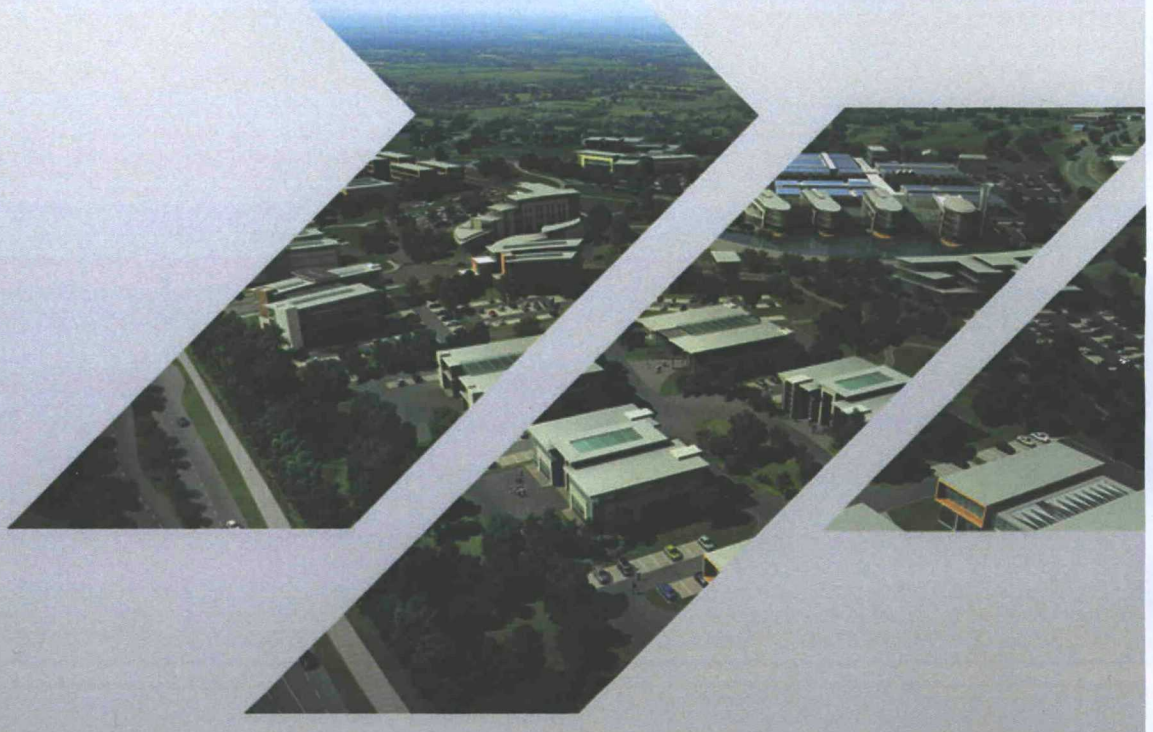
MIRA
TECHNOLOGY PARK

Design and Access Statement

May 2011



Design and Access Statement

Geddes Architects

CONTENTS

1 – Introduction Page 4

2 – The Existing Site Page 6

- Site Description

3 – Contextual Appraisal Page 9

- 3.1 Local Transport Connectivity
- 3.2 Local Land Uses
- 3.3 Archaeology / Cultural Heritage
- 3.4 Existing Built Form
- 3.5 Site Topography
- 3.6 Landscape Character
- 3.7 Local Views and Landmarks
- 3.8 Design Constraints
- 3.9 Design Opportunities
- 3.10 Planning Policy Context

4 – Design Principles Page 22

- 4.1 Masterplan Concept
- 4.2 Built Environment Concept
- 4.3 Landscape Concept
- 4.4 Sustainable Design Concept

5 – Accessibility Page 36

- 5.1 Pedestrian
- 5.2 Cyclist
- 5.3 Public Transport
- 5.4 Private Car
- 5.5 Disabled Access

6 – Site Management Page 39

- 6.1 Security Strategy
- 6.2 Security Overview
- 6.3 Security Concept
- 6.4 Maintenance
- 6.5 Lighting
- 6.6 Utilities

7 – Consultation Page 44

8 – Indicative Masterplan Page 46

- Breakdown by Place

Appendix 1 – Planning Parameters Report Page 58

MIRA TECHNOLOGY PARK

1

INTRODUCTION

MIRA
TECHNOLOGY PARK

1 INTRODUCTION

This Design and Access Statement accompanies an outline planning application for the MIRA Technology Park, submitted on behalf of MIRA Ltd.

These proposals relate to the development/redevelopment of land covering 71.51 hectares which is set within the wider MIRA site of approximately 340 hectares. The proposals in this statement have been developed to explain the underlying design process and rationale for the proposed development of a Technology Park at MIRA, taking into account the context and surroundings, including the physical, social and economic characteristics.

This Design and Access Statement therefore appraises the proposed development against the Government's principles as set out in the Town and Country Planning (Development Management Procedure) Order and associated guidance. The application to which this statement relates is submitted in outline form with the following matters reserved for future consideration:

- layout;
- scale;
- appearance; and
- landscaping

Parameter plans detailing the extent of the above, including maximum and minimum parameters, are provided in the Planning Parameters Report which accompanies the application. The Parameter Plans included with this submission incorporate:

- PP1: Site Plan and Application Boundary;
- PP2: Development Footprint and Height;
- PP3: Land Use;
- PP4: Access and Movement;
- PP5: Landscape Framework.

The Planning Parameters Report is a regulatory document that is supported by this Design and Access Statement, which in turn has informed the development of the aforementioned Parameter Plans. The Planning Parameters Report explains the evolution of the design concept which underpins the proposals.

This statement should be read in conjunction with the other documentation submitted as part of the application, including:

- Covering letter and planning application forms;
- Planning and consultation statement;
- Transport Assessment and Travel Plan;
- Schedule of Drawings;
- Sustainability Statement; and
- Environmental Statement

The 'Application Site' is located within the administrative boundaries of Hinckley and Bosworth Borough Council and North Warwickshire Borough Council and is located along the A5 (Watling Street) at Higham on the Hill, between Atherstone and Hinckley. The extent of the application site is shown on PP1 in Appendix 1.

2

THE EXISTING SITE

MIRA
TECHNOLOGY PARK

2 SITE AND SURROUNDINGS

The extent of the application site is defined by Parameter Plan 1 (Appendix). The site lies primarily within the parish of Higham-on-the-Hill in Hinckley and Bosworth Borough and the great majority is located to the north of the A5 between Atherstone and Hinkley. A small portion takes in the A5 itself and land immediately to the south, within North Warwickshire District.

Much of the site sits within the bounds of the former Second World War RAF Lindley Aerodrome, which became available to the Motor Industry Research Association in 1948.

The airfield runways and control tower remain and are now encompassed by a vehicle test track which combines to form 'The Proving Ground'.

Along with many subsequent metal shed structures that are industrial in feel, site roads and the brick facilities buildings sitting along the A5, the existing development sits within 343 hectares of mostly grassed areas, with some hard standing areas, along with scattered groups of mature trees.

The site rises gently away from the A5 on the south side by some 8 metres in height to the edge of the test track and is bounded on the west by lakes and mature trees fringing Lindley Park and the east by a disused railway cutting, now used as a cycle path and country walk into Nuneaton. Adjacent to this lies the medieval village of Higham on the Hill which is screened from the proving ground by a block of mature trees running along the disused railway cutting.

The far north side of the site peters out into open countryside with scattered blocks of mature trees, farmland and individual houses, as does the opposite side of the A5 trunk road to the south.



MIRA TECHNOLOGY PARK

The application site splits into three distinct areas as shown on the plan below:

Area 1 – (Yellow)

The main campus area at the A5 frontage consists of mainly brick structures from the late 1940s / early 1950s, interspersed with newer steel workshops and test buildings, along with brick offices. This part of the site, measuring 6 hectares, is bounded by flat open arable land which is partially shielded from the A5 by hedging.

The average building height here is two storeys and the uses range from main reception, staff canteen, accounts, personnel, contracts and other general office use to workshops, semi-anechoic and fully anechoic chambers, crash lab and other laboratories.

The area extends to the South of the A5 itself to include a small element of agricultural land in the adjoining administrative district.

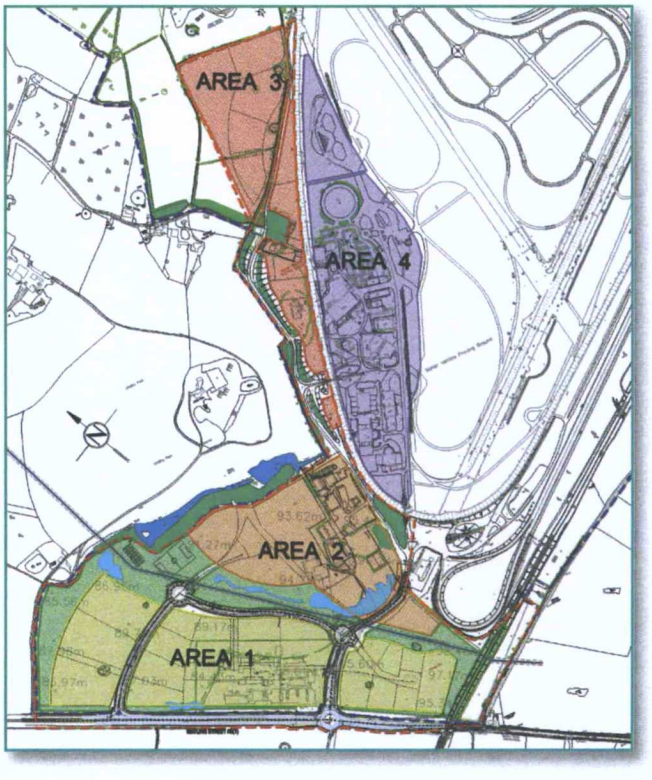
Area 2 – (Orange)

Located to the south of the Proving Ground and test tracks beyond to the north east, this part of the site contains a mix of large brick and steel structures and measures 7.2 hectares. These include EMC (Electro Magnetic Compatibility) laboratories, workshops and a product development laboratory, which can be characterized as industrial in character. This part of the site includes the former Lindley Grange residence which now houses an external customer. To the rear of this is a small rectangular pond surrounded by mature trees.

The north side borders the test track and the west side adjacent to park land contains stands of mature trees. The southeast corner contains a sports field, while the southern fringe of the site opens out onto open arable land which merges with the front area. A trunk gas main traverses this open area at a depth of 1.5m and is treated as an exclusion zone for built development. This will therefore establish the location of the proposed linear park which will separate Areas 1 and 2, providing an opportunity for a landscaped recreational area.

Area 3 – (Red)

Area 3 is located just outside of the track, and currently contains very few built structures. An existing access road runs alongside the site boundary, with planting on both sides. Further to to northeast, the area opens out into fields, with existing stands of mature trees and hedgerows crossing them.



This area may act as a future extension to the Proving Ground Estate, providing a higher level of security. There is the potential to locate a primary substation in this area.

Additionally, for completeness, we note the existing Proving Ground Estate, which lies outside the application site and can be categorized as 'Area 4'.

Area 4 – (Purple)

Area 4 is located to the north of Area 2 and sits to the west of the Proving Ground. This area measures 15.6 hectares and is characterized by recent shed construction, together with a range of brick garage, office, workshop and storage areas plus corrugated iron structures from the Second World War. The average height of buildings here is 2 to 3 storeys and the terrain is generally flat with some stands of mature trees.

Uses in this area vary from conference rooms and office space to climatic wind tunnels, vehicle workshops and off-road testing, with control function over the immediate track areas.

