NICHOLSONS

Green Infrastructure Supporting Statement

Client: Net World Sports

Site: Land South of Bryn Lane

Date: 04/07/2025

Revision: **V2**



Table of Contents

1. Introduction 03

2. Relevant Planning Policy Guidance 05

3. Baseline Appraisal and Review 07

- Overview
- Landscape Character
- Biodiversity and Geodiversity
- Cultural Heritage and Archaeology
- Natural Processes and Environmental Systems
- Access and Recreation
- Strategic Green Infrastructure Context
- Site Level Green Infrastructure Context

4. Green Infrastructure Appraisal 20

- Overview
- Green Infrastructure Proposals
- Landscape Character
- Biodiversity and Geodiversity
- Cultural Heritage and Archaeology
- Natural Processes and Environmental Systems
- Access and Recreation
- Strategic and Site Level Green Infrastructure Context

5. Conclusions 26

Rev	Description of Change	Date	Initial
D1	Original Draft	01/07/2025	GL
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INTRODUCTION

1. Introduction

This is a Green Infrastructure Supporting Statement prepared in support of the following:

"Full planning permission seeking: demolition of existing structures and erection of employment facilities (class B2/B8) with ancillary office accommodation (class B1A) including landscaping, parking, access and other associated works."

This document will establish an understanding of the baseline green infrastructure context of the Site, and it will present an appraisal of the implications of the proposed development upon a number of strategic green infrastructure assets and functions, as well as exploring further opportunities to achieve green infrastructure gain.

This report will do this by considering:

- The policy context for green infrastructure, both nationally and locally;
- An appraisal of the existing green infrastructure value of the Site;
- An assessment of the interaction of the proposed development with the existing green infrastructure; and
- Identification of any net gain or loss in green infrastructure value on the Site and wider network, arising from the development proposals.

The Site is located on land to the south of Bryn Lane, Wrexham. The Site is bound to the north by Bryn lane, to the east and west by industrial buildings and to the south by woodland.

This document will draw upon the constraints and opportunities identified at the Site in the individual environmental disciplines that have contributed to this application, with a broad focus on ecology, landscape and arboriculture, but also considering heritage and archaeology and other environmental factors. The document will also directly respond to the key Green Infrastructure national policy requirements, as well as to recommendations made by the Local Planning Authority.

Finally, this document demonstrates how closely the project team from the varying disciplines have been working in order to create a coordinated, committed Green Infrastructure Strategy.

For the purposes of this document, the land upon which the development is proposed to take place will be referred to as the 'Site'.

Definition of Green Infrastructure

In 2013, the Landscape[1] Institute provided its own definition of Green Infrastructure as follows:

> *"GI is the network of natural and semi natural features, green spaces, rivers and lakes that intersperse and connect villages, towns and cities. Individually, these elements are GI assets, and the roles that these assets play are GI functions. When appropriately planned, designed and managed, the assets and functions have the potential to deliver a wide range of benefits – from providing sustainable transport links to mitigating and adapting the effects of climate change."*

The Landscape Institute goes on to define Green Infrastructure assets as follows:

> *"GI assets range from country parks, lakes and woodlands to urban interventions such as green roofs and street trees. They can be specific Sites at the local level or broader environmental features at the landscape scale within and between rural and urban areas such as wetlands, moors and mountain ranges."*

In terms of Green Infrastructure functions, the Landscape Institute defines these as follows:

> *"GI functions are the roles that assets can play if planned, designed and managed in a way that is sensitive to, and includes provision for, natural features and ecosystem services. They may have obvious primary functions, but each asset can perform different functions simultaneously – a concept known as multifunctionality. For example, street trees add aesthetic quality to an urban area, but will also reduce airborne pollution, provide shade, reduce urban heat island effects, mitigate wind chill and turbulence and increase biodiversity."*

1 (Green Infrastructure An Integrated approach to land use, Landscape Institute Position Statement, 2013)

RELEVANT PLANNING POLICY AND GUIDANCE

2. Relevant Planning Policy and Guidance

National Planning Policy

National planning policy in relation to Green Infrastructure is provided within the Planning Policy Wales- Edition 12. This recognises the contribution of Green Infrastructure to several key strategic functions as stated below:

(Section 6.2.3)

> *"Green infrastructure is capable of providing several functions at the same time and as a result offers multiple benefits, for social, economic and cultural as well as environmental resilience. The components of green infrastructure, by improving the resilience of ecosystems, can result in positive benefits to well-being including flood management, water purification, improved air quality, reduced noise pollution and local climate moderation, climate change mitigation and food production. These benefits are important in urban environments where they can facilitate health and well-being related benefits of open space, clean air and improved tranquility, for example, as well as creating a sense of place and improved social cohesion. In addition, green infrastructure has a role in protecting local distinctiveness, providing economic benefits and social and community opportunities."*

National Policy has placed an emphasis on integrating green infrastructure and development:

(Section 6.2.4)

> *"Green infrastructure plays a fundamental role in shaping places and our sense of well-being, and is intrinsic to the quality of the spaces we live, work and play in. The planning system must maximise its contribution to the protection and provision of green infrastructure assets and networks as part of meeting society's wider social and economic objectives and the needs of local communities. Taking a proactive and spatial approach, which links to wider activity being taken by local authorities to protect and provide green infrastructure, will help provide clarity around the contribution which the planning system can make. This means considering how it complements existing and future maintenance and management regimes within urban areas and contributes towards wider land management activities in rural areas to aid nature recovery, and its underpinning natural resources. This will require effective joint working and collaboration across various sectors and activities, including administrative boundaries. Establishing arrangements to promote collaboration across local authority borders will be necessary, especially where the provision of off-Site compensatory land to address biodiversity loss and provide enhancement will have the greatest benefit for biodiversity and resilient ecological networks."*

Excerpts from Planning Policy Wales highlights the importance of green infrastructure and the role Green Infrastructure Assessments should have in the planning and development process:

(Section 6.2.5)

> *"Planning authorities must, as part of adopting a strategic and proactive approach to green infrastructure, biodiversity and ecosystems resilience, produce up to date inventories and maps of existing green infrastructure and ecological assets and networks. Local authorities may already be undertaking such assessments and/or preparing such information to underpin local authority wide green infrastructure strategies and where this is the case planning authorities should both contribute to this process and use the inventories and mapping to underpin a spatial approach in their development plans. Green Infrastructure Assessments provide key evidence to support the preparation of development plans and where authorities are not already actively undertaking assessments, they should be undertaken as part of development plan preparation. Such Green Infrastructure Assessments should use existing datasets, and the best available information, to develop an integrated map-based evidence resource for biodiversity, ecosystem resilience and ecosystem service provision. Doing so will facilitate a proactive approach and enable contributions towards the well-being goals to be maximised."*

(Section 6.2.6)

> *"Green Infrastructure Assessments should also draw from the evidence base provided by NRW's Area Statements and Nature Network Maps, Well-being Assessments and locally and regionally collected green infrastructure data and mapping already underpinning local authority approaches to green infrastructure. Its outcomes should be integrated into development plans to ensure the early and co-ordinated consideration of opportunities to inform the development, design and land related strategies of the development plan. The Green Infrastructure Assessment and outcomes should also be given early consideration in development proposals, and inform the design and implementation of projects."*

2. Relevant Planning Policy and Guidance

Local Planning Policy

In December 2023, Wrexham County Borough Council adopted the Wrexham Local Development Plan LDP (2013-2028). However, in May 2025, By Order of the High Court of Justice, this LDP has been quashed and is no longer part of the development plan for Wrexham and remains unadopted.

The development plan for the area now comprises Future Wales: the national plan 2040 and the Wrexham Unitary Development Plan 1996-2011.

Wrexham Unitary Development Plan 1996-2011

The Wrexham Unitary Development Plan covers the administrative area of the Wrexham County Borough Council, and aims to provide a framework for local decision making and the reconciliation of development and conservation interests, in order that land use changes proceed coherently and with maximum community benefit. The plan was adopted in February 2005, and it replaced all previous Development Plan Documents.

The Development Plan is divided into two parts. Part 1 is the strategy that outlines the Council's broad intention for development in the area and provides a framework for the more specific policies and proposals. Part 2 contains the specific policies which expand on the strategic vision and provides detailed guidance for the development and other use of land.

Whilst there is no mention of Green Infrastructure in this plan, there are several policies contained within the plan that are considered to be of relevance to the Site and this report as follows:

Development Plan Part 1 relevant policies:

- **Policy PS2**- Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment.
- **Policy PS3** - Development should use previously developed brownfield land comprising vacant, derelict or underused land in preference to the use of greenfield land, wherever possible.

Development Plan Part 2 relevant policies:

- **Policy EC4**- Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape.

