

A1 in Northumberland: Morpeth to Ellingham

Scheme Number: TR010041

6.8 Environmental Statement – Appendix 7.1 Arboricultural Report

Part B

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

June 2020

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

**The A1 in Northumberland: Morpeth to Ellingham
Development Consent Order 20[xx]**

Environmental Statement - Appendix

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1828 MAP OF NORTHUMBERLAND

1 INTRODUCTION

- 1.1.1. This report describes the outcome of the assessment of likely significant arboricultural effects arising from the A1 in Northumberland: Alnwick to Ellingham Scheme (Part B) upon the existing baseline arboricultural resource.
- 1.1.2. This report describes the baseline arboricultural conditions within the Study Area, the mitigation measures required to prevent, reduce or offset any significant negative arboricultural effects and the likely residual effects after these measures have been employed.
- 1.1.3. This report (and its associated figures and appendices) is intended to be read in support of the wider Environmental Statement (ES). Arboricultural Impacts are assessed to inform relevant chapters while likely significant arboricultural effects are presented as supporting information. It is recognised that trees can have multiple, separate and overlapping values such as landscape and ecological value. Therefore, landscape visual, ecological or other effects associated with trees may be implied within this report but are formally assessed within the respective chapters.

1.2 COMPETENT EXPERT EVIDENCE

- 1.2.1. **Table 1-1** below demonstrates that the professionals contributing to the production of this report have sufficient expertise to assure the ES is completed to the expected technical and professional quality.

Table 1-1 – Relevant Experience

Name	Role	Qualifications and Professional Membership	Experience
Caroline Parker	Author	MSc Forestry MA Environment, Policy and Society Arboriculture Association (Member)	Principal Consultant 18 Years of Experience within environment sector, including 4 years of experience in both Forestry and Arboriculture 4 Years of Experience relevant to EIA within both government and private sector. Projects including: <ul style="list-style-type: none"> – HS2 – A27 Arundel – Crawley Gateway – Great Yarmouth Third River Crossing – Oxford – Cambridge Expressway

Name	Role	Qualifications and Professional Membership	Experience
			– Lower Thames Crossing
Neil Davies	Reviewer	MSc Forestry – pending Level 4 diploma in Arboriculture (tech Cert) Member of Royal Forestry Society	Associate Director 23 years industry experience, 8 of which in EIA including: – A1 Coal House to Metro Centre – A30 Higher Carblake to Temple – Forder Valley Link Road

1.3 DESCRIPTION OF PART B

1.3.1. Part B comprises the widening of the existing single carriageway to a dual carriageway for an approximately 8 km section of the existing A1 between Alnwick and Ellingham.

2.1.1. Part B comprises two sections for assessment purposes as shown in **Figure 1.2: Location Plan: Part B** of this ES. The two sections of Part B are:

a. Part B Main Scheme Area: The area within the Order Limits between Alnwick and Ellingham including Charlton Mires Site Compound. Charlton Mires Site Compound is located within the Order Limits to the east of the existing A1, in a field to the south of Charlton Mires.

b. Lionheart Enterprise Park Compound: A construction compound located to the south of Alnwick in Lionheart Enterprise Park. The Lionheart Enterprise Park Compound is split into two sites (eastern site and western site) which are located either side of the existing Highways England maintenance depot.

2.1.2. In addition, for assessment purposes, Part B also addresses the:

a. Main Compound: The construction compound, which would be located within Part A, to the west of Thirston New Houses. It would be shared by Part A and Part B. The overview of the surrounding area of the Main Compound is described above in Part A.

1.3.2. There are numerous small areas of woodlands adjacent to the existing A1. To the east, the landform gradually rises to approximately 100 m AOD near Rennington Moor. To the west, the land is slightly hillier with more undulations and a high point of approximately 140 m AOD near White House Folly. A number of natural resources and areas classified or protected under legislation and policy are located within the corridor and surrounding area as detailed below.

- 1.3.3. It has been confirmed that the project is a Nationally Significant Infrastructure Project (NSIP) under the Planning Act (2008) and will therefore require a Development Consent Order (DCO) application to be made. It has been identified that Part B is likely to result in significant environmental effects and that an EIA is required in support of the DCO application and will be prepared under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Part B forms part of the A1 in Northumberland: Morpeth to Ellingham Scheme. Part A: Alnwick to Ellingham (Part A) is located 15 km to the south of Part B.

1.4 LEGISLATIVE FRAMEWORK

TREE PRESERVATION ORDERS

- 1.4.1. The Town and Country Planning Act 1990 places a duty upon local planning authorities to make provision for the preservation and planting of trees when granting permission for new development (**Ref. 1**). It also empowers local planning authorities to make Tree Preservation Orders (TPO) where it is expedient in the interests of amenity to make provision for the preservation of trees and woodlands (**Ref. 2**).

Purpose of a Tree Preservation Order

- 1.4.2. The purpose of a TPO is to protect specific trees, groups of trees and woodlands for the purpose of amenity. In the Secretary of State's view 'Orders should be used to protect trees and woodlands if their removal would have a significant negative impact on the local environment and its enjoyment by the public' (**Ref. 3**).
- 1.4.3. A TPO does not prevent the removal of trees in order to facilitate development. It does however prevent their unauthorised removal and ensures that they can be fully considered when determining whether development is appropriate and acceptable.
- 1.4.4. A TPO makes it a statutory offence to carry out any of the following works to trees without the formal consent of the Local Planning Authority (LPA):

- a. Cutting down
- b. Topping
- c. Lopping
- d. Uprooting
- e. Wilful damage
- f. Wilful destruction

Amenity Value

- 1.4.5. Trees which are to be included within a TPO should exhibit a minimum level of current or future amenity value. This should be assessed by the LPA in a structured and consistent manner with Government advice making reference to the following requirements.

Visibility

- 1.4.6. Trees should be visible, in whole or in part, from a public place such as a road, footpath or publicly accessible land.

Value

- 1.4.7. Public visibility is in itself not sufficient to warrant inclusion within a TPO. Arboricultural features should also exhibit merit in terms of one or more of the following criteria:

- a. Size and form
- b. Future potential
- c. Rarity, cultural or historical value
- d. Contribution to, and relationship with, the landscape
- e. Contribution to the character or appearance of a conservation area

Other Factors

- 1.4.8. Other factors such as nature conservation may be considered when making a TPO but on their own would not warrant making an Order.

CONSERVATION AREAS

- 1.4.9. A conservation area is an area which has been designated because of its special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance (**Ref. 3**). Trees have the ability to positively contribute towards the character, appearance or general amenity of a conservation area and, if not protected by a tree preservation order, are protected by the provisions in section 211 of the Town and Country Planning Act 1990 (**Ref. 4**).
- 1.4.10. Section 211 of the Town and Country Planning Act 1990 makes it a statutory offence to carry out any of the following works to trees¹ located within a conservation area without first providing the LPA with six weeks' notice of intent²:
- a. Cutting down
 - b. Topping
 - c. Lopping
 - d. Uprooting

¹ Except for trees whose stem diameter at 1.5 metres (m) above ground level:

- does not exceed 75 millimetres (mm); or
- has a stem diameter of 100 mm or less and is to be removed for the sole purpose of improving the growth of other trees (e.g. thinning as part of forestry operations).

² This does not apply to trees which are already protected by a TPO; these trees are subject to the procedures and controls for any tree covered by such an Order.

- e. Wilful damage
- f. Wilful destruction

- 1.4.11. Although the LPA must normally be given six weeks' notice of intent to carry out work to trees in a conservation area, certain exemptions exist. These include, but are not limited to, the following criteria:
- a. The making safe of dangerous trees where there is an immediate risk of serious harm
 - b. The removal of dead wood or dead trees
 - c. Work necessary to abate an actionable legal nuisance
 - d. Where work is necessary to implement a grant of full planning consent
- 1.4.12. It is therefore essential that, unless a valid exemption clearly applies, Northumberland Council is given six weeks' notice prior to undertaking any pruning or felling works to, or any development activities within the Root Protection Area (RPA), of any tree protected by virtue of a conservation area.

Exemptions

- 1.4.13. Within Tree Preservation Orders and Conservation Area Legislation, where DCO consent is granted or where tree protection legislation is disapplied, the need for permission to carry out trees works may not arise. However, the LPA should be advised prior to work being undertaken that affects protected trees, so that their records remain accurate and to ensure there are no misunderstandings that may lead to inadvertent prosecution.

ASH DIEBACK

- 1.4.14. Plant health legislation is influenced and governed by international (**Ref. 5**) and European legislation (**Ref. 6**) to protect against international spread of pest and disease.
- 1.4.15. The Plant Health Act 1967 empowers government to pass secondary legislation to control "*pests and diseases injurious to agricultural or horticultural crops, or to trees or bushes*" (**Ref. 7**).
- 1.4.16. Under the Act 'Pests and diseases' are:
- "Taken as references to insects, bacteria, fungi and other vegetable or animal organisms, viruses and all other agents causative of any transmissible disease of agricultural or horticultural crops or of trees or bushes, and also as including references to pests in any stage of existence"* (**Ref. 8**).
- 1.4.17. Section 1(2)(a) defines The Forestry Commission as the competent Authority for "...the protection of forest trees and timber from attack by pests (*"timber" for this purpose including all forest products*)", whereas section 1(2)(b) identifies the Secretary of State (currently DEFRA) as the Competent Authority for all plants. Section 3 concerns control of spread of Pests and disease.
- 1.4.18. The Plant Health (Forestry) (Amendment) Order 2012 was made as an emergency order on 29 October 2012 to grant the Forestry Commission powers as the Competent Authority and

bring in legal controls for *Chalara fraxinea*/*H. fraxineus*. This amended the Plant Health (Forestry) Order 2005 to include provisions for this disease. Detailed background information is contained within the explanatory memorandum of the 2012 order (**Ref. 9**).

- 1.4.19. On 22 November 2012, The Plant Health (England) (Amendment) Order 2012 empowered the Secretary of State to be Competent Authority with regards to *Chalara fraxinea*/*H. fraxineus*. The order 'amends the Plant Health (England) Order 2005 (S.I. 2005/2530) to include measures to prevent the introduction and spread of *Chalara fraxinea* T. Kowalski, including its teleomorph *Hymenoscyphus pseudoalbidus*³, a cause of ash dieback'.
- 1.4.20. Specifically, The Plant Health (England) (Amendment) Order 2012:
- a.** Prohibits the landing in or the spread within England of *Chalara fraxinea* T. Kowalski (article 2(7));
 - b.** Prohibits the landing in or the movement within England of plants of *Fraxinus* L. intended for planting, which are infected with *Chalara fraxinea* T. Kowalski (article 2(8));
 - c.** Imposes additional requirements on the landing in or movement within England of plants of *Fraxinus* L. intended for planting (article 2(9) to (12)); and
 - d.** Imposes additional requirements on the consignment from England to other parts of the European Union of plants of *Fraxinus* L. intended for planting (article 2(13)).
- 1.4.21. In practice the legal controls are described by the Forestry Commission (as Competent authority):
- a.** Prohibits all imports of ash plants, trees and seeds into Great Britain until further notice (because no pest-free areas are established);
 - b.** Prohibits all movements of plant-passported ash plants, trees and seeds within Great Britain until further notice (because no pest-free areas are in place);
 - c.** Continues to permit logs, woodchips and firewood, which pose a very low risk of disease transmission especially when they are kiln dried, to be imported from EU countries. In the unlikely event that this material is found to contain infection, action such as destruction will be ordered;
 - d.** Continues to permit movements within Great Britain of all ash timber, which poses a very low risk of disease transmission;
 - e.** Continues to permit imports of sawn ash timber from certain countries abroad under existing regulations against the forestry pest Emerald Ash Borer (EAB). These require the material to be accompanied by official phytosanitary (plant health) certificates declaring that the material either originated in areas known to be free of EAB, or that the wood is bark-free (which addresses the *Chalara* risk as well) before entering Great Britain. Imported woodchips and bark of ash material have the same certification

³ *Hymenoscyphus pseudoalbidus* is now considered to be a synonym (old name) of *H. fraxinea*.

requirements as for wood, but the alternative to originating in an area of pest freedom is that the material has been processed into pieces of not more than 2.5 cm thickness and width.

1.5 POLICY FRAMEWORK

1.5.1. National planning policies of specific relevance to this report are outlined below:

NATIONAL POLICY

1.5.2. National policy relevant to the potential effects on arboricultural features is outlined in **Table 1-2**.

Table 1-2 – Relevant National Policy

Policy	Relevant Policy Objectives	Significance of Part B on Policy Objective
National Policy Statement for National Networks (NPS NN)	<p>The National Policy Statement for National Networks (NPS NN) also includes relevant guidance in Chapter 5: Generic impacts. Paragraph 5.32 of this chapter supports the NPPF by stating:</p> <p><i>“The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss.”</i></p> <p>Paragraph 5.32 of the NPS NN further states that in instances where such trees would be affected by the proposed development then the applicant should either provide proposals for their conservation or give reasons for their loss.</p>	<p>Through the walkover survey, the presence of an ancient beech (T195) and veteran sycamore (T196) has been confirmed (refer to Appendix B1, Figure 1: Tree Constraints Plan, of this report (page 3 of 24)). Through the use of construction exclusion zones within the RPA of these features, it would be possible to reduce adverse impacts created by Part B and meet the requirements of NPS NN.</p>
National Planning Policy Framework (2019)	<p>The National Planning Policy Framework (NPPF) includes relevant guidance in Chapter 15: Conserving and Enhancing the Natural Environment.</p>	<p>Arboricultural features must be given due consideration during the design and approvals process.</p> <p>Through a desk study and walkover survey, the absence of ancient woodlands has been</p>

Policy	Relevant Policy Objectives	Significance of Part B on Policy Objective
	<p>Paragraph 170(b) recognises the economic and other benefits that trees, and woodlands provide and the fact that they should be considered as part of a planning decision;</p> <p>Paragraph 175(c) identifies the principle that ‘development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists⁴’.</p>	<p>confirmed. Therefore, no loss or deterioration of ancient woodlands is anticipated.</p> <p>Through the walkover survey, the presence of an ancient beech (T195) and veteran sycamore (T196) has been confirmed (refer to Appendix B1, Figure 1: Tree Constraints Plan of this report (page 3 of 24)). No loss of these features is anticipated. Through the use of construction exclusion zones and protective fencing in accordance with BS5837 within the RPA of these features, it would be possible reduce adverse impacts on these features, minimise the risk of deterioration and meet the requirements of NPPF.</p>

LOCAL POLICY

- 1.5.3. Local planning policy is administered by Northumberland County Council (NCC).
- 1.5.4. Local policy is currently contained in The Northumberland Consolidated Planning Policy Framework (**Ref. 10**); as of 14 March 2019, the NCC website states this document:
- a.** Details the planning policy documents that are currently used to determine and guide planning applications in Northumberland.
 - b.** This framework includes a number of planning policy documents put in place by the former County Council and District/Borough Councils. These policies are still being used to guide and determine planning applications by the Council and are called saved policies.
 - c.** This framework is updated when new planning policy documents are adopted by the Council. The planning policies detailed in the framework will gradually be replaced by the

⁴ “For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.”

new policies contained within the Northumberland Local Plan that is currently being prepared by the Council. (Northumberland County Council).

- 1.5.5. Within this document Annex B, Section A stipulates which policy documents apply and are used to determine planning applications. Relevant policies are identified in **Table 1-3**.

Table 1-3 – Relevant Adopted Local Policy in The Northumberland Consolidated Planning Policy Framework

Policy	Relevant Policy Objectives	Significance of Part B on Policy Objective
Alnwick District Local Development Framework - Core Strategy Development Plan Document Adopted October 2007	<p>Objective 7 Protect and enhance the quality and unique character of the countryside and landscape and the geological and biological diversity of the natural environment throughout the district.</p> <p>Objective 8 Prevent the unnecessary loss of valuable open land to development. Open land can be important for: farming, landscape quality, local character, recreation, functional floodplain, or ground water protection.</p> <p>Policy S3 Sustainability Criteria</p> <p>Policy S12 Protecting and Enhancing Biodiversity and Geodiversity</p> <p>Policy S13 Landscape Character</p> <p>Policy S14 Development in the Open Countryside</p>	<p>Part B would seek to avoid the loss or deterioration of ancient or veteran trees through the use of construction exclusion zones and appropriate protective barriers in accordance with BS 5837.</p> <p>The overall effect of tree/woodland loss would be assessed against the benefits of Part B and the compensation/mitigation proposals would be considered in line Landscape Mitigation Plan (refer to Figure 7.10: Landscape Mitigation Plan, Volume 6 of this ES (Application Document Reference: TR010041/APP/6.6).</p>
Castle Morpeth District Local Plan 1991-2006 Adopted February 2003	<p>Policy C14</p> <p>The council will make Castle Morpeth a more attractive place to live, work and take recreation by improving the landscape, nature conservation and visual amenity of the area through appropriate programmes of</p>	<p>Part B would avoid or mitigate tree loss through avoidance and protection of trees while also compensating through planting/afforestation.</p> <p>The overall effect of tree/woodland loss would be assessed against the benefits of Part B and the compensation/mitigation proposals</p>

Policy	Relevant Policy Objectives	Significance of Part B on Policy Objective
	<p>afforestation, hedgerow planting and woodland management.</p> <p>Policy C15</p> <p>Developers will be required to:</p> <ul style="list-style-type: none"> – Provide landscaping including tree planting and hedgerows, particularly indigenous broadleaved species, wherever appropriate, in new development. – Protect existing trees and hedgerows on sites where development is in progress. Tree preservation orders will be declared as necessary <p>Developers should pay particular attention to the landscape of the borough to the east of the A1 and to support and, where appropriate, initiate suitable planting schemes both directly and in support of the green initiative.</p>	<p>would be considered in line Landscape Mitigation Plan (refer to Figure 7.10: Landscape Mitigation Plan, Volume 6 of this ES (Application Document Reference: TR010041/APP/6.6)).</p>

- 1.5.6. NCC is currently processing a new overarching policy document for the Authority - the Northumberland Local Plan. This plan is currently (March 2019) under public consultation and the Proposed adoption date of is March 2020.
- 1.5.7. Relevant proposed policies are laid out in **Table 1-4**. These proposed policies are not yet adopted but, (perhaps being a more recent reflection of the LPA's position) may influence responses to applications and may, in practice, supersede those adopted policies in **Table 1-4**.

Table 1-4 – Relevant Local Policy in the Northumberland Local Plan – Publication Draft January 2019

Proposed Policy	Relevant Policy Objectives	Significance of Impact of Part B on Policy Objective
Table 3.1 Strategic Objectives in Northumberland - Environment	To conserve and enhance Northumberland's distinctive and valued natural, historic, water and built environments, ensuring that these assets continue to be experienced and valued by and residents and visitors to the county and protected from inappropriate development.	Part B would avoid or mitigate tree loss through avoidance and protection while compensating through planting/afforestation. The overall effect of tree/woodland loss would be assessed against the benefits of Part B and the compensation/mitigation proposals would be considered in line Landscape Mitigation Plan (refer to Figure 7.10: Landscape Mitigation Plan, Volume 6 of this ES (Application Document Reference: TR010041/APP/6.6)).
Policy QOP 2 Good design and amenity	In order to provide a high standard of amenity and minimise any adverse impacts on amenity, development proposals will need to ensure that: Trees, other green and blue infrastructure and soft landscaping of amenity value are retained and are introduced where they would enhance amenity of the development;	Amenity including visual amenity impacts would be minimised in line Landscape Mitigation Plan (refer to Figure 7.10: Landscape Mitigation Plan, Volume 6 of this ES (Application Document Reference: TR010041/APP/6.6)).
Policy QOP 4 Landscaping and trees	Where relevant, new development will be expected to incorporate well-designed landscaping and respond appropriately to any existing landscape features. Development proposals should ensure that: <ul style="list-style-type: none"> – Landscaping design is of a high quality, in accordance with the principles set out in Policy QOP 1; – Existing features which contribute towards the character of the area, or amenity, are retained wherever possible and sympathetically incorporated into the overall design of Part B; – Any hard or soft landscaping is appropriate, functional and well-integrated into the design of the development; – Trees, and other spaces and features that provide green and blue infrastructure, are preserved, enhanced and introduced into the landscaping Scheme wherever possible; – There is no loss of existing trees which are valuable in terms of amenity, biodiversity or the landscape; – Any tree lost is replaced on-site or at a suitable location in the local area; – Any protected vegetation, including trees within Conservation Areas, trees with Tree Preservation Orders (TPOs), protected habitats and important hedgerows, are preserved in accordance with the relevant national legislation, policy and guidance; – Planting Schemes are compatible and appropriate to the site and its use; species that may damage other vegetation or wildlife should be avoided; and – There will be no unacceptable damage to vegetation which is to be retained as part of the landscaping Scheme during construction; and – Provision is made for the long-term maintenance of new landscaped areas. 	Part B would seek to avoid the loss or deterioration of trees and woodland unless a suitable compensation strategy exists. The overall effect of tree/woodland loss would be assessed against the benefits of Part B and the compensation/mitigation proposals would be considered in line Landscape Mitigation Plan (refer to Figure 7.10: Landscape Mitigation Plan, Volume 6 of this ES (Application Document Reference: TR010041/APP/6.6)).

Proposed Policy	Relevant Policy Objectives	Significance of Impact of Part B on Policy Objective
	<p>The Council will protect trees and woodlands which are of a high amenity value through TPOs and planning conditions where appropriate. Where the loss of a protected tree is granted permission, replacement compensatory planting will be required.</p> <p>Development resulting in the loss or deterioration of ancient woodland and ancient or veteran trees will not be permitted unless wholly exceptional reasons exist to justify any loss or deterioration and a suitable compensatory strategy has been proposed.</p>	
Table 10.1	NCC recognises Ancient Woodland and Trees of National Importance	Emphasises that these features are to be regarded as High Value within the assessment

OTHER GUIDANCE

1.5.8. Other guidance of specific relevance to this report is outlined below:

British Standard BS 5837:2012

1.5.9. British Standard BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* (BS 5837:2012) provides recommendations and guidance on the relationship between trees and design, demolition and construction processes. It sets out principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures and is applicable whether or not planning consent is required.

Ancient Woodland and Veteran Trees: Protecting them from Development

1.5.10. The Forestry Commission and Natural England provided guidance on 13 October 2014 the protection of ancient woodland and veteran trees from development (**Ref. 11**). This guidance was updated on 05 November 2018 and advises the following should be undertaken in relation to ancient and veteran trees and ancient woodland:

- a.** Consult Inventories including the ancient woodland inventory, the ancient tree inventory and the wood pasture and parkland inventory.
- b.** Assess potential impacts
- c.** Provide evidence of the ancient woodland status and impacts to make an informed decision
- d.** Provide mitigation by:
 - i.** A buffer zone of semi-natural habitat should be left of at least 15 m between any development and ancient woodland
 - ii.** “A buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree’s canopy if that area is larger than 15 times the tree’s diameter”.
 - iii.** Improving the condition of the woodland
 - iv.** Putting up screening barriers to protect woodland or ancient and veteran trees from dust and pollution
 - v.** Noise or light reduction measures
 - vi.** Protecting ancient and veteran trees by designing open space around them
 - vii.** Identifying and protecting trees that could become ancient and veteran trees in the future
 - viii.** Rerouting footpaths
 - ix.** Removing invasive species
- e.** Provide compensation for loss or damage (as a last resort) by:
 - i.** Planting new native woodland or wood pasture
 - ii.** Restoring or managing other ancient woodland, including plantations on ancient woodland sites, and wood pasture

- iii. Connecting woodland and ancient and veteran trees separated by development with green bridges, tunnels or hedgerows
- iv. Long-term management plans for new woodland and ancient woodland
- v. Managing ancient and veteran trees
- vi. Planting individual trees that could become veteran and ancient trees in future
- vii. Monitoring the ecology of the site over an agreed period

- 1.5.11. Within this report these processes have been adopted with regards to arboricultural impacts. Details of compensation are described in detail within the landscape and ecology chapters.
- 1.5.12. For the purpose of a BS 5837 survey schedule, Category A arboricultural receptors include those of particular good examples of their species especially if rare or unusual, (e.g. notable trees), or are a dominant or a principal tree within an avenue. These receptors have limited potential for substitution. In line with Table 2.1 of DMRB Section 2, Part 5, these Category A arboricultural receptors have Medium sensitivity.
- 1.5.13. Category A trees also includes arboricultural receptors of significant conservation, historic or commemorative value such as ancient or veteran trees and ancient woodlands. However, as an irreplaceable habitat, these arboricultural receptors are of national importance. Therefore, according to Table 2.1 of DMRB Section 2, Part 5, irreplaceable habitats are of high importance and therefore have a DMRB sensitivity rating of High.
- 1.5.14. Trees and woodlands subject to a TPO are those that have been deemed by a local planning authority as having beneficial interest of amenity in their area at time of confirmation. Therefore, TPO status may not reflect the quality of an arboricultural receptor. For this reason, arboricultural receptors subject to a TPO may have different category ratings as determined by a BS 5837 assessment.

2 METHODOLOGY

2.1 ASSESSMENT METHODOLOGY

- 2.1.1. This assessment has been undertaken in accordance with guidance provided within The Design Manual for Roads and Bridges. Volume 11: Environmental Assessment Section 2, Part 5 (**Ref. 12**); the significance of arboricultural effects has been identified using guidance provided within Tables 2.1 to 2.4.
- 2.1.2. This assessment identifies the arboricultural impacts and effects of Part B during construction and potential anticipated effects during operation. For the purposes of this assessment Construction is defined as the period during which all site clearance, development and soft-landscaping activities are taking place; Operation is defined as 15 years after construction works have ceased.
- 2.1.3. This assessment provides an understanding of the likely arboricultural effects associated with Part B. It utilises information which is readily available either as a desk-study or from the walkover survey. This form of assessment represents an effective method of highlighting anticipated potentially significant impacts which may influence detailed design.

2.2 STUDY AREA

- 2.2.1. The arboriculture Study Area is defined as the area within which arboricultural features may experience effects associated with the construction of Part B. It is the Order Limits at the time of survey (March 2019) and up to a 15 m buffer. This buffer ensures that arboricultural features which are outside the Order Limits but whose RPAs may be affected by construction activities are recorded and considered. The Order Limits are shown in **Figure 1: Tree Constraints Plan** and **Figure 2: Tree Protection Plan** which are included in **Appendix B.1** and **Appendix B.2** of this report respectively.
- 2.2.2. The buffer accounts for the RPA as specified in British Standard BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*. It does not account for the RPA of Ancient and Veteran trees which is proportionately larger, however, this is considered on a case by case basis.
- 2.2.3. The Order Limits define the legal boundary for permanent and temporary works. This boundary has changed since the Study Area was used for survey. Features not surveyed are discussed in Baseline Conditions.

2.3 VALUE / SENSITIVITY

- 2.3.1. The sensitivity of receptors identified in the Study Area have been assessed based on DMRB guidance (Vol 11 Section 2 Part 5 (HA205/08 Assessment and Management of Environmental Effects)). To align sensitivity of receptors as determined by DMRB (**Ref.12**) with BS 5837 (**Ref. 13**) tree quality assessment a professional judgement was made as outlined at **paragraph 1.5.12** above.

- 2.3.2. The following sensitive receptors have been assessed and determined following the guidance outlined in **Table 2-1**.