MIRA TECHNOLOGY PARK

3

CONTEXTUAL APPRAISAL

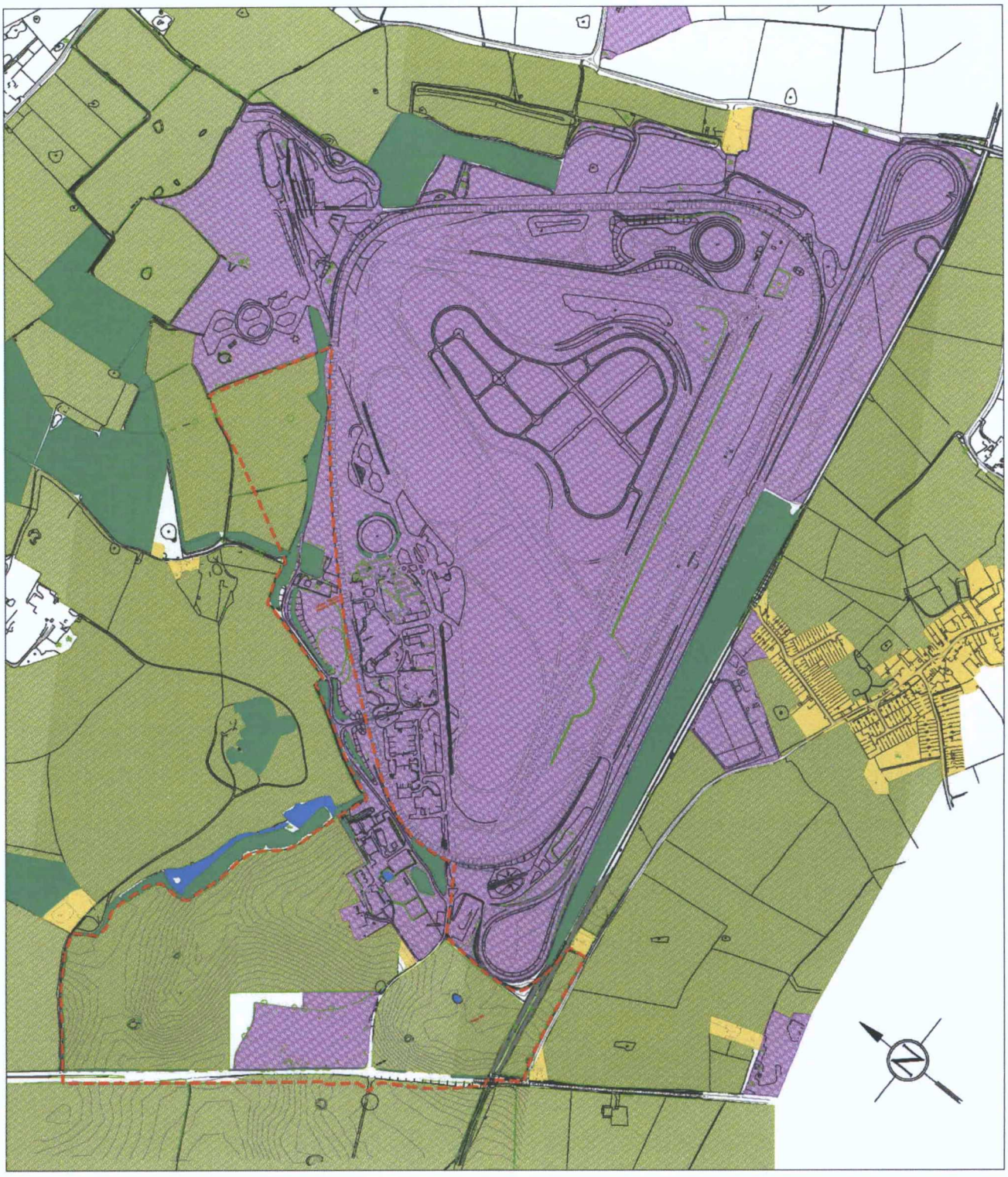
MIRA
TECHNOLOGY PARK





Local Transport Connectivity

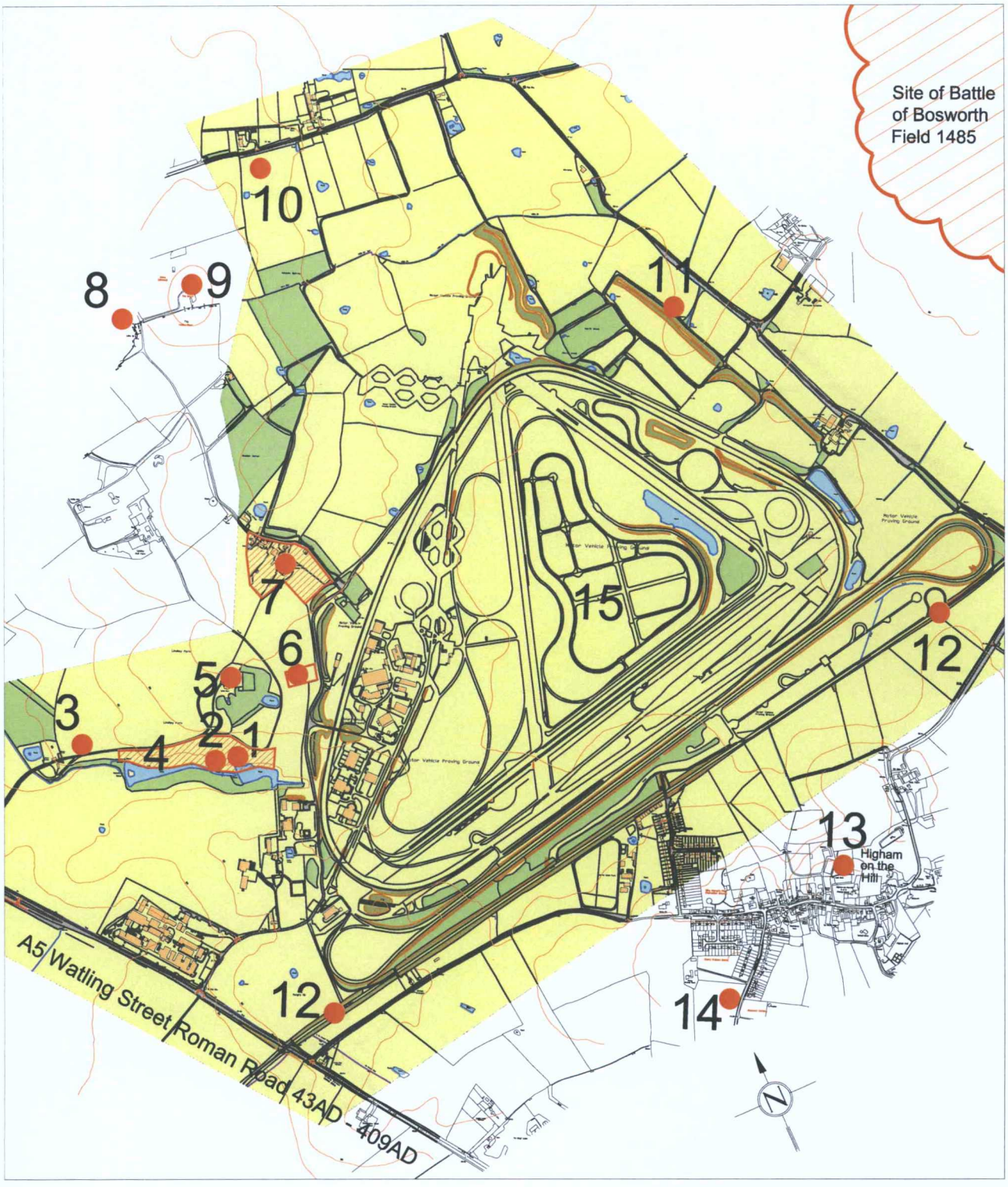
The A5 trunk road passes in front of the MIRA site, and performs a strategic role linking the M69 to the East with the M42 to the West, which makes it an attractive location for many businesses in the area. The nearest rail station is Nuneaton, while the site itself is bounded by National Cycle Route 52 (from Warwick to West of Loughborough), and approached from the south by the Weddington Country Walk, which runs along the disused Ashby - Nuneaton Railway.



Local Land Uses

The immediate area is principally agricultural in use with scattered village areas and individual farmhouses surrounded by open countryside and stands of semi-mature woodland. The South-West is cut by the A5 Trunk road which links the M1 with the Birmingham M6 Toll. Commercial uses include hotel/ conference facilities, stables, nurseries, builders yards and the motor vehicle proving ground of MIRA itself.

- Residential Areas
- Agricultural Areas
- Woodland
- Commercial



ARCHAEOLOGY / CULTURAL HERITAGE

1- Moated Manor House
late medieval, replaced 1705

2- Medieval Chapel 1067-1699
dedicated to John the Baptist

3- Various pottery shards found
Roman 'greyware' and
11th to 15th centuries

4- Deserted medieval village of Lindley
'Lilinge village' in Domesday Book
fully depopulated by 16th century

5- Lindley Hall
built 1705 to replace old hall
demolished in 1926

6- Rectangular enclosure 800BC-42AD
possible iron age crop mark

7- Rowden Medieval Hamlet
Farm House 1067 - 1539

8- Palaeolithic hand axe & 2 scrapers
500,000BC - 10,001BC

9- The Mount
Possible landscape feature
date unknown

10- Ashpole Spinney
Bronze age axe head
2350BC- 1501BC

11- Heath Wood 500,000-150,001BC
palaeolithic flint tools

12- Ashby & Nuneaton Joint Railway
opened 1873, closed 1971

13- St Peter's Church built 1130
Norman tower, medieval sculpture
18th century nave

14- Higham on the Hill (medieval)
several instances of Roman pottery found

15- RAF Lindley
airfield opened Feb 1943 for training until
1945. MIRA commenced operations here in
1948



Existing Built Form

The site is set within a context of open agricultural landscape with scattered farm houses and sheds, the nearby village of Higham on the Hill and a mix of workshops and offices on the MIRA site itself.

The farm houses are generally 2 storey pitch roofed construction, as are the majority of buildings within Higham, although there are single and 3 storey examples as well. The farm barn structures are generally steel framed and metal clad industrial type buildings, 4-6m high.

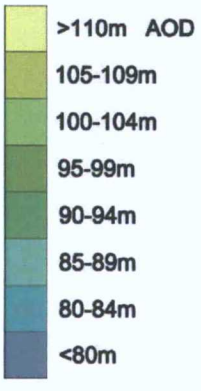
The Kings Lodge Christian conference centre on the A5 is a 3-4 storey pitched roofed brick structure. The current MIRA stock of buildings range from single storey garages through 2-3 storey brick pitched and flat roofed structures to 11m high steel framed metal clad testing buildings.

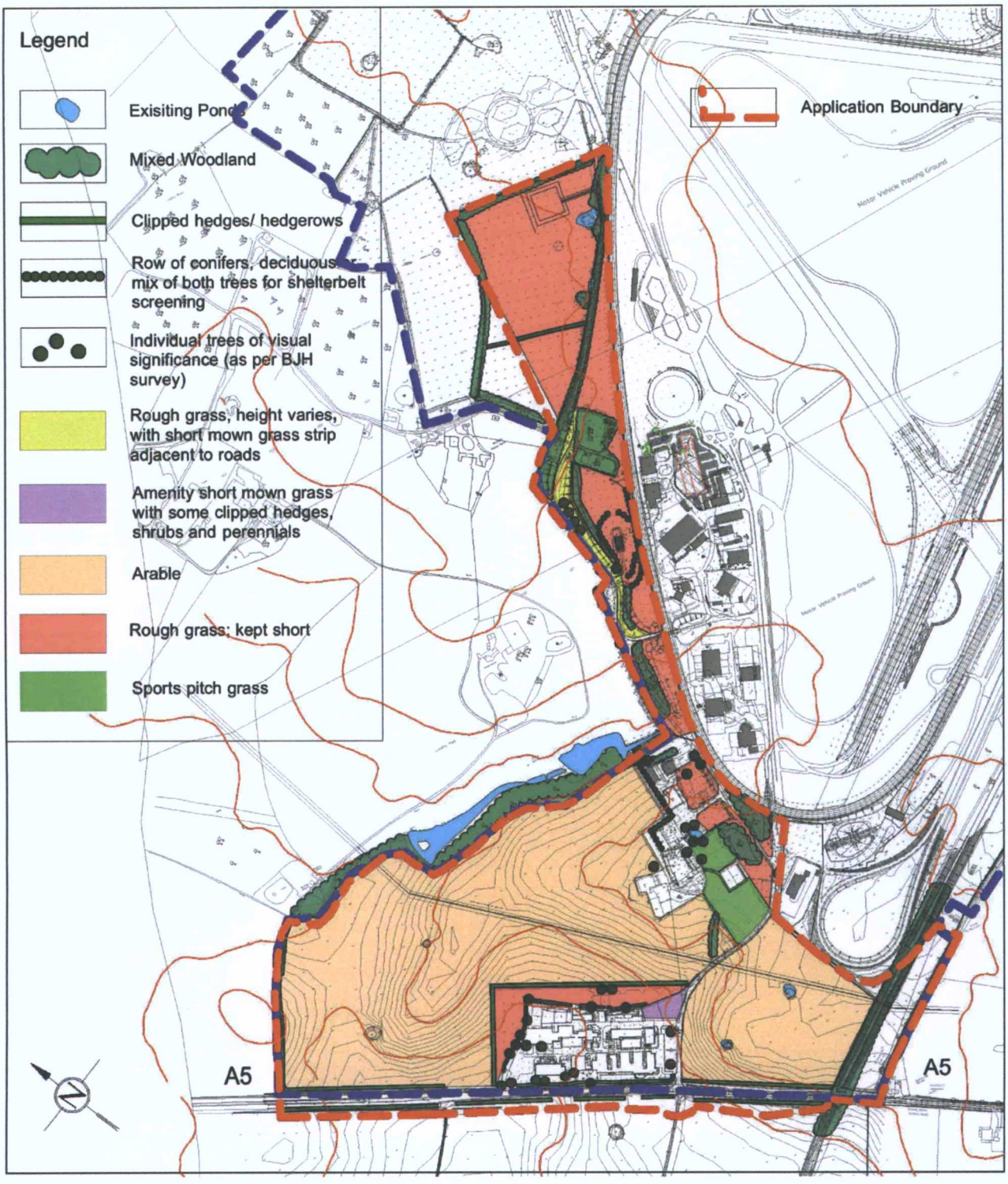
- 1 Storey
- 2 Storey (6m)
- 3 Storey (9m)
- 4 Storey (12m +)



Site Topography

The site, bounded in red on the diagram, is largely flat landscape which being a former RAF airfield is to be expected. The front part of the masterplan area adjacent to the A5 trunk road exhibits more change of level being gently undulating across the frontage, from a narrow ridge on the north-west to a central valley to 'Hungry Hill' in the south-east corner. From the A5 the site rises gently towards the centre where it plateaus out before finally falling away again to the north-east outside of the red lined area.



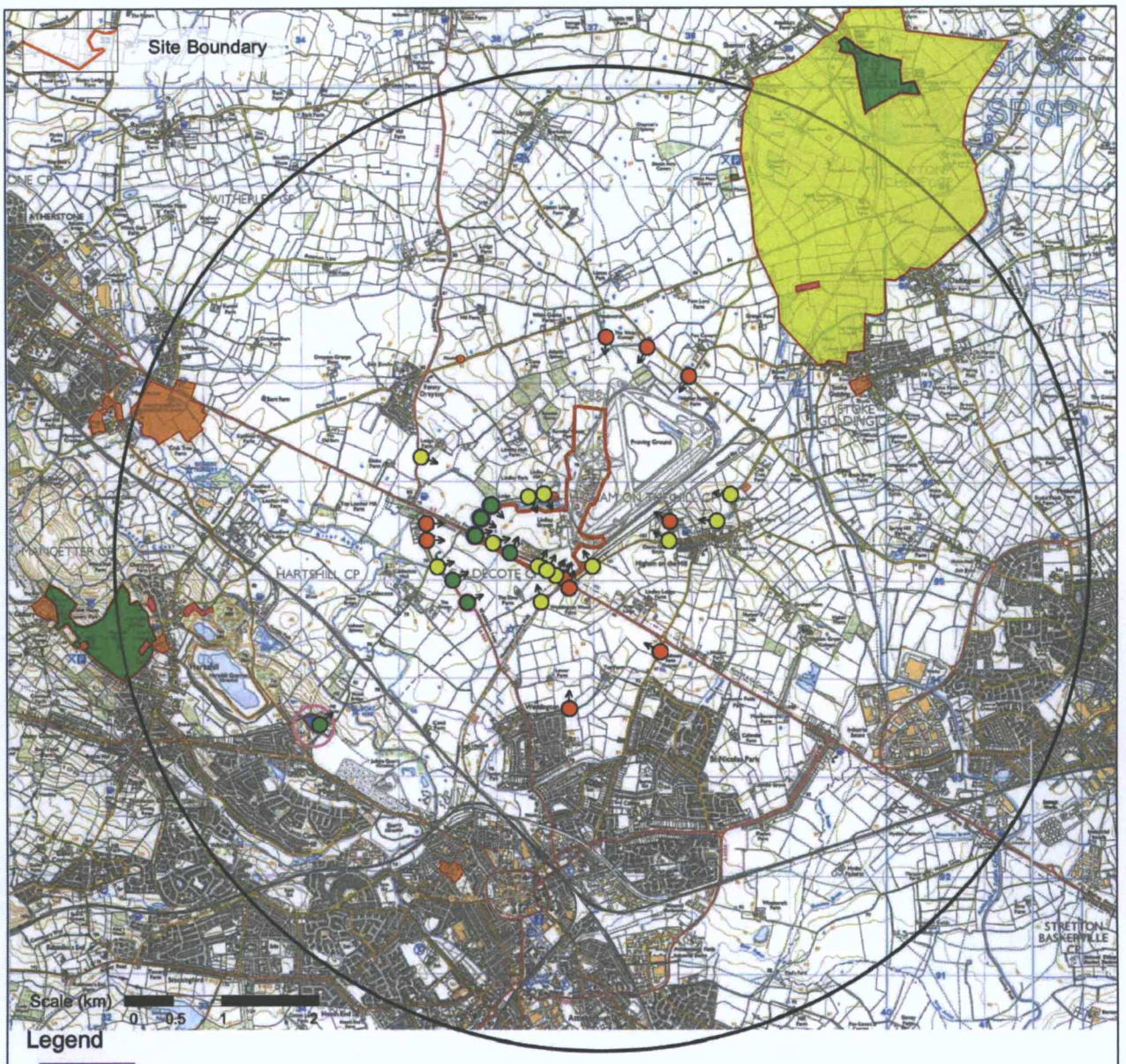


Existing Landscape Character

To the south of the site, adjacent to the A5 the existing MIRA development is surrounded by open agricultural land in arable use with well-maintained hedgerows. The vegetation surrounding the existing development to the northwest of the site is predominantly dry rough grass kept short. A small grass sports area comprising a football pitch and 2 no tennis courts exists in the centre of the development.

Trees and Woodland

A detailed arboricultural assessment of the trees has been undertaken and there are no tree preservation orders on the application site or significant veteran trees. Within the areas of existing development there are occasional groups of trees and hedgerows, which it would be desirable to retain. Some hedgerows to the A5 boundary and small areas of mixed woodland along the western boundary are also visually significant.



Local Views and Landmarks

There are several local landmarks within the 5km radius of the site. The most significant of these is the registered historic battlefield of Bosworth (1485) of national importance and located at the nearest point 3km to Northeast of the site.
Also of local importance is the Hartshill Hayes Country Park, an area of woodland and open hill top approximately 3km to the southwest of the site. The Environmental Impact assessment concludes the future development will not impact on any of the local designations

Visual Integration Impact/and Screening
An extensive Landscape Visual Impact Study has been carried out to assess the impact of the proposals on views from the surrounding public areas. From this study it appears the natural topography and existing tree planting on the boundaries will largely screen views of the proposed development from the North and Northeast. Viewpoints which may potentially experience major adverse impact are from the public footpath along the Northwest boundary, from the A5 and Weddington Way to the Southwest.

3 CONTEXTUAL APPRAISAL

DESIGN CONSTRAINTS AND OPPORTUNITIES

This section appraises the site context, including the immediate and wider site in terms of its physical characteristics, whilst taking into account relevant social and economic characteristics. This analysis has established the following design constraints and opportunities.

3.8 Design Constraints

• Topography

The site generally slopes gently from the southwest to northeast however gradients are significantly steeper in the area of Hungry Hill particularly adjacent to the proposed entrance road. The gradual rise in gradient across the southern development area results in future development becoming potentially more visible from the southwest aspect.

- Existing Built Fabric

  The existing built development within the application site is predominantly located within Areas 1 and 2 of the site. As described in the previous section, these areas are characterised by post Second World War (1940's and 1950's) brick built or corrugated iron structures which are ageing and of restrictive layout and configuration for current operations.

- MIRA and Related Activities

  Given the age and restrictions of the existing built fabric of the site, in terms of physical layout, building size, age and location, both MIRA and related tenants experience a constrained environment as the design, research and development facilities on site are spread across a large area. Moreover, expansion of existing built up areas would exacerbate this position given the piecemeal development of the site over the post war period and the ability of the existing infrastructure to cope.

Furthermore, the existing MIRA headquarters do not reflect the form, layout and physical appearance of comparable automotive technology centers/technology campus establishments such as McLaren Group in Woking and as such need to evolve to compete on the national and international stage.

