

## East Devon Local Plan Regulation 19 – March 2025

### Representations on behalf of Place Land Limited

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#### 1. Strategic Policy SD20 - Development Allocations at Kilmington

Place Land Limited welcomes the identification of land at Kilmington to deliver new residential development over the plan period, namely at Kilm\_09b and Kilm\_10. Kilmington is recognised as a service village under Policy SP01, capable of accommodating new development in accordance with the spatial strategy, with a minimum of 59 dwellings to be achieved within the Neighbourhood Plan area over the period 01.04.2020 – 01.04.2042.

The cumulative total capacity of allocations identified under Policy SD20 achieves 42 dwellings.

Land East of George Lane, Kilm\_09b is allocated for 23 dwellings. The site represents the easternmost of two fields sandwiched between the northern built-up edge of Kilmington and the A35 corridor. The western field is allocated for 14 dwellings in the Kilmington Neighbourhood Plan (Made in October 2022) which covers the shorter plan period of 2020-2031.

Place Land broadly supports the proposed capacity of 23 dwellings for Kilm\_09b. This capacity figure is informed by a presentation by Place Land to the Council's Strategic Planning Committee in January 2022, which indicated a potential capacity of 35 – 40 dwellings for Kilm\_09 a and b combined. Since this presentation, further design work has been undertaken to refine the concept layout, including preparation of a landscape appraisal, initial drainage strategy, walkover ecology survey and heritage appraisal. Copies of these studies and concept proposals for the site, prepared by Lacey Hickie Caley Limited accompany these representations.

The findings of the additional surveys confirm that Kilm\_09 (a and b combined) is capable of accommodating around 39 dwellings in a sensitive manner which respects the special landscape qualities of the National Landscapes and the setting of the listed buildings and mitigates any harm through the design and layout. The surveys submitted in support of this representation are summarised below.

#### **Landscape**

The allocation site lies within but on the edge of the East Devon National Landscape; its northern extent is defined by the A35. To the north west of the site lies the Blackdown Hills National Landscape, although land immediately north of the allocation site is not a protected landscape.

The landscape and visual appraisal identifies the main impact of the development of the allocation to be on views from the A35 on the approach to the site from the west, where the site can be appreciated as open fields with views to the Baptist Church in Kilmington. In the wider protected landscape of the National Landscapes the site is seen in the context of the rest of the village and its development would have a minimal adverse impact on the protected landscapes.

The proposed layout strengthens the established hedgerow and tree planting along the northern boundary, safeguarding a 10 metre corridor for additional landscaping to mitigate the visual impact of development when viewed from the Blackdowns National Landscape and to enhance the health and wellbeing of new residents through separation from the A35 corridor.

New and additional planting is proposed along the site's other boundaries to maintain and enhance the established visual enclosure of the site and soften the visual impact of new built development. An orchard is proposed to the south of the site and the existing weak field boundary planting through the centre of the site would be bolstered through additional tree planting to introduce a strong framework of landscaping. The landscaping would be sufficient to mitigate the landscape and visual impact of the proposed development on the National Landscape and assimilate the development into its context.

### **Heritage**

The heritage appraisal concludes that there is no functional relationship between the listed Old Inn and the proposed allocation. The setting of the Old Inn can best be appreciated from the roadside approaches along the A35; views of the Old Inn from the allocation site are incidental and do not add to its heritage significance. Similarly the allocation site does not form part of the 'designed' or 'intended' views of the Old Inn and is therefore not within the setting of the listed building. Accordingly, the site's development would not harm the Old Inn's setting or significance. Any views of the development are already well-screened by existing vegetation although additional landscape enhancement could be delivered as part of the development, if desirable.

Any impact of development on the setting of George Farm to the west of George Lane can be mitigated by avoiding building in the junction of George Lane and the A35. The listed war memorial to the north of George Lane has a very intimate setting which would not be affected by the development of the allocation.

## **Ecology**

The site comprises two arable agricultural fields with trees, hedgerows and other planting along the site boundaries. The northern hedgerow alongside Gammons Hill (A35) comprise two distinct sections. The western section appears to be a species rich hedgerow that has been in place for a good many years, the eastern extent beyond the field entrance is a line of overgrown beech trees, possibly planted as a hedgerow which became overgrown. This extent is of significantly lower value than the western extent.

The eastern hedgerow is also species rich and contains some significant trees. The southern hedgerow (to the north of Meadow Bank) consists of a line of trees with an understory of shrubs. None of the trees in this area are considered significant in an arboricultural context, but several are significant in an ecological context.

There are a small number of trees to the rear of properties in The Orch, including one very large oak which is of significant biodiversity value.

A line of small and insignificant trees, largely ash, bisects the two field, separating it in two. These tree are of low value from an ecological context and ash die back is already prevalent in this site, which will mean their demise. There is a section of defunct dry stone wall in this area. Very little of it now remains and it serves no purpose.

The boundary 'bund' of Dares Field is currently of low biodiversity value.

The species rich hedgerow alongside George Lane is of a similar composition and age as that alongside the A35. Two large oak trees are located within this hedgerow. Both have been butchered by Western Power as the power lines run close to and through the trees canopy.

The grassland within the two fields is arable in nature. The first survey recorded 100% rye grass, shortly after this it was replaced with maize and has subsequently been returned to rye. The ecological value is negligible.

## **Transport**

The site's location on the edge of Kilmington offers good opportunities to access an existing network of footways, cycleways and public rights of way, including a footway on the A35 connecting to a footway/cycleway routing along the B3261 into Axminster. Existing bus stops are located on the A35 within 260 metres of the site. The bus services provide a service between Exeter and Axminster with services every 2 hours Monday to Saturday. Axminster Rail Station located 2.64 kilometres from the site provide hourly train services to Exeter and London Waterloo.

The site benefits from a good range of facilities within an acceptable walking and cycling distance. Accordingly, the site represents a sustainable location for development with reasonable opportunities to travel by sustainable transport modes.

There are two potential vehicular access options. Option 1 is an access off George Lane, via a simple priority T-junction, whilst option 2 is an access off the A35 via a priority junction with a ghost-island right turn lane arrangement. Devon County Council Highways Authority has commented on Option 1 and raises no concerns to the principle of a vehicular access off George Lane. Initial consultation with National Highways on Option 2 indicate that access onto the A35 could be achieved if a departure from standards was accepted.

The proposed allocation offers the opportunity to introduce additional pedestrian and cycle connections onto the A35 and into Kilmington village to the benefit of new and existing residents.

### **Drainage**

The site comprises relatively flat agricultural land; the topography falls generally from west to east at an average gradient of 1 in 33 to a low point in the north-east corner adjacent to the A35. The whole site lies within Flood Zone 1 and is at very low risk of surface water flooding. British Geological Society mapping indicates that the site is underlain by a bedrock of mudstone with superficial deposits of silt, sand and gravel in the western part of the site and sand and gravel in the eastern part. It is therefore anticipated that the use of soakaways will be practical to dispose of surface water runoff. As a worst case scenario, an infiltration basin would be located in the north-east corner of the site to restrict run-off to greenfield rates. The accompanying layout plan incorporates the infiltration basin.

Sewer records indicate that there is a foul sewer connection from the existing residential development in Dares Field, to the south west of the site. A combined sewer should be capable of draining the western part of the site by gravity. The remainder of the site will gravitate to the north-east corner and can be connected to the existing combined sewer in the A35.

### **Wording of Policy SD20**

The Neighbourhood Plan was prepared in general conformity with the Adopted East Devon Local Plan 2031 and there is a stated intention to monitor the relationship with the emerging Local Plan and undertake a review of the Neighbourhood Plan, if necessary, to ensure it takes precedence in decisions on developments in the parish (paragraph 1.1, Kilmington Neighbourhood Plan).

The National Planning Policy Guidance advises that where a neighbourhood plan has been brought into force, the LPA should take its policies and proposals into account when preparing the local plan and should not duplicate those policies in the neighbourhood plan unless changed circumstances justify this (Paragraph: 006 Reference ID: 61-006-20190723).

For the following reasons Place Land considers that changes in circumstance justify the inclusion of the land allocated in the Neighbourhood Plan under Policy HD3 in this Local Plan within Policy SD20:

1. The Neighbourhood Plan expires in 2031, some 10 years prior to the Local Plan and whilst there is a stated intention from the Neighbourhood Plan group to review the Plan, it cannot be relied upon to ensure the ongoing allocation of the site for housing.
2. Kilm\_09b is reliant on vehicular access via the land identified within the Neighbourhood Plan land (HD3). The Highway Authority, Devon County Council has advised that a satisfactory access arrangement can be secured via George Lane (see attached email and access drawing). A vehicular access via the A35 would also be taken from within the Neighbourhood Plan allocation. The allocation of Kilm\_10 within this Local Plan also includes a stated preference for the highway access to be gained from Kilm\_09b. Accordingly, the Local Plan allocations are interlinked with, and reliant upon, the delivery of a site which falls outside the Local Plan and which may not retain its status as an up-to-date allocation for the lifetime of the Local Plan.
3. The Neighbourhood Plan site is referred to as “Kilm 09a” within Policy SD20. However, Kilm\_09a is not an allocated site within this Local Plan, it is not identified on the Policies Map and is not known by this reference within the Neighbourhood Plan. It would appear that the site reference has been carried over from earlier drafts of the Local Plan when the land was included in the site allocation.
4. Policy SD20 requires that a comprehensive development layout should cover both the Neighbourhood Plan allocation and the local plan site, with the whole site conforming with the design principles set out in Neighbourhood Plan policy. The effectiveness of this policy approach is questionable. Firstly, the design principles in the Neighbourhood Plan policy were drafted to apply to HD3 only. These policy principles cannot be conveyed to another allocation outside the Neighbourhood Plan. Policy SD20 does not clarify which elements of Policy HD3 represent the “design principles” which should apply across the whole site, leaving this open to interpretation at the submission of a planning application. Policy SD20 includes

some further design principles regarding buffer planting and footpath links. However the relationship between these principles and those within the Neighbourhood Plan are unclear.

5. The design principles within Policy HD3 refer to policies in the Adopted Local Plan, including EN19 and TT1. These policies will be superseded by the new Local Plan.
6. In respect of affordable housing and self-build, the Neighbourhood Plan policy requirements under Policy HD3 are overly prescriptive and onerous, requiring 50% affordable housing and a specific mix of house types for affordable housing and self-build. The policy requirements are inconsistent with the policies of this Local Plan and the prescriptive nature of the policy impedes delivery of housing (see attached copy of Policy HD3).
7. In light of these policy discrepancies and in the interests of establishing clear development principles for the comprehensive development of land at Kilm\_09 (a and b), Place Land finds Policy SD20 to be ineffective and unsound in its current form. To achieve a sound policy, the wording should be amended to allocate Kilm\_09 a and b under Policy SD20 with comprehensive design principles to apply to the whole site and affordable housing provision consistent with Kilm\_09b.

b) Place Land propose the following amended wording: *Policy*

*“Land east of George Lane is allocated for 37 homes. This site is in the East Devon National Landscape and requires very careful design to take account of its landscape setting. –A comprehensive development layout should include:*

*- a buffer of planting to the northern site boundary (along the A35);*

*- safe pedestrian and cycle access with connections to adjoining roads and paths, including to southern and northern site boundaries and a west-east pedestrian/cycle link to connect to existing facilities in the village”*

### **Policies Map**

For the reasons set out in respect of representations to Policy SD20, Place Land objects to the omission of land west of Kilm\_09b from the policies map. In order to ensure the comprehensive delivery of development across Kilm\_09a and Kilm\_09b, the sites should be identified as a contiguous residential allocation on the policies map, supported by Policy SD20, as proposed for amendment by Place Land Limited.

**Enclosures:**

Concept Design, prepared by LHC

Landscape Visual Appraisal, prepared by LHC

Site Accessibility and Access Appraisal, prepared by Hydrock

Drainage Strategy, Technical Note, prepared by Hydrock

Heritage Appraisal, prepared by AC Archaeology

Representations issued 28 March 2025

**Policy HD3: Land off George Lane (adjacent to Dares Field)**

**1. Land off George Lane (adjacent to Dares Field) defined in Figure 7 is allocated for up to or around 14 dwellings to meet the housing needs of the local community during the term of this plan. Any proposals must comply with Policy EN19 of the East Devon Local Plan 2013-2031 and the measures set out in the emerging Axe Catchment Area Nutrient Management Plan. Permission will not be granted, nor can development commence, until it can demonstrated that there will be no increase in phosphates as a result of the development and this has been approved in writing by the Local Planning Authority;**

**2. A Development Brief should be prepared for the site which takes into account both this Plan's aims, and objectives and the views of the local community established through engagement with the local community and Parish Council.**

**3. Proposals will be supported where they:**

- i) deliver a mix of dwelling types and sizes which meet demonstrable up-to-date local needs to help maintain a balanced and thriving local community; and**
- ii) provide at least 50% 'affordable' housing (a mix of low cost, shared ownership, and subsidised rent). The initial and subsequent occupancy of the affordable housing is restricted to a person(s) who:**

**a. Does not have access to general market housing and is in housing need; and**

**b. Is a resident of that parish group (as defined in The Local Plan), or has a local connection with that parish group because of family ties or a need to be near their workplace.**

**In the event that an occupier who fulfils both criterion (a) or (b) cannot be found within a reasonable period of time, then the criterion will be widened firstly to a person(s) with a local connection to the parish group because of family ties or a need to be near their workplace, and subsequently to a person(s) with an East Devon connection (Reference: EDDC Local Plan Strategy 35 or equivalent replacement policy); and**

- iii) include an element of 'self-build' (and custom build) subject to meeting the requirements in Policy HD5.**

**Local evidence at present suggests 7 affordable 2-3 bedroom houses, 3 self-build 3-4 bedroom houses and 4 open market 3-4 bedroom houses; the self-build (and custom build) element is in addition to and not part of the required affordable housing provision for this site; and**

- iv) demonstrate that an adequate connection to the public sewer can be provided; and**

- v) set built development back into the site from the northern boundary as far as is practically**

possible and include the provision of, as a minimum, a 10-metre buffer on the northern edge of the site between new development and the A35 which will be landscaped and planted before first occupation of the houses, in order to:

- a. minimise particulate and other pollution levels on the new site
- b. minimise noise from the A35
- c. enhance the boundary with the A35 to make a positive contribution to the “A35 green corridor”; and

vi) are designed to minimise the loss of existing hedges and trees. Where loss is unavoidable, development proposals must provide for appropriate replacement planting with native trees and hedgerow on the site to improve landscape structure, screening and bio-diversity value;

vii) provide a detailed landscaping scheme which includes:

- a) strategic planting and landscaping to reinforce the existing field boundary on the eastern edge of the site to act as a buffer;
- b) a mix of native and site appropriate trees including orchard planting
- c) include provision for, as a minimum, biodiversity net gain in compliance with national policy which retains and enhances habitat on the site, including installing a minimum of one integral nesting brick or bird box into each new build residential unit and external nest cups for house martins and swallows;
- d) include advance planting where possible and a detailed management plan for the ongoing care and maintenance of trees and hedgerows on the site; and

viii) provide safe pedestrian and cycle access on-site to help enable good access to community facilities and local services; and

ix) do not adversely impact the local road network, to provide adequate parking and options for sustainable travel (Policy TT1); and,

x) provide an East – West foot and cycle path at the southern end of the site that can, in future be extended to act as a west-east link from land north of The Orchard to the land to the east of the development site, together with a link to Meadowbank residential area; and

xi) provide dwellings of two storeys of a design, form, scale and density appropriate to and in keeping with the character of this part of the village, relating positively to the existing development on the adjacent site, following the guidance in the Blackdown Hills AONB Design Guide for Houses and the requirements set out in the Kilmington Village Design Statement; and

xii) use appropriate materials, particularly stone elevations to properties adjacent to A35 and George Lane with slate roofs; and,

xiii) avoid conspicuous gables and large window openings particularly to elevations facing open countryside.

**4. The development will be expected to satisfy the requirements of the other policies in this plan.**

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# Concept Design

## Land at George Lane, Kilmington

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January 2023





# Introduction

This short report summarises concept proposals for provision of a sustainable residential development at George Lane, Kilmington.

## PLANNING CONTEXT:

The proposed allocation site comprises two fields immediately adjoining the settlement boundary of Kilmington and within the East Devon AONB, as defined in the Adopted East Devon Local Plan 2013-2031. The recently made Kilmington Neighbourhood Plan allocates the western field for around 14 dwellings, with a mix of market, affordable and self-build homes to be delivered by 2031. The Regulation 18 consultation draft of the East Devon Local Plan Review extends the allocation to cover the eastern field and identifies a capacity of 37 dwellings for the whole site.

The Sustainability Appraisal accompanying the draft Local Plan appraises KILM\_09 to be a preferred site for allocation taking into account the following factors:

- *Arable land with trees and vegetation along the site boundaries. No ecological sites within 100m of the site.*
- *A major negative effect associated with development in the AONB. However, this applies to all sites within Kilmington, except KILM\_11.*
- *Three Grade II listed buildings within 40m of the site.*
- *7 of 12 local facilities are within a reasonable walking distance of the site.*

- *The site lies outside any critical drainage area and in an area at low risk of flooding.*
- *Located within the catchment of the River Axe the site has the potential to have a negative effect on water quality.*
- *Proximity of the site to the A35 could have a negative effect on the health and wellbeing of residents.*

To mitigate the anticipated impacts of the development, the sustainability appraisal recommends the following mitigation measures:

- *Considerable landscaping to assimilate the development into the landscape and mitigate harm to the AONB;*
- *Enhancement of public transport services and pedestrian/cycle links to increase the potential for sustainable travel;*
- *Provision of on-site employment opportunities, where reasonable.*



#### KEY FEATURES OF THE PROPOSAL INCLUDE:

- A new community of up to 37 new homes, including affordable housing and potential for self-build plots, in close walking distance to Kilmington Village Centre and facilities.
- A landscape-led design that delivers houses within the Area of Outstanding Natural Beauty, whilst reinforcing the edge of the village
- A design that complements the character of Kilmington and the surrounding countryside, with potential to be highly sustainable using low-carbon building design with generous private gardens and communal green space.
- Integrated multifunctional green space that is easily accessible for the use and enjoyment of the whole community and makes connections with the wider landscape - including a new pocket park, a community orchard and new hedgerows, wetland and meadow areas to enhance biodiversity.

# Site and Context Appraisal

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- Site Boundary (2.46 ha)
- Potential SUDs Ponds & Swales
- Potential Pedestrian / Cycle Links
- Potential Visibility Splay (2.4 x 43m)
- ➔ Potential Vehicle Access
- Ecological/Landscape Buffer
- Listed Buildings
- Existing Bus Stops
- Existing Hedges
- ↔ Existing Gaps in Hedges
- Existing Trees to be retained
- Existing Trees to be removed
- Existing Gated Access
- ▨ Existing Combined Sewer
- ▨ Existing Watermain
- ⚡ Road Noise Buffer
- Flood Zone 3
- Overhead Cables (to be Undergrounded)

## LANDSCAPE AND VISUAL APPRAISAL

The Visual Envelope of the site is limited by topography and existing buildings and vegetations. In views of the village from the surrounding landscape (and AONB) the proposed houses would be seen as an integral part of the village. In the immediate context of the site there are open views from the A35 and George Lane. The proposed development has been set back from the A35 frontage to enable the existing hedge and trees to be retained and enhanced with additional tree, hedge and scrub planting.

## ECOLOGY AND ARBORICULTURE

The key existing features of the site are the boundary hedgerows and trees to the site boundaries. The proposals will retain and enhance all of these with the exception of the George Lane frontage, which will need to be removed to provide the vehicular access to the site. A replacement native hedge can be provided to the newly defined site boundary.

The concept plan demonstrates the potential to provide robust Green and Blue Infrastructure with reinforced hedgerows and marginal areas that provide habitat and areas for bats and other wildlife to move and feed; a small village green in the western part of the site; a pond and an infiltration basin, a community orchard and informal open space which is managed to ensure the site delivers biodiversity net gain.

## DRAINAGE AND FLOODING

The site is at 'very low risk' from surface water flooding (although a small area of the site, outside the proposed housing development, is at medium risk immediately adjacent to the southern edge of the A35).