Table 2-1 – Criteria for Value/Sensitivity of the Arboricultural Resource

DMRB Sensitivity	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
High	A	>40 years	Trees, groups or woodlands which, because of their great age, size or habitat continuity are of exceptional value as arboricultural, landscape, conservation or cultural features (e.g. ancient or veteran trees and ancient woodland).
Medium	A	>40 years	<p>Trees, groups or woodlands of identifiable arboricultural, landscape or cultural value.</p> <p>Trees that are of particularly good examples of their species, especially if rare or unusual (e.g. notable specimens);</p> <p>Trees that are essential components of groups, or of formal or semi-formal arboricultural features;</p> <p>Trees, groups, or woodlands of particular visual importance as arboricultural and/or landscape features.</p>
Low	B	20+ years	<p>Trees that might be included in category A, but are downgraded because of impaired condition (e.g. the presence of significant though remediable defects including unsympathetic past management and storm damage);</p> <p>Trees lacking the special quality necessary to merit category A designation;</p> <p>Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality;</p> <p>Trees with material conservation or other cultural value.</p>

DMRB Sensitivity	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
Very Low	C	<20 years	<p>Trees with a stem diameter of less than 150 mm;</p> <p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories;</p> <p>Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits;</p> <p>Trees with no material conservation or other cultural value.</p>
Unsuitable	U	<10 years	<p>Trees that present a hazard or risk to people or property</p> <p>Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years;</p> <p>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse;</p> <p>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline;</p> <p>Trees infected with pathogens of significance to the health and/or safety of other trees nearby.</p>

Sub-Categories

- 2.3.3. The value associated with each arboricultural feature is defined by its sub-category. Sub-categories vary depending upon the overall value of the arboricultural feature, carry equal weight, do not influence retention priority and are simply included to indicate the primary value(s) associated with each surveyed feature. The sub-categories assigned to each arboricultural feature are identified within the Arboricultural Survey Schedule included in **Appendix A: Survey Schedule** of this report.

Table 2-2 – Sub-Categories Associated with High Value Category A Arboricultural Features

Sub-category	Area of Value	Estimated Remaining Life Expectancy (years)	Description
1	Arboricultural	>40	Trees that are of particularly good examples of their species (e.g. notable specimens), especially if rare or unusual; or those that are essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principle trees within an avenue).
2	Landscape	>40	Trees, groups, or woodlands of particular visual importance as arboricultural and/or landscape features.
3	Cultural	>40	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. ancient trees, veteran trees and ancient woodland).

Table 2-3 – Sub-Categories Associated with Low Value Category B Arboricultural Features

Sub-category	Area of Value	Estimated Remaining Life Expectancy (years)	Description
1	Arboricultural	>20	Trees that might be included in category A but are downgraded because of impaired condition (e.g. the presence of significant though remediable defects including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the special quality necessary to merit category A designation.
2	Landscape	>20	Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as

Sub-category	Area of Value	Estimated Remaining Life Expectancy (years)	Description
			individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.
3	Cultural	>20	Trees with material conservation or other cultural value.

Table 2-4 – Sub-Categories Associated with Very Low Value C Category Arboricultural Features

Sub-category	Area of Value	Estimated Remaining Life Expectancy (years)	Description
1	Arboricultural	>20	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
2	Landscape	>20	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.
3	Cultural	>20	Trees with no material conservation or other cultural value.

- 2.3.4. Arboricultural effects have been identified on the basis that all relevant mitigation measures have been undertaken. All likely significant effects will be discussed.

2.4 ASSESSMENT OF IMPACTS

- 2.4.1. As a worst-case scenario, the assumption is, trees identified as at risk within the Order Limits cannot be retained and that avoidance is not feasible.
- 2.4.2. This Impact assessment considers the magnitude of change to the arboricultural resource. Impacts may be adverse or beneficial. The criteria within Table 2.2 of DMRB guidance (Vol 11 Section 2 Part 5) Chapter 2: Determining Significance of Environmental Effects have been applied.

2.5 ASSESSMENT OF SIGNIFICANT EFFECTS

- 2.5.1. This assessment provides an understanding of the likely arboricultural effects associated with Part B. It utilises information which is readily available either as a desk-study or from the walkover survey. In accordance with relevant guidance topic specific descriptors and criteria for identifying the sensitivity of arboricultural features have been utilised, the Impacts are assessed as described in **Section 2.4**.
- 2.5.2. The interaction of sensitivity and the magnitude of impact indicate the likely significant effects that may arise as a consequence of Part B. The descriptors are contained within Table 2.4 of DMRB guidance (Vol 11 Section 2 Part 5) Chapter 2: Determining Significance of Environmental Effects.
- 2.5.3. Arboricultural effects have been identified on the basis that all relevant mitigation measures have been undertaken. Only significant effects will be discussed.
- 2.5.4. Significant effects are defined on a basis of professional judgement. They include those which affect nationally or locally important receptors. These include not only ancient or veteran trees and ancient woodland but also effects which are potentially important to local stakeholders in terms of public and private amenity. These effects may include impacts to protected trees or the loss of large numbers of very low-quality features where this may affect the enjoyment of the area by residents or members of the travelling public. Significant arboricultural effects are those which should be considered as part of the design or decision-making process.
- 2.5.5. For details of individual features refer to **Appendix A: Tree Survey Schedule** and **Appendix B1, Figure 1: Tree Constraints Plans** of this report.
- 2.5.6. For identification of trees likely to be removed refer to **Appendix B2, Figure 2: The Tree Protection Plan** of this report.

2.6 METHOD OF BASELINE DATA COLLECTION

DESK STUDY

- 2.6.1. A desk-study has been undertaken as a means of identifying any statutory and non-statutory constraints which may apply to arboricultural features within the Study Area. The desk-based review has considered the following sources:

Tree Preservation Orders and Conservation Areas

- 2.6.2. Northumberland County Council is responsible for implementing any legal controls imposed through TPOs and conservation areas within the Study Area. Confirmation regarding the statutory status of arboricultural features within the Study Area was obtained from NCC Central Registry Team, on 10 June 2019.

Notable Trees

- 2.6.3. The ancient tree forum suggests Notable Trees are usually:

- a. Mature trees which stand out in their local environment because;
- b. They are large by comparison with other trees around them;
- c. They are often taller than ancient trees and;
- d. They may be fatter than many veteran trees but do not have any obvious veteran characteristics.

2.6.4. In parts of the UK where trees are less common, a tree that is relatively small may be notable because it is significant in its local environment. Some ... [more common] trees may be relatively young e.g. Wellingtonias, but still appear remarkably large. Most notable trees will be worthy of recognition regionally or locally (**Ref. 14**).

Ancient and Veteran Trees

2.6.5. An ancient tree is defined as one '*that has passed beyond maturity and is old, or aged, in comparison with other trees of the same species*'. Similarly, it may also be defined as one that has all or several of the following characteristics (**Ref. 14**):

- a. Biological, aesthetic or cultural interest because of its great age;
- b. A growth stage that is described as ancient or post-mature; and
- c. A chronological age that is old relative to others of the same species (**Ref. 15**).

2.6.6. A veteran tree is one that possesses the physical characteristics of an ancient tree, but which is not aged in comparison with other trees of the same species. Thus, a veteran tree may not necessarily be particularly old but, due to the rigours of life, may exhibit signs of ancientness.

2.6.7. Ancient and veteran trees are of considerable interest due to their cultural, historical, landscape and conservation values. They can be found in many locations including woodlands, wood pastures, parklands, hedgerow, orchards and other areas.

2.6.8. The cultural, historical, landscape and conservation values associated with ancient and veteran trees mean that they should automatically be assigned category A3 when undertaking a quality assessment in accordance with BS 5837:2012 Table 1 (**Ref. 13**). The ability of such trees to provide many important benefits even if not alive means that this assessment criterion should apply whether physiologically declining or dead (**Ref. 16**).

2.6.9. The Ancient Tree Inventory (ATI) is administered by the Woodland Trust with support from volunteers and trained verifiers. The absence of a recorded tree on the ATI should not be taken as the absence of ancient, veteran or notable trees within the Study Area.

2.6.10. Natural England and Forestry Commission guidance (referred to commonly as 'Standing Advice') is a material planning consideration in planning decisions affecting ancient trees and veteran trees (**Ref. 11**).

2.6.11. The presence of locally notable, ancient and veteran trees within the Study Area was checked using the Woodland Trust's Ancient Tree Inventory (**Ref. 17**) on 7 June 2019.

Ancient Woodland

- 2.6.12. Ancient woodland is defined as any area that has been continuously wooded⁵ since 1600 AD and accounts for approximately 2% of the United Kingdom's land area (**Ref. 18**). It is valued for its wildlife which may include rare or threatened species, its soils, its amenity value and its importance as a cultural, historical and landscape resource. Ancient woodland takes hundreds of years to establish and is an irreplaceable resource.
- 2.6.13. Ancient woodland includes both ancient semi-natural woodland (ASNW) and plantations on ancient woodland sites (PAWS). Ancient semi-natural woodland consists predominately of naturally regenerating trees which are native to the site. Trees within ancient semi-natural woodland will be well suited to local environmental conditions, will be closely integrated into the ecology of the woodland and may represent a unique genetic resource.
- 2.6.14. Plantations on ancient woodland sites are those woodlands where the native trees have been removed and replaced with imported coniferous or broadleaved trees. These woodlands will still exhibit ancient woodland features including soils, flora and fauna and other historic features.
- 2.6.15. There is no distinction between ASNW and PAWS insofar as they are both identified as ancient woodland for the purposes of the National Planning Policy Framework (**Ref. 19**). The cultural and conservation values associated with ASNW and PAWS mean that they should automatically be assigned category A3 when undertaking a quality assessment in accordance with BS 5837:2012 Table 1 (**Ref. 13**). The existing condition of ancient woodland should not influence its quality assessment as if poor, this can usually be improved with appropriate management (**Ref. 11**).
- 2.6.16. Due to the irreplaceable nature of ancient woodland any loss or deterioration can only be partially compensated. Compensation measures must be determined on a site-specific basis and may include planting new native woodland and the implementation of positive management activities.
- 2.6.17. For the purposes of this report, ancient woodland is regarded as DMRB high importance and rarity which is of national importance.
- 2.6.18. The presence of ancient woodlands within the Study Area was checked using Natural England's Multi Agency Geographical Information for the Countryside (MAGIC) map (which provides geographic information about the natural environment from across UK

⁵ This excludes the presence of open areas within the woodland and the periodic felling of trees either over its full extent or in part. Neither of these features/actions will necessarily negatively impact upon the value of the woodland and, in the instance of open areas, often has a positive effect on diversity of habitat.

government) (**Ref. 20**) on 07 June 2019. However, ancient woodlands smaller than two hectares are unlikely to appear on the MAGIC website.

Historic Records

- 2.6.19. The presence of historic arboricultural features within the Study Area was researched using 1828 Greenwood's Map of Northumberland, a copy of which is included in **Appendix C3** of this report.

SITE VISIT / SURVEYS

- 2.6.20. A walkover survey of arboricultural features within the Study Area was undertaken on weeks commencing 4 March and 11 March 2019.
- 2.6.21. The arboricultural survey was undertaken in accordance with British Standard BS 5837:2012 (BS 5837) with Ordnance Survey Master Map forming the base mapping. The arboricultural survey was undertaken in accordance with the following criteria:
- a.** Arboricultural features have been recorded as groups or wooded areas where this has been deemed appropriate. Groups have been recorded on the basis that they form distinct arboricultural features either aerodynamically, visually or because they contain trees of similar cultural and biodiversity value.
 - b.** Arboricultural features have been inspected using the Visual Tree Assessment methodology as purported by Mattheck and Breloer (**Ref. 21**).
 - c.** Arboricultural features have been awarded a quality value based upon guidance provided within British Standard BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendation* (BS 5837:2012) Table 1.
 - d.** The walkover survey was carried out from ground level only.
 - e.** No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
 - f.** Tree heights and canopy spreads have been estimated to the nearest metre.
- 2.6.22. Where site access allows, stem diameters have been measured in accordance with Annex C of BS 5837:2012. Diameters of single stem trees on level ground have been measured at 1.5 m above ground level. The diameters of other commonly encountered stems have been measured where most appropriate and this is recorded within the schedule.
- 2.6.23. The combined stem diameters for multi-stemmed trees have been calculated in accordance with BS 5837:2012 paragraph 4.6.1. Apart from ancient and veteran trees all root protection areas have been calculated as an area equivalent to a circle with a radius 12 times the stem diameter. For ancient and veteran trees root protection areas have been calculated as an area equivalent to a circle with a radius 15 times the stem diameter (**Ref. 11**).

2.7 ASSESSMENT ASSUMPTIONS AND LIMITATIONS

- 2.7.1. This assessment has been undertaken based upon the following assumptions:
- a.** That all arboricultural features within the Order Limits and up to 15 m of the proposed highway would need to be removed.

- b.** That all arboricultural features between the 15 m buffer of the proposed highway and the Order Limits are at risk of removal. To secure the retention of these features, tree protection fencing would be required.
- c.** A buffer of 15 m has been applied to the outside of the Order Limits. This is to take into account any trees whose root protection areas may extend within but are growing on third party land.
- d.** The number of trees impacted in this area and degree of impact would be assessed via detailed site survey and 'micro siting' at detailed design stage.
- e.** That where the proposed working area encroaches into the root protection area of adjacent arboricultural features this would result in adverse impacts including root severance and soil compaction. It is further assumed that these impacts would have such a large adverse impact on affected trees that they would become unsustainable and therefore need to be removed.
- f.** There may be instances where 15 m working space is not needed and other cases where this is exceeded. Detailed design should seek to avoid impacts and adjust working space where possible. At this stage a precautionary approach has been adopted.
- g.** That all arboricultural features identified for retention can be sustainably protected during construction period and can therefore be retained.

2.7.2. The following limitations apply to this assessment:

- a.** Arboricultural survey data is of a preliminary nature and has been collected during a walkover survey. Only defects visible from the ground have been noted and some features may not have been inspected closely due to access difficulties, the presence of dense ivy or vegetation or safety constraints. However, it would not be expected that this would affect the outcome of the assessment.
- b.** The survey has only been undertaken from land within the client's ownership, from public land or from areas where formal access has been arranged.
- c.** Safety related features have recorded on the basis that the arboricultural features would be subject to a normal programme of tree hazard assessment and only those features which materially affect the quality of the feature or pose a real and immediate safety concern have been recorded.
- d.** The assessment has been undertaken without the benefit of a detailed design. Design information relating to items such as sightlines, signs, street lighting, fences, underground services, ancillary structures and permanent access routes. Features such as these may all require additional tree removal which has not been considered at this stage.
- e.** Working space requirements greater or smaller than those which have been assumed may increase or decrease the number and area of arboricultural features which have been identified as needing to be removed. Working space requirements would be further developed during detailed design and construction and specific areas of tree removal would be finalised.

- f.** Arboricultural survey data is typically valid for a period of two years unless otherwise stated. Significant environmental events (such as extreme weather conditions) or changes to Part B may render it invalid within a shorter timescale.
- g.** Records held on the Ancient Tree Inventory are collected on a voluntary basis, therefore the absence of records does not demonstrate the absence of ancient, veteran or notable trees but may simply indicate a gap in recording coverage.
- h.** The quantifications provided are based on generalised tree crown spreads and approximations of canopy cover for tree groups and woodlands, using survey data.
- i.** Morphology and condition of trees in the field would vary and change over time.
- j.** Whilst arboricultural surveys are not seasonally limited it is the case that certain pests and diseases may be more or less evident at different times of the year. This is especially true of certain wood decaying fungi such as the Giant Polypore (*Meripilus giganteus*) where fruiting bodies are short-lived, and the early stages of root decay may not result in other identifiable symptoms. Walkover survey data is therefore based upon observations made at the time of the site visit and may be subject to change should further or more detailed inspections be undertaken.
- k.** The position of arboricultural features has not been recorded on a topographical survey but has been estimated using aerial photography. The position and extent of these features should be regarded as approximate only, therefore 'borderline' trees may subsequently be included or excluded from impacts.

Ash Dieback

- 2.7.3. The Forestry Commission provide an online map (**Ref. 22**) resource which shows areas where Chalara has first been recorded and confirmed to be affecting ash trees using a grid format of 10 km square. As the Forest Research website explains (**Ref. 23**), the map is not an indication of the rate of spread of the disease, the map only indicates when the infection was first found. When the fungus first arrived at the site in many cases, is not known.
- 2.7.4. A review of this resource has confirmed that ash dieback has been present in the southern section of Part B since 2014. Data for northern section has not been confirmed. However, within the surrounding areas, ash dieback has been confirmed as early as 2013 to the west, 2014 to the north and since 2016 to the east of this section of Part B. A screenshot of the online map to show the full extent of Part B has been included in **Appendix C2: Ash Die Back** of this report.
- 2.7.5. With the known presence of Chalara in the surrounding areas since at least the last 5 years, and the scale of the map used, the absence of ash dieback in the northern section of Part B does not demonstrate the absence of ash dieback in the area but may simply indicate a gap in recording coverage.

3 PREAPPLICATION ENGAGEMENT

3.1 PRESCRIBED CONSULTEES

3.1.1. In line with s42 Planning Act 2008 and The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009⁶, prescribed consultees identified for preapplication engagement on tree and woodland impacts are:

- a.** Natural England - All proposed applications likely to affect land in England.
- b.** The Forestry Commission - All proposed applications likely to affect the protection or expansion of forests and woodlands.
- c.** Environment Agency - All proposed applications likely to affect land in England.

3.2 SUMMARY OF RESPONSES

3.2.1. A summary of response from prescribed consultees is provided below. Full responses are provided in the **Consultation Report (Application Document Reference: TR010041/APP/5.1)**.

NATURAL ENGLAND

3.2.2. The response from Natural England, received 1 April 2019, highlighted the need to protect and enhance valued landscapes, including local landscape features such as woodlands. In line with local landscape character assessments, woodlands could be incorporated into the development in order to respect and enhance local landscape character and distinctiveness.

ENVIRONMENT AGENCY

3.2.3. Comments provided in the response letter received 8 April 2019 were intended to inform the next stage of the application process. In relation to arboriculture, the response highlighted the option of planting trees to provide watercourses with shade *“to future proof watercourses against the impact of climate change”*.

FORESTRY COMMISSION

3.2.4. A consultation response was not received from the Forestry Commission.

⁶ Schedule 1, column 1 and Column 2.

4 BASELINE CONDITIONS

4.1 DESK STUDY

TREE PRESERVATION ORDERS AND CONSERVATION AREAS

4.1.1. Table 4-1 sets out the TPOs present within the Study Area.

Table 4-1 – Northumberland County Council TPOs within the Study Area

TPO Number	TPO Name	Potential Trees Affected
TPO 2005	West Linkhall Cottages, Chathill	T190a, T190b, T190c

4.1.2. This TPO is 14 years old and consists of three mature sycamore trees located within a private garden. From the desk study, these trees can be seen from aerial images, and appear to be a prominent feature in the local landscape. Although located outside of the Order Limits, these three trees are located within the Study Area for Part B. Localised amendments to the design of Part B may be appropriate in this location. The purpose would be to reduce negative impacts to these TPO trees located on third party land which may result from construction works within the root protection area where their rooting zones extends into the boundary of Part B.

4.1.3. A copy of the TPO is contained in **Appendix C1** of this report.

4.1.4. No conservation areas were identified through the desk study.

ANCIENT WOODLAND

4.1.5. A review of Defra's MAGIC website (**Ref. 20**) on 14 March 2019 confirmed the absence of Ancient Woodland within the Study Area.

ANCIENT AND VETERAN TREES

4.1.6. A review of the Ancient Tree Inventory (**Ref. 17**) on 14 March 2019 confirmed that the following ancient or veteran trees were recorded within the Study Area, as set out in **Table 4-2**. Using Google Earth option to view aerials from previous years, both trees were present in 2011. However, in subsequent years on Google Earth, these features appear to be no longer present.

Table 4-2 – Ancient and Veteran Trees Identified through Desk Study

Feature Reference	Species	ATI Reported Girth	Location	Easting Northing	Type
89648	Ash	4.5 m at 1.5 m	NU20321663	420320, 616630	Veteran

Feature Reference	Species	ATI Reported Girth	Location	Easting Northing	Type
89649	Ash	4.19 at 1.5 m	NU20901609	420900, 616090	Veteran

NOTABLE TREES

- 4.1.7. Review of the Ancient Tree Inventory confirmed the absence of notable trees.

4.2 SITE SURVEY

- 4.2.1. In total, 424 arboricultural features were surveyed. A survey schedule of all features is contained within **Appendix A: Survey Schedule** of this report.
- 4.2.2. Tree locations are identified with a unique reference. This reference within the schedule at **Appendix A** of this report may be cross-referenced with the Tree Constraints Plans within in **Appendix B1: Tree Constraints Plan** of this report.
- 4.2.3. **Table 4-3** summarises the Baseline Arboricultural Resource for the whole Study Area.

Table 4-3 – Overall Baseline Arboricultural Conditions

BS5837 Category	DMRB Sensitivity	Tree	Group	Linear Group	Hedge	Wooded Area	Shrubs	Grand Total
A	High	2	-	-	-	-	-	2
A	Medium	38	2	-	3	1	-	44
B	Low	100	50	3	83	13	8	257
C	Very Low	41	39	2	3	-	1	86
U	Unsuitable	28	3	1	-	-	-	32
TPO		3	-	-	-	-	-	3
	Grand Total	212	94	6	89	14	9	424

HIGH SENSITIVITY FEATURES

- 4.2.4. Two High Sensitivity arboricultural features were identified during the walkover survey. These high sensitivity features consist of an ancient beech tree (T195) with a stem diameter

of 1500 mm, and a veteran sycamore tree (T196) with a stem diameter of 1200 mm. Both features are located perpendicular to the west side the A1 along a dirt track running alongside a field boundary.

Table 4-4 – Summary of High Sensitivity Features

Feature Reference	Reason for Valuation
T195	Ancient Tree
T196	Veteran Tree

- 4.2.5. The two High Sensitivity features identified through the Ancient Tree Inventory and summarised in **Table 4-2** above were not present at the time of the walkover survey. Therefore, it is assumed that these two ash trees are no longer present.

MEDIUM SENSITIVITY FEATURES

- 4.2.6. A total of 44 Medium Sensitivity arboricultural features were identified including 38 individual trees, two groups of trees, three hedges and one wooded area, none of which qualifies as having ancient or veteran status. With the exception of H10 and W66, these arboricultural features consist of mature native species. Hedge H10 consists of four Leyland cypress, and wooded area W66 is a multi-aged, multi-structured quite dense mixed woodland of mainly deciduous trees with a coniferous mix.

LOW SENSITIVITY FEATURES

- 4.2.7. In total, 257 Low Sensitivity arboricultural features were identified including 100 individual trees, 50 groups of trees, three linear groups, 83 hedges, 13 woodland areas and eight shrubs. Arboricultural features within this category are primarily mature specimens to include agricultural hedgerows of predominantly hawthorn, and tree groups and woodlands of both softwood plantation and broadleaf. Woodland areas W76, W80, W84 and W86 are identified within The Avenue.
- 4.2.8. Individual trees are dominated by mature ash (36 specimens) and mature sycamore (28 specimens), with remaining species consisting of deciduous and non-deciduous trees, both of native and non-native species.

VERY LOW SENSITIVITY FEATURES

- 4.2.9. In addition, 86 Very Low Sensitivity arboricultural features were identified. These were predominantly:
- a. Trees of limited merit
 - b. Unmanaged hedges or hedges with gaps (not accounting for ecological value)
 - c. Young or scrubby woodland or groups
 - d. Planted areas of limited interest or value – highway group planting for example.

- e. Trees in poor condition but not defective enough to be unsuitable

TREE PRESERVATION ORDER FEATURES

- 4.2.10. Three trees, not surveyed during the walkover survey, have also been identified through a desk study. These are mature sycamore trees located within a private garden on the periphery of the Order Limits. The condition of these arboricultural features has been assessed purely based on a desk study and has not been subject to a BS 5837 survey. Purely based on resources available online, along with the landscape and amenity value of these trees are likely to have due to the location, a BS 5837 category B is assumed.

UNSUITABLE FEATURES

- 4.2.11. A further 32 unsuitable features were identified; these are summarised in **Table 4-5**, below. These are trees that are of little or no value due to their condition that may also be a hazard to people or property nearby. The remaining trees listed below also need to be removed as a matter of good practice but at the time of inspection did not pose an immediate threat.

Table 4-5 – Summary of Unsuitable Features

Feature Reference	Reason for Unsuitability	Recommended Action
G17	Hawthorn group, poor condition.	Partially impacted by Part B. Landowner remove tree.
G26	Two Ash, large basal swellings, stems heavily cracked and fractured.	Not impacted by Part B. Landowner remove tree
G103	Group of fourteen elderberry, poor condition, dbh averaged.	Directly impacted by Part B. Removal required.
LG119	Three trees tops cut out, due to power line cable above them.	Partially impacted by Part B.
T12	Windblown tree failed on route plate, leaning towards A1.	Directly impacted by Part B. Removal required.
T13	Old regenerated and hollowed, decayed ash stump.	Not impacted by Part B. If safe to do so, may be of value as a deadwood source.
T19	Poor condition, extensive decay along base and main stem, situated outside of woodland.	Not directly impacted by Part B. Landowner remove tree.
T20	Possibly bat features, extensive basal decay and throughout the main stem.	Not impacted by Part B. Landowner remove tree.
T23	Extensive basal decay, large cavity at base, dimensions estimated from A1 verge due to limited access.	Not impacted by Part B. Landowner remove tree.
T26	Failed at the root plate many years ago, now lying into farmers field.	Not directly impacted by Part B. Landowner remove tree.
T33	Large limb loss evident on upper stem, large fracture cavity into stem, meripilus fruiting body evident at base of stem trunk.	Not directly impacted by Part B. Landowner remove tree.
T35	Possibly bat features, tree in decline, heavily stag headed, cavities in stem and upper tree structure.	Directly impacted by Part B. Removal required.
T41	Crown ripped out in past, mainly a large standing stem, large areas of decay evident in main stem, lots of insect activity.	Not impacted by Part B. If safe to do so, may be of value as a deadwood source.
T42	Cavities in upper crown, early stage of root decay evident, west side large extensive cavity tree needs removal.	Not impacted by Part B. Landowner remove tree.
T44	In decline, has root damage, old bracket evident at base tree, extensive basal decay, possibly beef steak fungus around basal area.	Not directly impacted by Part B. Landowner remove tree.
T50	Tree in state of decline, top die back to 25% of crown, stag headed poor condition.	Not impacted by Part B. Landowner remove tree.
T52	Possible bat features, stag headed limb rip out and loss, old oak in natural state of decline.	Not directly impacted by Part B. Landowner remove tree.
T90	Tree dead in middle of hedge row.	Not directly impacted by Part B. Landowner remove tree.
T97	-	Not impacted by Part B. Landowner remove tree.
T98	Late mature ash, large open decay cavity on upper stem top has previously been lost.	Not directly impacted by Part B. Landowner remove tree.
T106	Even though tree is dead evidence of infect activity and possibly bay.	Not directly impacted by Part B. Landowner remove tree.
T120	Poor tree, suppressed under canopy of neighbouring large ash tree.	Not directly impacted by Part B. Landowner remove tree.
T138	Tree has lost two major leaders, one large leader left over field side crack evident in this large limb advise removal.	Not directly impacted by Part B. Landowner remove tree.

Feature Reference	Reason for Unsuitability	Recommended Action
T167	-	Not directly impacted by Part B. Landowner remove tree.
T185	Small elderberry in poor condition.	Directly impacted by Part B. Removal required.
T190	Small elderberry in poor condition.	Directly impacted by Part B. Removal required.
T193	Tree is in poor structural condition suppressed by dominant sycamore.	Not directly impacted by Part B. Landowner remove tree.
T194	Tree extremely poor condition, co-dominant leader snapped out.	Not directly impacted by Part B. Landowner remove tree.
T199	One hawthorn dead.	Directly impacted by Part B. Removal required.
T208	No access, dimensions estimated, tree physically in decline, large cavity in main stem, top of tree completely snapped out by wind loading.	Not directly impacted by Part B. Landowner remove tree.
T212	Small elderberry on culvert verge.	Directly impacted by Part B. Removal required.
T218	-	Not impacted by Part B. Landowner remove tree.