• Security

The existing development, track and proposed MIRA headquarters will need to be secured from the remainder of the Technology Park both visually and physically to reflect the nature of research and development activities undertaken within this area.

• Gas Main

A high-pressure national gas main dissects the site and restricts any work undertaken in the vicinity such as changes of level, built forms and tree planting. This constrains development in several ways particularly by development on or around this area restricting the number of crossing points for vehicular circulation, drainage, water management and services.

• Ecology

Evidence of Habitats for Great Crested Newts has been established in an existing pond on Hungry Hill. Proposals will aim to retain and protect the pond in accordance with guidelines. All work required in 250m radius to be undertaken by licence from Natural England.

Roadside bunds and planting to the north of the application site are of ecological significance and should be retained and protected as far as possible. Evidence of bats, a protected species, has been found in the Lindley Grange building.

- **Disused railway**

A section of the disused Ashby and Nuneaton Joint railway line runs within the MIRA ownership boundary and is identified in the Hinckley and Bosworth Landscape Character Assessment as a potential green infrastructure link providing a potential traffic-free pedestrian/cycle route connecting Bosworth Battlefield with Nuneaton. However this conflicts with MIRA's requirement for security which precludes public access so close to defined top security operations.

- **Visual Integration Impact/and Screening**

The development area is overlooked from close viewpoints from a public footpath along the northwest boundary and from the A5 and Weddington Way to the southwest.

- **A5**

The A5 is a busy road and traffic studies note that any future increase in traffic generation will require the implementation of physical improvements and other sustainable transport measures. Entrance to the application site is currently restricted to one specific entrance along MIRA Drive.

3.9 Design Opportunities

- **Topography**

Natural undulating open agricultural land offers a large scale landscape which is determined as 'resilient to change' (Hinckley and Bosworth Landscape Character Assessment). The natural higher ground at the centre of the development site lends itself to the location of a new purpose built MIRA headquarters building to create a focal point at the heart of scheme. The surrounding open undulating landform would accommodate a varied composition of built form and landscape buffers to complement the contours of the site to facilitate the expansion of the technology park by developing purpose built research and development buildings and associated testing facilities.

- **Pedestrian/ Cycle Connectivity**

The potential exists to create and extend a network of footpaths and cycle routes throughout the site linking in to existing routes and also to provide a segregated cycle lane to the busy A5.

- **Gas Main**

The high-pressure gas main constrains development along its length but provides the opportunity to designate the area as open space and create a linear green corridor of ecological significance linking to adjacent existing ecological habitats.

- **Drainage/Water management**

The requirement to provide areas of water storage to facilitate drainage creates the opportunity for a series of water features throughout the development significant for biodiversity and amenity value.

- **Security**

The requirement for visual screening to the area proposed for the MIRA headquarters allows the potential for woodland planting.

- **Existing Vegetation**

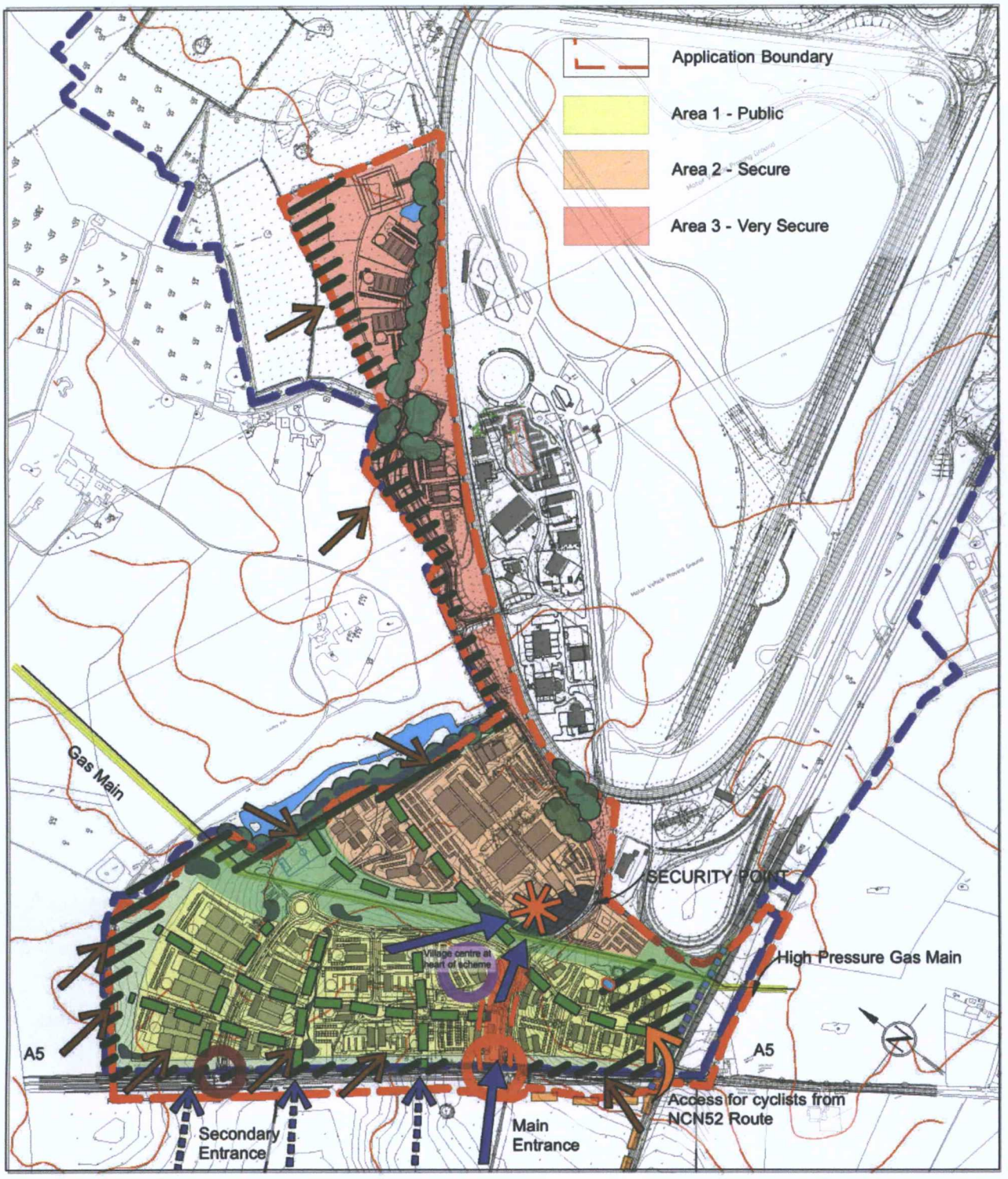
There are few good quality mature trees on the existing site. The development allows the opportunity for tree planting as well as additional woodland, hedgerows and ornamental shrubs and grasses.

- **Ecology**

Very little of the site supports habitats of high intrinsic value. There is the opportunity to improve the biodiversity of the site and create a range of ecological habitats in accordance with Local Biodiversity Action Plan and improve the overall BREEAM rating.

- **A5**

Potential exists to widen the A5 and improve the circulation and traffic flow on a busy congested road and to provide a secondary entrance further to the west of the A5 frontage.



Design Opportunities & Constraints

- Strong views within development to be retained and enhanced
- Views to be screened
- Strategic long view glimpses into development from A5
- Focal point location for HQ building on high point of site
- Existing areas of woodland trees to be retained
- Main access road - dual carriageway with high visibility to buildings on either side
- Existing ponds/waterbodies to be retained
- Proposed woodland planting to screen boundaries
- Secondary planting of trees and shrubs between zones, flexible boundary depending on plot division
- Linear parkway ecological corridor with cycle/footpaths.
- Planted Buffer

3.10 Planning Policy Context

The outline planning application proposals for the MIRA Technology Park have been developed against the backdrop of relevant national, regional and local planning policy and guidance.

The Planning and Consultation Statement that accompanies the outline planning application submission, sets out in detail all planning policy and guidance of relevance to the proposals.

In respect of the design and access considerations the following planning policy and guidance notes have been considered when formulating the design of the scheme;

- PPS 1: Delivering Sustainable Development (2005);
- PPS 1: Planning and Climate Change (Supplement to PPS 1) (2007);
- PPS 4: Planning for Sustainable Growth (2009);
- PPS 5: Planning for the Historic Environment (2010);
- PPS 13: Transport (2001);
- PPS 22: Renewable Energy (2004);
- PPS 23: Planning and Pollution Control (2004);
- PPS 25: Development and Flood Risk (2009).

In addition to the above, the following design guidance informed the proposals:

- Creating Successful Masterplans: A Guide for Clients (CABE 2005);
- Safer Places: The Planning System and Crime Prevention (ODPM 2004).

At the local level, the site encompasses two local planning authorities; Hinckley and Bosworth Borough Council and North Warwickshire Borough Council, although the majority of the site falls within the former authority's jurisdiction.

The development plan therefore consists of the Hinckley and Bosworth Local Plan (Saved Policies 2008) and the North Warwickshire Local Plan (2006). A summary of the key considerations in respect of the scheme's design and access is provided below.

The overriding planning policy context at the local level is the allocation of the majority of the site under Policies EMP5 and EMB6 for 'MIRA, Built Development for Employment Uses', and 'MIRA, Surface Test Facilities and Landscaping to Proving Ground'.

In respect of the Hinckley and Bosworth Local Plan, Policy BE1: 'Design and Siting of Development' sets out the relevant design considerations, including that proposals should:

- Complement or enhance the character of the surrounding area with regard to scale, layout, density, mass, design, materials and architectural features;
- Incorporate design features which reduce energy consumption;
- Incorporate landscaping to a high standard;
- Ensure adequate highway visibility for read users;
- Do not adversely affect the occupiers of neighbouring properties.

In relation to accessibility, Policy BE2: 'Access to Buildings' requires that the design and layout of new development to which the general public have access should have regard to the needs of wheelchairs users, other people with disabilities, elderly people and those with young children.

Although built development zones are not proposed within the Borough of North Warwickshire, Policy ENV12 of the North Warwickshire Local Plan advocates that all elements of proposals should be well related to each other and harmonise with both this immediate setting and wider surroundings to present a visually attractive environment.

In addition to the adopted local plans, the Hinckley and Bosworth emerging Local Development Framework highlights the Spatial Objective (9) to ensure that development contributes to the local distinctiveness of the borough and enhances both settlement identity and the environment through the quality of sustainable design. Strategic Objective 12 seeks to minimise the impact of climate change by promoting the prudent use of resources through sustainable patterns of development.

4

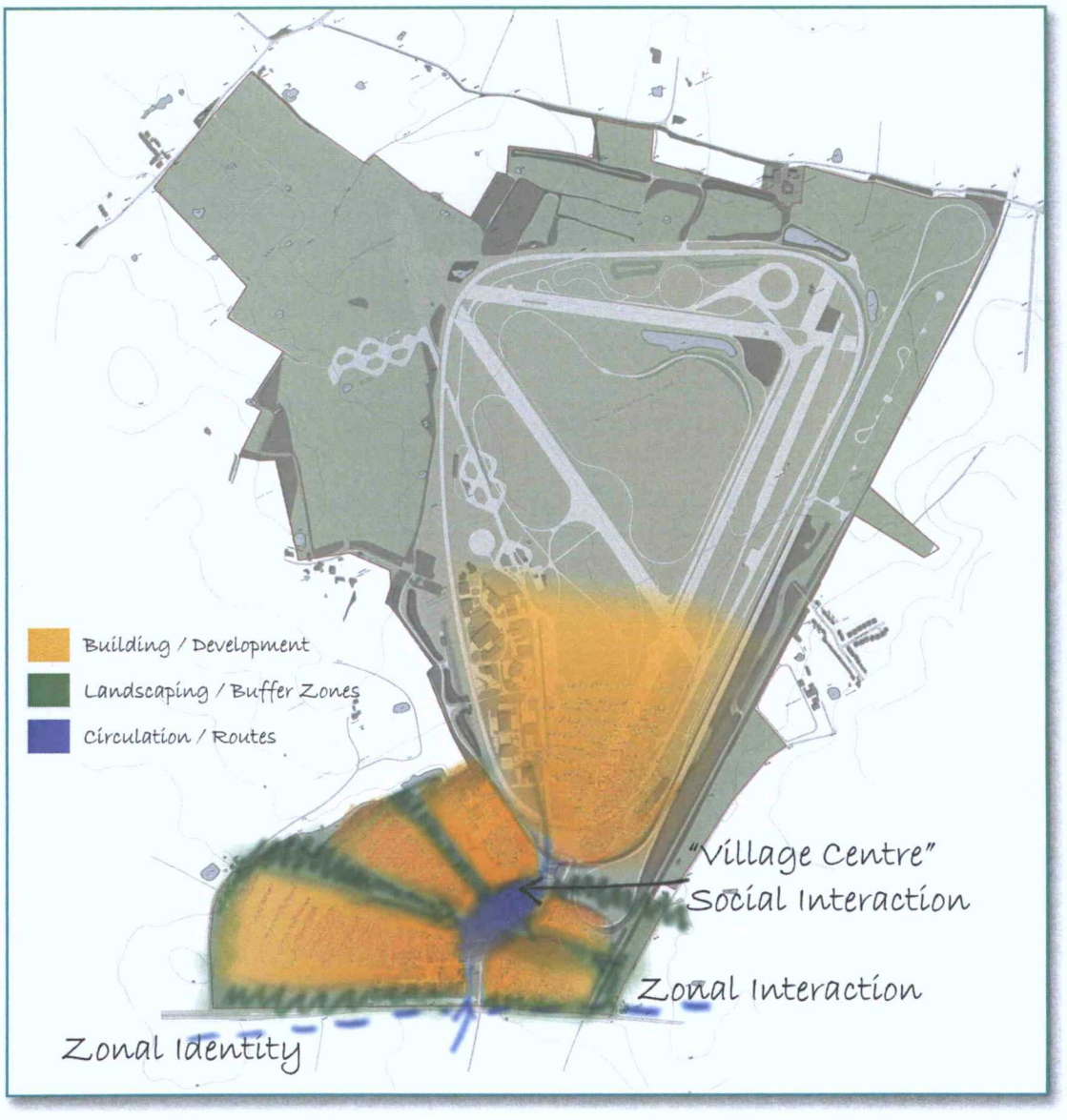
DESIGN PRINCIPLES

MIRA
TECHNOLOGY PARK

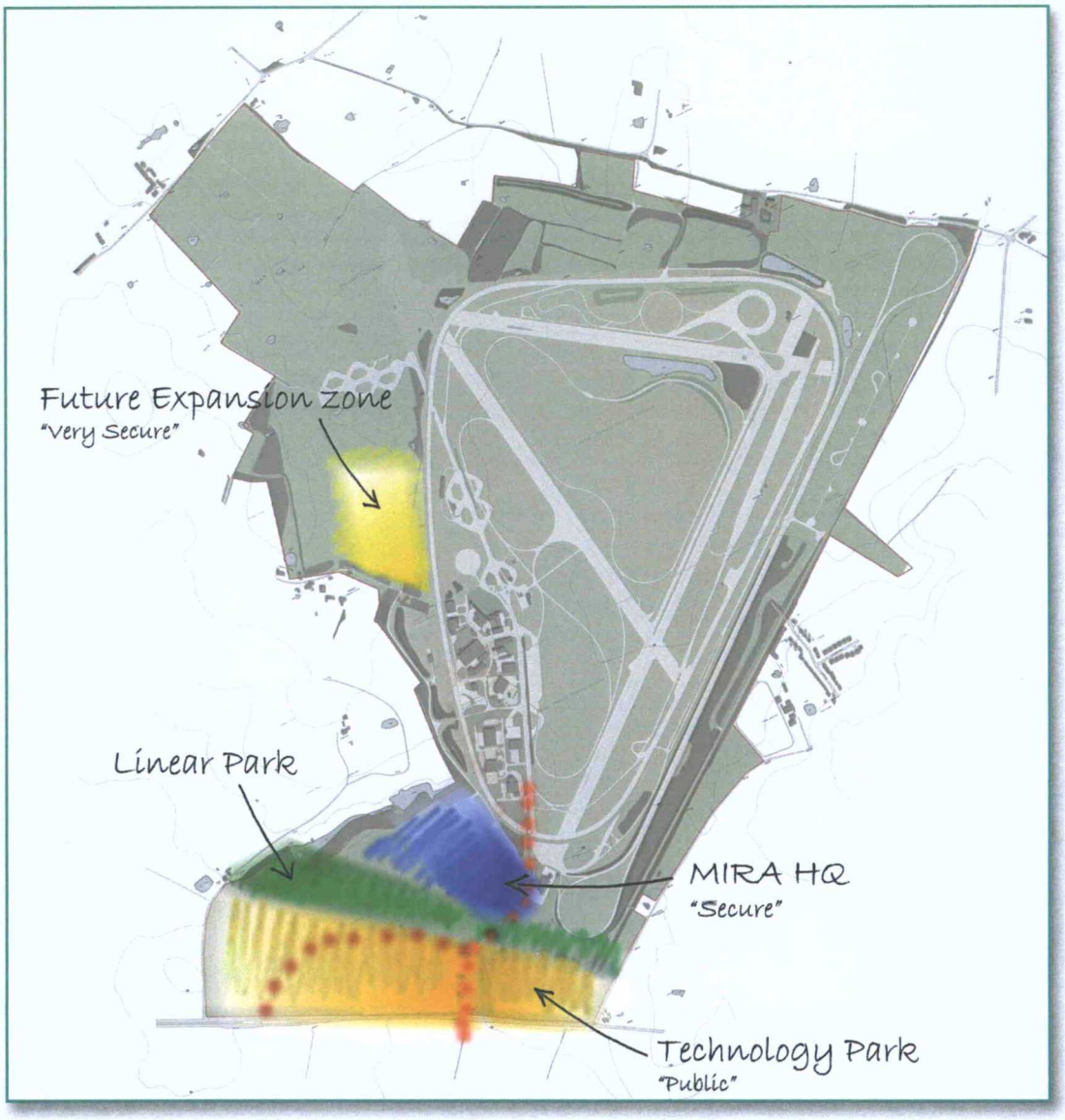
4.1 MASTERPLAN CONCEPT

The Masterplan application seeks consent for the relocating and redeveloping of the headquarters buildings for MIRA, and the creation of a new Technology Park, with associated facilities, set within a landscaped environment.