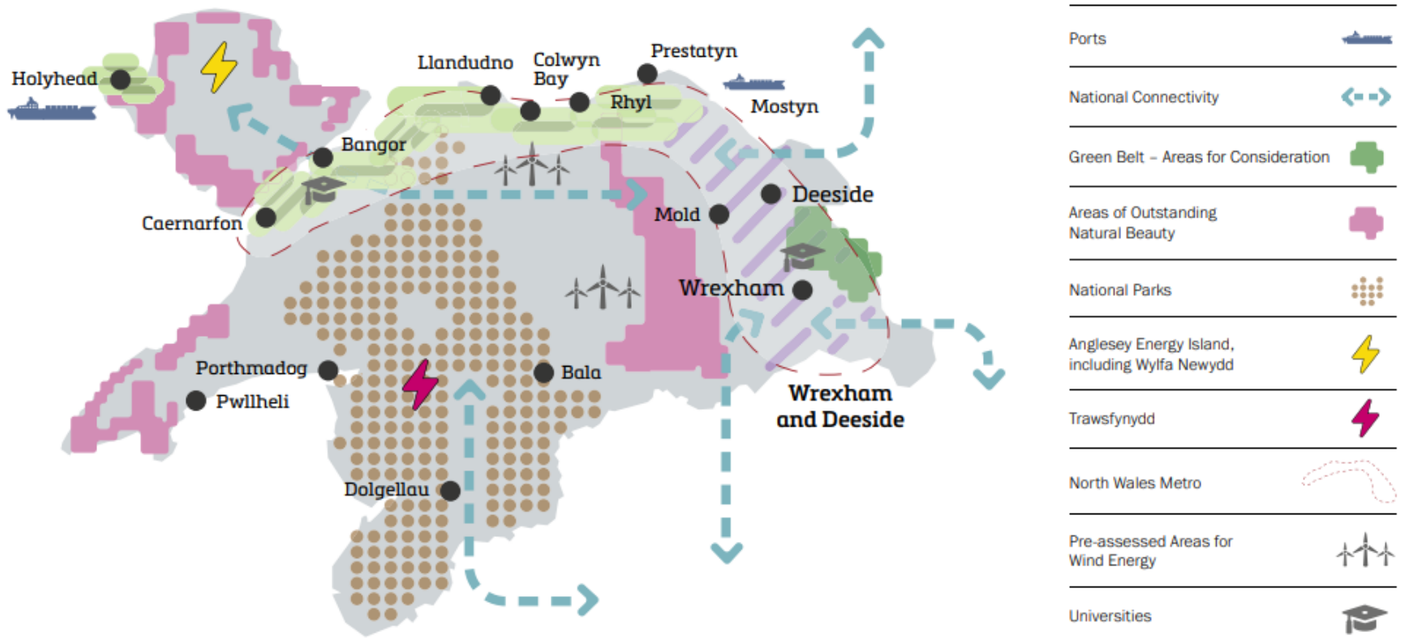
Future Wales: the national plan 2040

Future Wales: the national plan 2040 is a 20 year national development framework for Wales, outlining the Welsh Government's strategy for land use, development and providing guidelines for local authorities.

The document has a large emphasis on natural resources and green infrastructure and there is a clear view that opportunities to create and enhance green infrastructure should be maximised.

> *"Sustainable growth will involve achieving biodiversity and green infrastructure enhancements in our urban areas. Effective and innovative nature-based solutions to the challenges of urban form, design and density will be required in order to reap the well-being rewards of living and working in exemplar, future-resilient settlements."*

Future Wales: the national plan 2040
Regional Strategic Diagram



BASELINE APPRAISAL AND REVIEW

OVERVIEW
LANDSCAPE CHARACTER
BIODIVERSITY AND GEODIVERSITY
CULTURAL HERITAGE AND ARCHAEOLOGY
NATURAL PROCESSES AND ENVIRONMENTAL SYSTEMS
ACCESS AND RECREATION
STRATEGIC GREEN INFRASTRUCTURE CONTEXT
SITE LEVEL GREEN INFRASTRUCTURE CONTEXT

3. Baseline Review

Overview

This section will establish an evidence-based understanding of the existing Green Infrastructure context of the development Site and its wider context.

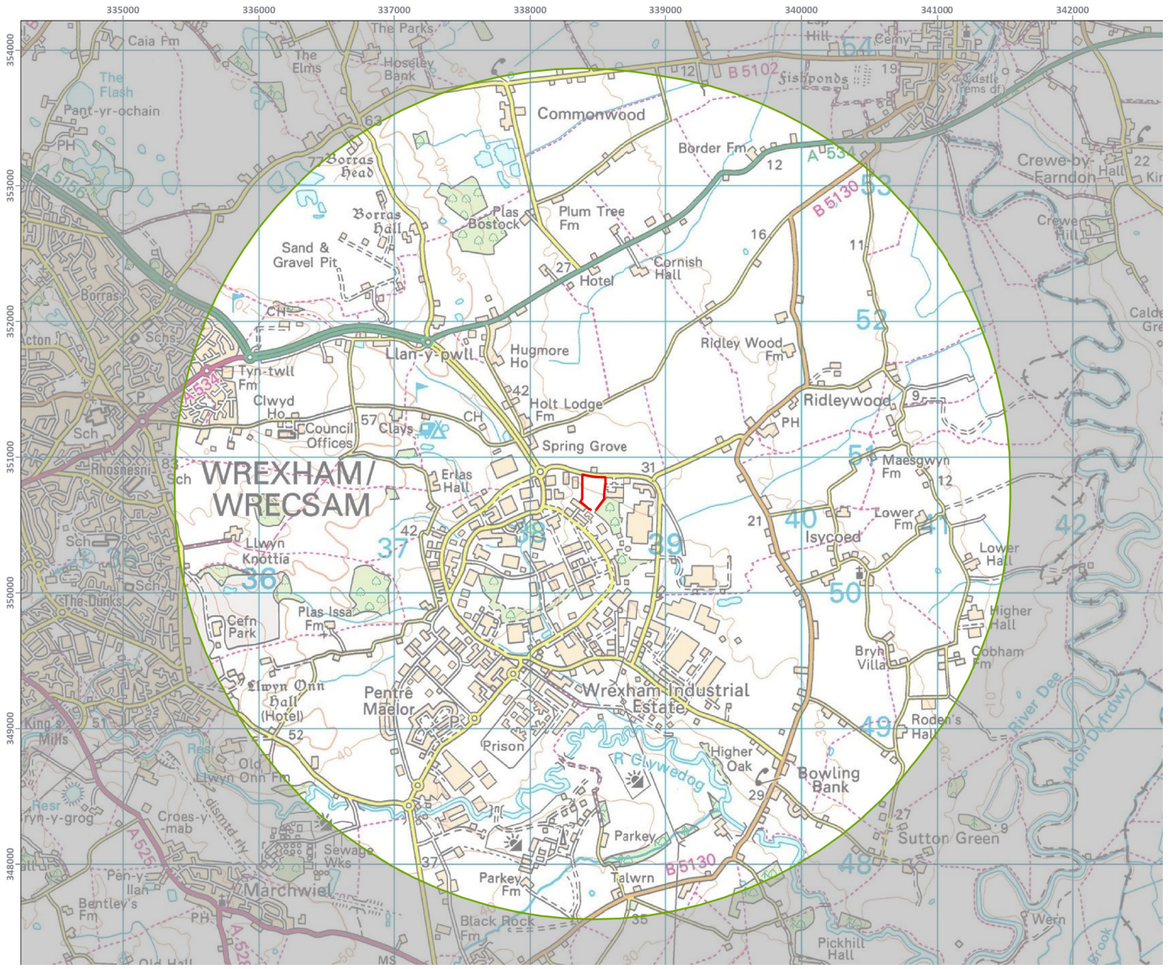
This review draws upon the findings of independent, professional reports that have been prepared in support of the planning application, with specific reference to:

- Landscape and visual Impact Assessment.
- Ecology and Arboriculture.
- Archaeology and Heritage.
- Ground Conditions.
- Drainage and Flood Risk.
- Access and Recreation.
- Climate Change.

The following sub-sections present a brief overview of the existing Green Infrastructure context of the Site. This has been structured into six Green Infrastructure functions, which reflect the various environmental services currently provided by the Site and the landscape in which it is located, while the final sub-section addresses nearby strategic level connections.

The green infrastructure functions that will be covered are as follows:

- Landscape character.
- Biodiversity and geodiversity.
- Cultural heritage and archaeology.
- Natural processes and environmental systems.
- Access and recreation.



Location of Application Site


Western Site boundary, looking east

3. Baseline Review

Landscape and Visual Character

Landscape Character

A Landscape and Visual Impact Assessment (LVIA) was prepared by Nicholsons for the proposed development on the 12/02/2025.