The proposed drainage strategy will utilise an infiltration basin in the north east corner of the site. Should infiltration not be practical a storage basin can be accommodated within the same area and a restricted discharge to the existing culvert under the A35 utilised. Both options will ensure that surface water from the site is below the existing green field run-off rate.

A combined sewer passes through the western part of the site and within the A35 to the north and it is proposed that foul sewerage from the site is connected to one or both of these, subject to discussions with SWW.

## HERITAGE

3 Grade II Listed Buildings are located in close proximity to the site: Kilmington War Memorial, George Farmhouse and The Old Inn Public House. The concept plan proposes a landscape buffer to the northern edge of the site which will ensure the proposed houses are set back from the Listed Buildings and do not impact on views of these from the adjacent streets and footpaths. The development is also set back from the north-western boundary to protect the setting of the War Memorial.

## ACCESS

The proposed layout is served by vehicular access from George Lane, which will require relocation of the existing hedgerow behind the visibility splays for the access point. The Highway Authority has no objection in principle to this access point. Additional pedestrian and cycle connections are proposed to Gammons Hill (utilising the existing field gate) and Meadow Bank, providing excellent walking and cycling connectivity to village facilities.

## SITE APPRAISAL

The site itself is relatively unconstrained. The land falls gently to the east, from a high point of circa 61m in the west to 52.5m in eastern corner. A public sewer runs diagonally through the eastern field, and can be retained in situ on site. Overhead power cables also run across the site and have potential to be removed and provided underground within the site boundaries. As noted above there is excellent potential for pedestrian and cycle connectivity to village facilities. Adjacent properties to the southern edges of the site are offset from the site boundaries and the concept layout has been carefully designed to provide appropriate buffers to the few windows (in Dares Field) which are close to the site boundaries.

# Concept Design

The site represents an excellent opportunity to create a development which fits in with its surroundings and complements the existing character of Kilmington, providing high quality housing and accessible public open space.

It will be a sustainable development, which respects and enhances existing biodiversity, creating new habitats and areas of native species planting. Residents will be able to walk or cycle to existing village amenities, and take advantage of local public transport links to services in surrounding areas.

## PLACE

The proposed development will have a distinctive identity, which takes cues from existing buildings within Kilmington. It will have a clear and legible development form, with high quality external spaces set in an integrated landscape structure.

## A VISION FOR CLEAN GROWTH

The land at George Lane provides the basis to create a low carbon community with energy efficient buildings and excellent connectivity. The site will use a multifunctional green and blue infrastructure network to ensure climate resilience and use zero carbon and energy positive technology where possible.

## CONNECTIONS

The site will provide new walking and cycling links to the amenities in the village and wider area, and a direct link to the existing bus stops on Gammons Hill which connect to Axminster and the wider area.

## COMMUNITY

The new community will be healthy and active, creating a walkable, vibrant, sociable neighbourhood with good connections to Kilmington and the wider landscape. The community will be balanced with mixed tenure homes and housing types, including affordable housing and the opportunity for Self Build plots.

## WORKING AND LIFE BALANCE

Homes will enable home working and have flexibility built into them, in order to accommodate changes in people's lifestyles and work-life balance. Home working space will be provided to enable flexible working patterns and reduce commuting requirements.



**ENVIRONMENT**

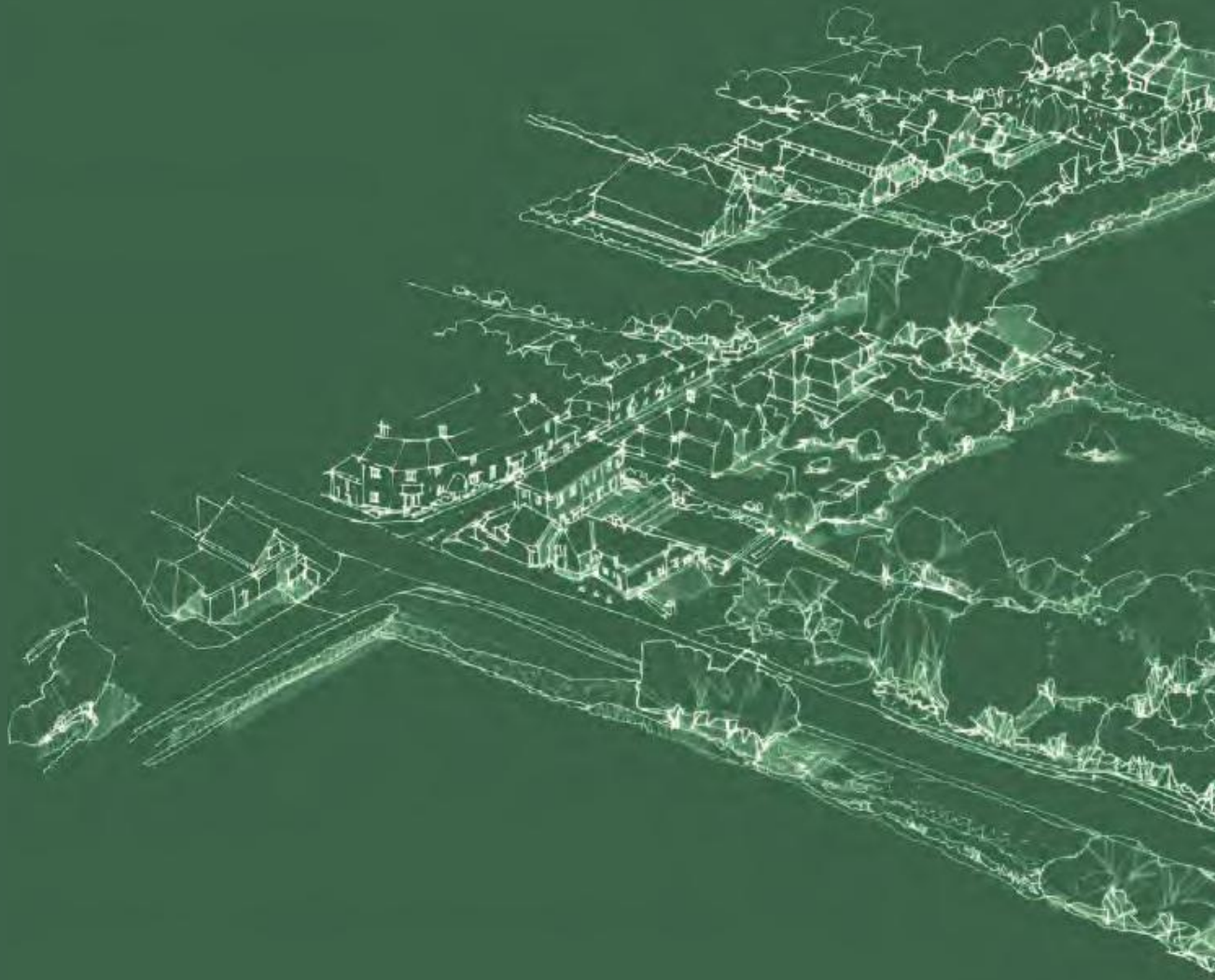
The development will be set within a green and blue infrastructure network which provides a variety of high quality public spaces, generates biodiversity gains and connects with existing landscape features. Existing hedgerows and trees will be retained and enhanced where possible, with their setting enhanced with a generous offset

to development. This will create a green infrastructure 'wrap' around the site, ensuring existing habitats are maintained and improved for local wildlife and delivering biodiversity net gain. Features such as a pond and community orchard will be provided, and the landscape framework will include places for informal play, activity and socialising.



## Offices

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# **Kilmington, Axminster, Devon**

Landscape & Visual Appraisal

**Client Name** Place Land

**Document Reference** Landscape Appraisal

**LHC Project Number** 21121

## Quality Assurance - Approval Status

Issue	Date	Prepared By	Checked By	Approved By
A	Jan 2023	Aaron Carpenter <i>Landscape Architect</i>	Paul Osborne <i>Director</i>	Paul Osborne <i>Director</i>

## Disclaimer

This report has been prepared by LHC Design Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Appointment and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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## Executive Summary

LHC Design have been appointed to undertake an initial, high-level landscape and visual appraisal (LVA) to record baseline landscape and visual conditions present on site and in the surrounding study area. This will help inform opportunities and constraints analysis and capacity testing for George lane site which is proposed for housing under policy KILM-09 in the draft East Devon Local Plan.

This analysis considers the sensitivity and capacity of the site to accommodate the proposed development. It is important to clarify that this initial LVA is not a detailed assessment of the effects of the development upon the landscape/visual receptors

The Visual Envelope of the site is limited by topography, existing buildings and vegetation. Views from the surrounding landscape (and Area of Outstanding Natural Beauty) are potential gained from higher ground to the south and north, and from the Axe valley to the east. In more distant views the proposed houses would be seen as an integral part of the village and therefore the potential landscape/visual impact will be limited.

In the immediate context of the site there are open views from the A35 and George Lane. In these views there would be a change from an open view to the existing fields to a view of the new residential development, seen within the context of the existing village and set within a landscape framework. The proposed development has been set back from the A35 frontage to enable the existing hedge and trees to be retained and enhanced with additional tree, hedge and scrub planting.

## Site Photos



View looking east towards the site on the pedestrian right of way which follows the A35



View taken from the A35 looking south west towards St Giles' Church

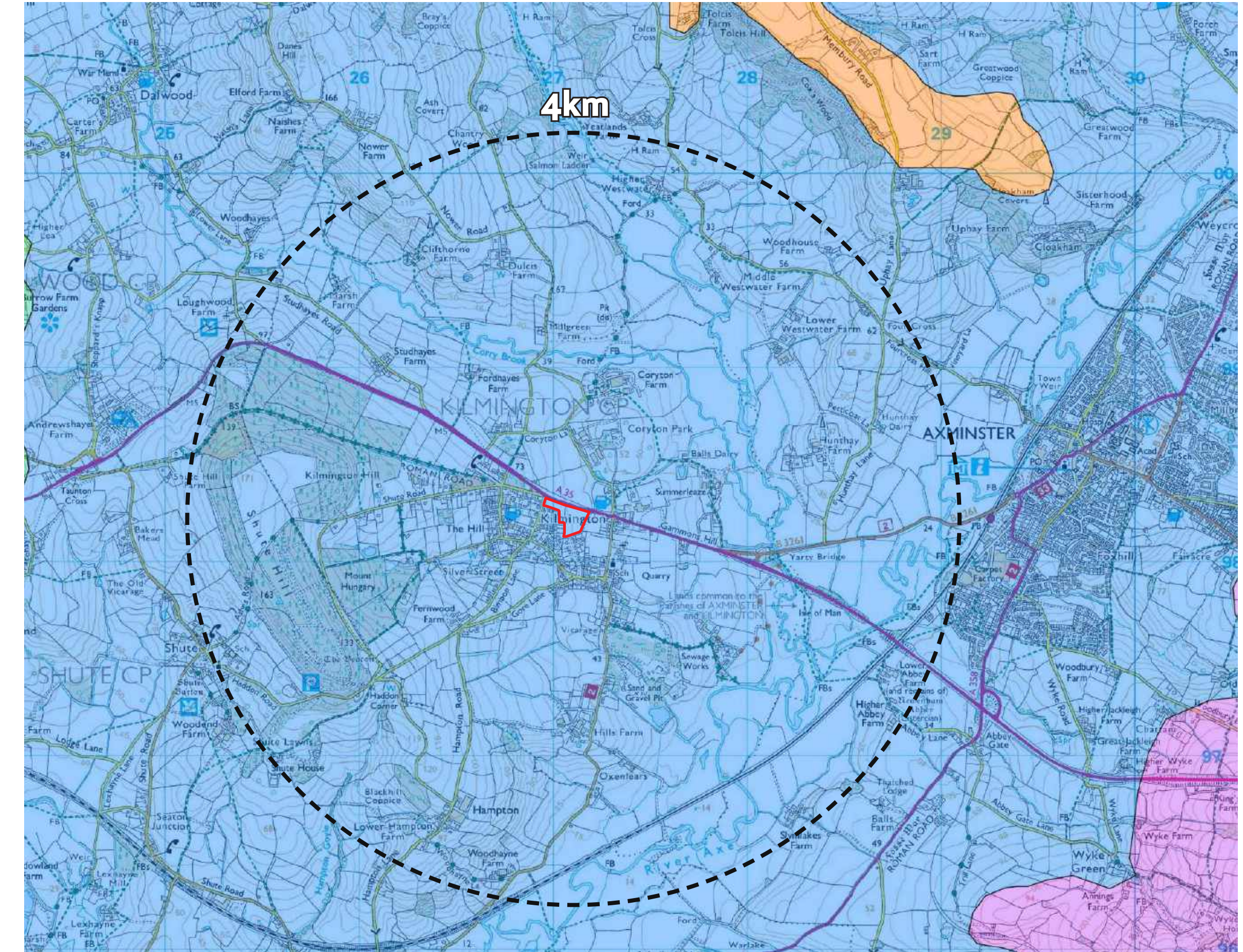


View taken from the A35 looking south towards Dares Field

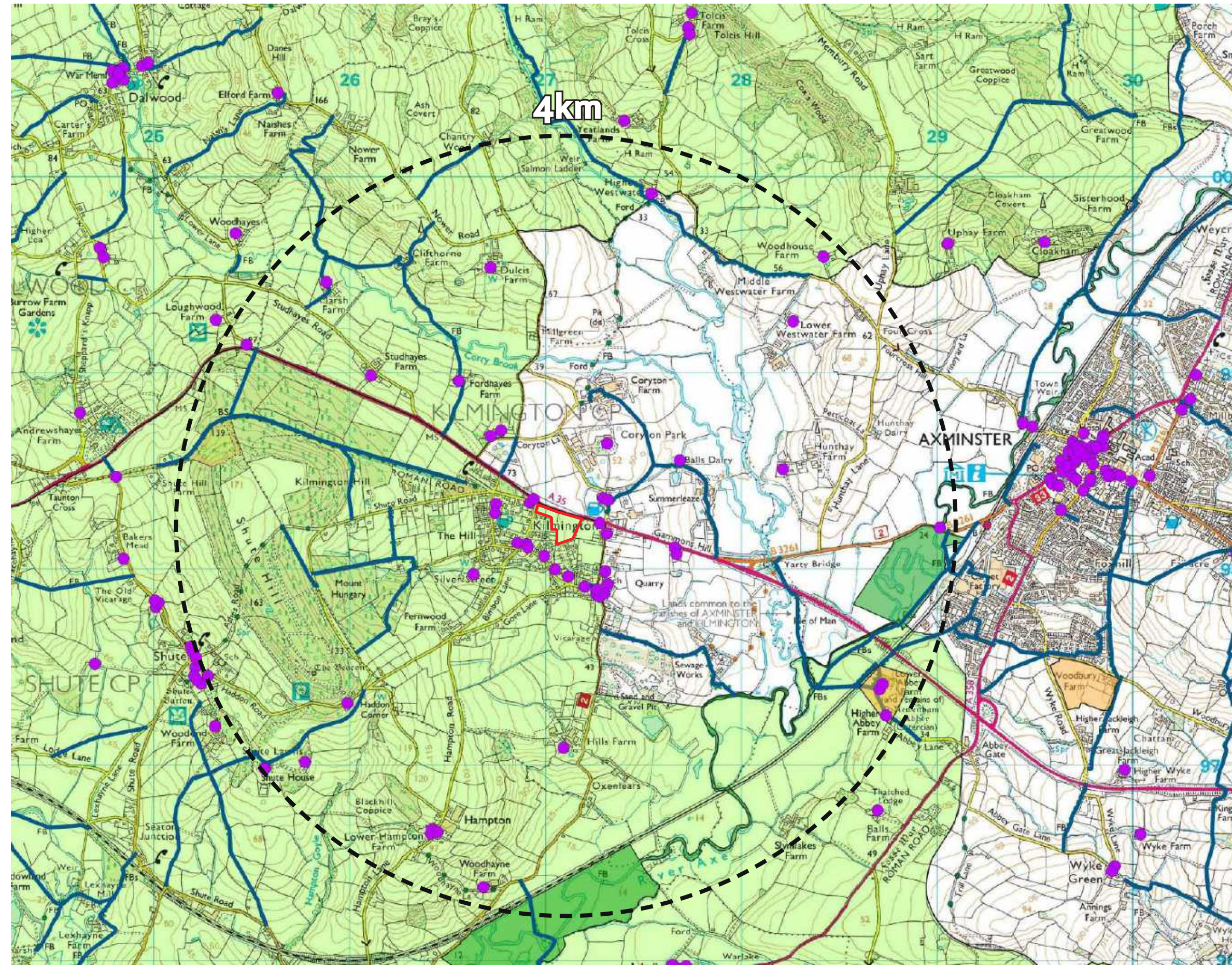


View taken from the A35 from an existing field access looking south west towards St Giles' Church

## Landscape Character Areas



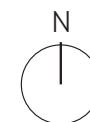
## Policies and Heritage Assets



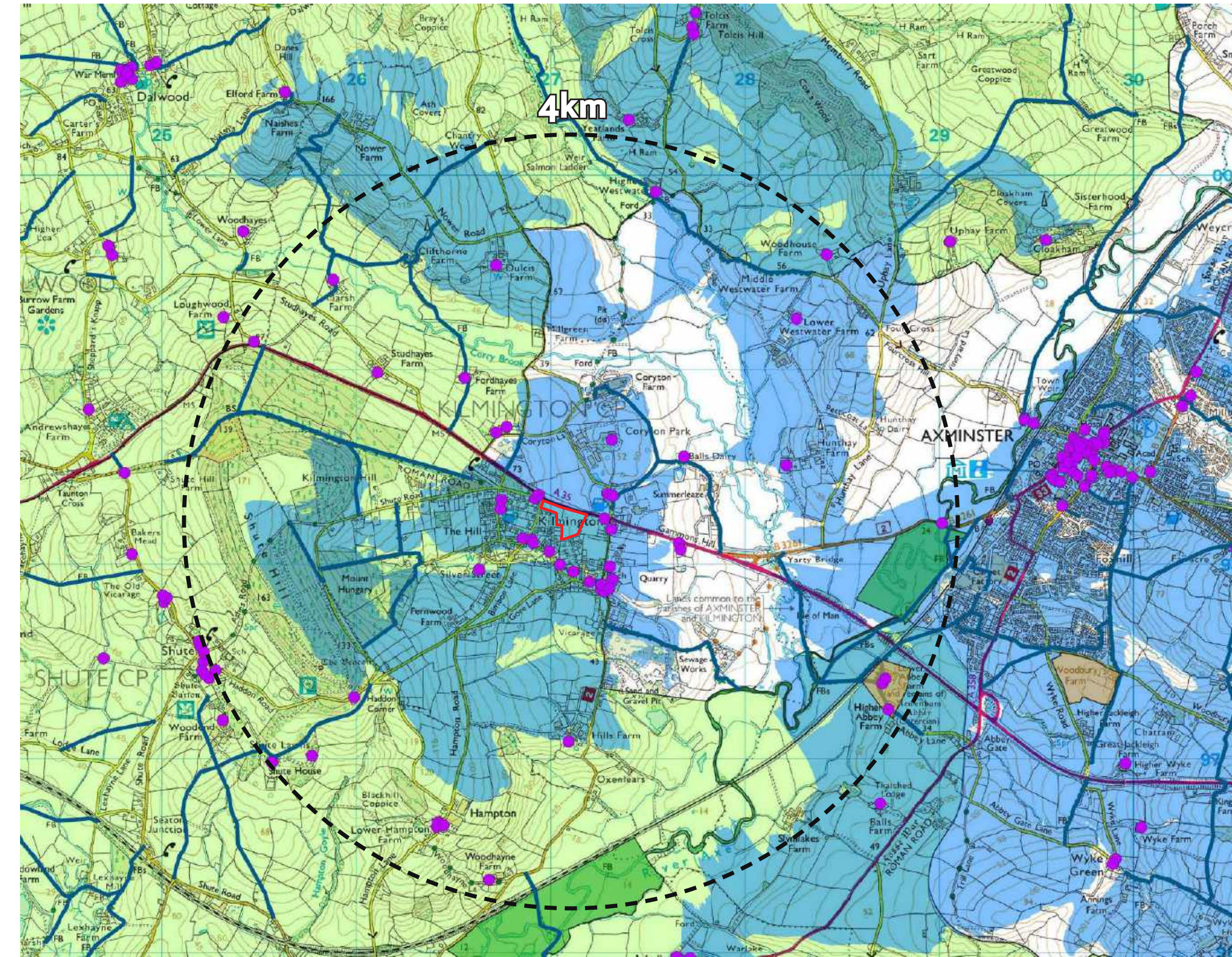
- Site Boundary
- Public Right of Way
- Sites of Special Scientific Interest
- Listed Buildings
- East Devon Area of Outstanding Natural Beauty

The desk study has identified several listed buildings within the study area that have potential intervisibility with the site. The zone of theoretical visibility and on-site appraisal work will take these into account when selecting viewpoints and help demonstrate potential impacts.