This section details the design principles and concepts that have informed the development of the masterplan concept for the scheme, including the amount, use, layout and scale of development proposed.



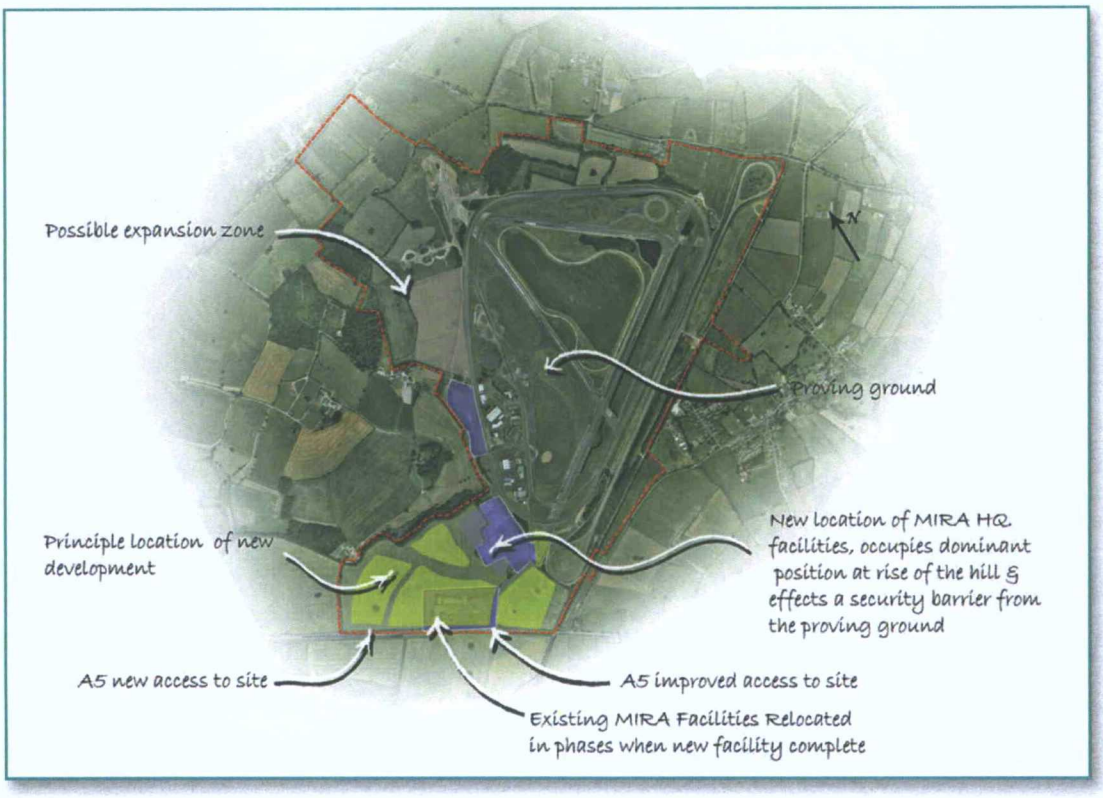
MIRA TECHNOLOGY PARK



The focus of the new development is within the area outside the proving ground at the front of the estate which fronts the A5. The early phases of the development will be established around the attractively landscaped park centre which will house MIRA's own headquarters building. The remaining areas within the masterplan will accommodate other companies who wish to locate within the new development in purpose built facilities, but may also require access to MIRA's test facilities.

The masterplan proposals encourage the evolution of areas of distinctly identifiable building clusters which will assist in breaking up the large site into a more human scale, each one with differing character within the overall park, creating areas of separate identity.

MIRA TECHNOLOGY PARK



The key objective of the masterplan concept is to design a world class technology campus within a beautiful rural setting, one that actively supports and stimulates current and future activities. The combination of high technological performance within a genuinely sustainable environment will provide employees and visitors with an exceptional place to work, relax, and above all create the automotive excellence of the future.

The proposals for MIRA Technology Park require a masterplanned approach to redevelop, reinforce and renew the existing vehicle engineering facilities. The development strategy will involve new and improved access from the A5, and a prominent frontage onto the main road, while still being respectful of its neighbours through green screening and strategic landscape zones. Existing architecture and landscaping models will be examined for best practice principles, to engender a renovation of MIRA's outdated existing facilities, as well as the establishment of a new Technology Park.

The focus of the new development is within the area outside the Proving Ground at the front of the estate which fronts the A5. The early phases of the development will be established around the attractively landscaped Park centre which will house MIRA's own headquarters building. The remaining area within the masterplan will accommodate other companies who wish to locate within the new Technology Park in purpose built facilities but may also require access to MIRA's test & development facilities. This southerly zone will effectively be the 'public' part of the new Technology Park.

MIRA TECHNOLOGY PARK

Development Zones

The masterplan separates the site into three distinct sections, within which are five development zones.

Appendix 1 - Table 2 provides full details of the amount, use and scale of the proposed development by zone and PP2 provides details of the location of each zone. A narrative of the proposed development by zone is provided below.

AREA 1

Area 1 consists of three development zones (Zones 1, 2 and 3) and is intended to contain large scale units.

This area is sited along the frontage of the A5 where the new Technology Park will be created, close enough to benefit from the MIRA environment, yet situated outside the stricter security zone. Buildings will be set in landscaped plots, within an environment of tree-lined avenues and adjacent woodland, feeding off the main green arteries that run through the site to link the extremities of the site to the village centre. A landscaped buffer strip will be retained between the widened A5 and the plot boundaries, which will allow glimpses of the new buildings within. Similar buffer strips will be set out to eastern and western boundaries together with greenways passing through the development, retaining a more spacious semi-rural rather than an overly dense tight urban feel.

In close proximity the "village centre" is located where social facilities, convenience shops, cafes, restaurant, hotel and health club all come together as the social catalyst for the campus. Although aimed at accommodating the needs of employees in a sustainable manner, this area will also be accessible to the public and will provide cycle ways and footpaths linking with a new square. The aim of the village centre is to create a social hub where visitors and employees can interact during and after work.

Zone 1:

It is intended that Zone 1 will contain large scale units either side of the proposed second access road from the A5 into the site. The larger units to the west of the access road will be set back from the boundary and will have a considerable amount of boundary treatment and landscaping (as shown on PP5) to screen the development from properties beyond the boundary of the site.

Within this area, Zone 1 will accommodate a maximum of 54,326 square metres of floorspace falling within Use Class B1, including research and development, light industrial and offices. Where the zone is divided into separate plots the building footprint within the plot would typically occupy 35% - 40% of the plot area.

Zone 2:

Zone 2 will predominantly cater for smaller scale research and development buildings and laboratories, centred around the main access road (i.e. MIRA Drive) and has the potential to provide a maximum of 38,210 square metres of B1 floorspace. These uses will be located on the site of the existing MIRA headquarters buildings.

The Village Centre will be positioned to the eastern part of the zone and will provide a central hub for employees of the technology park. It is intended that the proposed Village Centre will include retail, food and drink, leisure and hotel facilities up to a maximum total of 7,000 square metres of floorspace.

Zone 3:

Zone 3 is located along the eastern frontage of the A5 and adjacent to the main access into the site. This zone will consist of a mix of office facilities, high technology studios and research and development buildings falling within Use Class B1 and has the potential to accommodate a maximum of 29,399 square metres of floorspace. Where the zone is sub-divided into plots for individual buildings the buildings footprint would typically occupy circa 35% - 40% of the plot area.

AREA 2

Area 2 will contain the proposed new MIRA Headquarters (Zone 4).

At its heart, on the highest part of the site, both welcoming visitors and 'protecting' the Proving Ground, is the new MIRA headquarters, where landscape, water and buildings come together to set the highest standards of working environment for the development. As the established international headquarters for the company, MIRA's building will occupy a prominent place, as did the great country houses of the past, such as Blenheim and Chatsworth, situated at the end of its own drive with dynamic views unfolding to the approaching visitor.

To the south of the proposed MIRA Headquarters, and running along through the heart of the masterplan (along the line of the high pressure gas main) is the main strategic landscaped area - the Linear Park; a green lung that traverses the site, uniting the technology buildings with a softer more approachable form, bringing a naturalness to the heart of the development and reflecting the rural setting in which it sits. Sports and leisure facilities are located within this park, as are paths, cycleways and waterways.

The Linear Park will separate Zone 4 from the remainder of the main Technology Park to the south (Zones 1 to 3). All principal landscaping features on the site will be retained, and MIRA are committed to actively encourage the further presence of indigenous plants, animals, and wildlife. The new MIRA Headquarters Zone has the potential to provide a maximum of 76,624 square metres of B1 floorspace, ranging from environmental chambers and crash labs to conference facilities.

AREA 3

Area 3 (Zone 5) sits to the west and adjacent to the existing Proving Ground. It offers a key testing area to both MIRA and industry related companies requiring both security and adjacent specialist facilities for those companies.

It is anticipated that Zone 5 will accommodate a range of new B1 uses. Maximum potential additional floorspace totals circa 10,918 sq m.

A primary substation is proposed to the north of this zone and woodland planting through the spine and boundaries of the zone to strengthen and visually screen its boundaries.

Total Development Quantum

Whilst the masterplan is necessarily flexible, it is not intended that all zones will be developed to their maximum individual potential since anticipated traffic generation in particular represents an overall constraint on development. For this reason, an overall cap is envisaged which will restrict the scheme to a maximum of 132,716 sq m B1 floorspace, together with the ancillary Village Centre facilities.

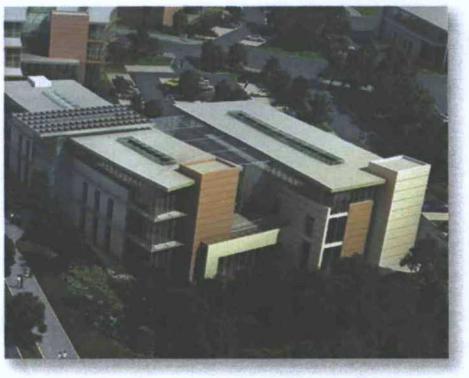
4.2 BUILT ENVIRONMENT CONCEPT

Appearance

A Design Guide for the Technology Park will be imposed on the developers of each plot; this guide will give an indication of requirements for plot densities, massing, scale and car parking requirements, as well as material usage and landscaping principles.

The buildings will be contemporary in character utilising a palette of materials, some natural, some local, and some recycled which will enhance the aesthetics of the buildings and encourage individuality within an overall family of architecture, all within a committed sustainable environment. Typically, this will include steel and concrete construction, with glass and cladding predominantly on the elevations.

Various design elements will be employed, such as the use of metal cladding panels, glass curtain walls and brise soleils / solar shading, coupled with the use of traditional materials such as timber (for cladding or louvres) and local red or buff engineering brickwork bases, to create the architecture of modern research and development buildings with a crisp and contemporary appearance.



Wall finishes may also use terracotta tiling, precast concrete, anodized aluminium panels or reconstituted stone, depending on suitability, cost concerns and design aesthetics.



It is intended that the buildings will be at a suitable height to avoid overly dominating the site and the site's neighbours. Due to the site being overlooked from certain angles, the impact on neighbours from these views will be mitigated. A visual impact assessment has been carried out. As a whole, the scale and massing of the new development will reflect its function and prominence, while being appropriate for the site.

Individual layout and character for the developments will ultimately be determined by detailed planning submissions for each component within the wider context of design principles established in the Masterplan proposals. Existing architectural and landscape models will be studied for best practice principles. The key objective for the scheme is a world class technology campus which sits within a rural setting without overly dominating it.



