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GRADON ARCHITECTURE



Valley Environmental Consulting

Creative Solutions for the Built & Natural Environment

CREATING POSITIVE? IDEAS DRIVE & INSPIRE ENVIRONMENT

1.0

INTRODUCTION



1.0 INTRODUCTION

1.1 Foreword

The Stainsby Site allocation is a major opportunity to create a vision for high quality residential development in a growing Middlesbrough, that meets the needs of homeowners and enhances the natural environment; creating a unique quality of place.

If Middlesbrough is to continue to be moulded as a vibrant, modern and growing city, competing against the wider north east, then the development of high quality homes is of paramount importance. Although the population of England has increased by about 10% in recent years, for the first time in generations there is population growth in Middlesbrough, with people attracted to the opportunities presented in by the growing local economy. The majority of this growth has been achieved towards the south of the borough, with housing sites performing very well in terms of completion numbers, and sale values.

Stabilising the population is essential if Middlesbrough is to consolidate its status as the city-centre of the Tees Valley. Stabilising the population will help to support and improve viability of local services such as schools and shops. The objective will be achieved through a combination of providing housing in locations, and of the type, that people want, and through improvements to the local environment and investment in facilities and infrastructure.

A mixed and balanced community at Stainsby is the ultimate aim with the opportunity to provide an outstanding 'country park' setting for this community not be missed. Middlesbrough Council, Housing Developers, Ward members and local people alike have contributed to the future vision for the site; with the emphasis firmly on creating a high quality and sustainable place to live.

This masterplan and design code is intended to set that vision, and to test future developments against its high standards.



1.0 INTRODUCTION

1.2 Purpose of the Design Code

The development of Stainsby as a new extension to the urban area of Middlesbrough has attracted significant interest from stakeholders who wish to see sustainable development. The purpose of this masterplan and design code therefore is to set out specific principles that should be adhered to in the pursuit of 'quality of place.'

Middlesbrough Council wish to utilise this document, adopted by the Council, as a tool to assess forthcoming planning applications. The document will therefore ensure that clear guidance is set out to developers on the scale, nature and type of development expected in relation to Middlesbrough's adopted Local Plan Policies.

Where specific requirements are set out, those 'hooks' will be identified in order to demonstrate that the masterplan is in line with Middlesbrough's Planning Policy, and where these would test any application.

The detailed guidance in this document is intended to ensure that a high quality development is created at design stage and retained throughout the approval and construction process to delivery.

This document recognises that developers will not be restricted to specific house types, designs or materials rather it is intended to promote innovation and best practice, particularly in layout, street scene and the green infrastructure that is synonymous with a high quality of place.

The document intends to assess and build upon the significant body of work already undertaken at previous masterplan stages in relation to current objectives, identifying any outstanding issues and strategic objectives.

This design code and indicative masterplan is based on a thorough desktop assessment of the existing site, context and character, identifying landscape and visual constraints and opportunities as well as receptors such as Air, Water & Flooding, Heritage, Ecology, Public Rights Of Way and Transport Corridors, and Noise.

It is expected that the desktop assessment will be further developed, in line with best practice place making and design guidelines, during the detailed design stage.

The document will create a site specific best practice development vision for the site, with objectives and design principles that address wider environmental objectives and outstanding issues

Lastly the document will demonstrate an indicative Outline Masterplan & design code which meets the identified objectives and design principles and illustrates the development vision and spatial layout including;

- housing densities and typologies,
- road hierarchy,
- parking strategy,
- character areas,
- landscape strategy, including country park,
- indicative sections and vignettes etc



1.0 INTRODUCTION

1.3 The Vision

The vision for the allocated housing site at Stainsby is a sustainable, mixed and balanced community set within an outstanding and engaging landscape, that includes the creation of a new country park, providing over 1500 new homes. This iteration of the masterplan seeks to flesh these out and provide greater detail and clarity around these themes.

Central to this vision is the very simple blurring between country park and residential development. This 'start with the park' philosophy has driven the design of the development where new residents, existing residents and visitors will always have the 'feel' of living in a park. This huge new provision of functional green space will greatly expand recreational activities in the local area.

1.3.1 Homes, Streets and Parking

A mix of standard developer housing types is anticipated, which will vary across the site from a high density around the central commercial hub area and along primary road frontages. Lower density development will dissipate towards the open countryside, alongside areas of the country park and particularly towards Bluebell Beck reducing the impact on this important habitat.

The character of the residential area will be homes within a park and therefore the impact of roads will be reduced to change driver behaviour, lower speeds and shared spaces that promote sustainable transport and active travel. The principal road will serve the development, alongside, cycle routes, with secondary and tertiary roads serving streets, lined with trees to provide legibility to the country park.

Parking is intended to be unobtrusive rather than dominating with ample spaces for cars, but avoiding bland parking courts, and visitor parking integrated with urban landscaping.

1.3.2 Landscape, Nature and a New Country Park

Starting with the park sets the tone for the development to provide a crucial new green space and set of green infrastructures that permeates the development. The jewel in the crown of this, is the new Country Park, comprising over 53% of the total development area. The purpose of this is to 'envelope' and pervade the residential area, providing setting and character.

The Country park would extend and enhance existing habitats, water courses and recreational areas including that of Bluebell Beck with the key concern that the park should permeate the development at every turn.

New habitats created would include structural native and community woodland and glades, species rich grassland, and wetlands incorporating sustainable drainage systems to manage surface water, as well as more formal areas of planting such as orchards and growing areas and natural play spaces.

1.3.3 Community and Connectivity

At the heart of the development and connected to the Country Park is a new community and commercial Hub. This includes a new primary school, local centre, community centre and associated formal sports facilities. Permeating the development will be a network of safe formal and non-formal cycle routes and multi-use paths, including a commuting route and footpaths that link the country park, bluebell beck, and the commercial hub with residential streets and adjacent areas of Middlesbrough.

1.3.4 Summary

- *The site is allocated for a high quality mixed and balanced community with an opportunity for increased public space*
- *A residential development within a new Country Park setting*
- *A mix of housing types, and densities creating distinct character*
- *Access for sustainable transport as well as new roads to serve the development*
- *Opportunities for a central commercial and community hub serving as the heart of the development*
- *enhanced connectivity to and from the wider area via a network of paths*



1.0 INTRODUCTION

1.4 Planning Policy Context and the Existing Site

The existing Stainsby site was allocated as a Housing Site within the adopted 2014 Local Plan with a specific policy attached governing the expected outcomes via Policy H21. This policy is the golden thread that runs through the philosophy of the masterplan with key elements of delivering housing within a mixed, balanced community and a country park.

Key to driving the final quality of the masterplan design will be adherence to Local and National Planning Policy. There are a number of elements to ensuring that policy will be met by the proposed planning applications, mirroring the level of design within the master plan.

These relate to the Middlesbrough Local Plan, Infrastructure Delivery Plan as well as the Middlesbrough Urban Design Guide. The Stainsby Masterplan is intended as a guide to developers on behalf of the local authority to provide certainty over design.