The site is located on the edge of the East Devon Area of Outstanding Natural Beauty. The AONB covers 103 square miles and covers approximately 32% of East Devon District. It is one of five AONBs that fall within Devon, abutting the Blackdown Hills AONB to the north and Dorset AONB to the east. With the exception of Budleigh Salterton, the AONB skirts the major settlements in the area and is characterised by small villages and hamlets at the coast and along its valleys.



## Zone of Theoretical Visibility (ZTV)

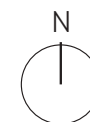


- Site Boundary
- Zone of Theoretical Visibility
- Viewshed
- Public Right of Way
- Sites of Special Scientific Interest
- Listed Buildings
- East Devon Area of Outstanding Natural Beauty

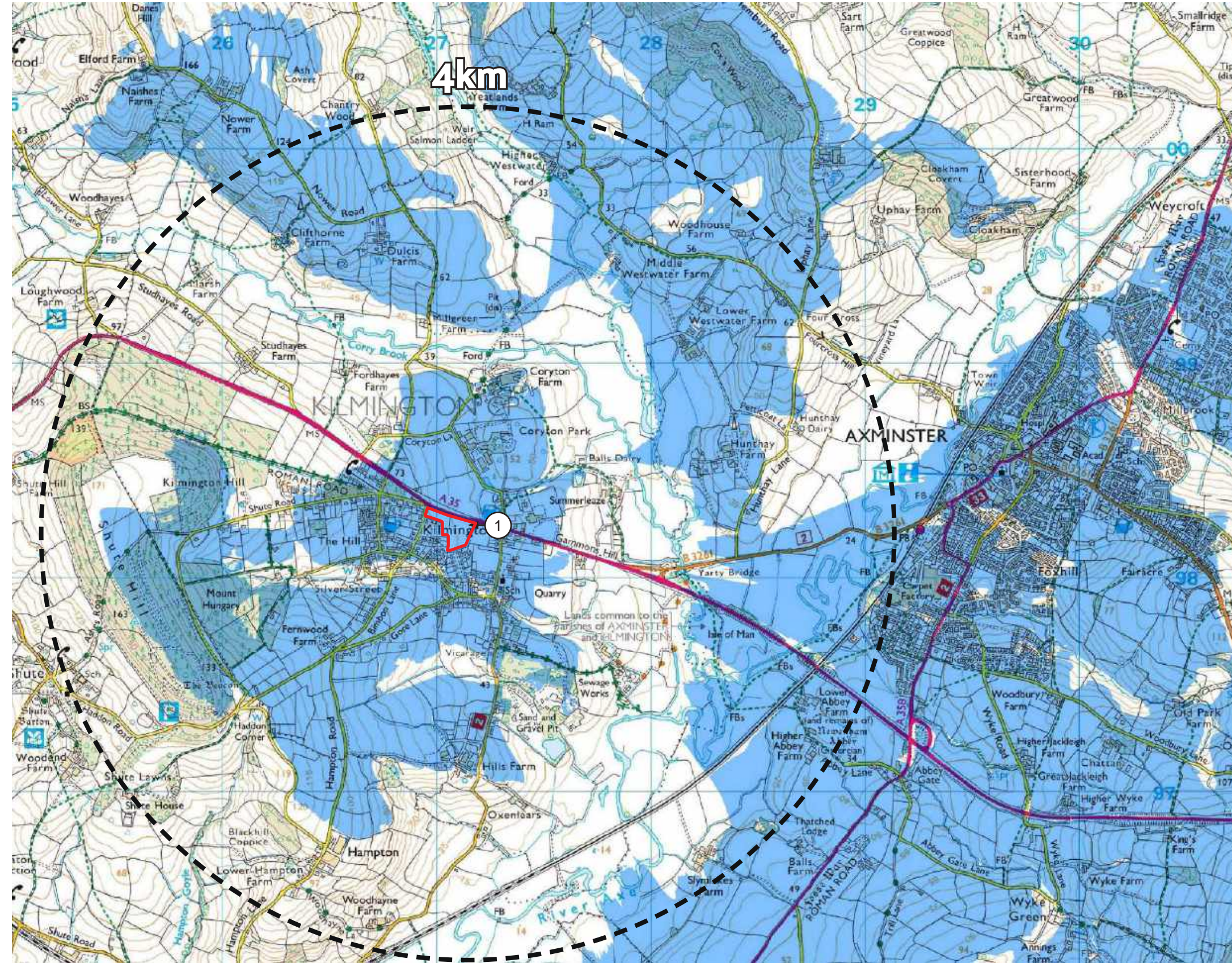
The approximate zone of theoretical visibility (ZTV) was calculated within the study area using GIS software and LiDAR digital terrain mapping data, based on the roof height of a 2 storey building. The Site may not be visible from all locations of potential visibility due to intervening built form or vegetation or the absence of publicly accessible viewpoints.

The ZTV is shown on the figure opposite with areas of potential inter-visibility shaded in blue. This shows that potential visibility covers a broad range of the study area when only taking into account the topography. A number of viewpoint locations were identified within the ZTV and study area to represent key visual receptors.

There were a number of viewpoints identified as part of the desk-based study within the ZTV that were found to have no intervisibility with the site due to built form or vegetation during on-site appraisal work. These have still been represented in the viewpoints to demonstrate the site in its context.



# Viewpoint 1



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

Distance:	0.12km	Project Number:	21121
Grid Reference:	ST 27354 98222	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 1



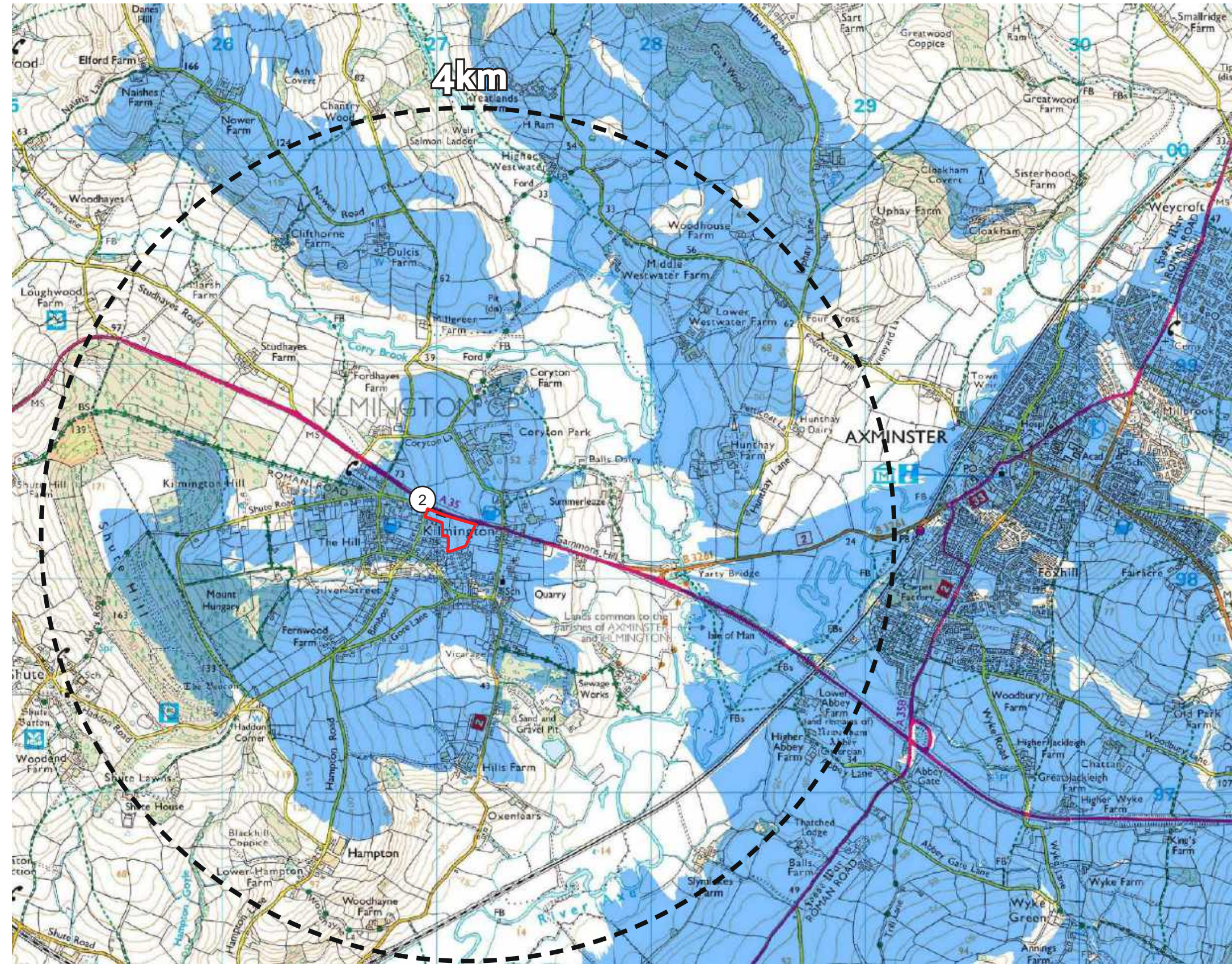
Viewpoint 1 Taken opposite the junction with The Green on the A35 0.12km east of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.

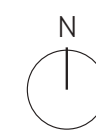


## Viewpoint 2



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

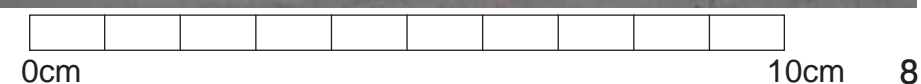
Distance:	0.04km	Project Number:	21121
Grid Reference:	ST 27354 98222	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilminster
		Figure:	Viewpoint 2



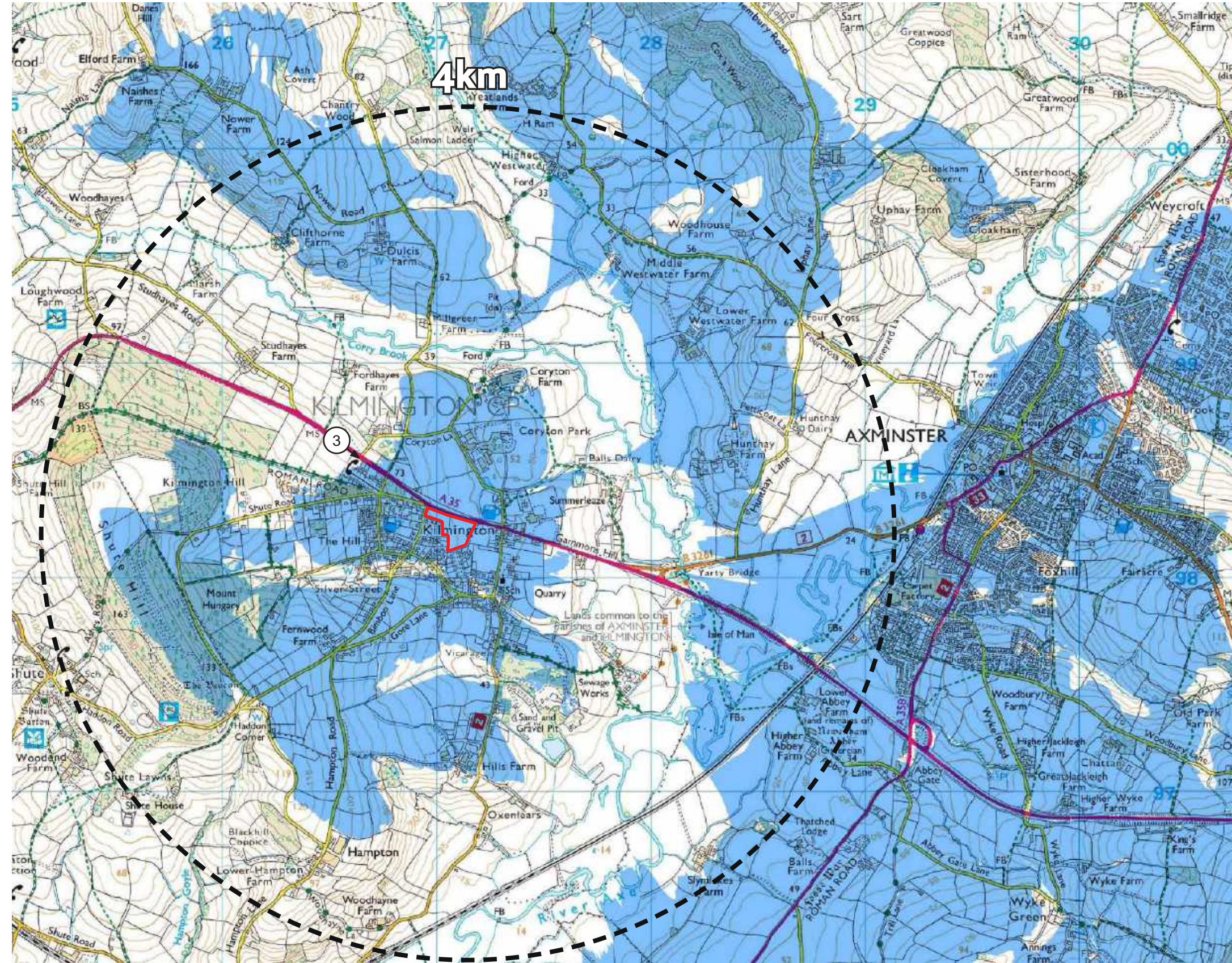
Viewpoint 2 taken on Shute Road in front of the war memorial 0.04km north east of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.



### Viewpoint 3



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

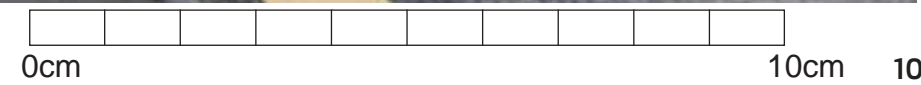
Distance:	0.23km	Project Number:	21121
Grid Reference:	ST 27293 98031	Photograph Date:	05/01/2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 3



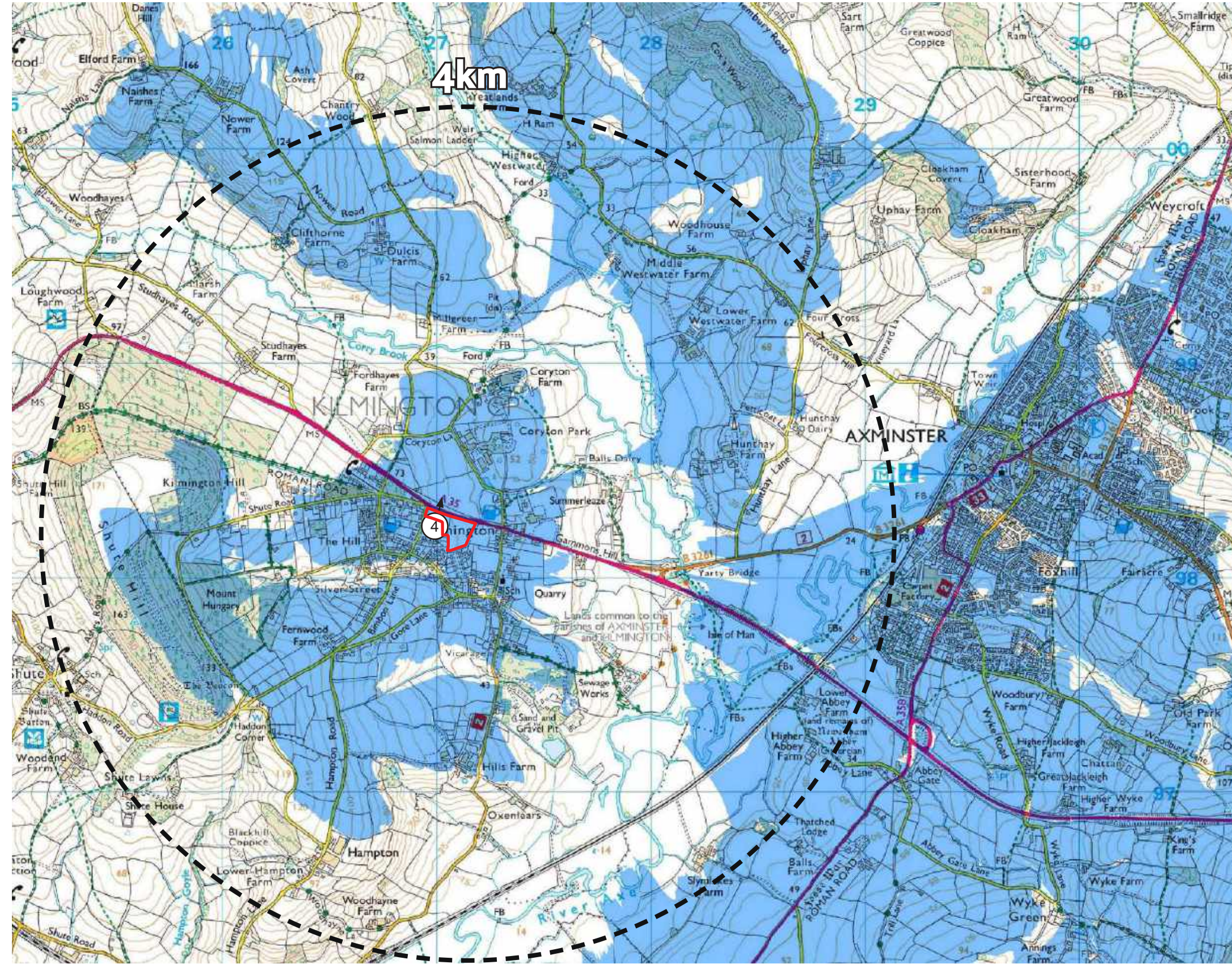
Viewpoint 3 taken on the A35 approximately 0.23km north west of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.

