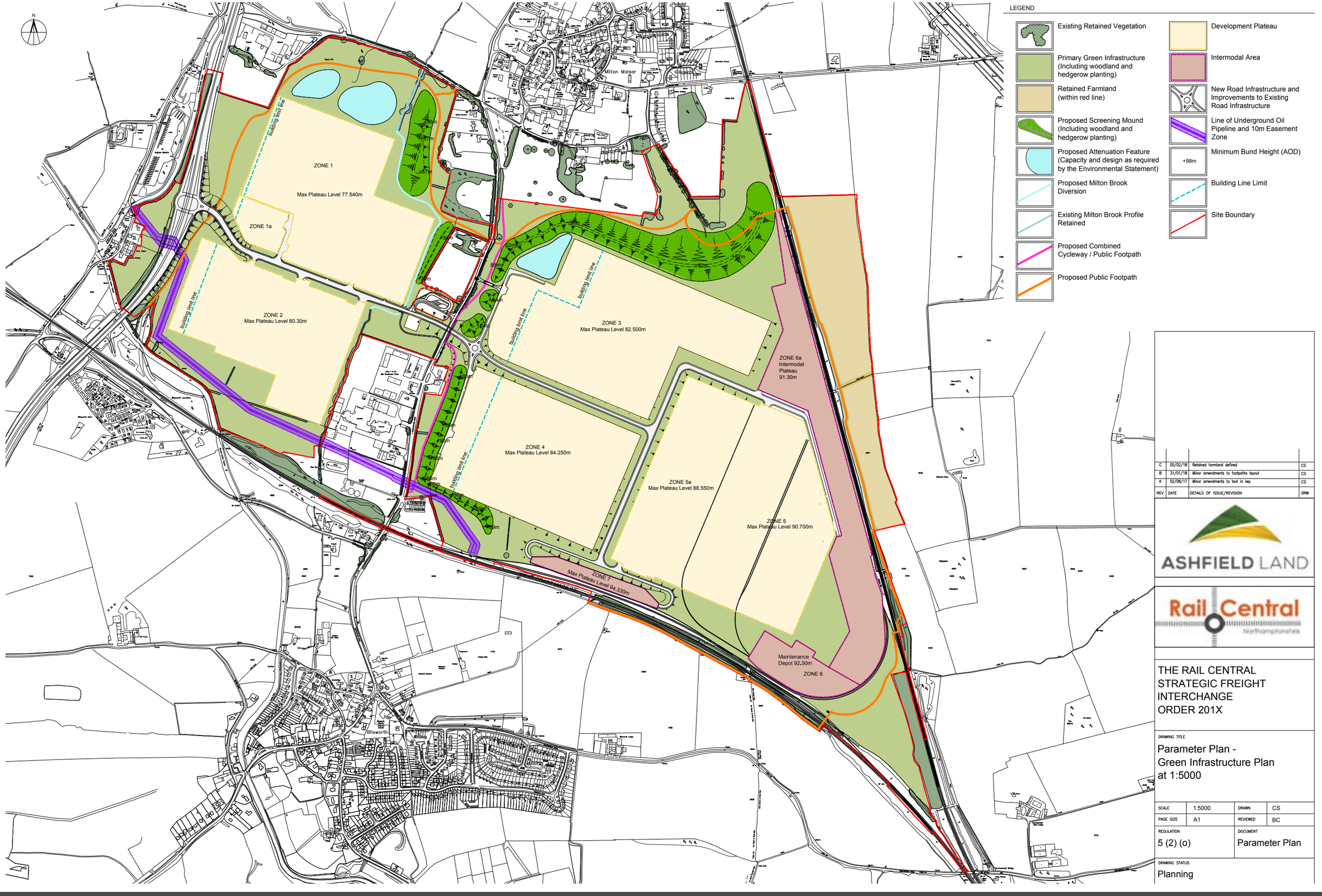
While the responsibility of the implementation of the landscape strategy and subsequent management of landscape ultimately rests with the developer, the possibility of community engagement with the proposals will be explored through dialogue with the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire and through approaching representatives of both Milton Malsor and Blisworth Parish Councils. The key areas of landscape mitigation will be safeguarded either through the creation of a community trust or by some other means to ensure their on-going protection from any future development and to ensure continued public accessibility. A 15 Year Soft Landscape Maintenance, Ecological Enhancement and Overall Management Plan has been produced for the proposals to provide a basis for the successful establishment and ongoing monitoring and development of the landscape proposals.

