



LAND AT DEAL GROUND AND MAY GURNEY

Environmental Statement Addendum – Chapter 8: Landscape & Visual Impact
Assessment

Serruys Property Company Limited

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8 LANDSCAPE & VISUAL IMPACT ASSESSMENT

8.1 INTRODUCTION

8.1.1 Purpose and Structure of the Chapter

The approach within this report is derived from the Guidelines for Landscape and Visual Impact Assessment 3rd Edition¹ (GLVIA3 or “the Guidelines”) published by the Landscape Institute and the Institute of Environmental Management and Assessment in April 2013. The guidance states that Landscape and Visual Impact Assessment (LVIA) is:

“a tool used to identify and assess the significance of effects of change resulting from development on both the landscape as an environmental resource in its own right and on people’s views and visual amenity”.

This definition of LVIA establishes the distinction between the two components of LVIA where landscape and visual effects are interrelated but should be dealt with separately. Landscape results from the interplay between the physical, natural and cultural components of the land, and visual amenity is the experience of people and their interaction (views) with the landscape.

The purpose of this report as part of the ES Addendum is to carry out a detailed appraisal of the site and study area, identify landscape and visual receptors likely to be affected, and determine the extent and significance of any potential landscape and visual effects against the baseline conditions. A previous LVIA was carried out by Broom Lynne Landscape Architects in 2010 for the original Environmental Statement (ES), and reference will be made to this assessment where necessary.

This LVIA has been carried out by suitably qualified landscape professionals, providing impartial judgements that are based on training and experience, and through clear and transparent methods outlined in the methodology.

8.2 METHODOLOGY

8.2.1 Changes in Legislation, Guidance and Planning Policy

Planning policy has developed since the ES, with the Norwich Local Plan² adopted as development control. The Plan includes the site allocations plan that includes the site as Policy **R9**. The Deal Ground (8.1 hectares) is *‘allocated for a major residential-led mixed use development to secure the beneficial, sustainable regeneration of this key gateway site on the eastern fringe of Norwich’*. The policy goes on to state that development will (amongst other things):

- *protect, retain and enhance the wooded landscape character and wildlife and biodiversity interest of the eastern fringe of the site around Carrow Abbey Marsh, and provide for opportunities for formal and informal recreation;*

¹ ‘Guidelines for Landscape & Visual Impact Assessment’ 3rd Edition

² Adopted Norwich Local Plan November 2014, Norwich City Council

- *provide a network of green infrastructure throughout the site including areas of formal and informal open space and playspace to serve new residential areas;*
- *preserve the open character of the Yare Valley, the fringe of the Broads and the rural areas to the south and east, and maintain strategic long views through and beyond the development site.*

The following general policies relating to landscape, visual and ecology are now relevant (refer to **Figure 8.1** and **8.2** for proposals map):

Policy **DM3** relates to delivering high quality design through a number of design principles to assess development proposals. These include gateways; long views; local distinctiveness and character; layout and siting; density; height, massing, scale and form; design of roads and streets; materials and details; green infrastructure, landscaping and biodiversity.

Policy **DM6** seeks to protect and enhance the natural environment, taking particular account of the need to avoid harm to the adjoining Broads Authority area and other identified areas of natural environmental value immediately adjoining the City.

Policy **DM7** relates to trees and development where trees and significant hedge and shrub masses should be retained as an integral part of the design of development except where their long-term survival would be compromised by their age or physical condition or there are exceptional and overriding benefits in accepting their loss.

Policy **DM8** relates to the provision, enhancement and maintenance of local open space either by means of on-site provision or indirect contribution through CIL.

8.2.2 Scoping Opinion

There has been direct consultation with the Local Authorities regarding the scope of the LVIA chapter. These persons include:

- Sarah Hinchcliffe – Senior Planner (Norwich City Council)
- Blanaid Skipper – Planner (South Norfolk Council)
- Tim Mellors – Landscape Officer (Norwich City Council)
- Robin Taylor – Landscape Officer (South Norfolk Council & Broadland)

Details of the communication between parties is included at **Appendix 8.1**.

8.2.3 Additional Consultation

No additional consultation has taken place.

8.2.4 Assessment Methodology

The detailed methodology which has been issued and agreed by the Local Authorities is included at **Appendix 8.2**. The landscape and visual effects will be judged as adverse or beneficial as required by the Regulations³, and categorized as Severe, Major, Moderate, Minor and Negligible using a sliding scale based on the table within the previous ES.

³ Town and Country Planning (Environmental Impact Assessment) Regulations 2017

Table 8.1 – Significance Matrix

← Magnitude of effect →	← Sensitivity of Receptors →				
		Very High	High	Medium	Low
Very High	Severe	Major	Major	Moderate	Moderate
	Major		Moderate		Minor
High	Major	Major	Moderate	Moderate	Minor
		Moderate		Minor	
Medium	Major	Moderate	Moderate	Minor	Minor
	Moderate		Minor		Negligible
Low	Moderate	Moderate	Minor	Minor	Negligible
		Minor		Negligible	
No Change	Negligible	Negligible	Negligible	Negligible	Negligible

In judging the overall significance of the effects, it is considered that Severe or Major are significant effects as required in the regulations.

8.2.5 Effects Not Requiring Further Assessment

Not relevant to this assessment.

8.3 CHANGES IN BASELINE CONDITIONS

8.3.1 ES Baseline

The ES baseline for the landscape and visual assessment identified a number of receptors that may be affected by the proposals, as well as their sensitivity to change. These receptors may be features or elements of character that need to be preserved, restored or enhanced (landscape receptors), and people likely to be affected (visual receptors).

The broad landscape and townscape assessment within the ES indicated that there are a number of distinct character types within a relatively small area within the vicinity of the site, ranging from low-lying grazing marsh, to intensive industrial activity to residential land on the wooded ridges. The Deal Ground site occupies a transition area, between the more rural land of the Broads and the valley sides to the east, and the Urban core and fringes of Norwich to the west.

The visual assessment included an in-depth assessment of locations from where the development may be potentially visible, and also identified the key vistas and viewpoints which were considered most significant. A total of 23 views were identified.

8.3.2 Current Baseline

Landscape Character

The baseline assessment of landscape character is established through desk-based research and fieldwork to identify and record the characteristic elements, features, and the aesthetic and perceptual factors which contribute to it. The site is located in the National Character Area (NCA) 80 'The Broads'⁴ and detailed in the profile published by Natural England. At a district level, the South Norfolk Landscape Assessment⁵ locates the site within the 'Yare Valley Urban Fringe' (F1) Landscape Character Area (LCA). Refer to **Figure 8.3** for Local Landscape Character areas. This remains the most up-to-date assessment and provides the most detailed analysis in identifying broadly homogenous zones that can be categorised in terms of quality and character.

The assessment notes the key characteristics of this area including:

- *Broad semi-enclosed valley form with a wide flat flood plain and enclosing valley sides, occasionally opening up to adjoining tributary river valleys, resulting in a sense of containment and unity. Perceived absence of settlement within the valley although influenced by developments in the City of Norwich. Sense of remoteness and solitude within the valley, remarkable given the closeness to a major city.*
- *Green buffer and comprehensible development edge to the City of Norwich.*
- *Strongly influenced by modern transportation corridors, in particular the Norwich Southern Bypass.*

The South Norfolk Assessment also notes the key sensitivities and vulnerabilities of this particular landscape character area, and which are particularly relevant to the Deal Ground site. These include

- *Loss of naturalistic quality as a result of further intrusion of suburban development, large institutional buildings and tall structures in particular pylons upon the valley landscape;*
- *Developments within the valley or adjoining character areas that would increase the perception of the level of development surrounding the valley, which would therefore weaken the current perception that the River Yare is unconnected to a major city;*
- *Loss or inappropriate management of vegetation on the valley floor or sides and the need to maintain/improve the quality of the River Yare;*
- *Developments that intrude upon the views into the landscape, including views from the Norwich Southern Bypass;*
- *Developments that break the current green mantle to Norwich provided by the Yare Valley which would blur the distinction between the settlements north of the River and the City of Norwich.*

Visual Amenity

A new set of viewpoints have been selected through baseline studies and fieldwork, and the amendments agreed through engagement with the Local Authorities. The current baseline for visual effects therefore includes 20 views which are summarised below, with the equivalent ES viewpoint referenced for clarity. Refer to **Figure 8.4** for location of viewpoints and Figures 8.4.1 to 8.4.10 for photographs.

⁴ National Character Area Profile: 80 The Broads (NE449) April 2015, Natural England

⁵ South Norfolk Landscape Assessment Volume 2, June 2001, Land Use Consultants

Table 8.2 – Viewpoints

Viewpoint for ESA LVIA	ES Viewpoint (Broom Lynne 2010)	Location / Reason for change
VP1	VP20	View from Bracondale bridge over River Yare. Concurs with ES.
VP2	VP19	View from Bracondale opposite the May Gurney site. Concurs with ES.
VP3	VP10	Views from Whittingham Lane junction adjacent to St Andrew’s church. Concurs with ES
VP4	VP12	View from Whittingham Lane, concurs with ES
VP5	none	Views from Trowse common were not considered in ES.
VP6	none	Views to the south of Bracondale Mill were not considered in ES. Potential visual impact to footpath users.
VP7 and 8	none	Views from Wherryman’s Way LDR further north along Whittingham Lane were not considered in ES.
VP9	VP4	Views from Whittingham Country Park to edge of River Yare. Concurs with ES.
VP10	VP18	View from little broad in Whittingham Country Park, taken on route of Wherryman’s Way LDR. Similar location to ES viewpoint 18.
VP11	none	View from great broad in Whittingham Country Park not considered in ES.
VP12; 13; 14	VP5; 2; 1	Views from the River Yare on boat. Concur with ES viewpoints
VP15; 16	VP9; 8	Views from the River Wensum on boat. Concur with ES viewpoints
VP17	VP22	View from Glendding Road/ Thorpe Hamlet. Concurs with ES viewpoint 22.
VP18	None	View from Heathside Road/ Cotman Road to the north, not considered in ES.
VP19	None	View from Carrow Hill to the west not considered in ES.
VP20	Supplement	View from Norwich Castle

ES Viewpoints not considered in Addendum are as follows:

- VP3 on River Yare is very similar to ES VP2.
- VP6 on River Yare has no clear view of the site.
- VP7 on River Yare replaced by sequence of views.
- VP11 in Trowse replaced by view from common.
- VP13 and 14 on private land of canoe club not publicly accessible. Replaced by views from the river.
- VP15-17 in grazing meadows are not publicly accessible so cannot be considered.

These viewpoints represent visual receptors that are already included in the assessment through the inclusion of other views as stated. This has been agreed with the Local Authorities as part of the scoping.

8.3.3 Changes in Baseline

Published Character Assessments

Since the previous ES was carried out, the Broads Authority have produced a character assessment 'The Broads – A breathing space for the cure of souls' ⁶. This identifies the land to the east of the River Yare as 'Yare-Whitlingham Lane and Country Park' area 10. Whilst the site does not lie within the Broads National Park, there are likely to be some effects on the landscape character of this area which lies immediately to the east.

The assessment states that '*Whitlingham Country Park is an important open space on the edges of Norwich. It is a mixture of modern sports facilities within a late 18th and 19th century parkland setting*'.

'There is a definite 'edge of city' feel to the area but the presence of large areas of scrub and woodland help to diffuse the effects of the urban environment on the landscape. The Country Park provides an important transition zone between the City and countryside'.

This new baseline information will need to be considered as part of the ESA. The extract of the assessment is contained in **Appendix 8.4**.

Existing Site Conditions

In terms of the existing site conditions since the ES in 2010, there have been some changes to the baseline that will affect both the landscape and visual aspects of the proposal. The site boundary now excludes the Carrow Abbey Marsh County Wildlife Site (CWS), and therefore does not propose the riverside walk that was part of the previous elements factored into the assessment of effects. The site conditions consist of colonized scrub and woodland which has continued to establish and provide an increase in tree and woodland cover in the river valley.

The trees and scrub around the periphery of the May Gurney site have been removed as part of recent site works. This has opened up views into the southern part of the site from adjacent roads, footpaths and open spaces.

The high-voltage overhead power cables and pylons that were prominent urbanizing elements adjacent to the river have been removed, reducing the visual intrusion into the valley landscape that was previously identified in the ES. The large gasometer within the railway sidings to the north of the site has also been decommissioned and razed to the ground, opening up views from the residential area to the north towards the site.

The development at Geoffrey Watling Way close to the Carrow Road Stadium had increased the large-scale development along the river frontage. This has evolved the character of the commercial river corridor townscape area identified in the ES to consist of more modern residential blocks of varying materials and design. Some development to the south of the river has also been completed, with the East

⁶ The Broads "A breathing space for the cure of souls" December 2016, The Broads Authority & Norwich City Council

Norwich Masterplan set to continue to evolve this area into the future, which will be considered as part of the cumulative assessment.

Night-time Visual Amenity

Within the Guidelines for landscape and visual assessment, it is considered that:

'For some types of development the visual effects of lighting may be an issue. In these cases it may be important to carry out night-time 'darkness' surveys of the existing conditions in order to assess the potential effects of lighting...'

The scoping opinion raised the need for the night-time impacts to be considered as part of the Reserved Matters application, although this was not a consideration in the original ES. Given that the site was previously developed, there would have been general lighting from the buildings within the site and the car parking areas as an active site within the sub-urban setting.

The guidance document: 'Lighting in the Countryside: Towards Good Practice'⁷ which has been reinforced by the Planning Practice Guidance (PPG), defines the following sources of light pollution:

- *Sky Glow is the glow... caused by a scattering of artificial light by dust particles and water droplets in the sky. It is closely related to the upward light waste ratio (ULWR) of lighting installations in the vicinity;*
- *Glare is the uncomfortable brightness of a light source when viewed against a darker background. A light source's luminous intensity in candelas (cd) gives an indication of levels of glare.*
- *Light trespass is the spill of light beyond the boundary of the property on which a light is located.*

The degree to which the various forms of light pollution currently affect both the visual amenity and landscape character baseline are broadly considered in relation to the visual receptors using professional judgements based on the proposed landscape strategy.

8.3.4 ES Future Baseline

The ES Addendum will provide a cumulative assessment of all the current or recently permitted applications for development, and those in construction that would affect the future baseline of the LVIA.

8.4 ASSESSMENT OF EFFECTS

8.4.1 Construction Phase Effects

It is assumed that the construction operations will generally consist of the visual effect of site vehicles and construction traffic; other components typical of construction activities including workers' accommodation, stockpiling of materials, lighting of specific areas, such as construction compounds; and modification of landscape fabric as part of the works.

A number of features comprising parts of the site's physical fabric, would be demolished, modified or implemented as follows:

⁷ DCLG 'Lighting in the Countryside: Towards Good Practice' Countryside Commission (1997)

- A large portion of the existing trees that surround the May Gurney site (approximately 550 linear metres) has been cut to ground prior to construction. This will start to regenerate during this phase and contribute to the proposed overall landscape scheme.
- Large sections of hard standing that comprise the May Gurney site and the Deal Ground would be broken up, graded into recycled aggregates and stockpiled for later use.
- Areas of semi-improved grassland within the Site to be stripped and removed.
- Topsoil and subsoils excavated as part of the foundation construction and drainage basins stockpiled for later reuse.
- The built form of the proposed dwellings, local amenities and other buildings would gradually emerge in line with the phasing plan as the construction stage progresses.
- The internal highways would gradually be completed along with the signage and lighting.
- Construction of the bridge linking May Gurney to the rest of the site.
- The landscape framework planting would gradually be implemented in line with the phasing plan. New lengths of hedgerow and blocks of trees planted to the edges of the Site.

Construction Effects on Landscape Character

The greatest level of effects resulting from the proposed development would be limited to the site and some indirect effects on landscape character beyond the confines of the Site. The proposed development on the Deal Ground site will create a significant and permanent change to the form and character of the site, creating new contemporary built form, hard surfacing and riverside activity to the site. This area has some relatively low-rise existing buildings and has become established with semi-natural vegetation. The new residential buildings will be closer to the river's edge (set back by 12-20 metres) with a height of up to 31 metres, creating an increased hard built edge to the riverside.

The construction stage would retain the majority of trees along the River Wensum. The riverside would be negatively affected by works to the frontage and construction of the new foot/cycle bridge. This will result in a major but temporary change to this part of the river. These effects are considered to be of high magnitude of change and of moderate significance.

The construction stage would involve temporary roadworks, traffic signaling for the S278 works on Bracondale, and then for the period of construction of the development. Temporary protection fencing would be erected around the existing trees to be retained, and various stages of hoarding will be erected for each phase for the full duration of the build. These changes would result in large scale, short-term and temporary effects within the Site and on Bracondale where changes to the road alignment and vegetation removals occur. These effects are considered to be of medium to high magnitude of change and of major-moderate significance.

Beyond the area described above the changes to the Site during the construction stage would have a limited influence on the character of the local landscape within the Valley Urban Fringe LCA given the presence of existing built form within the site and at the urban edges of Norwich. This wider landscape would experience a minor change with the introduction of new elements of construction paraphernalia although this will have a limited effect on the receptor. The effects would be of low magnitude of change and of minor significance.

At locations further to the north within the residential areas, the qualities and features of the existing landscape and townscape would predominate. Effects from the construction stage from the proposed development at these locations would be small scale, negligible magnitude of change and negligible significance.

The Broads Authority assessment published in 2016 identifies the land to the east of the River Yare as 'Yare-Whitlingham Lane' character area. The Country Park is an important open space on the edges of Norwich within a parkland setting and provides an important transition zone between the City and countryside. The presence of large areas of scrub and woodland help to diffuse the effects of the urban environment on the landscape and provides a high level of screening. The site is sufficiently detached from this area and heavily enclosed by the layers of vegetation that there will be a low magnitude of change due to the construction of the site.

Construction Effects on Visual Amenity

Table 8.3 sets out the summary of the visual effects during the construction phase. Views to the south result in moderate and adverse effects where the activities will be temporary and short to medium-term, but often disruptive to the character and visual amenity of the local area. Impacts will be experienced along Bracondale through construction traffic and the highway works. Trowse common to the southeast within 200m of the site has a high sensitivity to change. Some plant associated with the taller elements of the development may be perceptible in the winter months mainly, albeit short-term, resulting in a moderate-minor and adverse effect.

Views along the Wherryman's Way LDR on Whitlingham Lane and leading into the country park and are likely to observe some taller construction plant above the existing vegetation, particularly in the winter months. In the assessment it was determined that some views within the National Park are identified as being of Very High sensitivity. Nevertheless, the magnitude of change is considered to be medium to low and therefore the effects are moderate and adverse. Within Whitlingham Country Park and around Great Broad to the east the views are enclosed by the raised river embankments and riverbank trees. There is unlikely to be much visual interaction with the site, and construction activities will be hidden below the skyline of trees, therefore the change would be negligible.

Of particular sensitivity is the setting of the Norfolk Broads landscape and the users of the waterways, which is a very well used recreational resource and a key visual receptor. Therefore, the assessment has included an appraisal of the visibility from the river itself. Therefore, in the assessment it is determined that this river corridor is of Very High sensitivity. The removal of some of the riverside trees and the presence of construction plant on the site will be visible in the short-term but will not form a dominant feature in views. Closer to the site the changes will be experienced more tangibly, where the removal of some trees and the presence of construction plant will be a conspicuous feature locally. Therefore, the water-based receptors will experience a high magnitude of change where construction will replace where there is currently no development. From the west on the River Wensum the area is semi-industrial urban fringe representing a somewhat neglected and semi-derelict character, and therefore the sensitivity is considered medium. The construction activities create a medium magnitude of change resulting in a moderate-minor and adverse significance.

Views from the north within the residential areas, the magnitude of change is reduced given the distance to the site and the urban fringe context to which the development will be located. From the residential area at Thorpe Hamlet some of the large construction plant such as cranes will be partially visible beyond the railway line and would cause some disruption to the views and residential amenity. Further north on Cotman Road there are wider views over the city and the construction on site would cause a low magnitude of change and be of minor and adverse significance.

8.4.2 Additional Operational Phase Effects

Operational Effects on Landscape Character

The proposed development on the Deal Ground site will create a significant and permanent change in the form and character of the site itself, creating new built form, hard surfacing and vertical elements to a site which is largely flat. Existing warehouse buildings previously occupied the site, of two to three storeys and set back from the site edges often creating a diffused frontage softened by trees and hedgerows. The main vehicular entrance to the site, off The Street at Trowse Newton, will create new built form to the road frontage reflecting the existing scale, character and materiality of the existing buildings. It will have a closer 'grain' and more compact form than the existing development but is intended to reflect the tighter streetscape of the existing village. These effects are considered to be of medium to high magnitude of change and of moderate significance. From Trowse village the development will form a visible extension to the existing roadside built form in the distance, partially screened by the intervening vegetation.