Due to the nature of the site as greenfield and with reasonably certain development costs, lack of abnormalities such as remediation the site is considered to be able to support the proposed housing numbers within Policy H21. Significantly greater housing numbers suggested by developers leading to greater densities are likely to be resisted unless there are as yet unknown viability concerns.

The current planning policy context for the site in relation to its 'golden thread' of H21 is intended to set the bar intentionally high to achieve a strong quality of place. This combined with key elements of the Core Strategy and the Middlesbrough Urban Design Guide form material considerations in the masterplan design.

Housing Local Plan Policy H21

130 ha of land are allocated at Stainsby Hall Farm and Stainsby Hill Farm for a mixed and balanced residential community.

The following uses are considered appropriate:

- Residential – 1670 dwellings of which a minimum of 1125 to be completed within the Plan period up to 2029.
- Employment (B1 use) 2ha.
- Local retail centre – to be provided when need arises.
- Primary school – to be provided when needs arises.

The Council will require the development to deliver a high quality scheme that:

- a. *Creates residential development in neighbourhoods of identifiable character which provide variety and diversity in layout and design.*
- b. *Provides a mix of dwelling types and sizes, including three and four bedroom detached and semi-detached dwellings.*
- c. *15% of dwellings to be affordable provided as 5% of the dwellings on site and a 10% off-site affordable housing contribution.*
- d. *Provides the school and local centre in a central location which maximises accessibility for future residents, timing to be agreed subject to need.*
- e. *Is accessed from both the B1380 and A1130 creating a link road through the development.*
- f. *Provides any necessary off-site improvements to transport infrastructure to ensure that traffic generated by the development does not have a detrimental impact on the highway network.*
- g. *Provides pedestrian and cycleway links throughout the development to improve connectivity including links to the residential areas and community facilities located to the east of the site and to the public right of way to the south west of the site.*

- h. *Incorporates a country park along the western and south western parts of the sites including significant areas of woodland and structural landscaping to provide screening from the A19.*
- i. *Incorporates green corridors adjacent to Saffwood Beck and Blue Bell Beck, including a local park west of Saffwood Beck with pedestrian links to open space at Stotfold Walk.*
- j. *Where crossings over the becks are required this shall be by clear span crossings rather than culverting.*
- k. *Enhances the Local Wildlife Site in the north of the site and provides compensatory provision for any loss of habitat required for highway access.*
- l. *Maximises the use of SUDS, water efficiency measures and landscape buffers as appropriate to protect Saffwood and Blue Bell Beck from urban run-off and sedimentation.*
- m. *Maintains an access route for farm vehicles from the farmstead at Stainsby Hill Farm to the farmland south of Stainsby Grange Equestrian Centre. A noise assessment will be required to take account of traffic noise from the A19 and A174.*



1.0 INTRODUCTION

1.4 Planning Policy Context and the Existing Site continued..

Middlesbrough Core Strategy Design - CS5

CS5, requires that *“all development proposals will be required to demonstrate a high quality of design in terms of layout, form and contribution to the character and appearance of the area”*.

Policy CS5 further seeks the *“enhancement of the best characteristics of Middlesbrough’s built environment to create a positive identity for the town and improve the quality of life of its population”*.

Middlesbrough Urban Design Guide

This document will be used when determining most planning applications and failure to comply with the guidance set out in this document will be resisted.

A successful development should: -

- a) *relate well to the surrounding geography and history of the land, and contribute to the wider environmental benefits for the town;*
- b) *be of a density that is appropriate to the locality;*
- c) *respond to the natural patterns of movement in and around the site and encourage connectivity;*
- d) *respect and exploit already established important local and strategic views and vistas;*
- e) *relate to the scale (height and massing) of the surrounding buildings;*
- f) *consider the diversity and pattern of the already established surrounding urban grain, block and plot size;*
- g) *consider the current building line;*
- h) *ensure satisfactory measures are incorporated in the design and location of the development to minimise the effects of noise from any existing or potential sources nearby;*
- i) *create a site with identity;*
- j) *act as a visual focus, or complement the open spaces that already exist;*

Legibility, clear definition of public/private realm

Buildings and the spaces between them should work together to create key recognisable events and places that are easy to navigate through. Spaces are most successful when it is easy to identify who is meant to use them.

Development can be designed to ensure that places are easily understood by:-

- a) *creating or redefining a clear hierarchy of routes, streets and spaces;*
- b) *locating activity and mixes of uses along key transport corridors;*
- c) *relating building heights to streets and spaces to reinforce their relative importance;*
- d) *supporting a hierarchy of open spaces whose function and importance can easily be understood through their design;*
- e) *relating development to the visual connections between it and the surroundings;*
- f) *protecting and enhancing existing locally distinctive landmarks;*
- g) *creating new landmark buildings and spaces where appropriate e.g. gateway sites;*
- h) *incorporating memorable public art at landmark locations;*
- i) *reinforcing visual connections along routes with appropriate landscaping, lighting and signage;*
- j) *designing developments so that their intended functions are clear, and the access to entrances are visible and appropriately located; and,*
- k) *forming easily recognisable and clear delineation between private and public land through the use of boundary treatments where appropriate.*

1.0 INTRODUCTION

1.4 Planning Policy Context and the Existing Site continued..

Further to the above elements of Local Planning Policy and also Design Guides, the Stainsby Masterplan has been designed to 'One Planet Living Principles' wherever possible.

The One Planet Living framework adopted by Middlesbrough Council and partners is built around ten principles of sustainability that relate to environmental, economic and social aims. By gradually making changes to the way we do things we are making Middlesbrough a more sustainable community - one which lives within the planets available resources.

Referenced in the Middlesbrough Urban Design Guide the One Planet Living Principles are intended to be designed into the Stainsby Masterplan and these identified opportunities for each of the ten principles to work within the masterplan are shown below for guidance to developers;

Zero Carbon- The design although on the edge of the Middlesbrough Conurbation will ensure adequate reduction in car usage as well as maximising opportunities for buildings to utilise renewable energy and passive measures.

Zero Waste- The creation of the country park will ensure that on site cut and fill could be reused.

Sustainable Transport- The masterplan aims to wherever possible connect the development to existing sustainable transport links in the south of Middlesbrough. A key consideration will be a cycling commuter route throughout the development to allow quicker access to the town centre.

Sustainable Materials- Although largely controlled by other regulations it is likely that builders using standard house types will use a degree of sustainable materials.

Local and Sustainable Food- There may be opportunities to create food growing areas within the both the private areas as well as the public realm.

Sustainable Water- SuDs will be employed in a number of ways and as part of the wider development in order to create low run off rates minimising flooding issues on site. These areas with

higher flood risk on site will be considered within the detailed design process with opportunities for creation of detention ponds or larger areas of water retention as part of the landscape structure or country park. Provision of further Bluebell Beck Improvements in water quality and natural habitats and protection of the Beck from Impacts via appropriate buffers will be a key element of the design.