There is approximately 116.7 hectares of structural landscape shown on the Green Infrastructure Plan for the main site. Of this 13.8 hectares is retained farmland to the east of the Northampton Loop and 3.2 hectares will be developed as a new pocket park to the west of the A43. In addition to this a further 26 hectares of land to the south of Junction 15A will be developed as an ecological mitigation area.

Within the main site, the development will result in the loss of approximately 12km of existing hedgerows including a number of significant hedgerow trees. A veteran tree assessment was carried out on trees across the site which identified a total of 26no. veteran trees, 1no. notable and 17no. locally notable trees that would require removal to facilitate the development.

The Green Infrastructure plan on the following page defines the landscape parameters for the site. These include the location of proposed screening mounds with spot heights, the extent of retained vegetation, the route of the diverted Milton Malsor Brook, proposed attenuation features, retained farmland and proposed diverted footpath routes.

View of Rail Central site from the public footpath leading down from Blisworth



REV	DATE	DETAILS OF ISSUE/REVISION	DRW
C	05/02/18	Retained farmland defined	CS
B	31/01/18	Minor amendments to footpaths layout	CS
A	02/08/17	Minor amendments to text in key	CS

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Rail Central Northamptonshire

THE RAIL CENTRAL STRATEGIC FREIGHT INTERCHANGE ORDER 201X

DRAWING TITLE

Parameter Plan - Green Infrastructure Plan at 1:5000

SCALE	1:5000	DRAWN	CS
PAGE SIZE	A1	REVIEWED	BC
REGULATION	5 (2) (o)	DOCUMENT	Parameter Plan

DRAWING STATUS

Planning

LEGEND

- Existing Vegetation Retained
- Existing Vegetation Removed
- Proposed Blocks of Native Tree and Shrub Planting
- Proposed Scrub Areas
- Proposed Formal Planting
- Proposed Hedgerow
- Proposed Grass and Wildflower Areas
- Retained Farmland (Within Red Line)
- Existing Footpath
- Existing Footpath (Removed)
- Proposed Footpath
- Proposed Cycleway / Footpath
- Proposed Screening Mound
- Proposed Water Body
- Existing Retained Water Body
- Site Boundary
- Oversized Culvert Habitat link

REV	DATE	DETAILS OF ISSUE/REVISION	DRW
G	06/02/18	Drawing block added	CS
F	02/02/18	Minor amendments to footpath layout and redline	CS
E	29/06/17	General amendments to layout, drawing block added	CS
D	07/04/17	Further minor amendments to layout	CS
C	24/03/17	Amended rail layout and updated plot levels	CS
B	06/03/17	Minor amendment to redline and diverted footpath route	CS
A	02/03/17	Amended rail layout and maintenance depot	CS

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THE RAIL CENTRAL STRATEGIC FREIGHT INTERCHANGE ORDER 201X

DRAWING TITLE
ILLUSTRATIVE LANDSCAPE MASTERPLAN AT 1:5000

SCALE	1:5000	DRAWN	CS
PAGE SIZE	A1	REVIEWED	BC

REGULATION: 5 (2) (o)
DOCUMENT: Masterplan
DRAWING STATUS: PLANNING
DRAWING No: 1627-15-25
REVISION: G

The Illustrative Landscape Masterplan on the previous page has been produced to demonstrate how the site may be developed and how the various design principles would be applied to a typical development layout. This more detailed scheme increases the total area of soft landscape on the main site to approximately 128.8 hectares

1. Publicly Accessible Structural Landscape Zones

Approximately just over half of the structural landscape around the periphery of the site will become publicly accessible amenity land. In order to fully explain this provision, these zones have been further split down into specific areas and described below.

1A. Arm Farm Pocket Park

The area of land to the west of A43 will be safeguarded to provide mitigation planting for the proposed development and A43 junction. In addition to the mitigation planting, the land will be developed as an informal pocket park for use by adjacent residents and also utilised for ecological mitigation. This part of the sites proximity to the canal makes it of particular importance for bat mitigation with the potential to construct purpose made features. The proposed park will be low key and kept informal with native planting. The Northamptonshire Green Infrastructure Plan aspires to create a corridor of calcareous grassland along either side of the A43. The scheme will look to utilise the areas of grassland within this pocket park for development as calcareous grassland through the incorporation of chalk debris or limestone chipping within the soil mix.

1B. Northampton Road Greenway

The Northampton Road links Milton Malsor to Blisworth. The existing route is defined with strong highway hedges broken up by intermittent areas of commercial and residential development. The proposed development has been set back from the existing road to provide a landscape buffer that will reduce the potential impact on landscape character between the two villages. Mitigation mounding will wrap around the edge of the development zones to the east of Northampton Road which will aid with screening views across towards the proposed units and associated infrastructure.