The Valley Urban Fringe character is essentially the semi-enclosed valley with a wide flat flood plain and enclosing valley sides resulting in a sense of containment and unity. There is a perceived absence of settlement and sense of remoteness within the valley although strongly influenced by development in the City. The new modern development will have an impact on this character, further establishing the urban influence on the rurality of the setting, but creating a stronger gateway to the city and active frontage and public access to the riverfront. The riverside itself would change to a more active and managed formal frontage, with pedestrian access encouraged all along the frontage, linking in with the new footbridge and to the cycle and footpath network beyond. The character of the townscape will be enhanced, but the overall effect on the LCA will be moderate and adverse, in conflict with the aspirations with the published South Norfolk Assessment. However, there will be a scheme of mitigation as illustrated on **Figure 8.5** that will provide a strong landscape structure to the development and help to integrate the development into the local setting and character of the Yare Valley Urban Fringe.

Operational Effects on Visual Amenity

The operational effects on the visual receptors are set out in Table 8.4 below (refer to methodology in **Appendix 8.2**). Accurate Visual Representations (AVR) of the proposed development have been produced from 8 locations agreed with the Local Authorities. These are viewpoints 1, 5, 8, 9, 10, 13, 14 and 17 and are included in **Figure 8.6** and Figures 8.6.1 to 8.6.16. The process of providing AVRs for development proposals such as this is taken from guidance provided by the Landscape Institute⁸. The visualisations provide a photowire image indicating an outline of the proposal overlaid onto the photograph base. This visually denotes the scale, form and massing of the development within each view to inform the assessment of effects.

⁸ Landscape Institute Technical Guidance Note 'Visual Representation of Development Proposals (TGN 06/19)

Despite the relative scale of the proposed development, it is considered that the wider impacts on the visual amenity of the area will be relatively local and moderated by topography, built form and the existing landscape structure. The result is that, even from some relatively close viewpoints, the site is well contained, notably from Whitlingham Country Park and the village of Trowse Newton, which will be largely unaffected by the development (refer to AVR of viewpoint 5). From these viewpoints the impacts are considered to have a low or medium magnitude, and minor to moderate adverse effects. Native planting to the buffers of the site will have some mitigatory effects along with the regeneration of the bankside vegetation.

From Bracondale immediately to the south of the May Gurney site, changes will be very visible creating new residential street and buildings fronting a new access road and opening up a framed view into the site. Development will replace the existing buildings to the river frontage as illustrated in AVR of viewpoint 1. The magnitude of change will be medium to high, and the significance of effect will be moderate and adverse.

The river corridor to the north of the site is identified as being of Very High sensitivity. Nevertheless, the gateway to Norwich via the River Wensum/Yare is currently an undistinguished and semi-industrial urban fringe, heavily influenced by rail infrastructure, with a neglected and semi-derelict character.

From the east, the Deal Ground site is a recessive element in the landscape until relatively close due to the screening effects of the raised river embankments and riverbank trees. It is considered that the site will not have a noticeable impact until the bend in the river approximately 450 metres east of the site (refer to AVR of viewpoint 13). From here the magnitude of the visual effect is considered to be low and the result will be a minor adverse effect.

At the approaches of the confluence of the Rivers Yare and Wensum, the development will become more prominent and the eastern and northern sides of the development will be visible. This will constitute a significant and permanent change to this view and the character of the area, and assessed as having a high magnitude of effect, and a major adverse effect. There will be a tall built form close to the river where presently there is limited modern development (refer to AVR of viewpoint 14), and some mature trees will be removed. Nevertheless, there are considered to be positive benefits in the creation of an enhanced river frontage and gateway to the City, with an active frontage and public access, in an area which is currently neglected and creating a negative influence on the townscape character.

Further west, beyond the railway bridge and into the City of Norwich, the existing enclosure created by the tall buildings close to the river's edge creates a different character and more limited views. This creates a tighter corridor effect, limiting views and reducing the potential magnitude of the visual effect to low or medium.

The impact of the development from more distant viewpoints on the valley side to the north has also been considered. From Thorpe Ridge the north-south orientation of some of the streets together with their elevated position provides southerly views across the valley. The existing Poplar trees on the Deal Ground Site are a useful landmark to determine the location and relative height of the new development. From Glendenning Road, views face toward the eastern end of the site and are only partially affected by the proposals (refer to AVR of viewpoint 17). The magnitude of the impact from these areas, despite the presence of other detracting elements and the relatively high distance from the site, is therefore considered to be medium to low, and a moderate to minor adverse effect.

The visual sensitivity of Castle to the west of the Deal Ground within the heart of the City of Norwich is considered to be high. This has a wide panorama of the city with a significant urban area of high-rise built form dominating its character. The introduction of the proposed development in this view will form part of this ensemble of buildings in the long-distance and would be barely perceptible, resulting in a low to nil magnitude of change, and negligible effect.

Table 8.3 - Construction Phase Visual Effects

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Construction Effects	Magnitude of change	Significance of Effect
VP1	VP20	Medium - High	View from Bracondale bridge over River Yare looking across to the western edge of May Gurney site. Some of the construction plant will be visible, although enclosed by hoarding to the riverside. Activities will be temporary and short to medium-term, with other impacts experienced along Bracondale through construction traffic and the highway works.	Medium	Moderate Adverse
VP2	VP19	Medium	View from Bracondale opposite the May Gurney site at the new entrance point to the site. No.1886 Bracondale to the left will be retained, but the construction works will dominate this view and be disruptive to its character, but only in the short-term.	High	Moderate Adverse
VP3	VP10	Medium - High	Views from Whittingham Lane junction with Bracondale adjacent to St Andrew's church. Some plant and construction activity will be partially visible, partly screened by the local vegetation.	Medium	Moderate Adverse
VP4	VP12	High	Located on Whittingham Lane looking west through gaps in the trees with glimpsed view towards the May Gurney site. Some plant and construction activity will be visible through the trees against the backdrop of the existing urban fringe development.	Medium	Moderate Adverse
VP5	none	High	Views from Trowse common were not considered as part of the ES, but the village centre is in close proximity to the development and receptors have a high sensitivity to change. Some plant associated with the taller elements of the development may be perceptible in the winter months mainly, albeit short-term.	Low	Moderate-Minor Adverse
VP6	none	High	Views to the south of Bracondale were not considered as part of the ES. A footpath runs along the route of the river with views north towards the site. Some plant associated with the taller elements of the development may be perceptible in the winter months largely, albeit short-term.	Low	Minor Adverse

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Construction Effects	Magnitude of change	Significance of Effect
VP7	none	High	Views from Whitlingham Lane towards the Deal Ground site are available. Some plant and construction activity will be visible on the Deal Ground site against the backdrop of the existing treescape and urban development beyond. Disruption would be perceptible but short-term.	Medium	Moderate Adverse
VP8 & 10	VP18	Very High	Views from Wherryman's Way LDR within the country park and Broads National Park. Some taller construction plant may be visible above the skyline, particularly in the winter months.	Low	Moderate Adverse
VP9	VP4	Very High	Views from Whitlingham Country Park to edge of River Yare. The removal of some trees and the presence of construction plant will be visible behind the existing tree belt, partially obscured by vegetation.	Medium	Moderate Adverse
VP11	none	Very High	View from Great Broad in Whitlingham Country Park not considered in the ES. Some taller construction plant may be visible in the winter months but unlikely to break the skyline.	Low to No Change	Negligible
VP12 & 13	VP5 & 2	Very High	Views from the River Yare on hire boat representing Broads users within the National Park. The removal of some trees and the presence of construction plant will be visible behind the existing tree belt in the short-term but will not form a dominant feature.	Low	Minor Adverse
VP14 & 15	VP1 & 9	Very High	View from the River Wensum on a hire boat close to the northern boundary of the site, representing only water-based viewers. The removal of some trees and the presence of construction plant will be a conspicuous feature locally.	High	Major Adverse
VP16	VP8	Medium	View eastwards on the River Wensum adjacent to the Colman works with the main line railway bridge in the foreground. The removal of some trees and the presence of construction plant will be a conspicuous feature locally.	Medium	Moderate-Minor Adverse
VP17	VP22	Medium	View from residential area at Glendenning Road/ Thorpe Hamlet. Some of the large construction plant, such as cranes will be partially visible beyond the railway line and	Medium	Moderate-Minor Adverse

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Construction Effects	Magnitude of change	Significance of Effect
			the buildings. The removal of some of the trees will be visible.		
VP18	none	Medium	View from Heathside Road/ Cotman Road to the north, not considered in the ES. Some taller construction plant may be visible in the winter months but unlikely to be a prominent feature in the wide panorama over the city.	Low	Minor Adverse
VP19	none	Medium	View from Carrow Hill to the west of the site was not considered in the ES. This area now heavily developed would largely obscure any construction activities that may be seen.	Low to No Change	Negligible
VP20	Additional view	High	View from Norwich Castle	Low to No Change	Negligible

Table 8.4 - Operational Phase Visual Effects

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Operational Effects	Magnitude of change	Significance of Effect	Mitigation	Residual effect
VP1 (AVR)	VP20	Medium - High	View from Bracondale bridge over River Yare looking across to the western edge of May Gurney site. No.1886 Bracondale offsite will be retained, and new residential buildings will replace existing commercial development beyond. New buildings are set back from river and orientated to allow space between. Buffer provided to River Yare to allow regeneration of bankside vegetation and new planting.	Medium	Moderate Adverse	Native planting to landscape buffer	Moderate-Minor Adverse
VP2	VP19	Medium	View from Bracondale opposite the May Gurney site at the new entrance point to the site. No.1886 Bracondale to the left will be retained, and new buildings will front the road to the right, with a view north along the new road corridor.	High	Moderate Adverse	None	Moderate Adverse
VP3	VP10	Medium - High	Views from Whittingham Lane junction with Bracondale adjacent to St Andrew's church. New residential development will form a visible extension to the existing roadside built form in the distance, partially screened by the intervening vegetation around the grass meadows to the right of the view. Buffer provided to riverside to allow regeneration of bankside vegetation and new planting.	Medium	Moderate Adverse	Native planting to landscape buffer	Moderate Adverse
VP4	VP12	High	Located on Whittingham Lane looking west through gaps in the trees with glimpsed view towards the May Gurney site. New residential development will be located behind a landscape buffer in the distance, seen in the context of the existing semi-industrial backdrop of the Tarmac works adjacent to the railway. Buffer provided to river frontage to allow regeneration of bankside vegetation and new planting.	Medium	Moderate Adverse	Native planting to landscape buffer	Moderate Adverse
VP5 (AVR)	none	High	Views from Trowse common were not considered as part of the ES, but the village centre is in close proximity to the development and receptors have a high sensitivity to change. The proposed residential buildings will replace the existing commercial development which is glimpsed in the view, of a similar scale and located on the road frontage,	Low	Moderate-Minor Adverse	None	Moderate-Minor Adverse

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Operational Effects	Magnitude of change	Significance of Effect	Mitigation	Residual effect
			thereby causing a negligible degree of change in the winter months. The AVR demonstrates that there will not be any operational visual effects in the summer months given the low-set development well below the tree-line.				
VP6	none	High	Views to the south of Bracondale were not considered as part of the ES. A footpath runs along the route of the river with views north towards the proposed development fronting Bracondale. The new buildings would be no more than three storeys in height and likely to sit behind the intervening vegetation and only be glimpsed in the winter months. Given the presence of other built form in the view, the degree of change to the visual environment will be minimal.	Low	Minor Adverse	None	Minor Adverse
VP7	none	High	Views from Wherryman's Way LDR further north along Whitlingham Lane were not considered in ES. Views are available towards the Deal Ground site where the proposed buildings would form additional elements of built form across the view. The CWS is located adjacent to the River Yare and screens the May Gurney site to the south from this view. Buffer provided to river frontage to allow regeneration of bankside vegetation and new planting.	Medium	Moderate Adverse	Native planting to landscape buffer	Moderate Adverse
VP8 & 10 (AVR)	VP18	Very High	Views from Wherryman's Way LDR within the country park and Broads National Park were under-represented in the ES. The LDR continues to follow the River Yare east into the Broads, with a range of recreational uses (such as the canoe club) and receptors likely to experience some degree of change through the development. Vegetation in the country park forms an enclosing element with only glimpsed views in and out. Proposed buffer is provided to river frontage to allow regeneration of bankside vegetation and new planting. AVR demonstrates that there will be a low degree of change given the low-set development below the existing tree-line.	Low	Moderate Adverse	Native planting to landscape buffer	Moderate Adverse
VP9 (AVR)	VP4	Very High	Views from footpath loop within Whitlingham Country Park to the edge of the River Yare close to its confluence with	Medium	Moderate Adverse	None	Moderate Adverse

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Operational Effects	Magnitude of change	Significance of Effect	Mitigation	Residual effect
			the River Wensum. The character of this view is consistent with the area, with views of recreational activity and associated built form close to the edge of Norwich. As demonstrated by the AVR, the new buildings will be visible as a new element in the landscape, although at a lower elevation than the existing Poplars and partially screened by retained vegetation.				
VP11	none	Very High	View from the banks of Great Broad in Whitlingham Country Park towards the site in the distance approx. 700m away. Vegetation in the country park forms an enclosing element with limited views out. The new buildings are unlikely to be visible in the landscape, at a lower elevation than the existing trees and largely screened by retained vegetation.	Low to No Change	Negligible	None	Negligible
VP12 & 13 (AVR)	VP5 & 2	Very High	Views from the River Yare on a hire boat representing Broads users within the National Park. The meandering river, bank height and bankside vegetation create enclosure and glimpsed views, resulting in the Deal Ground site being a more recessive element in the landscape except at close proximity. As demonstrated by the AVR, the ridges of new buildings will be visible as a new element in the landscape, although at a lower elevation than the existing trees in the view.	Low	Minor Adverse	None	Minor Adverse
VP14 & 15 (AVR)	VP1 & 9	Very High	View from the River Wensum on a hire boat close to the northern boundary of the site, representing only water-based viewers. There will be a significant change in the character of the site, as new buildings will occupy the brownfield site and some trees will need to be removed. The built form will be set back from the river frontage with space for landscaping and riverside walks, as well as the pedestrian bridge across the Wensum. This development will create a prominent gateway to the city as demonstrated by the proposed AVR.	High	Major Adverse	New landscape treatment to river frontage and sense of place.	Moderate Adverse

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Operational Effects	Magnitude of change	Significance of Effect	Mitigation	Residual effect
VP16	VP8	Medium	View eastwards on the River Wensum adjacent to the Colman works with the main line railway bridge in the foreground. Access to the area is only possible by boat. Here the character changes dramatically as industrial buildings and former works close to the river's edge dominate the scene and create strong enclosure and a utilitarian character. New modern development at Carrow stadium is beginning to transform this character. Proposed development will result in a significant change to the character of the site. The trees on the site are visible as a landscape feature.	Medium	Moderate-Minor Adverse	New landscape treatment to river frontage and sense of place.	Minor Adverse
VP17 (AVR)	VP22	Medium	View from the residential estate around Glendenning Road/ Thorpe Hamlet. At this lower elevation, visibility to the site is more obscured by intervening buildings. The mature trees on the northern edge of the Deal Ground are partially visible as indicators of the development location. The railway sidings in the mid-ground creates a detracting element, although the large gasometer has been removed since the ES. As demonstrated by the AVR, new development proposed on the site will be visible, obscuring some of the landscape beyond, but with a broken roof line to allow some glimpsed views through.	Medium	Moderate-Minor Adverse	None	Moderate-Minor Adverse
VP18	none	Medium	View from Heathside Road/ Cotman Road to the north is located on rising land with glimpsed views from the residential area towards the site. The new development would introduce a minor new element into the panoramic views that are experienced within the existing urban edge of Norwich.	Low	Minor Adverse	None	Minor Adverse
VP19	none	Medium	View from Carrow Hill to the west of the site was not considered in the ES. This represents receptors within this housing area and close to the ancient city walls and towers enclosed by woodland. This area is now heavily developed with high-rise apartments, office blocks, and the existing Carrow works dominating the mid-ground. Views toward	Low to No Change	Negligible	None	Negligible

ESA Viewpoint	Equivalent ES View	Sensitivity	Description of Operational Effects	Magnitude of change	Significance of Effect	Mitigation	Residual effect
			the site are obscured and would only view the upper levels of the highest buildings proposed.				
VP20	Additional view	High	View from Norwich Castle from the ramparts of the eastern edge, with a wide panorama of the city. Existing elements such as the football ground, St Anne's Quarter and the dry ski slope some 2.25km away are visible. The upper levels of the highest (Height??) buildings proposed would be visible as part of this ensemble of development, which would be barely perceptible from this location.	Low to No Change	Negligible	None	Negligible

8.4.3 Lighting Effects

In terms of the effects of the development and the associated lighting scheme for the residential areas, community and retail buildings, streets and open spaces, it is assumed that this will be designed to the latest good practice guidelines utilising modern luminaires that limit the amount of light spillage into the wider environment.

Light pollution results from the effect of over-lighting through poorly designed lighting schemes and excessive levels of light. Inevitably an element of glare and light trespass will occur in close proximity to the light source but is generally not appreciated beyond the immediate environment of the site.

The introduction of the development will cause some lighting effects as the Site is located in a relatively dim landscape with the existing lighting in the locality within the existing Carrow Works to the west and the railway sidings and industrial area to the north.

The Site is bound to the west by the railway line, and to the south by a road lit with traditional highway lighting columns. It is considered that wider views from the southeast and east will observe the site in the context of the urban area beyond and filtered by intervening vegetation within the valley landscape. It is anticipated that at all phases of development there will be an additional glow to the vicinity of the site, as this is currently an undeveloped brownfield site with little or no lighting in its disused state.

Where residential streets and areas of open space adjoin the river to the north and east of the site, opportunities for street lighting within this area is recommended to use low level bollard lighting and other measures to limit light pollution. Where development fronts the landscape buffer and County Wildlife Site along the eastern edge of the site, lighting should be minimised and designed to limit light spill due to the presence of foraging bats and other wildlife.

The representative viewpoints from the surrounding countryside will be affected by the lighting resulting from the onsite uses, the new road network and junctions. Due to the maturing landscape buffers on the eastern, southern and western boundaries, the light spillage and glare at completion will be apparent from all views that experience similar visual change due to the development in the daylight hours. High level street lighting will be evident in the road connection between May Gurney and the Deal Ground sites. The current baseline already includes lighting in the vicinity of the Site but there will be additional sources of light through the construction and operation phases of the development into the existing dim sky. Adjacent to the Site, other existing sources include the night glow associated with the residential development at Huntingdon further to the west.

Considering these factors and given the existing context of artificial light sources within the site and nearby such as the industrial areas, and the existing sky glow from the residential and commercial development to the edge of Norwich, the magnitude of change has been assessed as being of low change to the existing baseline.

8.4.4 Additional Cumulative Effects

The cumulative schemes that are considered to be relevant for this project are set out in the ESA, extracted from SNC and NCC's scoping opinions. Not all of these are relevant to landscape and visual effects as they lie outside of the relevant study area, so a summary of the sites and their relevance is set out in Table 8.5 below.

Table 8.5 – Cumulative Schemes

App Ref	Location	Brief Description	Relevance to LVIA
2019/2318 Full (approved)	Phase 2, Land off White Horse Lane, Trowse	83 dwellings, access, landscaping, open space and associated infrastructure.	n/a. Enclosed by recent development and tree belt on A146.
2022/2148 Hybrid (pending)	Land north of Caistor Lane, Caistor St Edmund	Outline for residential development up to 180 dwellings, primary school, community building, sports pitch and road improvements. Detailed proposals for a 25.5 ha country park.	n/a. Outside of the study area for landscape and visual effects
22/00434/F Hybrid (pending)	Anglia Square, Norwich	Redevelopment of city centre site for residential, retail, and commercial space and car parking, highway works and public realm improvements.	n/a. Outside of the study area for landscape and visual effects
17/01647/VC 13/01270/RM	Land north of Carrow Quay	Residential flats and car parking and provision of a Riverside Walk.	n/a. This site is complete so forms part of the baseline
22/00540/EIA2	Carrow Works, King Street	EIA scoping request for mixed use development in line with East Norwich Masterplan.	Will feature in views from Broads and change the character of the local area

The relevant scheme that would cause further change to the landscape and visual effects is the emerging proposals for the Carrow Works site as part of the East Norwich Masterplan. This proposes an entire regeneration scheme to the site and is likely to introduce further large-scale modern development to the urban area and river frontage. The development as detailed in the strategic masterplan is likely to be visible in views from most locations, and the delivery of this proposal is likely to be staggered with later phases of the Deal Ground development which will extend to 2038. The effect of the cumulative developments would be greater, particularly from the river and completely change the character of the local area. The magnitude of change would be assessed as being an increase of one category to each viewpoint affected by the proposals. The magnitude of change would be likely to be medium to the existing baseline for landscape character.