4.3 FUTURE BASELINE

- 4.3.1. The future baseline considers the level or change that may occur in the absence of Part B. This change may occur due to either natural or manmade causes.
- 4.3.2. Within the Study Area, the future baseline arboricultural resource is expected to be largely stable, although highly likely to be impacted by ash dieback for the foreseeable future.
- 4.3.3. A high proportion of features (93) contained ash as individual trees, and as groups of trees. With much of this resource in good to fair structural and physiological condition, some ash trees may be exhibiting resistance, allowing these features to recover over time through natural regeneration. Despite this, a steady decline in the number of ash trees can be expected in the long-term.
- 4.3.4. Planting of ash not selected for resistance in the future will prove unviable within the Study Area for the foreseeable future. This will further compound the issue, as dying tree will be replaced less than other species.
- 4.3.5. For all non-ash species, new regeneration can be expected both naturally and through planting schemes under good land management.
- 4.3.6. Natural loss due to age and the presence of pest and diseases can also be expected. In roadside areas this loss may be relatively faster due to felling hazardous trees to manage roadside risk.
- 4.3.7. In summary, in the absence of Part B, the arboricultural resource is likely to remain stable with small fluctuations in numbers overall. Larger long-term fluctuations within the ash population resulting in a change in the ratio of species found across the landscape can be expected.

5 POTENTIAL IMPACTS

5.1 CONSTRUCTION

5.1.1. Potential arboricultural impacts during construction have been identified with reference to British Standard BS 5837:2012. Potential impacts during construction are wholly adverse and have been identified as including the following:

- a. The removal of arboricultural features to facilitate construction
- b. The removal of arboricultural features to create construction compounds and access
- c. Damage to retained trees resulting from:
 - I. Severance of roots caused by excavation
 - II. Damage to soil and roots caused by compaction
 - III. Damage to soil and roots caused by pollutants and contaminated surface run-off
 - IV. The smothering of trees due to significant accumulations of dust
 - V. The inappropriate pruning of trees to facilitate access

5.2 OPERATION

- 5.2.1. This initial assessment may be refined during detailed design of Part B, to retain trees that are on the edge of the construction by altering/refining design or adjusting working areas.
- 5.2.2. In the absence of Part B, trees may be sustainable where traffic is not present, for example, a decaying veteran tree located in a field. However, this same tree may present a hazard if incorporated into Part B adjacent to a live carriageway. Future impacts may also be expected where trees moderately impacted by Part B fail to recover.
- 5.2.3. Tree growth in some locations may be incompatible with Part B. Where trees are located near hard surfacing, principles contained within BS5837:2012 would be used to ensure a harmonious relationship between Part B and the tree. This would avoid the future conflicts and potential damage to trees, as well as helping to preserve highway infrastructure. Common conflicts occur with street lighting, traffic signals, signage and footways. They may have a future impact on the trees where they create problems for the function and safety of the highway.
- 5.2.4. Part removal of groups and woodland would need to consider the location and stability of retained trees. Where a tree is exposed to new wind forces that it has not previously adapted to, it may not be structurally strong enough and collapse. This in turn may lead to additional loss of trees as well as incompatibility with Part B.
- 5.2.5. Increases in local traffic and proportionate increases in air pollution may impact retained trees.
- 5.2.6. Changes in microclimate and exposure to wind and sun may impact retained trees.
- 5.2.7. Cumulative impacts may occur from additional infrastructure that develops to support Part B in the future.

6 DESIGN, MITIGATION AND ENHANCEMENT

6.1 TREE PROTECTION

- 6.1.1. Trees up to 15 m outside of the Order Limits would be assessed prior to construction commencement to ensure that appropriate mitigation is in place to protect root protection areas. The exact location and extent of buffer and protection measures to be employed would be considered during detailed design.
- 6.1.2. Trees would be protected using protective measures such as ground protection within the root protection areas (RPA) and fencing on the boundary of the RPA where practicable.
- 6.1.3. Excavations within the root protection area of retained trees may be carried out using manual techniques to reduce soil disturbance.
- 6.1.4. No-dig construction can be prescribed at detailed design for access routes and footways to reduce or avoid root and soil disturbance.
- 6.1.5. Working areas can be minimised as far as is practicable to and access routes diverted away from sensitive arboricultural features.
- 6.1.6. Pruning would be carried out in accordance with BS3998:2010 Tree Work Recommendations (**Ref. 24**) to mitigate damage during trees works.
- 6.1.7. All Tree Works and Construction would be undertaken in accordance with BS5837:2012 *Trees in relation to design, demolition and construction - Recommendations*. All works to support mitigation of tree impacts would be incorporated into an Approved Arboricultural Method Statement at detailed design stage. This in turn would support the Construction Environmental Management Plan (CEMP).

6.2 TREE PLANTING

- 6.2.1. Tree mitigatory planting is proposed in accordance with the Landscape Mitigation Plan (refer to **Figure 7.10: Landscape Mitigation Plan, Volume 6** of this ES (**Application Document Reference: TR010041/APP/6.6**)).

7 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

7.1 ASSESSMENT OF ARBORICULTURAL EFFECTS

- 7.1.1. The effects of Part B on the baseline arboricultural resource have been assessed. The assessment identifies the likely effects during both construction and operation. Operation is defined for arboriculture purposes as a period of 15 years following completion of construction work.
- 7.1.2. The effects associated with construction and operation of Part B assumes implementation of the tree protection and mitigation measures identified in this report.
- 7.1.3. In accordance with Table 2.4 of DMRB guidance (Vol 11 Section 2 Part 5) Chapter 2: Determining Significance of Environmental Effects, the interaction between DMRB sensitivity of the arboricultural resource and the construction or operation magnitude of impact identifies the significance of environmental effects as described in **section 2.5**. These outcomes are contained in **Table 7.1**.

Table 7-1 – Likely significant Effects – Trees, Groups, Hedges, Linear Groups, Shrubs and Wooded Areas

BS5837:2012 Category	DMRB Sensitivity	Partially Impacted	Directly Impacted	Protection Required/ Not Impacted	Construction Impact	Construction Effects	Operation Impacts	Operation Effects
Trees								
A	High	-	-	2	No Change	Neutral	No Change	Neutral
A	Medium	-	7	31	Major Adverse	Moderate or Large Adverse	Minor Adverse	Slight Adverse
B	Low	-	31	69	Major Adverse	Slight or Moderate Adverse	Minor Adverse	Neutral or Slight Adverse
C	Very Low	-	27	14	Major Adverse	Slight Adverse	Moderate Beneficial	Slight Beneficial

BS5837:2012 Category	DMRB Sensitivity	Partially Impacted	Directly Impacted	Protection Required/ Not Impacted	Construction Impact	Construction Effects	Operation Impacts	Operation Effects
U	Unsuitable	-	7	21	Major Adverse	Neutral	Major Beneficial	Moderate Beneficial
TPO		-	-	3	No Change	Neutral	No Change	Neutral
Trees Total		0	72	140				
Groups								
A	Medium	1	1	-	Major Adverse	Moderate or Large Adverse	Minor Adverse	Slight Adverse
B	Low	5	17	28	Major Adverse	Slight or Moderate Adverse	Minor Adverse	Neutral or Slight Adverse
C	Very Low	4	29	6	Major Adverse	Slight Adverse	Moderate Beneficial	Slight Beneficial
U	Unsuitable	1	1	1	Major Adverse	Neutral	Major Beneficial	Moderate Beneficial
Groups Total		11	48	35				
Hedges								
A	Medium	-	1	2	Moderate Adverse	Moderate Adverse	Minor Adverse	Slight Adverse
B	Low	15	29	39	Major Adverse	Slight or Moderate Adverse	Minor Adverse	Neutral or Slight Adverse

BS5837:2012 Category	DMRB Sensitivity	Partially Impacted	Directly Impacted	Protection Required/ Not Impacted	Construction Impact	Construction Effects	Operation Impacts	Operation Effects
C	Very Low	-	1	2	Moderate Adverse	Neutral or Slight Adverse	Moderate Beneficial	Slight Beneficial
Hedges Total		15	31	43				
Linear Groups								
B	Low	1	1	1	Major Adverse	Moderate or Large Adverse	Minor Adverse	Slight Adverse
C	Very Low	-	2	-	Major Adverse	Slight Adverse	Moderate Beneficial	Slight Beneficial
U	Unsuitable	1	-	-	Moderate Adverse	Neutral	Moderate Beneficial	Moderate Beneficial
Linear Groups Total		2	3	1				
Shrubs								
B	Low	1	4	3	Major Adverse	Slight or Moderate Adverse	Minor Adverse	Neutral or Slight Adverse
C	Very Low	-	1	-	Moderate Adverse	Neutral or Slight Adverse	Moderate Beneficial	Slight Beneficial
Shrub Total		1	5	3				
Wooded Areas								

BS5837:2012 Category	DMRB Sensitivity	Partially Impacted	Directly Impacted	Protection Required/ Not Impacted	Construction Impact	Construction Effects	Operation Impacts	Operation Effects
A	Medium	1	-	-	Major adverse	Moderate or Large Adverse	Negligible Adverse	Slight Adverse
B	Low	5	-	8	Major Adverse	Slight or Moderate Adverse	Moderate Adverse	Slight Adverse
Wooded Area Total		6	0	8				
Grand Total		35	160	230				

7.2 CONSTRUCTION EFFECTS

VERY LARGE EFFECTS

- 7.2.1. Within Part B, Very Large Effects on individual receptors are those that are generally a consequence of significant loss of high sensitivity features such as ancient or veteran trees. The two high sensitivity features identified during the walkover survey would be retained and not impacted by Part B.

MODERATE OR LARGE EFFECTS (SIGNIFICANT)

- 7.2.2. The majority of arboricultural features expected to be significantly impacted (Moderate or Large effect) are medium sensitivity features identified as requiring removal for the delivery of Part B, resulting in a Major impact. These include one mixed wooded group (G106) with an average stem diameter of 500 mm and seven mature trees consisting of:
- a. One beech tree (T148) with a stem diameter of 440 mm;
 - b. Two ash trees with stem diameter ranging from 650 mm to 900 mm (T150, T151); and
 - c. Four sycamore trees with stem diameter ranging from 800 mm to 1,000 mm (T130, T131, T171, T197).
- 7.2.3. Medium sensitivity arboricultural features requiring partial removal include one tree group (G50) and one woodland (W66). These features are predominantly located outside the

Order Limits on third party land, with a section located inside the Order Limits. Due to the proximity to the construction area for Part B, to ensure the remaining features located on third party land are maintained and avoid negative impacts to the above and below ground constraints, appropriate tree protection fencing, and construction exclusion zones as outlined in Section 6.2 of BS 5837:2012 would need to be adhered to.

- 7.2.4. Low sensitivity arboricultural features identified for removal includes one linear tree group (LG118) and the partial removal of linear tree group LG121. Due to the total number of low sensitivity arboricultural features located within these linear groups, the overall impact has been assessed as Major.
- 7.2.5. There are a further 27 medium sensitivity arboricultural feature at risk of Major impacts due to the proximity of their RPA to Part B and therefore require protection during construction. These consist of:
- a. Two hedges (H9, H10);
 - b. Seven ash trees (T141, T153, T164, T166, T168, T169, T170);
 - c. One beech (T64);
 - d. One Lime (T156);
 - e. Four oak (T46, T48, T63, T80); and
 - f. Twelve sycamore trees (T27, T28, T29, T34, T132, T133, T134, T135, T136, T142, T143, T191) with stem diameter ranging from 680 to 1,000 mm at risk due to significant encroachment into their RPA.
- 7.2.6. To secure the retention of arboricultural features at risk, appropriate tree protection fencing, and appropriate construction exclusion zones should be utilized as outlined in **Section 2.7** assessment of assumptions outlined above. Further guidance is provided in Section 6.2 of BS5837 (**Ref. 13**) and should be utilised to ensure protection of stems, crowns, rooting areas and soils of retained arboricultural features.
- 7.2.7. Due to the long period of time taken for replacement arboricultural features to reach a point whereby they can provide the same size and age-related benefits as medium sensitivity arboricultural features, mitigation for the loss of any such specimens is unlikely to be achieved. Medium sensitivity arboricultural features should be retained and are of sufficient value to influence the design of Part B. The loss of these features would persist for the lifetime of Part B and beyond.

MODERATE EFFECTS (SIGNIFICANT)

- 7.2.8. One arboricultural feature expected to be significantly impacted (Moderate effect) is a medium sensitivity features identified as requiring removal for the delivery of Part B, resulting in a Moderate impact. This feature is a hawthorn hedge (H11) with an average stem diameter of 200 mm.
- 7.2.9. The loss of these features is likely to persist for the lifetime of Part B and beyond.

SLIGHT OR MODERATE EFFECTS (SIGNIFICANT)

- 7.2.10. All arboricultural features that are slight to moderately affected are low sensitivity features. Those identified for removal include 17 tree groups, 29 hedges, four shrubs and 31 trees. In addition, arboricultural features identified for partial removal include five tree groups, 15 hedges (including H36), one linear tree group, one shrub and five woodlands, one of which is woodland W86, and eight trees due to significant encroachment into their root protection area.
- 7.2.11. Hedge H36 is located to the south west of Charlton Mires Junction on the periphery of Part B. This feature runs along the B6347 which is to be retained and continues along B6341 which is identified for removal.
- 7.2.12. Hedge H39 is located between Rock South Farm Access Road and the existing track. The southern section of this hedge is identified as requiring protection fencing due to its proximity to Part B.
- 7.2.13. To ensure the sections of hedges H36 and H39 identified for retention are secured, appropriate construction exclusion zones as outlined in **Section 2.7** Assessment of Assumptions above. Further guidance is provided in Section 6.2 of BS5837 (**Ref. 13**) and should be utilised to ensure protection of stems, crowns, rooting areas and soils of retained arboricultural features.
- 7.2.14. At risk of removal due to encroachment into their root protection area or proximity to Part B are a further nine tree groups, 13 hedges, one linear tree group, two shrubs, 49 trees and three woodlands.
- 7.2.15. To secure the retention of arboricultural features at risk, appropriate tree protection fencing, and appropriate construction exclusion zones should be utilized as outlined in **Section 2.7** above. Further guidance is provided in Section 6.2 of BS5837 (**Ref. 13**) and should be utilised to ensure protection of stems, crowns, rooting areas and soils of retained arboricultural features.
- 7.2.16. Although of insufficient value to influence the design of Part B, loss of these arboricultural features has the potential to be mitigated over a period of 10 to 20 years.

SLIGHT EFFECTS (NOT SIGNIFICANT)

- 7.2.17. A total of 61 arboricultural features identified for removal or part removal resulting in a Slight effect are very low sensitivity arboricultural features all resulting in a Major impact. At risk and therefore requiring protection are a further four very low sensitivity arboricultural features resulting in a Moderate Impact. Overall effect of these arboricultural features is therefore Slight.
- 7.2.18. Where features identified for removal are large groups it is expected these can be replaced within 15 to 25 years.

NEUTRAL OR SLIGHT EFFECT (NOT SIGNIFICANT)

- 7.2.19. Two very low sensitivity arboricultural features are identified for removal resulting in a Moderate effect. Overall effect of these arboricultural features is therefore Neutral or Slight.
- 7.2.20. It is expected these arboricultural features can be replaced within the lifetime of Part B.

NEUTRAL EFFECTS (NOT SIGNIFICANT)

- 7.2.21. Nine unsuitable sensitivity arboricultural features are identified for removal or partial removal resulting in an overall Major impact and one unsuitable sensitivity arboricultural feature is identified for partial removal resulting in a Moderate impact due to the total number of individual arboricultural features requiring removal. At risk of removal is a further 14 unsuitable sensitivity arboricultural feature. The Overall effect of the loss of these arboricultural features is therefore Neutral.
- 7.2.22. On the periphery of Part B are three trees protected by a TPO 2005 West Linkhall Cottages. Although not assessed during the walk over survey, these trees have been assigned a moderate sensitivity for the purpose of this assessment. Due to the fact that the RPAs of two features (T190a, T190c) extend across the Order Limits, these features are at risk of adverse impacts.
- 7.2.23. To secure the retention of arboricultural features at risk, appropriate tree protection fencing, and appropriate construction exclusion zones should be utilized as outlined in **Section 2.7** above. Further guidance is provided in Section 6.2 of BS5837 (**Ref. 13**) and should be utilised to ensure protection of stems, crowns, rooting areas and soils of retained arboricultural features.
- 7.2.24. Mitigatory planting as part of a wider programme of replacement tree planting is achievable within the lifetime of Part B insofar as once established, new planting would have the capacity to effectively replace arboricultural features which are lost.

7.3 OPERATIONAL EFFECTS

- 7.3.1. Operational effects to retained features may extend to ongoing impacts such as increased air pollution, wind exposure, road surface run off and road salt. It is not possible to quantify these at this stage of design. It is likely that landscaping mitigation would provide some **neutral** or **slight adverse** effect to High, Medium and Low sensitivity retained features.
- 7.3.2. Impacts to Very Low sensitivity features are expected to be mitigated through replacement planting during operation therefore a **slight beneficial** (not significant) effect can be expected as the new trees mature.
- 7.3.3. Unsuitable sensitivity features are those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Therefore, impacts to these features is expected to be **moderately beneficial** when achieved through a programme of replacement planting.

8 REPORT SUMMARY

- 8.1.1. The Study Area comprises a typical rural landscape of trees, hedges and woodland around agricultural fields with small scale sporadic development outside the A1, such as farm houses and small hamlets.
- 8.1.2. Due to the nature of the landscape and the size of the Study Area, the arboricultural resource varies from formal planting to natural regeneration, from large highway plantation screens to aged or near ancient veteran trees. The resource is generally in good to fair condition and of value to the local landscape.
- 8.1.3. Two High Sensitivity features were identified. These features would not be impacted by Part B.
- 8.1.4. A total of 44 Medium Sensitivity arboricultural features were identified, of which 11 are significantly affected.
- 8.1.5. Within the terms of DMRB, the majority of the resource is regarded as Low or Very Low Sensitivity, however, these features are not strictly 'low' value in usage of BS5837:2012. Within BS5837:2012 Table 1, these trees are '*Trees lacking the special quality necessary to merit category A designation*'. Within this usage a category B tree is a tree that falls short of 'special'. This therefore includes mature trees and mature woodland that falls short of special but has some value. There were 263 features identified within this category, of which 81 are significantly affected.
- 8.1.6. Very low sensitivity trees also still have some value, but their loss can normally be compensated or enhanced by replacement planting. In total, the loss or partial loss of 61 features were identified in this category.
- 8.1.7. Although a number of features were identified as medium to high sensitivity, 26 are not expected to be significantly affected. For the remaining arboricultural resource, where the working areas are reduced below 15 m from the edge of construction (used for impact assessment) those trees impacted are likely to reduce further in number.
- 8.1.8. Overall, the construction stage of Part B is expected to have a Moderate to Major Adverse Significant Effect on the arboricultural resource. The operation stage of Part B would bring opportunities to provide beneficial effects through mitigatory replanting of trees in line with the Landscape Mitigation Plan (refer to **Figure 7.10: Landscape Mitigation Plan, Volume 6** of this ES (**Application Document Reference: TR010041/APP/6.6**)).
- 8.1.9. All Tree Works and Construction would be undertaken in accordance with BS5837:2012 *Trees in relation to design, demolition and construction - Recommendations*.
- 8.1.10. An Arboricultural Method Statement is recommended at detailed design stage to ensure mitigation is achieved. This in turn would support the Construction Environmental Management Plan.

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Appendix A

SURVEY SCHEDULE

Key:							
REFERENCE NUMBER:	Individual reference number						
TYPE:	T - Tree	G - Group	W - Woodland	H - Hedge	LG- Linear Group	S - Shrub	
SPECIES:	Species listed by common name						
HEIGHT:	Overall height (m)						
DIAMETER:	Stem diameter (mm) calculated in accordance with BS 5837 paragraph 4.6.1. An average stem diameter is provided for groups, woodlands and hedges. * Denotes an estimated stem diameter						
NO. OF STEMS:	Number of stems (individual trees only)						
LCH:	Lowest crown height (m)						
PRELIMINARY MANAGEMENT RECOMMENDATIONS:	Retain, Remove, or Action Required – Action required in the absence of a project or scheme due to a significant defect.						
AGE CLASS:	Young - < 1/3rd estimated life expectancy		Semi-mature – 1/3rd to 2/3rd estimated life expectancy		Mature - > 2/3rd estimated life expectancy		Veteran – a tree which exists significantly beyond its normal life expectancy
PHYSIOLOGICAL CONDITION:	Good		Fair		Poor		Dead
STRUCTURAL CONDITION:	Good		Fair		Poor		
ESTIMATED REMAINING CONTRIBUTION:	>10 years		10+ years		20+ years		40+ years
CATEGORY:	BS 5837 Category - A, B, C, U		BS 5837 Sub-category - 1, 2, 3				
RPA RADIUS	The radius of the circular Root Protection Area associated with the tree as measured from the centre of the stem (m)						
ENVIRONMENTAL STATUS	Ancient woodland (ASNW), ancient tree (AT), veteran tree (VT), notable tree (NT),						
LEGAL STATUS	Tree within conservation area or subject to a tree preservation order.						

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T195	Beech	12	1500	12	Ancient	Good	Fair	Retain	40 +	A	3	Extremely important beech tree within the landscape ecologically and culturally.	18	1017.88	Ancient	Ancient	Not Impacted	Retain	High
T196	Sycamore	12	1200	8	Mature (Late)	Fair	Poor	Retain	40 +	A	3	This is an old veteran sycamore consisting of three main leaders decay evident throughout stem, important cultural / wildlife value tree in the landscape.	14.4	651.44	Veteran	Veteran	Not Impacted	Retain	High
G106	Beech	20	500	8	Mature (Late)	Good	Fair	Retain	40 +	A	2	Mixed wooded group of beech, lime, chestnut, sycamore, larch, Scots pine, herb layer, bird/bat boxes present, potential bat area, retain as much as possible.	6	16898.87	none	none	Directly Impacted	Remove	Medium
H11	Hawthorn	1.5	200	1	Mature (Early)	Good	Good	Retain	40 +	A	3	Hawthorn mixed with elderberry, small gaps.	2.4	153.76	none	none	Directly Impacted	Remove	Medium
T150	Ash	14	650	8	Mature (Early)	Good	Good	Retain	40 +	A	3	-	7.8	191.13	none	none	Directly Impacted	Remove	Medium
T151	Ash	18	900	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	10.8	366.44	none	none	Directly Impacted	Remove	Medium
T148	Beech	16	440	8	Mature (Early)	Good	Good	Retain	40 +	A	3	-	5.28	87.58	none	none	Directly Impacted	Remove	Medium
T130	Sycamore	16	800	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	Located in field inside hedge.	9.6	289.53	none	none	Directly Impacted	Remove	Medium
T131	Sycamore	16	800	8	Mature (Late)	Good	Good	Retain	40 +	A	3	-	9.6	289.53	none	none	Directly Impacted	Remove	Medium

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T171	Sycamore	14	960	10	Mature (Late)	Fair	Fair	Retain	40 +	A	2	Single tree, good individual tree in landscape with good shape and form.	11.52	416.92	none	none	Directly Impacted	Remove	Medium
T197	Sycamore	12	1000	8	Mature (Late)	Fair	Fair	Retain	40 +	A	3	Good individual feature tree in landscape.	12	452.39	none	none	Directly Impacted	Remove	Medium
G50	Oak	18	800	8	Mature (Early)	Good	Good	Retain	40 +	A	3	Within the group two oak, one ash furthest west of group, and lower hedge of scrubby hawthorn, access difficult, had to survey as close as possible from a distance, binoculars used, dimensions estimated from largest trees.	9.6	4821.8	none	none	Partially Impacted	Remove Part	Medium
W66	Other/Unknown	20	750	4	Mature (Early)	Good	Fair	Retain	40 +	A	2	Mixed woodland, mainly deciduous trees with coniferous mix, varying age structure from matures, mature, early mature, young and natural regeneration, woodland is quite dense and well stocked with an understorey of elderberry, hawthorn and cherry laurel.	9	42355.51	none	none	Partially Impacted	Remove Part	Medium
H9	Hawthorn	1.5	200	1	Mature (Early)	Good	Good	Retain	40 +	A	3	Hawthorn mixed with elder berry small gaps.	2.4	653.41	none	none	Protection Required	Retain	Medium
H10	Leyland cypress	12	400	4	Mature (Early)	Good	Good	Retain	40 +	A	3	Boundary line hedge consisting if four trees of golden form of leylandii.	4.8	304.34	none	none	Protection Required	Retain	Medium
T141	Ash	20	800	10	Mature (Late)	Good	Fair	Retain	40 +	A	3	Two co-dominant leaders at 5m height from ground level.	9.6	289.53	none	none	Protection Required	Retain	Medium

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T153	Ash	18	800	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	Covered in ivy.	9.6	289.53	none	none	Protection Required	Retain	Medium
T164	Ash	18	960	10	Mature (Late)	Fair	Fair	Retain	40 +	A	3	Previous limb loss evident.	11.5 2	416.92	none	none	Protection Required	Retain	Medium
T166	Ash	20	960	10	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	11.5 2	416.92	none	none	Protection Required	Retain	Medium
T168	Ash	20	1200	10	Mature (Late)	Fair	Fair	Retain	40 +	A	3	Previous large limb loss evident.	14.4	651.44	none	none	Protection Required	Retain	Medium
T169	Ash	20	1000	10	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	12	452.39	none	none	Protection Required	Retain	Medium
T170	Ash	20	1200	12	Mature (Late)	Good	Fair	Retain	40 +	A	3	Previous limb loss evident.	14.4	651.44	none	none	Protection Required	Retain	Medium
T64	Beech	16	1000	10	Mature (Late)	Good	Fair	Retain	40 +	A	3	Located on edge of woodland and pond.	12	452.39	none	none	Protection Required	Retain	Medium
T156	Lime	16	800	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	9.6	289.53	none	none	Protection Required	Retain	Medium
T46	Oak	18	820	8	Mature (Late)	Fair	Fair	Retain	40 +	A	3	If retained needs crown work.	9.84	304.19	none	none	Protection Required	Retain	Medium
T48	Oak	18	860	10	Mature (Late)	Good	Good	Retain	40 +	A	3	-	10.3 2	334.59	none	none	Protection Required	Retain	Medium
T63	Oak	10	300	4	Mature (Early)	Fair	Good	Retain	40 +	A	3	Good shape and form.	3.6	40.72	none	none	Protection Required	Retain	Medium

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T80	Oak	12	460	8	Mature (Early)	Good	Good	Retain	40 +	A	3	Located other side of post a rail barn wire fence on edge of brook.	5.52	95.73	none	none	Protection Required	Retain	Medium
T27	Sycamore	18	780	8	Mature (Late)	Good	Good	Retain	40 +	A	3	Rooted on edge of old dried ditch, good form and architecture.	9.36	275.23	none	none	Protection Required	Retain	Medium
T28	Sycamore	18	880	8	Mature (Late)	Good	Good	Retain	40 +	A	3	Fine specimen well balanced form and architecture.	10.56	350.33	none	none	Protection Required	Retain	Medium
T29	Sycamore	18	960	9	Mature (Late)	Good	Good	Retain	40 +	A	3	Fine specimen, well balanced architecture.	11.52	416.92	none	none	Protection Required	Retain	Medium
T132	Sycamore	16	700	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	Previous limb loss.	8.4	221.67	none	none	Protection Required	Retain	Medium
T133	Sycamore	12	600	6	Mature (Late)	Good	Fair	Retain	40 +	A	3	Previous limb loss.	7.2	162.86	none	none	Protection Required	Retain	Medium
T134	Sycamore	12	700	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	Previous limb loss, over road.	8.4	221.67	none	none	Protection Required	Retain	Medium
T135	Sycamore	12	700	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	8.4	221.67	none	none	Protection Required	Retain	Medium
T136	Sycamore	16	800	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	9.6	289.53	none	none	Protection Required	Retain	Medium
T142	Sycamore	20	800	8	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	9.6	289.53	none	none	Protection Required	Retain	Medium
T143	Sycamore	16	900	8	Mature (Late)	Fair	Fair	Retain	40 +	A	3	-	10.8	366.44	none	none	Protection Required	Retain	Medium