Existing hedgerows and hedgerow trees along Northampton Road will be protected and retained where feasible and reinforced with small pockets of new woodland planting. The bridge over the underpass linking the two development zones to the east and west of Northampton Road will be wide enough to accommodate a grass verge between the road and footpath and also a native hedgerow to aid with screening views back towards the development and to provide continuation for pedestrians and road users. The footpath link between the two villages will be upgraded to a combined cycleway / footpath providing an ‘off road’ cycle link between the two villages and into the proposed development.

1C. Milton Malsor Ecological Corridor

The landscape between the proposed development and Milton Malsor will provide a strong screen to views back towards the development through the combination of earth mounding and structural landscape. The site topography will also allow this area to be utilised for attenuation ponds which will be designed to provide additional ecological and amenity benefit. To the north of the proposed earth mounding the existing field structure and vegetation will be retained to protect the existing village edge character with the existing fields developed as species rich neutral grassland in line with the Northamptonshire Green Infrastructure Plan.

The existing barns to the west of Barn Lane will be retained and utilised for both barn owl and bat mitigation. The possibility of providing an interpretation facility for the local community will also be explored within this ecological corridor with any proposed facility located to avoid disturbance to wildlife. This could be utilised by local community groups and by schools looking to explore the ‘Forest Schools’ learning initiative. There is also the possibility of working with the Wildlife Trust to provide interpretation boards at key points within the landscape zones to explain different elements such as bat and barn owl mitigation, pond creation, habitat creation and canal heritage.

Example of structural planting and earth mounding

Example of drainage feature adjacent to development

1D. Blisworth to Collingtree Footpath Diversion

The proposed development will require the diversion of the existing Blisworth to Collingtree footpath around the eastern edge of the development. The proposed re-routed footpath will run adjacent to the existing West Coast and Northampton Loop train lines along the existing field edge. It will cut across the site in the south eastern corner to minimise the additional distance of the diversion. Where the footpath runs adjacent to the railway, new hedgerow planting will be planted between the footpath and the railway to provide an increasingly effective screen to views towards the development and encourage views out to surrounding countryside. Where the footpath cuts across the corner of the site, the surrounding landscape will be developed as woodland habitat in line with the Northamptonshire Green Infrastructure Plan.

1E. A43 Ecological Corridor

The existing footpath linking the Grand Union Canal to Milton Malsor will need to be diverted to facilitate the development. It will be re-routed around the western edge of the development linking though an underpass under the proposed site access road. Existing and proposed native tree planting will provide a setting for this diverted footpath with mounding providing some additional screening of views towards the development. The Northamptonshire Biodiversity Action Plan shows this area of land as being within the Calcareous Grassland Habitat Reservoir so the masterplan will look to develop areas of calcareous grassland where ground conditions and soil type permit. This area will also be managed as a dark zone to minimise light spillage from the development into the landscape zone.

The design of the proposed A43 junction has aimed to retain the maximum amount of existing roadside vegetation. Where vegetation has been removed to facilitate the construction of the slip roads to the new junction it will be re-instated with robust new native planting belts.

Example of a public footpath within a landscape setting

Example of retained vegetation within structural landscape

Example of publically accessible structural landscape

2. Structural Landscaping Zones

In addition to the publicly accessible areas listed above there are also a number of other landscape zones that can be utilised for mitigation around the periphery of the site. These are summarised below.

2A. Milton Malsor Brook Ecological Corridor

The existing Milton Malsor Brook will need to be diverted around the proposed development. It is proposed to minimise the length of brook that is diverted in order to retain and protect the maximum amount of existing watercourse and associated vegetation. Where the watercourse is diverted it will be profiled to reflect the requirements of the Environment Agency with a suitable width for maintenance access provided. Where appropriate the watercourse profile will be varied to provide a variety of flow rates, depths and widths to maximise ecological potential.

2B. West Coast Mainline Ecological Corridor

To the east of Northampton Road, there is a significant band of soft landscape proposed between the west coast mainline and the proposed development. Access to these areas is relatively restricted due to the proposed rail access to the development and the express platform. The emphasis for the landscape in these areas will be to provide strong bands of native structure planting that will begin to soften views from Courteenhall Road towards the proposed development. This structure planting will be complemented with species rich neutral grassland areas and scrub areas to provide a matrix of interconnecting habitats linked together using oversized culverts crossing any road or rail infrastructure.