8.5 REQUIREMENT FOR ADDITIONAL MITIGATION

Alternate or additional mitigation has not been considered necessary.

8.6 RESIDUAL EFFECTS

8.6.1 Construction Phase

There will not be any mitigation that will result in a change in the construction effects.

8.6.2 Operational Phase

The residual effects for viewpoints are set out in Table 8.4.

8.7 SUMMARY OF EFFECTS

For landscape character, the effects at construction and operation will not be significant. The greatest effects will be to the site itself changing its form and character into a substantial residential development at a scale greater than what exists currently. This will be of high magnitude to change and of major significance. Beyond this the changes would have a limited influence on the character of the local landscape within the Valley Urban Fringe LCA, with a low magnitude of change and of minor significance.

For visual amenity, the greatest effects at construction will be from the River Wensum close to the northern boundary of the site as the sensitivity is very high. Here the effect will be of major significance and adverse. Views from the south on Bracondale and Whitlingham Lane will experience a moderate and adverse effect as views of construction activities will be visible. Beyond these areas the changes would be limited and not be overly perceptible given the existing landscape structure and topography. At operation, the magnitude of change is similar to that at construction as the scale and extent of the development is comparable. Major and adverse effects will be experienced from the River Wensum, with moderate and adverse effects from local roads and footpaths close to the site, and minor effects beyond.

These findings are consistent with the original ES chapter and verified by the processes carried out as part of this addendum.

8.8 CONCLUSIONS

The purpose of this report is to carry out a detailed appraisal of the site and study area, identify landscape and visual receptors likely to be affected, and determine the extent and significance of any potential landscape and visual effects against the baseline conditions. A previous LVIA was carried out by Broom Lynne Landscape Architects in 2010 for the original Environmental Statement (ES), and reference will be made to this assessment where necessary.

The ES baseline for the landscape and visual assessment identified a number of receptors that may be affected by the proposals, as well as their sensitivity to change. In terms of landscape character the site is located in 'The Broads' NCA and at a district level, the South Norfolk Landscape Assessment locates the site within the 'Yare Valley Urban Fringe' LCA. This is a broad semi-enclosed valley with a wide floodplain resulting in a sense of containment and unity, but influenced by developments in the City of Norwich. Visually the site is well contained and views are available locally from roads, footpaths, access routes, the country park and rivers Yare and Wensum. Longer distance views are glimpsed and limited to the north and northwest within the elevated urban areas on the ridgeline.

Some of the existing baseline conditions have changed since the original ES, with high-voltage overhead power cables and pylons buried underground, and the large gasometer within the railway sidings to the north of the site has been removed. New developments have been completed along the riverside to Geoffrey Watling Way close to the Carrow Road Stadium, and the East Norwich Masterplan set to continue to evolve this area into the future.

The construction operations for the proposed development will generally consist of the visual effect of site vehicles and construction traffic; other components typical of construction activities including workers' accommodation, stockpiling of materials, lighting of specific areas, such as construction compounds; and modification of landscape fabric as part of the works. The level of change to the site itself will be of high magnitude by changing its form and character into a substantial residential development

at a scale greater than what exists currently. Whilst temporary, the large-scale construction activities will have a moderate and adverse effect on landscape/ townscape character. At completion of the development, riverside would change to a more active and managed formal frontage that will create a stronger gateway to the city and contrast with the rural character of the Broads and country park to the east. Whilst the character of the townscape will be enhanced, the overall effect on the LCA will be moderate and adverse given its scale.

In terms of the visual environment, the greatest effects at construction will be from the River Wensum close to the northern boundary of the site as the sensitivity is considered 'very high'. Here the effect will be major and adverse. Views from the south on roads immediately adjacent to the May Gurney site will experience a moderate and adverse effect as views of construction activities will be visible. Beyond these areas the changes would be limited and not be overly perceptible given the existing landscape structure and topography. At operation, the magnitude of change reflects that at construction as the scale and extent of the development is comparable. Major and adverse effects will be experienced from the River Wensum, with moderate and adverse effects from local roads and footpaths close to the site, and minor effects beyond.

Environmental Statement Addendum – Chapter 08: LVIA
Appendix 8.1

Laura Marshall
Triptych PD Limited
62 Queens Park Terrace
Brighton
BN2 9YB

By email

10th May 2023

Our Reference: 23/01243/EIA2
Your reference:
Contact: Sarah Hinchcliffe (Senior
planner)

Dear Laura

EIA Scoping Opinion Request for the development of a mixed use residential and commercial development on land known as Deal Ground, Bracondale, Norwich.

Thank you for the letter and accompanying 'Additional EIA Scoping Request' seeking a 'scoping opinion' under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (hereafter referred to as 'the EIA Regs'), received by the Council on the 27th February 2023.

The request follows on from a recent scoping response relating to the same development at the same application site, reference 22/01255/EIA2 issued on 23rd November 2022 and should supplement rather than replace this previous response.

The extent of the scoping relates specifically to the LVIA requirements (as scoped in by the Broads Authority in their response November 2022). It also seeks to scope out 'Risks of major accidents and /or disasters relevant to the development concerned, including those caused by climate change'.

The local planning authority has consulted statutory and non-statutory bodies. Responses have been received from:

- Natural England
- Historic England
- Broads Authority
- Norfolk County Council - Lead Local Flood Authority
- Norfolk Constabulary
- Norwich City Council – Landscape
- Marine Management Organisation
- Whitlingham Charitable Trust

Full consultation responses from the above are attached to this response in Appendix 1. Please note some of the responses extend beyond the scope of this specific EIA scoping request but are included for completeness.

The Environment Agency, Norfolk Wildlife Trust, Yare Valley Society, Anglian Water, Water Management Alliance, Cadent Gas Ltd, Norfolk Fire Service, Norfolk County Council Highway Authority and Historic Environment Service, Network Rail were also consulted, however to date no response has been received. Any further responses that are received will be provided under separate cover.

Vulnerability to major accidents and natural disasters

A proposed developments vulnerability to major accidents and natural disasters (as you have defined) should be considered in terms of the likelihood of the development itself to cause a major man-made accident, and in terms of the development being affected by an external man-made accident or by a natural disaster. It should also be considered whether the design, construction or operation of the proposed development could increase impacts on nearby receptors.

While the proposed development will introduce human receptors to the site, there are a number of measures in place at a national, regional and local level to mitigate risks from the identified major environmental hazards both during the construction and operational stages of the development.

Due to the nature and surroundings of the proposed development it is not considered relevant or likely to pose a risk to future site users or surrounding receptors. Any risks can be managed or avoided, through the regulatory framework and the control measures implemented at the local and/or national government level.

In some cases, this risk management process will be further supported with project-specific information and assessments which form part of the EIA and the wider planning process (e.g. flood risk assessment).

Consequently, it is considered that the vulnerability of the proposed development to major accidents and disasters is capable of being adequately managed throughout the lifetime of the project. As such, it is considered that the vulnerability of the proposed development to such events, is in itself, unlikely to result in any further significant effects on existing or future human and environmental receptors. Please however note the comments in Appendix 1 provided by Norfolk Constabulary relating to the implementation of Martyn's Law and protections against terrorism in public places (new Protect Duty legislation), which may require consideration within the detailed design of such spaces within the development depending on the implementation date.

Therefore, it is agreed that specific consideration of major accidents and natural disasters should be scoped out of the EIA as it is possible to appropriately manage such risks through the regulatory framework and control measures to be implemented at the local and / or national level and are considered where relevant in the Environmental Statement technical assessments, e.g. flood risk, transport/traffic related impacts.

Landscape and Visual Impact Assessment requirements

Appendix TPD1 – Location Plan

My understanding is that the area of the County Wildlife Site is slightly different to that shown on this plan (especially in the area to the south west), extending over the red line boundary.

Appendix TPD2 - IDP LVIA Methodology

The methodology refers to the use of ZTV (Zone of Theoretical Visibility) mapping to inform the visual baseline. However, it is understood that no ZTV was produced for the original LVIA for the outline application carried out by Broome Lynne and no ZTV mapping will be used to inform the addendum LVIA. The inclusion of such assertions as part of the LVIA methodology are incorrect and should be removed.

It is assumed that assessments will be undertaken for the construction stage in addition to commencement of operation, and once mitigation (and other) planting is established. Night time/lighting effects will also need to be considered, especially in the context of the CWS and the Broads.

Appendix TPD3 - IDP LVIA Viewpoints including Locations

Lengthy discussions took place around the selection of viewpoints. As a result the original viewpoints presented within the scoping document were expanded to include a wider range of viewpoints which also include users of the river as receptors. The 23 viewpoints used in the original LVIA by Broome Lynne were used as a starting point to ensure an appropriate spread of viewpoints, including receptors from roads, footpaths and the river. Where appropriate, adjustments were agreed to the previously agreed viewpoint locations to gain improved representations.

While discussions around viewpoint locations were taking place we became aware that tree and scrub removal was taking place at a significant scale on both the May Gurney and Deal Ground sites. It is essential that these baseline changes continue to be reflected in the photographic imagery used.

Historic England recommended views be included from a number of heritage assets in the locality. Where possible and where public access is available the comments have been incorporated into the list of revised viewpoints.

A total of 20 viewpoints were finalised and provided by email to the council on 3rd May 2023 and were subsequently agreed by both Norwich City Council and South Norfolk Council.

The type of visualisations for a smaller selection (8) of the viewpoints were also agreed. Initially wirelines will be produced for each of these agreed points to be followed with rendered versions at AVR Level 2 or 3 with a short delay to allow the development proposals which are to be submitted to be finalised.

We trust this response is helpful and we look forward to receiving the reserved matters planning applications in due course.

Yours sincerely



Sarah Ashurst
Head of Planning and Regulatory Services

From: [Hinchcliffe, Sarah](#)
To: [Hinchcliffe, Sarah](#)
Subject: FW: 2023/0578 - Deal Ground scoping - Robin's informal comments
Date: 09 May 2023 11:38:11
Attachments: [image001.png](#)

From: Mellors, Tim
Sent: 31 March 2023 16:16
To: Blanaid Skipper ; Hinchcliffe, Sarah
Subject: RE: 2023/0578 - Deal Ground scoping
Hi Both

Thanks for the meeting and sorry that I'm going to be on leave next week.
Just some quick thoughts:

As this LVIA is for an update of the original ES, it would be more consistent to use the original 23 viewpoints as the basis. If new viewpoints are then considered to be needed or original ones not that would be OK although an explanation for changes would be helpful.

Original LVIA viewpoints included additional ones for the Castle, for which there were 3. The intention was to assess the potential impact of the development on the historic core of the city, and primarily the impact on views from the scheduled ancient monument of the castle and the castle mound.

The new viewpoints only show 1 viewpoint from the Castle but I think this would be sufficient.

Additional Viewpoints to be considered: From the urban area; Trowse swing bridge, Carrow Works, Thorpe area. Boat users.

Most of the text in the document relating to LVIA seems to be just the methodology from the Guidelines for LVIA (GLVIA). [Appendix TPD2 IDP LVIA Methodology]. As long as the LVIA accords with GLVIA that's fine. I think we might want to agree the type of visualisations to be used. The Landscape Institute has a guidance note on this: [TGN-06-19-Visual_Representation \(windows.net\)](#)

Cumulative and in-combination effects to be considered:
East Norwich developments likely to progress before completion of the development and for which sufficient information is available (??) to assess the likelihood of cumulative and in-combination effects.

The site is adjacent to and may impact on the setting of The Broads National Park. The Landscape section of EIA should consider the direct and indirect effects on this designated landscape.

The ES should include a full assessment of the potential impacts of the development on local landscape character.

Thanks
Tim

Tim Mellors
Senior landscape architect
Development and city services

Thorpe Lodge
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Tel 01508 533985
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By Email

Our ref 2023/0578

25 May 2023

Dear Laura

**Location: The Deal Ground and former May Gurney Site, The Street, Trowse Norfolk
Proposal: Additional Scoping Opinion for the development of mixed use residential
development and commercial development
Applicant: Mr Matt Hill**

I refer to your EIA Scoping Request which was submitted on 27 February 2023 under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) England and Wales Regulations 2017 (EIA Regulations) in respect of the above development.

This follows a recent scoping opinion for the same development (SNC ref: 2022/1847) which was issued by this Authority on 07 December 2022. This response is now in addition to that previous opinion.

This scoping request seeks to clarify the LVIA requirements (as scoped in by the Broads Authority) and seeks to scope out the need for a separate chapter on the Risk of Major Accidents and Disasters.

South Norfolk Council has consulted the relevant statutory and non-statutory bodies as required in accordance with the EIA Regulations, and others it considers of relevance. Responses have been received from;

- Historic Environment Service
- NCC Highways
- Lead local Flood Authority
- Water Management Alliance



- SNC landscape Architect

Any further consultation responses that are received will be forwarded under separate cover.

Vulnerability to major accidents and natural disasters

This is considered in terms of any potentially significant adverse effects of a proposed development on the environment deriving from its vulnerability to risks of major accidents and/or disasters, both natural and man-made.

While this proposal will introduce human receptors to this site, it is considered that there are existing design measures, legislation and standards in place at national, regional and local level to adequately control and mitigate against potential major accidents and/or disaster. In addition, these are further supported by specific topics already scoped into the updated ES and to be assessed as part of the planning application, such as flood risk.

Officers at Norwich City Council, in their response dated 10 May 2023, have already highlighted Norfolk Police's comments regarding the implementation of Martyn's Law to protect against terrorism in public spaces and this Authority would also endorse these comments.

Landscape and Visual Impact Assessment

Appendix TPD1 – Location Plan

My understanding is that the area of the County Wildlife Site is greater than shown on this plan, extending over the red line boundary.

Appendix TPD2 – IPD LVIA Methodology

The methodology refers to the use of ZTV mapping to inform the visual baseline. It is understood that no ZTV was produced for the original LVIA and will not be used to inform the addendum LVIA. The methodology should be corrected to reflect this.

It is assumed that assessments will be undertaken for construction stage in addition to the commencement of operation and once mitigation (and other) planting is established.

Night time/lighting effects should be considered, especially in the context of the CWS and Broads.

Appendix TPD3 – IDP LVIA viewpoints including locations

Following discussions, the original viewpoints as proposed were expanded upon which also included users of the river as receptors. Adjustments were also agreed to previously agreed viewpoints. It is essential that baseline changes due to the recent extensive removal of trees and scrub are reflected in your submission.

20 viewpoints have been agreed by Norwich and South Norfolk Councils, as confirmed in an email dated 03 May 2023 from IDP Group. Visualisations for a smaller selection of viewpoints were also agreed

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I hope that you find the above information useful and please do not hesitate to contact the above case officer on the details listed should you wish to discuss this letter further.

Yours sincerely

Blanaid Skipper
Senior Planning Officer

Environmental Statement Addendum – Chapter 08: LVIA
Appendix 8.2

INTRODUCTION

- 1.1. This methodology has been prepared in accordance with the Guidelines for Landscape and Visual Impact Assessment Third Edition 2013 (GLVIA3 or “the Guidelines”) produced jointly by the Landscape Institute and the Institute of Environmental Management and Assessment (IEMA). This provides guidance on carrying out an LVIA and its use within an Environmental Impact Assessment (EIA) under the regulations.
- 1.2. The methodology within the previous Environmental Statement November 2010 was prepared by Broom Lynne Landscape Architects. This assessment was carried out based on the old Guidelines which relied on more systematic processes through matrices to determine levels of value, sensitivity, magnitude and significance of effect. Whilst this approach is not incorrect, the new Guidelines have more emphasis on professional judgements which should be based on training and experience. While there is some scope for quantitative assessment, the Guidelines state that *‘the assessment must rely on qualitative judgements, for example about what effect the introduction of a new development or land use change may have on visual amenity, or about the significance of change in the character of the landscape and whether it is positive or negative’*.¹
- 1.3. The criteria used for the assessment stages are consistent with the original ES to allow for comparisons in significance of effects and the residual effects following mitigation. This LVIA has been carried out by suitably qualified and experienced landscape professionals, providing impartial judgements through clear and transparent methods outlined in this methodology.

Approach

- 1.4. The overall process within this LVIA is outlined in the following flow chart (Figure 1) based on figures produced in the Guidelines detailing steps in the assessment of landscape effects and visual effects. The scope of the assessment has been discussed with the Local Authority and stakeholders to agree the scope as much as possible prior to planning submission, to ensure the process is site specific, clear and transparent, and identifies the effects necessary to make a full judgement as to the acceptability of the proposed development in landscape and visual terms.

¹ GLVIA3 paragraph 2.23

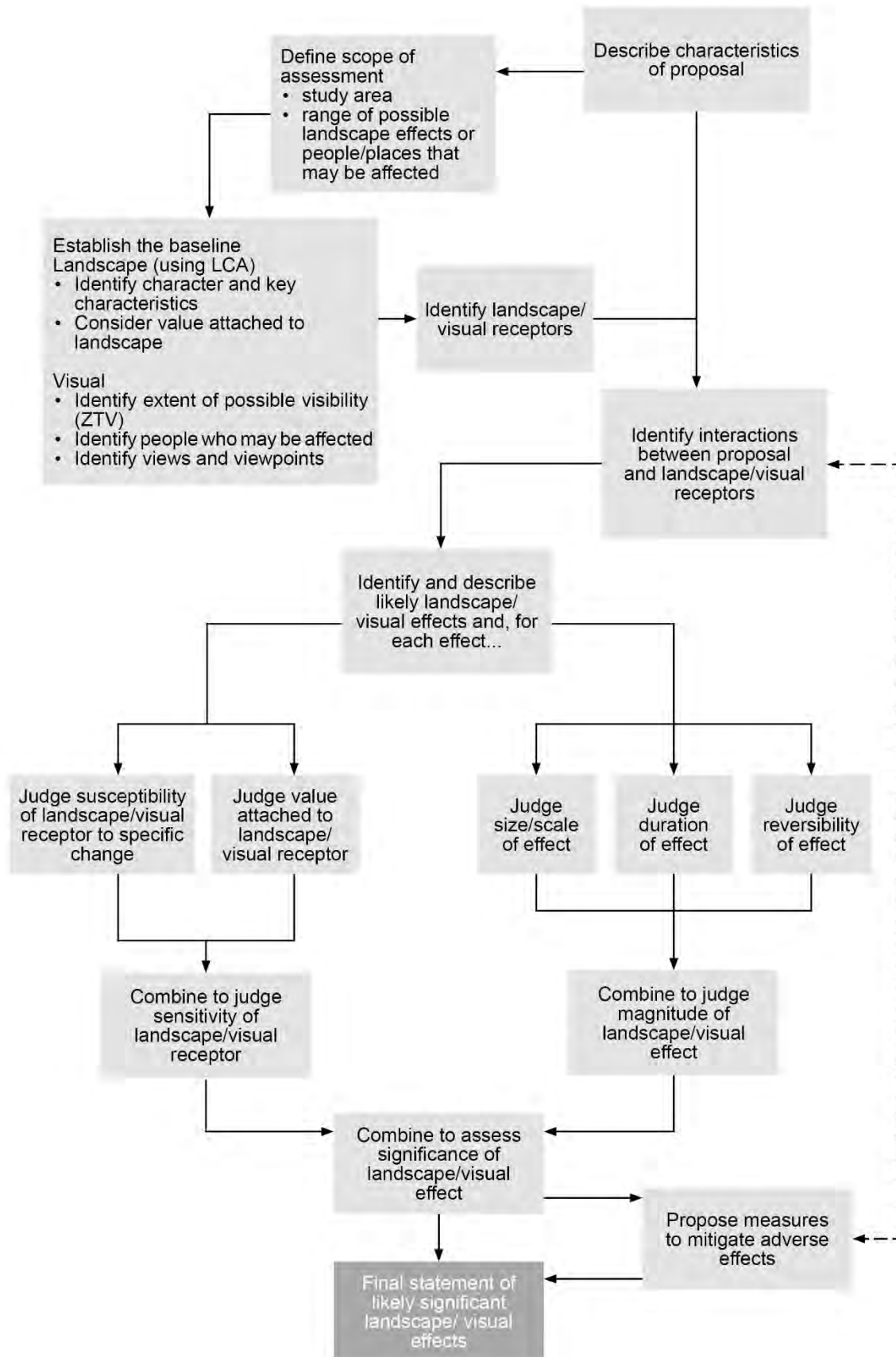


Figure 1: Steps in assessing landscape/visual effects

BASELINE CONDITIONS

Landscape Baseline

- 1.5. Baseline studies require a mix of desk study and fieldwork to identify and record the character of the landscape, as well as the elements, features and aesthetic and perceptual factors which contribute to it. For landscape effects the study area covers the proposed project Site and the wider landscape context within which the proposals may influence landscape character and the full extent of any neighbouring features of special value (e.g. designated areas including AONBs, Historic Parks, Conservation Areas etc.) to reflect the setting of that feature.