The Site is located within National Landscape Character Area (NLCA) 13 Deeside and Wrexham. The key characteristics of NCLA 13 are as follows:

- Predominantly mature, lowland countryside.
- Some areas offer a sense of seclusion due to agricultural enclosure interplaying with trees, woodlands and small river valleys.
- A singular large river, the River Dee, traverses the landscape.
- Mixed pasture with some arable and farm woodland cover.
- Strongly settled character within urban settlements in the central and southern regions of the area.
- Industrial character in particular areas.
- Small settlements outside of urban areas, in particular compact villages associated with landed estates and isolated farmsteads.
- Broad floodplain adjacent to the Dee Estuary.

The Site is located on land to the south of Bryn Lane and mostly comprises an open grassland field, which is divided into two parts with timber post and rail fencing. Tall native woody vegetation is present on the northern, eastern and southern Site boundaries. The Site is accessed from Bryn Lane via an existing agricultural entrance on its northern boundary. Watercourses are present along parts of the southern and eastern Site boundaries. Two disused World War II concrete bunkers are located within an area of scrub in the north-eastern corner of the Site.

With regard to the effect of the proposals upon the character of the Site and its immediate setting, the LVIA concluded that the proposals will constitute a change of Medium magnitude, acting upon a Low sensitivity receptor. The significance of this effect has been judged to have a Moderate to Moderate/Minor adverse effect.

When considering the effect of the proposals upon the character of the wider landscape, it is considered that the proposals will result in a change of Low magnitude, acting upon a Low/ Medium sensitivity receptor. The significance of this effect will be Minor to Negligible adverse.

In order to ensure that the proposals can be successfully integrated into this setting, and following the assessment of the Site, its setting and the wider landscape context, a number of design principles and mitigation measures have been identified. These include:

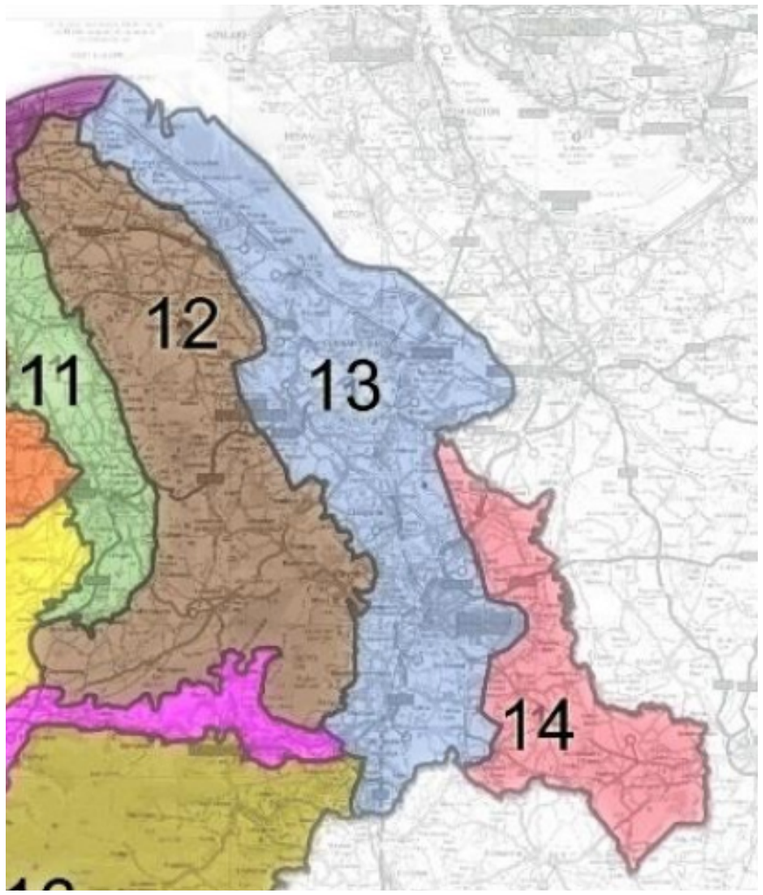
- Retention of as much of the boundary vegetation as possible to preserve the Site's vegetated context and contribution to the Strategic Ecological Network of the industrial estate.
- Planting a new hedgerow along the Site's western boundary to screen the palisade fence and provide additional wildlife connectivity.
- Supplementing the eastern boundary vegetation with additional planting.
- Planting of additional trees to the south of the building.
- Retention of the open water channels on the Site's eastern and southern boundaries.

3. Baseline Review

Visual Environment

The proposed development will not result in any significant landscape effects because of the existing industrial context in which the Site is located. This serves to significantly reduce the sensitivity of the receiving landscape, and sets a strong precedent for the type of development proposed.

The visual environment of the Site is highly restricted by the adjacent industrial elements, and by tall woody vegetation within the landscape. The visual receptors of the scheme were identified as public highway users and public footpath users within the countryside to the north of the Site. The proposed development is not anticipated to result in any significant effects upon these receptors because of the presence of existing industrial elements within views, and the screening effects of intervening structures and vegetation.



NCLA Map (Natural Resources Wales) showing NCLA 13







Baseline viewpoints
(Nicholsons)

3. Baseline Review

Biodiversity and Geodiversity

Ecology

An ecology desk study and an Ecological Impact Assessment were undertaken by The Environment Partnership (TEP) in November 2023.

The desk study exercise identified 4 internationally designated Wildlife Sites within 10km, 4 nationally designated Wildlife Sites within 5km of the Site (the closest being the Afon Dyfrdwy (River Dee)), no statutory locally designated Wildlife Sites within 2km and 2 non-statutory locally designated Wildlife Sites within 2km of the Site.

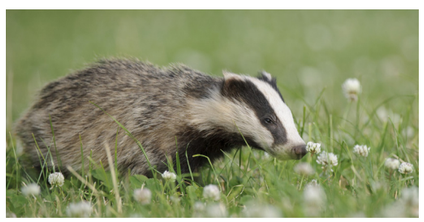
The Ecological Impact Assessment identified that the Site was made up of the following habitats:

- Semi-improved neutral grassland.
- Scattered Broad-leaved trees.
- Hedgerow with trees (species poor).
- Native species rich hedges and trees.
- Tall ruderal.
- Scattered scrub.
- Plantation.
- Buildings.
- Bare ground with ephemeral short perennial.
- Wet ditch/standing water.

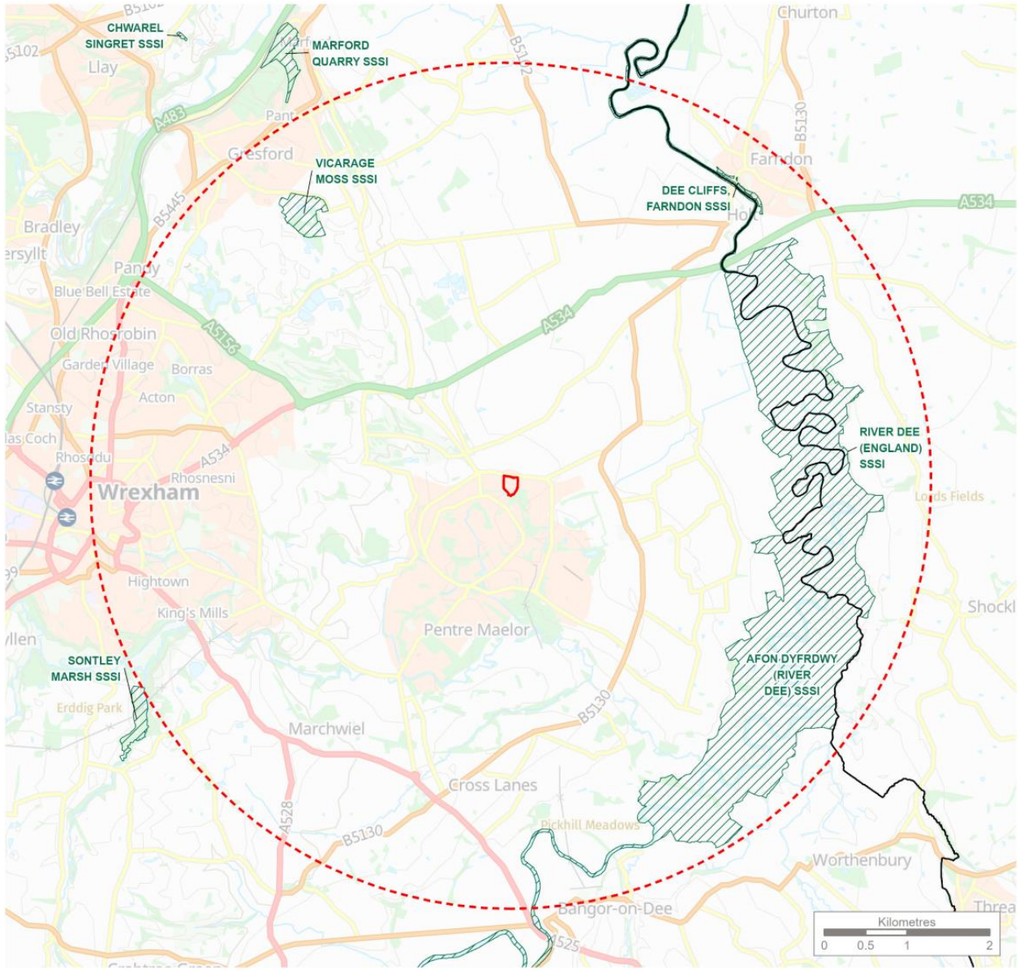












Key

- Site boundary
- Site boundary - 5km buffer
- Wales and England Border
- Sites of Special Scientific Interest (SSSI)