2C. Grand Union Canal Ecological Corridor

To the west of Northampton Road the development borders the Grand Union Canal which is designated as a local wildlife site and is considered an important ecological feature within the county. Adjacent to the canal there two further sites that are identified as potential wildlife sites, one between the West Coast Mainline and Station Road and one sited between the A43, West Coast Mainline and the Grand Union Canal. Both of these sites have a mixed habitat of woodland, scrub and species rich grassland. The landscape buffer between the canal and the proposed development will be established with the aim of complementing and expanding these potential wildlife sites by linking them both to provide a continuous strip of mixed habitat on both sides of the canal. The intention is that this segment of land will not be generally accessible to the public in order to maximise its ecological potential. This area will also be managed as a dark zone to minimise light spillage into the landscape zone.

3. Estate Road Landscaping

In addition to the structural landscape around the periphery there will be wide landscape strips running adjacent to proposed estate roads. This internal landscape will follow a graded level of formality. The central estate road will have an avenue of trees running on both sides of the road within semi native and ornamental planting. Behind this native structure planting will provide a buffer to the development. Radiating out from the main estate road the landscape will become gradually more naturalised with the emphasis increasingly on the use of native species and habitat creation. This will link back to the peripheral landscape described above that will provide a robust setting for the development and tie it back to the surrounding landscape. Connectivity through the site will be maintained for invertebrates and small mammals through the creation of new native hedgerows and ditch lines running through the site. These will be connected together through a series of oversized culverts running under the proposed road and rail infrastructure.

4. Junction 15A Ecological Mitigation Area

To the south of Junction 15A there will be an additional 26 hectare area of land secured for ecological mitigation. This will seek to complement the onsite mitigation with a number of bespoke mitigation measures. The existing area of marshland which is recognised a potential wildlife site will be retained and actively managed to maximise its ecological potential. The existing trees and woodland will also be retained with a variety of bird and bat boxes installed on key trees throughout. Proposed native tree and shrub planting alongside the highway will connect up existing vegetation to create wildlife corridors. Retained arable farmland will be managed to maximise the habitat potential for ground nesting birds with wildflower margins and smaller field sizes divided with new hedgerows and ditches. The remaining area will be developed to complement the adjacent county wildlife site that runs along the canal. This will be seeded with species rich native grass and wildflower which will be maintained through low level grazing. In addition the grazed areas will be split through a series of new ponds, hedgerows, ditches, marshy areas and scrub. The existing barns at the centre of the site will be restored to maximise their potential for barn owls and bats.

5. Conclusions

While the proposed development will inevitably result in the loss of a large area of farmland and associated field edge vegetation the proposals look to offset this through the development of a series of biodiverse ecologically rich landscape zones that will look to provide a net gain in area of woodland habitat, species rich grassland habitat, wetland habitat and overall length of hedgerow. The loss of farmland will be partially offset by the retention and biodiversity enhancement of an area of farmland to the east the Northampton Loop.

The proposed landscape scheme will provide a setting for the development with an expansive area of publicly accessible land to provide a landscape structure for the diverted footpath routes and additional footpath links. It will also provide an ‘off road’ cycleway connection between Blisworth to Milton Malsor. The publicly accessible land will feature numerous interpretation boards that explain local heritage features and also provide opportunities for use as an educational and recreational resource for the local community. An illustrative landscape masterplan has been produced to demonstrate the various principles described above and how they would be applied to a typical development layout.

Example of a newly planted structural landscape

Typical estate road landscape

Typical internal landscape

LEGEND

- Existing Vegetation Retained
- Proposed Blocks of Native Tree and Shrub Planting
- Proposed Scrub Areas
- Proposed Hedgerow
- Proposed Grass and Wildflower Areas
- Proposed Grass and Wildflower Areas (To be Grazed)
- Proposed Marshland Area
- Retained Farmland (Within Red Line)
- Retained Marshland Area
- Existing Barns to be Renovated for Bats and Barn Owls
- Pole Mounted Barn Owl Box
- Standing Deadwood / Deadwood Tree Piles
- Existing Retained Water Body
- Proposed Pond
- Proposed Ditch Line
- Site Boundary
- Existing PRoW / Towpath
- Proposed PRoW
- Non-statutory designated sites boundaries supplied by NBRC January 2018

REV	DATE	DETAILS OF ISSUE/REVISION	DRW
A	06/02/18	DCO drawing frame added, general amendments	CS

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DRAWING TITLE

JUNCTION 15A ILLUSTRATIVE LANDSCAPE MASTERPLAN

SCALE	1:2000	DRAWN	CS
PAGE SIZE	A0	REVIEWED	BC

REGULATION	DOCUMENT
5 (2) (o)	Masterplan

DRAWING STATUS

Planning

DRAWING No	REVISION
1627-15-201	A