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T191	Sycamore	18	1000	10	Mature (Late)	Good	Fair	Retain	40 +	A	2	Large individual sycamore on cusp of boundary wall, very notable tree, dbh estimated at 1m, lower stem covered in ivy.	12	452.39	none	none	Protection Required	Retain	Medium
T36	Ash	16	880	10	Mature (Late)	Good	Fair	Retain	40 +	A	3	-	10.56	350.33	none	none	Not Impacted	Retain	Medium
T121	Ash	16	700	8	Mature (Early)	Good	Good	Retain	40 +	A	3	-	8.4	221.67	none	none	Not Impacted	Retain	Medium
T31	Horse Chestnut	18	1200	10	Mature (Late)	Good	Good	Retain	40 +	A	3	Tree has good form architecture.	14.4	651.44	none	none	Not Impacted	Retain	Medium
T34	Sycamore	18	880	10	Mature (Late)	Good	Good	Retain	40 +	A	3	Tree has good form shape and architecture.	10.56	350.33	none	none	Not Impacted	Retain	Medium
T37	Sycamore	20	880	10	Mature (Late)	Good	Good	Retain	40 +	A	3	Tree has well balanced crown and good architecture.	10.56	350.33	none	none	Not Impacted	Retain	Medium
T91	Sycamore	14	680	4	Mature (Late)	Good	Good	Retain	40 +	A	3	-	8.16	209.18	none	none	Not Impacted	Retain	Medium
T192	Sycamore	14	500	10	Mature (Late)	Good	Good	Retain	40 +	A	3	Good shape architecture of tree, good notable in the landscape, located within boundary of private land.	6	113.1	none	none	Not Impacted	Retain	Medium
G31	Ash	10	220	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group consists of ash, hawthorn, field maple, sycamore. linear group, dimensions estimated, average dbh taken from largest trees.	2.64	2906.14	none	none	Directly Impacted	Remove	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
G72	Ash	12	340	5	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Group of four ash.	4.08	300.56	none	none	Directly Impacted	Remove	Low
G95	Ash	10	460	6	Mature (Early)	Fair	Fair	Retain	20 +	B	3	This group consists of two ash, which are the larger trees, two pine and one hawthorn.	5.52	266.11	none	none	Directly Impacted	Remove	Low
G109	Ash	12	500	6	Mature (Early)	Fair	Fair	Retain	20 +	B	2	Mixed wooded group consisting of Ash, birch, cherry, elm, scattered Scots pine, alder, understory is scrub hawthorn Rosa. should retain as much as possible.	6	2864.78	none	none	Directly Impacted	Remove	Low
G81	Beech	8	180	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of 10 trees, consisting of beech, ash and sycamore.	2.16	1103.56	none	none	Directly Impacted	Remove	Low
G92	Birch	12	250	6	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Mixed group consisting of seven birch one sycamore, blue cedar, Lawson cypress within kennel boundary.	3	417.99	none	none	Directly Impacted	Remove	Low
G94	Elder	6	200	3	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Group of mainly gorse with small hawthorn and elder berry.	2.4	578.87	none	none	Directly Impacted	Remove	Low
G186	Elder	6	200	4	Mature (Late)	Fair	Fair	Retain	10 +	B	3	Group of two elderberry and two hawthorn, two elderberry can be removed but two hawthorn at back can be retained.	2.4	18.1	none	none	Directly Impacted	Remove	Low
G19	Field Maple	10	200	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Linear group consists of hawthorn, field maple, ash.	2.4	5148.83	none	none	Directly Impacted	Remove	Low
G24	Field Maple	10	200	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	Linear group of field maple.	2.4	696.1	none	none	Directly Impacted	Remove	Low

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G13	Hawthorn	10	200	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of individual hawthorn trees, two trees in group, larger are ash, dimensions taken from the ash.	2.4	343.9	none	none	Directly Impacted	Remove	Low
G75	Hawthorn	8	140	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group consists of one willow, one ash and the remaining hawthorn, dbh estimated.	1.68	536.87	none	none	Directly Impacted	Remove	Low
G102	Hawthorn	8	400	4	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Five hawthorn, average dbh calculated.	4.8	297.46	none	none	Directly Impacted	Remove	Low
G97	Norway Maple	12	260	6	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Group consists of the following species. Norway maple, deciduous larch, sycamore, Scots pine, ash, hawthorn, beech. average DBH of largest trees twofour0mm.	3.12	1769.52	none	none	Directly Impacted	Remove	Low
G55	Scots Pine	12	308	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Linear group consists of Scots Pine, hawthorn, field maple, sycamore, ash. main is Scots pine.	3.69 6	3017.04	none	none	Directly Impacted	Remove	Low
G16	Sycamore	12	360	5	Mature (Early)	Good	Fair	Retain	20 +	B	3	Three sycamore, one beech.	4.32	457.37	none	none	Directly Impacted	Remove	Low
G96	Sycamore	12	380	6	Mature (Early)	Fair	Fair	Retain	20 +	B	3	This group consists of sycamore with an understory of elderberry and gorse.	4.56	900.59	none	none	Directly Impacted	Remove	Low
H12	Hawthorn	1.5	200	1	Mature (Early)	Good	Good	Retain	40 +	B	3	Hawthorn linear hedge, well managed.	2.4	152.52	none	none	Directly Impacted	Remove	Low
H13	Hawthorn	1.5	200	1	Mature (Early)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, acts as screen, well managed hawthorn.	2.4	228.31	none	none	Directly Impacted	Remove	Low

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H14	Hawthorn	1.5	200	1	Mature (Early)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, well managed, hawthorn acts as screen.	2.4	420.35	none	none	Directly Impacted	Remove	Low
H15	Hawthorn	1.5	200	1	Mature (Early)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, hawthorn, acts as screen, well managed.	2.4	419.87	none	none	Directly Impacted	Remove	Low
H16	Hawthorn	2	200	1	Mature (Early)	Good	Good	Retain	40 +	B	3	Unmanaged agricultural hedge row, linear, hawthorn.	2.4	496.56	none	none	Directly Impacted	Remove	Low
H17	Hawthorn	8	200	4	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Hedge line 24 hawthorn and one elderberry behind barrier.	2.4	203.71	none	none	Directly Impacted	Remove	Low
H18	Hawthorn	1.5	200	1.5	Mature (Early)	Good	Fair	Retain	40 +	B	3	Agricultural boundary hedge managed.	2.4	1534.05	none	none	Directly Impacted	Remove	Low
H20	Hawthorn	1.5	200	1.5	Mature (Early)	Good	Good	Retain	40 +	B	3	Linear hedge hawthorn, with gaps, managed agricultural boundary hedge.	2.4	1077.04	none	none	Directly Impacted	Remove	Low
H21	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Agricultural boundary hedge well maintained.	2.4	504.82	none	none	Directly Impacted	Remove	Low
H23	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Well managed agricultural boundary hedge running behind woodland.	2.4	813.47	none	none	Directly Impacted	Remove	Low
H24	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge of hawthorn with small gaps, some individual hawthorn trees are just outside of the hedge.	2.4	1181.87	none	none	Directly Impacted	Remove	Low

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H30	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Managed hedge line around property boundary.	2.4	351.27	none	none	Directly Impacted	Remove	Low
H33	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	1073.14	none	none	Directly Impacted	Remove	Low
H34	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	418.95	none	none	Directly Impacted	Remove	Low
H35	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	1338.16	none	none	Directly Impacted	Remove	Low
H37	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	182.42	none	none	Directly Impacted	Remove	Low
H38	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	171.96	none	none	Directly Impacted	Remove	Low
H39	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	1634.54	none	none	Partially Protection Required	Retain	Low
H75	Hawthorn	8	300	2	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear hedge unmanaged.	3.6	2797.4	none	none	Directly Impacted	Remove	Low
H76	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear boundary hedge, well managed, gaps for field access.	2.4	2832.02	none	none	Directly Impacted	Remove	Low
H80	Hawthorn	8	300	2	Mature (Late)	Good	Fair	Retain	40 +	B	3	Unmanaged linear agricultural hedge row, scrubby.	3.6	1996.71	none	none	Directly Impacted	Remove	Low
H81	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Managed linear hedge along A1, in front of trees.	2.4	399.49	none	none	Directly Impacted	Remove	Low

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H82	Hawthorn	6	300	2	Mature (Late)	Good	Fair	Retain	40 +	B	3	Unmanaged linear hawthorn hedge along A1.	3.6	9335.66	none	none	Directly Impacted	Remove	Low
H83	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Managed hedge, very gappy.	2.4	669.96	none	none	Directly Impacted	Remove	Low
H84	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Managed hedge, linear, gaps.	2.4	471.72	none	none	Directly Impacted	Remove	Low
H85	Hawthorn	2	200	2	Mature (Late)	Good	Fair	Retain	40 +	B	3	Well managed agricultural boundary hedge.	2.4	1629.4	none	none	Directly Impacted	Remove	Low
H89	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Linear agricultural hedge managed, gappy in places.	2.4	1058.84	none	none	Directly Impacted	Remove	Low
H91	Hawthorn	2	200	2	Mature (Late)	Good	Fair	Retain	40 +	B	3	Linear managed hedge, appears not managed in places, individual trees within hedge that are sycamore.	2.4	4086.41	none	none	Directly Impacted	Remove	Low
H92	Hawthorn	4	200	2	Mature (Late)	Good	Fair	Retain	40 +	B	3	Linear hedge, appears unmanaged.	2.4	1798.73	none	none	Directly Impacted	Remove	Low
H93	Hawthorn	6	300	4	Mature (Late)	Good	Fair	Retain	40 +	B	3	Linear hedge, unmanaged, scrub in areas consisting of gorse, hedge reached 6m in height.	3.6	3840.36	none	none	Directly Impacted	Remove	Low
LG118	Hawthorn	6	250	2	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Approximately 45 individual close hawthorns, unmanaged, linear screen/barrier to field edge.	3	663.03	none	none	Directly Impacted	Remove	Low
S47	Gorse	2	100	1	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of gorse.	1.2	186.74	none	none	Directly Impacted	Remove	Low

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S70	Gorse	2	100	3	Mature (Late)	Good	Fair	Retain	20 +	B	3	Group of gorse.	1.2	255.98	none	none	Directly Impacted	Remove	Low
S73	Gorse	1	100	1	Mature (Late)	Good	Fair	Retain	20 +	B	3	Group of gorse along A1 verge.	1.2	797.56	none	none	Directly Impacted	Remove	Low
S74	Gorse	1.5	100	1.5	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of gorse.	1.2	103.43	none	none	Directly Impacted	Remove	Low
T57	Ash	10	200	3	Mature (Early)	Good	Good	Retain	20 +	B	3	-	2.4	18.1	none	none	Directly Impacted	Remove	Low
T115	Ash	12	580	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Located in middle of hedge.	6.96	152.18	none	none	Directly Impacted	Remove	Low
T116	Ash	12	480	6	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Tree located in middle of hedge.	5.76	104.23	none	none	Directly Impacted	Remove	Low
T117	Ash	16	580	8	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	6.96	152.18	none	none	Directly Impacted	Remove	Low
T173	Ash	10	340	10	Mature (Early)	Fair	Fair	Retain	40 +	B	3	Tree is multi-stemmed from ground level, three main stem, located on private land.	4.08	52.3	none	none	Directly Impacted	Remove	Low
T149	Beech	16	420	8	Mature (Early)	Good	Fair	Retain	20 +	B	1	Twin stemmed at 1.2 m developing included fork.	5.04	79.8	none	none	Directly Impacted	Remove	Low
T87	Cherry	8	300	8	Mature (Early)	Good	Fair	Retain	20 +	B	3	Three stems included at GL.	3.6	40.72	none	none	Directly Impacted	Remove	Low
T8	Hawthorn	8	180	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	-	2.16	14.66	none	none	Directly Impacted	Remove	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T114	Hawthorn	6	140	1	Mature (Late)	Fair	Fair	Retain	20 +	B	3	-	1.68	8.87	none	none	Directly Impacted	Remove	Low
T125	Hawthorn	6	140	1	Mature (Late)	Good	Fair	Retain	20 +	B	3	-	1.68	8.87	none	none	Directly Impacted	Remove	Low
T200	Hawthorn	5	160	2	Mature (Early)	Good	Fair	Retain	20 +	B	3	-	1.92	11.58	none	none	Directly Impacted	Remove	Low
T201	Hawthorn	5	140	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	-	1.68	8.87	none	none	Directly Impacted	Remove	Low
T128	Holly	6	200	3	Mature (Late)	Good	Fair	Retain	20 +	B	3	Growing in garden of property.	2.4	18.1	none	none	Directly Impacted	Remove	Low
T81	Scots Pine	10	420	4	Mature (Early)	Good	Good	Retain	20 +	B	3	-	5.04	79.8	none	none	Directly Impacted	Remove	Low
T82	Scots Pine	8	420	5	Mature (Early)	Good	Good	Retain	20 +	B	3	-	5.04	79.8	none	none	Directly Impacted	Remove	Low
T181	Scots Pine	8	370	6	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	4.44	61.93	none	none	Directly Impacted	Remove	Low
T182	Scots Pine	8	480	6	Mature (Early)	Good	Fair	Retain	20 +	B	3	-	5.76	104.23	none	none	Directly Impacted	Remove	Low
T119	Spruce	12	420	6	Mature (Early)	Fair	Good	Retain	20 +	B	3	-	5.04	79.8	none	none	Directly Impacted	Remove	Low
T60	Sycamore	16	800	8	Mature (Late)	Good	Fair	Retain	20 +	B	3	Good shape and form, cavities in upper main stem.	9.6	289.53	none	none	Directly Impacted	Remove	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T75	Sycamore	10	220	3	Mature (Early)	Good	Good	Retain	20 +	B	3	-	2.64	21.9	none	none	Directly Impacted	Remove	Low
T78	Sycamore	8	200	4	Mature (Early)	Good	Good	Retain	20 +	B	3	-	2.4	18.1	none	none	Directly Impacted	Remove	Low
T126	Sycamore	8	240	2	Mature (Early)	Good	Good	Retain	20 +	B	3	-	2.88	26.06	none	none	Directly Impacted	Remove	Low
T127	Sycamore	16	1000	8	Mature (Late)	Good	Fair	Retain	40 +	B	3	Tree has good shape form, ivy growing up the main stem.	12	452.39	none	none	Directly Impacted	Remove	Low
T172	Sycamore	12	300	8	Mature (Early)	Good	Fair	Retain	40 +	B	3	This tree consists of four main stems, dbh estimated.	3.6	40.72	none	none	Directly Impacted	Remove	Low
T175	Sycamore	10	320	5	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Tree has ivy growing on main stem.	3.84	46.32	none	none	Directly Impacted	Remove	Low
T180	Sycamore	10	800	6	Mature (Early)	Fair	Fair	Retain	20 +	B	3	This tree consists of four main stems meeting from ground level, slight included fork.	9.6	289.53	none	none	Directly Impacted	Remove	Low
T183	Sycamore	10	250	6	Mature (Early)	Good	Fair	Retain	40 +	B	3	Individual tree multi-stemmed sycamore seven stems covered in ivy from base upwards can be retained.	3	28.27	none	none	Directly Impacted	Remove	Low
T184	Sycamore	12	560	8	Mature (Late)	Good	Fair	Retain	20 +	B	3	Sycamore two main stems arising from ground level developing included union.	6.72	141.87	none	none	Directly Impacted	Remove	Low
T198	Sycamore	10	320	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Multi-stemmed sycamore seven stems from ground level, dbh estimated.	3.84	46.32	none	none	Directly Impacted	Remove	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T211	Sycamore	12	420	5	Mature (Early)	Good	Fair	Retain	20 +	B	3	Individual sycamore within line of hawthorn on A1 verge.	5.04	79.8	none	none	Directly Impacted	Remove	Low
T214	Sycamore	12	500	8	Mature (Early)	Fair	Good	Retain	20 +	B	3	Individual sycamore.	6	113.1	none	none	Directly Impacted	Remove	Low
G60	Birch	12	250	5	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of three birch.	3	90.24	none	none	Partially Impacted	Remove Part	Low
G9	Goat Willow	10	200	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group consists of hawthorn, willow, Scots pine three, alder, oak one, and gorse. Also, one tree noted was split included union willow.	2.4	1846.85	none	none	Partially Impacted	Remove Part	Low
G85	Larch	12	250	6	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group consists of larch, ash, some scattered holly and field maple.	3	2533.92	none	none	Partially Impacted	Remove Part	Low
G63	Scots Pine	10	180	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group consists of seven Scots pine, some small ash and hawthorn, all dimensions estimated due to access.	2.16	852.08	none	none	Partially Impacted	Remove Part	Low
G108	Scots Pine	20	450	6	Mature (Early)	Fair	Fair	Retain	40 +	B	2	This is a plantation wooded area of approximately random species count 225 trees, potential wildlife value, species are Scots pine, ash, beech, sycamore. understory mainly elderberry. herb layer present.	5.4	2015.17	none	none	Partially Impacted	Remove Part	Low
H31	Ash	10	250	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Hedge/screen consists of varying species of ash, willow, hazel, hawthorn.	3	1002.93	none	none	Partially Impacted	Remove Part	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
H19	Hawthorn	4	200	1	Young	Good	Good	Retain	40 +	B	3	Four2m stretch of newly planted hawthorn agricultural hedge line.	2.4	213.16	none	none	Partially Impacted	Remove Part	Low
H22	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Gappy hedge along agricultural boundary.	2.4	281.99	none	none	Partially Impacted	Remove Part	Low
H25	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Agricultural boundary hedge, large gaps, bordering fence and culvert.	2.4	706.16	none	none	Partially Impacted	Remove Part	Low
H32	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Hedge bordering track road, runs behind trees.	2.4	480.33	none	none	Partially Impacted	Remove Part	Low
H36	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	2475.99	none	none	Partially Impacted	Remove Part	Low
H42	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Boundary linear hedge, well managed, gaps where trees are and property fences.	2.4	3557.37	none	none	Partially Impacted	Remove Part	Low
H43	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear hedge, well maintained, gaps for trees and field entries.	2.4	2064.21	none	none	Partially Impacted	Remove Part	Low
H46	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Gappy hedge along agricultural boundary hedge bordering access road.	2.4	819.44	none	none	Partially Impacted	Remove Part	Low
H47	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	202.53	none	none	Partially Impacted	Remove Part	Low
H50	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, some gaps.	2.4	265.05	none	none	Partially Impacted	Remove Part	Low
H51	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row.	2.4	331.59	none	none	Partially Impacted	Remove Part	Low

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H60	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, well managed.	2.4	1337.93	none	none	Partially Impacted	Remove Part	Low
H79	Hawthorn	4	200	2	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge unmanaged.	2.4	248.04	none	none	Partially Impacted	Remove Part	Low
H88	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Agricultural boundary hedge, managed, gappy in places.	2.4	1413.01	none	none	Partially Impacted	Remove Part	Low
LG12 1	Ash	10	200	3	Mature (Early)	Fair	Fair	Retain	10 +	B	3	Group of ten ash, average dimensions taken, understory hawthorn.	2.4	188.23	none	none	Partially Impacted	Remove Part	Low
S55	Hawthorn	8	300	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Within group there are two ash of 12m height, 300mm stem diameter.	3.6	627.58	none	none	Partially Impacted	Remove Part	Low
S53	Hazel	5	300	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Mixed scrub consisting of hazel, hawthorn, gorse.	3.6	800.27	none	none	Partially Impacted	Remove Part	Low
W80	Beech	18	500	8	Mature (Early)	Fair	Fair	Retain	40 +	B	3	Extensive wooded area plotted, fairly dense in parts and gaps in others where windblown and trees have been felled, wild life value, species are beech, ash, oak, Scots pine, goat willow, lime, scrubby understory.	6	10211.64	none	none	Partially Impacted	Remove Part	Low
W86	Beech	18	700	8	Mature (Early)	Fair	Fair	Retain	40 +	B	3	Scots pine, larch, sycamore beech, ash, hawthorn, Oak, birch, holly understory _ has been surveyed as one block but has an accessible public path through it.	8.4	21060.56	none	none	Partially Impacted	Remove Part	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
W52	Birch	12	350	6	Mature (Late)	Good	Fair	Retain	40 +	B	3	Group consisting of species of willow, birch, ash and an under scrub of hawthorn. honeysuckle twisting and growing round trees, birch trees slightly stunted due to growth of witches brooms. some trees collapsed in the woodland due to root plate failure.	4.2	4556.48	none	none	Partially Impacted	Remove Part	Low
W65	Spruce	14	300	6	Mature (Early)	Good	Poor	Retain	20 +	B	3	Small plantation woodland.	3.6	1326.14	none	none	Partially Impacted	Remove Part	Low
W76	Sycamore	16	500	6	Mature (Early)	Fair	Fair	Retain	40 +	B	3	This is an extensive wooded area around the property all dbh dimensions estimated as limited access, consists of sycamore, ash, oak, willow with understory of RD, hawthorn, holly.	6	5448.11	none	none	Partially Impacted	Remove Part	Low
G43	Ash	16	750	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Due to difficult access and time constraints group viewed from a distance all dimensions recorded are based on trees surveyed in the near surrounding area. group appears to consist of two ash and hawthorn.	9	9115.75	none	none	Protection Required	Retain	Low
G44	Ash	16	750	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Due to difficult access and time constraint, trees viewed from a distance. all dimensions recorded are based on similar trees surveyed in the surrounding area.	9	3569.47	none	none	Protection Required	Retain	Low
G111	Ash	10	180	4	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Group of mainly ash planted and self-seeded ash with eight pine and	2.16	1491.67	none	none	Protection Required	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
												a scrubby understory of gorse and young hawthorn.							
G115	Ash	12	200	4	Semi-Mature	Fair	Fair	Retain	20 +	B	2	Group of Ash self-seeded and planted ash, eleven ash Also within group are two hawthorn two black pine and a scrub understory of gorse.	2.4	1207.42	none	none	Protection Required	Retain	Low
G4	Broom	3	100	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of Broom (Cytisus).	1.2	928.66	none	none	Protection Required	Retain	Low
G114	Corsican Pine	14	300	4	Mature (Early)	Good	Fair	Retain	40 +	B	1	Fourteen black pine, scrubby understory, one tree needs removal as it's snapped and hung up by other trees.	3.6	1659.46	none	none	Protection Required	Retain	Low
G6	Hawthorn	3	120	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group consists of hawthorn and broom.	1.44	524.95	none	none	Protection Required	Retain	Low
G21	Oak	12	1000	6	Mature (Late)	Fair	Poor	Retain	20 +	B	3	Group of two oak, and one ash in between the two oak and it is in poor condition emoe it but retain oak, understory to be scrubby layer of holly, growing for years on embankment/ditch of field.	12	3209.94	none	none	Protection Required	Retain	Low
G5	Scots Pine	12	400	8	Mature (Early)	Good	Fair	Retain	20 +	B	1	Group of Scots pine woodland.	4.8	1131.17	none	none	Protection Required	Retain	Low
G7	Scots Pine	8	140	2	Young	Good	Fair	Retain	20 +	B	3	Group consists of alder, Scots pine, beech, hawthorn, willow, and field maple. Youngish planted, fairly recently planted group.	1.68	1815.17	none	none	Protection Required	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
H5	Hawthorn	4	250	3	Mature (Late)	Fair	Fair	Retain	40 +	B	3	Linear hedge line is made up of approx. 22 hawthorn and gorse scrub.	3	603.03	none	none	Protection Required	Retain	Low
H26	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear boundary hedge, small gaps.	2.4	280.28	none	none	Protection Required	Retain	Low
H40	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	545.67	none	none	Protection Required	Retain	Low
H41	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	1175.83	none	none	Protection Required	Retain	Low
H44	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear hedge, gaps where trees are and field accesses.	2.4	1941.97	none	none	Protection Required	Retain	Low
H45	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear hedge bordering field and private access road.	2.4	2600.37	none	none	Protection Required	Retain	Low
H49	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Boundary line hedge with gaps.	2.4	2686.5	none	none	Protection Required	Retain	Low
H58	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, well managed.	2.4	850.36	none	none	Protection Required	Retain	Low
H59	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, well managed.	2.4	874.99	none	none	Protection Required	Retain	Low
H73	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	2907.62	none	none	Protection Required	Retain	Low
H74	Hawthorn	6	420	3	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Unmanaged linear line of hawthorn hedge, some hedge covered in ivy.	5.04	3596.29	none	none	Protection Required	Retain	Low

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H95	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	-	2.4	4180.21	none	none	Protection Required	Retain	Low
H8	Lawson Cypress	8	250	2	Mature (Early)	Good	Good	Retain	20 +	B	3	Linear conifer hedge made up of 14 trees.	3	193.47	none	none	Protection Required	Retain	Low
S54	Hawthorn	6	300	4	Mature (Late)	Good	Fair	Retain	20 +	B	3	Linear scrub mainly hawthorn and some holly, hazel.	3.6	1078	none	none	Protection Required	Retain	Low
S57	Hawthorn	6	300	4	Mature (Late)	Good	Fair	Retain	40 +	B	3	Scrub of hawthorn, elderberry and in amongst this group old coppiced ash stools. in front of woodland.	3.6	858.51	none	none	Protection Required	Retain	Low
T21	Ash	10	480	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Cavities main stem, branch structure.	5.76	104.23	none	none	Protection Required	Retain	Low
T22	Ash	12	500	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Cavities main stem, branch structure.	6	113.1	none	none	Protection Required	Retain	Low
T30	Ash	18	880	10	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Can be retained with tree surgery work, removal of broken limbs in crown.	10.5 6	350.33	none	none	Protection Required	Retain	Low
T43	Ash	20	920	10	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Cavities in upper crown.	11.0 4	382.9	none	none	Protection Required	Retain	Low
T47	Ash	18	940	9	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Heavy limb loss.	11.2 8	399.73	none	none	Protection Required	Retain	Low
T65	Ash	8	280	4	Mature (Early)	Good	Fair	Retain	40 +	B	3	Growing out of vert edge of brook bank.	3.36	35.47	none	none	Protection Required	Retain	Low
T66	Ash	16	900	8	Mature (Late)	Fair	Poor	Retain	20 +	B	3	Stag headed, small shot holes, cavities throughout the crown,	10.8	366.44	none	none	Protection Required	Retain	Low