Land Use and Wildlife- Achievement of a well used and valued network of well maintained Open Spaces which cover all the future requirements of Middlesbrough residents in terms of different types of land use such as allotments, parks and gardens and natural green spaces. Open Space and the green infrastructure should be, where possible, publicly accessible, well signed and welcoming. Open Spaces will be used to support health and recreational activities. Middlesbrough residents will be actively involved in the future of their local spaces. Areas of cultural, historic or natural significance will be restored and interpreted Allotments into self use, volunteer groups supported in management and development of green spaces, key to the potential for a flourishing country park.

Culture and Community- The creation of the country park should assist with creation of a community and also improve wellbeing with access to high quality open space.

Equity and Local Economy- The masterplan seeks to create a mixed and balanced new community to provide new homes in strengthening the Middlesbrough economy, as well as provision of a new commercial hub in a sustainable location including shops, a school, commercial property and a country park visitor centre.

Health and Happiness- Improve the natural and urban environment to create healthy and sustainable opportunities to improve economic and social opportunities for community and volunteer engagement. The design and creation of a country park will provide a solid foundation for community engagement and events.

The ten One Planet Living principles:

-  **Health and happiness**
-  **Equity and local economy**
-  **Culture and community**
-  **Land and nature**
-  **Sustainable water**
-  **Local and sustainable food**
-  **Travel and transport**
-  **Materials and products**
-  **Zero waste**
-  **Zero carbon energy**



ONE PLANET LIVING

1.0 INTRODUCTION

1.5 Review of Existing Masterplan

Before undertaking any proposals GRADONARCHITECTURE with Valley Environmental have undertaken a full review of the Stainsby Draft Masterplan as completed by Niven Architects and TGP Landscape Architects.

This foundational process included initial site analysis and the development of a combined masterplanning & landscape strategy over three Public Consultations. These Consultations were vital in defining the parameters that brought about the positioning of the Primary Road and access to the development sites. The position of the local centre and landscape corridor concepts were also explored with initial ideas of the relationships between the developments and the green space.

GRADONARCHITECTURE and Valley Environmental have sought to use these thoughts as a basis of the Design Code, further enhancing and developing these concepts.





1.0 INTRODUCTION

1.6 Updated Masterplan

The detailed scheme seeks to define a landscape driven masterplan creating a development that is continually connected to the wider country park.

To do this a series of Site analysis and desktop studies have been undertaken to inform a naturalised approach to the landscape driven elements. These studies and parameters then inform a framework to define a series of Urban principles in response creating hierarchies and features to define and enhance local identity and placemaking.



2.0 SITE ANALYSIS



2.0 SITE ANALYSIS

2.1 SITE LOCATION

The site allocation lies to the South West of the centre of Middlesbrough in a prominent location bordering the A19 and the A174.

The site therefore has ease of connections to the surrounding boroughs through this network of wider connections.



2.2 EXISTING SITE PLAN

The site itself is predominantly greenfield site made up of Farmland, Green Open Spaces and Woodland.

Due to bordering the A19 and A174 the site itself is isolated from the neighbouring green field land and is currently inaccessible to public access.



2.3 SITE OWNERSHIP

The 140ha site is divided into three Ownerships.

Middlesbrough Council own the public accessible land to the East which incorporates the Green Open Spaces, Woodland and Blue Bell Beck.

The farmland is divided between two ownerships, the Pearson's and the Weightman's.

The southern most portion of the land has already transferred from the Weightman ownership to Story / Miller Homes who are in process of developing 299 homes with access from Jack Simon Way.



2.0 SITE ANALYSIS

2.4 SITE VIEWS

View 1

View of North Public Open Space from existing car park.

Features:

- Flat site with mown grass.
- Mature trees bordering the A19.
- Existing residential houses to the left.

View 2

View from Mosswood Crescent over BlueBell Beck.

Features:

- Beck runs in a small depression with trees following the same route.
- Large public open space.
- Mature trees by the Beck and at the far site boundary.

View 3

View from access lane to Stainby Farm.

Features:

- Land in foreground slopes steeply.
- Open farm land used for grazing.
- Long view to the Cleveland Hills.





VIEW 4



VIEW 5

2.0 SITE ANALYSIS

2.4 SITE VIEWS CONTINUED.

View 4

View from path near Curthwaite.

Features:

- Existing houses facing on Public Open Space.
- Beck runs in a small depression with trees following the same route.
- Open fields beyond the beck.

View 5

Features:

- House and helicopter hangar on the right of photo.
- Grass paddock in the foreground.
- Long views over Teesside.



2.0 SITE ANALYSIS

2.5 Topography and Flood Risk

The site has a range of ground conditions. The majority of the land within private ownership is gently undulating and sloping fields. However, this land slopes more steeply where the Blue Bell Beck and Saphwood Beck flow through the site and have created small valleys along their course. There is also a band of steeper sloping ground near Stainsby Farm.

The land owned by Middlesbrough Council features two flat areas of public open space, Acklam Meadow and Mandale Meadow, but the majority of the land is sloping towards the Becks.

There is a small area of the site that has been identified as a flood risk zone, predominantly along the course of Blue Bell Beck and particularly just before it is culverted under the A19; at the highest point of the tidal reach.



2.6 Site Access

There are only two potential access points to the site. Access points are limited as no new access can be created from the A19 or A174 which border the south and west of the site. To the east is an existing residential area and any new access from here would create unacceptable additional traffic through these areas. Two potential site access points have been identified at north and south of the site.

South Access

The south access point will be an extension of Jack Simon Way. The first phase of development from this access has already been designed and approved. From this first phase of development there are two access points into the next phase of development.

North Access

The northern access point is from the existing Mandale roundabout where there is already an access to a small car park. This car park has the potential to be enhanced to serve as an additional entrance to the proposed Country Park. It already serves as access to the green space for dog walkers and the local community and will be retained and enhanced in its function.



2.7 Rights of Way & Connections

There is one Public Right of Way to the South of the site. The route is along the site boundary next to the A19 and A174. The PROW crosses the A19 and A174 on single track road bridges. The crossing point of the A19 and A174 are important connections to retain as there are very limited crossing points on these roads for pedestrians, cycles or horses.

Within the council owned Public Open Space land there are a number of footpaths that are well used by the local community, although they are not formally recognised as PROWs. Some of these routes are permanent features with tarmac paths, other are more informal routes across the public open spaces that have been created by people using the space. There are a number of bridges crossing Blue Bell Beck but none across Saphwood Beck.

The country park will create an extensive network of paths creating links to land to the west of Blue Bell Beck, which currently has no public access.



2.0 SITE ANALYSIS

2.8 Trees & Hedges

There is a ribbon of trees along the route of Blue Bell Beck and Saphwood Beck. This cluster that extends from the South, near Jack Simon Way and stretches North to Stainsby North. At the north of the site the woodland widens and expands beyond the route and frames part of Stainsby North.