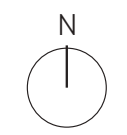


# Viewpoint 4



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

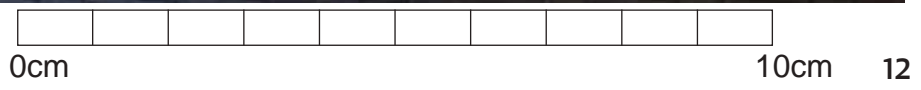
Distance:	0.03km	Project Number:	21121
Grid Reference:	ST 26970 98269	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 4



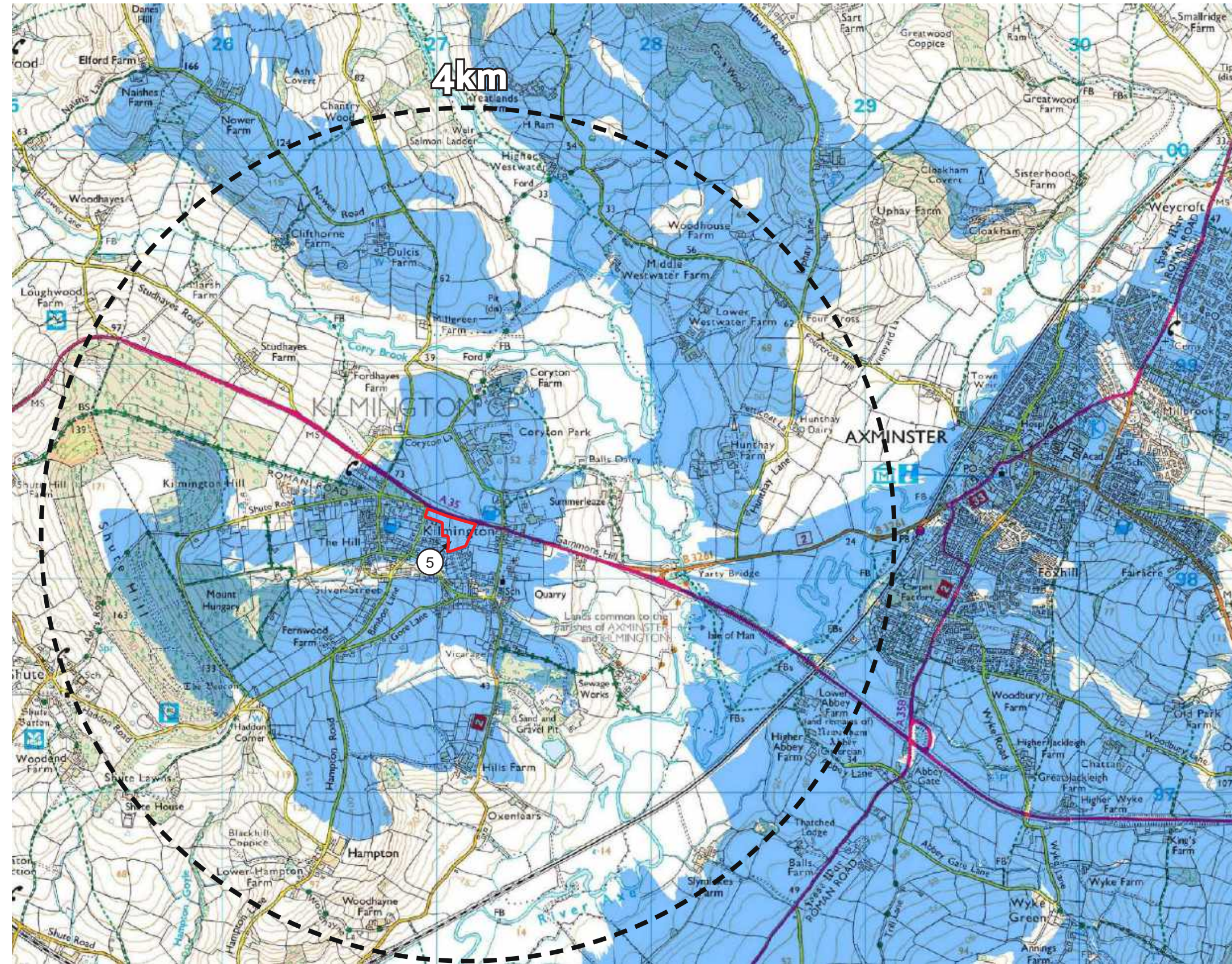
Viewpoint 4 taken in Dares Field 0.04km south of the Site

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.

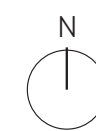


# Viewpoint 5



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

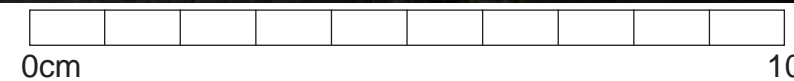
Distance:	0.1km	Project Number:	21121
Grid Reference:	ST 26966 98071	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 5



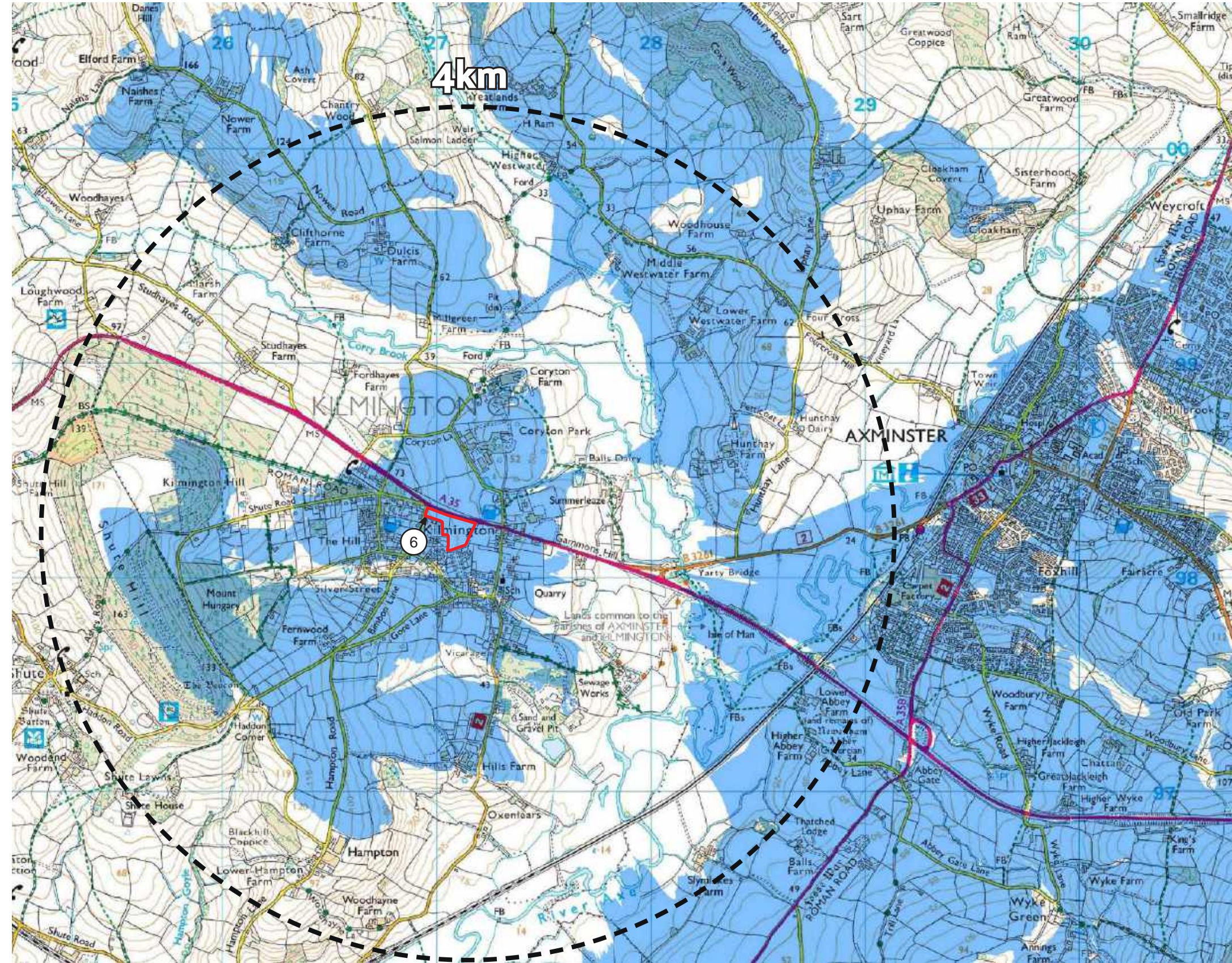
Viewpoint 5 taken on Whitehayes Close 0.1km south west of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.



# Viewpoint 6



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

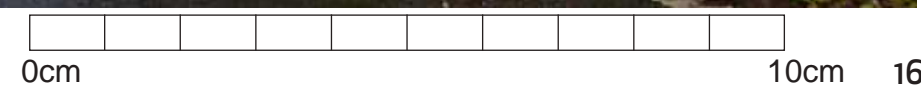
Distance:	0.08km	Project Number:	21121
Grid Reference:	ST 26937 98247	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 6



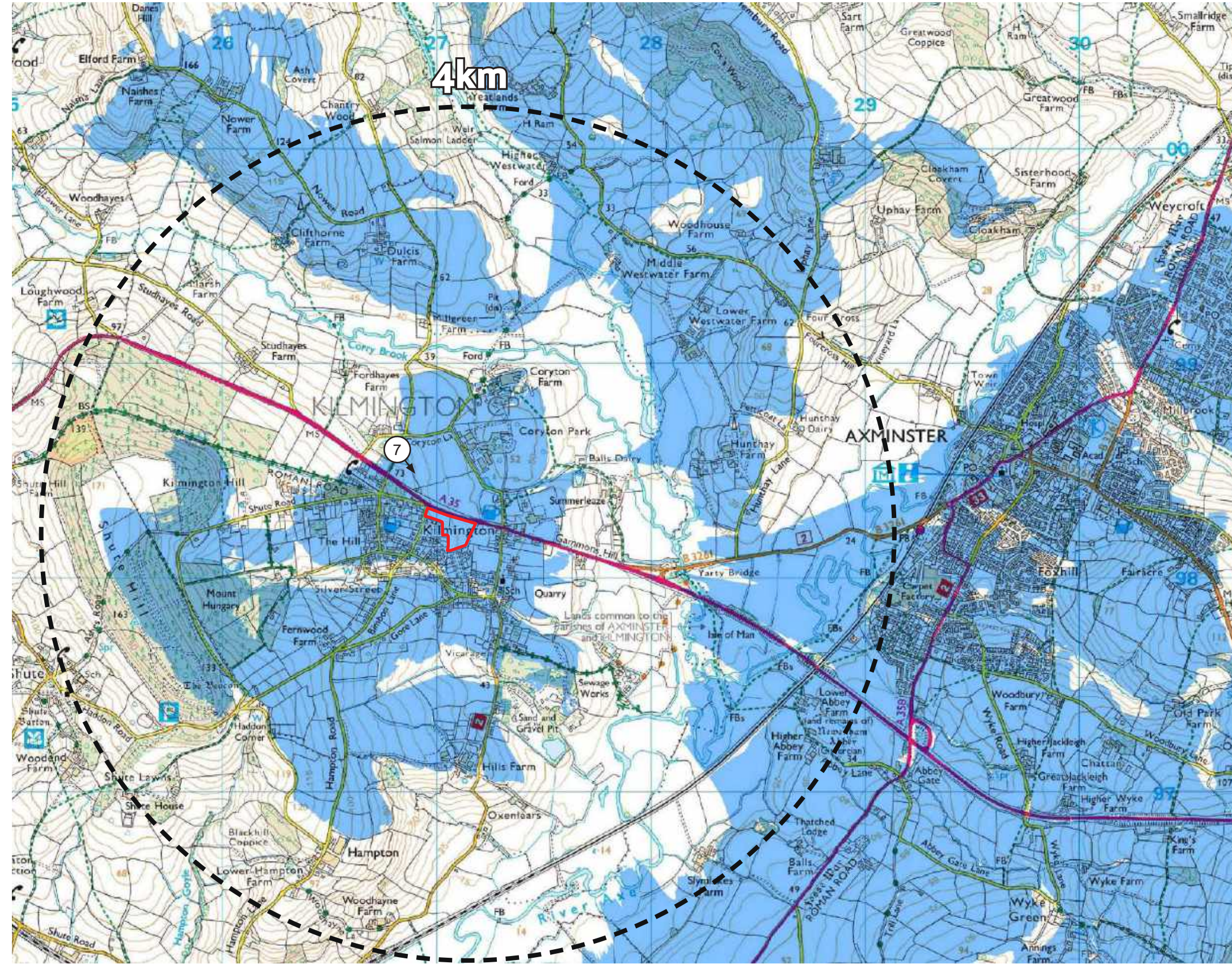
Viewpoint 6 taken on George Lane opposite to The Orchard road junction approximately 0.08km south of the site entrance.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.

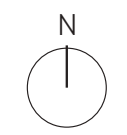


# Viewpoint 7



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

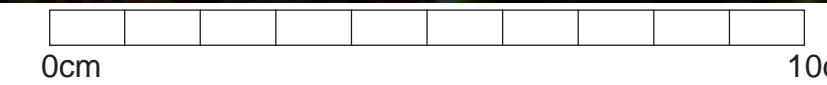
Distance:	0.25km	Project Number:	21121
Grid Reference:	ST 26791 98514	Photograph Date:	05/01/2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilminster
		Figure:	Viewpoint 7



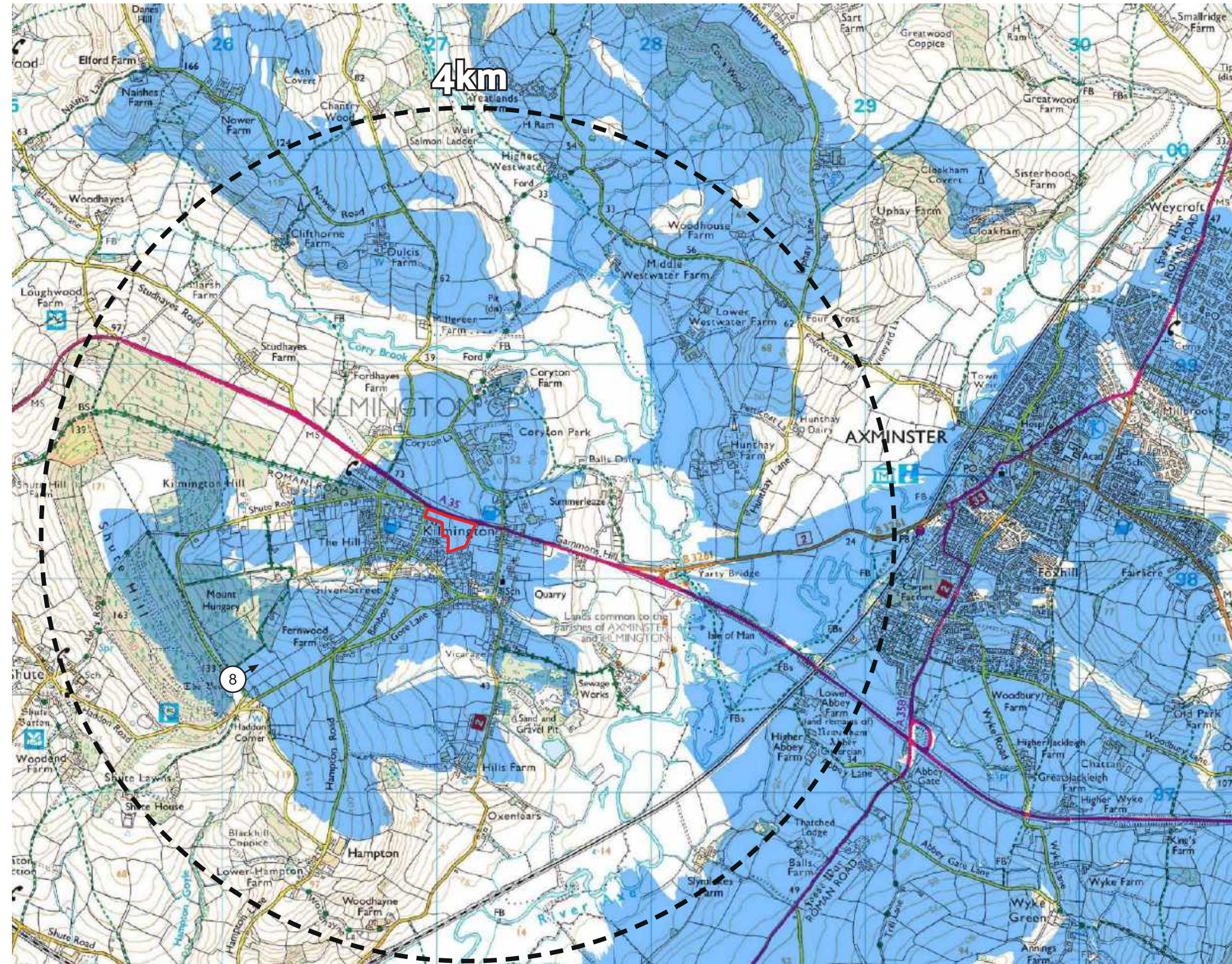
Viewpoint 7 taken on PRoW number 26 approximately 0.25km north west of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.

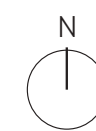


# Viewpoint 8



- Site Location
- X Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

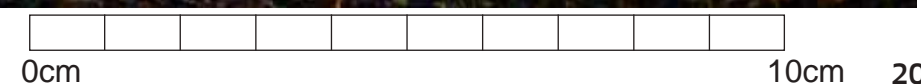
Distance:	1.16km	Project Number:	21121
Grid Reference:	ST 27354 98222	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 8



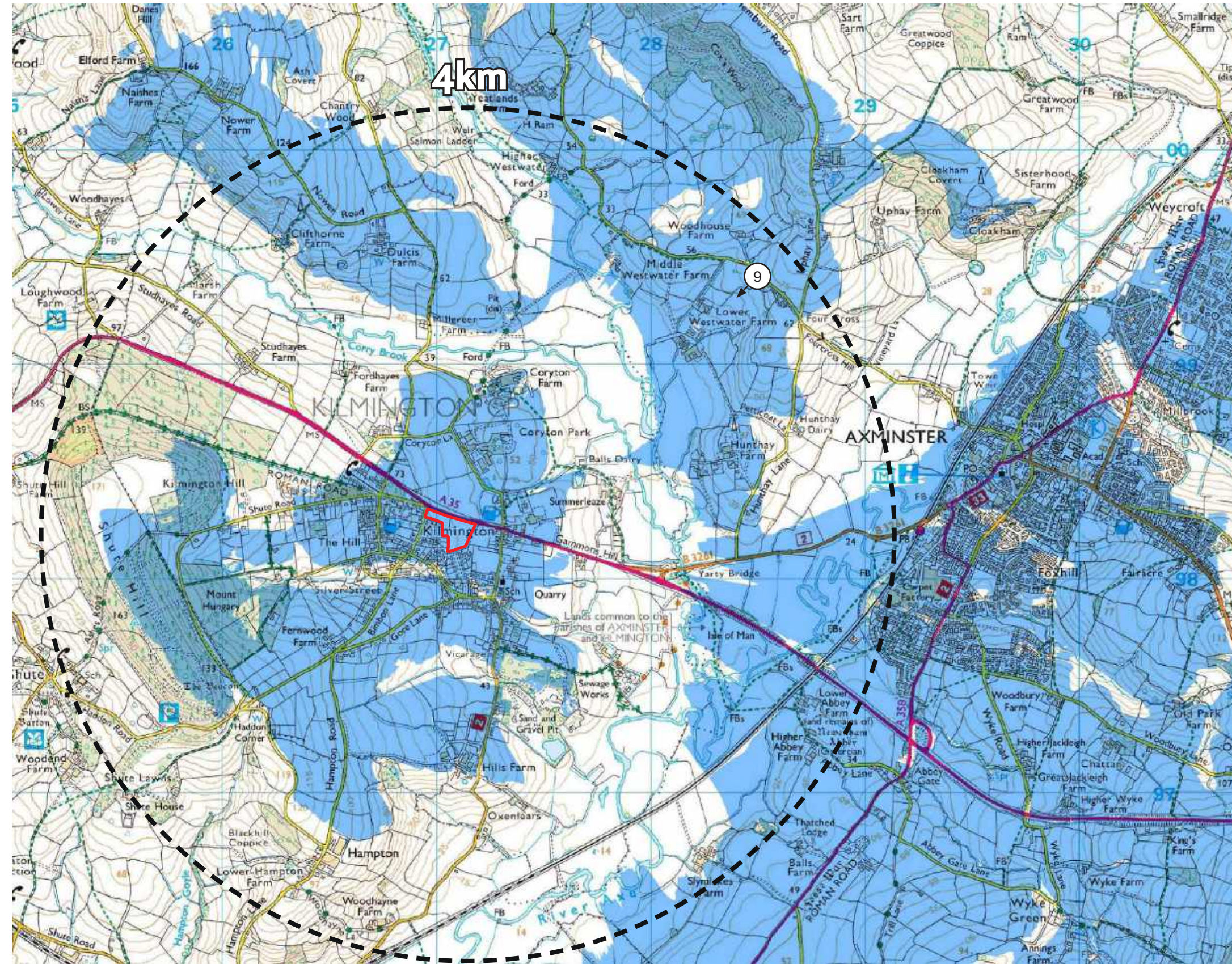
Viewpoint 8 taken 1.16km south west of the site on the vehicle access connecting PRoW number 17 and PRoW Shute Footpath 5.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.