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												basal decay evident, important for wild life.							
T67	Ash	14	900	5	Mature (Late)	Fair	Poor	Retain	20 +	B	3	Tops have ripped out, previous damage, decaying cavities on the crown, basal decay evident, important ecologically and for wildlife.	10.8	366.44	none	none	Protection Required	Retain	Low
T68	Ash	8	300	4	Mature (Early)	Good	Good	Retain	40 +	B	3	Growing out of edge of brook.	3.6	40.72	none	none	Protection Required	Retain	Low
T69	Ash	8	300	4	Mature (Early)	Good	Poor	Retain	20 +	B	3	Snapped retained limbs.	3.6	40.72	none	none	Protection Required	Retain	Low
T70	Ash	8	280	3	Mature (Early)	Good	Fair	Retain	40 +	B	3	-	3.36	35.47	none	none	Protection Required	Retain	Low
T79	Ash	16	1200	10	Mature (Late)	Good	Fair	Retain	40 +	B	3	Twin stemmed at 1.5m from ground level, small cavities in upper crown structure.	14.4	651.44	none	none	Protection Required	Retain	Low
T85	Ash	6	210	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Twin stemmed tree developing an included fork.	2.52	19.95	none	none	Protection Required	Retain	Low
T95	Ash	8	220	4	Mature (Late)	Fair	Poor	Retain	20 +	B	3	Regeneration from old decayed stump.	2.64	21.9	none	none	Protection Required	Retain	Low
T101	Ash	10	460	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Twin stemmed tree arising from ground level.	5.52	95.73	none	none	Protection Required	Retain	Low
T102	Ash	12	1200	5	Mature (Late)	Fair	Poor	Retain	20 +	B	3	Covered completely in ivy.	14.4	651.44	none	none	Protection Required	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T103	Ash	14	960	8	Mature (Late)	Fair	Poor	Retain	20 +	B	3	Completely covered in ivy.	11.5 2	416.92	none	none	Protection Required	Retain	Low
T104	Ash	14	960	8	Mature (Late)	Fair	Poor	Retain	20 +	B	3	Heavy limb loss.	11.5 2	416.92	none	none	Protection Required	Retain	Low
T105	Ash	16	1200	10	Mature (Late)	Good	Poor	Retain	20 +	B	3	Previous limb loss evident.	14.4	651.44	none	none	Protection Required	Retain	Low
T145	Ash	18	1000	10	Mature (Late)	Good	Poor	Retain	20 +	B	3	Tree has lost heavy limbs over the road.	12	443.28	none	none	Protection Required	Retain	Low
T147	Ash	10	280	5	Mature (Early)	Good	Good	Retain	40 +	B	3	-	3.36	35.47	none	none	Protection Required	Retain	Low
T155	Ash	14	800	6	Mature (Early)	Good	Poor	Retain	10 +	B	3	Seems to have root problem, leaning heavily towards field.	9.6	289.53	none	none	Protection Required	Retain	Low
T158	Ash	10	280	5	Mature (Early)	Good	Fair	Retain	20 +	B	3	Covered in ivy.	3.36	35.47	none	none	Protection Required	Retain	Low
T161	Ash	10	300	5	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Ivy on main stem and crown.	3.6	40.72	none	none	Protection Required	Retain	Low
T53	Beech	16	800	10	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Bark death on lower stem from ground level up to 1m, also bark death damage lower stem west side.	9.6	289.53	none	none	Protection Required	Retain	Low
T54	Beech	18	1200	10	Mature (Late)	Fair	Fair	Retain	40 +	B	1	Appears to have bark disease, upper crown and main limb structure.	14.4	651.44	none	none	Protection Required	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T205	Beech	16	800	8	Mature (Late)	Good	Fair	Retain	40 +	B	3	Slight bend in stem rectified itself, bend due to suppression of neighbouring beech tree, limited access.	9.6	289.53	none	none	Protection Required	Retain	Low
T206	Beech	18	900	8	Mature (Late)	Good	Fair	Retain	40 +	B	3	Limited access, slight bend in stem rectified itself due to chestnut tree next to it.	10.8	366.44	none	none	Protection Required	Retain	Low
T108	Elm	8	260	4	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	3.12	30.58	none	none	Protection Required	Retain	Low
T157	Hawthorn	8	300	2	Mature (Early)	Poor	Poor	Retain	10 +	B	3	This is just a canopy covered in ivy.	3.6	40.72	none	none	Protection Required	Retain	Low
T207	Horse Chestnut	16	800	8	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Limited access, tree condition reasonable.	9.6	289.53	none	none	Protection Required	Retain	Low
T72	Lime	18	1000	8	Mature (Late)	Fair	Fair	Retain	40 +	B	3	Dead wood in crown.	12	452.39	none	none	Protection Required	Retain	Low
T73	Lime	16	1000	6	Mature (Late)	Fair	Fair	Retain	40 +	B	3	Stag headed, top die back, dead wood in crown.	12	452.39	none	none	Protection Required	Retain	Low
T49	Oak	18	880	10	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Vitality of crown slightly in decline, can be retained with some crown work, removal of dead wood.	10.56	350.33	none	none	Protection Required	Retain	Low
T51	Oak	12	780	10	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Can be retained with some tree work, removal of broken limbs and deadwood.	9.36	275.23	none	none	Protection Required	Retain	Low
T107	Oak	10	1000	8	Mature (Late)	Good	Fair	Retain	40 +	B	3	Old gnarly oak, potential for high wildlife value.	12	452.39	none	none	Protection Required	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T61	Sycamore	12	600	6	Mature (Late)	Good	Fair	Retain	20 +	B	3	Cavity in upper stem, good shape and form.	7.2	162.86	none	none	Protection Required	Retain	Low
T71	Sycamore	8	280	3	Mature (Early)	Good	Fair	Retain	40 +	B	3	Growing out of edge of brook.	3.36	35.47	none	none	Protection Required	Retain	Low
T94	Sycamore	12	400	4	Mature (Early)	Good	Poor	Retain	20 +	B	3	Included union.	4.8	72.38	none	none	Protection Required	Retain	Low
T99	Sycamore	14	400	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	-	4.8	72.38	none	none	Protection Required	Retain	Low
T100	Sycamore	14	600	5	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	7.2	162.86	none	none	Protection Required	Retain	Low
T139	Sycamore	14	700	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Tree has top die back evident.	8.4	221.67	none	none	Protection Required	Retain	Low
T144	Sycamore	12	400	4	Mature (Late)	Fair	Fair	Retain	40 +	B	3	-	4.8	72.38	none	none	Protection Required	Retain	Low
T146	Sycamore	8	260	3	Mature (Early)	Good	Fair	Retain	40 +	B	3	-	3.12	30.58	none	none	Protection Required	Retain	Low
T154	Sycamore	8	250	3	Mature (Early)	Good	Good	Retain	40 +	B	3	-	3	27.71	none	none	Protection Required	Retain	Low
T159	Sycamore	10	280	3	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Covered in ivy.	3.36	35.47	none	none	Protection Required	Retain	Low
T160	Sycamore	10	280	4	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	3.36	35.47	none	none	Protection Required	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T163	Sycamore	10	320	4	Mature (Early)	Good	Fair	Retain	40 +	B	3	Self-seeded covered in ivy.	3.84	46.32	none	none	Protection Required	Retain	Low
W45	Scots Pine	12	250	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Monoculture Scots pine woodland plantation.	3	3764.36	none	none	Protection Required	Retain	Low
W64	Scots Pine	16	350	4	Mature (Early)	Good	Fair	Retain	20 +	B	2	Forestry plantation of Scots pine and some larch.	4.2	607.57	none	none	Protection Required	Retain	Low
W36	Spruce	14	250	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Woodland plantation also within it is ash.	3	1310.04	none	none	Protection Required	Retain	Low
G54	Birch	10	300	5	Mature (Early)	Good	Poor	Retain	20 +	B	3	Group of willow and birch, fourteen birch, twelve willow, average DBH on birch twofive0, DBH willow is five00, also one large holly difficult to record DBH so estimated five00.	3.6	1385.2	none	none	Not Impacted	Retain	Low
G56	Birch	8	300	3	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of four trees, dimensions estimated.	3.6	1221.48	none	none	Not Impacted	Retain	Low
G117	Birch	6	140	1	Semi-Mature	Good	Fair	Retain	10 +	B	3	Group of six birch.	1.68	8.87	none	none	Not Impacted	Retain	Low
G88	Birch	10	250	6	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of five multi-stemmed birch trees average dbh taken.	3	158.38	none	none	Not Impacted	Retain	Low
G57	Hawthorn	8	250	4	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Group of scrub, hawthorn, willow with individual trees of birch and ash, difficult to access due to brook.	3	1067.94	none	none	Not Impacted	Retain	Low
G25	Hawthorn	8	200	3	Mature (Late)	Good	Fair	Retain	20 +	B	3	Group of hawthorn.	2.4	4016.79	none	none	Not Impacted	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
G30	Holly	8	200	2	Mature (Early)	Good	Fair	Retain	20 +	B	3	-	2.4	284.78	none	none	Not Impacted	Retain	Low
G90	Lawson Cypress	8	350	3	Mature (Early)	Fair	Fair	Retain	20 +	B	3	Three hedge in group.	4.2	204.34	none	none	Not Impacted	Retain	Low
H2	Hawthorn	2	340	1.5	Mature (Late)	Good	Good	Retain	40 +	B	2	Agricultural hedge well maintained.	4.08	613.29	none	none	Not Impacted	Retain	Low
H3	Hawthorn	2	340	1.5	Mature (Late)	Good	Good	Retain	40 +	B	2	Agricultural hedge well maintained.	4.08	360.39	none	none	Not Impacted	Retain	Low
H4	Hawthorn	2	340	1.5	Mature (Late)	Good	Good	Retain	40 +	B	2	Only short span of hedge on map showing hedge- hedge along New road been removed.	4.08	271.17	none	none	Not Impacted	Retain	Low
H48	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	-	2.4	202.11	none	none	Not Impacted	Retain	Low
H52	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Four hawthorn to create gapped hedge.	2.4	182.08	none	none	Not Impacted	Retain	Low
H78	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedgerow.	2.4	1295.51	none	none	Not Impacted	Retain	Low
H87	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Hedge agricultural large gap.	2.4	316.11	none	none	Not Impacted	Retain	Low
H90	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Fair	Retain	40 +	B	3	Linear agricultural hedge, managed, gappy in places.	2.4	1325.51	none	none	Not Impacted	Retain	Low
H94	Hawthorn	8	300	3	Mature (Late)	Good	Good	Retain	40 +	B	3	Hedge raises in height to 8m, unmanaged.	3.6	40.72	none	none	Not Impacted	Retain	Low

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H96	Hawthorn	6	200	2	Mature (Late)	Good	Fair	Retain	40 +	B	3	Unmanaged hedge, very gappy.	2.4	474.43	none	none	Not Impacted	Retain	Low
T14	Ash	16	800	8	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Some top die back in crown, cavities in stem, dimensions estimated.	9.6	289.53	none	none	Not Impacted	Retain	Low
T15	Ash	16	800	10	Mature (Late)	Good	Fair	Retain	20 +	B	3	Cavities appear in upper branch structure.	9.6	289.53	none	none	Not Impacted	Retain	Low
T16	Ash	16	800	10	Mature (Late)	Good	Poor	Retain	20 +	B	3	Extensive cavities in upper main stem, dimensions estimated from A1 verge due to limited access and bulls in field adjacent to it.	9.6	289.53	none	none	Not Impacted	Retain	Low
T17	Ash	16	900	10	Mature (Late)	Good	Fair	Retain	20 +	B	3	Twin stemmed, dimensions estimated from a distance due to limited access and bulls in field adjacent to it.	10.8	366.44	none	none	Not Impacted	Retain	Low
T39	Ash	18	880	6	Mature (Late)	Fair	Fair	Retain	20 +	B	3	-	10.5 6	350.33	none	none	Not Impacted	Retain	Low
T88	Ash	12	700	8	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Dimensions estimated, had to survey from road due to access, situated in middle if field.	8.4	221.67	none	none	Not Impacted	Retain	Low
T219	Ash	11 6	800	8	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Site has recently been developed. Tree next to palisade fence.	9.6	289.53	none	none	Not Impacted	Retain	Low
T32	Beech	20	1300	10	Mature (Late)	Good	Fair	Retain	20 +	B	3	Appears to be on west side of root area all fruiting bodies of honey fungus, early decay at base.	15.6	764.54	none	none	Not Impacted	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T177	Beech	10	440	6	Mature (Early)	Good	Fair	Retain	20 +	B	1	Located next to dog kennels.	5.28	87.58	none	none	Not Impacted	Retain	Low
T83	Birch	10	300	5	Mature (Early)	Good	Fair	Retain	20 +	B	3	Located on edge of brook embankment.	3.6	40.72	none	none	Not Impacted	Retain	Low
T84	Birch	8	200	3	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	2.4	18.1	none	none	Not Impacted	Retain	Low
T210	Birch	12	400	7	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Limited access, dimensions estimated, witches broom evident.	4.8	72.38	none	none	Not Impacted	Retain	Low
T216	Elm	10	250	6	Mature (Early)	Good	Fair	Retain	20 +	B	3	Multi-stemmed single tree, ground level five main stems.	3	28.27	none	none	Not Impacted	Retain	Low
T176	Holly	8	340	5.5	Mature (Early)	Good	Good	Retain	20 +	B	1	Within dog kennels.	4.08	52.3	none	none	Not Impacted	Retain	Low
T179	Lawson Cypress	8	250	2	Semi-Mature	Fair	Fair	Retain	20 +	B	3	Individual hedge located in kennels.	3	28.27	none	none	Not Impacted	Retain	Low
T178	Oak	8	240	6	Semi-Mature	Good	Good	Retain	20 +	B	2	Individual oak located in dog exercise area.	2.88	26.06	none	none	Not Impacted	Retain	Low
T123	Spruce	12	230	4	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	2.76	23.93	none	none	Not Impacted	Retain	Low
T124	Spruce	10	240	2	Mature (Early)	Fair	Fair	Retain	20 +	B	3	-	2.88	26.06	none	none	Not Impacted	Retain	Low
T24	Sycamore	12	900	8	Mature (Late)	Fair	Fair	Retain	40 +	B	3	Dimensions estimated from a distance, located in the centre of farmed field with crops.	10.8	366.44	none	none	Not Impacted	Retain	Low

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T215	Sycamore	10	320	5	Mature (Early)	Good	Fair	Retain	20 +	B	2	Single tree, multi-stemmed at 1m from ground level three stems, some structural included unions.	3.84	46.32	none	none	Not Impacted	Retain	Low
T217	Sycamore	12	960	8	Mature (Late)	Fair	Fair	Retain	40 +	B	1	Bird box in tree, some basal decay around route system. epicormic growth around the base. single tree.	11.52	416.92	None	None	Not Impacted	Retain	Low
W89	Beech	20	900	10	Mature (Late)	Good	Fair	Retain	40 +	B	3	The edge of woodland surveyed consists of Scots pine and beech, larger trees dbh recorded.	10.8	2536.17	none	none	Not Impacted	Retain	Low
W78	Scots Pine	22	380	2	Mature (Early)	Good	Good	Retain	20 +	B	3	Conifer silver cultural plantation woodland, short rotation. Also, within edge of woodland mature beech trees with dbh of 1000mm.	4.56	2833.11	none	none	Not Impacted	Retain	Low
G22	Beech	22	1200	8	Mature (Late)	Fair	Poor	Retain	40 +	B	3	Possible bat features, wooded group, not in best condition, a lot of previous limb loss evident, large cavities in upper stems of a lot of trees and basal decay, species consists of sycamore, beech, Scots Pine, ash, lime, hawthorn, chestnut. DBH taken.	14.4	11515.47	none	none	Partially Protection Required	Retain	Low
G112	Birch	10	150	3	Semi-Mature	Fair	Fair	Retain	20 +	B	2	Dimensions estimated, polygon group of three species containing one beech, hedge, one birch tree, one beech tree top cut off, two small ash top cut off.	1.8	191.06	none	none	Partially Protection Required	Retain	Low

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G107	Elm	10	360	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group consists of four trees, group of what appears to be one dead Elm, one healthy elm, two small hawthorn, woodland private no access.	4.32	490.86	none	none	Partially Protection Required	Retain	Low
G105	Hawthorn	6	200	2	Mature (Late)	Good	Fair	Retain	20 +	B	3	Main species is gorse with scattered hawthorn. adjacent to brook.	2.4	1154.68	none	none	Partially Protection Required	Retain	Low
G110	Leyland cypress	8	200	4	Semi-Mature	Good	Fair	Retain	20 +	B	1	All dimensions estimated as no permission to survey, completed from roadway, group consists of lime, Lawson cypress and leylandii of no significant importance.	2.4	425.44	none	none	Partially Protection Required	Retain	Low
G29	Other/ Unknown	20	500	8	Mature (Late)	Good	Fair	Retain	20 +	B	3	Group consists of three lime, two beech, one cherry. limes appear to have been previously pollarded.	6	957.82	none	none	Partially Protection Required	Retain	Low
G98	Portuguese Laurel	10	150	6	Mature (Late)	Fair	Fair	Retain	20 +	B	2	Private land - group of shrubs and trees located behind boundary wall, consisting of Portuguese laurel, cherry laurel, cherry tree, leylandii, cherry.	1.8	286.54	none	none	Partially Protection Required	Retain	Low
G77	Spruce	12	250	4	Mature (Early)	Good	Fair	Retain	20 +	B	3	Group of three spruce.	3	187.28	none	none	Partially Protection Required	Retain	Low
G100	Sycamore	16	400	8	Mature (Late)	Fair	Fair	Retain	40 +	B	3	Group consisting of three sycamore developing included unions and one elm to the rear of sycamore which is in poor condition and needs removing.	4.8	659.36	none	none	Partially Protection Required	Retain	Low

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G113	Willow	10	200	4	Mature (Early)	Good	Fair	Retain	20 +	B	1	All dimensions are estimated as no access to survey, estimated from roadway. two trees are dragons claw willow.	2.4	65.72	none	none	Partially Protection Required	Retain	Low
H1	Hawthorn	2	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	2	Agricultural hedge.	2.4	774.03	none	none	Partially Protection Required	Retain	Low
H6	Hawthorn	6	250	3	Mature (Late)	Good	Good	Retain	40 +	B	1	Hedge has been developed around to the east, palisade fence 1m from hedge, new building in place.	3	1327.86	none	none	Partially Protection Required	Retain	Low
H7	Hawthorn	2	250	3	Mature (Late)	Fair	Fair	Retain	40 +	B	1	Hedge already developed around part of it, retain if possible, any remaining hedge remain if possible.	3	626.18	none	none	Partially Protection Required	Retain	Low
H27	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear boundary hedge with gaps.	2.4	1412.87	none	none	Partially Protection Required	Retain	Low
H28	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear hedge, gap for gate access after property.	2.4	1241.18	none	none	Partially Protection Required	Retain	Low
H29	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear hedge, gaps.	2.4	1320.84	none	none	Partially Protection Required	Retain	Low
H56	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, very sparse with large gaps.	2.4	1968.04	none	none	Partially Protection Required	Retain	Low

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H61	Hawthorn	8	300	4	Mature (Late)	Good	Fair	Retain	20 +	B	3	Linear hedge line of mixed species of willow, hawthorn.	3.6	5057.11	none	none	Partially Protection Required	Retain	Low
H62	Hawthorn	1.5	200	1.5	Young	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, newly planted.	2.4	1412.45	none	none	Partially Protection Required	Retain	Low
H66	Hawthorn	6	200	2	Mature (Late)	Good	Good	Retain	20 +	B	3	Unmanaged agricultural hedge row linear.	2.4	1409.83	none	none	Partially Protection Required	Retain	Low
H68	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, well managed, borders both sides of access road, small gaps in places.	2.4	1286.79	none	none	Partially Protection Required	Retain	Low
H69	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row, gappy in places, well managed.	2.4	1221.3	none	none	Partially Protection Required	Retain	Low
H70	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Agricultural boundary hedge, well managed, gappy in places.	2.4	2455.7	none	none	Partially Protection Required	Retain	Low
H71	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Agricultural boundary hedge, well managed, gappy in places.	2.4	2803.74	none	none	Partially Protection Required	Retain	Low
H77	Hawthorn	1.5	200	1.5	Mature (Late)	Good	Good	Retain	40 +	B	3	Linear agricultural hedge row.	2.4	3048.87	none	none	Partially Protection Required	Retain	Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
LG117	Scots Pine	6	140	2	Young	Good	Good	Retain	20 +	B	2	Linear stretch of recent New planting, mixed species mainly of pine, alder and birch with some scrub underplanting.	1.68	372.16	none	none	Partially Protection Required	Retain	Low
W1	Beech	16	700	8	Mature (Early)	Fair	Fair	Retain	40 +	B	2	Linear stretch of 48 Trees, mainly beech. the average dbh has been calculated at 700mm. walking route along back of woodland.	8.4	8230.91	none	none	Partially Protection Required	Retain	Low
W84	Beech	20	500	8	Mature (Late)	Fair	Fair	Retain	40 +	B	3	Extensive plotted woodland, dense in parts open in others tree felling and fallen over trees, species beech, sycamore, lime, oak, cherry, willow, hawthorn, replanting has taken place some time ago.	6	21688.33	none	none	Partially Protection Required	Retain	Low
W20	Scots Pine	16	400	4	Mature (Late)	Fair	Fair	Retain	20 +	B	3	Small wooded area, main species pine, ash, sycamore, oak. dominant species is Scots pine. some wildlife conservation value.	4.8	2773.68	none	none	Partially Protection Required	Retain	Low
G39	Alder	10	250	5	Mature (Early)	Good	Fair	Retain	20 +	C	1	Linear group, dbh estimated, main species alder, sycamore, willow, hawthorn and ash. gap for farm access.	3	1997.64	none	none	Directly Impacted	Remove	Very Low
G41	Alder	10	200	5	Mature (Early)	Good	Fair	Retain	20 +	C	1	Linear group of alder, ash, sycamore, hawthorn. dimensions estimated.	2.4	1148.52	none	none	Directly Impacted	Remove	Very Low
G59	Alder	8	180	3	Mature (Early)	Good	Fair	Retain	20 +	C	1	Linear group of field maple, goat willow, hazel, alder, hawthorn, birch, ash, gorse. dbh estimated.	2.16	1613.22	none	none	Directly Impacted	Remove	Very Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
G32	Ash	12	200	4	Mature (Early)	Fair	Fair	Retain	20 +	C	1	Group of ash, hawthorn, willow, birch average dbh taken at two00mm.	2.4	1115.69	none	none	Directly Impacted	Remove	Very Low
G34	Ash	10	180	3	Mature (Early)	Good	Fair	Retain	10 +	C	1	Group of five trees, some are multi-stemmed and developing included unions.	2.16	375.92	none	none	Directly Impacted	Remove	Very Low
G35	Ash	10	180	3	Mature (Early)	Good	Fair	Retain	10 +	C	1	Two trees in group, one tree is multi-stemmed developing inclusions.	2.16	75.32	none	none	Directly Impacted	Remove	Very Low
G48	Ash	10	220	4	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group consists of twelve trees, average dbh taken on largest tree.	2.64	475.12	none	none	Directly Impacted	Remove	Very Low
G49	Ash	12	300	5	Mature (Early)	Fair	Fair	Retain	20 +	C	1	Linear group consists hawthorn, ash, hazel, sycamore, Scots pine. dbh estimated on biggest trees.	3.6	6758.87	none	none	Directly Impacted	Remove	Very Low
G51	Ash	12	200	5	Mature (Early)	Good	Fair	Retain	20 +	C	1	Large group of mass landscape planting, average dbh recorded, under storey of scrub, bramble and hawthorn. tree species are ash, hawthorn, birch, alder, blackthorn,	2.4	9126.19	none	none	Directly Impacted	Remove	Very Low
G62	Ash	10	180	4	Mature (Early)	Fair	Fair	Retain	20 +	C	1	Linear group consists of Ash, hawthorn and sycamore.	2.16	2075.77	none	none	Directly Impacted	Remove	Very Low
G68	Ash	10	140	4	Mature (Early)	Fair	Fair	Retain	20 +	C	1	Linear group consists of Ash, scots pine, field maple, sycamore, hawthorn.	1.68	2603.49	none	none	Directly Impacted	Remove	Very Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
G69	Ash	10	200	3	Mature (Early)	Fair	Fair	Retain	20 +	C	1	Two hawthorn, predominantly group of an even mixture of sycamore, ash.	2.4	3031.99	none	none	Directly Impacted	Remove	Very Low
G71	Ash	12	140	4	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Group consists of linear landscape row of ash, sycamore, hawthorn, field maple, and hazel.	1.68	2673.04	none	none	Directly Impacted	Remove	Very Low
G82	Ash	10	180	4	Mature (Early)	Good	Fair	Retain	20 +	C	1	Linear stretch of fourteen trees consisting of mainly ash, some sycamore, and hawthorn.	2.16	586.55	none	none	Directly Impacted	Remove	Very Low
G37	Beech	10	350	6	Mature (Early)	Good	Poor	Retain	10 +	C	1	Three trees in group, one is structurally poor and two stems twisted and making contact causing inclusion.	4.2	223.36	none	none	Directly Impacted	Remove	Very Low
G79	Birch	10	180	3	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group consists of ash, sycamore, hawthorn, birch. linear stretch, scrubby understory.	2.16	1960.02	none	none	Directly Impacted	Remove	Very Low
G93	Elm	10	300	6	Mature (Early)	Fair	Poor	Retain	10 +	C	1	Group consists of two trees, one is elm and one is sycamore, snap limb from elm and hanging attached, trees have no value.	3.6	97.26	none	none	Directly Impacted	Remove	Very Low
G18	Field Maple	10	200	5	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group of hawthorn, predominantly field maple, a bit of ash. dimensions estimated.	2.4	1596.39	none	none	Directly Impacted	Remove	Very Low
G23	Hawthorn	6	140	2	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Three trees in group, one is hawthorn, two is ash, dimensions estimated.	1.68	403.32	none	none	Directly Impacted	Remove	Very Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
G104	Hawthorn	6	200	4	Mature (Late)	Fair	Fair	Retain	10 +	C	1	Group of two trees, one is individual hawthorn and one is individual elderberry.	2.4	79.51	none	none	Directly Impacted	Remove	Very Low
G91	Poplar	6	120	1	Mature (Early)	Poor	Poor	Retain	10 +	C	1	Group consists of approximately 10 trees.	1.44	61.56	none	none	Directly Impacted	Remove	Very Low
G15	Sycamore	12	250	5	Mature (Early)	Fair	Fair	Retain	20 +	C	1	Dimensions estimated, linear group of sycamore, hawthorn, field maple, ash,	3	5360.95	none	none	Directly Impacted	Remove	Very Low
G38	Sycamore	10	360	4	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group consists of eleven trees, becoming structurally included, dbh taken from largest tree in group.	4.32	944.6	none	none	Directly Impacted	Remove	Very Low
G42	Sycamore	10	180	3	Mature (Early)	Fair	Poor	Retain	10 +	C	1	Group consists of three sycamore, multi-stemmed at ground level, all trees seem to have a problem of snapped branches over carriageway.	2.16	269.21	none	none	Directly Impacted	Remove	Very Low
G46	Sycamore	10	220	3	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group consists of five sycamore, one ash.	2.64	640.48	none	none	Directly Impacted	Remove	Very Low
G61	Sycamore	10	410	4	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group consists of eight trees of varying ages, these are seven sycamore and one ash, dbh taken of largest sycamore in the group at four10mm.	4.92	803.67	none	none	Directly Impacted	Remove	Very Low
G67	Sycamore	8	250	3	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Group of two trees.	3	349.52	none	none	Directly Impacted	Remove	Very Low

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
G99	Sycamore	12	320	5	Mature (Early)	Fair	Poor	Retain	10 +	C	1	This is a group of sycamore, poor condition, with larger trees having included unions and decay in the main stems, would recommend thinning and removal of worst trees.	3.84	1511.84	none	none	Directly Impacted	Remove	Very Low
G101	Sycamore	10	360	6	Mature (Early)	Fair	Fair	Retain	20 +	C	1	This group consists of two sycamore, one of the sycamore has two stems which have an included union at the base.	4.32	97.23	none	none	Directly Impacted	Remove	Very Low
H86	Leyland cypress	2	200	1.5	Mature (Late)	Good	Good	Retain	20 +	C	1	Within private property by stone wall.	2.4	368.29	none	none	Directly Impacted	Remove	Very Low
LG120	Ash	6	120	1	Young	Fair	Fair	Retain	20 +	C	1	Linear group of approximately 25 ash, one hawthorn, under scrub of gorse.	1.44	475.69	none	none	Directly Impacted	Remove	Very Low
LG122	Ash	8	140	3	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Line of Ash with gaps in between trees.	1.68	513.64	none	none	Directly Impacted	Remove	Very Low
S87	Berberis	1.5	100	1	Mature (Late)	Good	Good	Retain	10 +	C	1	Small group of berberis planted close to stone wall of farm building.	1.2	20.87	none	none	Directly Impacted	Remove	Very Low
T9	Ash	8	160	2	Young	Good	Fair	Retain	20 +	C	3	-	1.92	11.58	none	none	Directly Impacted	Remove	Very Low
T58	Ash	10	160	3	Mature (Early)	Good	Poor	Retain	10 +	C	1	Developing basal included unions.	1.92	11.58	none	none	Directly Impacted	Remove	Very Low
T59	Ash	10	140	2	Mature (Early)	Good	Poor	Retain	10 +	C	1	Two stems included at the base.	1.68	8.87	none	none	Directly Impacted	Remove	Very Low