Although there are the occasional mature trees much of the woodland is relatively new, apart from two significant areas of trees; West Plantation & Acklam Whin (or Fox Covert) which are shown on maps dating back to 1853.

The areas of agricultural fields are separated with hedge boundaries and the occasional hedgerow tree.

It is intended to retain the existing trees along Blue Bell Beck where possible and enhance with new woodland planting as part of the new country park.



2.9 Air Quality and Easements

The most significant issues regarding air quality is anticipated to be traffic noise from the surrounding roads. The A19 & A174 both have high volumes of traffic.

Appropriate solutions to mitigate any noise pollution will need to be incorporated into the design. The height of the site in relation to these roads varies across the site and the noise mitigation measure may vary across the site to adapt. In some areas landscape bunds already exist to help mitigate the road noise, however in other areas the A19 is level with the site.

There is one significant easement that affects the site, but this is only on the north sections. Two large sewer pipes pass under the site and no development can be built within their easements.

Apart from the above there are no other significant easements that affect the site.



2.10 Site Analysis Summary

All the previous site analysis diagrams have been brought together in this image to give an overall appreciation of the site constraints and opportunities.

Key Opportunities & Constraints

- Large site with predominantly gently sloping land does not limit development layouts option.
- Sloping topography around the becks creates opportunity for interesting POS.
- Existing POS and mature woodland can be incorporated and expanded upon to create the Country Park.
- New development can face onto attractive POS.
- Very limited impact from flood risk.
- Main site entrance road from the South does not cause disturbance to any features within the site.
- Noise pollution from A19 & A174 will need to be mitigated.
- Site is not part of the Conservation Area.
- Easement around sewer pipe throughout the site will restrict certain uses and landscaping approaches.
- Links to surrounding residential areas possible.



2.0 SITE ANALYSIS

2.11 Desktop Analysis Overview

The site has undergone a desktop assessment for constraints associated with environmental impacts from residential developments. This includes a DEFRA MAGIC website search to identify potential receptors.

Fig 2 and fig 3 shows the comparison between the existing landscape, as shown by the satellite image, and the historical landscape, as shown by the extract of the 1853 map. Apart from the encroachment of housing and roads the pattern of the landscape is clearly identifiable. The locations of former orchards have been highlighted on the plan as has West Plantation and Fox Covert, which continues to form a significant landscape feature. As is evident the pattern of the landscape across the site has changed little, woodland cover has perhaps increased and West Plantation and Acklam Whin are easily identified, along with a number of orchards associated with the historic farmsteads. The location of West plantation has been transposed onto the satellite image, as has the location of the orchards; however the orchards are now gone or in severe decline. Existing woodland will be retained and enhanced and the presence historically of orchards will inform the design. The rectilinear pattern of later enclosure hedgerows, many of which are now missing or in decline or recently re-established, will not be retained and instead a more naturalistic approach will be used based on landform and drainage.

Fig 4: Habitats

Due to the predominantly agricultural nature of the landscape habitats are restricted to narrow hedgerows and field edges. Small blocks of woodland follow the line of bluebell beck, the most significant of which are West Plantation and Fox Covert. Generally the riparian habitats associated with the beck are very narrow. The northern most point of bluebell beck is under the influence the tidal reach, which may cause seasonal flooding into the area directly south of the culvert. The plantation shown on Fig.4 is not present and there is only marginal evidence remaining on site of the former farm orchards. The area of ancient woodland to the south west is disconnected from the site by the A19.

Fig 5: Biodiversity

Fig 5 helps to highlight the relatively low site biodiversity and reflects the sites use as intensive arable farmland. Bluebell Beck however has the potential to deliver significant environmental benefits in the form a of a wide range of habitats including woodland, wetlands, grassland and riparian habitats and has a high priority.

Fig.2 Existing Site Satellite



Fig.3 Extract map 1853



Fig.4 Habitats

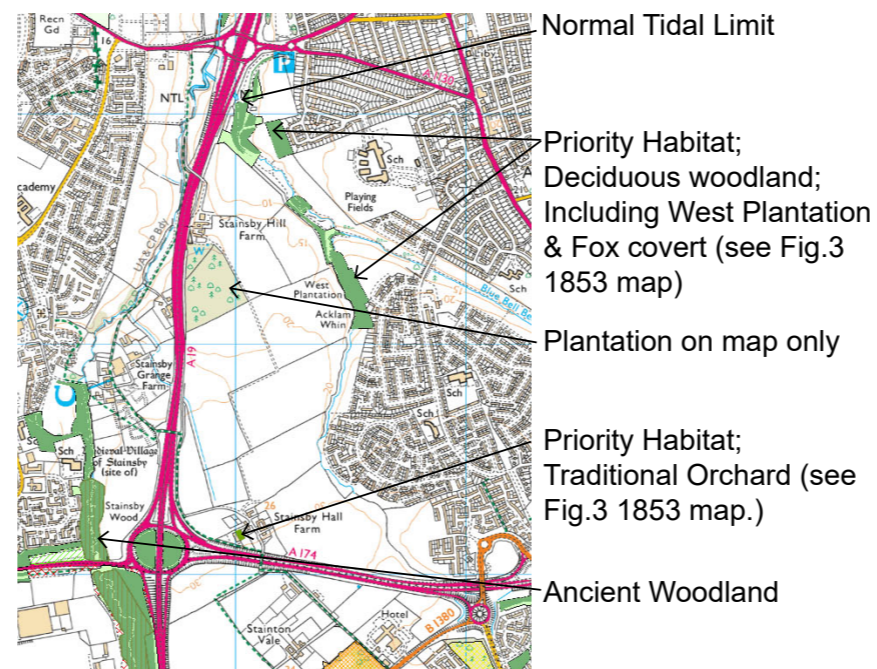
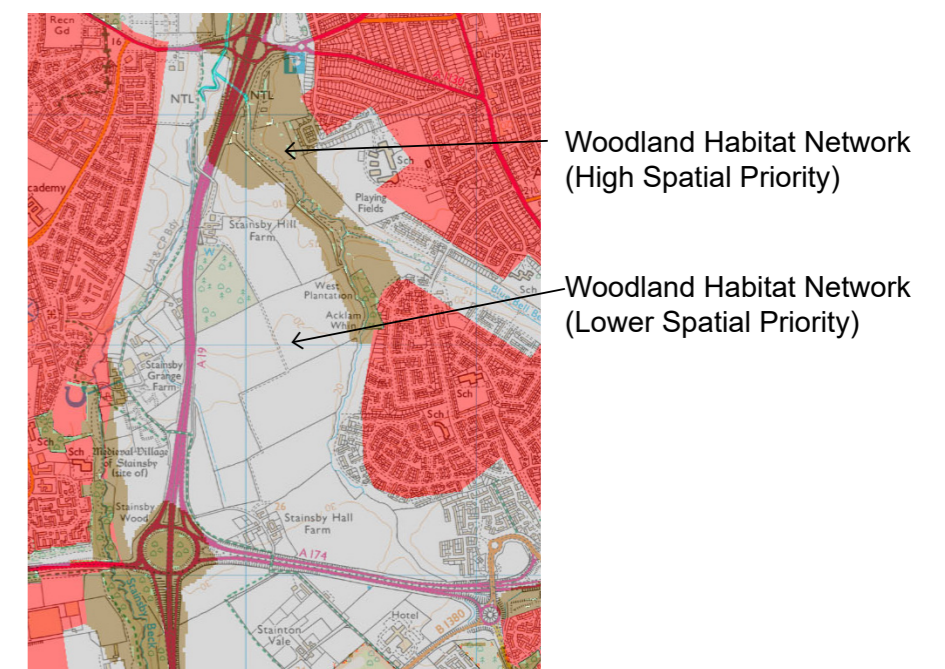