- 1.6. Published Landscape or Townscape Character Assessments prepared by the Local Authorities have formed the basis of the desk study, followed by the site-specific assessment to identify landscape receptors. The process involves the assessment of a combination of physical (e.g. landform, vegetation, buildings), aesthetic/perceptual (e.g. scale, appearance, tranquillity) and cultural/social (e.g. human interaction, landuse, heritage) aspects which together make up the character of the area and its value. An assessment is also made as to the quality, or condition, of the landscape, which involves consideration of the physical state of the landscape and of the features and elements which make up landscape character.

Landscape Value

- 1.7. **Value** is “attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a whole variety of reasons”². Landscapes or their component parts may be valued at community, local, national or international levels. A review of existing landscape designations is the starting point in understanding value, but the value attached to undesignated landscapes will be carefully considered and individual elements of the landscape - such as trees, buildings, or hedgerows – may also be of value.

- 1.8. The landscape value has been evaluated using the following factors that are generally agreed to influence value, based on Box 5.1 in the Guidelines.

Table 1

FACTOR	DESCRIPTION OF VALUE
LANDSCAPE QUALITY (CONDITION)	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
SCENIC QUALITY	The term used to describe landscapes that appeal primarily to the senses (primarily but not wholly the visual senses).
RARITY	The presence of rare elements or features in the landscape or the presence of a rare Landscape Character Type.

² GLVIA3 paragraph 5.19

REPRESENTATIVENESS	Whether the landscape contains a particular character and/or features or elements which are considered particularly important examples.
CONSERVATION INTERESTS	The presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of the landscape as well as having value in their own right.
RECREATION VALUE	Evidence that the landscape is valued for recreational activity where experience of the landscape is important.
PERCEPTUAL ASPECTS	A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity.
ASSOCIATIONS	Some landscapes are associated with particular people, such as artists or writers, or events in history that contribute to perceptions of the natural beauty of the area

1.9. Bearing in mind the above factors, the following elements (which are not intended to be prescriptive) provide an indication of the range of attributes that would need to be considered within the assessment³. These should be assessed as to how they contribute or detract from the overall character and quality of the landscape to help identify what should be conserved or protected and what should be enhanced and provides the basis to consider the sensitivity of the landscape to change as a result of the proposed project.

- Natural features and elements. Examples would include:
 - landform (e.g. ridge lines);
 - trees and woodland (e.g. mature hilltop copse, scrub, or isolated trees);
 - any other natural vegetation (e.g. heathland);
 - water features (e.g. lakes, streams and ditches);
 - rock formations.
- Built features and elements. Examples would include;
 - prominent buildings or other landmarks (e.g. a church spire or bridge);
 - settlements and built form (e.g. urban areas, villages, farms or houses);
 - settlement pattern and density (e.g. clustered, isolated or randomly dispersed);
 - style and characteristics of the built landscape (e.g. old or modern, use of local vernacular materials such as stone or thatch).
- Historic features and elements. Examples would include;
 - visible ancient monuments (e.g. earthworks, burial mounds and standing stones);
 - visible historic features remaining from past farming and land management systems (e.g. ridge and furrow);
 - historic buildings, bridges and other structures (e.g. memorials)
- Features and elements of the managed landscape. Examples would include:
 - hedgerow form or other boundary treatment (e.g. dry stone walling);

³ Taken from Advice Note on LVIA 'IAN 135/10' (Highways England)

- land use (e.g arable, pasture, urban).
- Infrastructure features and elements (e.g. roads, canals, railways)
- Any discordant or intrusive features and elements, such as a conspicuous line of pylons or an area of derelict land.
- Less tangible aesthetic and perceptual characteristics concerned with how the landscape is experienced and why, including professional judgment on tranquillity, wildness, intimacy, sense of place, scenic quality and other responses or impressions.

Visual Baseline

- 1.10. The baseline studies for visual effects have established the geographic area in which the development may be visible from, and the different groups of people (receptors) who may experience views of the development. These receptors have been illustrated through a number of specific/representative viewpoints that are reasonable and proportional to the scale and nature of the proposed development. The locations of these photographs will be scoped and agreed with the Local Authority at an early stage and communication recorded.
- 1.11. Likely visual receptors who will be affected by the changes in views and visual amenity include users of open access land, public rights of way, the public highway or other transport routes, local residents, and those at work. Views and viewpoints to represent these receptors have been recorded with panoramic images produced in line with the Technical Guidance Note on 'Visual Representation of Development Proposals'⁴. Data such as the camera, the field of view and weather conditions have been recorded for clarity of information.

Value of views

- 1.12. The nature, composition and characteristics of the existing views experienced at each viewpoint have been recorded as well as an assessment of value attached to that view. Recognition of the value attached to particular views has taken into account the presence of heritage assets or planning designations, appearance in guidebooks or maps, provision of facilities for their enjoyment (viewpoints, benches, information boards), or specific references in literature/art.
- 1.13. The visual receptors most susceptible to change are generally likely to include:
- *Residents at home;*

⁴ Landscape Institute Technical Guidance Note 06/19 17th September 2019

- *People engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape or particular views;*
- *Visitors to heritage assets or other attractions, where views of surroundings are an important contributor to the experience;*
- *Communities where views contribute to the landscape setting enjoyed by residents in the area;*

Travellers on road, rail or other transport routes tend to fall into an intermediate category of susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high.⁵

1.14. Visual receptors likely to be less susceptible to change include:

- *People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape;*
- *People at their place of work whose attention may be focused on their work or activity, not on their surroundings.⁶*

ASSESSMENT OF EFFECTS

1.15. The project description outlines the siting, layout, components and other characteristics of the development that are likely to be relevant to the landscape and visual effects. This also includes the primary landscape measures that have been developed through the iterative design process and have become integrated or embedded into the project design. Having established the baseline receptors for both landscape and visual aspects and their value, it is necessary to predict what interactions there will be between these receptors and the proposed development. This will follow these stages:

- Evaluate the sensitivity of the receptor through combining judgements on the value attached to the receptor and the susceptibility to change arising from the specific type of development;
- Identify the magnitude of change through judgements on size/scale, extent and duration;
- Combine judgements on sensitivity and magnitude to establish the level of the effects.

1.16. Determining the significance of effects is a requirement of the LVIA process through an evidence-based process combined with professional judgement. Under the UK EIA Regulations the LVIA process must consider the direct effects and any indirect, secondary, cumulative,

⁵ GLVIA3 paragraph 6.33

⁶ GLVIA3 paragraph 6.34

short-, medium- and long-term, permanent and temporary, as well as positive and negative effects of the development.

- 1.17. In deciding whether effects are positive (beneficial) or negative (adverse), an informed professional judgement has been made, using clearly stated criteria used in reaching the judgement. It is considered that well-designed new development can make a positive contribution to the landscape and need not always be hidden or screened. It is also possible for effects to be neutral in their consequences.

Landscape Effects

- 1.18. The **sensitivity** of the landscape receptor has been identified by combining judgements of the susceptibility to the type of change or development proposed with the value attached to the landscape as established in the baseline study.
- 1.19. Susceptibility is the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation⁷.
- 1.20. The overall landscape sensitivity for each receptor has then been categorised balancing the judgements made on the value attached to the receptor and the susceptibility to the type of change arising from the specific proposal. These are categorised into Very High, High, Medium, Low and Negligible and defined in Table 2.

Table 2

LANDSCAPE SENSITIVITY	DEFINITION
VERY HIGH	A landscape with very high susceptibility (vulnerability) to change where the type of development would cause large-scale loss to the characteristics of the area. Areas have high landscape value with no or limited potential for substitution. Likely to be designated at national level such as National Parks, AONB, SSSIs, Grade I and II* listed buildings of high importance and rarity.
HIGH	A landscape with high susceptibility (vulnerability) to change where the type of development would cause large-scale loss to the characteristics of the area. Areas have high landscape value with limited potential for substitution. Likely to be designated at national or regional level and/or rare or high-quality elements or features may be present outside designated areas, especially at a local scale.
MEDIUM	A landscape with medium susceptibility (vulnerability) to change where the type of development would cause some disruption or loss to the characteristics of the

⁷ GLVIA3 paragraph 5.40

	<p>area. Areas have medium landscape value with some potential for substitution.</p> <p>Likely to be designated at district or local level and/or medium quality elements or features that are more commonplace but worthy of retention.</p>
LOW	<p>A landscape with low susceptibility (vulnerability) to change, where the type of development would be consistent with the characteristics of the area. Areas have low importance or rarity with scope to mitigate the loss of individual elements/features.</p> <p>Likely to be non-designated areas where landscape is discordant, derelict or in decline with little or no sense of place.</p>
NEGLIGIBLE	<p>A landscape of very low importance and rarity at a local scale where landscape is heavily discordant or derelict and/or poor-quality elements and features that are commonplace.</p>

Magnitude of Landscape Change

- 1.21. The magnitude of change on the landscape resource has been assessed in terms of its size/scale, the geographical extent of the area influenced, and its duration and reversibility⁸.

Size or Scale: the extent and importance of existing landscape elements that will be lost, and the degree to which aesthetic or perceptual aspects are altered either by removal of existing components or by addition of new ones, and whether this loss is critical to its distinctive character.

Geographical extent: the physical area to which landscape effects will be felt, whether at site level within the development site itself, in the immediate setting of the site, or at a scale of the landscape type or character area.

Duration and reversibility: the duration of the effect whether short, medium or long term, and if the effects are permanent or could be reversed such as some renewable energy developments.

- 1.22. These factors are considered against the baseline conditions and a judgement has been made as to the likely magnitude of effect of the proposals on the landscape resource. This is categorised as Very High, High, Medium, Low, and No Change and defined in Table 3.

Table 3

LANDSCAPE MAGNITUDE OF CHANGE	DEFINITION
VERY HIGH	Substantial or total loss/damage/alteration of key characteristics or features within the landscape, or introduction of new uncharacteristic elements causing a significant and defining effect on the receptor.
HIGH	Noticeable loss/damage/alteration of key characteristics or features within the landscape, or introduction of new uncharacteristic elements, having a marked effect on the receptor.
MEDIUM	Partial loss/damage/alteration of key characteristics or features within the landscape, or introduction of new elements, having a noticeable but not defining

⁸ GLVIA3 paragraph 5.48

	effect on the receptor.
LOW	Minor scale loss/damage/alteration of key characteristics or features within the landscape, or introduction of new elements that are barely noticeable in the receiving landscape.
NO CHANGE	No noticeable loss/damage/alteration of key characteristics or features within the landscape, and no introduction of new elements.

Visual Effects

- 1.23. Each visual receptor has been assessed in terms of their susceptibility to change in views and visual amenity, and the value attached to those views established in the baseline study. The susceptibility varies depending on the occupation or activity of the receptor (people) experiencing the view at particular locations, and the extent to which their attention is focused on the views and the visual amenity they experience from that viewpoint. The visual sensitivity is categorised as Very High, High, Medium and Low as defined in Table 4, although in reality there will be some gradation between.

Table 4

VISUAL SENSITIVITY	DEFINITION
VERY HIGH	People at locations within nationally designated areas such as AONBs, National Parks etc who are very aware of the value of the landscape around them. Where visitors would travel some distance to experience views and visual amenity. Visitors to recognised heritage assets or other areas of special interest.
HIGH	People at locations where the appreciation of their surroundings is an integral part of the experience. Includes people engaged in recreational use of public land, on National Trails and PRoWs, and in designated or high value landscapes. Receptors in residential properties with views from primary rooms.
HIGH → MEDIUM	People at locations where the appreciation of their surroundings is an important contributor to the experience. Includes people engaged in recreational use of public land or PRoWs in higher value landscapes, visitors to heritage assets or other attractions, travellers on recognised scenic routes, and residents at home.
MEDIUM	People at locations where the appreciation of their surroundings is evident but not fundamental to the experience. Includes people engaged in recreational use of public land or PRoWs in medium value landscapes, those on transport routes, and residents at home with secondary views.
MEDIUM → LOW	People at locations where their focus is likely to be on their activity and less on their surroundings. Includes people engaged in outdoor sport, people in private gardens and those on transport routes.
LOW	People at locations where their focus is primarily on their activity and not on their surroundings. Includes people in low value landscapes, at their place of work, at school, those engaged in indoor sport, or travelling along main infrastructure routes.

Magnitude of Visual Change

- 1.24. Each visual receptor and their sensitivity has been assessed against the magnitude of change in terms of its size or scale, the geographical extent of the area influenced, and its duration

and reversibility. The magnitude will be categorised as Very High, High, Medium, Low, and No Change as defined in Table 5.

- **Size or Scale:** the loss or addition of features in the view and changes in its composition including the proportion of the view occupied by the change, the degree of contrast in terms of form, scale and mass, line, height, colour and texture, and the nature of the view whether full, partial or glimpsed.
- **Geographical extent:** the angle of view in relation to the main activity of the receptor, the distance away from the proposed development, and the extent of the area over which the changes are visible.
- **Duration and reversibility:** the duration of the effect whether short, medium or long term, and if the effects are permanent or could be reversed such as some renewable energy developments.

Table 5

VISUAL MAGNITUDE OF CHANGE	DEFINITION
VERY HIGH	The proposal will become the dominant feature of the scene to which other elements become subordinate and will significantly affect and change its character.
HIGH	The proposal will form a visible and recognisable new component in the view with a significant alteration to key elements, having a marked and defining effect on the amenity of the visual receptor.
MEDIUM	The proposal will form a perceptible and uncharacteristic component in the view with a moderate alteration to key elements, having a distinct but not defining effect on the amenity of the visual receptor.
LOW	The proposal will form only a minor and small-scale component of the view with a minor alteration to key elements, having a barely perceptible effect on the amenity of the visual receptor.
NO CHANGE	No part of the proposals or works/activity associated with it would be discernible.

SIGNIFICANCE

- 1.25. The scope of this assessment has been determined through discussions with the Local Authority. For an LVIA, the landscape and visual effects have been described and judged whether they are adverse or beneficial, and the likely significance of those effects. This has been categorised using a sliding scale and followed by a final statement summarising those which are 'significant' effects, and whether they can be mitigated. The following matrix has been determined in line with the previous consultants table in the 2010 Environmental Statement.

Table 6

← Magnitude of effect →	← Sensitivity of Receptors →					
		Very High	High	Medium	Low	Negligible
Very High	Severe	Major	Major	Major	Moderate	Moderate
	Major			Moderate		Minor
High	Major	Major	Moderate	Moderate	Minor	Minor
		Moderate				
Medium	Major	Moderate	Moderate	Moderate	Minor	Minor
	Moderate			Minor		Negligible
Low	Moderate	Moderate	Minor	Minor	Minor	Negligible
		Minor			Negligible	
No Change	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

1.26. Following this example, categories for the level of significance range from Severe, Major, Moderate, Minor, and Negligible and defined in Table 7. Effects can also be neutral due to being compatible with the local character or not visible.

Table 7

SIGNIFICANCE	DEFINITION
SEVERE	<p>The proposal would cause a substantial or total loss or change to the characteristics and perceptible qualities of the landscape resource or visual amenity. Would be a determining issue in its own right.</p> <p><i>Beneficial</i> – substantially enhance the character/view and define a sense of place. <i>Adverse</i> – completely overwhelm the character/view and significant damage to sense of place.</p>
MAJOR	<p>The proposal would cause a considerable loss or change to the characteristics and perceptible qualities of the landscape resource or visual amenity. Likely to be a determining issue in its own right.</p> <p><i>Beneficial</i> – greatly enhance the character/view and create a sense of place. <i>Adverse</i> – discordant with the character/view and damage to sense of place.</p>
MODERATE	<p>The proposal would cause a discernible loss or change to the characteristics and perceptible qualities of the landscape resource or visual amenity. Could be considered a determining issue when combined with other effects.</p> <p><i>Beneficial</i> – improvement to the character/view and restoration of a sense of place. <i>Adverse</i> – conflict with the character/view and some damage to sense of place.</p>
MINOR	<p>The proposal would cause a minor loss or localised change to the characteristics and perceptible qualities of the landscape resource or visual amenity. Of little consequence in the decision-making process.</p> <p><i>Beneficial</i> – minor improvement to the character/view and sense of place. <i>Adverse</i> – some disparity with the character/view and diminished sense of place.</p>
NEGLIGIBLE	<p>The proposal would cause a negligible change in the landscape resource or visual amenity. Not considered material in the decision-making process.</p> <p><i>Beneficial</i> – complements the character/view and retains sense of place. <i>Adverse</i> – little alteration to the character/view and slight loss of sense of place.</p>

- 1.27. In judging the overall significance of the effects, it is considered that Severe and Major adverse effects are 'significant' as required in the regulations. Within an Environmental Statement (ES) the approach as to how to present these conclusions and their definitions has been guided by the consistency required in the ES and the screening response from the Local Authority.

MITIGATION/ENHANCEMENT

- 1.28. Mitigation measures are proposed to prevent, reduce and where possible offset any significant adverse landscape and visual effects. Enhancement includes any proposals that seek to improve the landscape and/or visual amenity of the proposed development site and its wider setting beyond its baseline condition.
- 1.29. Mitigation measures generally fall into three categories⁹:
1. primary measures, developed through the iterative design process, which have become integrated or embedded into the project design;
 2. standard construction and operational management practices for avoiding and reducing environmental effects;
 3. secondary measures, designed to address any residual adverse effects remaining after primary measures and standard construction practices have been incorporated into the scheme.
- 1.30. Proposed mitigation measures have been well related to local landscape distinctiveness and are also effective in mitigating adverse ecological effects through the appropriateness of the species used.
- 1.31. Mitigation measures, especially planting schemes, are not always immediately effective. Where planting is intended to provide a visual filter/screen for the development it is necessary to assess the effects for different seasons and periods of time as agreed with the Local Authority (for example, at year 0, representing the start of the operational stage, year 5 and year 15). Therefore, the significance of effect has been weighed against the baseline conditions and the category reviewed where appropriate to establish any residual effects.

ASSESSING CUMULATIVE EFFECTS

⁹ GLVIA3 paragraph 4.21

- 1.32. GLVIA3 provides information on assessing cumulative landscape and visual effects. Cumulative landscape and visual effects are usually considered in LVIA when it is carried out as part of EIA. These effects may be caused by a proposed development in conjunction with other similar proposed developments or as the combined effect of a set of developments taken together. Cumulative landscape effects are on the physical fabric or character of the landscape or any special values attached to it. Cumulative visual effects can arise where two or more developments are visible from one viewpoint and/or from a sequence of views.¹⁰
- 1.33. The scope of cumulative effects has been agreed at the outset to establish what schemes are relevant to the assessment, and what planning stage is appropriate.

¹⁰ GLVIA3 paragraph 7.3

GLOSSARY

Characteristics Elements, or combinations of elements, which make a contribution to distinctive landscape character.

Landscape character A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

Landscape Character Areas (LCAs) These are single unique areas which are the discrete geographical areas of a particular landscape type.

Landscape Character Types (LCTs) These are distinct types of landscape that are relatively homogeneous in character, and share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.

Landscape quality (condition) A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.

Landscape receptors Defined aspects of the landscape resource that have the potential to be affected by a proposal.

Magnitude (of effect) A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.

Scoping The process of identifying the issues to be addressed by an EIA. It is a method of ensuring that an EIA focuses on the important issues and avoids those that are considered to be less significant.

Sensitivity A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.

Significance A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.

Susceptibility The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.

Tranquillity A state of calm and quietude associated with peace, considered to be a significant asset of landscape.

Visual amenity The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.

Visual receptors Individuals and/or defined groups of people who have the potential to be affected by a proposal.

Visualisation A computer simulation, photomontage or other technique illustrating the predicted appearance of a development.

Zone of Theoretical Visibility (ZTV; sometimes Zone of Visual Influence) A map, usually digitally produced, showing areas of land within which, a development is theoretically visible.

Environmental Statement Addendum – Chapter 08: LVIA
Appendix 8.3

14. FI: YARE VALLEY URBAN FRINGE

LOCATION AND BOUNDARIES

- 14.1. The Yare Valley Urban Fringe Character Area lies entirely within the Norwich Policy Area and occurs in a narrow band at the perimeter of the City of Norwich. The boundaries are marked by the transition of the valley form into the surrounding landscape at around 30m AOD.