# Viewpoint 9



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

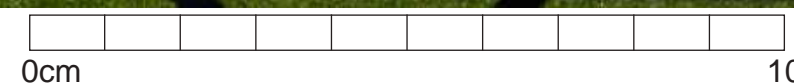
Distance:	1.7km	Project Number:	21121
Grid Reference:	ST 28535 99394	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 9



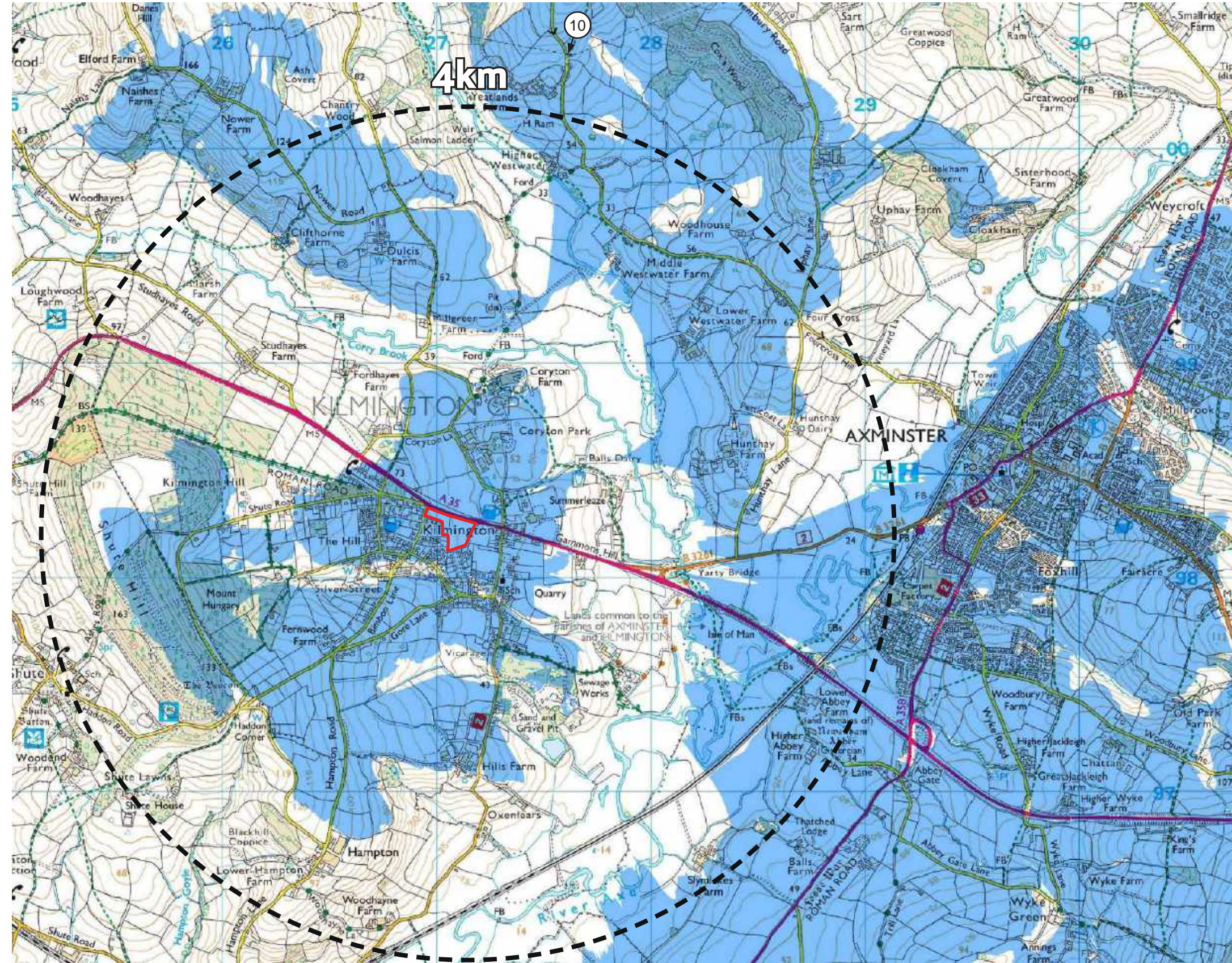
Viewpoint 9 taken on the PRow Axminster Footpath 42 approximately 1.7km north east of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.

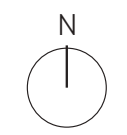


# Viewpoint 10



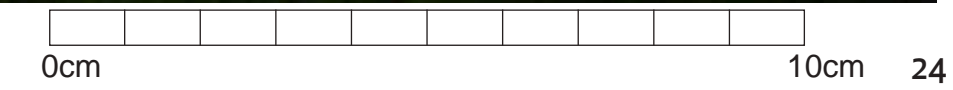
- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

Distance:	2.34km	Project Number:	21121
Grid Reference:	ST 27612 00430	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 10

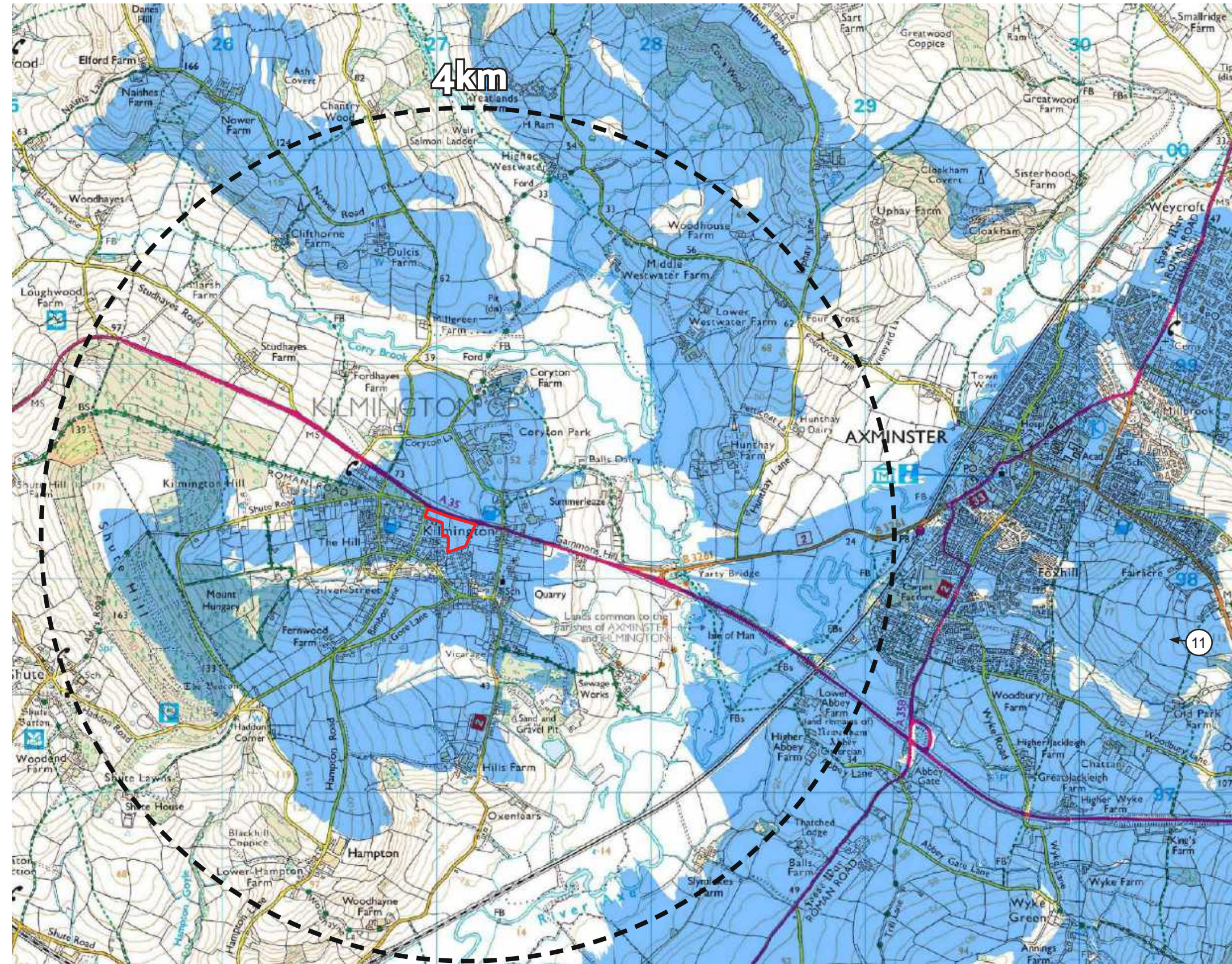


Viewpoint 10 taken on PRoW Axminster Footpath 56 approximately 2.34km north of the site.

Original image size 390 x 260mm  
 Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.

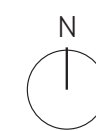


# Viewpoint 11



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

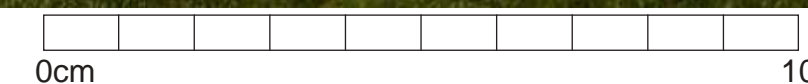
Distance:	3.4km	Project Number:	21121
Grid Reference:	ST 30647 97916	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilminster
		Figure:	Viewpoint 11



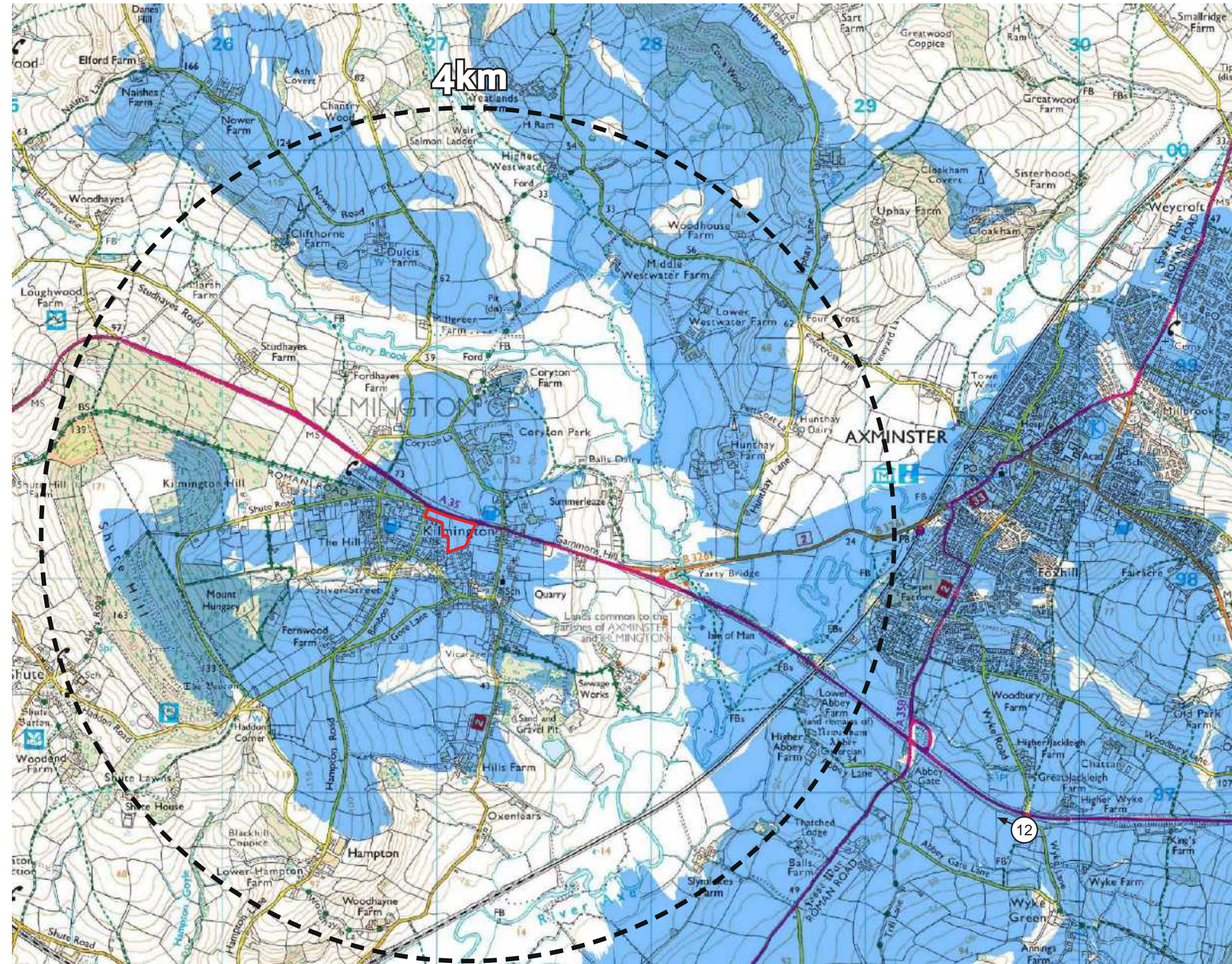
Viewpoint 11 taken on PRow Axminster Footpath 76 approximately 3.4km east of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.



# Viewpoint 12



- Site Location
- Photo viewpoint
- Zone of Theoretical Visibility
- Viewshed

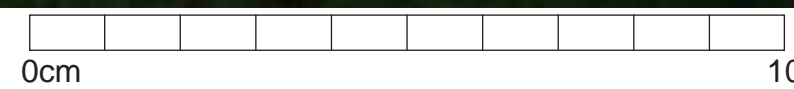
Distance:	2.9km	Project Number:	21121
Grid Reference:	ST 29767 96845	Photograph Date:	09 / 01 / 2023
Page Size:	420 x 297mm	Issue Status:	Preliminary
		Project:	Kilmington
		Figure:	Viewpoint 12



Viewpoint 12 taken on PRoW Axminster Footpath 31 approximately 2.9km east of the site.

Original image size 390 x 260mm

Note: To view this image digitally, calibrate this scale bar on screen for a correct scale representation and view the photograph at a comfortable arms length.



# Site Accessibility and Access Appraisal

Project name	George Lane, Kilminster		
Design note title	Site Accessibility and Access Appraisal		
Document reference	16610-HYD-XX-XX-RP-TP-2001		
Author	Annie Chapelton / Neil Buckman		
Revision	P01		
Date	10 January 2023	Approved	✓

## 1. Existing Site Context

### 1.1 Overview

- 1.1.1 This Site Accessibility and Access Appraisal provides a high-level review of existing pedestrian, cycle, public transport and vehicular accessibility to serve the proposed development, which seeks to develop land at George Lane in Kilminster. The development proposals comprise of a residential development and associated parking, with a proposed new access.
- 1.1.2 The development site is located in the village of Kilminster, near Axminster in East Devon. The site is bounded by the A35 to the north, residential properties to the south, agricultural land/ pub to the east, and George Lane to the west. The indicative redline boundary and site location are shown in Figure 1.1.



Figure 1.1: Site Location Context

## 1.2 Existing Site Use

- 1.2.1 The existing site is undeveloped agricultural land that benefits from an existing agricultural gated access point onto George Lane.

## 1.3 Surrounding Road Network

- 1.3.1 George Lane bounds the development site to the west and provides a link to the A35. Access to the development is proposed via George Lane which is subject to a 30mph speed limit and provides access to residential dwellings in the village of Kilmington. The carriageway varies in width, allowing for one-way vehicle movements for the majority, and benefiting from numerous passing place points allowing for two vehicles to pass. No footways or street lighting are present along the carriageway with the road being in a rural setting.
- 1.3.2 At the northern extent of George Lane, the carriageway forms a priority junction with Shute Road. Shute Road is subject to a 30mph speed limit and serves the western boundary of the village of Kilmington. Shute Road forms a junction with the A35 at its eastern extent, directly north of the site.
- 1.3.3 At the southern extent of George Lane, the carriageway forms a priority junction with The Street which serves many of the residential properties within the village. There are no footways or street lighting present along the carriageway which is not unusual considering the rural setting.
- 1.3.4 To the east of the site, the A35 provides access to the B3261 via an on-off slip road; the B3261 provides a route to and from Axminster, the closest town to the site. The B3261 is subject to national speed limit (60mph) and reduces to 30mph on approach to Axminster. The B3261 benefits from a shared footway/cycleway along the northern side of the carriageway.

## 1.4 Road Safety Records

- 1.4.1 Personal Injury Accident (PIA) data has been obtained from recorded road safety data published annually by the Department for Transport (DfT). The statistics provide PIA data reported in each local authority using the STATS19 accident form. The most recent five-year dataset has been reviewed, covering the period between January 1st 2017 and 31st December 2021 inclusive with the study area as shown in Figure 1.2.



Figure 1.2: PIA Study Area

- 1.4.2 The purpose of examining PIA data is to ascertain if there are elements of the highway examined that may be causal factors in PIA events. It is unlikely that a single incident at a particular location will be of sufficient evidential value to implicate highway design or condition as a causal factor, unless the particular highway issue is in some way extreme, so particular attention is paid to accident clusters.
- 1.4.3 Within the study area in the five-year period, seven PIAs were recorded of which six were recorded as slight in nature and one as serious. There were no fatal accidents recorded within the study area. The accidents recorded as slight in nature are summarised as follows:
- » **A35**
    - » Involved two vehicles and one casualty. Vehicle one was proceeding normally along the carriageway and the first point of impact was at the front of the car; the object that was hit was unknown. Vehicle two was not impacted in the collision.
    - » Involved two vehicles and one casualty. Vehicle one was parked in the carriageway and vehicle two was in the act of turning right and collided with the parked vehicle.
    - » Involved two vehicles and two casualties. Vehicle two was waiting to proceed normally but was held up and vehicle one was slowing down but collided with the rear of vehicle two.
    - » Involved two vehicles and three casualties. Vehicle one collided with the rear of vehicle two.
    - » Involved two vehicles and one casualty. Vehicle one collided with the rear of vehicle two.
    - » Involved three vehicles and three casualties. Vehicles two and three were waiting to proceed normally but held up and vehicle collided with the rear of the vehicle in front.

- 1.4.4 The accident recorded as serious in nature was located on Shute Road and involved one vehicle and one pedestrian casualty. The vehicle was proceeding normally along the carriageway and collided with a pedestrian who was walking in the carriageway with their back to the traffic.
- 1.4.5 There were no cyclists involved in the recorded PIAs in the study area within the most recent five-year period, nor are there clusters of four or more accidents. Although all incidents are regrettable, the PIAs that occurred do not indicate a specific pattern or issue with the geometry of the highway that would be exacerbated by the proposals.

## 2. Accessibility and Connectivity

### 2.1 Pedestrian Connectivity

- 2.1.1 The site benefits from a footway on the A35, connecting to the shared footway/cycleway routing along the B3261 into Axminster. There are crossing points with dropped kerbs and tactile paving provided and junctions. The journey from the site into Axminster is approximately a 30 min walk, where a wider range of facilities are provided.
- 2.1.2 Within the village of Kilmington, pedestrians typically share the carriageway with motor vehicles and other users, as is commonplace for a site situated in a rural location, and the absence of any pedestrian/vehicle collision history suggests that this does create a safety concern
- 1.1.1 This situation is not unusual for rural settlements such as this. Manual for Streets 2 notes that villages are the most numerous type of settlement in the UK and, at 2.7.4, that:
- 2.1.3 'Many villages have existed for centuries and are likely to have an historic centre with a street pattern that is unlikely to conform to a standardised highway layout but which is desirable to conserve in the interests in (sic) maintaining the character of the area. Carriageways are often narrow, and footways may be narrow or non-existent and as a result speeds can be low.
- 2.1.4 Strava ([www.Strava.com](http://www.Strava.com)) heatmaps were used to review frequently used routes for walking/running. While this data only captures the activity of those who choose to record and upload it, it is a useful tool to demonstrate the attitude of predominantly local users to a particular route. The extract at Figure 2.1 shows that George Lane is well used by pedestrians, suggesting that there is no overriding safety related anxiety arising from the layout.



Figure 2.1: Strava Heatmap (Pedestrian)

## 2.2 Public Rights of Way

2.2.1 The existing Public Right of Way (PRoW) network in the vicinity of the development site has been reviewed, which includes footpaths, bridleways and by-ways. Figure 2.2 indicates the locations of the nearby existing routes, which forms part of Devon County Council's PRoW network. There are no PRoWs which route through the site or that connect to the site.