Fig.5 Biodiversity



2.0 SITE ANALYSIS

Fig 6: Landscape

The site is situated within the NCA Character area 23 of the Tees Lowlands and surrounded by urban development including the A19 to the west and residential development to the east, including schools, dating from the 1950s to the 1980s. The majority of the site itself comprises enclosed and private agricultural land. The development of the peripheral areas is shown on Fig 10.

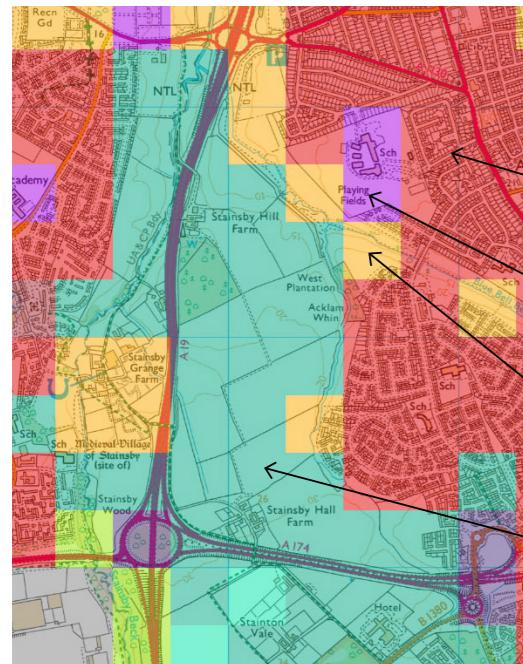
Fig 7: Water

Bluebell Beck forms the primary water course within the area with a number of areas of standing water in the area. There is some flood risk from rivers within the Bluebell Beck area to the north of the site and some further surface water flood risk in the central east areas of the site.

Fig 8: Species

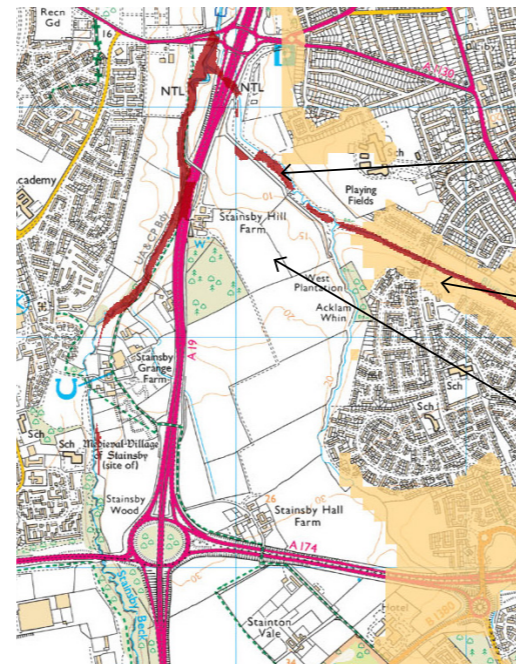
Notable species identified within MAGIC include Lapwing and Tree Sparrow to the north of the site as well as Grassland assemblages, Farmland Birds and potentially Redshank. Bat species are expected within Bluebell Beck and are likely to use this area as well as linear hedge features for foraging.

Fig.6 Landscape



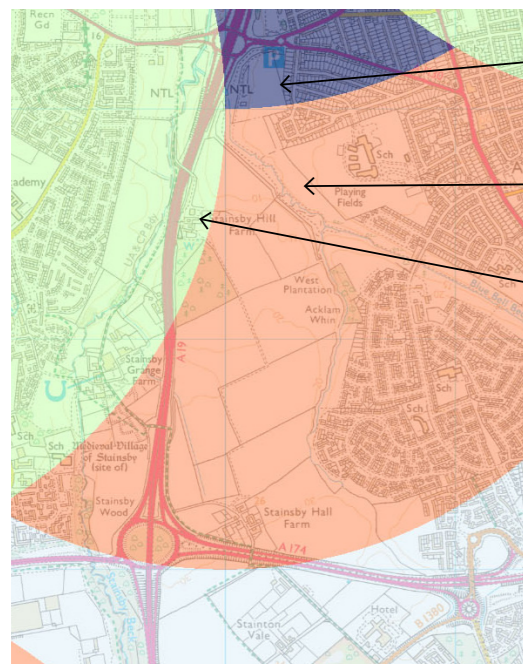
- NCA 23 Tees Lowlands
- Settlement inter-war to postwar
- Civic Provision; Education
- Recreation; Park & Garden, Planned Fields
- Enclosed Agriculture; Pre-Modern, Planned Fields

Fig.7 Water



- Woodland Flood Risk (High Spatial Priority)
- Woodland Flood Risk (Lower Spatial Priority)
- Keeping Rivers Cool