KEY CHARACTERISTICS

- **Broad semi-enclosed valley form** with wide flat flood plain and enclosing valley sides, occasionally opening up to adjoining tributary river valleys, resulting in a sense of containment and unity.
- **Large meandering river** flanked by characteristic wetland vegetation including reeds and fringing alder/willow woodland and grassland.
- **Presence of attractive flooded gravel workings** as a result of historic extraction of the glacial gravel deposits which are present.
- **Sense of inaccessibility** with transportation routes restricted to discrete transverse river crossings and non-vehicular bridleways.
- **Perceived absence of settlement within the valley although influenced by developments in the City of Norwich.**
- **Sense of remoteness and solitude** within the valley, remarkable given the closeness to a major city.
- **Green buffer and comprehensible development edge to the City of Norwich.**
- **Presence of recreational landscapes** including country parks and walks.
- **Evidence of early human activity**, for example Arminghall henge.
- **Strongly influenced by modern transportation corridors, in particular the Norwich Southern Bypass.**

LANDSCAPE CHARACTER DESCRIPTION

- 14.2. The Yare Valley Urban Fringe forms a thin belt which extends to the district boundary south of the City of Norwich. It is a landscape type unique within South Norfolk and is quite different to other rivers in the district.
- 14.3. The Yare Valley Urban Fringe comprises a geology of alluvium upon the valley floor with sand and gravel and some areas of Glacial Till upon the valley sides. The sand

and gravel has been and continues to be commercially extracted and as a result there are a number of flooded gravel workings within the valley. The River Yare in this area is a large river, of similar status to the Waveney in the south of the district. This has resulted in a distinctive broad valley with large pronounced meanders. The floodplain is wide and there are a number of drainage channels crossing the valley floor. The floodplain widens where other valleys, notably the Tas, join the Yare and east of the character area the river swells considerably as part of the Norfolk Broads. The sides of the valley are fairly steep in places.

- 14.4. The valley has a naturalistic quality due to the comparative absence of arable farmland. This naturalism is accentuated by the wooded appearance of the floodplain and some areas of the valley sides. Wetland habitats found here include willow carr with informal bankside vegetation along the river itself and associated with the flooded gravel workings. Mixed woodland blocks and shelterbelts occur on the valley sides. The valley includes important recreational opportunities due to the presence of a number of public footpaths and rights of way across and within the valley, the 'country park' at Whitlingham, the presence of playing fields and golf courses plus the ski run within or visible from the valley.
- 14.5. There are a high number of Scheduled Ancient Monuments in the valley including a cluster around the Woodhenge at Arminghall with a number of associated sites and Cringleford Bridge (a limestone bridge dating from 1520). The presence of such a high number reflects the long history of human influences within the area including the proximity of the valley to Caistor St Edmund (Venta Icenorum) and, in later days, to Norwich.
- 14.6. Modern-day settlement within the valley is sparse and is restricted to a few locations notably Keswick, Trowse Newton, Harford Bridge and Cringleford, (which is the largest settlement), all primarily related to Yare crossing points. Similarly, on the north valley side, outside South Norfolk District the settlements of Bowthorpe and Eaton are located. Most development dates from the 1930s or the post-war period and brick is the usual building material. One of the few vernacular buildings of note is the weatherboarded Keswick Millhouse.
- 14.7. This character area is highly influenced by the City of Norwich. In addition to the historic cores of Eaton and Bowthorpe are a wide sweep of interconnected suburban areas that are partly visible on the north valley slope. In addition to these residential buildings are a number of large institutional buildings in or adjacent to the valley. These include the University of East Anglia, the Colney Research Park and new Hospital, and, towards the east of the area, the City of Norwich – including views to the Cathedral.
- 14.8. Overall the valley is relatively inaccessible and therefore has a peaceful undisturbed quality. This quality is intruded upon to some extent by infrastructure and transportation routes, particularly in the east of the district where the Norwich Southern Bypass marks the boundary and introduces noise and movement into the landscape. Other intrusions, again concentrated to the east, include the railway lines (which occupy the floodplain for some distance, crossing over the Yare at numerous points) and the electricity pylons which converge unattractively at the electricity substation near Arminghall.

14.9. The character of the Yare Valley Urban Fringe is illustrated on **Figure F1 Yare Valley Urban Fringe**

LANDSCAPE ASSETS

✓✓✓ very characteristic/important ✓✓ characteristic/important ✓ noticeably present/important

– Asset not present or present but by virtue of extent or quality does not contribute significantly to landscape character

ASSET/LEVEL OF IMPORTANCE		NOTES
NATIONAL/INTERNATIONAL:		
Nationally important ecological assemblages	-	Surprisingly no national designations
Presence of Scheduled Ancient Monuments	✓✓	Arminghall Henge is a very important site.
Presence of round-towered churches	✓	
Presence of isolated churches	-	
DISTRICT/COUNTY:		
Strong regional vernacular character	✓	
Presence of historic parkland particularly EH listed.	-	
Wooded appearance	✓✓	
Distinctive valley landform	✓✓✓	
Waterways visible within the landscape	✓✓✓	
Watermills present	✓	Keswick Mill
Windmills present	-	
Moats present.	-	
LOCAL:		
Pastoral Farmland with visible grazing animals.	✓	
Important Views that provide sense of place	✓✓	Views are very variable.
Willow pollard and/or poplar-lined watercourses	✓	
Drainage ditches	-	

Wide grass verges alongside roads	-	
Good hedgerow network	-	
Mature hedgerow trees	-	
Presence of river crossings	✓✓	
Sunken Lanes	-	
Water bodies	✓✓	
Distinctive plateau landscape	-	
Area of or including significant strategic breaks between settled areas	✓✓✓	The most comprehensible strategic break, separating Norwich from its rural hinterland.

See summary table for greater explanation of Landscape Assets

SENSITIVITIES AND VULNERABILITIES

14.10. The sensitivities and vulnerabilities of this particular landscape character area are considered to include:

- loss of naturalistic quality as a result of further intrusion of suburban development, large institutional buildings and tall structures in particular pylons upon the valley landscape;
- developments within the valley or adjoining character areas that would increase the perception of the level of development surrounding the valley, which would therefore weaken the current perception that the River Yare is unconnected to a major city;
- further disturbance of the tranquillity of the area by traffic, in particular detrimental impact of cross-valley links or upgrading of existing links;
- loss or inappropriate management of vegetation on the valley floor or sides and the need to maintain/improve the quality of the River Yare;
- sensitivity of recreational uses/users to losses in naturalistic quality including formalisation of recreational facilities;
- developments that intrude upon the views into the landscape, including views from the Norwich Southern Bypass;
- developments that break the current green mantle to Norwich provided by the Yare Valley which would blur the distinction between the settlements north of the River and the City of Norwich.

LANDSCAPE STRATEGY

- 14.11. It is recognised that this character area is particularly vulnerable to change due to its location at the periphery of East Anglia's premier city. Therefore the strategy for this area is to maintain an open and distinctive boundary to the city of Norwich to provide a 'green buffer' between the city and its rural hinterland. This will necessitate co-operation with Norwich City Council to ensure that development within the City will not adversely impact upon the character of the valley. Open views within the valley and, where possible, from the valley should be protected and views from and across the valley towards Norwich, particularly the cathedral, should be maintained and enhanced. Enhancement of landscape quality should be targeted, in particular:
- landscape improvements towards the eastern edge, where there is some erosion of landscape quality due to the presence of transportation and other infrastructure;
 - conservation and management of existing semi-natural woodland and wetland habitats to enhance the ecological and visual qualities of the valley;
 - Conserved and enhancement of Scheduled Ancient Monuments and their settings.

DEVELOPMENT CONSIDERATIONS

- 1.12. Any development should respect the character and landscape assets of the Yare Valley Urban Fringe and this will necessitate consideration of the following criteria:
- respect the relative absence of development within the valley and ensure any new development relates to existing settled crossing points;
 - maintain the distinction between settlements to the south and north of the Yare;
 - maintain the role of the Yare valley as a comprehensible and tangible limit to the southern suburbs of the City of Norwich;
 - ensure new development (including associated landscaping) does not intrude upon the openness within the valley or character of the vegetation;
 - conserve the ecology of the River Yare and consider the direct or indirect impacts of development (including run-off) upon ecological character and quality;
 - protect the Scheduled Ancient Monuments within the valley and their settings including Arminghall Henge;
 - maintain open views to and from the Southern Bypass, the City of Norwich, and important landmarks;

- cooperate with Norwich City Council to avoid City-related developments which would affect these considerations.



- The Valley Urban Fringe is characterised by the presence of or views to large institutional buildings such as the University of East Anglia.



- Gravel workings continue to be an integral part of the valley character and as they become abandoned are restored to attractive flooded wetland areas.



- Keswick village is one of the few developed areas within the valley that has vernacular appeal and includes the weather-boarded Keswick Mill.



- In some areas of the valley such as near Whitlingham there are views to the city of Norwich including the Cathedral.

Figure F1: Yare Valley Urban Fringe

Figure G1: Easton Fringe Farmland



- The large retail superstores adjacent to the Norwich Southern Bypass have a high impact upon the character area, affecting the perception of the City.



- Arable farmland, away from the developed ridge has a rural character, disturbed only by the electricity pylons.



- The 'ridgeway' settlement of Easton is highly visible from adjoining character areas (e.g. the Tud Valley) and can be discerned by its water tower which acts as a distinct landmark.

Environmental Statement Addendum – Chapter 08: LVIA
Appendix 8.4

10 Yare - Whitlingham Lane and Country Park

Whitlingham chalk workings used to be located in this area. It was a large industrial concern which included lime kilns and a narrow gauge railway. Some of the chalk extracted was burnt on site and some transported by wherry to other riverside sites in the Broads. The chalk deposit has meant that this area has a distinctive local building material used in both the medieval buildings and the later estate cottages.

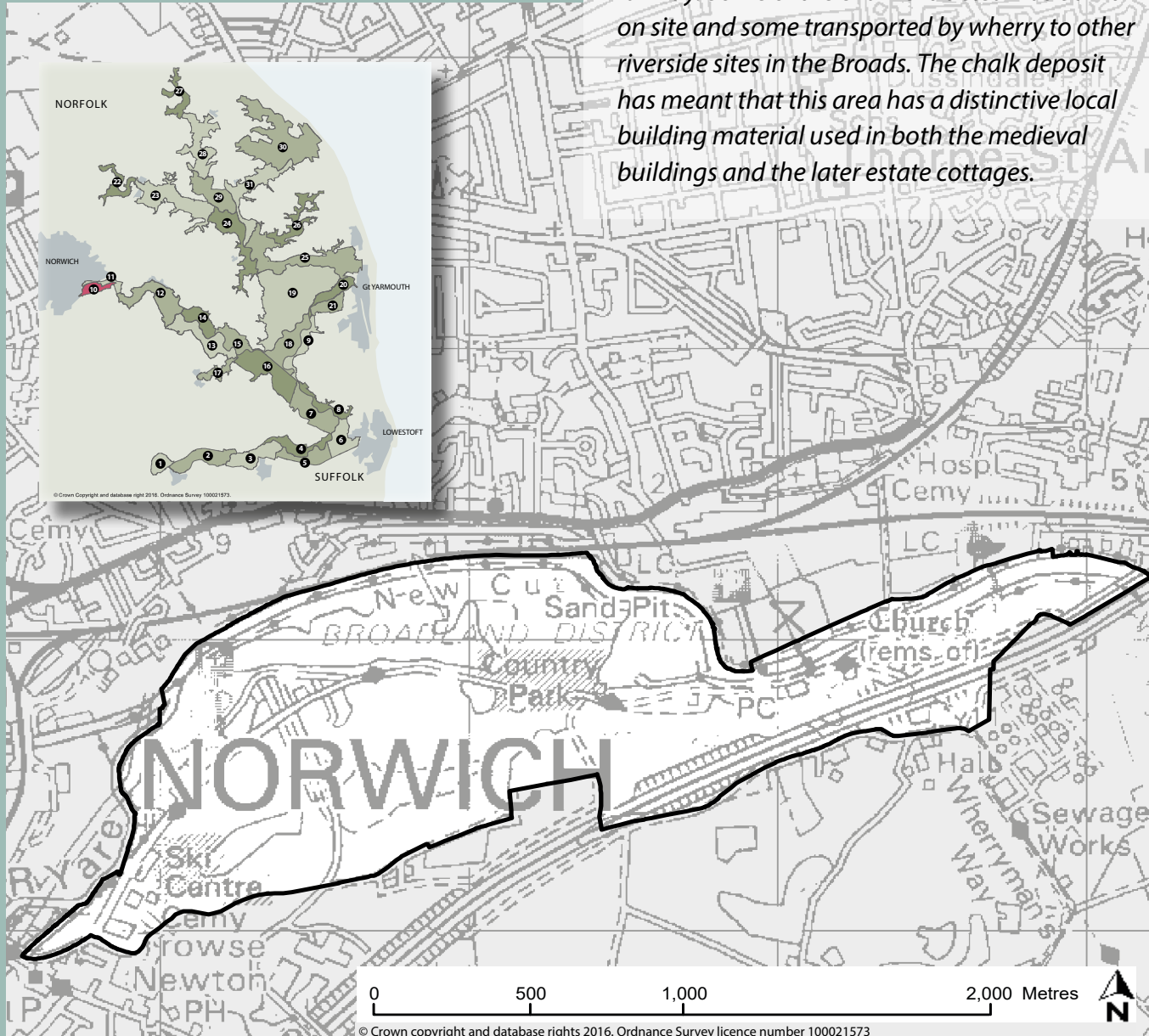
Why is this area special?

Whitlingham Country Park is an important open space on the edges of Norwich. It is a mixture of modern sports facilities within a late 18th and 19th century parkland setting. The area was originally called Crown Point Park, and it was developed successively by the Money, Harvey and Colman families, surrounding a house rebuilt in the 1860's. In 1955 the house and grounds were sold by the Colman family to become Whitlingham Hospital and later redeveloped as flats, while the wider estate was retained.

Parkland features are still evident throughout as witnessed by the lime tree avenue which runs between Whitlingham Lane and Crown Point Hall and the early 19th century parkland plantation (Coronation Belt) which covers the ridge within the park. To the west the area has remained as grazing land with mature parkland trees

At a similar time to the building of Crown Point Hall, Trowse Newton Hall, a mid-15th century country house of the Priors (later Deans) of Norwich Cathedral, was deliberately ruined to form a feature in the landscape park.

This area also contains the remains of medieval church of St Andrew, Whitlingham set on the hillside surrounded by overgrown chalk pits. Although the church was in ruins from the early 17th century, it must also have been adopted as a picturesque ruin in the 19th century as contemporary photographs show Victorian window tracery and the masonry tidied up. On the eastern boundary of the parkland there was a popular tavern called Whitlingham White House which also marked the site of a ferry across the Yare (shown on Faden's Map published 1797 and later maps). In 1845 it was noted that 'Pleasure parties often visit this spot to enjoy its romantic scenery



and remarkable echo' (White's Directory, 1845). By the 1880's it had been pulled down and its site annexed to the Crown Point Estate. The present rebuild may be the work of architect Edward Boardman who certainly carried out alterations to the main Hall and Gardens in the early 1900's. This area with its rich variety of subject matter was a well-known beauty spot and favourite of many of the Norwich School artists including J.S Cotman, J.J Cotman, M.E. Cotman, Stannard and Ninham.

In relatively recent years, the Norwich southern bypass cut through the park and a major aggregate extraction scheme was completed at the northern side of the area. The Whitlingham Broads, now providing a popular recreation area, are a product of the scheme.

The area is busy all the year but is especially so during the summer period, as a greater number of water sports activities, including sailing, take place on the Great Broad and the camping site becomes busy. A dry ski slope is located to the western end of the area. As a result of the area's popularity, car traffic can be significant.

There is a definite 'edge of city' feel to the area but the presence of large areas of scrub and woodland help to diffuse the effects of the urban environment on the landscape. The Country Park provides an important transition zone between the City and countryside.

The area lies on the boundaries of Norwich City and provides an important open space for local residents. The broads formed by gravel extraction are significant landscape features in the area and along with the river, cater for a range of water sports /activities.



Evelyn Simak - geograph.org.uk



Chris McAuley - geograph.org.uk



Matthew Chadwick - geograph.org.uk



GOOGLE earth - Image ©2016 Getmapping plc, ©2016 Digital Globe, © 2016 Infoterra Ltd & Bluesky

Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.

Topography and skyline

The valley floor of the southern side of River Yare floodplain lies at around 0 OD. The northern valley side rises up relatively steeply to crest at around 40-45m OD, whilst the valley side to the south rises gently to low wooded ridge (20-25m OD) where Whitlingham Hall is located. The overall width of the valley floor is approximately 700 metres making it relatively narrow in Broad's terms.

The skylines to the north area are defined by the settled, wooded south facing slopes and valley tops within Norwich. The slopes are mostly developed and a complex skyline character has been created by the mixture of residential roofs and mature structural and garden vegetation. This has a significant influence of the character of this area due to its close proximity and the availability of views. The flood embankments along the river valley can truncate lower level views.

The late 18th and 19th century parkland provides a historic backdrop to the leisure and sporting activities today.
Alison Yardy



The presence of the A47 flyover at the eastern end of the area, adversely affects the landscape character, impacting on the area's tranquillity and creating a dominant urban feature in views.

To the south, skylines are defined by the gently rising parkland on the southern valley slopes which terminate in the low wooded ridge at Coronation Belt. To the west, taller buildings and industrial development within Norwich are prominent skyline features, as are pylons.

Views out from the area are often framed due to the wooded nature of the parkland and the embankments to the edge of Whitlingham Great Broad, although large scale development associated with the urban edge is visible from within the area (pylons and taller buildings within Norwich to the west). The parkland within and beyond the Country Park is essentially severed visually and aurally from the wider Broads landscape by the southern bypass (A47).

◀ *The valley side to the south (much of it woodland) gradually rise up to provide elevated long distance views across the area.*

Images, Evelyn Simak - geograph.org.uk



Geology and soils

Chalk underlies this area at an accessible depth. The valley floor is silty clay and sand and gravel river terrace deposits. The presence of both of these types have deposits have shaped the landscape of this area as over the centuries the rich deposits have been extracted.

Enclosure, scale and pattern

This is landscape of medium scale in Broads terms created by the mix of the land cover including the broads, areas of woodland and mature, vegetated parkland all within this relatively narrow stretch of the valley. A sense of enclosure is created by the wooded areas within Whitlingham Country Park which include wet woodland and relict parkland vegetation. This is reinforced by flood banks along the river and more widely by the wooded, south facing ridge overlooking the valley, within the Norwich settlement boundary, as well as by the low wooded ridge to the south.

The River Yare (both its historic course and the 'New Cut') and the Whitlingham Great and Little Broad are large areas of water within an otherwise wooded landscape. The interplay of these creates local variation in light, shade and reflectivity within the landscape.

The valley sides, which lie outside the area, make a significant contribution to the character of the area.



Evelyn Simak - geograph.org.uk



A mix of urban edge development, transport infrastructure corridors, water based recreational activity and amenity space has resulted in loss of cohesion of the original landscape patterns and much contrast is created by the sometimes abrupt juxtaposition of such elements.

Main features of land cover and use

The legacy of the recently finished extraction works is a prominent feature of the landscape, particularly on the northern side, as a result of the creation of Whitlingham Great and Little Broads which allied to the presence of the River Yare create significant areas of open water.



◀ A brick tunnel under Whitlingham Lane apparently through which chalk was taken along a railway to be loaded onto wherries.
Evelyn Simak - geograph.org.uk

Distinctive Colman estate cottages reflect the availability of flint from local chalk workings. Alison Yardy



Elsewhere, there is early 19th century **parkland** with a **woodland plantation** covering the valley ridge and orientated in a northeast/south-west through the park. Beyond this to the north, the land falls gradually towards the River Yare. Wet **carr woodland** and scrub vegetation on former industrial and boat yard sites can be found. To the west there is a good remaining area of "upland" **grazing** with **mature parkland trees** and estate type metal fencing along Whitlingham Lane.

The land use is predominantly leisure related - walking, water sports and dry ski slope but outside these specific uses, the area is managed for nature conservation. A camping site exists to the south of Whittingham Lane. Being an exceptionally popular area, large number of cars have needed to be accommodated in a series of **car parks** along the length of the park. The more extensive car parks being sited at the busier western end.

The area lies to the east and south of the main urban and suburban development of Norwich and Thorpe. **Settlement** within the area itself is largely confined to various (mainly Colman style) estate cottages along Whitlingham Lane. The tented water sports centre provides the focal point of the sports and leisure activities and was constructed at the edge of the Great Broad in 2005. This has added to existing facilities of dry ski slope in the western corner of the parkland and Norwich Rowing Club on Whitlingham Lane.