Sites searched for were as follows:
- Sites of Special Scientific Interest (SSSI)
- National Nature Reserve (NNR)
- Area of Outstanding Natural Beauty (AONB)

THE ENVIRONMENT PARTNERSHIP

401 Faraday Street, Birchwood Park, Warrington, WA3 6GA
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
Land South of Bryn Lane, Wrexham

Title
Nationally Designated Sites Within a 5km Buffer

Drawing Number
G10204.003

Scale	Date
1:60,000 @ A4	22/11/2023

Drawn	Checked	Approved
OH	AR	KR

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3. Baseline Review

Biodiversity and Geodiversity

Ecological Desk Study

The desk study returned records of 51 bird species that are classed as notable or protected within 2km of the Site of which there were 13 species classed as WCA1 and 17 classed as S7. No records of birds were recorded from within the Site boundary.

The desk study found no evidence of amphibians on Site however, 81 records of newt species returned within 2km with 25 of those being great crested newts. There were 11 species of bats returned within 2km of Site however, none recorded within the Site. The desk study also returned records of further notable invertebrates, badgers, reptiles and hedgehogs within 2km of the Site.

The desk study identified 1 veteran Oak approximately 60m to the east of the Site boundary that is registered with the Woodland Trust. 2 protected and notable flora records were returned within 2km of Site along with 2 non-native invasive species (Himalayan Balsam and Himalayan Cotoneaster).

Ecological Impact Assessment

The majority of habitats on Site comprises of semi-improved neutral grassland with areas of dense continuous scrub, plantation broad-leaved woodland, wet ditch, tall ruderal, introduced shrub, trees, hedgerows, bare ground with ephemeral/short perennial, hardstanding and buildings.

Badgers have historically been recorded in the local area however, no badger activity was recorded within the Site and immediate environments.

No protected plant species or invasive non-native plant species were identified on or immediately adjacent to the Site.

Hedgerow Survey

A number of scattered broad-leaved trees are present within a hedgerow along the northern boundary edge of the Site with the habitat being classed as a mix of hedgerow with trees (species poor) and native species rich hedges and hedgerows with trees.



Phase 1 Habitat Survey (TEP)

3. Baseline Review

Biodiversity and Geodiversity

Trees

A tree survey was undertaken at the Site in accordance with the guidelines provided in BS5837: Trees in relation to Design, Demolition, and Construction – Recommendations.

This survey identified a total of 12 trees and 8 groups. These trees have been categorised as follows:

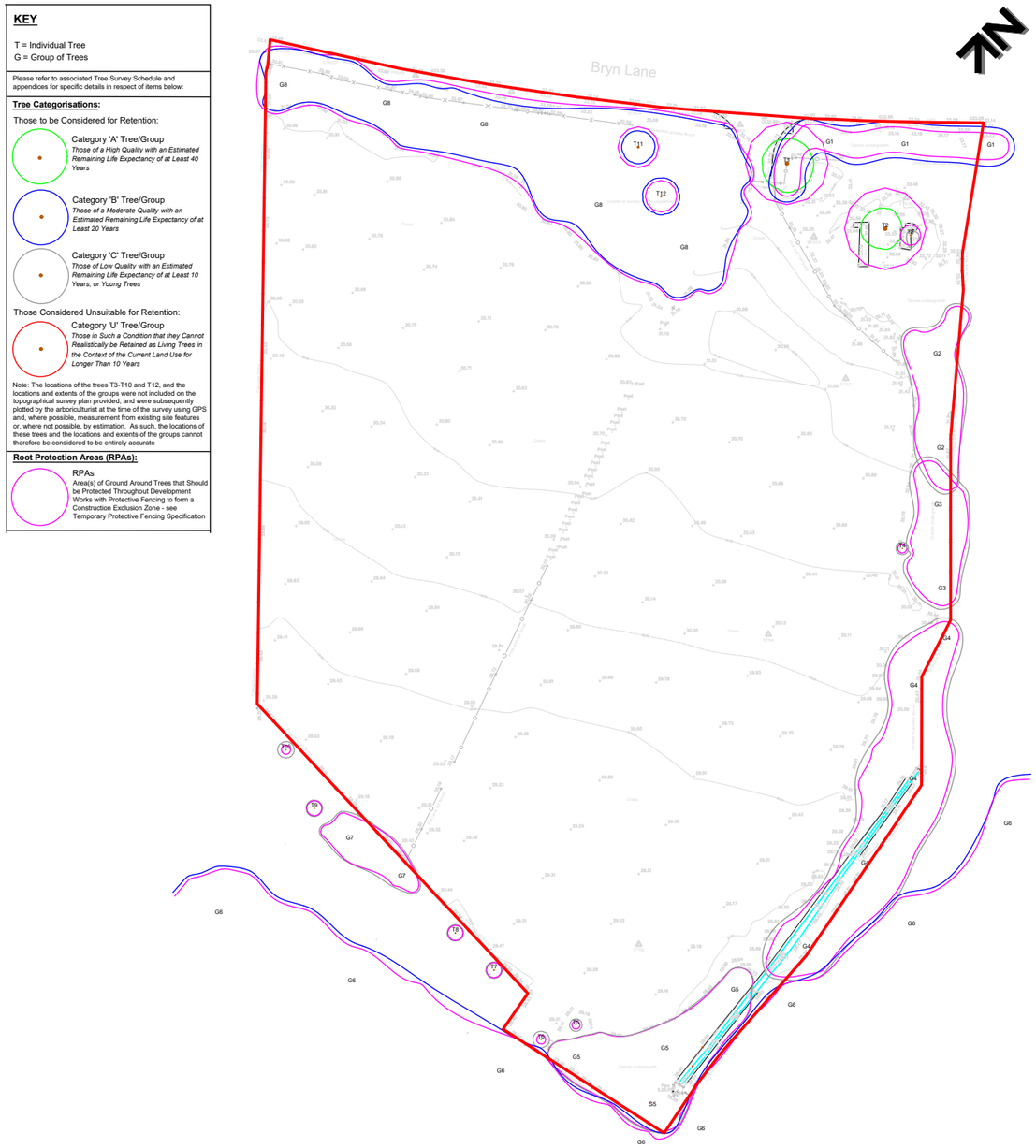
- 2 of high arboricultural quality (Category A).
- 5 of moderate arboricultural quality (Category B).
- 13 of low arboricultural quality (Category C).

There are no management recommendations made by the survey for the trees and groups surveyed.

The survey identifies Construction Exclusion Zones with temporary protective fencing and temporary ground protection measures to protect the trees and RPAs during construction.

Geodiversity

According to British Geological Survey maps, the application Site is not located within an area of artificial ground. The Site is underlain by superficial deposits of Devensian Till- Diamicton. This is identified to be a secondary (undifferentiated) aquifer. The western and northern parts of the Site are underlain by the Salop Formation comprising mudstone. The Kinnerton Sandstone Formation is a principal aquifer, and the Salop Sandstone Formation is a secondary aquifer.



Tree Constraints Plan
(Bowland Tree Consultancy)

3. Baseline Review

Natural Processes and Environmental Systems

Overview

The landform of the Site gently slopes down from north to south, with a small undulation to the northern area of the application Site. The lowest regions of topography are located along the application Site's southern boundary, whilst the highest regions of topography are located in the north, and this is consistent with the application Site's location on the gentle western slopes of the Dee Valley.

Drainage and Flood Risk

The application Site lies within the River Dee catchment. The River Dee itself is located approximately 3.4km east from the application Site and the nearest surface water feature to the Site comprises a water course within the Site. Watercourses are present along parts of the southern and eastern Site boundaries. The southern watercourse is a substantial engineered channel, whereas the eastern watercourse bears the character of an informal ditch. Both watercourses flow through engineered headwalls into culverts near to the southernmost point of the Site.