Fig.8 Species



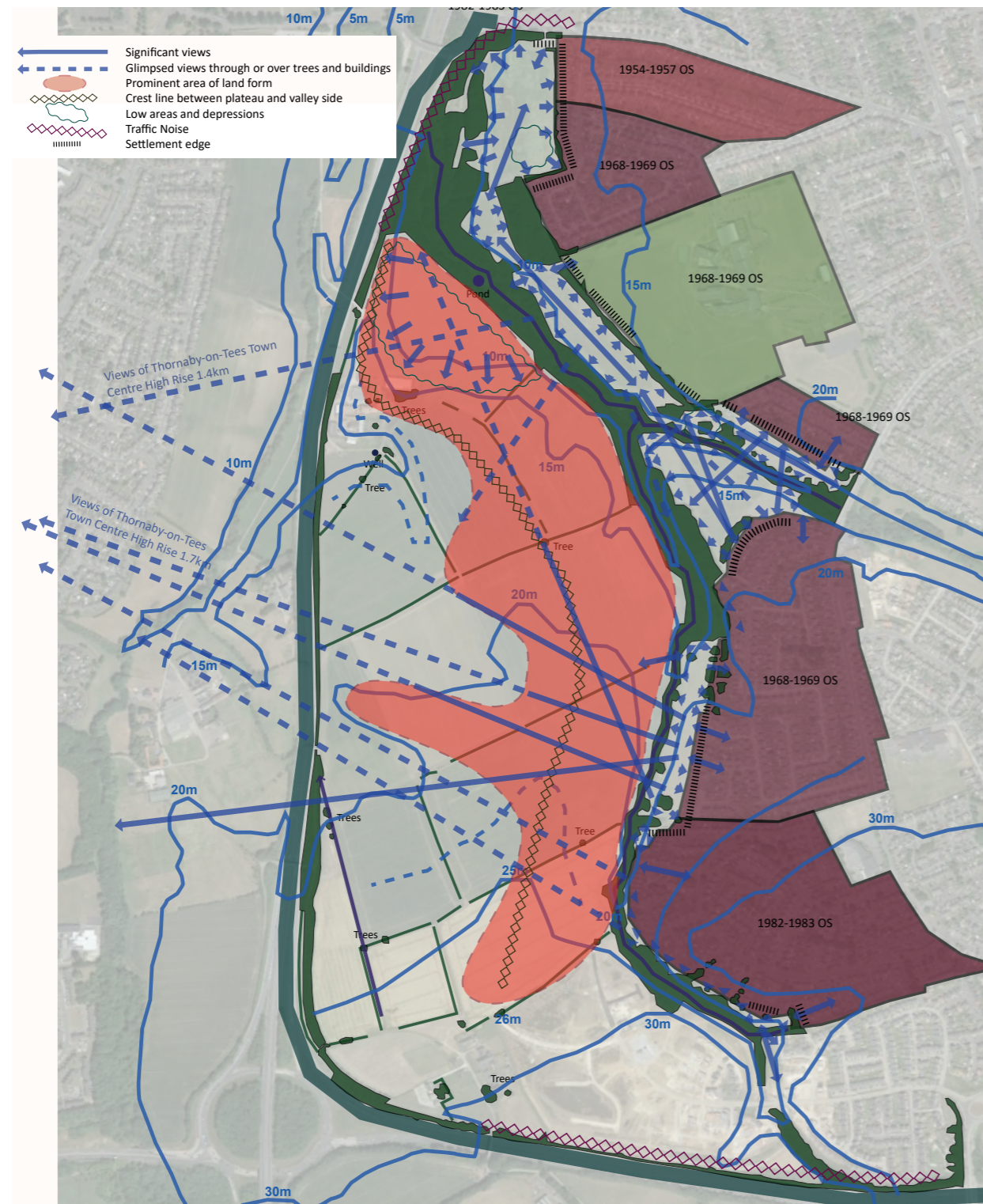
- Lapwing/Tree Sparrow
- Tree Sparrow
- Grassland Assemblages Farmland Birds/Lapwing/Redshank/



2.0 SITE ANALYSIS

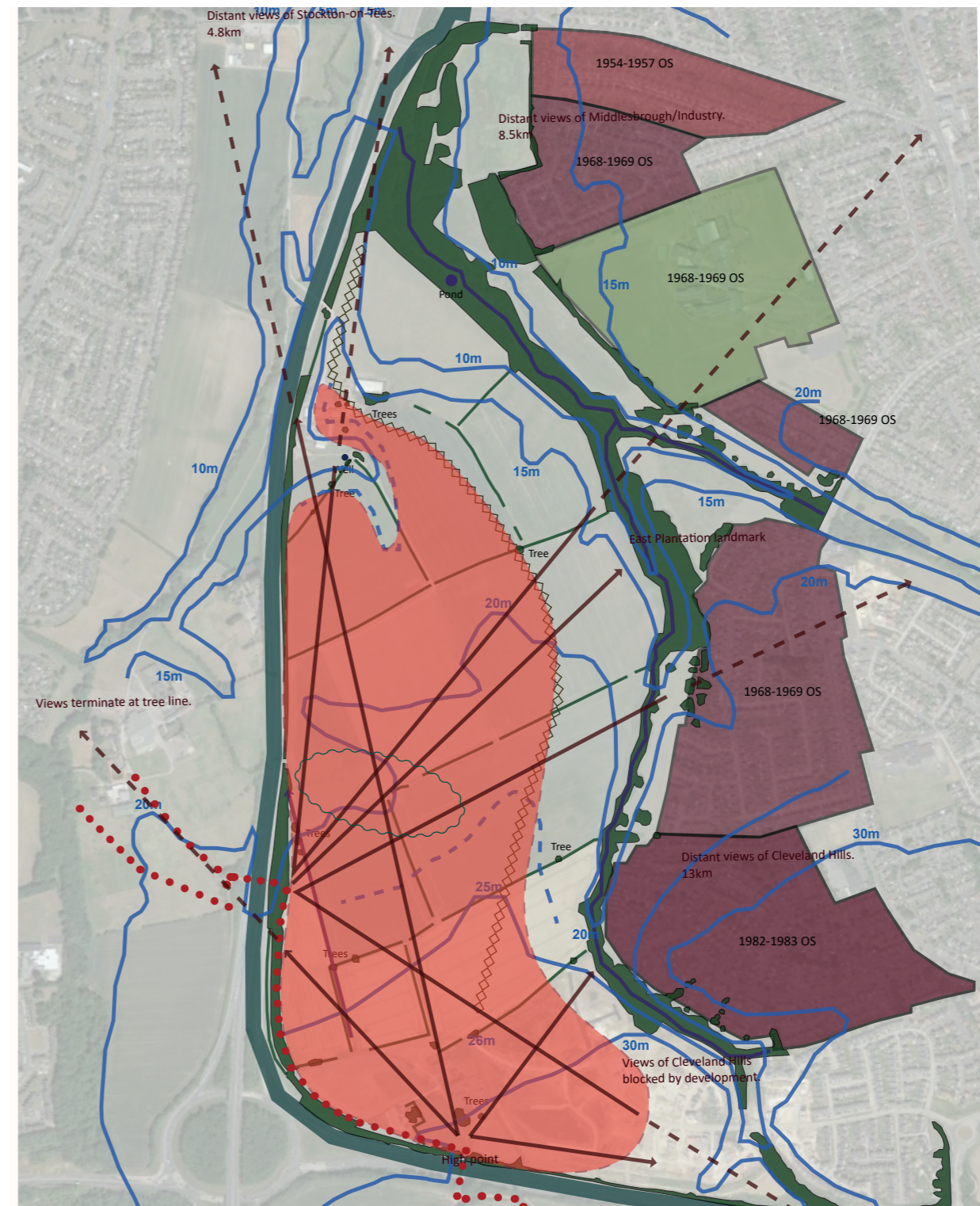
2.12 Views from Public Open Spaces

The POS to the East of Saphwood and Bluebell Beck is generally inward looking and compartmental, with the occasional long axis views through the compartments that often terminate at existing housing. There are occasional views over or through the trees to the high points within the development site, most notably from the POS to the west of Foxberry Ave, due to the narrow line of trees along the beck at this point. The development site occupies a gently undulating plateau spur, dissected to the west by the A19 and delineated by the course of the Bluebell and Saphwood Becks to the East, the sides of which become steadily steeper to the south. Other than blue bell beck here are few dramatic features other than shallow depressions and hollows. Due to the topography the most prominent views of the development site follow the crest line between the plateau and the steeper valley side. The multi-story buildings of Stockton-on-Tees form a focal point in many of the longer distance views.