CONCEPTUAL MODEL IMAGES





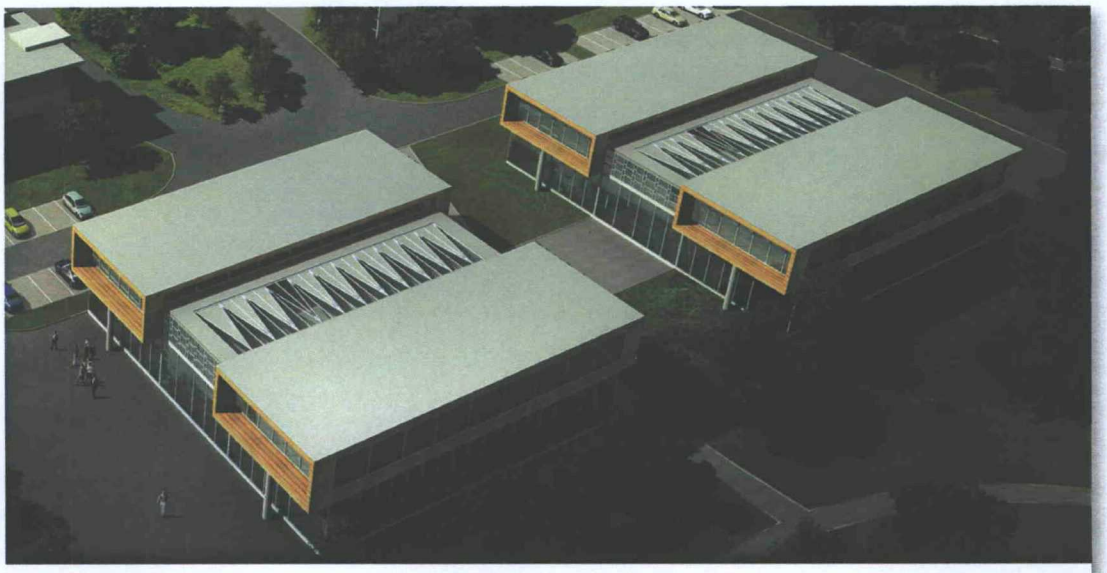






MIRA TECHNOLOGY PARK

CONCEPTUAL MODEL IMAGES

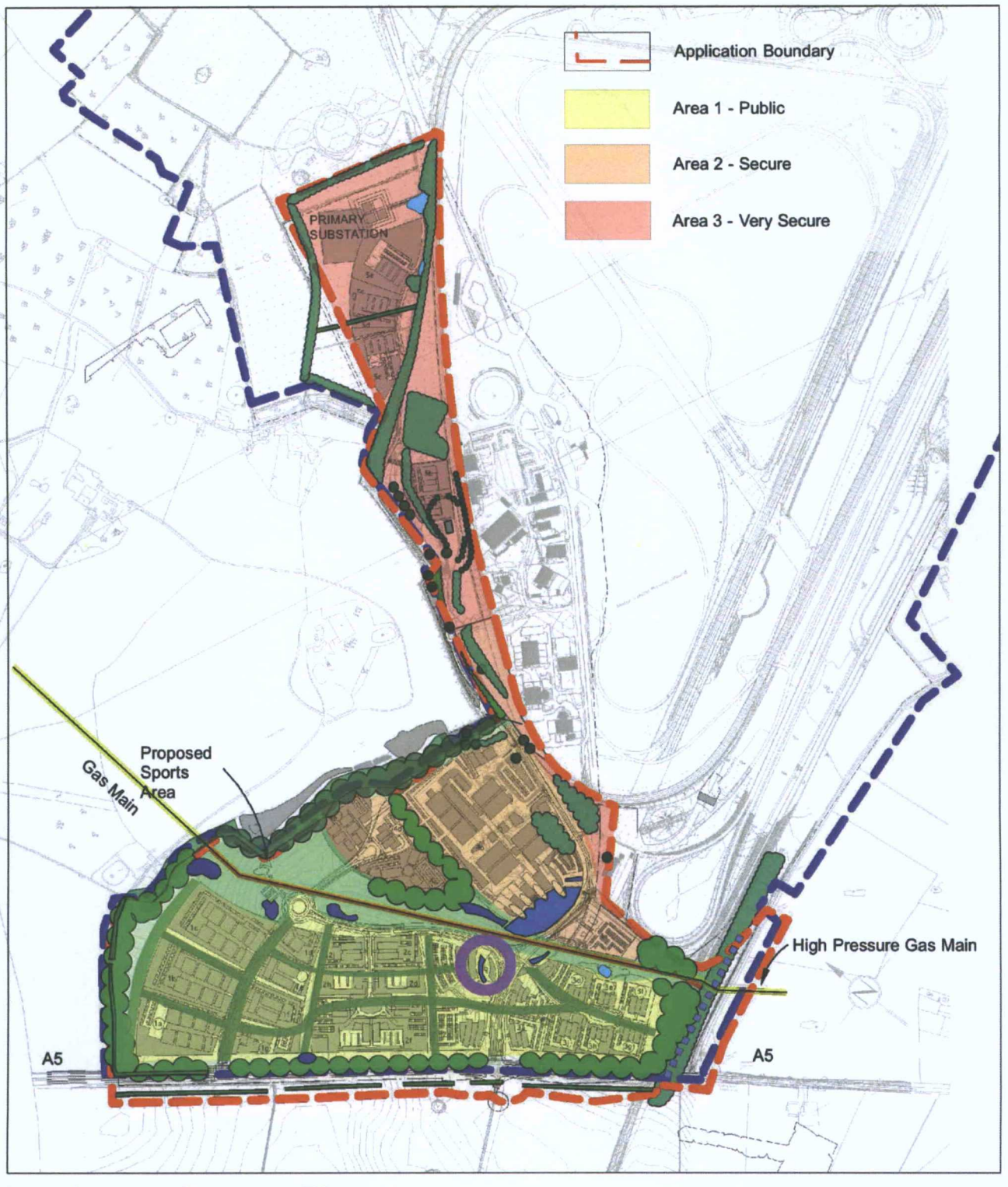








MIRA TECHNOLOGY PARK



Landscape Concept Plan

Existing areas of woodland to be retained

Proposed woodland planting to strengthen and visually screen boundaries

Linear Park

Planted Buffer

Proposed secondary planted visual buffer zones to be flexible, determined by plot boundaries

Water Features

Existing ponds retained as possible

Proposed formal water feature associated with HQ building seating/viewing areas

Proposed ponds/waterbodies with associated natural planting integrated with water/drainage managment & seating/picnic areas

Village Centre - Access to retail, restaurants, fitness, hotel and general meeting area.

4.3 LANDSCAPE CONCEPT

Generally

The major aim of the landscape proposals is to fully integrate the development within the context of the existing rural setting reflecting the character of the surrounding countryside. The landscape design aims to unify the development and create a strong overall identity providing a framework of natural landscape within which each business zone is allowed to develop its own individual character. In contrast a more formal landscape is proposed to highlight key areas such as the MIRA headquarters building and the village centre.

In line with regional and local design guidelines the proposals also aim to increase the woodland and hedgerow planting on the application site.

Existing ecological habitats including water bodies, open grassland, trees and woodland will be retained as far as possible and protected. Proposals aim to increase biodiversity and create additional ecological assets by providing a robust multi-functional green infrastructure including wildlife corridors, drainage and water management, potential energy sources as well as providing an attractive amenity for the users of the Technology Park. If asset loss becomes inevitable it will be mitigated to ensure 'no net loss' of the functions provided across the site in line with Hinckley and Bosworth Green Infrastructure Strategy.

The scheme aims to maximise the interconnection within the site for cyclists, pedestrians and the disabled by establishing a network of footpaths and cycleways throughout the development linking into the wider context of existing public routes and surrounding urban areas.

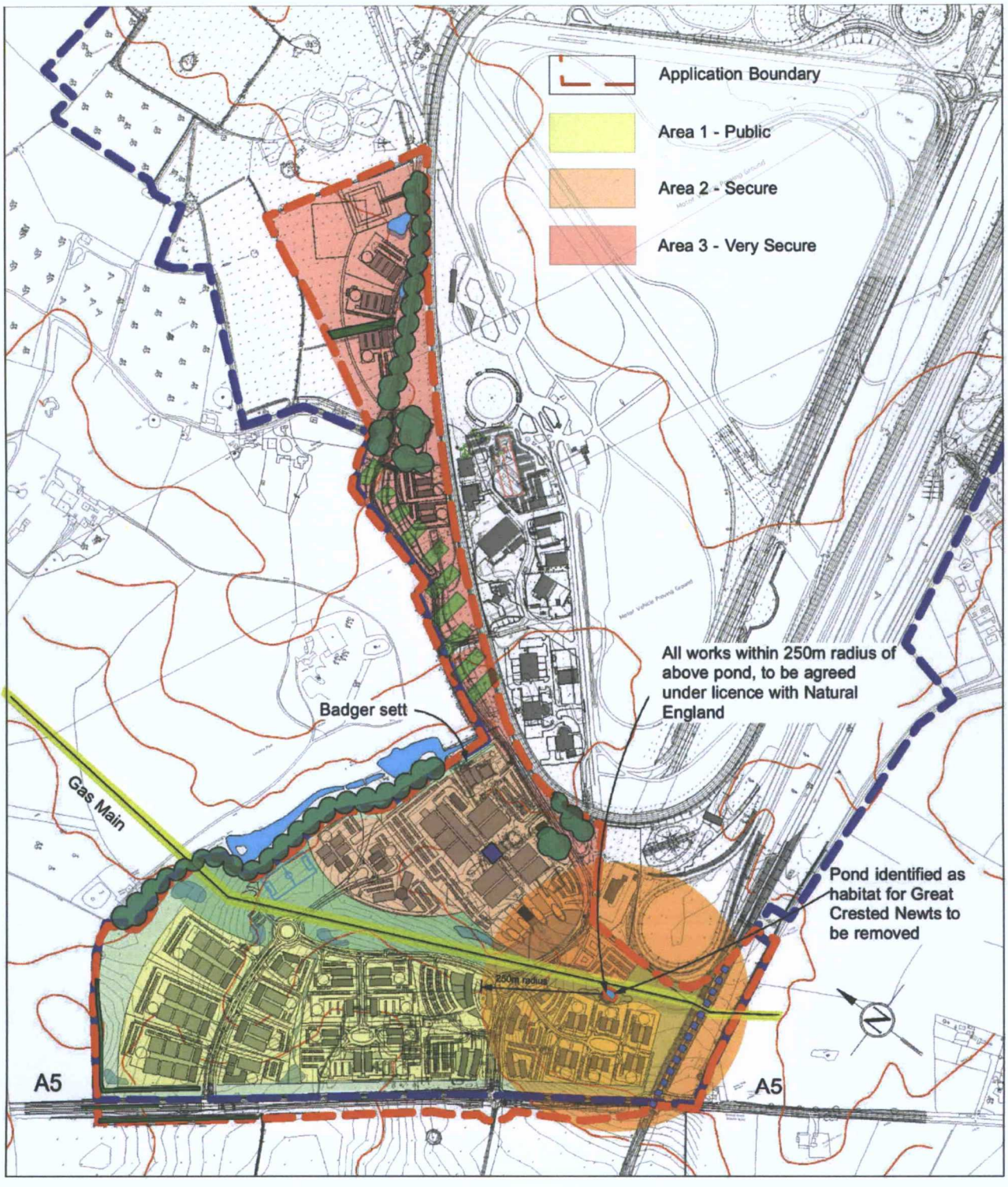
Creation of Open Spaces and Opportunities for Recreation

The Masterplan proposals include a series of open spaces interlinked throughout the scheme maximising the interconnectivity between the development zones. This strong framework of open spaces is key to integrating the Technology Park within the wider context of the existing rural setting and providing an attractive environment for all users of the development.

The creation of open spaces within the Technology Park include a wide variety of experiences from the formal semi-urban squares surrounding the village centre and headquarters to the more remote and open landscape areas of the Linear Park offering peaceful and relaxed seating and picnic areas associated with the proposed wetlands, woodland and meadow areas.

Flexible green buffers are proposed between each area of development to create visual separation between the zones and allow the footpath/cycle path network to be extended throughout the development.

A sports area located within the linear parkway provides facilities for more active recreation including a pavilion and tennis, football and jogging.



Ecological Connectivity Features

- Existing woodland/hedgerows to be maintained - good native hedgerows, mixed deciduous species to be retained where possible
- Existing ponds/waterbodies to be retained
- Ponds identified as habitats for great crested newts to be retained
- Existing hedgerows to be retained as far as possible
- Existing roadside bunds and planting of ecological value to be retained
- Disused Railway Line within Application site boundary
- Lindley Grange building, identified as habitat for bats which will require mitigation if building is proposed for removal
- Linear parkway ecological corridor/planted buffer with footpaths/cycleways
- Planted Buffer

Ecological Connectivity

A detailed Ecological Survey of the site has been undertaken as part of the Environmental Impact Assessment. The majority of the land comprising the application site is of negligible ecological value.

The potential of the development to increase the bio-diversity and ecological connectivity of the area is an important aspect of the scheme. The proposals aim to widen the variety of habitats by creating wetlands, meadowland, hedgerows and woodland planting providing food sources to attract a range of birds and insects.

The proposed linear parkway creates a multi-functional green corridor which links as continuously as possible the established woodland and wetland habitats on the northern boundary to the woodland and disused railway line to the south. This maximises the interconnection between existing habitats retained within the development to existing habitats beyond the site boundaries.

Existing features of ecological importance are to be retained as far as possible, such as ponds identified as habitats and breeding grounds for great crested newts. Where impact is unavoidable loss of habitat will be compensated through re-creation of habitats in other areas and enhancement of existing habitats that can be retained. Where such works affect species protected by law, mitigation will be carried out in consultation with Natural England and under sanction of appropriate Species Licence.

Visual screening

The landscape proposals include robust woodland planting and mounding to the boundaries where overlooking has been highlighted as an issue in the Visual Impact Assessment (as set out in the Environmental Statement accompanying the application), particularly along the northwest boundary adjacent to public footpaths, the A5 and southwest. Planted buffers within the development zones create a green framework and ensure the Technology Park is visually integrated with the character and scale of the surrounding rural countryside. These planted buffers also screen and define the boundary between the public area of the Technology Park and the more secure areas proposed for the MIRA Headquarters and track area.

Planting and Landscape Materials

Plant species will include predominantly native species procured from local sources and of local provenance wherever possible. More ornamental species will be introduced to the entrance area and MIRA headquarters.

In keeping with the Leicestershire and Rutland Landscape and Woodland Strategy and the Hinckley and Bosworth Landscape Character Assessment the scheme aims to increase the woodland and hedgerow planting throughout the development and retain existing trees, woodland and hedgerow as far as possible.

The selection of hard materials includes predominantly free draining materials such as hoggins and gravels for footpaths and cycle ways and fully sustainable and natural materials for any site furniture such as timber.

4.4 Sustainable Design Concept

Sustainability will be at the heart of the Technology Park development, which is being designed to meet best practice industry standards and will feature many aspects of a green future and sustainable design. The development will incorporate the latest technologies for low carbon building design, energy management and renewable energy forms, waste management and sustainable construction techniques, to gain as high a BREEAM rating as possible.

We will seek to maximise energy efficiency through the use of renewable technology, including heat extraction from water features where possible. Rainwater harvesting will be considered to reduce potable water use and SUDS principles will be used to manage surface water run-off, prevent flooding and pollution. Other options considered are swales, infiltration devices, basins, and permeable surfaces.

Use of recycled building material will be encouraged in the Design Guide, and such material should be sourced from local demolition sites or experienced reclamation companies.

Due to the scale of the estate and the new infrastructure which is required to develop the masterplan, the opportunity exists to employ many new techniques and technologies to allow both the occupiers to benefit and also to develop the new Technology Park with the environment in mind.

The opportunity exists to introduce horizontal louvres, vertical baffles and solar control glazing, to minimize unwanted solar gain and reduce cooling load. In addition exposed concrete structure has the potential to act as thermal mass storage, and with the help of natural ventilation, night time cooling and limitation of air-condition system to highly occupied rooms, a significant reduction in energy consumption will be achieved.

To complement passive design, air source heat pumps with heat recovery systems, solar water heating, and energy-efficient lighting control systems are among the technologies that will be considered. Photovoltaic panels are being considered for the roof space of the main MIRA headquarters building also.

The project will be developed under the control of a Technology Park Design Guide, which shall lay down the base requirements of sustainable design as protecting and enhancing the natural and historic environment, the quality and character of the countryside, and existing communities. This will be achieved by following the advice of the national Planning Policy Statement 1 (PPS 1); also, all development plots will be expected to achieve a minimum of BREEAM 'very good'.

5

ACCESSIBILITY

MIRA
TECHNOLOGY PARK

5 ACCESSIBILITY

• 5.1 Pedestrian

Once within the Technology Park the intention is to develop a pedestrian friendly environment set in a natural parkland environment. An extensive network of informal footpaths running through green corridors away from heavy traffic will link up all areas of the development with each other, the sports fields within the linear park and the communal village centre facilities of restaurants, shops, fitness club and hotel. As part of the A5 widening across the proposed development frontage a new public footpath will be laid out and buffered from the road via existing hedging strengthened by new planting. The internal path system will be tied into the Weddington Country Walk which runs along the disused Ashton – Nuneaton Joint Railway cutting at the southwest corner of the proposed development.

• 5.2 Cyclist

A shared pedestrian / cycle path 4m wide will be provided both along the A5 site frontage and to one side of the primary site roads. Additionally combined pedestrian/cycle ways will serve the development area away from roads running through the green corridors and linear park. A cycle loan system will be provided for employees within the proposed development area to discourage on campus car use that may be prompted by the extended linear nature of the application site. Connectivity to existing networks will be made via a link into the National Cycle Route 52 which runs along the south boundary linking Nuneaton with Higham on the Hill.