Trowse Newton Hall, a mid-15th century country house of the Priors was deliberately ruined to form a feature in the landscape park.
Graham Hardy - geograph.org.uk

Helping to keep it special

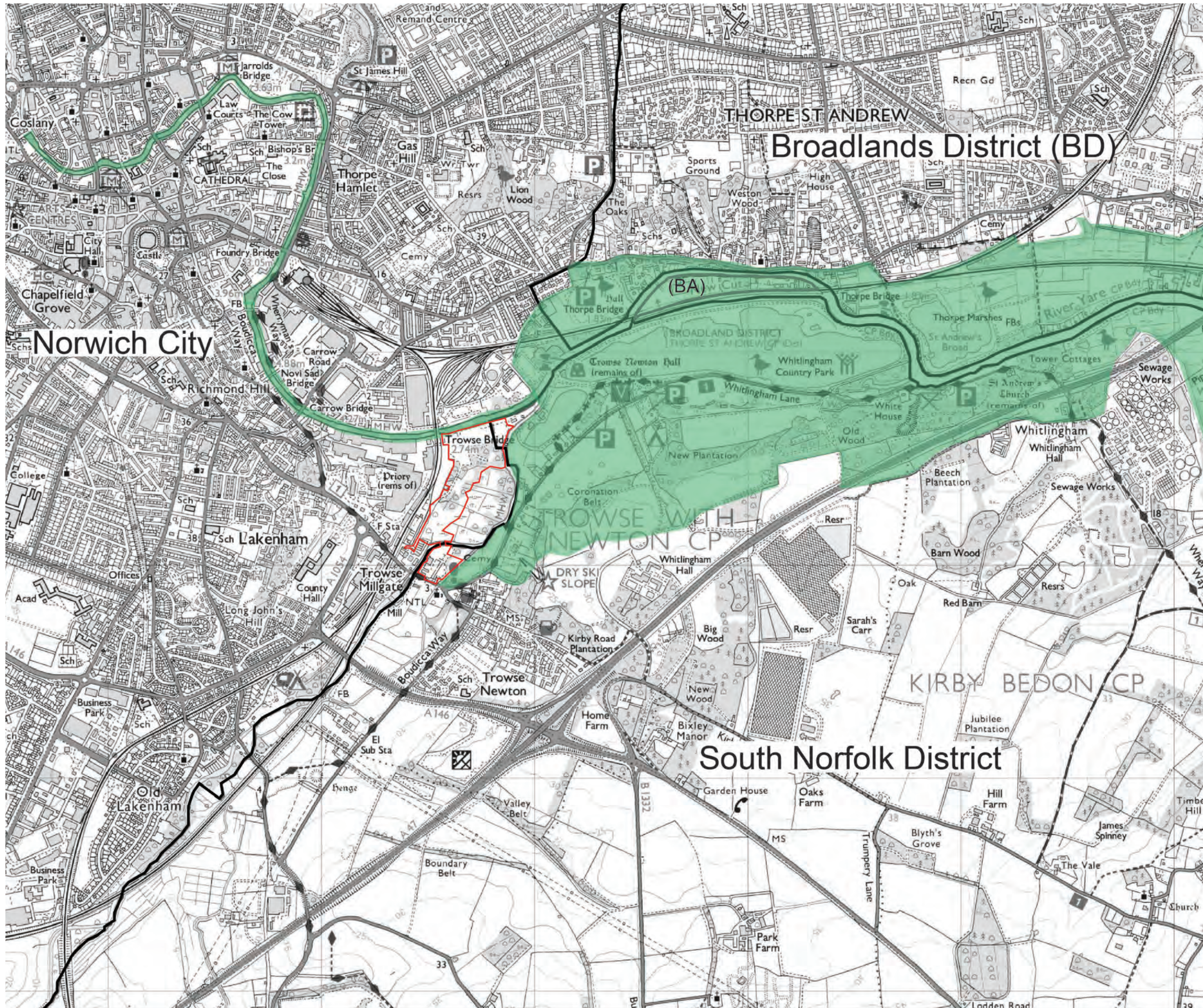
Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an areas unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape - elements such as the southern bypass, the railway, pylons and tall buildings are visible from within the character area and reduce the sense of tranquillity, although wet woodland in the valley floor and mixed woodland on the sides of the valley within the Country Park provides a degree of attenuation. Opportunities to improve the existing visual buffers between the park and the urban areas should be sought. The vast pylons which form a prominent feature in some views may be removed as, at the time of writing, UKPN are considering undergrounding the overhead wires the pylons support.

The valley sides, lying outside the character area, make a significant contribution to the area's character. Significant change within these areas as a result of development has the potential to affect the local landscape character.

Any development which intensifies or extends existing recreational or leisure uses within the park will need to carefully assess their effect on the area. Projects should consider mitigation proposals which help to reinforce traditional parkland features and limit the suburbanisation of the area.

Historic environment - The Grade II Listed ruins of St. Andrew's church on the buildings at risk register. Only the south side of chancel wall and east end remain along with south side of chancel arch. A tall fragment of the southwest nave wall also survives. The ruins are heavily overgrown and some consolidation of the masonry is needed.






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All dimensions to be checked on site and landscape architect notified of any discrepancies prior to commencement.
Do not scale

Notes.

Key

-  Site location boundary
-  Administrative Boundary
-  Broads Authority Boundary - National Park

Rev: date: comment(s) name: check:

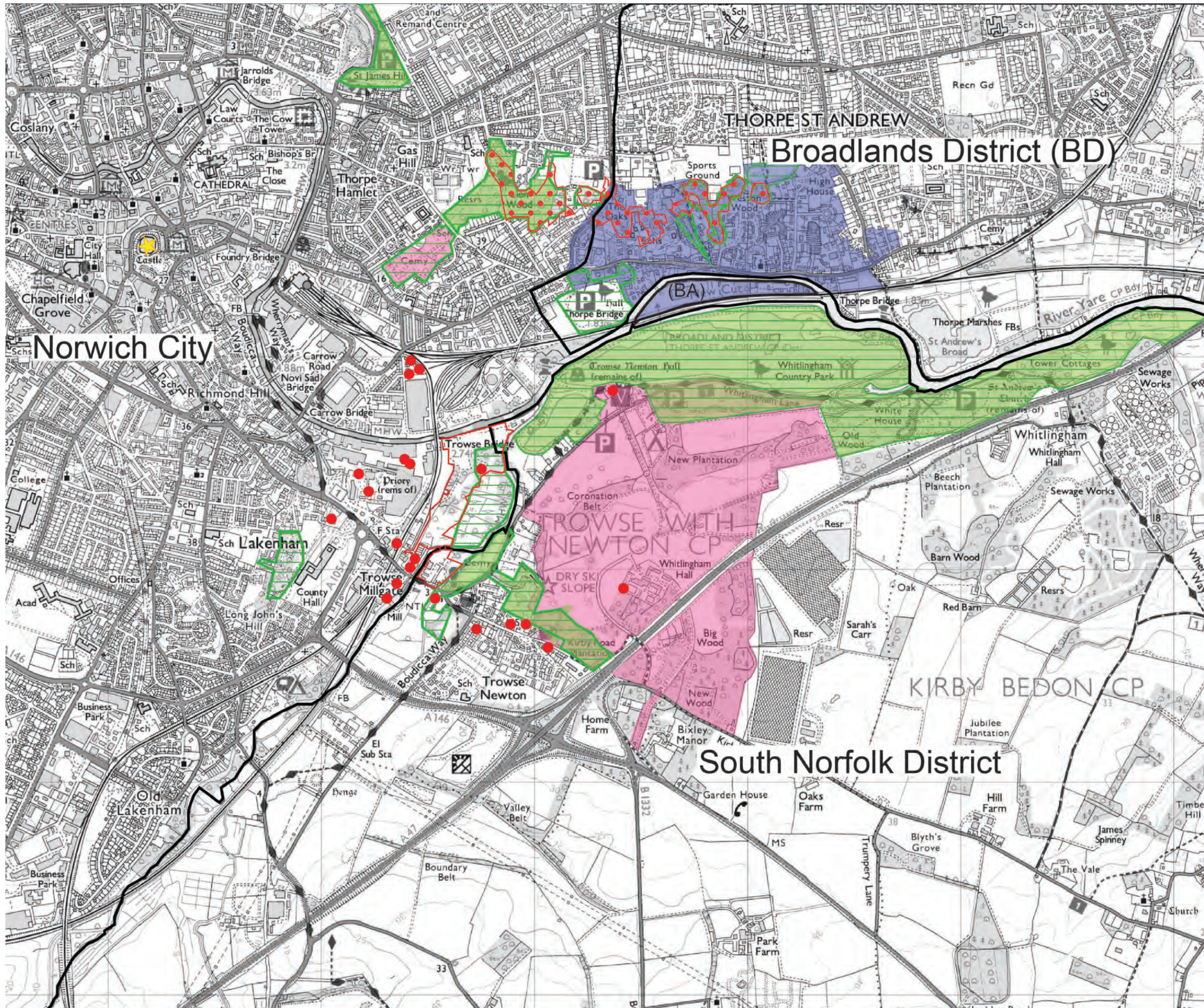


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Client: Serruys Property Company Ltd
Job: Deal Ground & May Gurney Site, Norwich
Title: Site Location with Administrative Boundaries
Drawn: CB Date: April 2023
Checked: KC Scale @ A3: nts
Job no: LA5589 Drg no: Figure 8.1

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Notes.

Key

-  Site location boundary
-  Administrative Boundary
-  County Wildlife Parks
-  Historic Parks & Gardens
-  Conservation Area
-  Local Nature Reserves
-  Historic Monuments
-  Listed Buildings - within 1km radius
-  Ancient Woodland

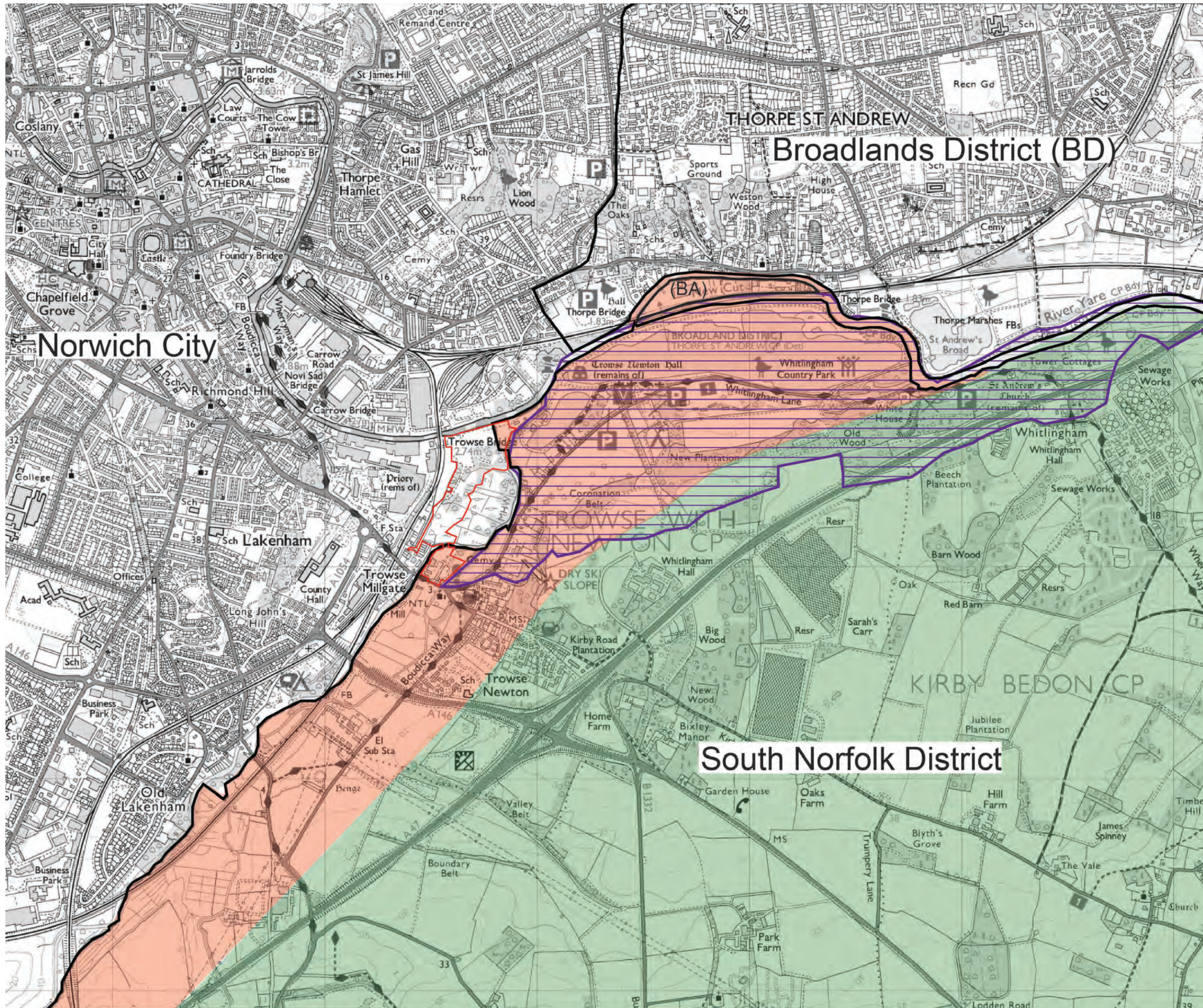
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IDP LANDSCAPE

Client: Serruys Property Company Ltd
 Job: Deal Ground & May Gurney Site, Norwich
 Title: Planning Policy Context
 Drawn: CB Date: April 2023
 Checked: KC Scale @ A3: nts
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Notes.

Key

- Site location boundary
- Administrative Boundary
- Valley Urban Fringe
- Tas Tributary Farmland
- The Broads - Yare - Whittingham Lane and Country Park

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Client: Serruys Property Company Ltd

Job: Deal Ground & May Gurney Site, Norwich

Title: Local Landscape Character

Drawn: CB Date: April 2023

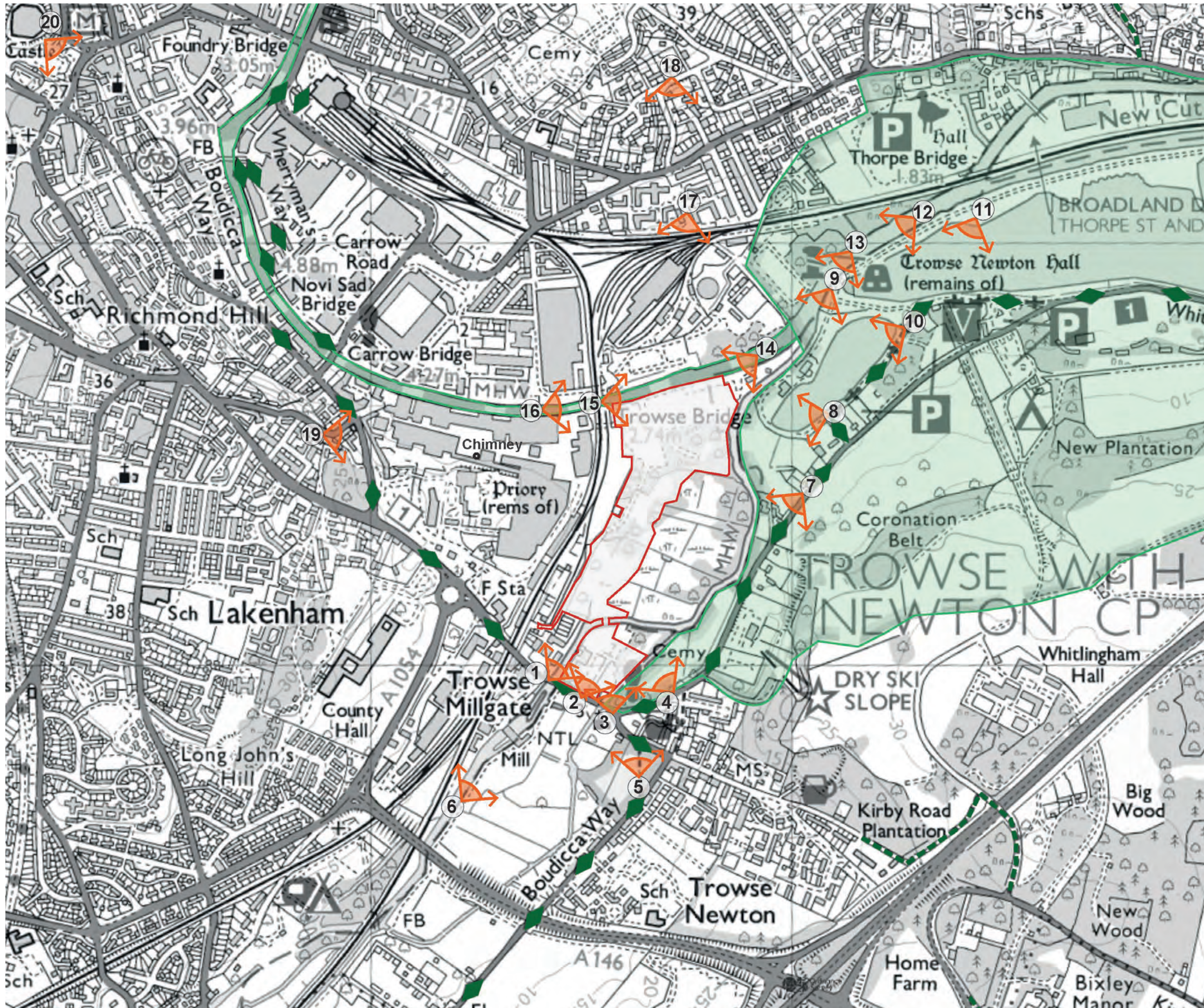
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Notes.