2.13 Views from Public Rights of Way

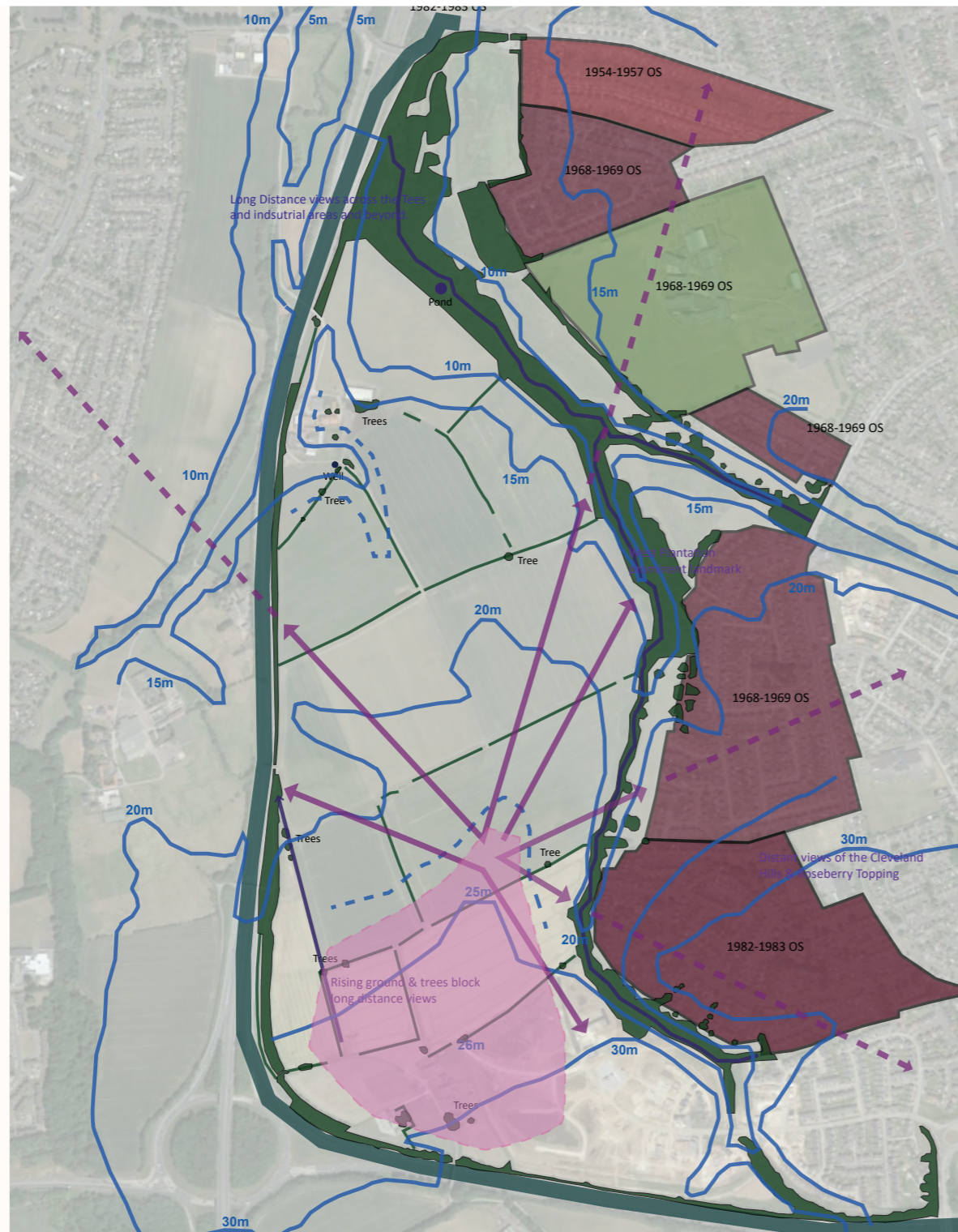
There is a high point to the south of the site, on the bridge that the footpath crosses, that provides good views across the site; To the North across Stockton and Middlesbrough and distant views East toward the Cleveland Hills and Roseberry Topping. Generally though views are not dramatic and are dominated by the tree line along Bluebell Beck, including the prominent East Plantation, and the existing housing development in the middle distance. The elevation of the high point is not great enough for views not to be blocked by the proposed development; other than from the very edges of the development.



2.0 SITE ANALYSIS

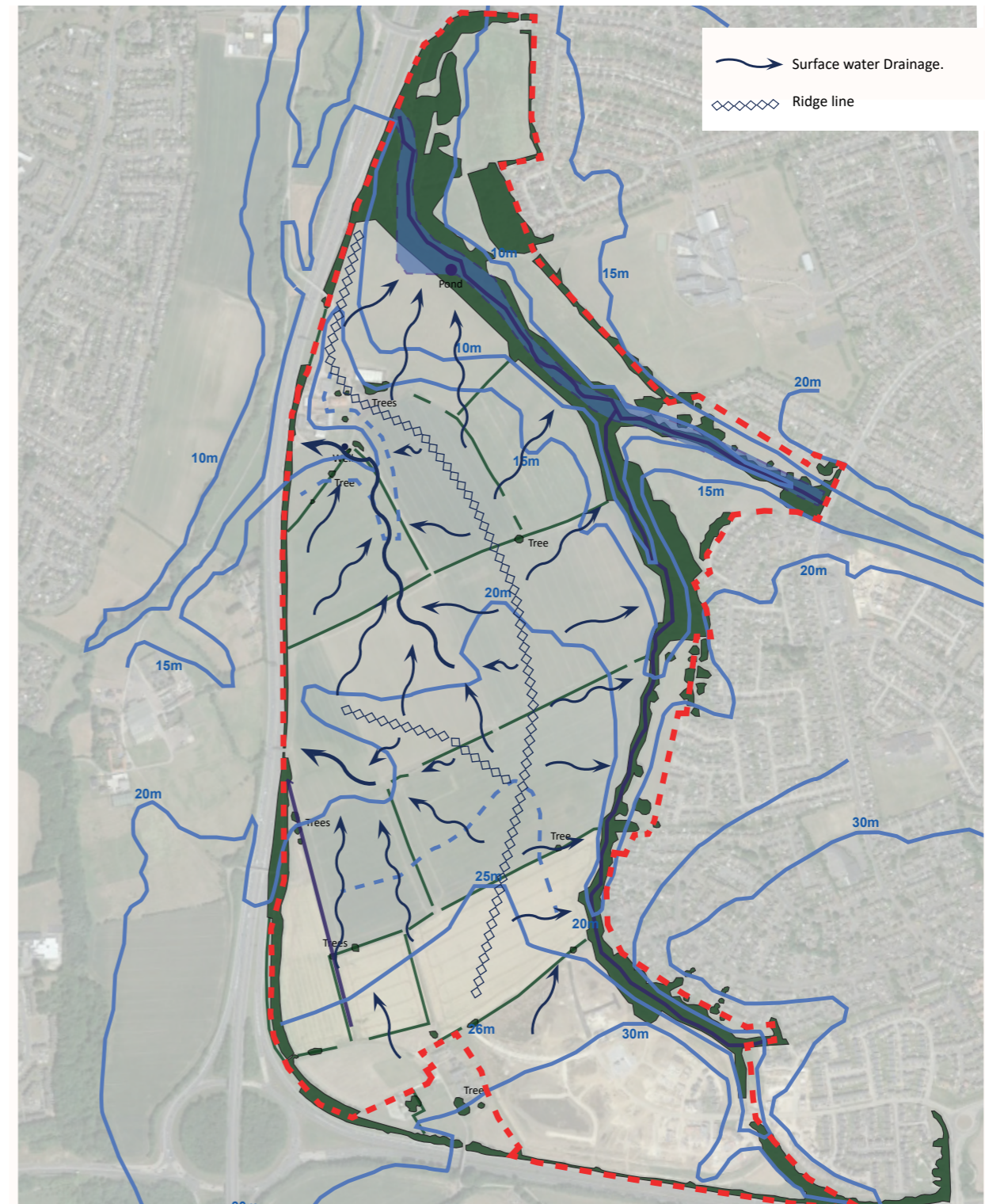
2.14 Views from Site.