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T112	Ash	12	500	8	Mature (Late)	Fair	Poor	Retain	20 +	C	1	Recent limb loss not in best condition, short term retention.	6	113.1	none	none	Directly Impacted	Remove	Very Low
T113	Ash	6	120	1	Young	Good	Fair	Retain	10 +	C	1	Multi-stemmed from ground level.	1.44	6.51	none	none	Directly Impacted	Remove	Very Low
T118	Ash	16	400	8	Mature (Early)	Poor	Fair	Retain	10 +	C	1	Tree in decline.	4.8	72.38	none	none	Directly Impacted	Remove	Very Low
T152	Ash	8	200	3	Mature (Early)	Good	Fair	Retain	10 +	C	3	-	2.4	17.73	none	none	Directly Impacted	Remove	Very Low
T25	Beech	10	250	5	Mature (Early)	Good	Poor	Retain	10 +	C	1	Included union at ground level.	3	28.27	none	none	Directly Impacted	Remove	Very Low
T109	Birch	12	300	5	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Twin stemmed, one snapped branch hanging in crown, tree has witches brooms.	3.6	40.72	none	none	Directly Impacted	Remove	Very Low
T129	Cherry	10	400	4	Mature (Late)	Good	Poor	Retain	10 +	C	1	Consists of three main stems becoming tightly included.	4.8	72.38	none	none	Directly Impacted	Remove	Very Low
T174	Elm	6	170	2	Mature (Early)	Fair	Fair	Retain	10 +	C	1	-	2.04	13.07	none	none	Directly Impacted	Remove	Very Low
T89	Hawthorn	6	440	3	Mature (Late)	Fair	Poor	Retain	10 +	C	1	-	5.28	87.58	none	none	Directly Impacted	Remove	Very Low
T111	Hawthorn	6	120	1	Mature (Early)	Fair	Fair	Retain	10 +	C	1	-	1.44	6.51	none	none	Directly Impacted	Remove	Very Low
T188	Hawthorn	4	200	2	Mature (Early)	Good	Fair	Retain	10 +	C	3	Multi-stemmed hawthorn located behind wall.	2.4	18.1	none	none	Directly Impacted	Remove	Very Low

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T11	Oak	12	700	8	Mature (Late)	Fair	Poor	Retain	10 +	C	1	Small old oak. A lot of previous limb loss evident, two trees to the rear of the oak have failed on the root plate some time Ago.	8.4	221.67	none	none	Directly Impacted	Remove	Very Low
T110	Oak	6	120	1	Young	Fair	Fair	Retain	20 +	C	3	-	1.44	6.51	none	none	Directly Impacted	Remove	Very Low
T10	Scots Pine	10	250	5	Mature (Early)	Good	Fair	Retain	20 +	C	1	Stem diameter estimated.	3	28.27	none	none	Directly Impacted	Remove	Very Low
T55	Sycamore	10	300	6	Mature (Early)	Good	Fair	Retain	20 +	C	1	Twin stemmed at ground level.	3.6	40.72	none	none	Directly Impacted	Remove	Very Low
T56	Sycamore	10	300	5	Mature (Early)	Good	Fair	Retain	20 +	C	1	Twin stemmed at 1m from ground level.	3.6	40.72	none	none	Directly Impacted	Remove	Very Low
T74	Sycamore	10	200	3	Mature (Early)	Good	Fair	Retain	20 +	C	3	Two main stems at base, included fork developing.	2.4	18.1	none	none	Directly Impacted	Remove	Very Low
T76	Sycamore	10	250	3	Mature (Early)	Good	Poor	Retain	10 +	C	1	Becoming included at base, two main stems.	3	28.27	none	none	Directly Impacted	Remove	Very Low
T77	Sycamore	8	180	2	Mature (Early)	Good	Poor	Retain	10 +	C	1	-	2.16	14.66	none	none	Directly Impacted	Remove	Very Low
T187	Sycamore	10	240	6	Mature (Early)	Fair	Poor	Remove	10 +	C	3	Multi-stemmed sycamore basal included unions located behind stone wall.	2.88	26.06	none	none	Directly Impacted	Remove	Very Low
T189	Sycamore	12	420	6	Mature (Early)	Good	Poor	Retain	10 +	C	3	Multi-stemmed sycamore ground level comprising 4main stems becoming included located behind stone wall.	5.04	79.8	none	none	Directly Impacted	Remove	Very Low

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T202	Sycamore	8	330	5	Mature (Early)	Good	Poor	Retain	10 +	C	1	Included union at 0.5m from ground level.	3.96	49.27	none	none	Directly Impacted	Remove	Very Low
T203	Sycamore	12	400	6	Mature (Early)	Fair	Poor	Retain	10 +	C	1	Haw heavy basal inclusion, tree consists of three main stems.	4.8	72.38	none	none	Directly Impacted	Remove	Very Low
T213	Sycamore	12	620	8	Mature (Early)	Fair	Poor	Retain	10 +	C	1	Individual sycamore consider removing as it has severe included union.	7.44	173.9	none	none	Directly Impacted	Remove	Very Low
G27	Ash	10	200	3	Mature (Early)	Good	Fair	Retain	10 +	C	1	Group of self-seeded and planted two0 ash.	2.4	249.53	none	none	Partially Impacted	Remove Part	Very Low
G8	Beech	10	250	5	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group of hawthorn, ash, beech in front of boundary hedge.	3	4793.83	none	none	Partially Impacted	Remove Part	Very Low
G33	Oak	3	80	0.5	Young	Fair	Fair	Retain	10 +	C	1	Group is a new planting, trees still located in correx tubes, consists of ash, oak, hawthorn.	0.96	10915.89	none	none	Partially Impacted	Remove Part	Very Low
G83	Sycamore	10	200	4	Mature (Early)	Good	Fair	Retain	20 +	C	1	Group consists of approximately fourteen trees.	2.4	642.54	none	none	Partially Impacted	Remove Part	Very Low
G40	Lawson Cypress	8	200	3	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Screen planting in private garden, consists of Leyland cypress, hawthorn, ash and Lawson cypress.	2.4	324.47	none	none	Protection Required	Retain	Very Low
H64	Beech	6	300	2	Mature (Early)	Good	Fair	Retain	20 +	C	1	-	3.6	283.81	none	none	Protection Required	Retain	Very Low
T18	Ash	14	1780	8	Mature (Late)	Fair	Poor	Retain	10 +	C	1	Dead wood in crown, cavities, cankering of limbs.	21.36	1433.35	none	none	Protection Required	Retain	Very Low

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T96	Ash	12	960	8	Mature (Late)	Fair	Poor	Retain	10 +	C	3	Heavily decayed in upper stem, obvious signs of woodpecker activity, even though decayed this tree has ecological importance.	11.52	416.92	none	none	Protection Required	Retain	Very Low
T165	Ash	10	320	6	Mature (Early)	Poor	Fair	Retain	10 +	C	3	-	3.84	46.32	none	none	Protection Required	Retain	Very Low
T86	Cherry	6	120	4	Mature (Early)	Good	Fair	Retain	10 +	C	3	-	1.44	6.51	none	none	Protection Required	Retain	Very Low
G118	Elm	6	140	2	Mature (Early)	Fair	Fair	Retain	10 +	C	3	Small group.	1.68	8.87	none	none	Protection Required	Retain	Very Low
T204	Laburnum	8	140	4	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Multi-stemmed.	1.68	8.87	none	none	Protection Required	Retain	Very Low
T40	Oak	14	820	6	Mature (Late)	Fair	Poor	Retain	10 +	C	1	Whole top crown ripped out by wind, could be retained with some tree work to tidy crown.	9.84	304.19	none	none	Protection Required	Retain	Very Low
T45	Oak	20	940	10	Mature (Late)	Poor	Poor	Retain	10 +	C	1	Meripilus fruiting bodies evident on base of structural roots, crown heavily in decline, large areas of dead wood, tree in decline.	11.28	399.73	none	none	Protection Required	Retain	Very Low
T137	Sycamore	18	850	10	Mature (Late)	Good	Fair	Retain	10 +	C	1	Basal damage and decay evident on field side.	10.2	326.85	none	none	Protection Required	Retain	Very Low
T140	Sycamore	14	600	8	Mature (Late)	Good	Fair	Retain	10 +	C	1	Severe basal decay evident.	7.2	162.86	none	none	Protection Required	Retain	Very Low
T162	Sycamore	12	600	8	Mature (Late)	Fair	Poor	Retain	10 +	C	1	Previous heavy limb removal over the road.	7.2	162.86	none	none	Protection Required	Retain	Very Low

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G28	Hawthorn	6	180	2	Mature (Late)	Fair	Fair	Retain	10 +	C	1	Group of mature hawthorn, young self-seeded ash, six hawthorn, two ash.	2.16	375.24	none	none	Not Impacted	Retain	Very Low
G53	Hawthorn	8	400	4	Mature (Early)	Good	Poor	Retain	10 +	C	1	Group of four birch, five hawthorn.	4.8	691.19	none	none	Not Impacted	Retain	Very Low
G58	Willow	8	200	3	Mature (Early)	Fair	Fair	Retain	10 +	C	1	Group of three willow, four hawthorn, and one larger multi-stemmed birch, dimensions estimated.	2.4	1158.16	none	none	Not Impacted	Retain	Very Low
T209	Larch	14	350	6	Mature (Late)	Good	Fair	Retain	20 +	C	1	No access, dimensions estimated.	4.2	55.42	none	none	Not Impacted	Retain	Very Low
T38	Oak	16	880	6	Mature (Late)	Fair	Poor	Retain	10 +	C	1	Can be retained with some tree work short term, recent heavy limb loss rip out from crown.	10.56	350.33	none	none	Not Impacted	Retain	Very Low
T122	Spruce	10	320	4	Mature (Early)	Fair	Poor	Retain	10 +	C	1	Tree poor, has lost the top, suppressed by neighbouring large ash tree.	3.84	46.32	none	none	Not Impacted	Retain	Very Low
T92	Sycamore	14	760	6	Mature (Late)	Fair	Poor	Retain	10 +	C	1	Severe basal decay.	9.12	261.3	none	none	Not Impacted	Retain	Very Low
G116	Sycamore	12	300	6	Mature (Early)	Fair	Fair	Retain	20 +	C	1	Group of approximately fourteen sycamore, all multi-stemmed with structural inclusions.	3.6	583.16	none	none	Partially Protection Required	Retain	Very Low
H63	Leyland cypress	8	300	2	Mature (Early)	Good	Fair	Retain	20 +	C	1	-	3.6	185.41	none	none	Partially Protection Required	Retain	Very Low

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T190a	Sycamore	15	700	6	Mature (Late)	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	0	Not assessed during sight survey. Dimensions estimated from computer images.	8.4	221.67	none	West Link Hall Cottages Chathill TPO 2005	Protection Required	Retain	TPO
T190c	Sycamore	15	700	6	Mature (Late)	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	0	Not assessed during sight survey. Dimensions estimated from computer images.	8.4	221.67	none	West Link Hall Cottages Chathill TPO 2005	Protection Required	Retain	TPO
T190b	Sycamore	15	700	6	Mature (Late)	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	0	Not assessed during sight survey. Dimensions estimated from computer images.	8.4	221.67	none	West Link Hall Cottages Chathill TPO 2005	Not Impacted	Retain	TPO
G103	Elder	6	160	4	Mature (Late)	Poor	Poor	Remove	<10	U	3	Group of fourteen elderberry, poor condition, dbh averaged.	1.92	369.71	none	none	Directly Impacted	Remove	Unsuitable
T35	Ash	14	700	8	Mature (Late)	Poor	Poor	Remove	<10	U	3	Possibly bat features, tree in decline, heavily stag headed,	8.4	221.67	none	none	Directly Impacted	Remove	Unsuitable

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												cavities in stem and upper tree structure.							
T185	Elder	6	160	2	Mature (Late)	Poor	Poor	Remove	<10	U	3	Small elderberry in poor condition.	1.92	11.58	none	none	Directly Impacted	Remove	Unsuitable
T190	Elder	6	220	4	Mature (Late)	Poor	Poor	Remove	<10	U	3	Small elderberry in poor condition.	2.64	21.9	none	none	Directly Impacted	Remove	Unsuitable
T212	Elder	6	120	2	Mature (Late)	Poor	Poor	Remove	<10	U	3	Small elderberry on culvert verge.	1.44	6.51	none	none	Directly Impacted	Remove	Unsuitable
T90	Hawthorn	6	370	1	Mature (Late)	Dying /Dead	Poor	Remove	<10	U	3	Tree dead in middle of hedge row.	4.44	61.93	none	none	Protection Required	Retain	Unsuitable
T199	Hawthorn	6	300	3	Mature (Late)	Dying /Dead	Poor	Remove	<10	U	3	One hawthorn dead.	3.6	40.72	none	none	Directly Impacted	Remove	Unsuitable
T12	Sycamore	12	500	4	Mature (Late)	Poor	Poor	Remove	<10	U	3	Windblown tree failed on route plate, leaning towards A1.	6	113.1	none	none	Directly Impacted	Remove	Unsuitable
G17	Hawthorn	8	140	3	Mature (Late)	Poor	Fair	Remove	<10	U	3	Hawthorn group, poor condition.	1.68	237	none	none	Partially Impacted	Remove Part	Unsuitable
LG119	Spruce	6	230	2	Mature (Early)	Fair	Poor	Remove	<10	U	3	Three trees tops cut out, due to power line cable above them.	2.76	52.1	none	none	Partially Impacted	Remove Part	Unsuitable
T19	Ash	10	480	6	Mature (Late)	Good	Poor	Remove	<10	U	3	Poor condition, extensive decay along base and main stem, situated outside of woodland.	5.76	104.23	none	none	Protection Required	Retain	Unsuitable
T23	Ash	14	900	5	Mature (Late)	Fair	Poor	Remove	<10	U	3	Extensive basal decay, large cavity at base, dimensions estimated	10.8	366.44	none	none	Protection Required	Retain	Unsuitable

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
												from A1 verge due to limited access.							
T98	Ash	16	960	6	Mature (Late)	Poor	Poor	Remove	<10	U	3	Late mature ash, large open decay cavity on upper stem top has previously been lost.	11.52	416.92	none	none	Protection Required	Retain	Unsuitable
T106	Ash	10	700	10	Mature (Late)	Dying /Dead	Poor	Remove	<10	U	3	Even though tree is dead evidence of infect activity and possibly bay.	8.4	221.67	none	none	Protection Required	Retain	Unsuitable
T138	Ash	14	900	6	Mature (Late)	Fair	Poor	Remove	<10	U	3	Tree has lost two major leaders, one large leader left over field side crack evident in this large limb advise removal.	10.8	366.44	none	none	Protection Required	Retain	Unsuitable
T167	Ash	6	240	2	Mature (Early)	Poor	Poor	Remove	<10	U	3	-	2.88	26.06	none	none	Protection Required	Retain	Unsuitable
T33	Beech	18	1000	10	Mature (Late)	Good	Poor	Remove	<10	U	3	Large limb loss evident on upper stem, large fracture cavity into stem, meripilus fruiting body evident at base of stem trunk.	12	452.39	none	none	Protection Required	Retain	Unsuitable
T97	Elder	6	180	3	Mature (Late)	Dying /Dead	Poor	Remove	<10	U	3	-	2.16	14.66	none	none	Protection Required	Retain	Unsuitable
T194	Horse Chestnut	14	600	8	Mature (Late)	Poor	Poor	Remove	<10	U	3	Tree extremely poor condition, co-dominant leader snapped out.	7.2	162.86	none	none	Protection Required	Retain	Unsuitable
T208	Horse Chestnut	12	800	8	Mature (Late)	Poor	Fair	Remove	<10	U	3	No access, dimensions estimated, tree physically in decline, large cavity in main stem, top of tree completely snapped out by wind loading.	9.6	289.53	none	none	Protection Required	Retain	Unsuitable

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T26	Oak	8	500	8	Mature (Late)	Fair	Poor	Remove	<10	U	3	Failed at the root plate many years ago, now lying into farmers field.	6	113.1	none	none	Protection Required	Retain	Unsuitable
T44	Oak	16	820	6	Mature (Late)	Poor	Poor	Remove	<10	U	3	In decline, has root damage, old bracket evident at base tree, extensive basal decay, possibly beef steak fungus around basal area.	9.84	304.19	none	none	Protection Required	Retain	Unsuitable
T52	Oak	10	660	4	Mature (Late)	Poor	Poor	Remove	<10	U	3	Possible bat features, stag headed limb rip out and loss, old oak in natural state of decline.	7.92	197.06	none	none	Protection Required	Retain	Unsuitable
T193	Sycamore	14	360	8	Mature (Early)	Fair	Poor	Remove	<10	U	3	Tree is in poor structural condition suppressed by dominant sycamore.	4.32	58.63	none	none	Protection Required	Retain	Unsuitable
G26	Ash	14	900	7	Mature (Late)	Fair	Poor	Remove	<10	U	3	Two ash, large basal swellings, stems heavily cracked and fractured.	10.8	701.09	none	none	Not Impacted	Retain	Unsuitable
T13	Ash	10	500	5	Mature (Late)	Fair	Poor	Remove	<10	U	3	Old regenerated and hollowed, decayed ash stump.	6	113.1	none	none	Not Impacted	Retain	Unsuitable
T20	Ash	10	400	6	Mature (Late)	Poor	Poor	Remove	<10	U	3	Possibly bat features, extensive basal decay and throughout the main stem.	4.8	72.38	none	none	Not Impacted	Retain	Unsuitable
T41	Ash	14	880	6	Mature (Late)	Poor	Poor	Remove	<10	U	3	Crown ripped out in past, mainly a large standing stem, large areas of decay evident in main stem, lots of insect activity.	10.56	350.33	none	none	Not Impacted	Retain	Unsuitable

Tree Ref	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub-category	Notes	RPA Radius (m)	RPA Area (m2)	Environmental Constraints	Statutory/Legal Constraints	Impact	Remove/Retain	DMRB Sensitivity
T42	Ash	16	820	8	Mature (Late)	Fair	Fair	Remove	<10	U	3	Cavities in upper crown, early stage of root decay evident, west side large extensive cavity tree needs removal.	9.84	304.19	none	none	Not Impacted	Retain	Unsuitable
T218	Hawthorn	3	200	1.5	Mature (Late)	Fair	Poor	Remove	<10	U	3	-	2.4	18.1	none	none	Not Impacted	Retain	Unsuitable
T50	Oak	14	860	8	Mature (Late)	Poor	Poor	Remove	<10	U	3	Tree in state of decline, top die back to 25% of crown, stag headed poor condition.	10.32	334.59	none	none	Not Impacted	Retain	Unsuitable
T120	Spruce	6	160	2	Mature (Early)	Poor	Poor	Remove	<10	U	3	Poor tree, suppressed under canopy of neighbouring large ash tree.	1.92	11.58	none	none	Not Impacted	Retain	Unsuitable
T195	Beech	12	1500	12	Ancient	Good	Fair	Retain	40+	A	3	Extremely important beech tree within the landscape ecologically and culturally.	18	1017.88	Ancient	Ancient	Not Impacted	Retain	High
T196	Sycamore	12	1200	8	Mature (Late)	Fair	Poor	Retain	40+	A	3	This is an old veteran sycamore consisting of three main leaders decay evident throughout stem, important cultural / wildlife value tree in the landscape.	14.4	651.44	Veteran	Veteran	Not Impacted	Retain	High
G106	Beech	20	500	8	Mature (Late)	Good	Fair	Retain	40+	A	2	Mixed wooded group of beech, lime, chestnut, sycamore, larch, Scots pine, herb layer, bird/bat boxes present, potential bat area, retain as much as possible.	6	16898.87	none	none	Directly Impacted	Remove	Medium