Key

-  Site boundary
-  Viewpoint location
-  Long Distance Route (Wherryman's Way)
-  Public Right of Way
-  The Broads National Park

Rev: date: comment(s) name: check:



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Client: Serruys Property Company Ltd
 Job: Deal Ground & May Gurney Site, Norwich
 Title: Viewpoint Location Plan
 Drawn: CB Date: April 2023
 Checked: KC Scale @ A3: nts
 Job no: LA5589 Drg no: Figure 8.4

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Viewpoint 1	Location of View:	Bracondale Bridge, Bracondale, over river Yare	Date and Time:	01-05-2023 10.50am	OS Coordinates:	TG 24431 06972
	Notes:	Cloudy, very good visibility	Receptors:	Road users, footpath users	Distance from site:	n/a



Viewpoint 2	Location of View:	Bracondale opposite May Gurney site	Date and Time:	01-05-2023 10:50am	OS Coordinates:	TG 24470 06952
	Notes:	Cloudy, very good visibility	Receptors:	Road users, footpath users	Distance from site:	n/a

LA5589 Deal Ground, Norwich
Figure 8.4.1: Viewpoints 1-2

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape

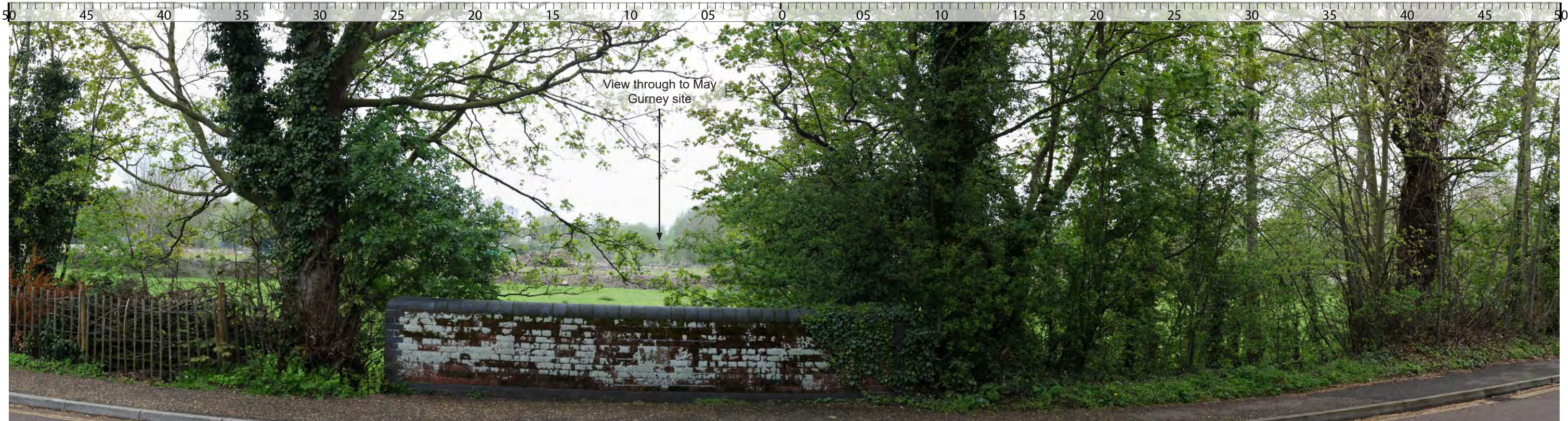




May Gurney site

Direction of Deal Ground site

Viewpoint 3	Location of View:	Whitlingham Lane, junction adjacent to St Andrew's Church, Trowse	Date and Time:	01-05-2023 10.40am	OS Coordinates:	TG 24598 06880
	Notes:	Cloudy, very good visibility	Receptors:	Road users, footpath users	Distance from site:	50m



View through to May Gurney site

Viewpoint 4	Location of View:	Whitlingham Lane, Trowse	Date and Time:	01-05-2023 11.15am	OS Coordinates:	TG 24673 06912
	Notes:	Cloudy, very good visibility	Receptors:	Road users, footpath users	Distance from site:	75m

LA5589 Deal Ground, Norwich
Figure 8.4.2: Viewpoints 3-4

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 5	Location of View:	Trowse Common - Open Access Land, White Horse Lane	Date and Time:	01-05-2023 11.05am	OS Coordinates:	TG 24678 06768
	Notes:	Cloudy, very good visibility	Receptors:	Footpath users, residents	Distance from site:	185m



Viewpoint 6	Location of View:	Bracondale Millgate along path following river Yare	Date and Time:	02-02-2023 10.26am	OS Coordinates:	TG 24209 06677
	Notes:	Clear skies, very good visibility	Receptors:	Footpath users	Distance from site:	350m

LA5589 Deal Ground, Norwich
Figure 8.4.3: Viewpoints 5-6

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 7	Location of View:	Willow Cottages, Whitlingham Lane to east of site	Date and Time:	02-02-2023 10.10am	OS Coordinates:	TG 25031 07406
	Notes:	Clear skies, very good visibility	Receptors:	Footpath users, Road users, Residents	Distance from site:	180m

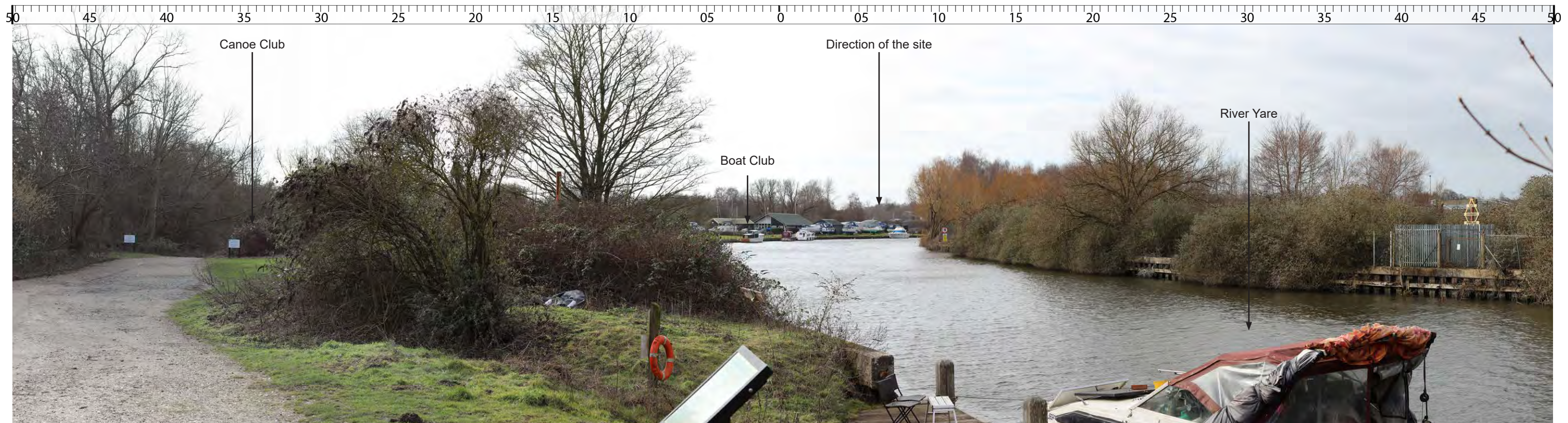


Viewpoint 8	Location of View:	Kingsley Farrington off Whitlingham Lane	Date and Time:	02-02-2023 10.20am	OS Coordinates:	TG 25092 07589
	Notes:	Clear skies, very good visibility	Receptors:	Footpath users	Distance from site:	225m

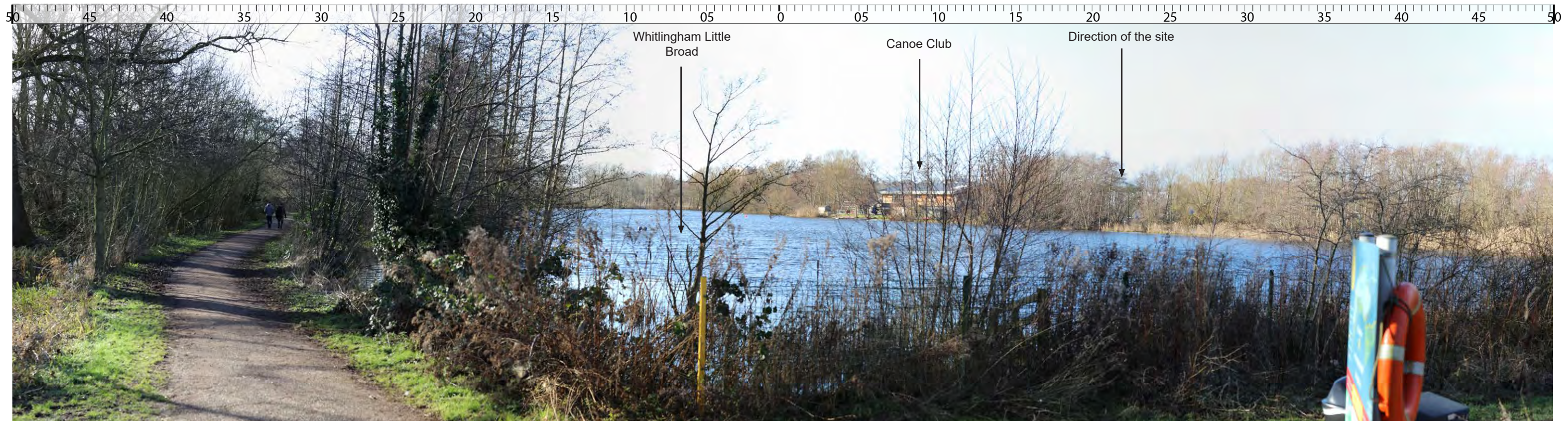
LA5589 Deal Ground, Norwich
Figure 8.4.4: Viewpoints 7-8

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 9	Location of View:	Whitlingham Country Park within Broads National Park	Date and Time:	02-02-2023 10.30am	OS Coordinates:	TG 25098 07864
	Notes:	Clear skies, very good visibility	Receptors:	Footpath users in Country Park	Distance from site:	350m



Viewpoint 10	Location of View:	Whitlingham Country Park near main Car Park	Date and Time:	02-02-2023 10.29am	OS Coordinates:	TG 25263 07804
	Notes:	Clear skies, very good visibility	Receptors:	Footpath users in Country Park	Distance from site:	500m

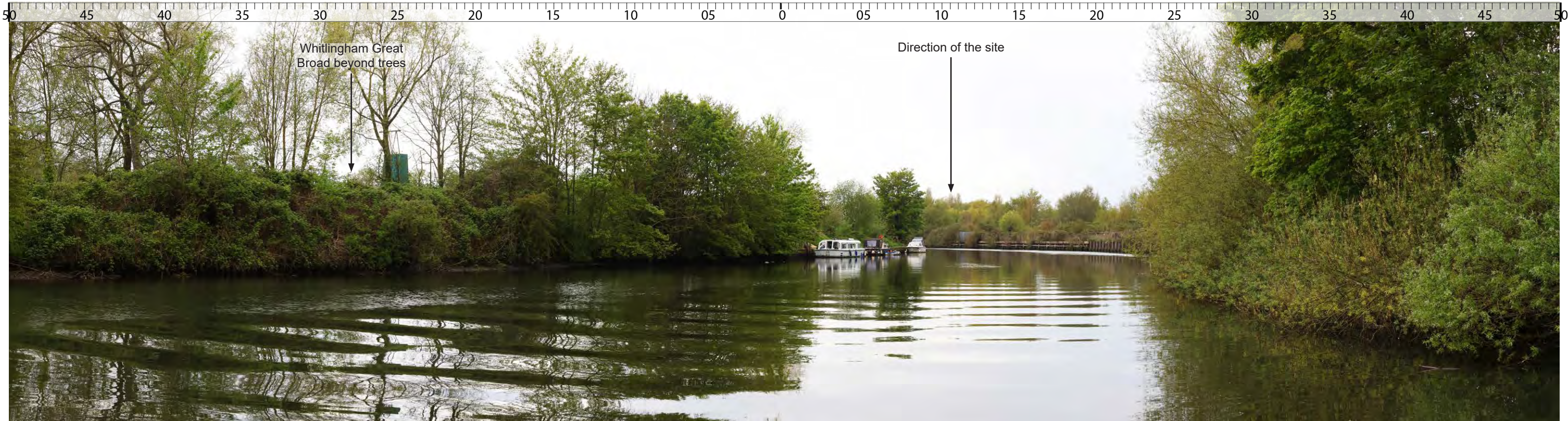
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Figure 8.4.5: Viewpoints 9-10

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 11	Location of View:	Whitlingham Country Park	Date and Time:	02-02-2023 10.33am	OS Coordinates:	TG 25406 08083
	Notes:	Cloudy, very good visibility	Receptors:	Footpath users	Distance from site:	690m

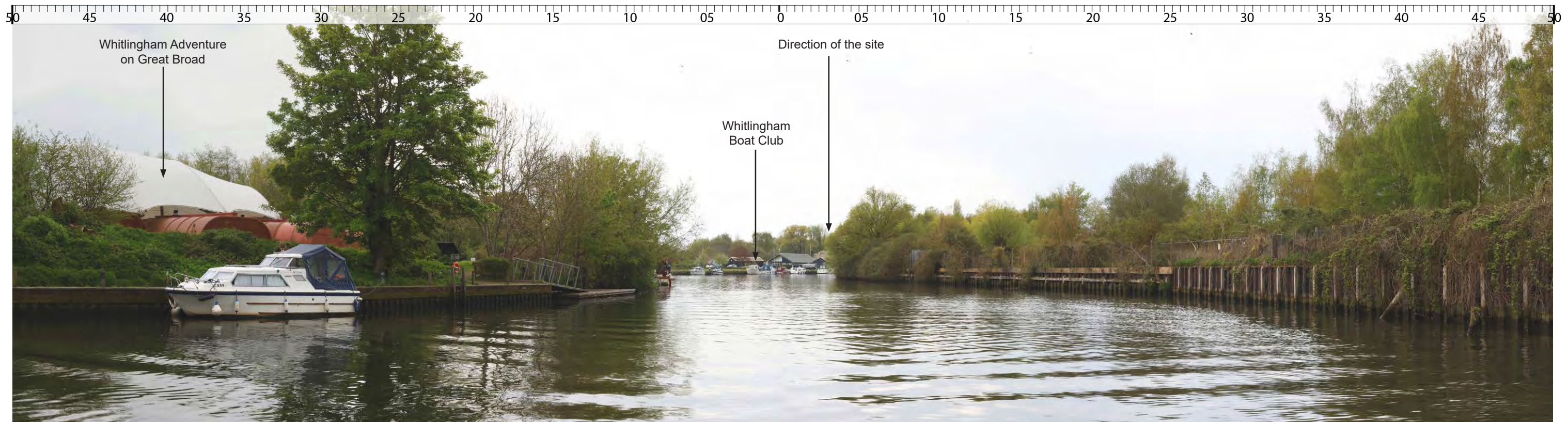


Viewpoint 12	Location of View:	View from Broads hire boat on the River Yare close to Thorpe Bridge	Date and Time:	01-05-2023 2.45pm	OS Coordinates:	TG 25261 08047
	Notes:	Cloudy, very good visibility	Receptors:	River users	Distance from site:	560m

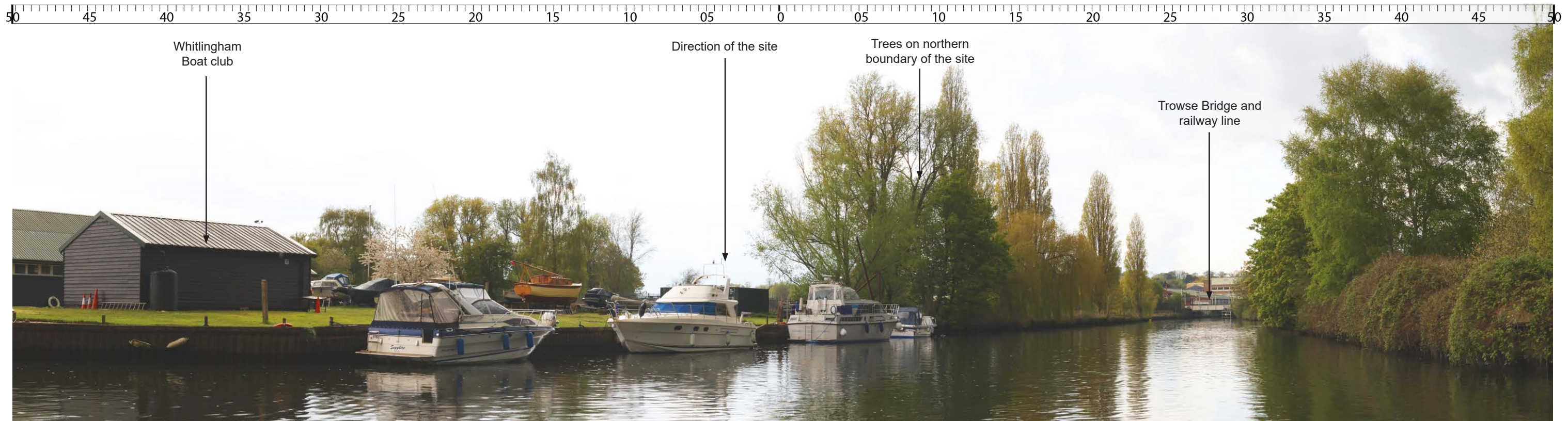
LA5589 Deal Ground, Norwich
Figure 8.4.6: Viewpoints 11-12

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 13	Location of View:	View from Broads hire boat on the River Yare	Date and Time:	01-05-2023 2.55pm	OS Coordinates:	TG 25131 07979
	Notes:	Cloudy, very good visibility	Receptors:	Boat users	Distance from site:	450m



Viewpoint 14	Location of View:	View from Broads hire boat on the River Wensum adjacent to boat club	Date and Time:	01-05-2023 3.00pm	OS Coordinates:	TG 24910 07738
	Notes:	Cloudy, very good visibility	Receptors:	Boat users	Distance from site:	130m

LA5589 Deal Ground, Norwich
Figure 8.4.7: Viewpoints 13-14

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 15	Location of View:	View from Broads hire boat on the River Wensum beneath Trowse Bridge	Date and Time:	01-05-2023 3.00pm	OS Coordinates:	TG 24534 07636
	Notes:	Cloudy, very good visibility	Receptors:	Boat users (railway users)	Distance from site:	30m

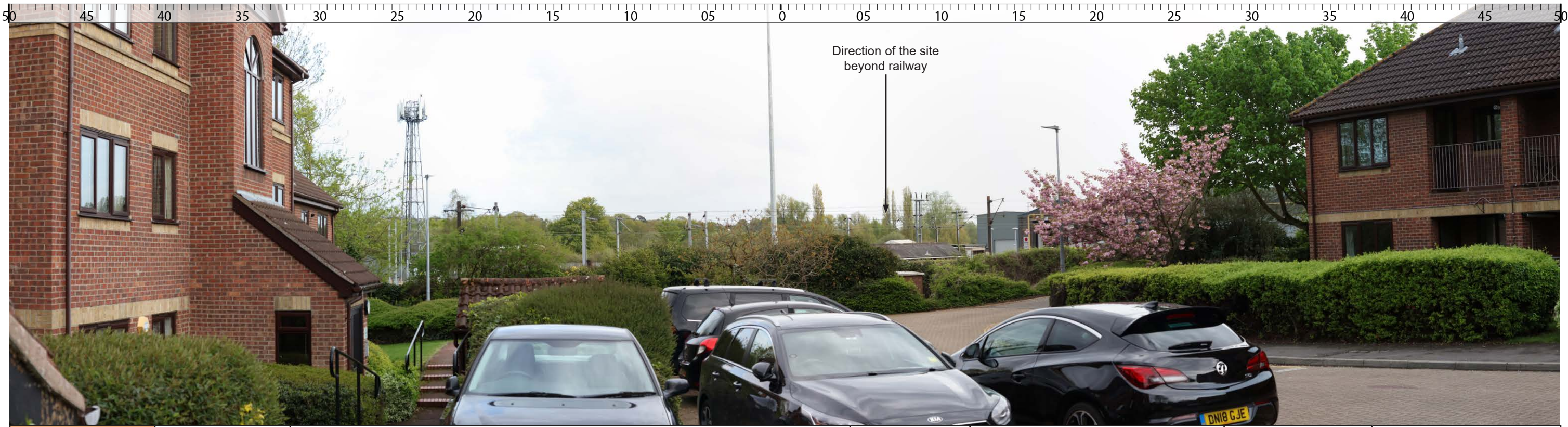


Viewpoint 16	Location of View:	View from Broads hire boat on the River Wensum adjacent to Colemans site	Date and Time:	01-05-2023 3.10pm	OS Coordinates:	TG 24420 07615
	Notes:	Cloudy, very good visibility	Receptors:	Boat users	Distance from site:	160m

LA5589 Deal Ground, Norwich
Figure 8.4.8: Viewpoints 15-16

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 17	Location of View:	Glendenning Road, Thorpe Hamlet, Norwich	Date and Time:	01-05-2023 5.00pm	OS Coordinates:	TG 24763 08074
	Notes:	Cloudy, very good visibility	Receptors:	Residents	Distance from site:	400m

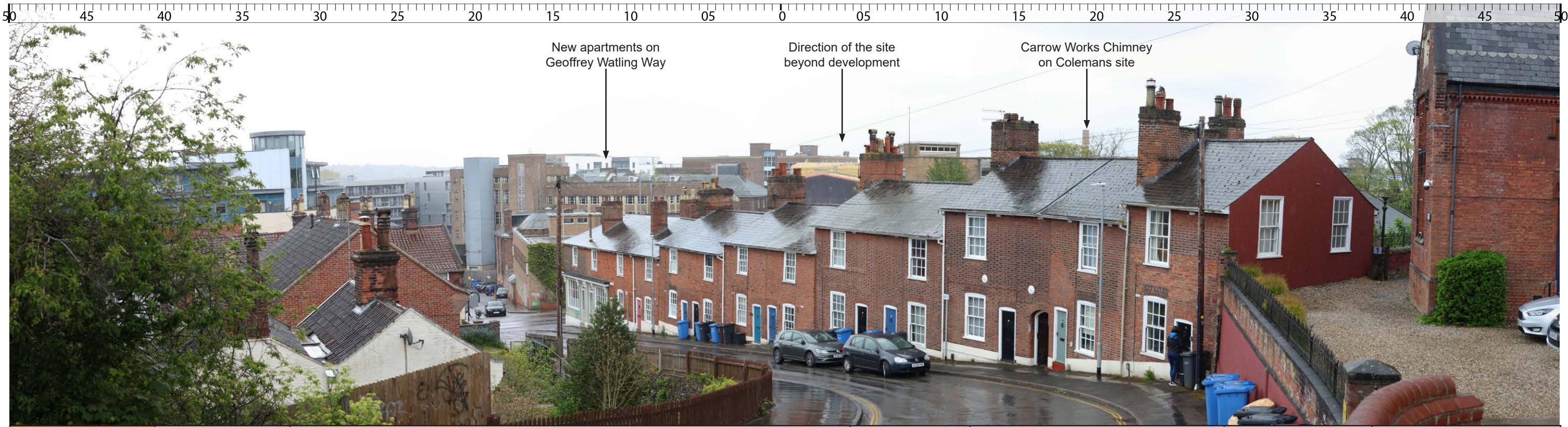


Viewpoint 18	Location of View:	Heathside Road and Cotman Road junction to the north of railway line	Date and Time:	01-05-2023 2.00pm	OS Coordinates:	TG 24710 08394
	Notes:	Cloudy, very good visibility	Receptors:	Residents, road users	Distance from site:	730m