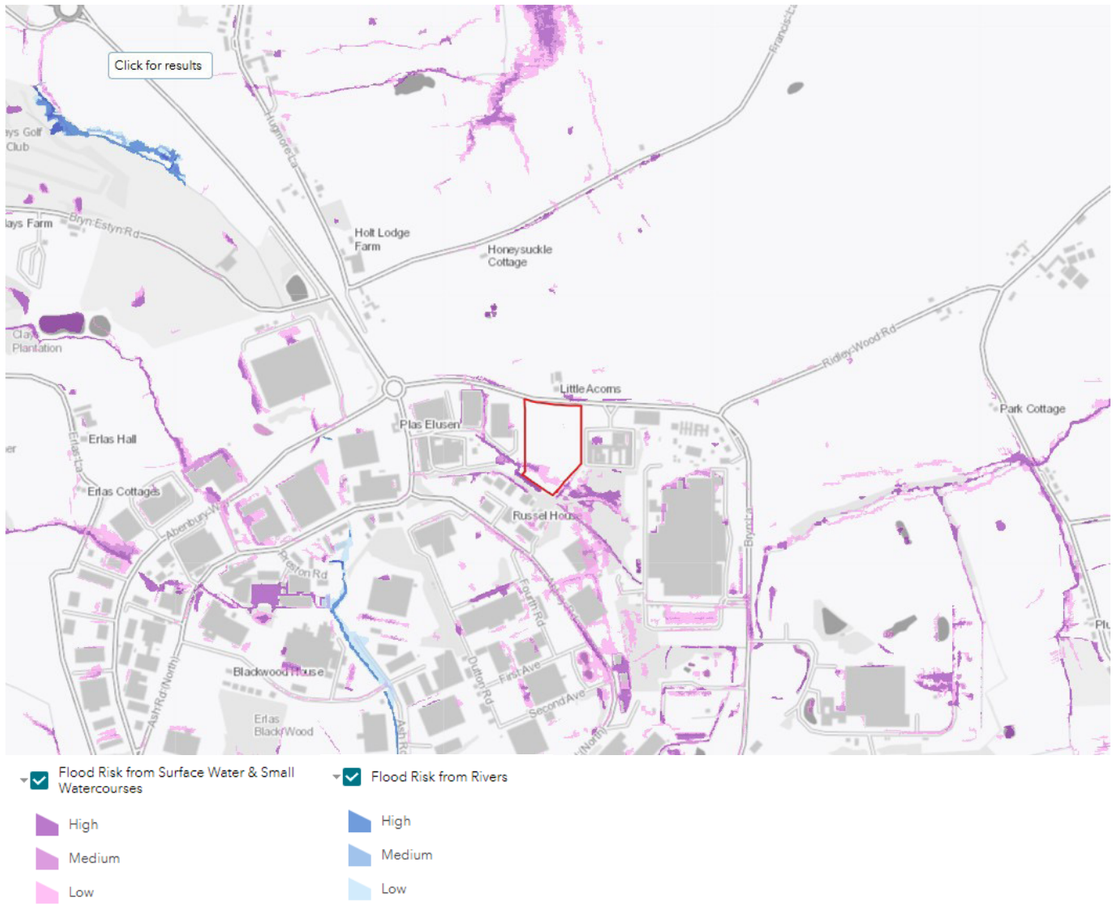
The Natural Resources Wales Flood Risk Map shows that the majority of the application Site has a very low risk of surface water flooding with a chance of flooding less than 1 in 1000 years (0.1%) in any year, including the effects of climate change. The southern area of the application Site where the drainage channel is located has a areas of low risk of surface water flooding with a chance of flooding of between 1 in 1000 (0.1%) and than 1 in 100 (1%) years and medium risk of surface water with a chance of flooding between 1 in 100 (1%) and 1 in 30 (3.3%), including the effects of climate change. This is associated with lower areas in the application Site.

The proposed Surface Water Drainage Strategy will include a range of SuDS features to prevent runoff and pollution though the Site, as well as the redirection to the existing watercourse and discharge point to help manage the surface runoff.

The catchment is designated as a Phosphorus Sensitive Special Area of Conservation (SAC) associated with the River Dee. Available mapping shows that annual mean orthophosphate concentrations for the River Dee within the vicinity of the application Site are low. The application Site is not located within 2km of either a Nitrate Sensitive Area or Nitrate Vulnerable Zone.

The soil condition at the Site and within the vicinity of the Site, and the topography of the Site suggest that the Site is relatively well drained and surface water flooding would not be expected to accumulate to any significant depths.

Flood Risk Map
(Natural Resources Wales)



Soils

The soils for the Site are described as slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils; fertility being classed as moderate and carbon levels low.

Light Levels

There are no existing artificial light sources within the Site due to its agricultural nature, however to the immediate south and south-west there is an existing industrial estate with numerous large buildings and car parking areas.

3. Baseline Review

Cultural Heritage and Archaeology

Cultural Heritage

There are no designated heritage assets within the Site; however there are a number of Listed Buildings within the study area, the closest being the Grade II Listed New Hold Lodge Farm, located approximately 500m to the north-west of the Site.

The two Grade II Listed Buildings located within 1km of the Site are:

- New Hold Lodge Farm, approximately 500m north-west of the application Site.
- Erlas Hall, approximately 1000m west of the application Site.

The LVIA (Nicholsons) has concluded that field investigation has shown that there is no perceptual relationship between the Site and these historic assets, and therefore no impacts are anticipated upon the character of the setting of these assets.

Archaeology

Two disused World War II concrete bunkers are located within an area of scrub in the north-eastern corner of the Site.





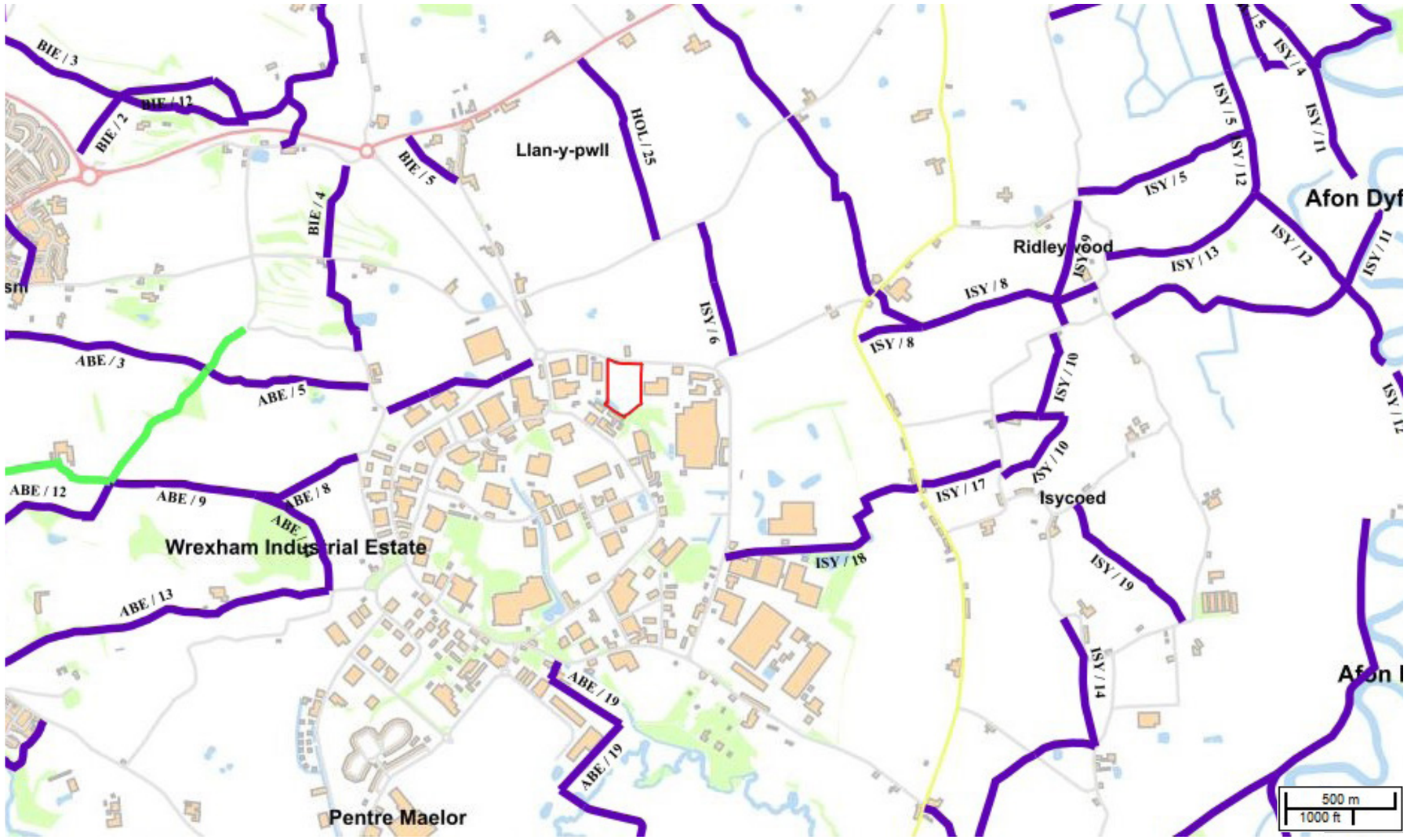
3. Baseline Review

Access and Recreation

There are no Public Rights of Way running through the Site, and no part of the Site is publicly accessible. An additional number of footpaths lie within fields north, east and west of the Site, connecting to the villages of Holt, Farndon, Gresford,the River Dee and to Wrexham.