• 5.3 Public Transport

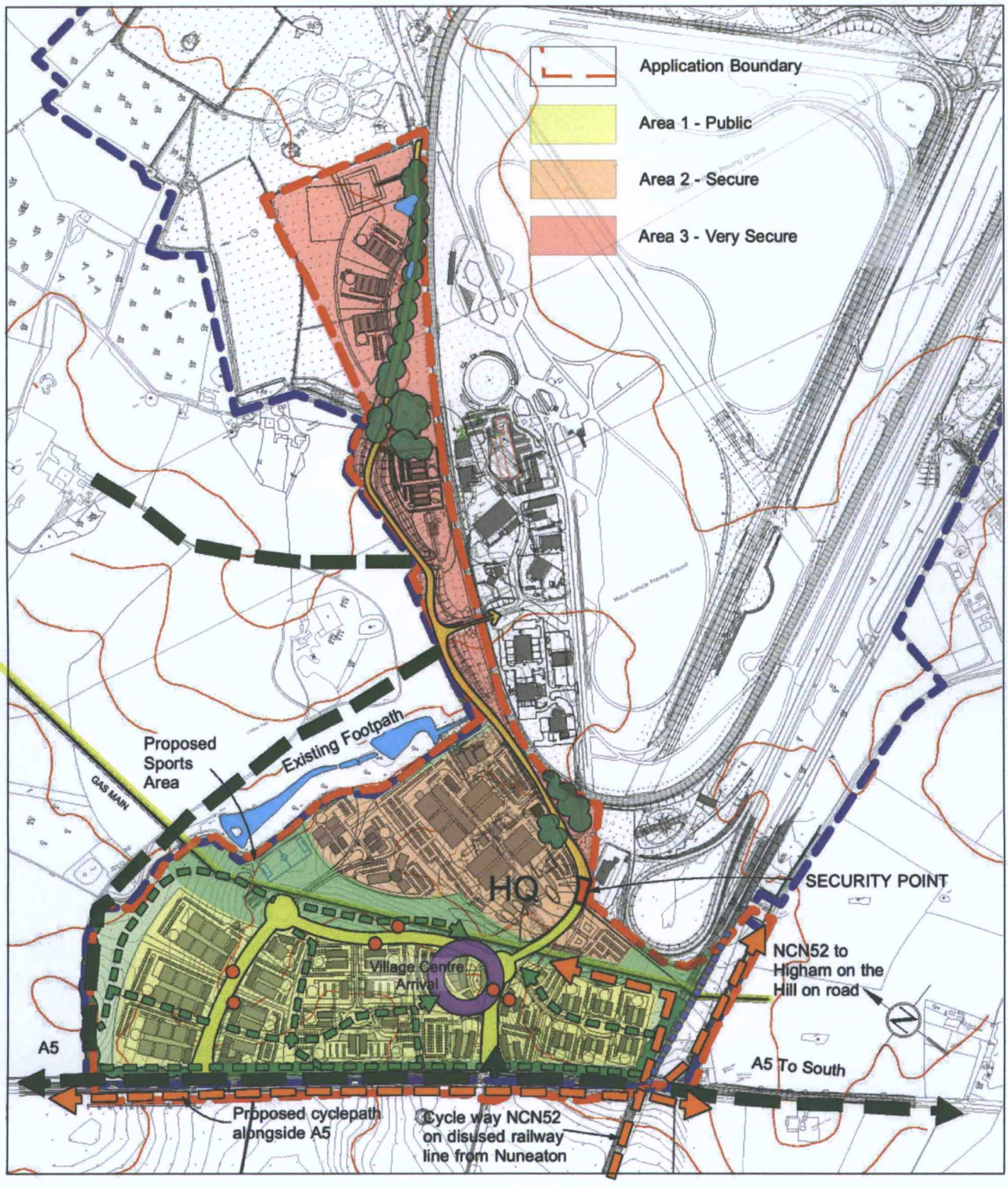
There is currently no public transport serving the proposed development or its immediate environs. A taxi ride from Nuneaton or Hinckley stations is currently all there is. It is proposed to set up a Technology Park staff bus running from the nearest railway stations or other suitable catchment locations.

• 5.4 Private Car

Through the above options and car sharing initiatives it is hoped to reduce private car use by way of a Travel Plan Scheme; however, the relative isolation of the application site means that private cars will always form a major accessibility option. The A5 trunk road which passes across the development site frontage links the M42 with the M69 and M1 and thus into the national motorway system. A new site road network tied into a widened A5 dual carriageway road at two locations will provide segregated vehicular access to all developed parts of the proposed development. Adequate landscaped parking will be regulated by the Technology Park Design Guide to each development plot, within the overall constraint of a maximum parking quantum of 2,263 spaces.

• 5.5 Disabled Access

The site is generally level or gently sloping with many wide flat footpaths with seating areas provided. The distances involved across the whole development area means vehicular mobility will be required for disabled workers/visitors and all development plots will have disabled parking spaces and level entry written into the Design Guide.



Pedestrian/Cycle Connectivity

- Existing Public Footpath
- Indicative Routes of Proposed Footpath/Cycleways
- Proposed Major Cycle Routes
- Disused Railway Line within Application site boundary
- Proposed Bus Stops
- Site roads with well lit shared cycleway and footpath, bus stops and waiting areas
- Existing site road to be retained with shared footpath and cycleway
- Linear parkway ecological corridor with network of footpaths/cycleways
- Planted Buffer

6

SITE MANAGEMENT

MIRA
TECHNOLOGY PARK

6 SITE MANAGEMENT

• 6.1 SECURITY STRATEGY

Given the nature of the research work undertaken on site, security is an important issue to MIRA. The application site has been conceived in terms of zones of increasing security the further one gets from the A5 frontage.

The front area is publicly accessible containing communal social facilities and businesses with security procedures as would be expected in a normal Technology Park. The middle area across from the linear park will contain businesses closely linked to the motor industry and using proving ground facilities known as 'MIRA Customers'. Security will be stricter here with CCTV installations linked into the MIRA security control centre. To gain access to the inner area visitors must pass through the manned security gate and be logged in and out. Those using proving ground facilities use an electronic access card system which logs and times their use of the various areas. An extensive CCTV network here also links into the central security control centre.

Design of car parking areas will be regulated by the Design Guide which shall require suitable lighting and 'natural surveillance' (clear lines of sight) in accordance with "Secured by Design" principles.

• 6.2 SECURITY OVERVIEW

Currently the MIRA site is staffed by a team of Security Officers 24/7, 365 days of the year. The perimeter of the 800 acre site is protected by high quality, secure fencing and vegetation. Closed circuit television operates across key areas of the site, which is monitored by MIRA's on-site security team.

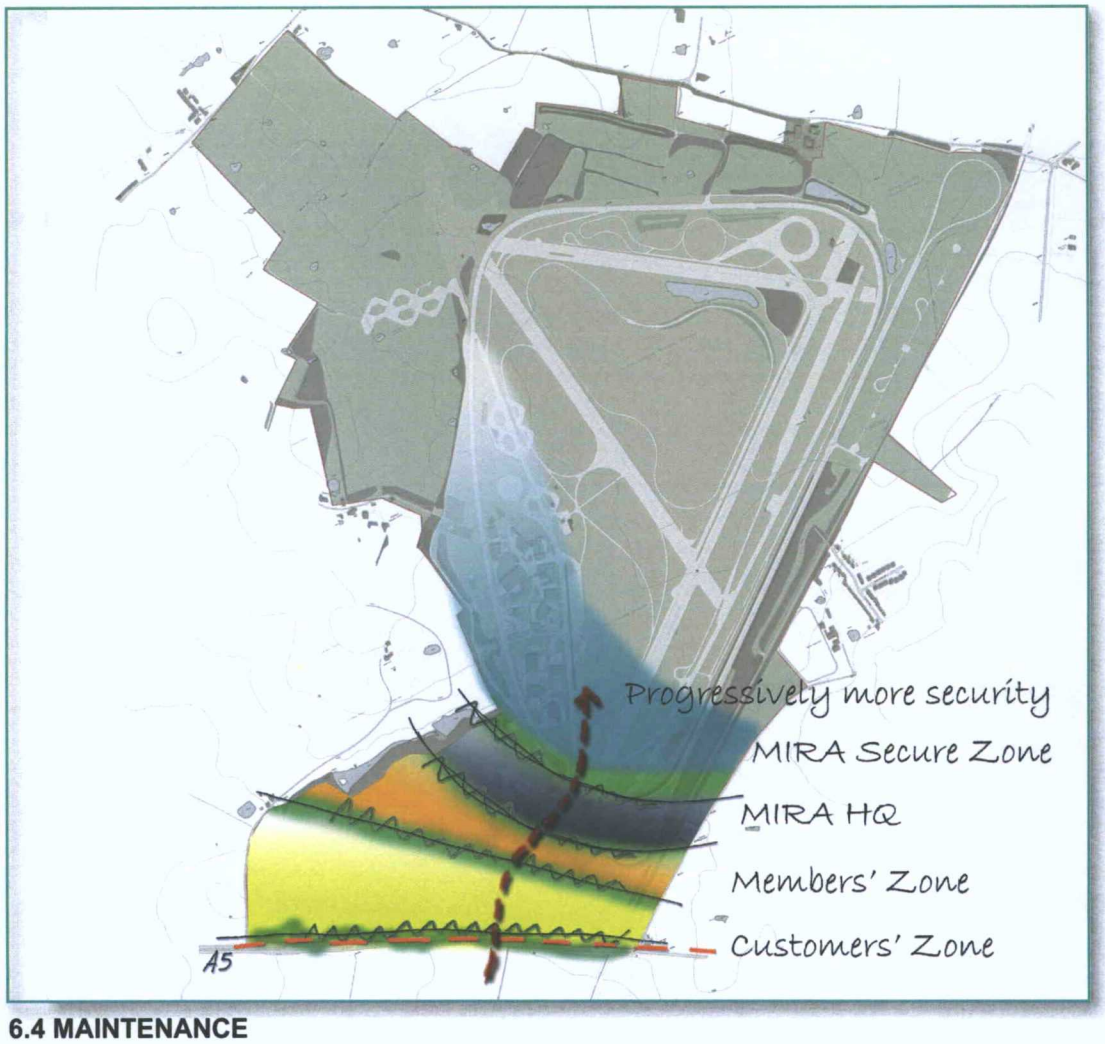
Security patrols are carried out day and night, both on foot and by 4x4 vehicle. These patrols also extend to the local parishes on the exterior of the MIRA perimeter.

The main site entrance is controlled from a security lodge and security barrier. The MIRA buildings have active, proximity access control to further restrict the movement of staff and visitors into only those buildings which are relevant to their work.

The nature of the projects undertaken at MIRA requires heightened security for key buildings. This additional security includes warded alarms, further limits of pedestrian access and significant reinforcement for the fabric of the buildings and perimeter.

Random vehicle searches are conducted on entry to and exit from the site.

6.3 SECURITY CONCEPT



6.4 MAINTENANCE

The application site will be divided between serviced plots (to be developed independently by tenants but controlled by the Technology Park Design Guide) and common land & infrastructure needed to support access and service these plots. This will include elements such as open green space, water features, roads and shared infrastructure. This common land and infrastructure will be managed and maintained by an appointed Technology Park estate management company. The management company will charge tenants / lessees, via the rental charge, for management and maintenance services comprising:

- Grounds maintenance
- Security
- Car parking and roads

All landscape maintenance will be undertaken in accordance with a Management Plan to be developed in conjunction with the local authority. The plan will be agreed for a set period of time, 5 – 10 years, and will establish the aims and objectives for all landscape character types (for example woodland, hedgerows and ponds) and the maintenance regime to be carried out on an annual basis to achieve these goals for each area. The Management Plan will incorporate the Biodiversity Action Plan for the local area and work closely with ecologists to safeguard the range of habitats within the development. A period for joint review between MIRA and the local authority will be incorporated into the document to ensure it is a flexible and workable plan that can respond to the changing requirements of the establishing landscape.

The buildings and infrastructure within each serviced plot will be managed and maintained by the tenant in accordance with Design Guide and management plan requirements or subcontracted to the estate management company.

MIRA TECHNOLOGY PARK

6.5 LIGHTING

There are a number of aspects to the lighting of the site as follows:

- **Approach road**

The A5 main road which passes the site is currently unlit at the section adjacent to the site boundary. We understand that the County Council's street lighting policy is being updated. If either of the two new junctions to the MIRA site are signalled junctions then lighting would be required as part of the Section 278 works.

If lighting is required, it will be designed by a competent street lighting designer (as defined by the Institution of Lighting Professionals competency scheme), and will comply with the relevant Leicestershire County Council's requirements and relevant British and European Standards. The lighting will also comply with the ILP guidelines for the reduction of obtrusive light.

- **Access roads**

There are proposed to be two access roads into the site and it is envisaged to have lighting on both of these roads as there will be regular movements of traffic.

The speed of traffic will be low as will the traffic density at most times of the day.

The lighting luminance levels will be kept to a minimum whilst being designed to comply with British and European standards relating to lighting levels for vehicular and pedestrian traffic through a business park. The lighting design will incorporate all the necessary restrictions on obtrusive light. It will be low glare. The mounting height will be kept to a practical minimum to ensure that the visual impact by day and night is minimised.

- **Parking areas**

There are a number of different parking areas on the site. These will generally need to be lit when in use. The lighting levels can be kept to a minimum, and lighting can be switched off when not required.

- **Footpaths & Pedestrian walkways**

It is important to light pedestrian footways to ensure safety and security. However many of the footpaths would not be regularly used during the night, so they could be unlit, or lit using way guidance systems (LED's).

The main pathway to the cycleway could be lit. We would propose a maximum height of 5m and LED lighting which could be dimmed down and switched off at certain times of the night.

- **Building Lighting**

The office buildings will have internal lighting which is likely to be visible from various receptors. To mitigate this, there will be intelligent controls employed which minimise the operation of the lighting in an area. These could include presence detectors, timer switches etc.

- **HQ feature lighting**

  It is proposed that the lighting to the HQ building would be based upon current best practice and would be designed such that the obtrusive or spill light would be minimised. A curfew would operate on the lighting.

- **Sports Lighting**

  It is proposed that the sports lighting would be based upon current best practice and would be designed such that the obtrusive or spill light would be minimised. A curfew would operate on the sports lighting.

- **Energy Efficiency**

  The lighting equipment used will be high efficiency. This will be achieved by the use of high efficacy lamps and well designed lighting systems that direct the light onto the task. Typical high efficacy lamps would include high pressure sodium and metal halide.

  In addition the use of LED's is becoming more prevalent and with their efficacy increasing year on year, it is envisaged that they will be used to some extent on the site. They have major advantages in their ability to be dimmed and in their long life / low maintenance characteristics.

- **Central Monitoring System**

  It is proposed that the lighting will be managed with a central monitoring system which gives control over lighting levels and power consumption.

6.6 UTILITIES

The design of the Infrastructure and Utility Services will be in full compliance with the Building Regulations, IEE Regulations, Gas, Water and Electricity Codes and CIBSE codes.

Consultation has taken place with all the utility companies serving and surrounding the site to establish future provision for gas, water, electricity and telecoms together with any potential services crossing the site to serve adjoining properties.

There will be significant reinforcement and diversion of existing services serving the site and currently routed along the A5.

Of special interest is the protection of the existing high pressure National Grid gas main crossing the south of the site.

Since there is no gas serving the site at present a new pressure reducing/metering station will be provided, located at the south-east of the site adjacent to the disused railway. This will be constructed to provide low pressure gas to a new site distribution network serving all the new buildings.

Any increase in electrical demand beyond the reserved 4 MVA capacity for the site will require a primary sub-station and a location has accordingly been identified for this within Masterplan Area 5.

7

CONSULTATION

MIRA
TECHNOLOGY PARK

8

INDICATIVE MASTERPLAN

MIRA
TECHNOLOGY PARK



INDICATIVE MASTERPLAN



INDICATIVE MASTERPLAN

8 MASTERPLAN

8.1 Development Zones

The proposed development zones are shown indicatively on the Masterplan and on PP2, and provide a flexible framework which will allow a wide variety of plot sizes to be developed in the future. These plots will house Research and Development facilities varying from 'hands on' workshops constructing prototypes to laboratories and high tech computer aided design studios together with central administrative buildings. A Technology Park Design Guide will be developed to regulate mass and bulk of built form and a palette of suitable materials for the park.



Whilst parameters for scale, development quantum and overall site layout are established via this application and detailed in the Parameter Plans Report, individual layout and character of plots will be determined by detailed submissions for each development within the wider context of design principles established in the Masterplan proposals.

The landscape proposals include a framework of planted green buffers which envelop these areas adjacent to the site roads and between the plots. The location of these buffers is flexible and will be determined by plot boundaries. This will ensure visual screening and containment to each development zone and will allow a flexible phasing programme to be determined.

A network of public footpaths and cycleways is also proposed within these green buffers to maximise interconnectivity throughout the development.