Figure 2.2: Existing PRoW Network

## 2.3 Cycle Connectivity

2.3.1 The existing cycling facilities within close proximity to the site are shown in Figure 2.3.



Figure 2.3: Cycle Routes within Close Proximity to Site

- 2.3.2 The site benefits from an off-road cycleway along the B3261 which routes into Axminster; this route forms part of National Cycle Network (NCN) Route 2. Route 2 is a long-distance cycle route which, when complete, will link Dover in Kent with St. Austell in Cornwall via the south coast of England.
- 2.3.3 NCN 2 can be accessed from the site via the B3261 which takes approximately a 7-minute cycle which provides access to the east and north. To the south, NCN Route 2 can be accessed via Whitford Road, approximately a 3-minute cycle from the site; to the south the route provides access to the coastal town and villages.
- 2.3.4 The Strava heatmap extract at Figure 2.4 shows that the surrounding roads are well used by cyclists, and therefore have potential to form part of a journey by bike.

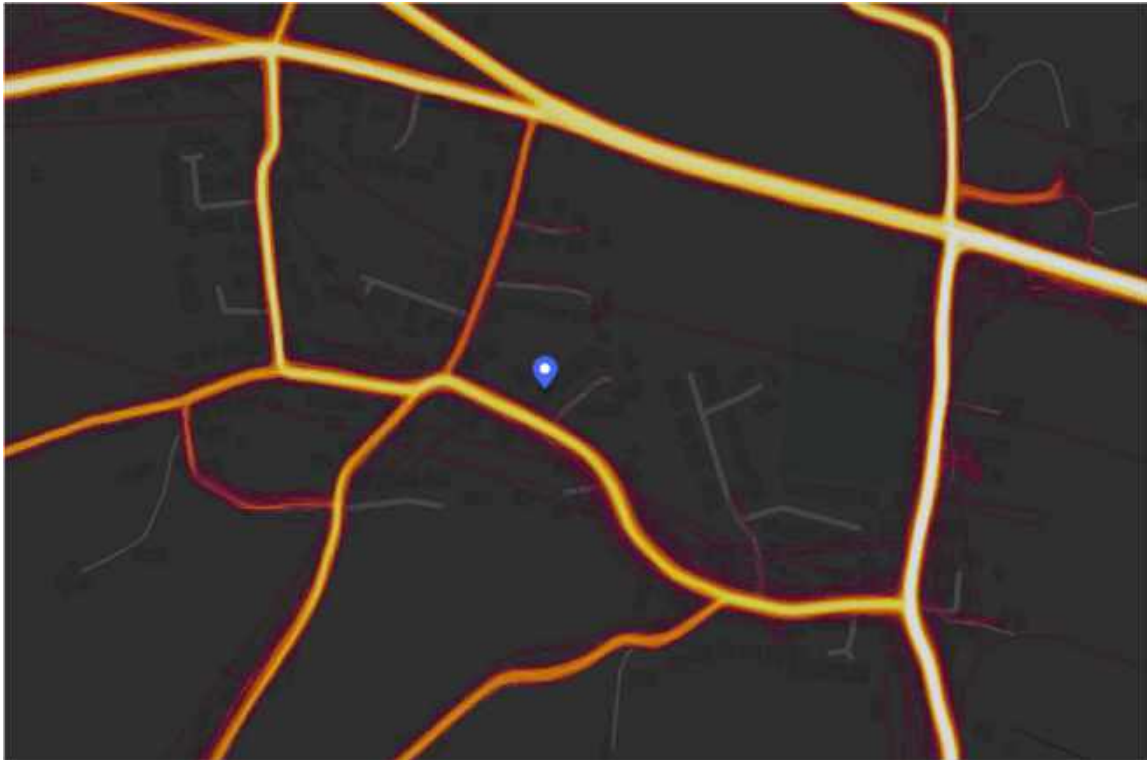


Figure 2.4: Strava Heatmap (Cycle)

## 2.4 Public Transport

### Bus

- 2.4.1 The closest bus stops are located on the A35 (Old Inn and The Hill stops), to the east and west of the site approximately 180-260m from the site, equating to approximately a 3-minute walk from the site. The services these stops provide however are limited with only one service – service 44A. Service 44A routes from Exeter to Axminster and Axminster to Exeter, providing a service every two hours Monday to Saturday; no service is provided from these stops on Sundays.

### Train

- 2.4.2 Axminster Rail Station is located approximately 2.64km from the site, which equates to a 33-minute walk or an 8-minute cycle. Additionally, bus service 44A routes to and from the station which takes approximately 10 minutes from the site, including the walk to and from the stops.
- 2.4.3 Axminster Rail Station provides hourly services to Exeter and London Waterloo.

## 2.5 Local Facilities and Services

- 2.5.1 Manual for Streets (paragraph 4.4.1) states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes (up to 800m).
- 2.5.2 Paragraph 2.2 of TA91/05 Provision for Non-Motorised Users states that 2 miles is 'a distance that could easily be walked by the majority of people'. Paragraph 2.3 also continues by stating that 'Walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles' (3.2km).

- 2.5.3 In relation to shorter trips in particular, the CIHT publication Planning for Walking (section 2.1) states that across Britain about '80% of journeys shorter than 1 mile (1.6km) are made wholly on foot'.
- 2.5.4 Although now superseded by CD143, LTN 91/05 does provide useful guidance on likely walking and cycling distances and states (paragraph 2.11) that 'Cycling is used for accessing a variety of different destinations, including educational facilities shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances.' Paragraph 2.9 also indicates that 5 miles (8km) is a distance 'that could easily be cycled by the majority of people'.
- 2.5.5 This is consistent with the statement in LTN1/20 Cycle Infrastructure Design (in paragraph 2.2.2) that 'Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people'. Table 2.1 provides a summary of the local facilities and services within the vicinity of the site.

Table 2.1: Key Local Facilities and Services

Destination:	Distance (m)	Walking Time (min) <sup>1</sup>	Cycling Time (min) <sup>2</sup>
<b>Local public transport</b>			
Old Inn Bus Stops	190	2	1
The Hill Bus Stops	260	3	1
Axminster Rail Station	2640	33	8
<b>Education</b>			
Kilmington primary School	720	9	2
Axe Valley Academy (Secondary School)	3000	38	9
<b>Health</b>			
Morton's Pharmacy	2900	36	9
Axminster Hospital	3000	38	9
<b>Local Shops/Supermarkets</b>			
Londis	364	5	1
Millers Farm Shop	435	5	1
Tesco Superstore	2700	34	8

<sup>1</sup>Based on walking speed of 80m/minute, taken from 'Providing for Journeys on Foot', IHT

<sup>2</sup>Based on cycling speed of 320m/minute (19.2kph), taken from Cycling England Design Guide

- 2.5.6 Based on a review of the existing services and facilities the site is well served within acceptable walking and cycling distances. These are accessible via a mix of pedestrian footways and cycleways, and on road cycling.
- 2.5.7 The close proximity of these uses will encourage walking and cycling. This will reduce the reliance on the private car and encourage sustainable, active modes of transport.

### 3. Proposed Development

#### 3.1 Overview

- 3.1.1 The development site is undeveloped agricultural land, which is proposed for a residential development. The development will include a new access, either located on George Lane or the A35, and associated residential parking on-site.

#### 3.2 Vehicular Access Strategy

- 3.2.1 There are currently two access options for the development; Option 1 is to be accessed off George Lane via a simple priority T-junction, and Option 2 is to be accessed off the A35 via a priority junction with a ghost-island right turn lane arrangement. The access options are discussed below.

##### *George Lane*

- 3.2.2 The preliminary general arrangement design of this junction is included as Drawing Number 16610-HYD-XX-XX-DR-TP-0301 Po1, attached as Appendix A. The geometry has been designed with corner radii of 6 metres, a 5.5-metre-wide access road width and a footway of 2 metres in width which would continue into site.
- 3.2.3 Visibility splays have been provided in accordance with Manual for Street (MfS) and Manual for Streets 2 (MfS2). Manual for Streets guidance states that visibility splays of 2.4m x 43m should be achieved for roads with a 30mph design speed.
- 3.2.4 MfS2 states that:

*"MfS2 builds on the guidance contained in MfS1, exploring in greater detail how and where its key principles can be applied to busier streets and non-trunk roads, thus helping to fill the perceived gap in design guidance between MfS1 and the Design Manual for Roads and Bridges (DMRB). DMRB is the design standard for Trunk Roads and Motorways in England, Scotland, Wales and Northern Ireland. The strict application of DMRB to non-trunk routes is rarely appropriate for highway design in built up areas, regardless of traffic volume."*

- 3.2.5 Paragraph 1.3.6 of MfS2 states that:

*"It is only where actual speeds are above 40mph for significant periods of the day that DMRB parameters for SSD are recommended. Where speeds are lower, MfS parameters are recommended. Where there may be some doubt as to which guidance to adopt, actual speed measurements should be undertaken to determine which is most appropriate"*

- 3.2.6 To the north, a visibility splay of 2.4m x 40.7m can be achieved to where George Lane forms a junction with Shute Road; therefore, the northern splay is considered appropriate. To the south, a 2.4m x 43m visibility splay has been provided, in accordance with MfS and MfS2 with a 1m offset from the edge of carriageway; additionally, the access benefits from greater visibility to the south achieving 2.4m x 70m. These visibility splays are shown on Drawing Number 16610-HYD-XX-XX-DR-TP-0301 Po1.
- 3.2.7 It is also noted that the development to the south (Ref 14/1905/MFUL) was permitted with achievable visibility splays of 2.4m x 39m, lower than can be achieved for this site.

- 3.2.8 Therefore, it is considered that the location of the proposed vehicle access onto George Lane poses no safety issues as suitable visibility can be achieved, in line with guidance. Based on this information, it is considered that there are no reasons for objecting a new access onto George Lane due to proximity to its junction with Shute Road / A35.
- 3.2.9 Officers at Devon County Council were consulted on the potential for a new access and replied;

*We do not have any major concerns with the proposed access from George Lane, although we note that there are existing vehicle passing places on this narrow road and would not wish for a new access to impede these in any way. Also the slight angle of the proposed access to the existing George Lane could be altered to make the road a little wider towards the existing junction with Shute Road.*

- 3.2.10 Based on this response and the initial appraisal, it is considered that an acceptable junction can be achieved onto George Lane.

#### A35

- 3.2.11 Additionally, an access on the A35 has been considered; Sketch Drawing 16610-HYD-XX-XX-SK-TP-0103 (Appendix B) demonstrates that appropriate visibility splays can be achieved. Visibility splays have been provided in accordance with DMRB for a design speed of 50mph.
- 3.2.12 Paragraph 2.21 of DMRB Volume 6 Section 2 Part 7 states that:

*"Normally, an "X" distance of 4.5m shall be provided for a direct access where use in the design year is forecast not to exceed 500 AADT. The choice of setback distance is related to the forecast traffic using the access. For lightly used accesses, for example those serving a single dwelling or a small cul-de-sac of a half a dozen dwellings, the set back "X" may be reduced to 2.4m. The 2.4m set back relates to normally only one vehicle wishing to join the trunk road at one time. The 4.5m covers the situation where two light vehicles may want to accept the same gap in the trunk road traffic."*

- 3.2.13 The sketch drawing demonstrates that 2.4m x 160m visibility splays and 4.5m x 160m visibility splays can be achieved to both the north west and to the east. Therefore, suitable visibility can be provided from the A35 in line with DMRB guidance.
- 3.2.14 Feedback has been received from National Highways on the potential for providing an access directly from the A35. In summary, this would require a Departure from Standards to allow the access and, if permitted, would require ghost-island/turning lane arrangement, potentially with widening into the site.

### 3.3 Pedestrian and Cycle Access

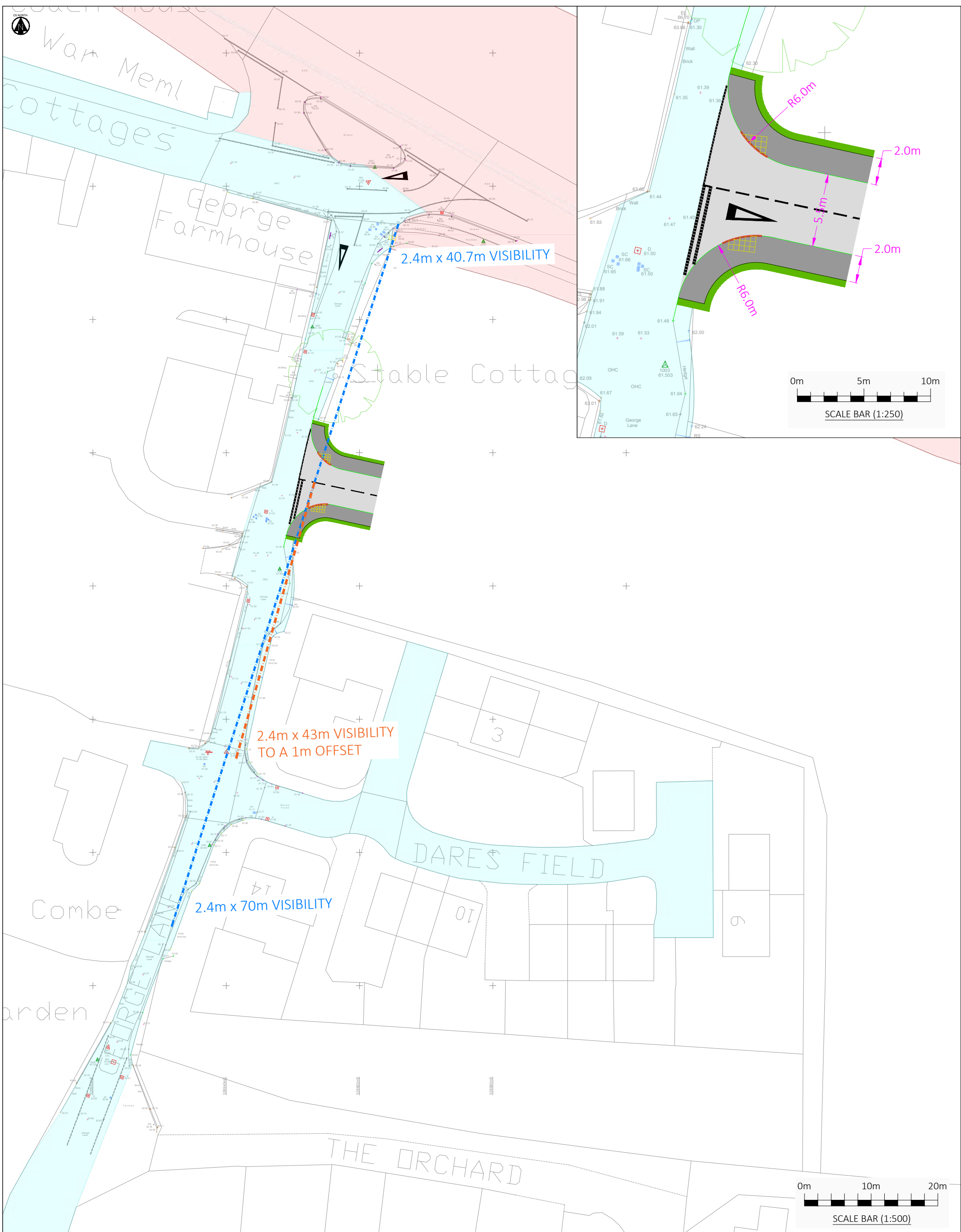
- 3.3.1 The development proposals will connect to existing local infrastructure where possible to promote the use of walking and cycling trips.

## 4. Summary and Conclusions

- 4.1.1 This Transport Appraisal concludes that the site is accessible based on a review of the existing services and facilities within acceptable walking and cycling distances via a mix of existing footways and cycleways, and on road cycling. In addition, the site benefits from public transport facilities/services located within close proximity to the site.

- 4.1.2 In terms of vehicular access, there are two potential access options; Option 1 is to be accessed off George Lane via a simple priority T-junction, and Option 2 is to be accessed of the A35 via a priority junction with a ghost-island right turn lane arrangement.
- 4.1.3 It is considered that the location of the proposed vehicle access onto George Lane is appropriate as suitable visibility can be achieved in line with guidance. Based on this information, it is considered that there are no reasons for objecting a new access onto George Lane due to proximity to its junction with Shute Road / A35.
- 4.1.4 Consideration could also be given to the provision of an access onto the A35, albeit this would require further design assessment to establish its extent and scale, informing its acceptability to National Highways.

# Appendix A George Lane Access Design



KEY PLAN

	PUBLIC HIGHWAY OWNERSHIP (INTERPRETED FROM DEVON CC DATA)
	PUBLIC HIGHWAY OWNERSHIP (INTERPRETED FROM HIGHWAYS ENGLAND DATA)

NOTES

REVISIONS

PO1	16/11/2021	First Issue.	AC	NB	JM
Rev	Date	Description	By	Ckd	App

**Hydrock**

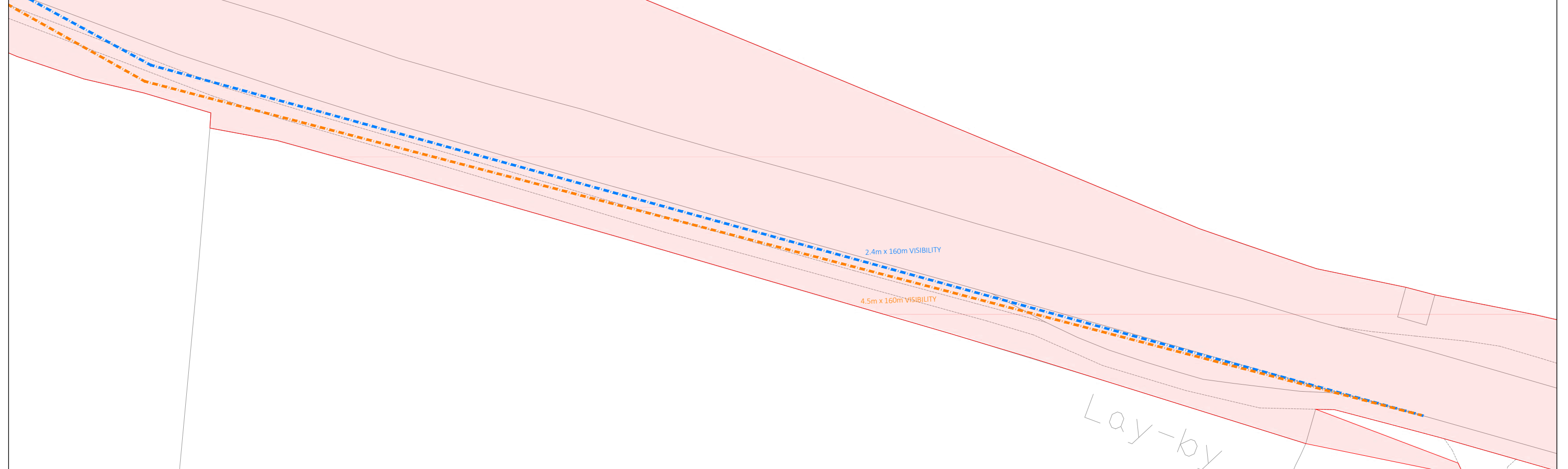
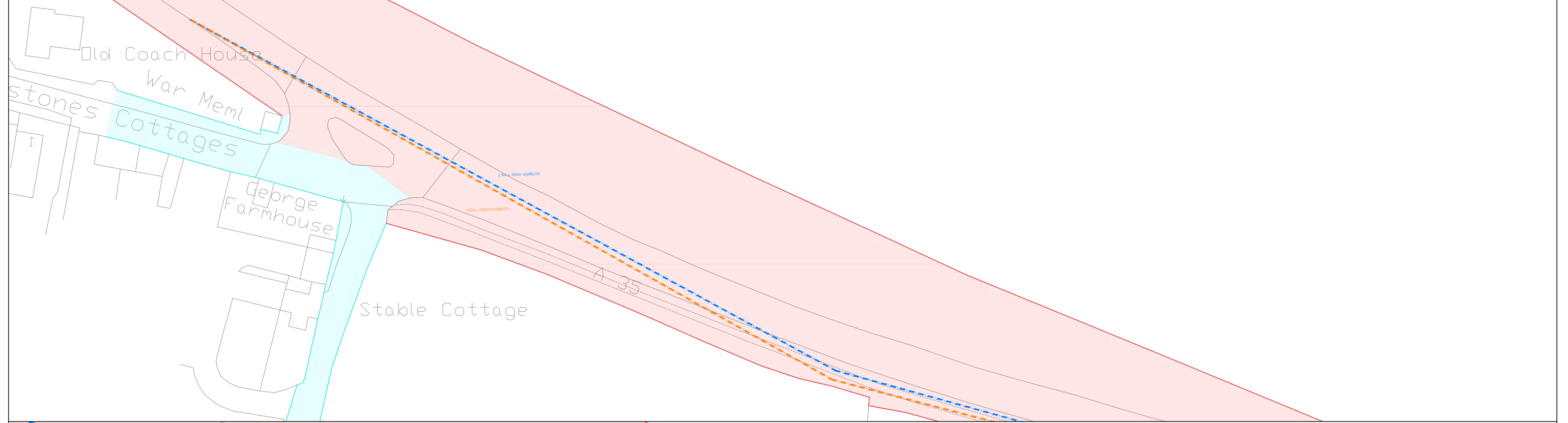
CLIENT  
PLACE LAND LTD.