The surrounding area benefits from an adequate level of pedestrian infrastructure. A lit cycleway is located on the southern side of Bryn Lane. Dropped kerbs and dedicated pedestrian cycleways can be found along Industrial Estate Road in the vicinity of the development Site.

Rights of Way map
(Wrexham County Borough Council)











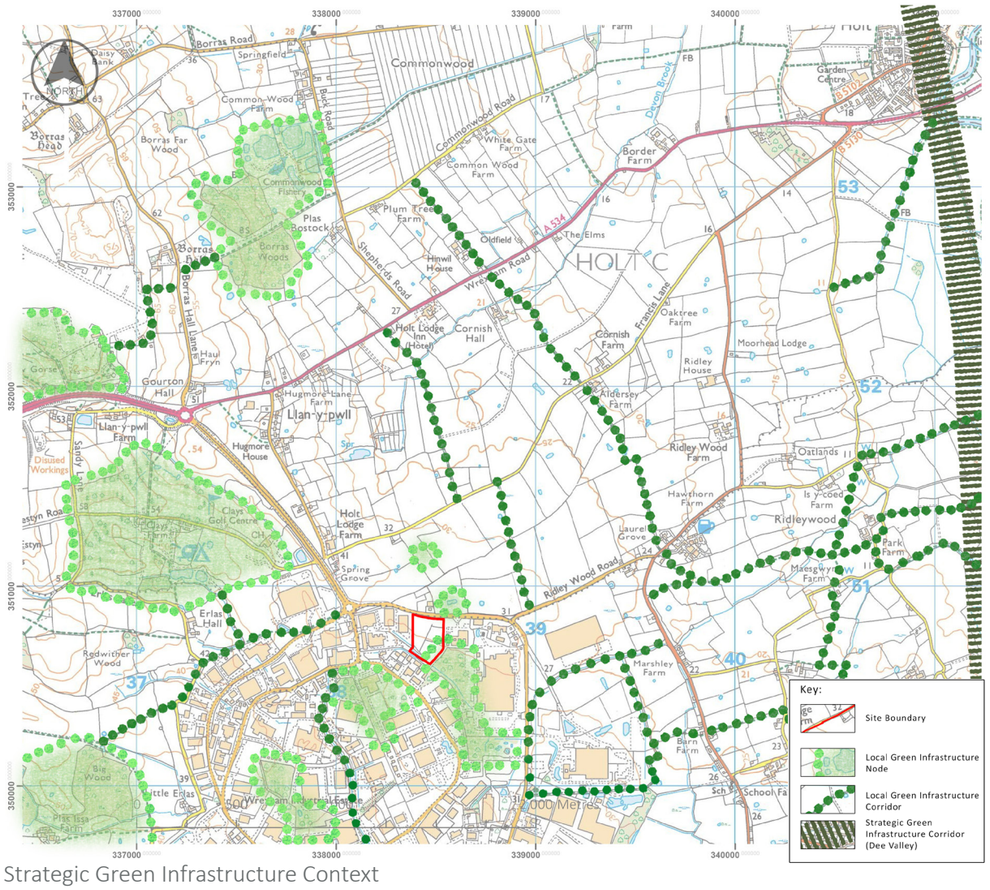
3. Baseline Review

Strategic Green Infrastructure Context

A recent Living Landscape Development Project across the area of Wrexham Industrial Estate has had a heavy focus on Green Infrastructure for the area. The long-term aim of the scheme is to successfully integrate the needs of the economy, environment and society in a genuinely mutually beneficial way, making the area attractive to businesses as well as providing benefits to wildlife and people.

There were three main activities undertaken during the Living Landscape Development Project:

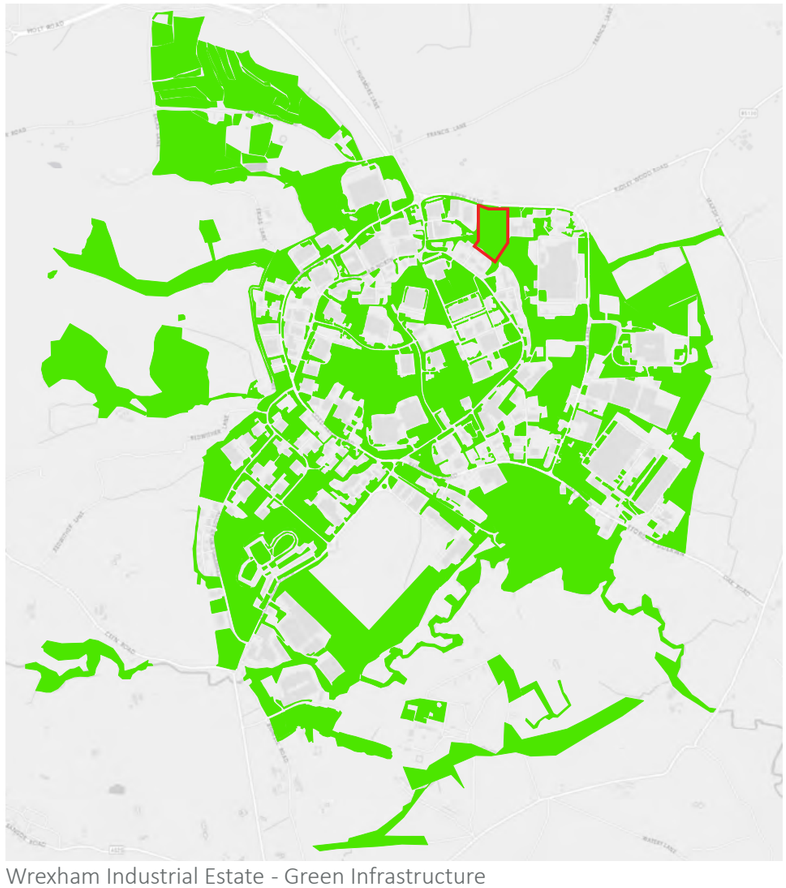
- Data collection, habitat surveys and mapping.
- Engagement with businesses and other stakeholders.
- Development of an ethos, vision and long-term strategy proposal for the Wrexham Industrial Estate.



Strategic Green Infrastructure Context
(Nicholsons)

The management of Green Infrastructure within the industrial estate sets a precedent for the Wrexham area and has been referenced in the Design and Access Statement for the proposed development. The guidance advocated in 'Wrexham Industrial Estate – Towards a Living Landscape' illustrates the important ecological assets that exist within the wider Site context and how the Bryn Lane Site can integrate and connect through hedgerows, aquatic corridors, woodland planting, open grasslands and the mosaic of varying habitats for wildlife.

The wider area has several local Green Infrastructure corridors that the Site links to both to the Green Infrastructure nodes to the North, West and South and to the Dee Valley corridor to the East.



Wrexham Industrial Estate - Green Infrastructure
(North Wales Wildlife Trust)

3. Baseline Review

Site Level Green Infrastructure Context

The wider Site has a rich baseline of ecological and habitat assets that can be utilised and in the long run, improved upon.

The Site lies to the east of the settlement of Wrexham, with Wrexham Industrial Estate to the immediate east, south and west. The land to the north is currently open fields, however is also a potential development site as part of the wider industrial estate expansion.