8.2 The Entrance

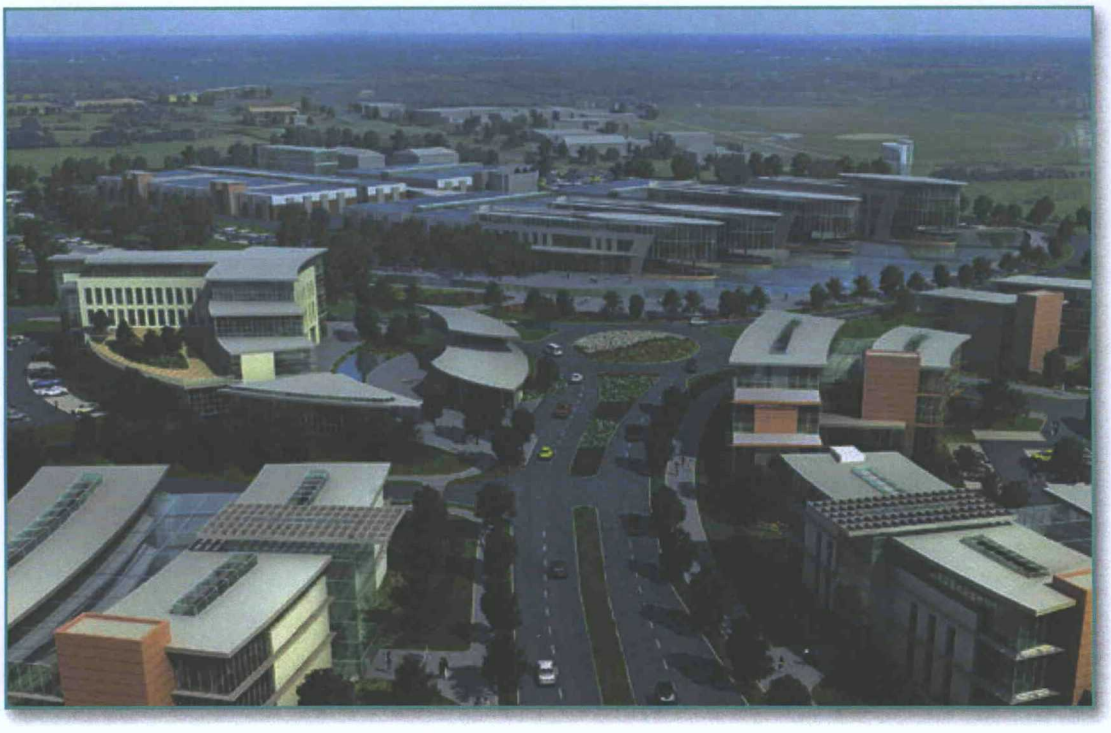
The entrance area comprises the main dual carriageway entrance road leading up to the new MIRA Headquarters / Engineering Centre commanding the higher part of the park and controlling entry into the secure 'Proving Ground' area (Area 3).

The building complex comprises a series of glazed fingers fronting an ornamental lake and abutting the meadow land of the central linear park.

This will provide an airy, light, pleasant working environment and provide a focus for the whole development. In contrast to the general landscape strategy for the development the proposals for this area are strongly formal.

Avenue planting of large sized stock trees are proposed to line each side of the dual carriageway, focussing the dramatic view from the entrance to the distinctive headquarters building located at the end of the vista.

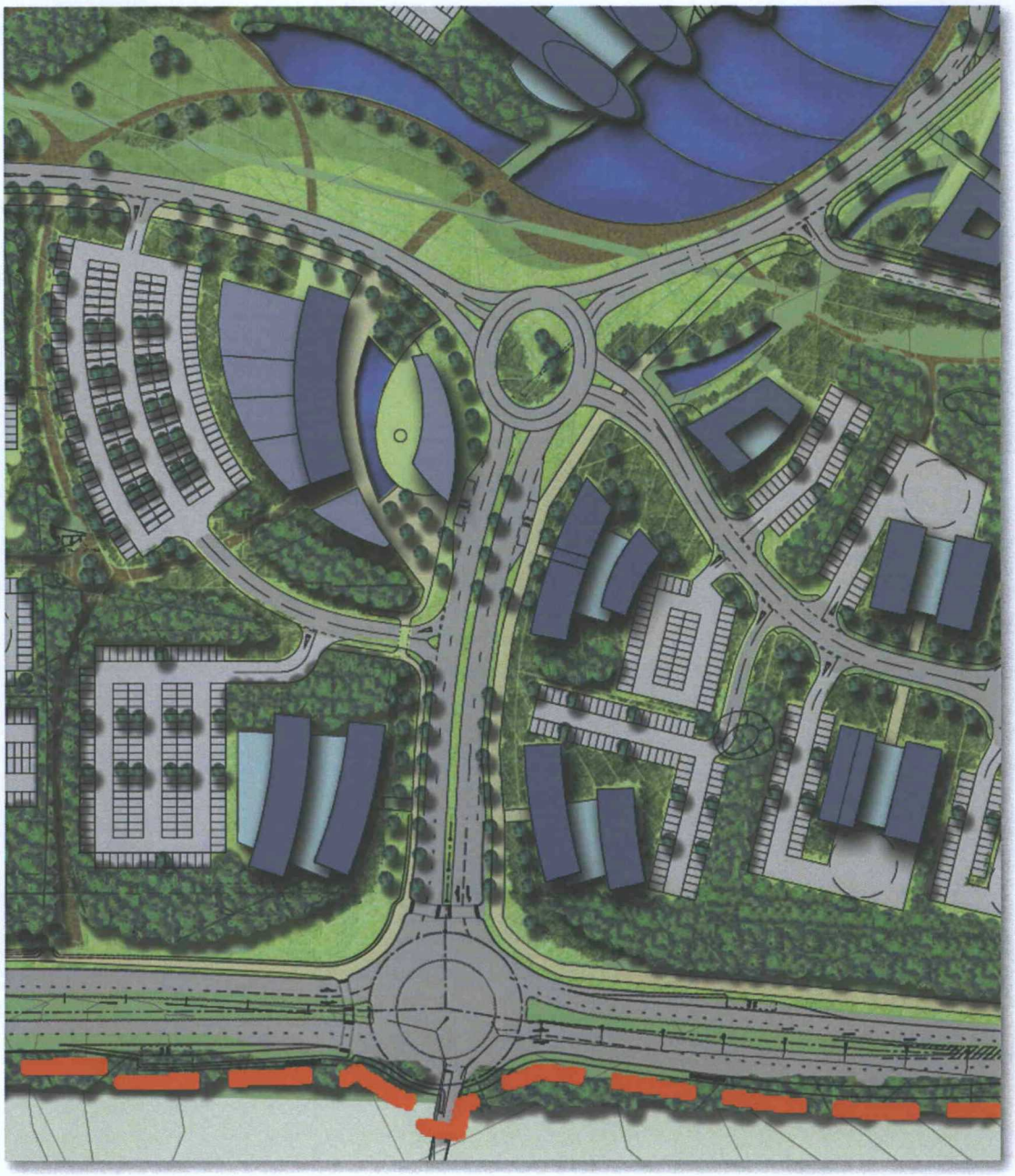
Bold drifts of shrub planting and ornamental trees envelop the buildings providing seasonal colour and highlights throughout the year. Hedging is proposed to direct pedestrians and enhance footpaths.



A series of formal water features surround the main roundabout and provide a focal point to the village centre. These culminate in the large-scale water feature that provides the setting for the headquarters building.

The broad open area of water steps down with the gradient creating a gentle flow of water surrounded by seating areas and viewing platforms. This water feature leads into a more informal pond at the entrance to the linear park and this becomes a transitional area between the formality of the entrance and the more natural landscape of the linear park.

The transition is created by contrasting landscape features such as long meadow grasses with formal lawns, as well as planting native trees and shrubs in formal patterns gradually blending into more informal drifts.



8.3 The Village Centre

The 'village centre' with its open square provides a formal meeting hub to serve an anticipated workforce of circa 3,000 employees and thus saving the busy A5 from this potential additional mid-day traffic flow.

The centre has strong pedestrian / cycle links to the surrounding development areas, and it is anticipated that the MIRA Bus will also stop here.

The centre will provide an attractive external seating area with a water feature and access to local shops, a fitness centre, restaurants and cafes. A hotel to cater for outside visitors to the Technology Park and conferencing is also located here.

The square will be a vibrant and active centre for the Park users.



8.4 Linear Park

The Linear Park is a strategic area of open landscape that creates both an attractive facility and refuge for the users of the development and an important ecological feature.

The location of the park is aligned to the high-pressure gas main which crosses the entire width of the southern section of the development. The gas main restricts any ground modelling, changes of level and tree planting within its vicinity but offers the opportunity to create an area of informal natural landscape through the heart of the development extending to the boundaries and to the planted buffers proposed between development zones, providing a green envelope to the built forms.

The Linear Park provides a range of landscape features and semi-natural habitats in keeping with the character of the surrounding rural landscape and regional Biodiversity Action Plan objectives. These include wetlands and water marginal planting; open meadowland supporting native grasses and wildflowers; hedgerows with hedgerow trees; areas of native shrub planting, specimen trees and woodland planting. Areas of formal mown lawn are to be kept to a minimum.

As well as increasing bio-diversity the Linear Park will provide a valuable amenity for all those using the Technology Park; a network of footpaths and cycleways runs through the area linking to existing public footpaths and cycle routes beyond the site boundaries. This maximises connectivity and helps reduce reliance on the car for transport. Seating and picnic areas are created adjacent to the proposed water features and in the woodland and meadow, as well as a pavilion, tennis courts, a football pitch and routes for running and keep-fit.



A section of disused railway, partially in a cutting, runs along the southeastern section of the Linear Park and along the site boundary. The Hinckley and Bosworth Landscape Character Assessment highlights this as potentially linking to the disused line to the south of the A5 which has been used as a footpath/cycle route to Nuneaton. Extending this through the site would create a pedestrian link to Bosworth Battlefield; however, as the line runs through the most secure area of the MIRA development, allowing public access so close will not be possible. The existing trees and native shrubs provide a valuable ecological habitat and this will be preserved and protected by limiting access and managing the area to retain and enhance its ecological value.

The Linear Park includes several proposed water features that also form part of the water and drainage management strategy providing storage facilities for surface water. Fluctuation in water levels is ameliorated by the planting of native water marginal plants which will also provide valuable ecological habitats. These water features also provide an attractive amenity and include decking for viewing platforms, seating and picnic areas.

One of the ponds identified as a breeding ground for great crested newts is located close to the gas main and will be retained and protected in accordance with Natural England's requirements, with a planted protection zone and limited access. The other small pond is located on Hungry Hill where the steep levels mean that it may be virtually impossible to retain it within the proposed development. When this phase is due for construction, all procedures to remove the pond will be applied for and carried out under licence with Natural England. In order to mitigate the loss of the potential breeding ground and avoid any net loss within the development it is proposed that, working closely with Natural England, further 'scrapes' are created in the more remote areas of the Linear Park to the southwest to increase the available breeding grounds in this area, if possible.



8.5 Boundary Treatment

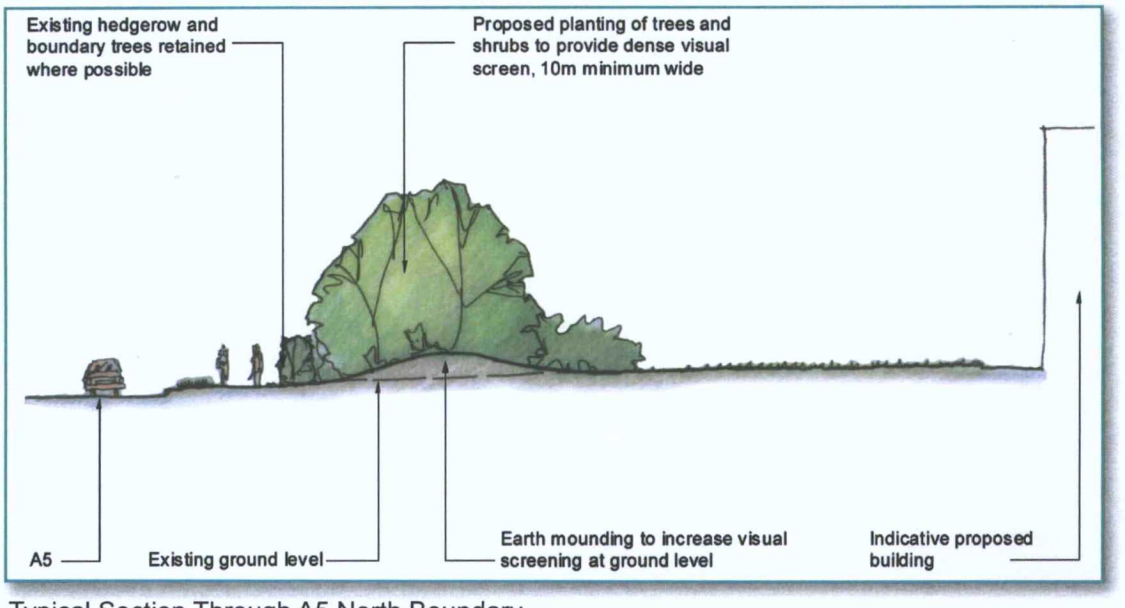
The Visual Impact Assessment studied the impacts of the proposed development from surrounding viewpoints and has concluded that the development will largely not be seen or only glimpsed from viewpoints to the east and southeast. The most adverse impact is experienced from close viewpoints on the northwestern boundary, from Weddington Way and from the A5. The landscape treatment proposed to minimize visual impact is set out below:

A5 Frontage - North

A robust planted screen is proposed to the northern A5 boundary to visually enclose the future development. The planted buffer, minimum 10m wide, is proposed to extend for the entire length of the northern A5 frontage with allowances for sight line requirements adjacent to the two entrances and any statutory service requirements. Gentle mounding along the boundary is also proposed to provide a visual screen at eye level with immediate impact and providing screening throughout the year.

Any footpath or cycleway links that enter the site will cross this area obliquely to minimize any loss of visual screening. The buffer will screen the development from the road and allow only strategic glimpses into the site from the entrances

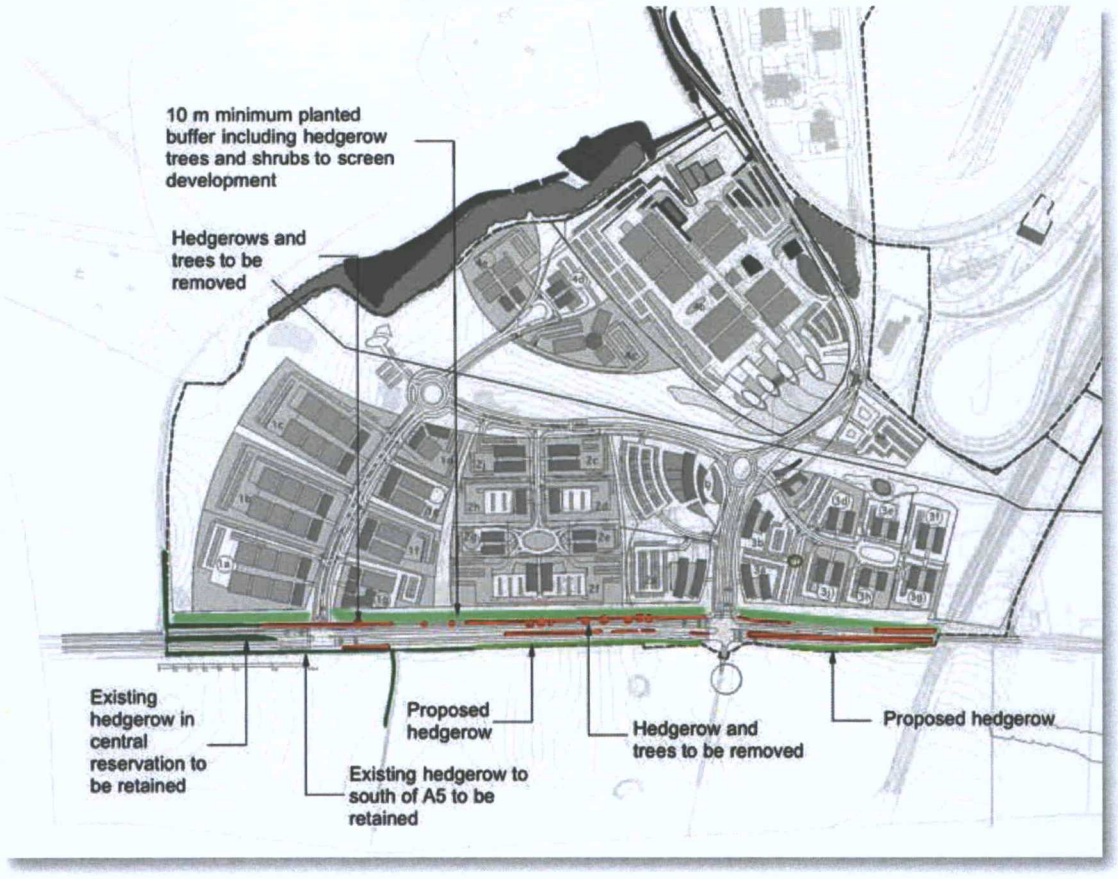
The mature existing native hedgerow will be retained as possible and augmented with additional planting to strengthen and continue the hedge along the frontage of the development. The planted buffer will include a mix of native woodland and hedgerow species to create a dense planted scheme, and will include a range of stock sizes, whips and forestry transplants for mass planting with additional standard and advanced nursery stock trees for more immediate impact in key locations.