PROJECT  
GEORGE LANE,  
KILMINGTON

TITLE  
VISIBILITY SPLAYS -  
GEORGE LANE ACCESS

HYDROCK PROJECT NO. 16610-TGEN	SCALE @ A3 SEE SCALE BARS
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 16610-HYD-XX-XX-DR-TP-0301	REVISION P01

## Appendix B A35 Access Visibility Splays



KEY PLAN	
	PUBLIC HIGHWAY OWNERSHIP (INTERPRETED FROM DEVON CC DATA)
	PUBLIC HIGHWAY OWNERSHIP (INTERPRETED FROM HIGHWAYS ENGLAND DATA)

NOTES

NOTES (CONTINUED)

REVISIONS (CONTINUED)

Rev	Date	Description	By	Ckd	App
P02	22/10/2020	Second Issue.	AC	NB	NB
P01	04/08/2020	First Issue.	AC	NB	NB

**Hydrock**

CLIENT  
PLACE LAND LTD.

PROJECT  
GEORGE LANE,  
KILMINGTON

TITLE	
VISIBILITY SPLAYS REQUIRED FOR 50MPH ROAD (DMRB)- A35 ACCESS	
HYDROCK PROJECT NO. 16610-TGEN	SCALE @ A3 NOT TO SCALE
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 16610-HYD-XX-XX-SK-TP-0103	REVISION P02

# Technical design note

Project name	Land East of George Lane, Kilmington		
Design note title	Drainage Strategy		
Document reference	27120-HYD-XX-XX-TN-D-0001		
Author	Richard Hughes		
Revision	P02		
Date	16 January 2023	Approved	✓

## 1. Introduction

- 1.1 This Technical Note supports representations by Place Land Limited to the East Devon Local Plan and the allocation of land east of George Lane for residential development under Policy KILM\_09. The Technical Note demonstrates that the site can be effectively drained in terms of both foul and surface water.
- 1.2 The findings and proposals contained within this Technical Note are based on desk based investigations and will require further site work to confirm the conclusions.

## 2. Surface Water

### 2.1 Existing

- 2.1.1 The site is currently undeveloped 'greenfield' and is used for arable agricultural.
- 2.1.2 It is bounded to the north by the A35 Gammons Hill, to the west by George Lane, to the south by residential development and to the east by fields and public open space and the Old Inn public house.
- 2.1.3 Site location plans and site referencing information are shown below.



Figure 1 – Site Location



Figure 2 – Site Location

Site Referencing Information	
<b>Site address</b>	George Lane Kilmington East Devon EX13 7DL
<b>Grid reference</b>	E. 326981, N. 98287 SY269982 / SY2698198287

Table 1 – Site Referencing Details

- 2.1.4 The topography of the site falls generally from west to east at an average gradient of 1 in 33 to a low point in the north-east corner of the site, adjacent to the A35.
- 2.1.5 As the site is greenfield, it is anticipated that there are no formal drainage systems serving the site. A copy of the South West Water sewer records, included in Appendix B, has been obtained which confirms that there are no public surface water sewers within the site boundary.

An existing public sewer network is shown in the adjacent residential development to the west serving Dares Field. There is no apparent outfall point and it is assumed that the system discharges to a soakaway.

- 2.1.6 There are no watercourses recorded within the site boundary although a site inspection has revealed a culvert under the A35 adjacent to the north-east corner.

2.1.7 Referring to the on-line GOV.UK mapping service for flood risk from surface water, shows the whole of the site to be at 'very low' risk however, there is a length of medium risk immediately adjacent to the southern side of the A35 flowing to the east, see Figure 3 below.



Figure 3: Surface Water Mapping

The mapping also shows that the site is entirely located within Flood Zone 1 which is a low risk of flooding ( $\leq 0.1\%$  AEP of fluvial flooding in any given year), see Figure 4 below.



Figure 4: Flood Zone Mapping

## 2.2 Post Development

2.2.1 The proposal is for 37 residential dwellings together with associated access, parking and open space.

A copy of the proposed site layout plan is included in Appendix A.

2.2.2 The site lies within the responsibility of Devon County Council as Lead Local Flood Authority. Reference has been made to their document "Sustainable Drainage Systems – Guidance for Devon" dated January 2017'.

2.2.3 In accordance with the National Planning Policy Framework (NPPF), surface water runoff from the proposed development is to be captured and managed utilising sustainable methods where possible. As such, the following surface water drainage management strategies will be assessed in direct relation to the site, based on preferential order in accordance with the NPPF, National Planning Policy Guidance (NPPG), Building Regulations and Sewerage Sector Guidance (SSG).

- Infiltration
- Discharge to local watercourse
- Discharge to public surface water sewer
- Discharge to public combined sewer

2.2.4 No ground investigation work has been undertaken at the time of writing however, reference has been made to the on-line British Geological Society mapping information. This indicates that the site is underlain by a bedrock of mudstone with superficial deposits of silt, sand and gravel in the western part of the site and sand and gravel in the eastern part.

On the basis of the above, it is anticipated that the use of soakaways will be practical for the disposal of surface water runoff. This assumption is supported by the apparent disposal of surface water from the Dares Field development to the west to ground.

2.2.5 An infiltration rate of  $1.0 \times 10^{-5}$  m/s has been assumed as a conservative value for the purposes of estimating soakaway sizes. It is possible that each plot can be provided with its own soakaway manhole however, this will be dependent on the final layout and being able to achieve 5m offsets to all structures.

For the purposes of this assessment, it is assumed that this is not possible and that all buildings and roads will need to be drained to an infiltration basin located in the north-east corner of the site as a 'worst case' option.

2.2.6 An assumed impermeability factor of 55% has been taken for the proposed development areas and an urban creep factor of +10% applied to determine a likely total drained area of 0.775 ha.

2.2.7 Applying the above design criteria an infiltration basin design has been carried out using the Source Control module in Micro Drainage. This shows that a basin with a maximum storage depth of 1.3m. and an overall footprint of 836m<sup>2</sup> will contain runoff generated by a 1 in 100 year storm event with an allowance of +45% for climate change.

The half drain down time is 972 minutes.

- 2.2.8 A copy of the calculations and a drawing showing the size and location of the basin is included in Appendix C.
- 2.2.9 Should infiltration prove not to be practical, surface water runoff will be discharged to the culvert under the A35 and discharge rates restricted to the greenfield QBAR value.

Using the Source Control module in Micro Drainage which estimates a QBAR rate of 6.6 L/s/ha. The total impermeable area, ignoring the urban creep factor, is 0.734 ha therefore the allowable discharge rate will be 4.8 L/s.

The Micro Drainage calculation shows that the storage requirement is very similar to that of the infiltration basin option with a maximum depth of 1.3m and a maximum volume of 551m<sup>3</sup>.

Copies of the above calculations are included in Appendix C.

### 3. Foul Water

#### 3.1 Existing

- 3.1.1 As the site is greenfield, it is anticipated that there are no formal drainage systems serving the site. However, a copy of the South West Water sewer records, included in Appendix B, has been obtained which shows that there is an existing 150mm diameter public combined sewer crossing the western part of the site, flowing approximately from north to south.
- 3.1.2 The sewer records also indicate that there is a foul sewer connection from the existing residential development, Dares Field, to the west.
- 3.1.3 It will be necessary to accommodate this combined sewer within the proposed site layout, either by providing a protected route or diverting it as necessary. Any diversion works will require the approval of South West Water.
- 3.1.4 The head of a 150mm diameter public combined sewer is located in the A35, immediately outside the Old Inn public house to the north-east of the site.

#### 3.2 Post Development

- 3.2.1 The topography of the site is such that it is possible to drain the western part of the site by gravity to the existing combined sewer which passes through the development area.
- The remainder of the development to the east will gravitate to the north-east corner of the site and can be connected to the existing combined sewer in the A35 via a new off-site sewer. Should this prove not to be possible it will be necessary to provide a new pumping station in order to pump flows back towards the western combined sewer.
- 3.2.2 The development proposal is for up to 40 residential dwellings. The anticipated peak flow for the development is 1.8 L/second for 40 units based on an allowance of 4,000 litres/dwelling/day in accordance with the recommendations of clause B3.1.1(b) of the Water UK Sewerage Sector Guidance Appendix C.

- 3.2.3 It is anticipated that all new foul drainage sewers will be offered to South West Water for adoption under a Section104 Agreement. It will be necessary to submit a Pre-Development Enquiry to South West Water at the time of any planning application in order to determine the recommended points of connection and if any off-site reinforcement works are required.
- 3.2.4 A notional foul drainage layout is included in Appendix C.

## 4. Conclusions

- 4.1 The site is currently undeveloped and therefore is assumed to have no formal drainage connections.
- 4.2 The only existing public surface water sewer in the immediate vicinity of the site shown on the South West Water mapping is in the existing residential development immediately to the west, served by Dares Field. This sewer network appears to have no positive discharge point and therefore it is assumed that this is likely to discharge to a soakaway.
- 4.3 The British Geological Society mapping indicates the site to be underlain by superficial deposits of sands, silts and gravels and it is assumed at this stage that surface water runoff from the development can be disposed of to soakaways.





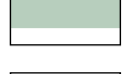



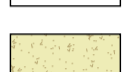







An infiltration basin located in the north-east corner of the site could serve the development, as shown by the abluitions included in Appendix D.

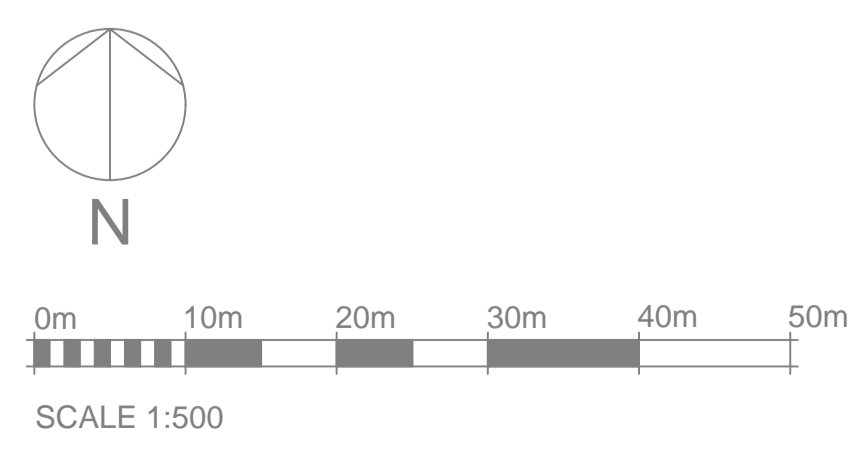
Should infiltration prove not to be practical, a storage basin of the same size as the infiltration basin with a restricted discharge and a connection to the existing culvert under the A35 can be utilised.

- 4.4 The South West Water sewer records show a combined sewer passing through the site and in the A35 to the north-east of the site. It is proposed that foul flows from the development be discharged to one or both of these sewers, subject to discussions with South West Water.

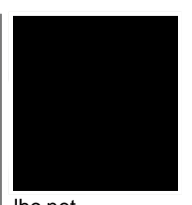
## APPENDIX A

Sketch Concept Layout - 21121

- Key**
-  Site Boundary (2.46ha)
  -  Existing Key Trees
  -  Listed Buildings (Grade II & II\*)
  -  Existing Bus Stop
  -  Ecological or Landscape Buffer (5 - 10m from Boundary)
  -  Potential SUDS Pond
  -  Potential SUDS Swales
  -  Shared Surface
  -  Private Drive
  -  Parking Court
  -  Ped/Cycle link
  -  Footpath
  -  Proposed Native Trees
  -  Proposed Semi-ornamental/ Street Trees
  -  Proposed Orchard Trees
  -  Proposed Mixed Native Hedge/Hedgebank



P1 REV	08/01/23 DATE	First Issue to Client COMMENTS	AV / PD AUTHOR / CHECKED
<b>PROJECT TITLE</b>			
Kilmington			
<b>DETAIL</b>			
<b>Illustrative Masterplan</b>			
<small>DRAWING NUMBER (PROJECT-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)</small>			
KIL - LHC - 00 - 00 - DR - UD - 0106			
<b>STATUS</b>		<b>STATUS DESCRIPTION</b>	
S2		FOR INFORMATION	
<b>REVISION</b>	<b>DATE</b>	<b>SCALE</b>	
P1	JANUARY 2023	1:500 @A1	
<small>CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE - ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM - DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING © THIS DRAWING IS COPYRIGHT</small>			<small>LHC PROJECT NUMBER</small>
			21121

# APPENDIX B

South West Water Sewer Record Plan



## APPENDIX C

Infiltration Basin Calculation

Greenfield Runoff Rate Calculation

Storage Basin Calculation

Drainage Strategy Plan

.	Land East of George Lane
.	Kilmington
.	Infiltration Basin - Q100+45%
Date 16/01/2023 16:03	Designed by RJH
File Inf Basin - Whole Site V2.SRCX	Checked by
Innovyze	Source Control 2018.1



Summary of Results for 100 year Return Period (+45%)

Half Drain Time : 972 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m <sup>3</sup> )	Status
15 min Summer	8.537	0.537	2.9	163.6	O K
30 min Summer	8.682	0.682	3.5	225.0	O K
60 min Summer	8.827	0.827	4.0	294.2	O K
120 min Summer	8.965	0.965	4.6	367.6	O K
180 min Summer	9.036	1.036	4.9	408.4	O K
240 min Summer	9.078	1.078	5.0	433.7	O K
360 min Summer	9.129	1.129	5.2	464.7	O K
480 min Summer	9.157	1.157	5.4	482.4	O K
600 min Summer	9.171	1.171	5.4	491.8	O K
720 min Summer	9.179	1.179	5.5	496.5	O K
960 min Summer	9.188	1.188	5.5	502.6	O K
1440 min Summer	9.191	1.191	5.5	504.7	O K
2160 min Summer	9.176	1.176	5.4	495.1	O K
2880 min Summer	9.151	1.151	5.3	478.8	O K
4320 min Summer	9.091	1.091	5.1	441.5	O K
5760 min Summer	9.034	1.034	4.8	406.9	O K
7200 min Summer	8.982	0.982	4.6	376.9	O K
8640 min Summer	8.934	0.934	4.4	350.3	O K
10080 min Summer	8.890	0.890	4.3	326.6	O K
15 min Winter	8.586	0.586	3.1	183.5	O K
30 min Winter	8.742	0.742	3.7	252.4	O K
60 min Winter	8.897	0.897	4.3	330.5	O K
120 min Winter	9.045	1.045	4.9	413.7	O K
180 min Winter	9.122	1.122	5.2	460.4	O K
240 min Winter	9.168	1.168	5.4	489.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m <sup>3</sup> )	Time-Peak (mins)
15 min Summer	115.250	0.0	34
30 min Summer	79.580	0.0	48
60 min Summer	52.627	0.0	78
120 min Summer	33.624	0.0	134
180 min Summer	25.459	0.0	192
240 min Summer	20.722	0.0	250
360 min Summer	15.446	0.0	368
480 min Summer	12.532	0.0	484
600 min Summer	10.645	0.0	600
720 min Summer	9.310	0.0	670
960 min Summer	7.526	0.0	782
1440 min Summer	5.564	0.0	1038
2160 min Summer	4.102	0.0	1452
2880 min Summer	3.298	0.0	1860
4320 min Summer	2.420	0.0	2688
5760 min Summer	1.943	0.0	3472
7200 min Summer	1.640	0.0	4264
8640 min Summer	1.428	0.0	5032
10080 min Summer	1.271	0.0	5840
15 min Winter	115.250	0.0	34
30 min Winter	79.580	0.0	48
60 min Winter	52.627	0.0	76
120 min Winter	33.624	0.0	132
180 min Winter	25.459	0.0	190
240 min Winter	20.722	0.0	246

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Land East of George Lane  
Kilmington  
Infiltration Basin - Q100+45%



Date 16/01/2023 16:03

Designed by RJH

File Inf Basin - Whole Site V2.SRCX

Checked by

Innovyze

Source Control 2018.1

Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m <sup>3</sup> )	Status
360 min Winter	9.225	1.225	5.6	526.7	O K
480 min Winter	9.257	1.257	5.8	548.6	O K
600 min Winter	9.276	1.276	5.9	561.3	O K
720 min Winter	9.286	1.286	5.9	568.3	O K
960 min Winter	9.291	1.291	5.9	572.0	O K
1440 min Winter	9.291	1.291	5.9	572.2	O K
2160 min Winter	9.266	1.266	5.8	555.0	O K
2880 min Winter	9.228	1.228	5.7	529.2	O K
4320 min Winter	9.143	1.143	5.3	473.5	O K
5760 min Winter	9.061	1.061	5.0	423.1	O K
7200 min Winter	8.987	0.987	4.6	379.8	O K
8640 min Winter	8.920	0.920	4.4	342.8	O K
10080 min Winter	8.860	0.860	4.1	311.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m <sup>3</sup> )	Time-Peak (mins)
360 min Winter	15.446	0.0	360
480 min Winter	12.532	0.0	474
600 min Winter	10.645	0.0	584
720 min Winter	9.310	0.0	692
960 min Winter	7.526	0.0	880
1440 min Winter	5.564	0.0	1102
2160 min Winter	4.102	0.0	1564
2880 min Winter	3.298	0.0	2016
4320 min Winter	2.420	0.0	2868
5760 min Winter	1.943	0.0	3704
7200 min Winter	1.640	0.0	4536
8640 min Winter	1.428	0.0	5288
10080 min Winter	1.271	0.0	6064

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Land East of George Lane  
Kilmington  
Infiltration Basin - Q100+45%



Date 16/01/2023 16:03

Designed by RJH

File Inf Basin - Whole Site V2.SRCX

Checked by

Innovyze

Source Control 2018.1

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.000	Shortest Storm (mins)	15
Ratio R	0.300	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time Area Diagram

Total Area (ha) 0.775

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area	Time (mins)	Area	Time (mins)	Area					
From:	To:	From:	To:	From:	To:	From:	To:	From:	To:					
0	4	0.155	4	8	0.155	8	12	0.155	12	16	0.155	16	20	0.155

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Land East of George Lane  
Kilmington  
Infiltration Basin - Q100+45%



Date 16/01/2023 16:03

Designed by RJH

File Inf Basin - Whole Site V2.SRCX

Checked by

Innovyze

Source Control 2018.1

Model Details

Storage is Online Cover Level (m) 10.000

Infiltration Basin Structure

Invert Level (m) 8.000 Safety Factor 2.0  
Infiltration Coefficient Base (m/hr) 0.03600 Porosity 1.00  
Infiltration Coefficient Side (m/hr) 0.03600

Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )
0.000	214.0	1.200	657.0	2.400	836.0	3.600	836.0	4.800	836.0
0.200	282.0	1.400	744.0	2.600	836.0	3.800	836.0	5.000	836.0
0.400	349.0	1.600	836.0	2.800	836.0	4.000	836.0		
0.600	420.0	1.800	836.0	3.000	836.0	4.200	836.0		
0.800	495.0	2.000	836.0	3.200	836.0	4.400	836.0		
1.000	574.0	2.200	836.0	3.400	836.0	4.600	836.0		

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Land East of George Lane
Kilmington
Greenfield Runoff Rates



Date 19/12/2022 17:26
File

Designed by RJH
Checked by

Innovyze

Source Control 2018.1

ICP SUDS Mean Annual Flood

Input

Return Period (years) 100 SAAR (mm) 991 Urban 0.000
Area (ha) 1.000 Soil 0.450 Region Number Region 8

Results l/s

QBAR Rural 6.6
QBAR Urban 6.6

Q100 years 16.0

Q1 year 5.1
Q30 years 12.6
Q100 years 16.0

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Land East of George Lane  
Kilmington  
Storage Basin - Q100+45%



Date 16/01/2023 16:09

Designed by RJH

File Storage Basin - Whole Site\_V2.SRCX

Checked by

Innovyze

Source Control 2018.1

Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m <sup>3</sup> )	Status
15 min Summer	8.529	0.529	4.8	160.3	O K
30 min Summer	8.675	0.675	4.8	221.5	O K
60 min Summer	8.820	0.820	4.8	290.4	O K
120 min Summer	8.954	0.954	4.8	361.4	O K
180 min Summer	9.022	1.022	4.8	400.0	O K
240 min Summer	9.061	1.061	4.8	423.2	O K
360 min Summer	9.106	1.106	4.8	450.5	O K
480 min Summer	9.129	1.129	4.8	465.0	O K
600 min Summer	9.140	1.140	4.8	471.5	O K
720 min Summer	9.142	1.142	4.8	473.0	O K
960 min Summer	9.136	1.136	4.8	469.0	O K
1440 min Summer	9.115	1.115	4.8	456.0	O K
2160 min Summer	9.078	1.078	4.8	433.5	O K
2880 min Summer	9.039	1.039	4.8	410.0	O K
4320 min Summer	8.955	0.955	4.8	361.9	O K
5760 min Summer	8.868	0.868	4.8	315.0	O K
7200 min Summer	8.773	0.773	4.8	267.3	O K
8640 min Summer	8.651	0.651	4.8	211.0	O K
10080 min Summer	8.549	0.549	4.8	168.1	O K
15 min Winter	8.579	0.579	4.8	180.4	O K
30 min Winter	8.735	0.735	4.8	249.5	O K
60 min Winter	8.890	0.890	4.8	327.0	O K
120 min Winter	9.036	1.036	4.8	408.2	O K
180 min Winter	9.110	1.110	4.8	453.2	O K
240 min Winter	9.155	1.155	4.8	481.0	O K
360 min Winter	9.207	1.207	4.8	515.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m <sup>3</sup> )	Discharge Volume (m <sup>3</sup> )	Time-Peak (mins)
15 min Summer	115.250	0.0	166.0	34
30 min Summer	79.580	0.0	229.3	48
60 min Summer	52.627	0.0	305.1	78
120 min Summer	33.624	0.0	390.0	136
180 min Summer	25.459	0.0	442.9	194
240 min Summer	20.722	0.0	480.6	252
360 min Summer	15.446	0.0	537.1	368
480 min Summer	12.532	0.0	580.8	486
600 min Summer	10.645	0.0	616.3	604
720 min Summer	9.310	0.0	646.3	720
960 min Summer	7.526	0.0	694.4	846
1440 min Summer	5.564	0.0	719.2	1102
2160 min Summer	4.102	0.0	857.7	1504
2880 min Summer	3.298	0.0	919.5	1920
4320 min Summer	2.420	0.0	1011.4	2744
5760 min Summer	1.943	0.0	1084.1	3576
7200 min Summer	1.640	0.0	1143.8	4400
8640 min Summer	1.428	0.0	1195.1	5032
10080 min Summer	1.271	0.0	1240.3	5744
15 min Winter	115.250	0.0	186.0	34
30 min Winter	79.580	0.0	256.6	48
60 min Winter	52.627	0.0	341.8	76
120 min Winter	33.624	0.0	436.7	134
180 min Winter	25.459	0.0	495.9	190
240 min Winter	20.722	0.0	538.1	248
360 min Winter	15.446	0.0	601.3	362

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Land East of George Lane  
Kilmington  
Storage Basin - Q100+45%



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Checked by

Innovyze

Source Control 2018.1

Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m <sup>3</sup> )	Status
480 min Winter	9.237	1.237	4.9	534.9	O K
600 min Winter	9.253	1.253	4.9	545.7	O K
720 min Winter	9.260	1.260	4.9	550.7	O K
960 min Winter	9.259	1.259	4.9	550.1	O K
1440 min Winter	9.232	1.232	4.9	531.6	O K
2160 min Winter	9.184	1.184	4.8	500.1	O K
2880 min Winter	9.128	1.128	4.8	464.2	O K
4320 min Winter	9.003	1.003	4.8	389.1	O K
5760 min Winter	8.868	0.868	4.8	315.1	O K
7200 min Winter	8.686	0.686	4.8	226.6	O K
8640 min Winter	8.508	0.508	4.8	152.0	O K
10080 min Winter	8.368	0.368	4.8	101.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m <sup>3</sup> )	Discharge Volume (m <sup>3</sup> )	Time-Peak (mins)
480 min Winter	12.532	0.0	649.8	476
600 min Winter	10.645	0.0	688.8	590
720 min Winter	9.310	0.0	720.6	702
960 min Winter	7.526	0.0	751.8	918
1440 min Winter	5.564	0.0	731.9	1158
2160 min Winter	4.102	0.0	960.6	1624
2880 min Winter	3.298	0.0	1029.8	2084
4320 min Winter	2.420	0.0	1132.4	2988
5760 min Winter	1.943	0.0	1214.3	3864
7200 min Winter	1.640	0.0	1281.1	4616
8640 min Winter	1.428	0.0	1338.6	5200
10080 min Winter	1.271	0.0	1389.3	5760

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Land East of George Lane  
Kilmington  
Storage Basin - Q100+45%



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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.000	Shortest Storm (mins)	15
Ratio R	0.300	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time Area Diagram

Total Area (ha) 0.775

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area	Time (mins)	Area	Time (mins)	Area					
From:	To:	From:	To:	From:	To:	From:	To:	From:	To:					
0	4	0.155	4	8	0.155	8	12	0.155	12	16	0.155	16	20	0.155

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Land East of George Lane  
Kilmington  
Storage Basin - Q100+45%



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File Storage Basin - Whole Site\_V2.SRCX

Designed by RJH  
Checked by

Innovyze

Source Control 2018.1

Model Details

Storage is Online Cover Level (m) 10.000

Tank or Pond Structure

Invert Level (m) 8.000

Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )
0.000	214.0	1.200	657.0	2.400	836.0	3.600	836.0	4.800	836.0
0.200	282.0	1.400	744.0	2.600	836.0	3.800	836.0	5.000	836.0
0.400	349.0	1.600	836.0	2.800	836.0	4.000	836.0		
0.600	420.0	1.800	836.0	3.000	836.0	4.200	836.0		
0.800	495.0	2.000	836.0	3.200	836.0	4.400	836.0		
1.000	574.0	2.200	836.0	3.400	836.0	4.600	836.0		

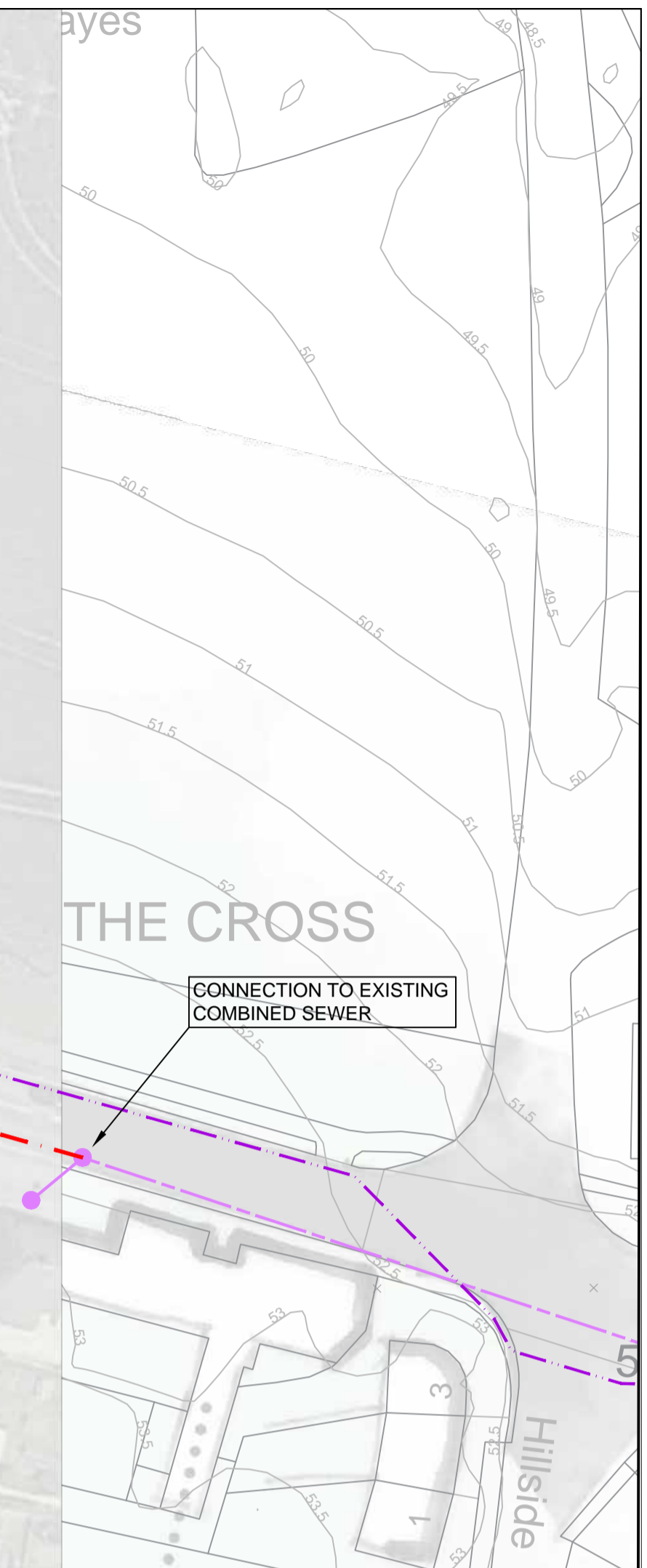
Hydro-Brake® Optimum Outflow Control

Unit Reference MD-SHE-0101-4800-1200-4800  
 Design Head (m) 1.200  
 Design Flow (l/s) 4.8  
 Flush-Flo™ Calculated  
 Objective Minimise upstream storage  
 Application Surface  
 Sump Available Yes  
 Diameter (mm) 101  
 Invert Level (m) 8.000  
 Minimum Outlet Pipe Diameter (mm) 150  
 Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.200	4.8	Kick-Flo®	0.748	3.9
Flush-Flo™	0.359	4.8	Mean Flow over Head Range	-	4.2

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.3	0.800	4.0	2.000	6.1	4.000	8.4	7.000	11.0
0.200	4.5	1.000	4.4	2.200	6.4	4.500	8.9	7.500	11.4
0.300	4.8	1.200	4.8	2.400	6.6	5.000	9.4	8.000	11.7
0.400	4.8	1.400	5.2	2.600	6.9	5.500	9.8	8.500	12.1
0.500	4.7	1.600	5.5	3.000	7.4	6.000	10.2	9.000	12.4
0.600	4.5	1.800	5.8	3.500	7.9	6.500	10.6	9.500	12.7



- Key**
- Existing public surface water sewer
  - Existing public foul water sewer
  - Existing public combined sewer
  - Proposed foul water sewer
  - Existing water main
  - Existing culvert
  - [Hatched] Proposed attenuation/infiltration basin

REVISIONS

Rev	Date	Description	By	Ckd	App
P02	16/01/23	Updated planning layout.	RJH		
P01	09/01/23	First Issue.	RJH		

**Hydrock**

CLIENT  
PLACE LAND SW LIMITED

PROJECT  
LAND EAST OF GEORGE LANE  
KILMINGTON  
EAST DEVON

TITLE  
SCHEMATIC FOUL AND SURFACE WATER  
DRAINAGE STRATEGY PLAN

HYDROCK PROJECT NO. 21720-IOCB	SCALE @ A1 1 : 500
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 21720-HYD-XX-XX-DR-D-2001	REVISION P02

# Land east of George Lane, Kilmington, Devon (Kilm09):

Heritage Appraisal

NGR: SY 27081 98233

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Prepared by:  
Peter W Cox  
MCIfA

Document No: ACW1512/1/0

Date: January 2023



AC archaeology

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## KILMINGTON ALLOCATION (Kilm 09) HERITAGE APPRAISAL

### INTRODUCTION

This statement has been prepared in support of a representation to East Devon Local Plan to allocate land at Kilmington, known as Kilm 09, for residential development. The presence of designated heritage assets in the vicinity is recognised as a material consideration by the Strategic Planning Committee and by the Parish Council in the adopted Neighbourhood Plan.

### DESIGNATED HERITAGE ASSETS

The prospective allocation site lies outside the Kilmington Conservation Area; at a distance of c.120m at its nearest point. The Conservation Area Appraisal does not identify any key views from within, through or into the Conservation Area, which could be adversely affected by the development of this site. The setting of this designated asset, and hence its heritage significance, would therefore be considered to be unaffected by the development of this site.

There are three Grade II Listed Buildings within c 50m of the allocation site. Two lie to the west of George Lane, on Shute Road, and comprise the George Farmhouse (List Entry Number 1098466) and the War Memorial (List Entry Number 1425397). Both possess quite intimate settings associated with their roadside positions which would be unaffected by development of the allocation site; these are not considered further.

#### *The Old Inn*

The third designated heritage asset, The Old Inn, a Grade II Listed Building (List Entry Number 1333544) lies c. 30m to the east of the boundary of the allocation site. The Historic England Listing description states:

*Public house. Circa C16/17 with C18 wing. Roughcast and white-washed stone rubble. Thatched roof with hipped ends. Two storeys. Long four/five window range. Two and three light casement on first floor with chamfered mullions and leaded panes. One C20 casement on ground floor. C20 glazed doors and C20 thatched porch in the angle with circa C18 wing projecting to lefthand, the gable to road with bowed sash on each floor with glazing bars. Plank door to left. Rebuilt brick ridge stacks and stack over gable of wing. Interior: one jointed cruck truss. Stopped chamfer ceiling beams.*

An early cartographic depiction of the building, the 1838 Tithe Map, shows the Old Inn and outbuildings within a restricted curtilage (Plot 278), described in the accompanying apportionment as *Old Inn, yards and garden*. Subsequent extension to create the modern car park to the west, into a former meadow field (Plot 277) is of twentieth century date and known to have been present at the time of listing in 1967; it is therefore considered to be its modern curtilage in respect of its listed status.

#### *Significance*

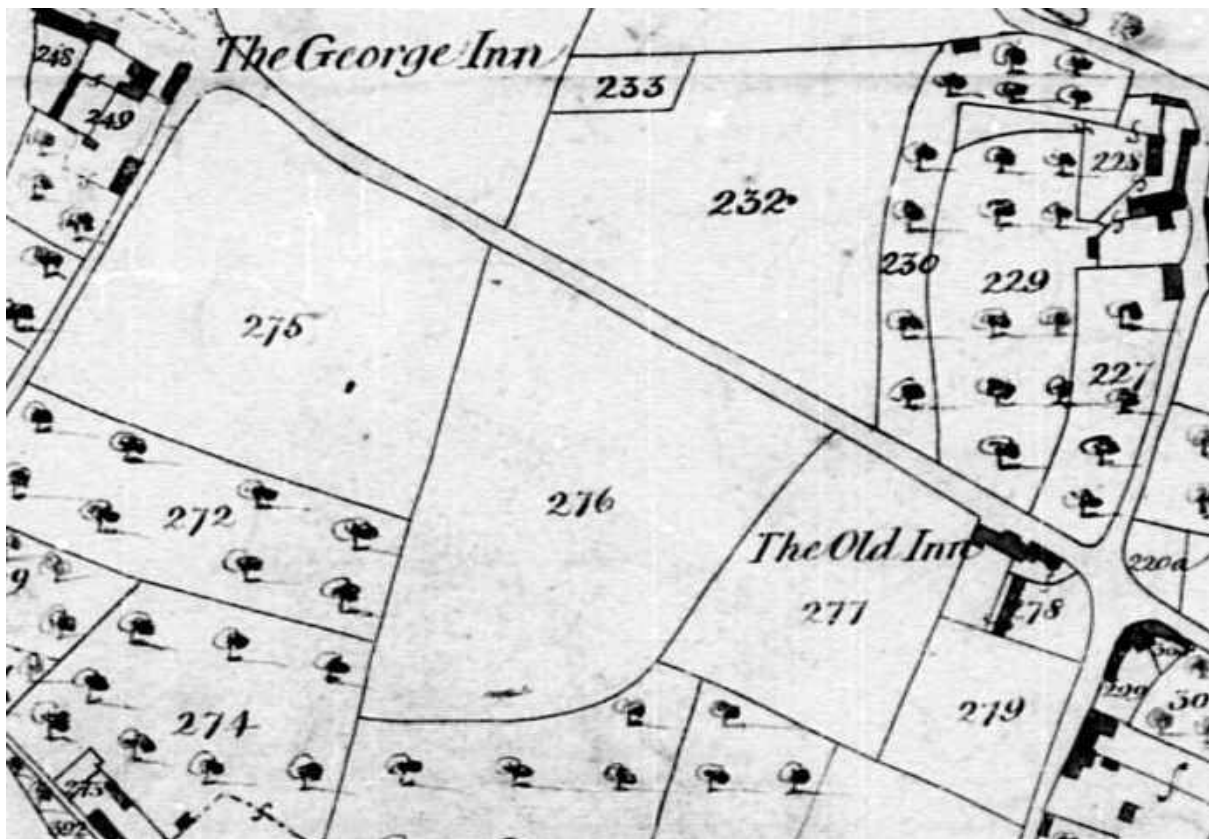
The Old Inn derives its heritage significance principally from its architectural and historical interests. Although its early history is poorly documented it is believed to have functioned as a wayside inn for many centuries, a function that continues to this day. It is therefore additionally considered to have communal values.

#### *Setting*

The key aspects of the building's setting comprise its historic roadside position on the modern A35. It is a prominent, landmark building in the approach to the village from the west in the final few

hundred metres, prior to which it is obscured by trees. The appreciation of its external architecture, particularly its rough-cast walls and thatched rooves, is more immediately visible in close proximity and from views from within the car park where its principal facades can be experienced. The visual prominence of this building as a historic roadside inn adds to the significance of the asset. There is no evidence that existing views from the building are designed or intended, and certainly not towards the allocation site; nor has the building and the allocation site shared any functional relationship in the past.

The western boundary of the car park is well-vegetated and provides an effective screen between the Listed Building and the allocation site; any intervisibility is both restricted and entirely incidental to the experience of the heritage asset.



Extract from 1838 Tithe Map

#### NON-DESIGNATED HERITAGE ASSETS

The allocation site is recorded in the Devon County Council Historic Environment Record as being the potential site of former (possibly Romano-British or medieval) ironworking, by virtue of its field name *Ashen Field* recorded on the 1838 Tithe Apportionment (ref MDV107136). Sites of this type are likely to be considered of local archaeological significance, the management of their archaeological interest can be achieved by reference to policies for non-designated heritage assets in Chapter 16 of the NPPF.

#### CONCLUSION

The allocation site does not lie within the setting of the Old Inn, a Grade II Listed Building. Residential development can be achieved without harm to the setting or significance of this designated heritage asset.

The allocation land may contain archaeological interest, the significance of which could be affected by development, but for which appropriate mitigation can be achieved through planning condition(s).



**Approach to the Old Inn from the northwest**



**Winter view towards the Old Inn through the allocation site**

Wiltshire Office

Devon Office