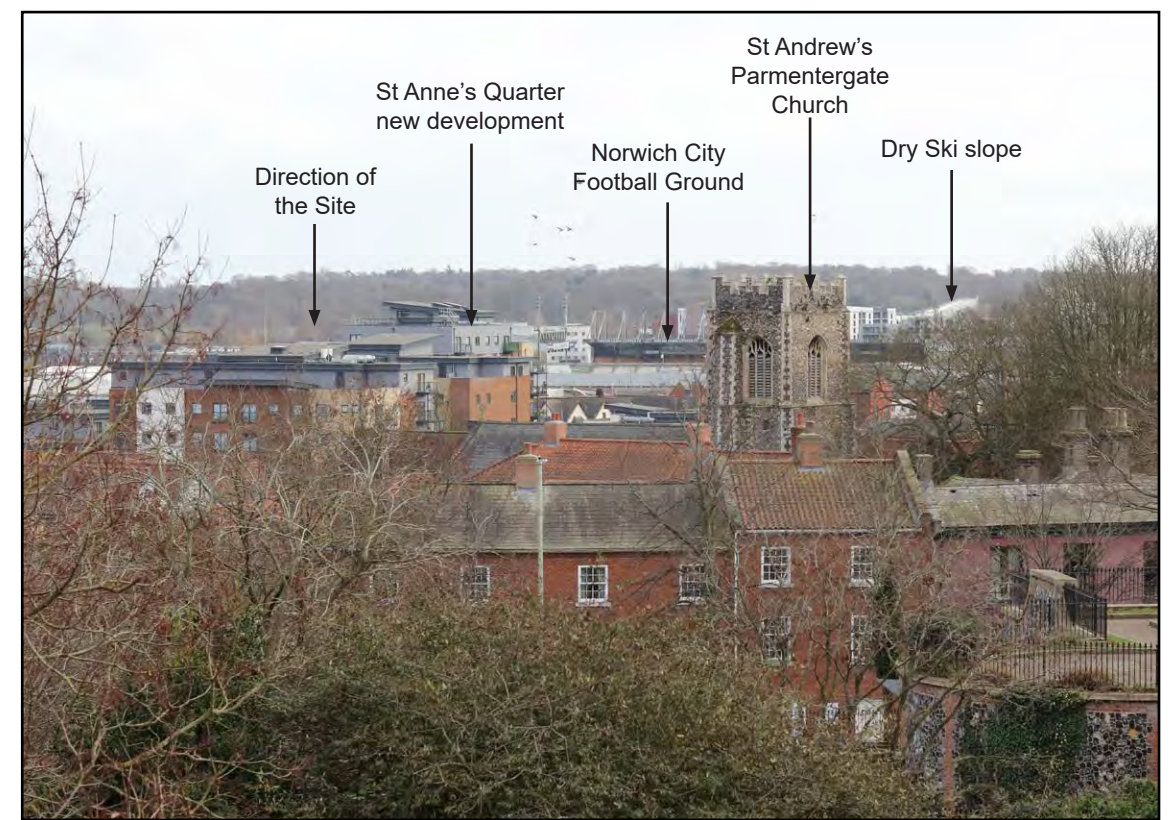
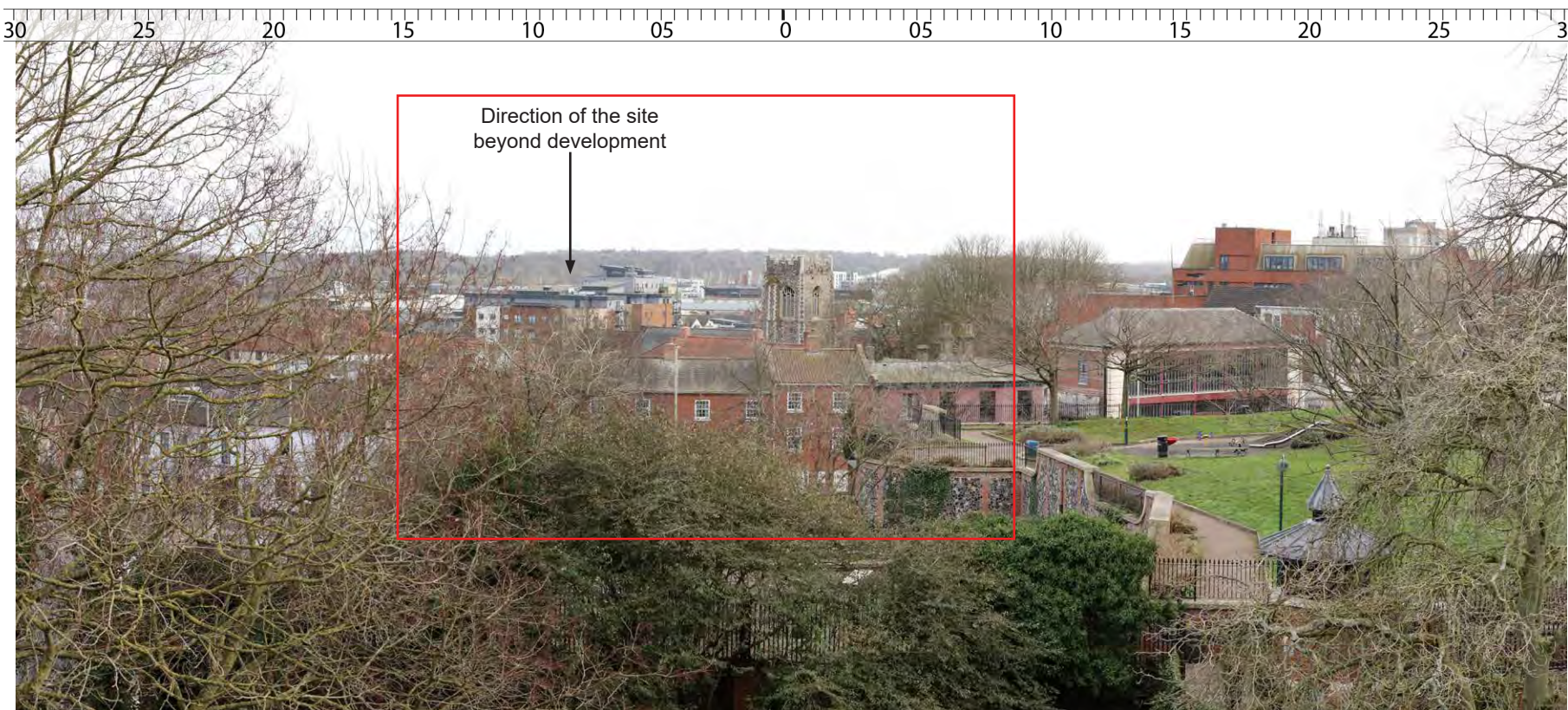
LA5589 Deal Ground, Norwich
Figure 8.4.9: Viewpoints 17-18

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Viewpoint 19	Location of View:	Carrow Hill to the west of the site	Date and Time:	01-05-2023 11.30am	OS Coordinates:	TG 23225 08500
	Notes:	Cloudy, very good visibility	Receptors:	Residents, road users	Distance from site:	700m



Viewpoint 20	Location of View:	Castle Gardens, Orford Street, Norwich	Date and Time:	02-02-2023 10.34am	OS Coordinates:	TG 23225 08500
	Notes:	Cloudy, very good visibility	Receptors:	Castle Visitors	Distance from site:	1.6km














LA5589 Deal Ground, Norwich
Figure 8.4.10: Viewpoints 19-20

Camera: Canon EOS 5DS
Focal Length: 50 mm
Horizontal Field of View: 100 degrees
Reproduction: A3 landscape





Key

-  **Existing vegetation and tree blocks;**
screening, framing and filtering views
-  **Existing trees;**
screening, framing and filtering views
-  **Proposed trees;**
Creating new habitat, screening, framing and filtering views
-  **Proposed woodland;**
Incorporating existing green infrastructure and forming a landscape buffer for habitat, noise and visual mitigation
-  **County Wildlife Site;**
Protect County Wildlife Site habitat and trees
-  **Fen Landscape;**
Extend fen landscape into development areas to create new habitat, soften views and integrate built form
-  **Natural Fen Landscape Buffer;**
Incorporating existing green infrastructure and fen landscape elements within a natural planting buffer to create new habitat and soften built form
-  **Parkland Landscape Buffer;**
Amenity landscape with additional tree and shrub planting to filter and soften views to the development from Boats on the River Wensum
-  **Fen Wetland Swales extend into site;**
Creating and enhancing the wetland and marginal habitat of the County Wildlife Site
-  **SUDS Corridor;**
Creates new habitat opportunity for wetland and marginal planting as well as wildlife corridor linking County wildlife site to the River Wensum
-  **Direct Views into site**
-  **Filtered Views into site**
-  **Locations for Vehicular access**

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All dimensions to be checked on site and landscape architect notified of any discrepancies prior to commencement.
Do not scale

Notes.

Rev: date: comment(s) name: check:

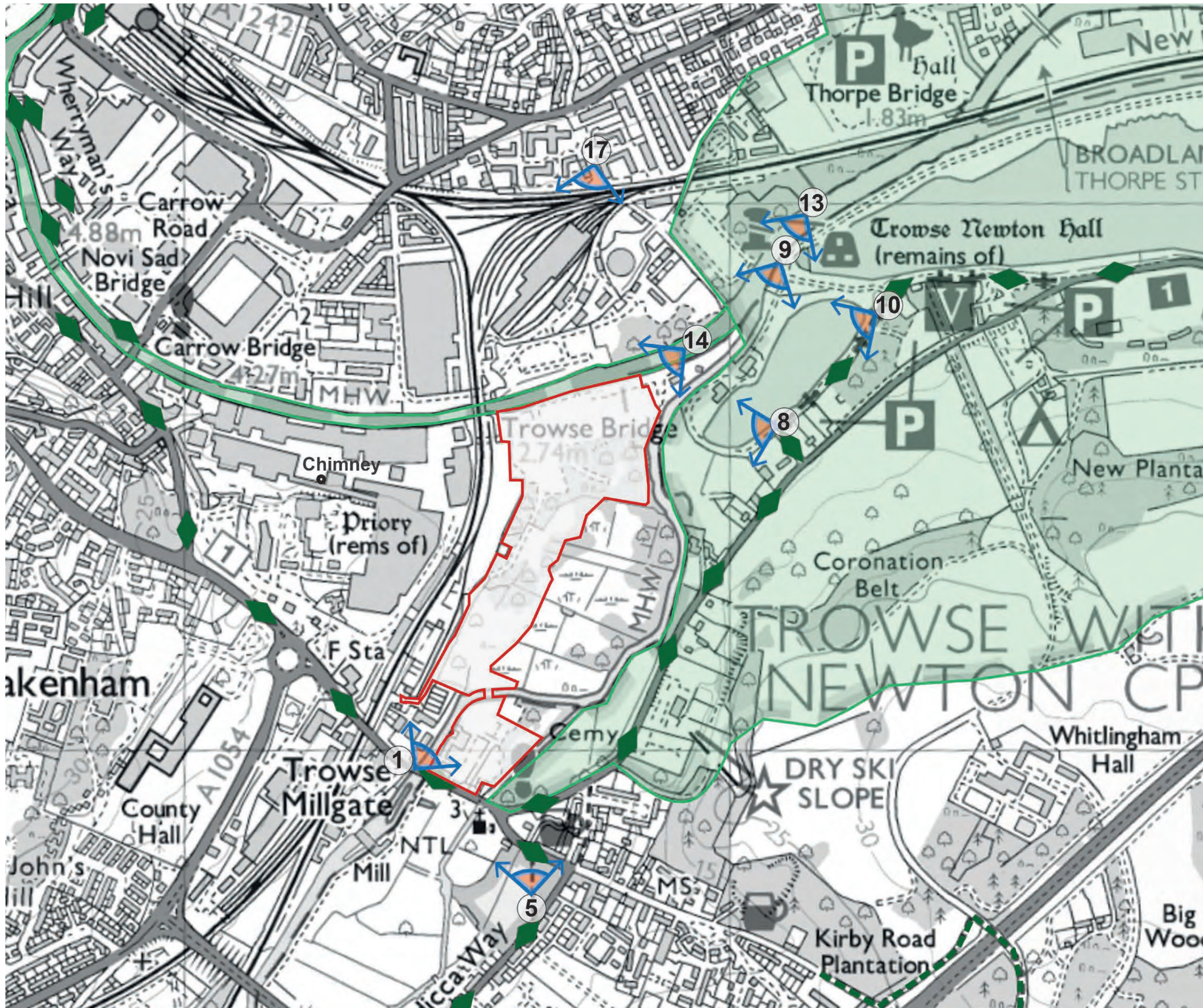


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Client: Serruys Property Company Ltd
 Job: Deal Ground & May Gurney Site, Norwich
 Title: Landscape Mitigation Plan
 Drawn: CB Date: April 2023
 Checked: KC Scale @ A3: nts
 Job no: LA5589 Drg no: Figure 8.5

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All dimensions to be checked on site and landscape architect notified of any discrepancies prior to commencement.
Do not scale

Notes.

Key

-  Site boundary
-  AVR location
-  Long Distance Route (Wherryman's Way)
-  Public Right of Way
-  The Broads National Park

Rev: date: comment(s) name: check:



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Client: Serruys Regeneration
Job: Deal Ground & May Gurney Site, Norwich
Title: AVR Location Plan
Drawn: KC Date: May 2023
Checked: KC Scale @ A3: nts
Job no: LA5589 Drg no: Figure 8.6

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METHODOLOGY

Accurate Visual Representations (AVRs)



These AVRs have been produced by HCUK Ltd on behalf of the client. The selected viewpoints have been specified by the Landscape Architect (IDP Landscape) in liaison with the competent authority. The 3D model of the proposed scheme is supplied by the client/architect.

The process of providing accurate visual representation of development proposals is taken from guidance provided by the Landscape Institute (TGN 06/19). For the purposes of this assessment, Type 4 visualisations have been produced to represent scale, appearance, context, form, and extent of development in a verifiable format. This is the highest level of accuracy and verifiability for use in the most critical situations.

Photographs using a Canon 5d Mk III full-frame camera with a 50mm fixed focal length lens are taken. A tripod with a graduated head is used and photographs are taken every 12 degrees. Photographs are taken portrait to capture depth of the existing view.

Centimetre accurate GPS equipment is used to log the camera position to OS GB15. The GPS also records level AOD for reference on the image. GPS and Trimble Total Stations are used to collect data around the site.

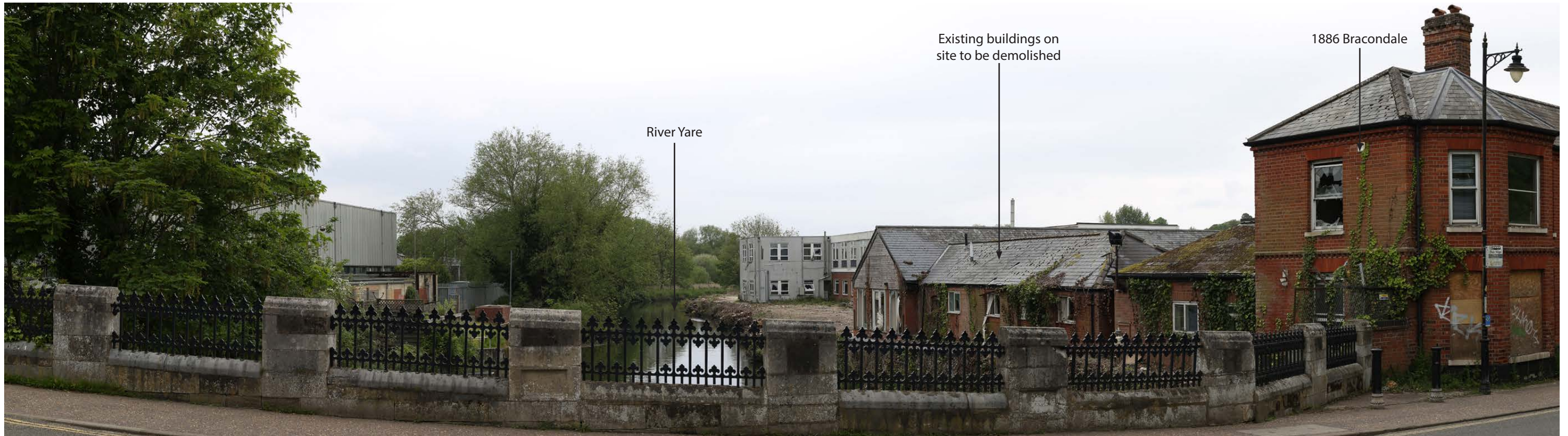
When a panoramic image is required the photographs are stitched using Adobe Photoshop software.

The survey data collected on-site is processed using N4Ce software and exported as a 3d DWG file. The 3d DWG file is imported into the model and virtual cameras set up to replicate the shots taken on site. The virtual camera views are brought into Photoshop on top of the photographs.

The model outline is traced to provide a photowire image to AVR Level 0, and the final image is saved as a high-quality JPEG. This provides an outline of the proposal overlaid onto the photograph base.



Figure A6-1: Accurate Visual Representation (AVR) Levels 0-3
(Images ©Nicholas Pearson Associates)



Viewpoint 1	Location of view:	Bracondale Bridge, Bracondale, over river Yare	Date and Time:	22/05/23 12:13pm	Easting:	624428.45	Level (AOD):	5.553m
	Notes:	Cloudy, very good visibility	Receptors:	Road users	Northing:	306960.37	Distance from site:	n/a

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Figure 8.6.1: Viewpoint 1 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.2: Viewpoint 1 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape





Viewpoint 5	Location of view:	Trowse Common - Open Access Land, White Horse Lane	Date and Time:	22/05/23 12:02pm	Easting:	624642.6	Level (AOD):	2.994m
	Notes:	Cloudy, very good visibility	Receptors:	Footpath users, residents	Northing:	306745.36	Distance from site:	185m

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Figure 8.6.3: Viewpoint 5 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.4: Viewpoint 5 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape





Viewpoint 8	Location of view:	Kingsley Farrington off Whitlingham Lane	Date and Time:	22/05/23 10:48am	Easting:	625096.58	Level (AOD):	2.905m
	Notes:	Cloudy, very good visibility	Receptors:	Footpath users	Northing:	307578.42	Distance from site:	225m

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Figure 8.6.5: Viewpoint 8 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.6: Viewpoint 8 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape





Viewpoint 9	Location of view:	Whitlingham Country Park within Broads National Park	Date and Time:	22/05/23 11:36am	Easting:	625097.36	Level (AOD):	4.192m
	Notes:	Cloudy, very good visibility	Receptors:	Footpath users	Northing:	307891.8	Distance from site:	350m

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Figure 8.6.7: Viewpoint 9 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.8: Viewpoint 9 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape





Viewpoint 10	Location of view:	Whitlingham Country Park near main Car Park	Date and Time:	22/05/23 11:48am	Easting:	625264.68	Level (AOD):	2.566m
	Notes:	Cloudy, very good visibility	Receptors:	Footpath users	Northing:	307779.8	Distance from site:	455m

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Figure 8.6.9: Viewpoint 10 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.10: Viewpoint 10 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape





Viewpoint 13	Location of view:	View from Broads hire boat on the River Yare	Date and Time:	22/05/23 09:35am	Easting:	625152.45	Level (AOD):	1.045m
	Notes:	Cloudy, very good visibility	Receptors:	Boat users	Northing:	307986.64	Distance from site:	450m

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Figure 8.6.11: Viewpoint 13 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.12: Viewpoint 13 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape



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Viewpoint 14	Location of view:	View from Broads hire boat on the River Wensum adjacent to boat club	Date and Time:	22/05/23 09:41am	Easting:	624906.16	Level (AOD):	0.99m
	Notes:	Clear skies, very good visibility	Receptors:	Boat users	Northing:	307738.73	Distance from site:	130m

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Figure 8.6.13: Viewpoint 14 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.14: Viewpoint 14 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape



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Viewpoint 17	Location of view:	Glendenning Road, Thorpe Hamlet, Norwich	Date and Time:	22/05/23 10:16am	Easting:	624752.89	Level (AOD):	5.799m
	Notes:	Clear skies, very good visibility	Receptors:	Residents	Northing:	308076.23	Distance from site:	400m

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Figure 8.6.15: Viewpoint 17 Panorama

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 90 degrees
Reproduction: A3 landscape





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Figure 8.6.16: Viewpoint 17 Single Frame

Camera: Canon EOS 5D
Focal Length: 50mm
Height of camera: 1.6m
Horizontal FOV: 40 degrees
Reproduction: A3 landscape



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