Typical Section Through A5 North Boundary

A5 Frontage - South

The road widening to the south of the A5 will result in sections of the existing hedgerow being removed. Proposals aim to retain the existing landscape character by retaining the hedgerow wherever possible to the south of the road and in the central reservation and infilling this with new planting to create a continuous hedgerow along this boundary..



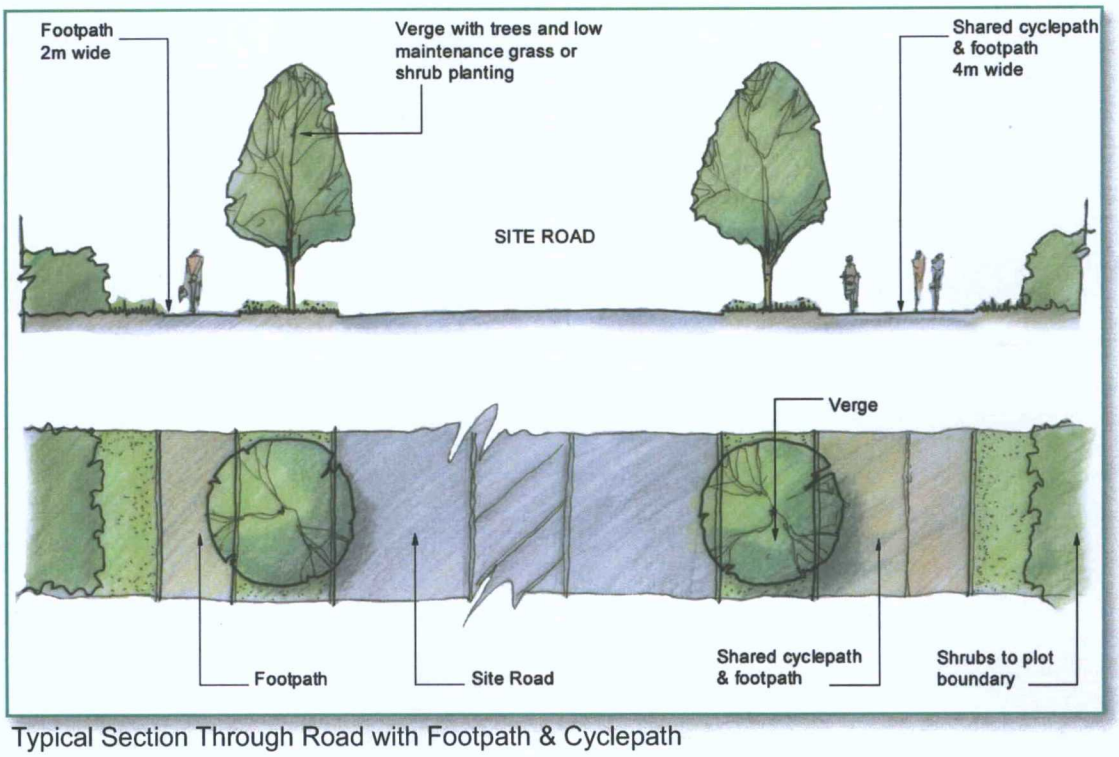
Planting Strategy for A5 Frontage

Northwest Boundary

The northwest boundary is defined by a mature hedgerow which follows the route of the public footpath, although with several gaps from the A5 to Rowden Lodge where, to the north, the boundary is further screened by a thin area of woodland and wetland. The landscape proposals include strengthening the visual screen to this boundary by maintaining the hedge and providing an additional planted buffer when this is required, minimum 10m wide with a further 25m zone to be maintained as open landscape where development will not be permitted. The planted buffer will include a mix of native trees and shrubs and a range of stock sizes to create a dense visual screen.

Southern Boundary

The natural landform and disused railway cutting supporting dense trees and shrubs provide an effective screen to views from the south. Proposals include retaining vegetation along the disused railway as a screen as well as an important ecological feature and strengthening the visual screen to the secure areas of the track and views from the A5 with additional planting.



Typical Section Through Road with Footpath & Cyclepath

MIRA
TECHNOLOGY PARK

Appendix 1

Planning Parameters Report

May 2011

MIRA TECHNOLOGY PARK

APPENDIX 1

PLANNING PARAMETERS REPORT

MAY 2011

TURLEY ASSOCIATES

CONTENTS

1.	Introduction	1
2.	Parameter Plans	3

Appendices:

Appendix 1: Parameter Plans

TA Ref: RAML2000

LPA Ref:

Office Address: 25 Savile Row
London
W1S 2ES

Telephone 020 7851 4010

Date of Issue: 04 May 2011

1. Introduction

1.1 This document accompanies the outline planning application submitted on behalf of MIRA Limited proposing the comprehensive development of land at and adjoining the existing MIRA site at Watling Street, Hinckley.

1.2 The site subject of this outline planning application covers 71.51 hectares, the majority of which is located within Hinckley and Bosworth's administrative boundary, whilst the area encompassing the A5 is located within the administrative boundary of North Warwickshire Borough Council and measures 3.45 hectares.

1.3 The application seeks outline planning permission for the following development:

> *Development of business/technology campus comprising replacement MIRA headquarters, office, research and manufacturing facilities, hotel and local facilities including retail/café/restaurant, indoor and outdoor leisure, ancillary energy generation plant/equipment, internal access roads, car parking, landscaping, drainage and associated work and creation of new and improved points of access; widening of A5, associated earth works and landscaping.*

1.4 The development described is defined by the submitted parameter plans and their accompanying descriptions that fix the key overarching principles for the development.

1.5 There are five parameter plans with accompanying descriptions, as detailed below:

- PP1 – site plan and application boundary;
- PP2 – Development footprint and height;
- PP3 – land use;
- PP4 – access and movement;
- PP5 – landscape framework.

1.6 This regulatory document is supported by a Design & Access Statement that accompanies the application and presents an illustrative masterplan scheme for the application site. This has informed the parameters set out for approval and explains how the design concept which underpins the proposals has evolved.

The Application

1.7 The application seeks consent for a replacement MIRA headquarters building together with an associated Technology Park and related elements. The key objective is to design a world class technology campus which integrates the development with its rural location and provides an attractive amenity for all users of the development.

1.8 The new MIRA headquarters is at the heart of the scheme and a core zone is set aside for it in the accompanying plans, showing how it is relocated within the site to a commanding location which controls the access to the existing Proving Ground area whilst at the same time freeing up A5 frontage land for complementary development. The availability of land beyond the immediate confines of the MIRA site reinforces this potential but dictates that particular care is given to the incorporation of these greenfield components.

1.9 To the rear of the site some provision is made for further operational development for MIRA in immediate proximity to the Proving Ground.

1.10 The masterplan proposals encourage the evolution of areas of distinctly identifiable building clusters which will assist in breaking up the large site into a more human scale, each one with differing character within the overall park, creating areas of separate identity.

1.11 Fundamental to the overall concept is the creation of a linear park through the development providing a landscaped and ecological corridor which will form a natural barrier between the more public businesses in the Technology Park, MIRA itself and members' businesses.

1.12 A 'village centre' provides local facilities for the greatly increased workforce and contributes to the development of a sense of place.

1.13 The application is in outline with all matters reserved with the exception of the principal means of access (i.e. junctions with the A5).

1.14 Given that road widening to the A5 itself will be required to accommodate the full scheme build out this is also incorporated within the submission and addressed via separate plans.

2. Parameter Plans

Parameter Plan PP1 – Site Boundary

2.1 This plan defines the extent of the outline planning application site boundary outlined in red, comprising some 71.51 hectares.

2.2 The red line extends beyond the main masterplan area to encompass the adjoining A5 and land immediately to the south to provide for the highway widening which will be necessary to accommodate the full development.

2.3 The area outlined in blue is land within the applicant's control and includes the MIRA Proving Ground itself and Proving Ground Estate. Future plans for the Proving Ground Estate are described in the Planning and Consultation Statement.

2.4 The plan also identifies existing site levels across the site as heights in metres Above Ordnance Data (AOD).

Parameter Plan PP2 – Development Footprint and Height

2.5 This plan sets out built development footprint and height limits for the site, with reference to zones which have been identified for ease of analysis and referencing as follows:

- Western (1) zone;
- Central (2) zone;
- Eastern (3) zone;
- MIRA (4) zone;
- North-west (5) zone;

2.6 In showing the maximum extent of built footprint in each zone, it is not intended that all of the area shown will be covered by buildings since this will be subject to control on development quantum (Parameter Plan 03/overall site limit), the dimensions of individual buildings (as detailed at Table 1 below) and the provision of landscaping, parking and circulation within the overall zone and each development plot. The plan shows the maximum points, particularly at the edges of the site, where built development may be located.

2.7 The plan also identifies the maximum building heights in metres above AOD, which have been informed by the Visual Impact Assessment and adjusted during the

design process. Sub-division of the zones to reflect height variations across plots arises from this.

2.8 Not all buildings across plots will be built to these maximum levels – however the height quoted has been designed to provide the necessary flexibility in terms of building type, since the three dimensional envelope will necessarily vary according to the nature of the use and to occupier requirements.

2.9 Table 1 specifies the maximum horizontal unbroken dimensions of individual buildings within zones. Minimum dimensions are also specified, excluding minor ancillary buildings (gatehouses etc).

2.10 Areas outside of the development footprint may accommodate roads subject to the maximum limits of deviation specified in Parameter Plan 04.

Table 1: Thresholds

Zone	Land Use	Height (AOD)		Maximum Length (metres)	Maximum Width (metres)	Minimum Length (metres)	Minimum Width (metres)
		Upper	Lower				
1							
a	B1 (a, b &c)	102	90				
b	B1 (a, b &c)	105	90				
c	B1 (a, b &c)	105	91				
d	B1 (a, b &c)	106	93				
e	B1 (a, b &c)	106	90	98.5	67.6	20	15
f	B1 (a, b &c)	106	89				
2							
a	B1 (a, b &c)	102	89				
b	B1 (a, b &c)	106	89				
c	B1 (a, b &c)	107	90				
d	B1 (a, b &c)	108	91	122.8	48.3	20	15
	Other *	108	94				
3							
a	B1 (a, b &c)	108	94				

Zone	Land Use	Height (AOD)		Maximum Length (metres)	Maximum Width (metres)	Minimum Length (metres)	Minimum Width (metres)
		Upper	Lower				
b	B1 (a, b &c)	107	99				
c	B1 (a, b &c)	110	96				
d	B1 (a, b &c)	111	100	62.2	54.2	20	15
4							
a	MIRA HQ**	121	95				
b		111	97				
c		109.5	97				
d		108	95	156.8	75.8	20	15
5							
	B1 (a, b &c)	115	102	55.5	32.0	20	15
	Other ***	115	101	50.0	50.0	20	15

* Includes leisure, food and drink, community, retail and hotel

** MIRA HQ, includes B1 a, b and c uses;

*** Primary Sub Station/Plant

PP03 – Land Use

2.11 This plan outlines the land uses for which consent is sought across the zones and includes maximum and minimum amounts of floorspace per zone (Table 2).

2.12 For each zone, maximum development quantum has been calculated with reference to the maximum physical extent of the developable area and the typical estimated footprint. Allowance is also made for multi-level development via floorspace increase in those areas where a higher level of office type development is anticipated.

2.13 It is not intended that zone by zone maximae will be delivered in combination, since the overall site maximum will act as a constraint and will not allow for this.

2.14 As detailed in the Traffic Assessment it is anticipated that there will be a cap on the overall quantum of B1(a) office development for reasons of traffic generation. The

location of these offices within the site is not fixed however and the floorspace figures given allow for this variation.

2.15 Since the application embraces all forms of B1 development it is inevitable that building types will vary according to their specific function dependent on whether light industrial, research and development or office use (or a combination of these) is delivered.

2.16 Outside of the main building zones, an outdoor recreation zone is defined to the western extremity of the linear park to replace existing facilities within the existing MIRA site. Ancillary buildings will fall within the overall limits for D2 leisure specified in the application.

Table 2: Amount of Development

Zone	**Use**	**Minimum (sq metres)**	**Maximum * (sq metres)**
1	B1	27,514	54,326
2	B1	12,272	38,210
	Retail/Services		500
	Restaurants		1,000
	Fitness club	2,819	1,000
	100 bed Hotel		4,500
3	B1	9,761	29,399
4	B1	31,756	76,624
5	B1	6,100	10,918
	Primary Sub-Station	n/a (plant)	n/a (plant)
Overall Maximum **		92,334	139,716

*Please refer to paragraphs 2.12 and 2.13 for quantum of floorspace rationale.

** Overall maximum floorspace proposed for the site which is less than the sum of individual zone maximae (see text) .

Parameter Plan 04 – Access and Movement

2.17 This plan identifies the position and form of access from the A5, which is to be fixed via the planning application.

2.18 The position of the primary access via MIRA Drive is subject to specified limits of deviation.

2.19 Within the site, a primary distributor route of 7.3 metres carriageway width, widened to 10.8 metres where ghosted right turn lane facilities are provided into development plot areas will link these external access points via western and central spine routes which will intersect via a roundabout of 40 metres ICD.

2.20 Limits of deviation of these distribution roads are defined on the plan. Further information on detailed internal road geometry and the provision of access to individual development plots within the site is set out within the Transport Assessment.

2.21 A combined cycleway/footway is provided across the site frontage, linking with National Cycle Route 52. Within the site, this route will continue adjacent to the primary distributor. Other potential connection points to the external highway network are not fixed.

2.22 An illustrative Pedestrian/Cycle Connectivity plan is submitted within the Design and Access Statement that provides a demonstration of how the access parameters allow for good access through and around the site and link it successfully to the surrounding area.

2.23 The extent of the A5 widening is also defined on the parameter plan although detailed drawings show these works in more detail.

2.24 Car parking will be provided within the site in accordance with the rations set out below. An overall limit of 2,263 spaces will apply.

Use	**Area**	**Rate**
Class B1 General	118,413 sq m	1/75 sq m
B1(A) office component	14,303 sq m	1/30 sq m
Class C3 hotel	4,500 sq m (100 beds)	1/40 sq m

Use	Area	Rate
Class A1 local retail facilities	500 sq m	1/30 sq m
Class A3 restaurants	1,000 sq m	1/30 sq m
D2 leisure	1,000 sq m	1/22 sq m

Parameter Plan P05 – Landscape Framework

2.25 This plan identifies areas of strategic landscape and open space.

2.26 The landscaped edge of the site to the A5 frontage provides for a minimum of 10 metres landscaping, comprising planting and mounding.

2.27 To the west, the exact form of landscape provision will be governed by the phasing of the development, as detailed in the Landscaping and Visual Impact Assessment. Notwithstanding this, a buffer zone is defined adjacent to the developed land which will remain permanently free from development and which may (dependent upon development phasing) incorporate additional planting if necessary. Within the site, in plot landscaping will provide additional visual buffers.

2.28 The plan shows the area in which the linear park which penetrates the development will be located, centred on the gas main crossing the site. The core zone lies immediately adjacent to the gas main, with a minimum width of 25 metres widening to up to 200 metres. The maximum extent of the park on completion will be circa 7.2 hectares.

2.29 To maintain the park's role as a wildlife corridor, connectivity will be maintained across it, including where roads cross the area. The plan shows the retention of the water body to the eastern site area which is identified in the ecological assessment as a habitat for great crested newts.

2.30 A new water body will be created as part of the MIRA Headquarters development. Whilst the extent of this area is not fixed, its general location is shown on the plan.

2.31 Elsewhere the provision of water bodies will be linked to the SUDS strategy which is detailed in the water resources chapter of the ES. The location and extent of these will be defined within each development zone as reserved matters come forward.

2.32 Flexible green corridors will be provided to link structural landscape components, as shown on the landscape concept plan. The location and extent of these will be defined within each development zone as reserved matters come forward.

2.33 To the south of the A5, a landscape edge of 2 metres minimum is provided to the south of the widened carriageway.

Appendix 1 – Parameter Plans

TURLEY ASSOCIATES



339.69 ha

71.51 ha

PP1: SITE BOUNDARY

SCALE 1:10000 @ A3



PP2: DEVELOPMENT FOOTPRINT AND HEIGHT

SCALE 1:7500 @ A4



PP3: LAND USE / ZONE PLAN

SCALE 1:7500 @ A4



PP4: ACCESS AND MOVEMENT

SCALE 1:7500 @ A4



PP5: LANDSCAPE FRAMEWORK

SCALE 1:7500 @ A4

BELFAST

BIRMINGHAM

BRISTOL

CARDIFF

EDINBURGH

GLASGOW

LEEDS

LONDON

MANCHESTER

SOUTHAMPTON

www.turleyassociates.co.uk