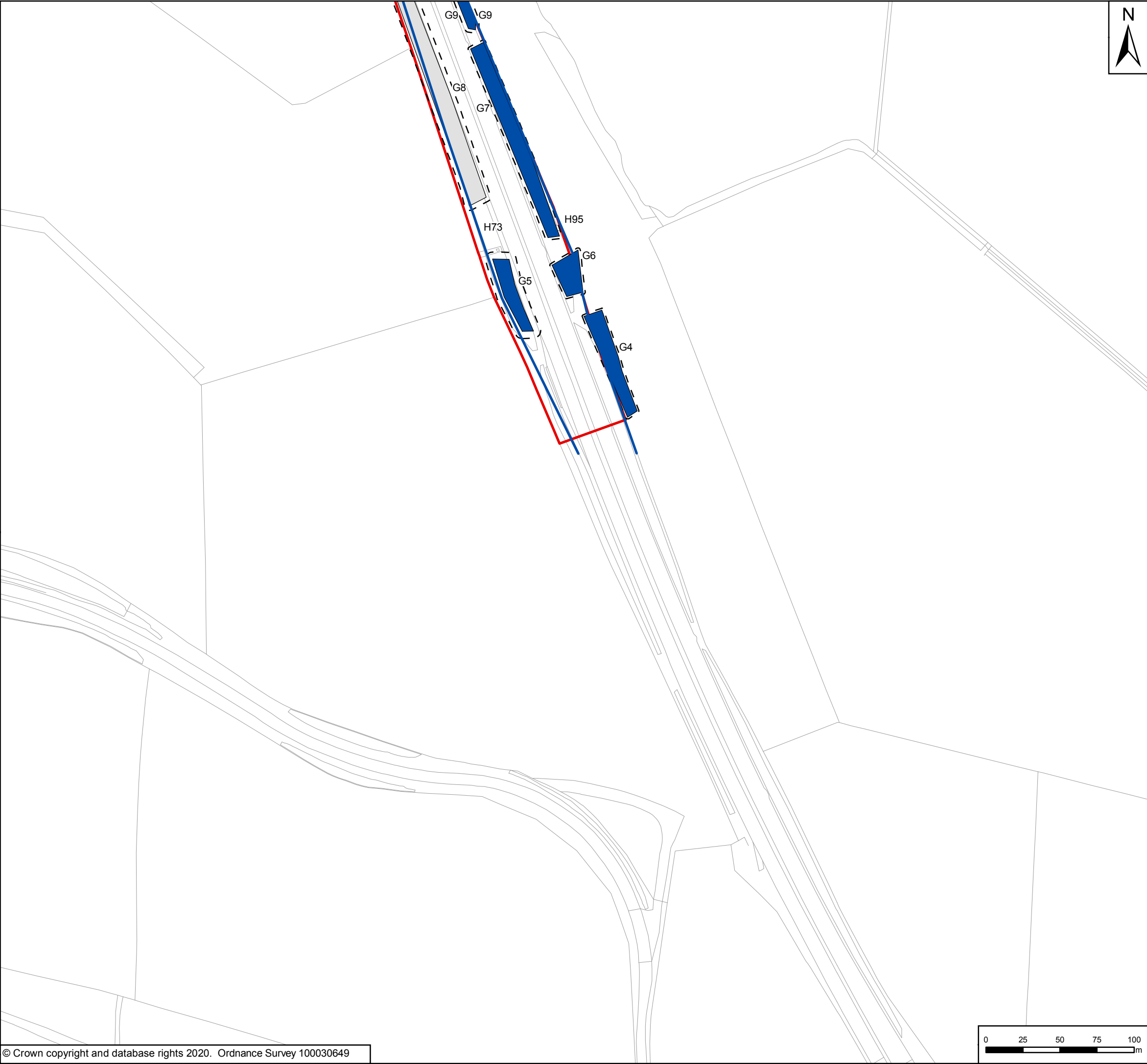
Appendix B

PLANS

Appendix B.1

ARBORICULTURE CONSTRAINTS PLAN

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Key

Order Limits

Areas Excluded from Order Limits

Tree Preservation Area

Ancient - Veteran Tree

The Avenue - Historic Tree Lined Road

Tree Category

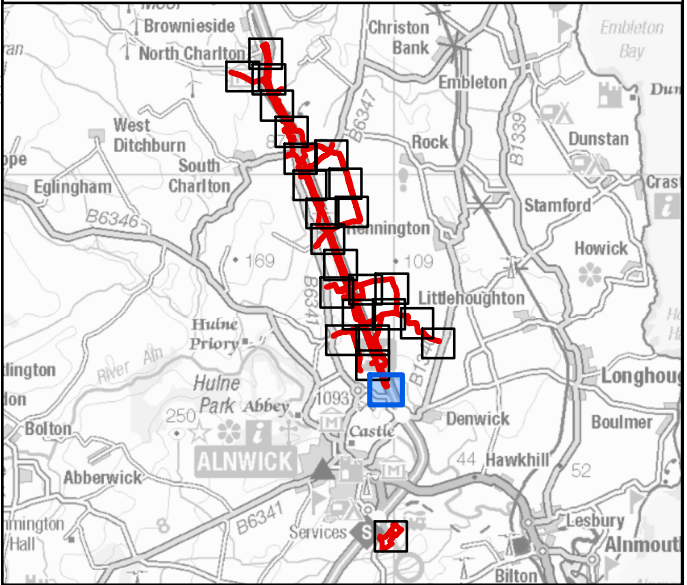
A

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Root Protection Area



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Client

Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

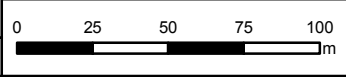
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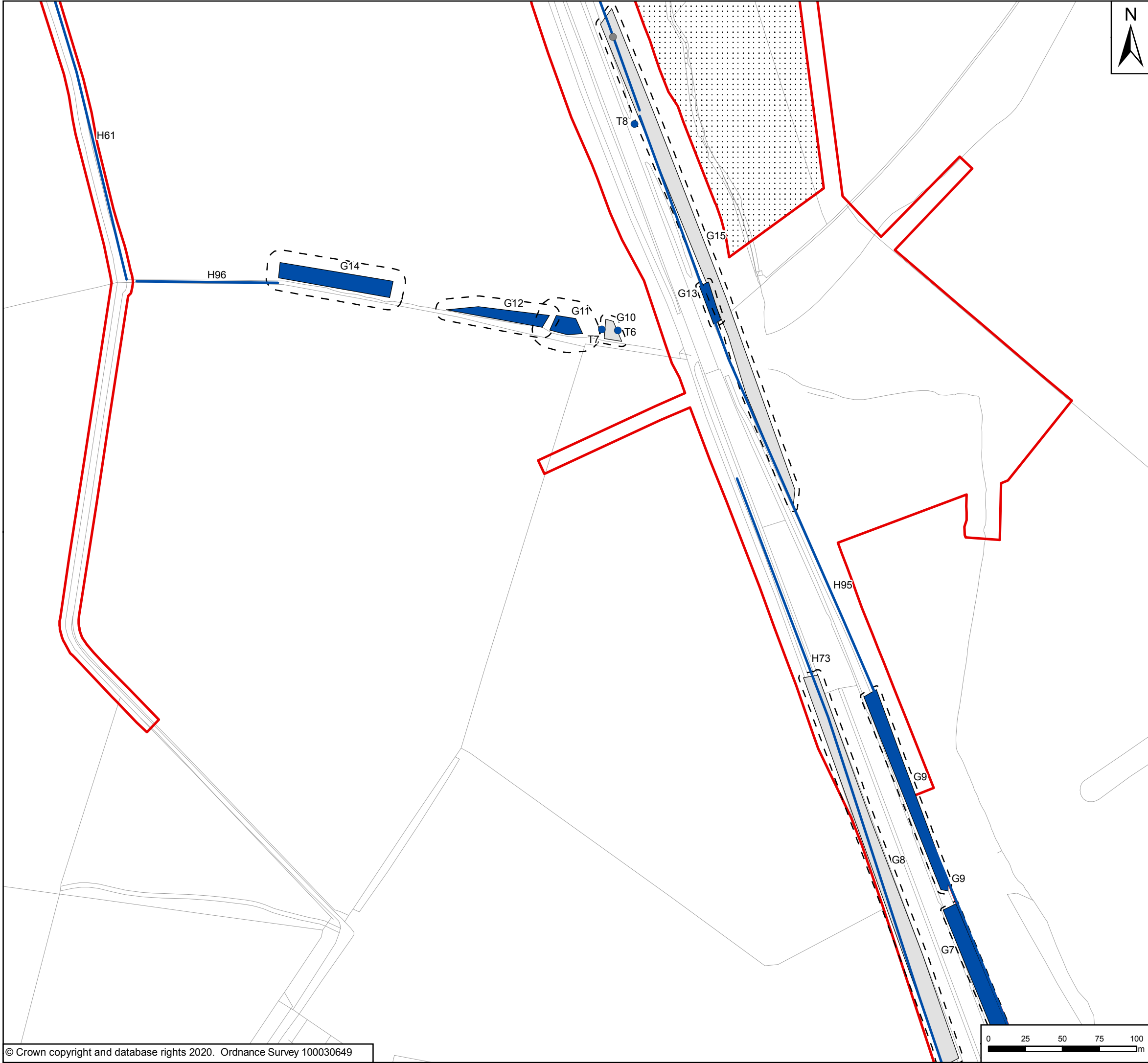
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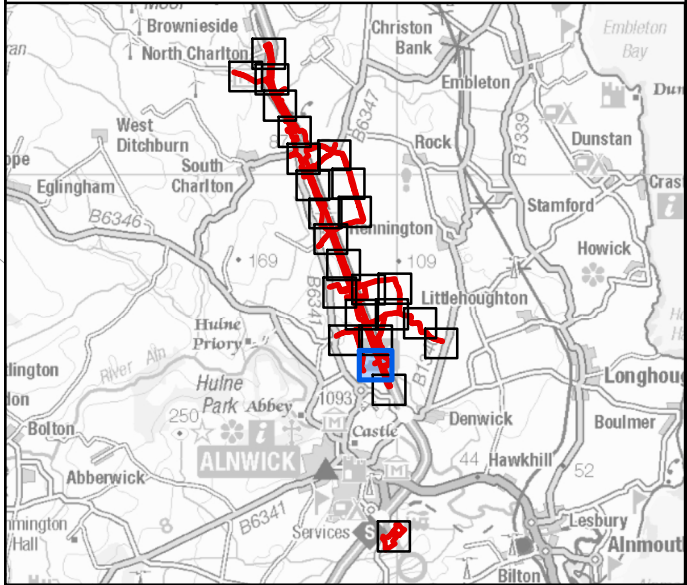
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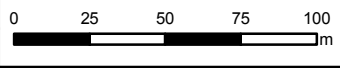
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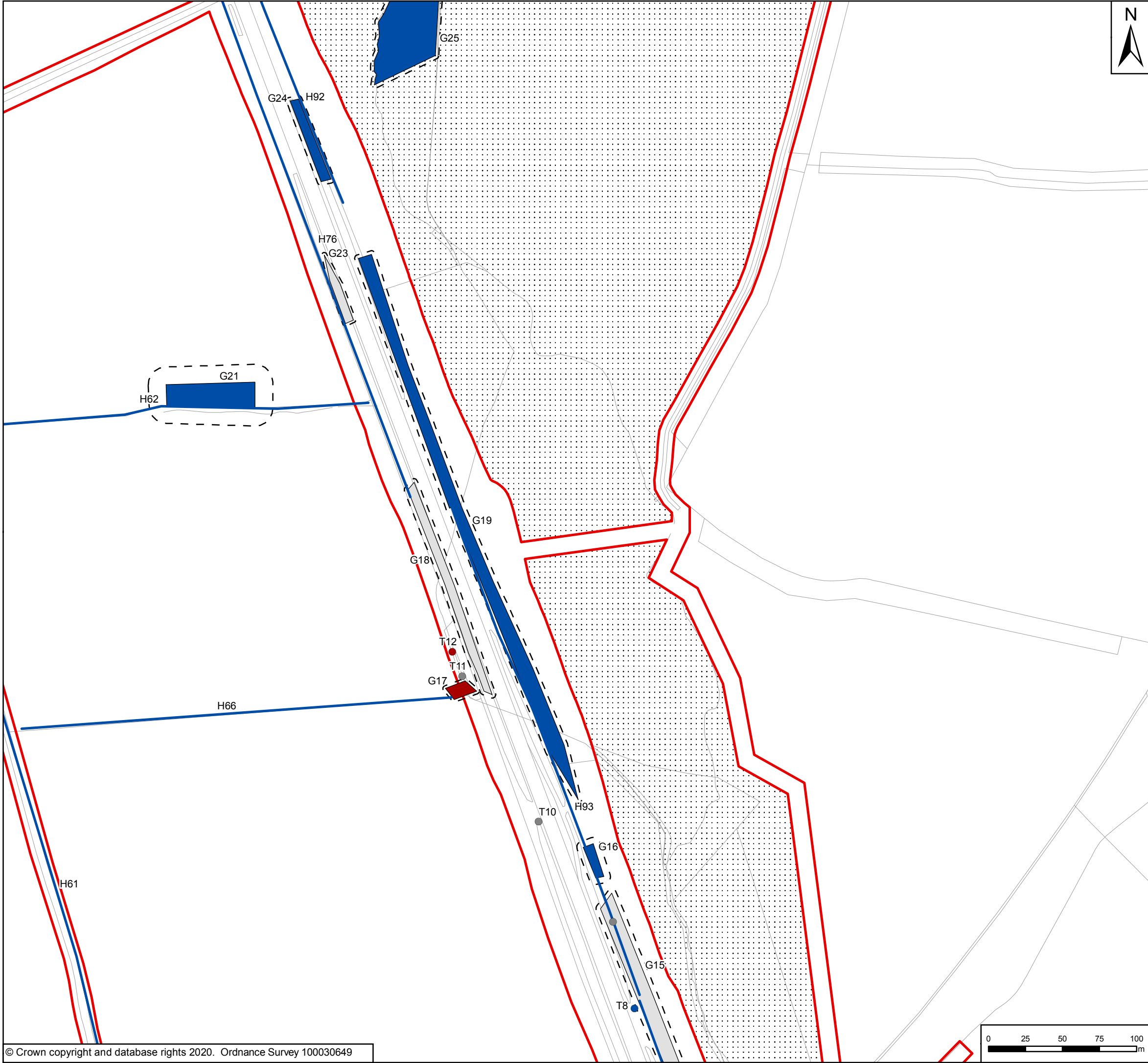
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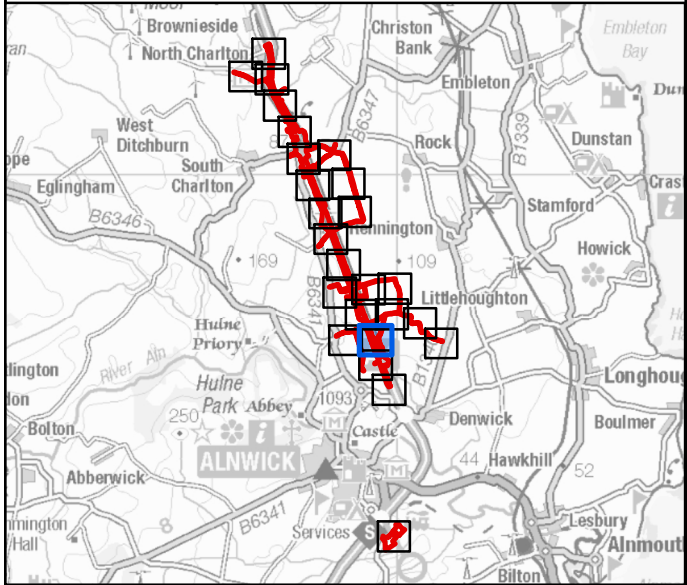
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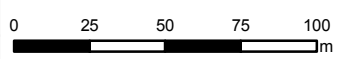
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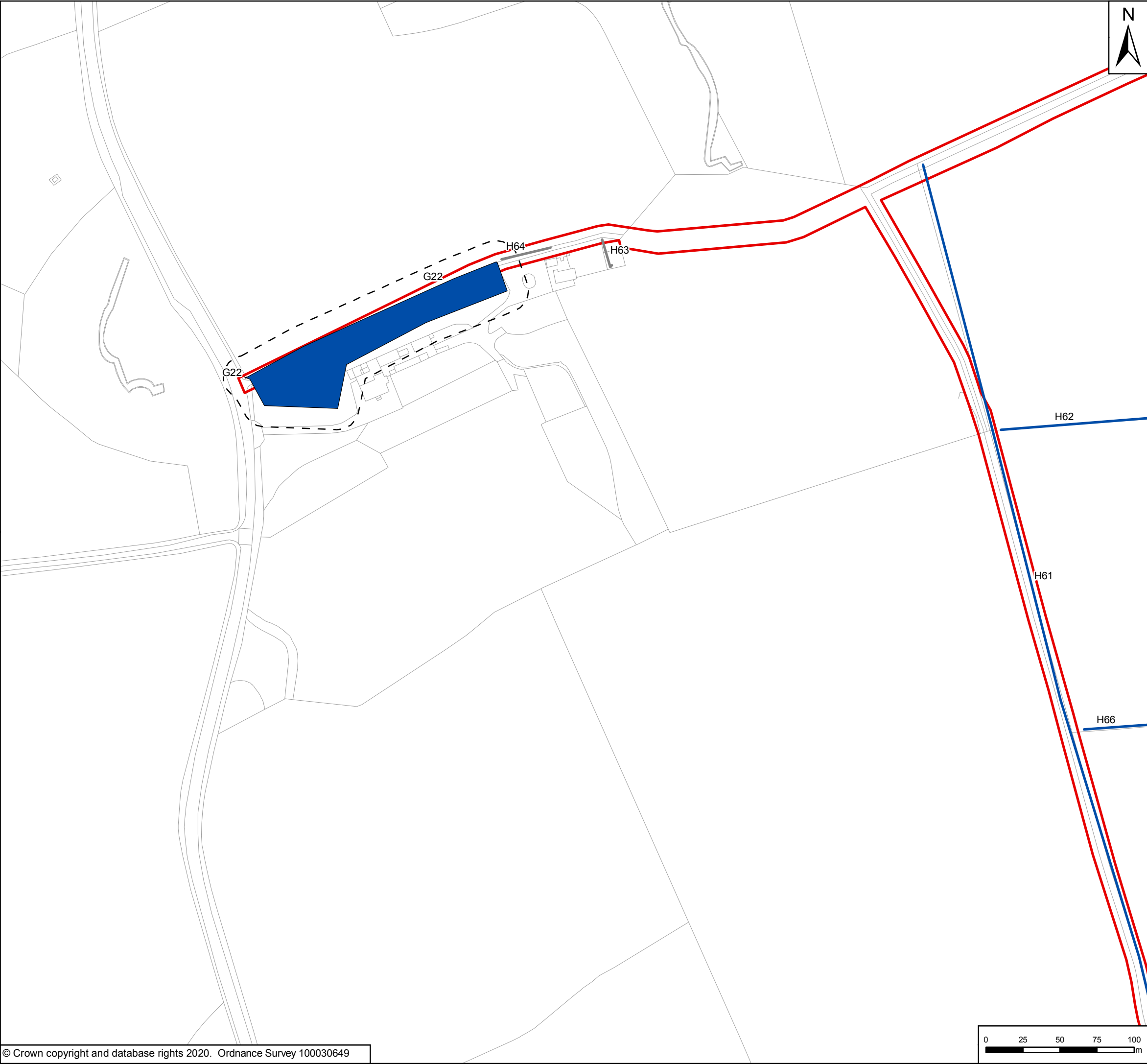
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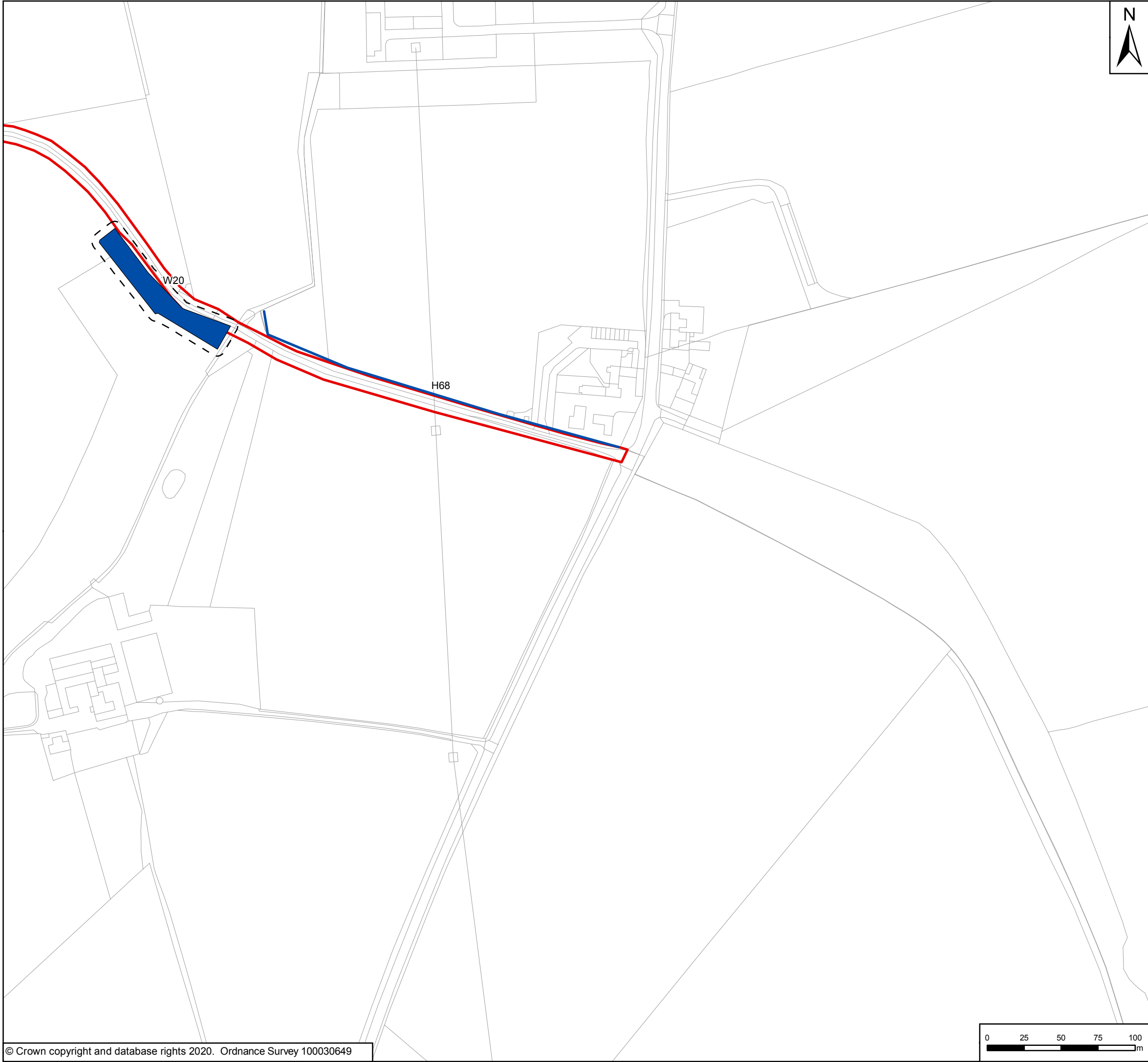
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Key

Order Limits

Areas Excluded from Order Limits

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Tree Category

A

B

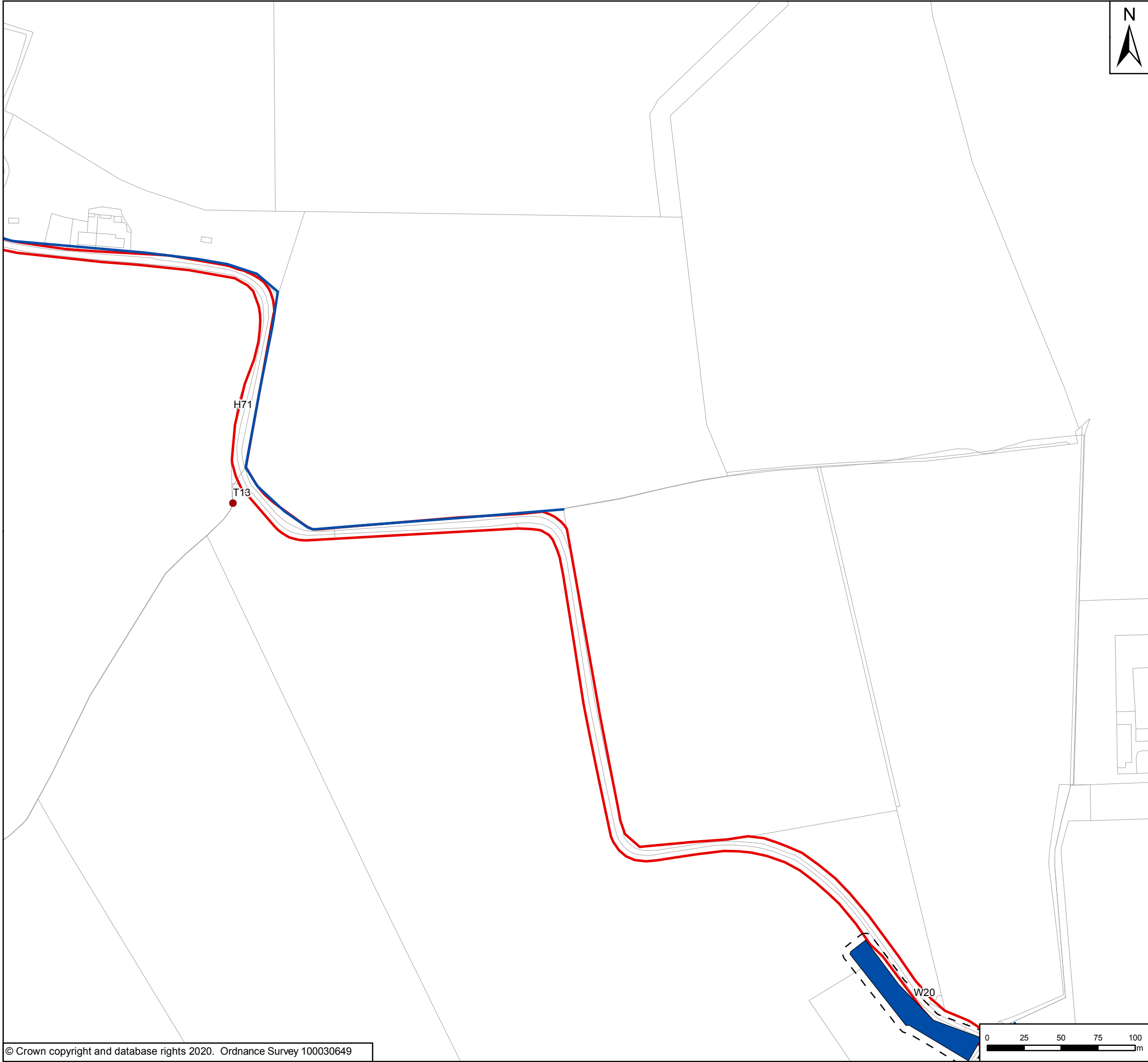
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Root Protection Area

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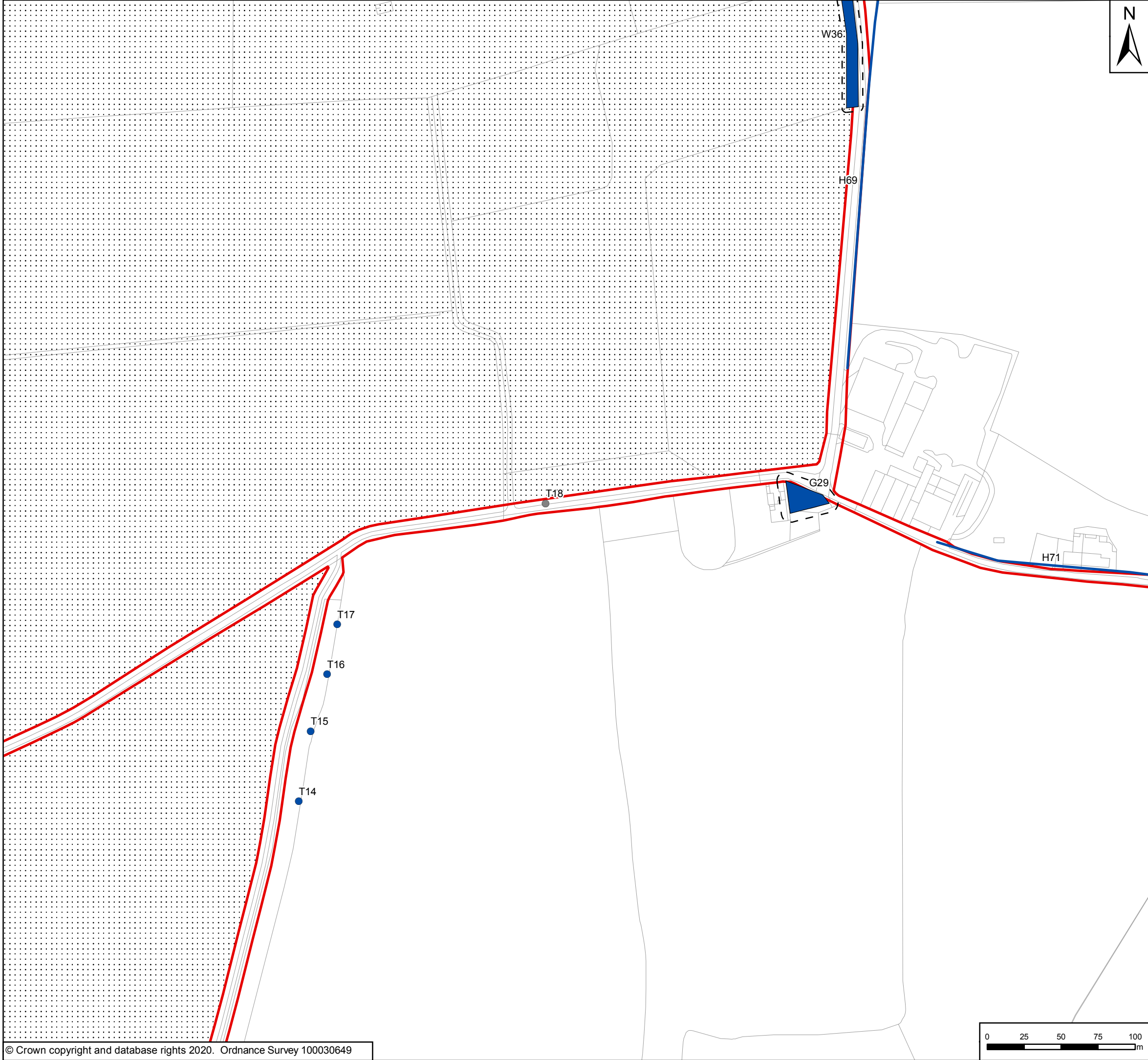
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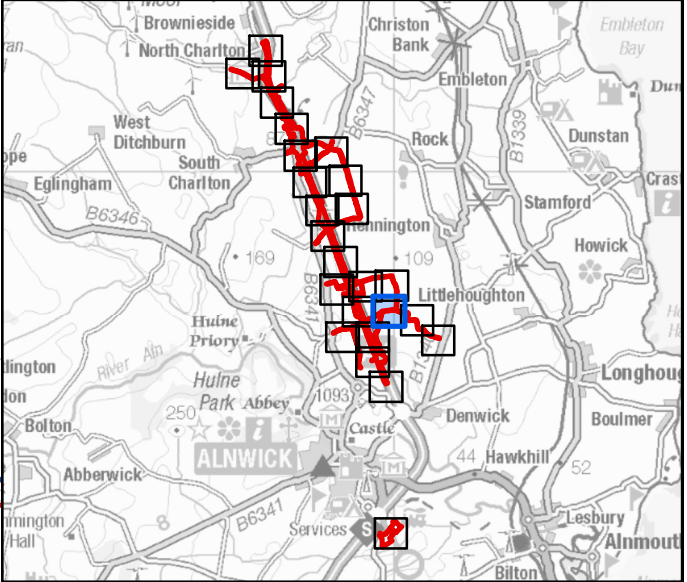
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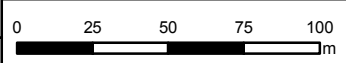
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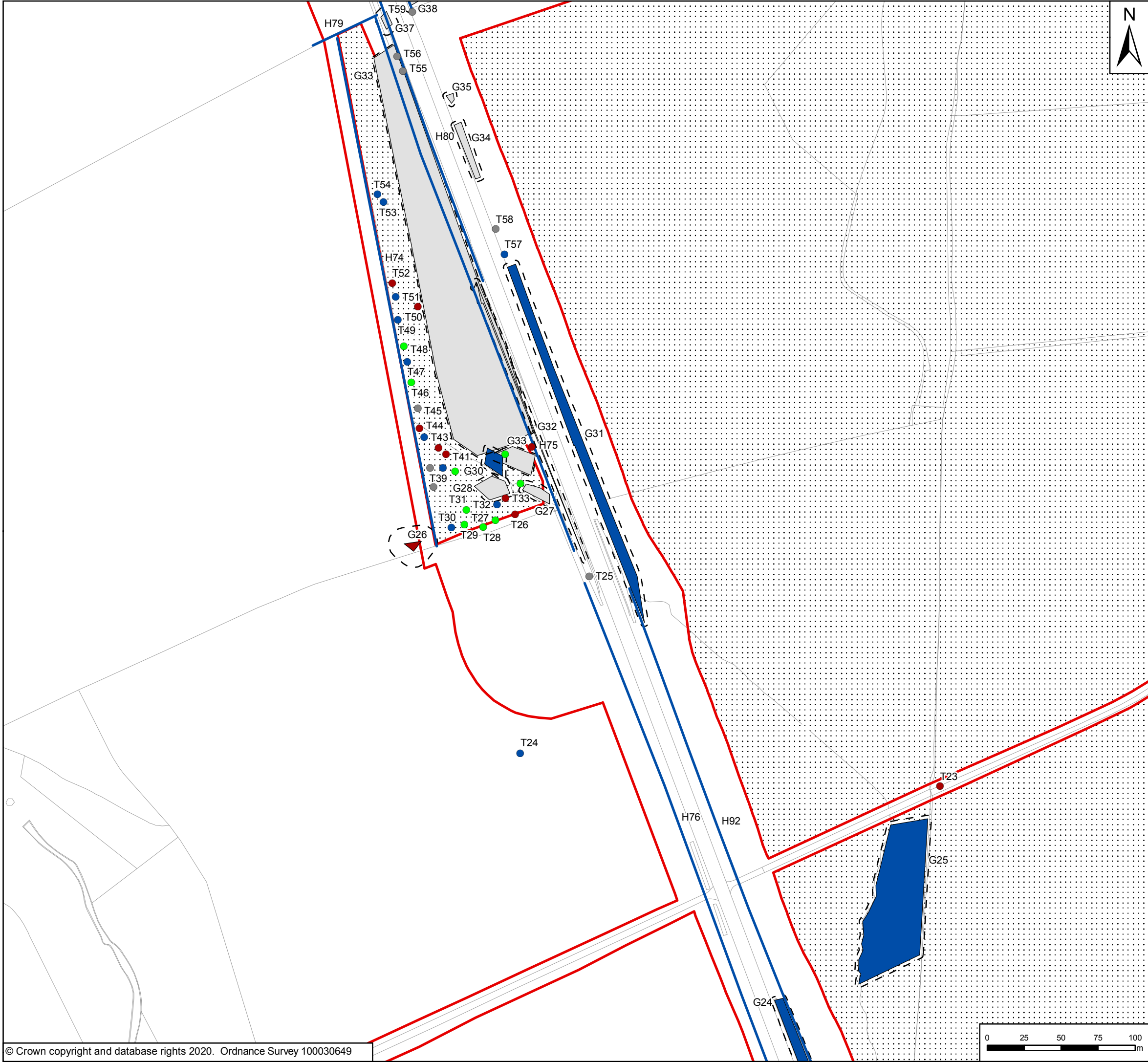
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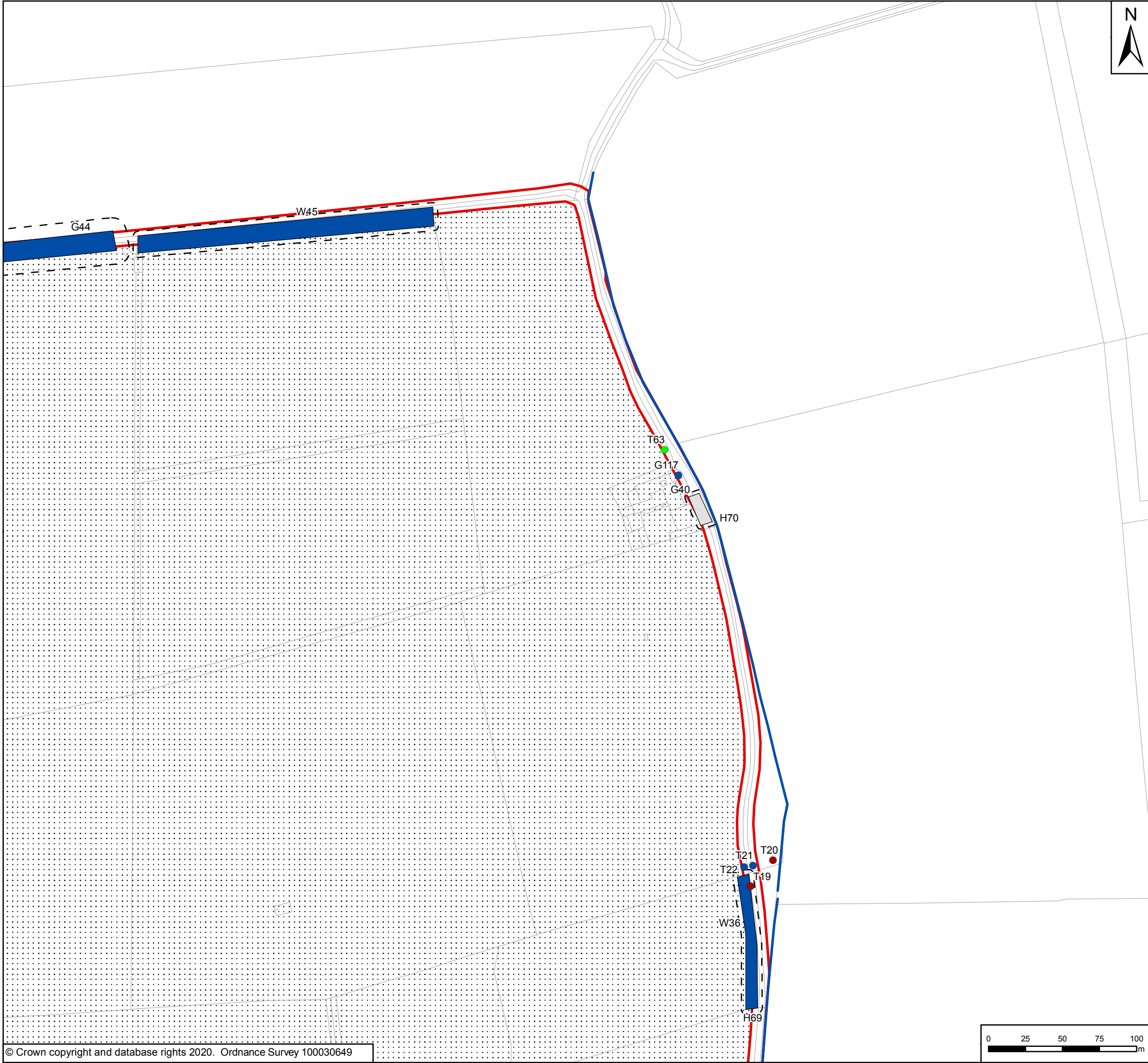
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Root Protection Area