The gently south sloping topography allows distant views North across Stockton and Middlesbrough, and distant views East toward the Cleveland Hills and Roseberry Topping. To the South views are terminated by the rising ground and the new development. There are no dramatic vantage points and only the edge of the development will benefit from views once completed, and these will generally be short distance, of the proposed beck and country park; except where space can be created to allow longer distance views from the site high ground.



2.15 Topography and Flooding & Surface Water

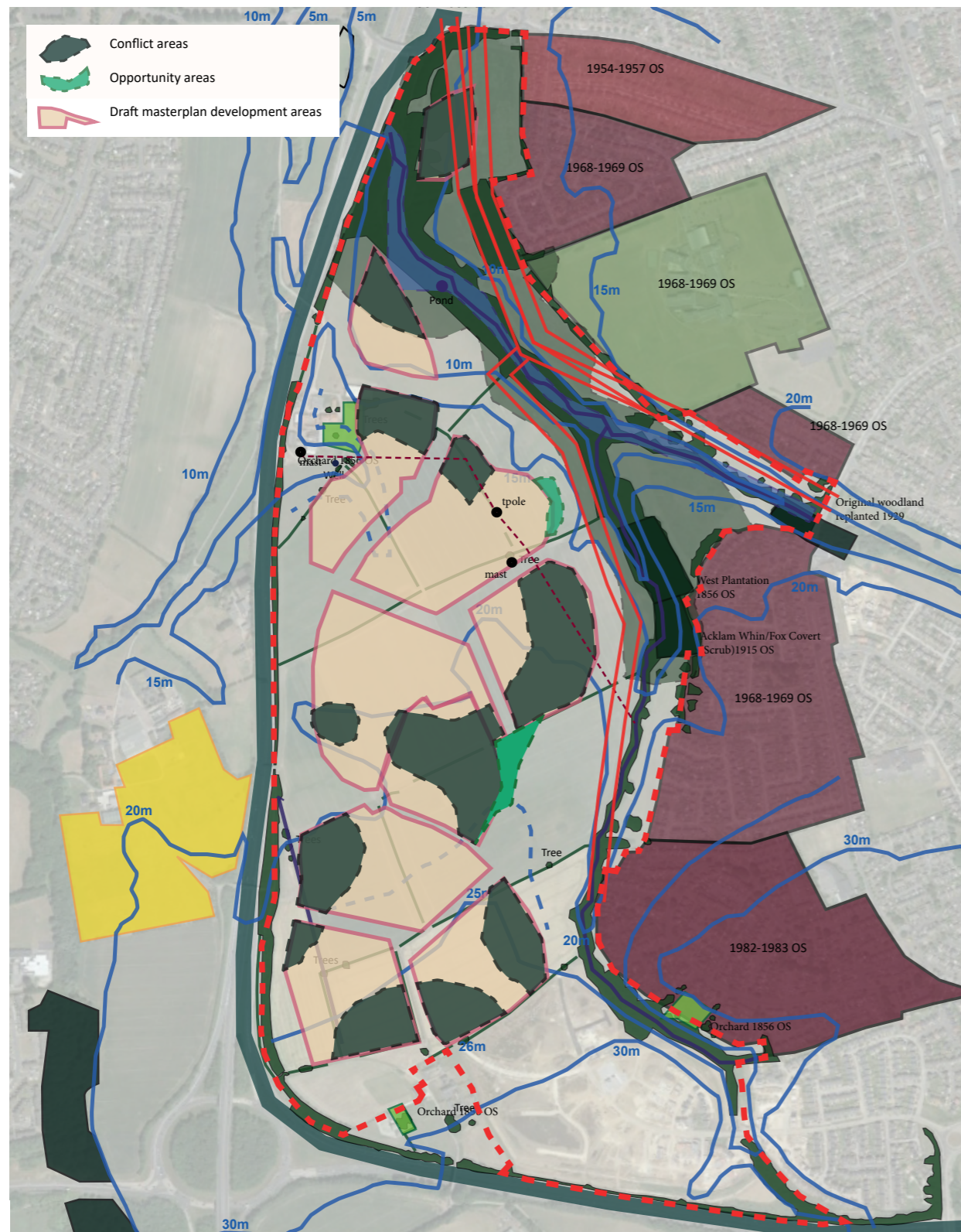
Where appropriate, and subject to detailed site investigation, the green links should be aligned to take advantage of the sites existing surface water drainage patterns, so that surface water can be managed as part of a naturalistic sustainable drainage system (SuDS), including ponds, wetlands and water channels for the benefit of amenity, biodiversity and water quality; in accordance with the CIRIA SuDS manual. SuDS elements should not be placed within existing flood zones, or within areas under the influence of the tidal reach; unless under specific circumstances for the specific benefit of wildlife and habitat.



2.0 SITE ANALYSIS

2.16 Assessment of Draft masterplan.

This plan assesses the draft masterplan development areas against the site assessment, including: plotted views (in and out of site); significant site features (woodland, orchards, topography); site constraints (flooding and easements, traffic noise); strategic environmental objectives (MAGIC); and layout changes (single access and omission of northern part of development). It highlights potential conflicts and opportunities to be resolved by further design.



2.17 Retained Views

Visual analysis of the site has influenced the layout of the proposed development, helping to reduce adverse visual effects. Key views to and from the site have been retained where possible.