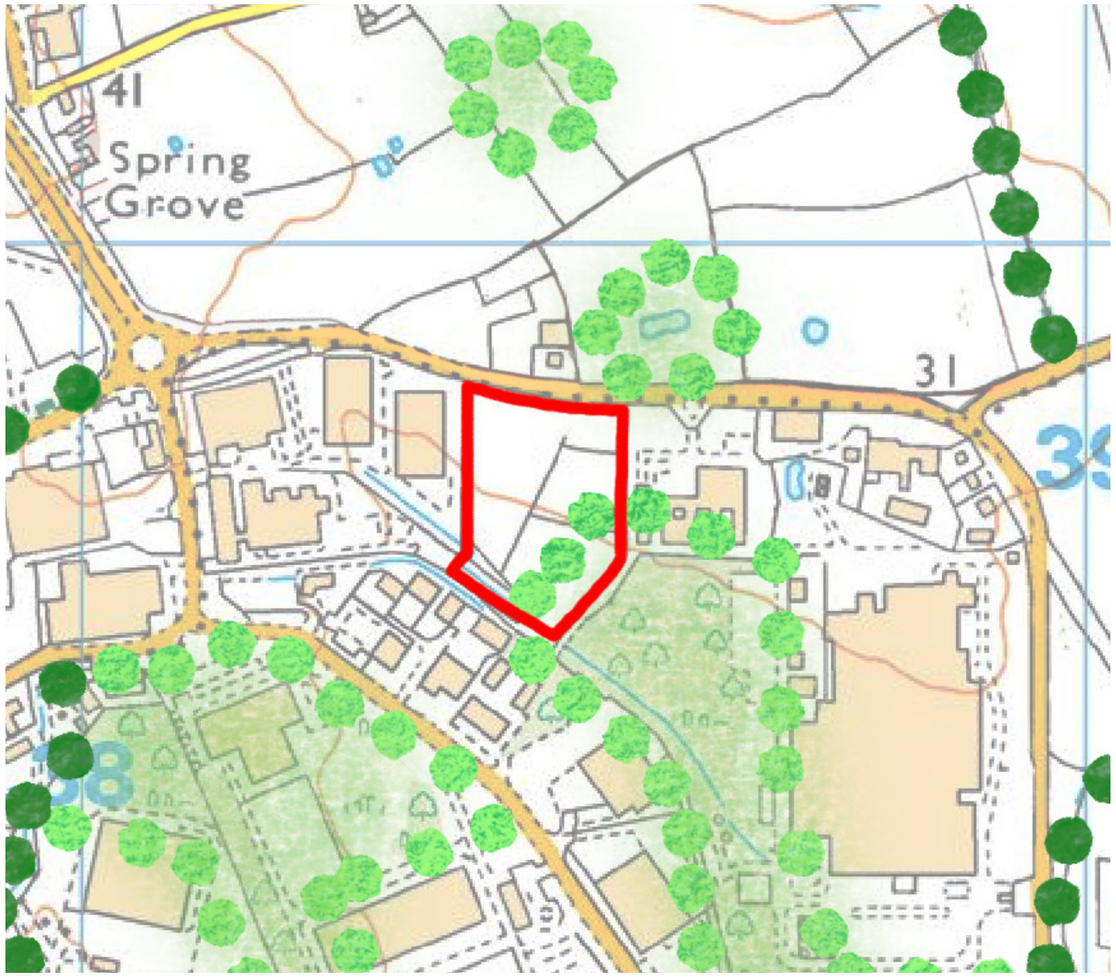
The Green Infrastructure planting that is currently established on the edges of the Site is an important ecological asset, and enhancement is important as this forms part of the industrial estate Strategic Ecological Network. These wildlife links are connectors within the wider industrial estate as a whole, and allow foraging and habitat creation for many forms of wildlife. Elements such as drainage ditches, hedgerows, scrub planting, trees of varying ages and condition are all present on Site, and provide a valuable resource, as well as opportunities for developing a robust landscape strategy.





Photos of habitat types within the Site boundaries.

Site Level GI nodes and connections
(Nicholsons)



GREEN INFRASTRUCTURE APPRAISAL

OVERVIEW
GREEN INFRASTRUCTURE PROPOSALS
LANDSCAPE CHARACTER
BIODIVERSITY AND GEODIVERSITY
CULTURAL HERITAGE AND ARCHAEOLOGY
NATURAL PROCESSES AND ENVIRONMENTAL SYSTEMS
ACCESS AND RECREATION
STRATEGIC AND SITE LEVEL GREEN INFRASTRUCTURE CONTEXT

4. Green Infrastructure Appraisal

Overview

Proposed Development Description

The proposed development comprises a single industrial building with associated infrastructure, including parking and circulation routes and Green Infrastructure. Parking space for staff vehicles is provided to the north of the building and lorry bays are located on the southern elevation.

The proposals present an opportunity to improve the overall Green Infrastructure within the Site and create improved connectivity both ecologically and recreationally, as well as serving to improve overall health and well-being for employees and visitors.

Opportunities and Constraints

The Site analysis carried out by PACE Architecture identified no major constraints to the development on the Site. As part of the design process considerations have been given to:

- Site levels to respond to the Site's existing topography, and to ensure that development plateaus are efficient and flexible to suit occupier requirements and that these tie into the overall surface water drainage strategy.
- Hard and soft landscape treatment to minimise the impact of the development on the surrounding area in visual terms.
- Integration of landscape and drainage features to create a sustainable and robust strategy that also enhances biodiversity.
- A robust and deliverable access strategy to ensure that the development does not impact on the surrounding network.
- A tree retention strategy that retains the significant trees across the Site.

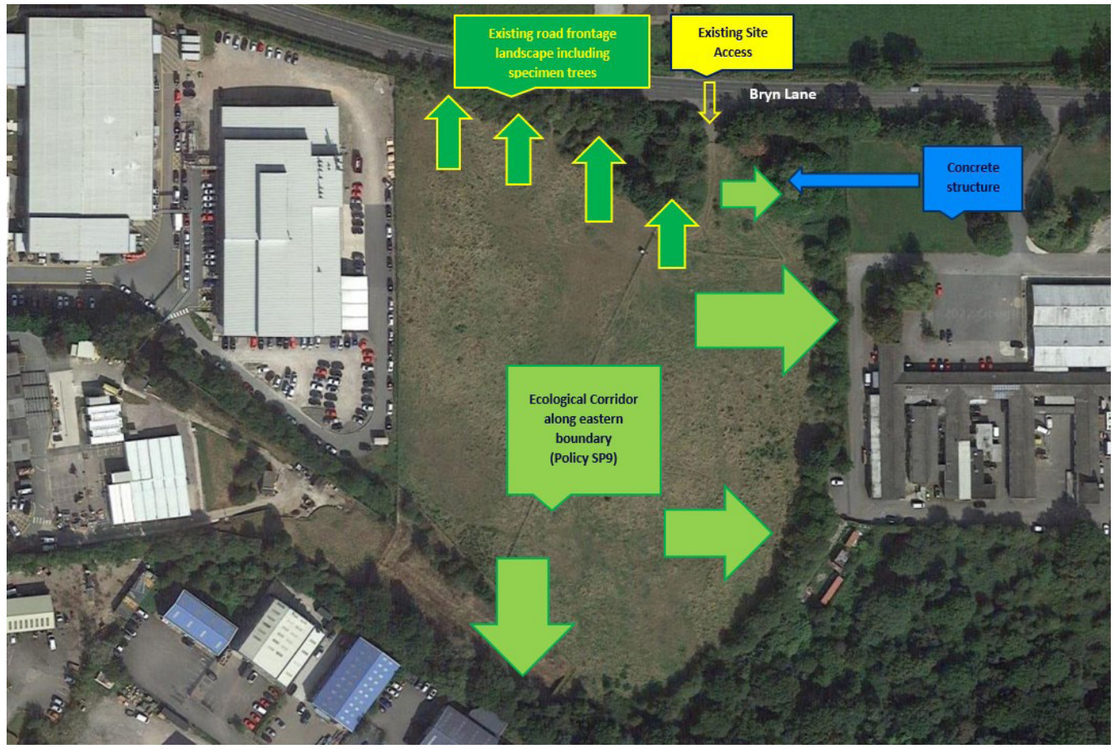
Landscape and Ecological Buffers

A key feature of the development proposals is the formulation of a robust landscape strategy which will see the creation of landscape and ecological buffers along the north, east and southern sides of the Site.

The role of these landscape and ecological buffers are to filter and contain views of the Site, create Green Infrastructure networks linking to existing corridors, and create an attractive green space for employees and visitors.

These new landscape areas will incorporate new native trees, shrub and hedgerow planting alongside meadow grassland areas and areas of mixed structural planting, as part of a comprehensive ecological habitat.

Opportunities and Constraints
(PACE Architecture)



4. Green Infrastructure Appraisal

Green Infrastructure Proposals

The landscape design for the proposed development has incorporated a range of positive measures to reduce the effects of the scheme upon the prevailing landscape character and environment.

These include the following:

- Retention of as much of the boundary vegetation as possible to preserve the Site's vegetated context and contribution to the Strategic Ecological Network of the industrial estate.
- Planting a new hedgerow along the Site's western boundary to screen the palisade fence and provide additional wildlife connectivity.
- Supplementing the eastern boundary vegetation with additional planting.
- Planting of additional trees to the south of the building.
- Retention of the open water channels on the Site's eastern and southern boundaries.

Landscape Strategy Masterplan
(Nicholsons)



4. Green Infrastructure Appraisal

Landscape Character

The LVIA concluded that the proposed development will not result in any significant landscape effects because of the existing industrial context in which the Site is located. This serves to significantly reduce the sensitivity of the receiving landscape, and sets a strong precedent for the type of development proposed.

The anticipated landscape receptors, and the significance of effect upon them, are as follows:

- Site and its immediate setting: Moderate to Moderate/Minor adverse effect.
- National Landscape Character Area 13: Deeside and Wrexham: Minor to Negligible adverse effect.

These effects are not considered to be significant within the planning balance.

Visual Character

The Site's visual environment to the west, south and east is restricted to its immediate boundaries by the presence of the surrounding industrial estate. Views towards the Site are available from the adjacent Bryn Lane and from public footpaths and a public highway in the wider countryside to the north, although in all of these views the Site is seen in context with existing buildings within the industrial estate, reducing the inherent sensitivity of these views.

The land to the north of the Site is allocated within the Local Plan for employment development, and when this allocation is developed, it is anticipated that the only public views of the Site will be from Bryn Lane.

The anticipated visual receptors, and the significance of effect upon them are as follows:

- Users of Bryn Lane (Viewpoint 1): Minor adverse
- Users of Public Footpath ISY/6 (Viewpoint 2): Moderate/Minor to Minor adverse
- Users of Public Footpath HOLT/24 (Viewpoints 3&4): Moderate/Minor to Minor adverse
- Users of Public Footpath HOLT/25 (Viewpoint 5&7): Moderate/Minor to Minor adverse
- Users of Francis' Lane (Viewpoint 6): Minor adverse

Wireframe Visualisations
(Nicholsons)



4. Green Infrastructure Appraisal

Biodiversity and Geodiversity

The Ecological Impact Assessment and Ecology Desk Study concludes that no significant ecological effects are expected on statutory or non-statutory Wildlife Sites, notable habitats or protected or notable species. It also identifies that the Site contains optimal terrestrial habitat for amphibians with foraging and resting opportunities and connectivity to the ponds in the wider landscape to the south. There are opportunities for habitat creation such as ponds to encourage and support a range of protected species.

The Ecological Impact Assessment identified parcels of trees and scrub in the east, south and west that have potential for foraging birds that should be retained or enhanced where possible. They also identified there is potential for amphibians, badgers, bats, nesting birds, reptiles and hedgehogs to be present within the Site.

Much of the mitigation has been designed to ensure the long term retention of existing key habitats and to create linking wildlife corridors through and around the Site, allowing species movement into the wider landscape.

Natural Processes and Environmental Services

The existing drain will be retained and a new wildlife pond added within the enhanced ecological corridor along the south east of the Site to enhance habitat provision.

The inclusion of new woodland, shrub, tree and hedgerow planting will greatly increase the Site's potential for Carbon Sequestration.

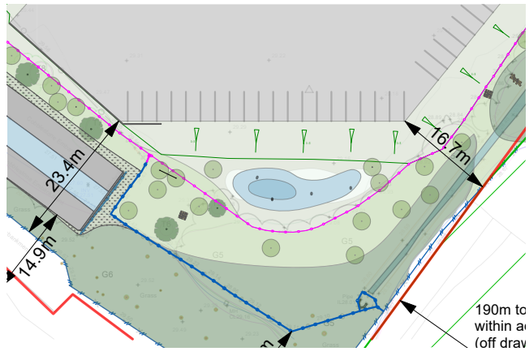
Access and Recreation

There are No Public Rights of Way running through the Site and it is not publicly accessible. The proposed design provides access to the Site, circulation routes and parking. Cycle paths and parking have also been proposed to link with the wider cycle network in the industrial estate.

Cultural & Heritage Archaeology

The disused bunker in the north-eastern corner of Site is due to be removed following a demolition plan.

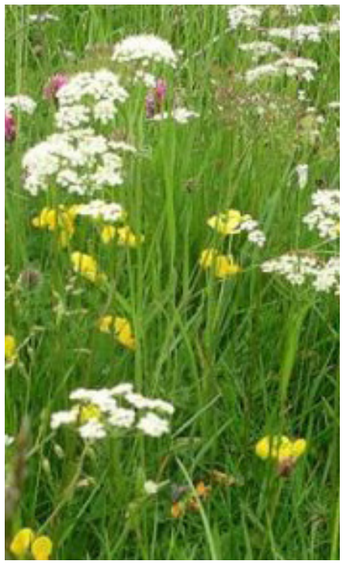
Extract of Landscape Plan- New wildlife pond (Nicholsons)



Extract of Landscape Plan- Cycle routes and parking (Nicholsons)









4. Green Infrastructure Appraisal

Strategic Level Green Infrastructure Context

There are several areas of Green Infrastructure planting that are currently established on the eastern and southern edges of the Site that form part of the industrial estate Strategic Ecological Network. There is the potential to enhance these connections with further planting and link the landscape strategy in with the Strategic Green Infrastructure Network.

The addition of new wildlife ponds and trees, as well as the enhancement of existing hedgerows and scrub, is anticipated to supplement the local strategic network and strengthen existing links.

Site Level Green Infrastructure Context

At Site level, the proposed development will improve the connectivity and enhance the current habitat provision. The key landscaping objectives are to:

- Preserve existing valuable trees to create a stable ecological element within the landscape.
- Enhance the current Green Infrastructure corridors along the north, east and southern part of the Site with additional scrub, hedgerow and tree planting, along with increasing wildflower potential, mosaic grasslands and pollinator plants.
- Drainage features such as the ditch will be improved and a wildlife pond added and situated in positions of the highest benefit to local ecology and to increase biodiversity within the Site.
- The existing grassland will be improved with a more diverse range of species and different forms of management to provide a varying habitat.
- Hedgerows to be protected and enhanced with hedgerow trees to provide the opportunity to reconnect fragmented habitats.

Proposed Green Infrastructure Network
(Nicholsons)



CONCLUSIONS

5. Conclusions

The proposed development scheme on land south of Bryn Lane, Wrexham presents a number of opportunities to enhance the natural environment and connect into the existing Green Infrastructure corridors.

The Site lies to the east of the settlement of Wrexham, and within Wrexham Industrial Estate. The Sites northern boundary is immediately open to Bryn Lane and the proposed development on land to the north of Bryn Lane.

The Site is currently an open grassland field with a small collection of trees to the north and a drainage ditch to the south.

Current Green Infrastructure Network

At present, the Site bounds several Green Infrastructure corridors that are part of the strategic ecological corridor. Tall native woody vegetation is present on the northern, eastern and southern Site boundaries.

The Site lies within a well developed Green Infrastructure network as demonstrated by the Living Landscapes Development. Therefore, there is an opportunity to create stronger Green Infrastructure links across the Site, allowing for stronger connections with the existing Green Infrastructure throughout Wrexham Industrial Estate.

Development Proposals

The proposed development comprises a single industrial building with associated infrastructure, including parking and circulation routes and Green Infrastructure. Parking space for staff vehicles is provided to the north of the building and lorry bays are located on the southern elevation.

Key green infrastructure on the site such as the existing valuable trees, grassland, drainage features and hedgerows will be retained and enhanced. The development proposal also includes scrub and tree planting along with the addition of a new wildflide pond. It provides an opportunity to deliver environmental benefits within the Site and extending into wider networks.

Enhanced Connectivity

The enhancement of Green Infrastructure to the north, east and south of the Site provides greater connectivity for many species and encourages migration and breeding.

Green Infrastructure Enhancement and Creation

The identification of wildlife populations and habitats and the existing Green Infrastructure scheme in the industrial estate have been noted as integral factors to the design approach, as well as the aspiration to create meaningful environmental and social benefits both within the Site and the wider countryside and community.

A series of landscape creation and enhancement measures have been proposed to create meaningful Green Infrastructure in and adjacent to the Site. It has taken future climate change considerations into account, as well as the increasing the desire to protect and appreciate our environment.

Proposed Landscape Measures

- The creation of Strategic Landscape Areas at key boundaries and points within the development in order to successfully integrate the development into the wider landscape.
- Retention of as much of the boundary vegetation as possible to preserve the Site's vegetated context and contribution to the Strategic Ecological Network of the industrial estate.
- Planting a new hedgerow along the Site's western boundary to screen the palisade fence and provide additional wildlife connectivity.
- Supplementing the eastern boundary vegetation with additional planting.
- Planting of additional trees to the south of the building.
- Retention of the open water channels on the Site's eastern and southern boundaries.

Climate Resilience

The Green Infrastructure proposals have been designed to respond positively to climate change, through the selection of locally native and climate resilient woodland, tree and shrub species, as well as the improved potential for carbon sequestration through tree and woodland planting.

Overall Conclusion

The low/medium level baseline of existing Green Infrastructure across the current Site means that the proposed Green Infrastructure features provide opportunities for a net gain in overall Green Infrastructure value.

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Nicholson Nurseries Limited
Oxfordshire & Northamptonshire
Head Office: The Park, North Aston, Oxfordshire. OX25 6HL.
Tel 01869 340 342 Fax 01869 340 350 e-mail office@nicholsonsgb.com
www.nicholsonsgb.com
Registered office as above. Reg no 04820053