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Order Limits

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The Avenue - Historic Tree Lined Road

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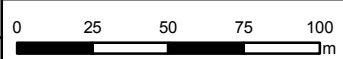
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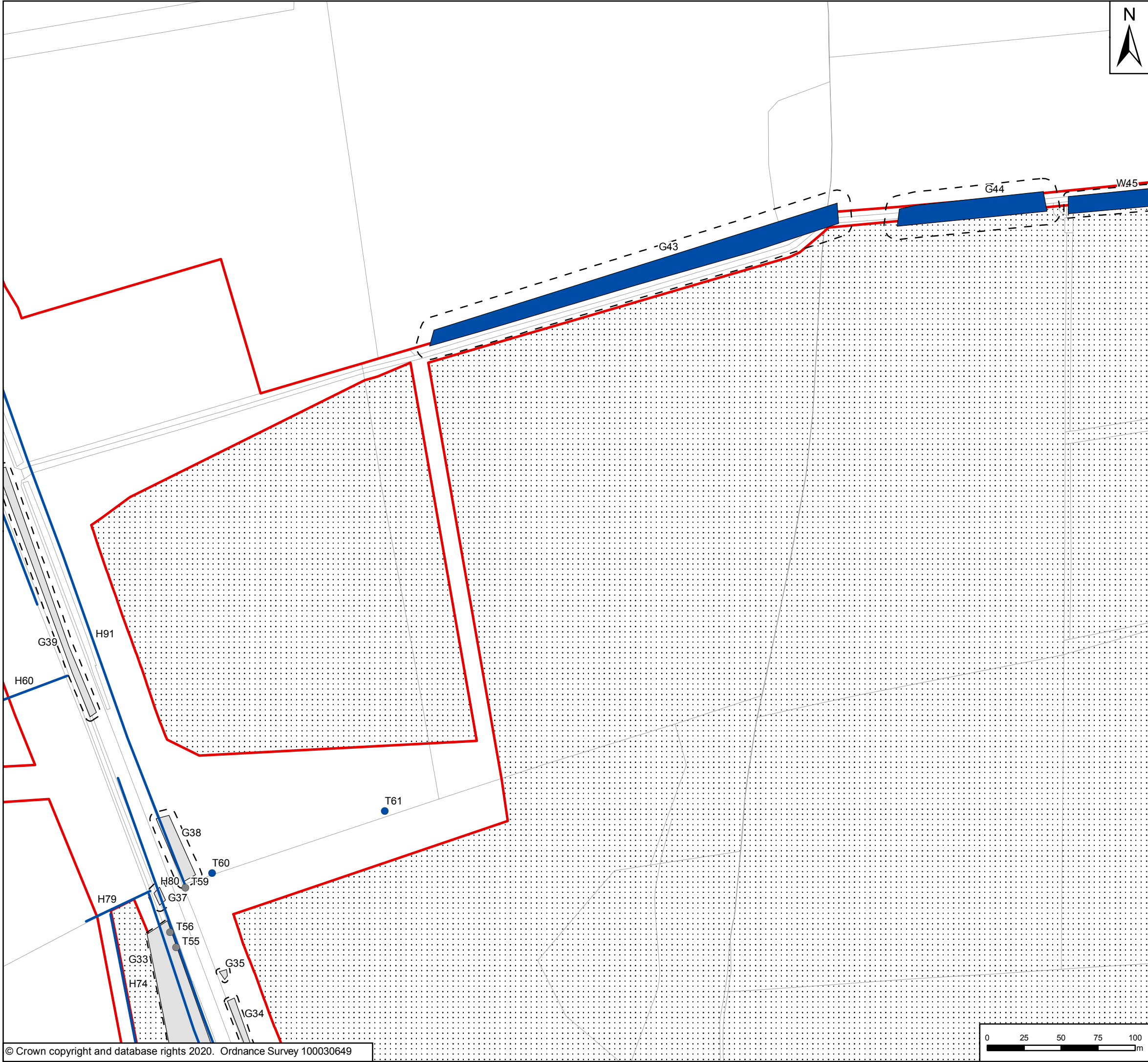
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Root Protection Area

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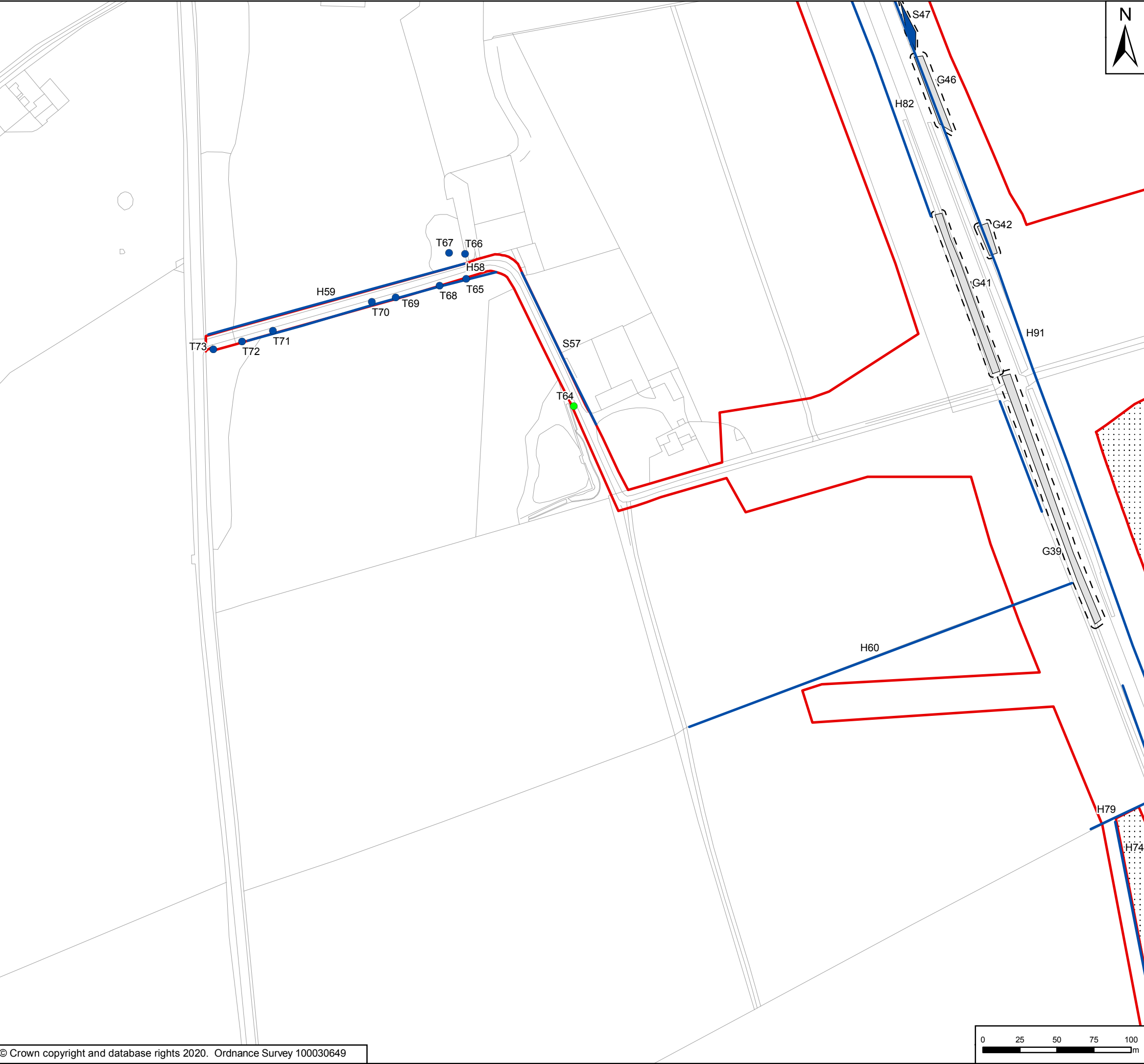
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Root Protection Area

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HE551459		RP		2130	
A2E		LE		P03	
Location		Type		Role	
				Number	

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Key

- Order Limits
- Areas Excluded from Order Limits
- Tree Preservation Area
- Ancient - Veteran Tree
- The Avenue - Historic Tree Lined Road

Tree Category

- A
- B
- C
- U

Root Protection Area

P03	11/02/20	Third Issue	GH	JM	KS
P02	19/12/19	Second Issue	GH	JM	KS
P01	31/07/19	First Issue	JA	JM	KS
Rev	Date	Description	By	Chk'd	App'd

Client

Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

Figure 1
Arboriculture Constraints Plan
Page 11 of 25

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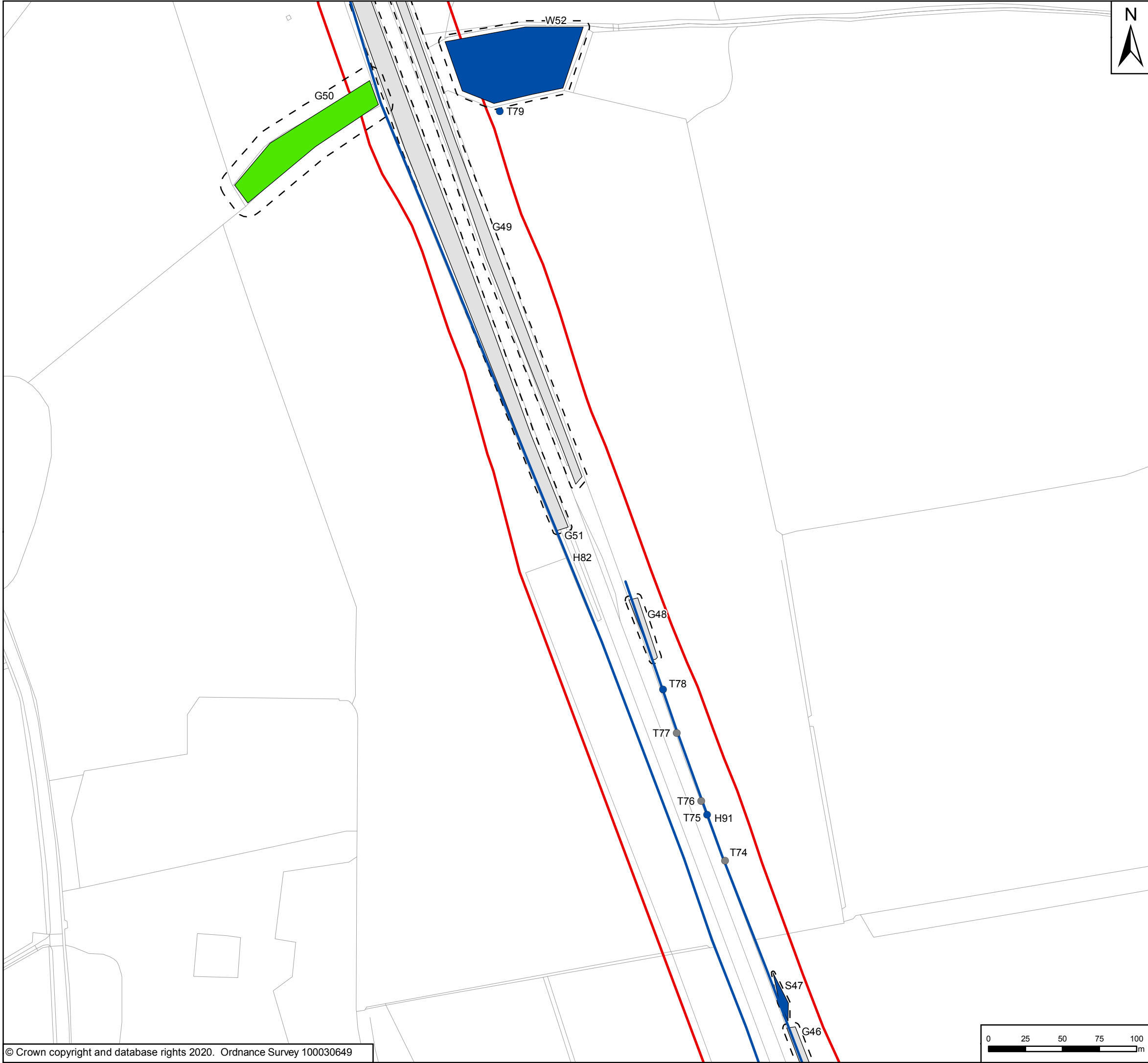
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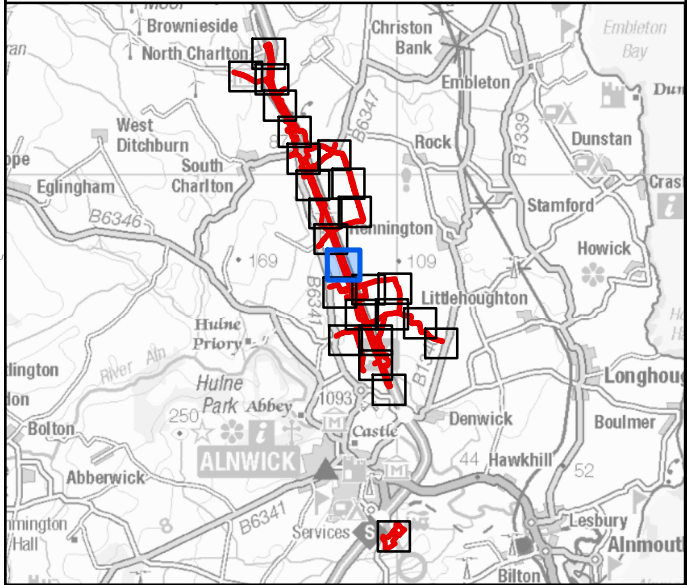
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- Key
- Order Limits
 - Areas Excluded from Order Limits
 - Tree Preservation Area
 - Ancient - Veteran Tree
 - The Avenue - Historic Tree Lined Road
- Tree Category
- A
 - B
 - C
 - U
- Root Protection Area



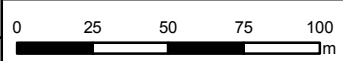
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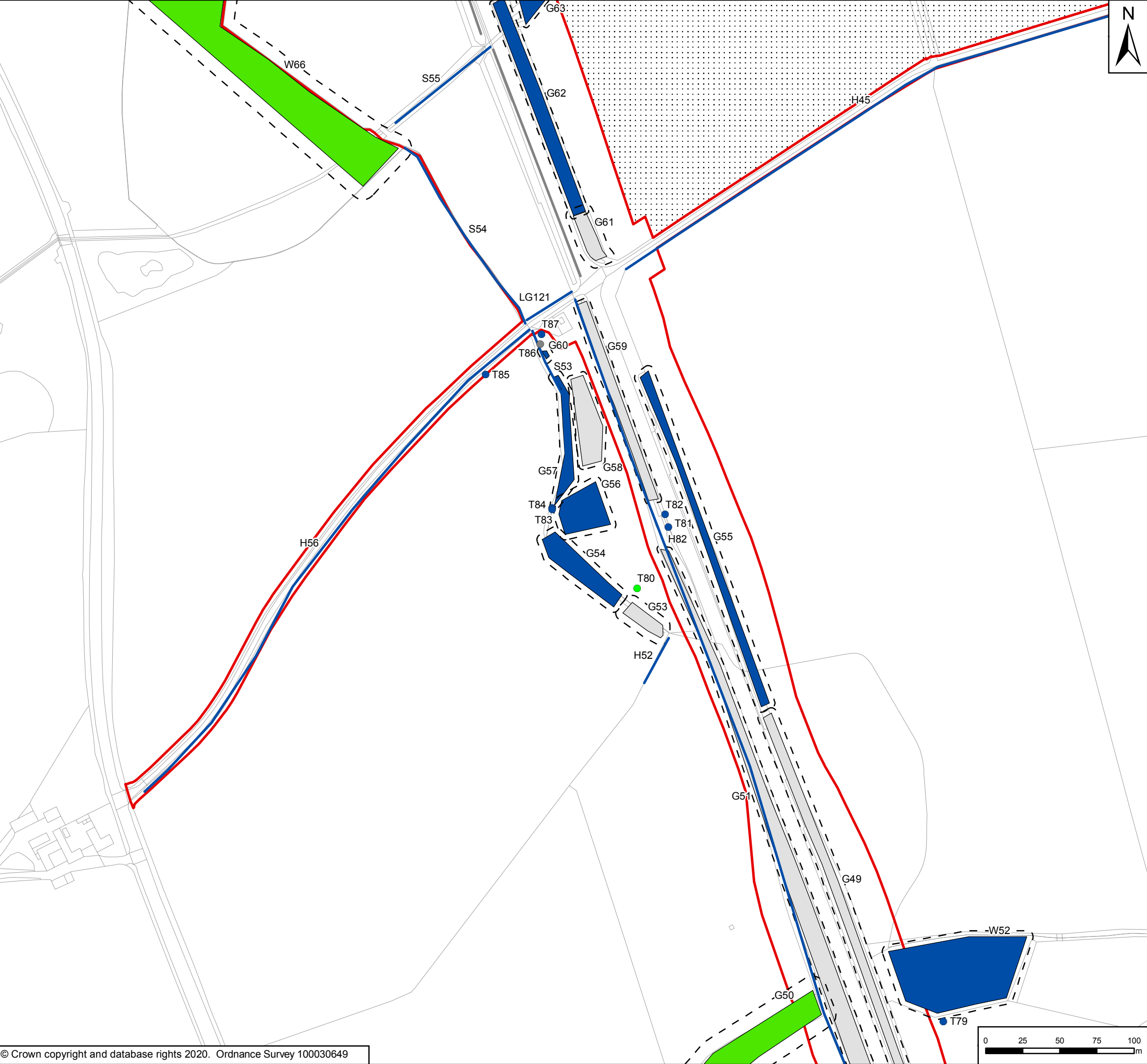
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A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 1
Arboriculture Constraints Plan
Page 12 of 25

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Order Limits

Areas Excluded from Order Limits

Tree Preservation Area

Ancient - Veteran Tree

The Avenue - Historic Tree Lined Road

Tree Category

A

B

C

U

Root Protection Area

P03	11/02/20	Third Issue	GH	JM	KS
P02	19/12/19	Second Issue	GH	JM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

Figure 1
Arboriculture Constraints Plan
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Drawing Status

For Information

Suitability

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Drawing Number

HE551459

Project

A2E

Location

RP

Type

LE

Role

2130

Volume

EGN

Number

Project Ref. No.

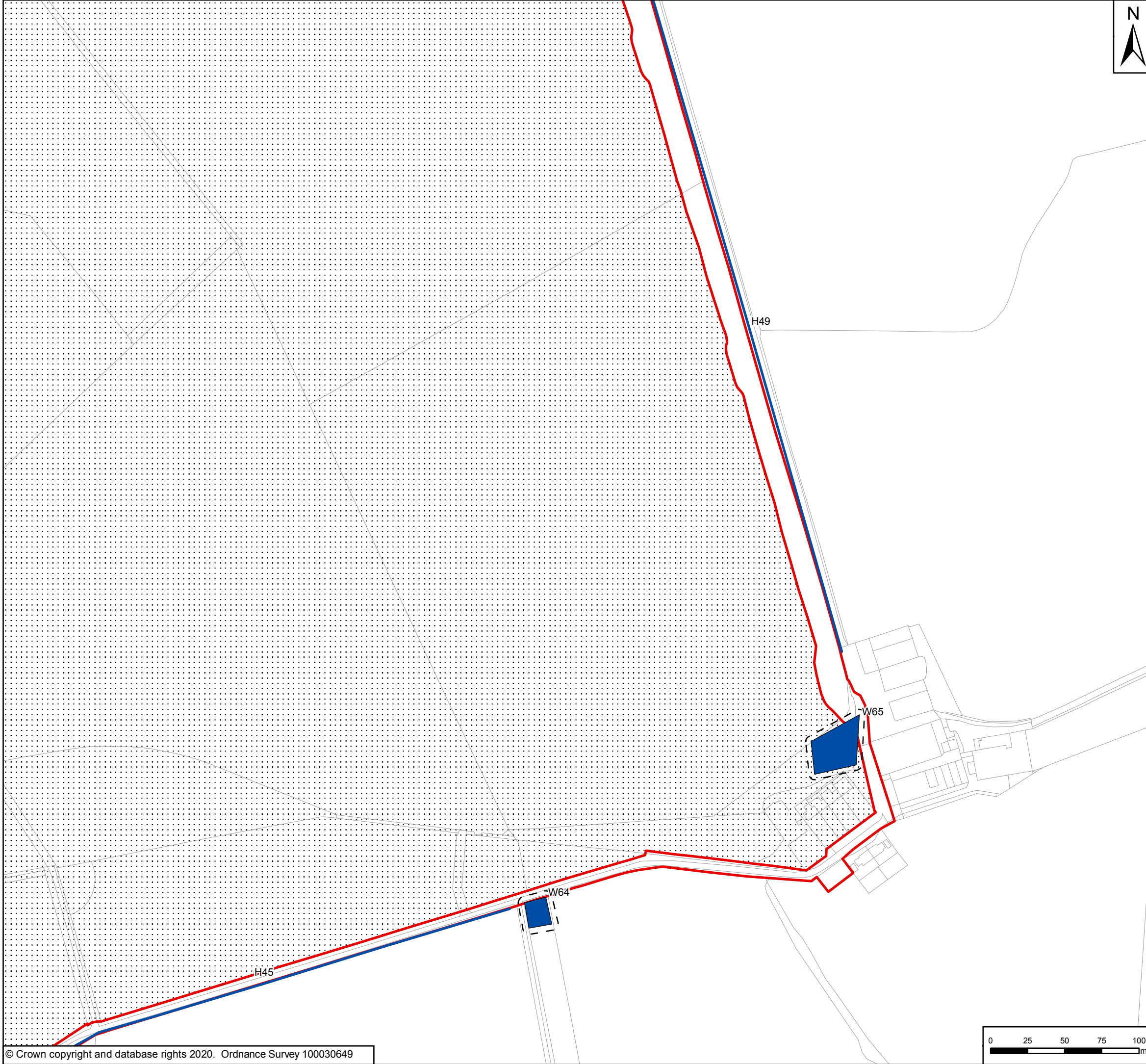
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Revision

P03

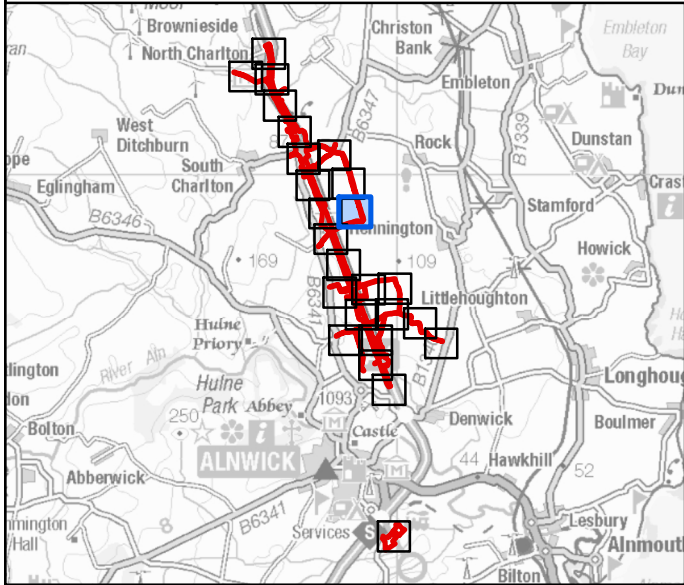
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Key

- Order Limits
- Areas Excluded from Order Limits
- Tree Preservation Area
- Ancient - Veteran Tree
- The Avenue - Historic Tree Lined Road
- Tree Category**
 - A
 - B
 - C
 - U
- Root Protection Area



Rev	Date	Description	By	Chk'd	App'd
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P02	19/12/19	Second Issue	GH	JM	KS
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Project Title
A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 1
Arboriculture Constraints Plan
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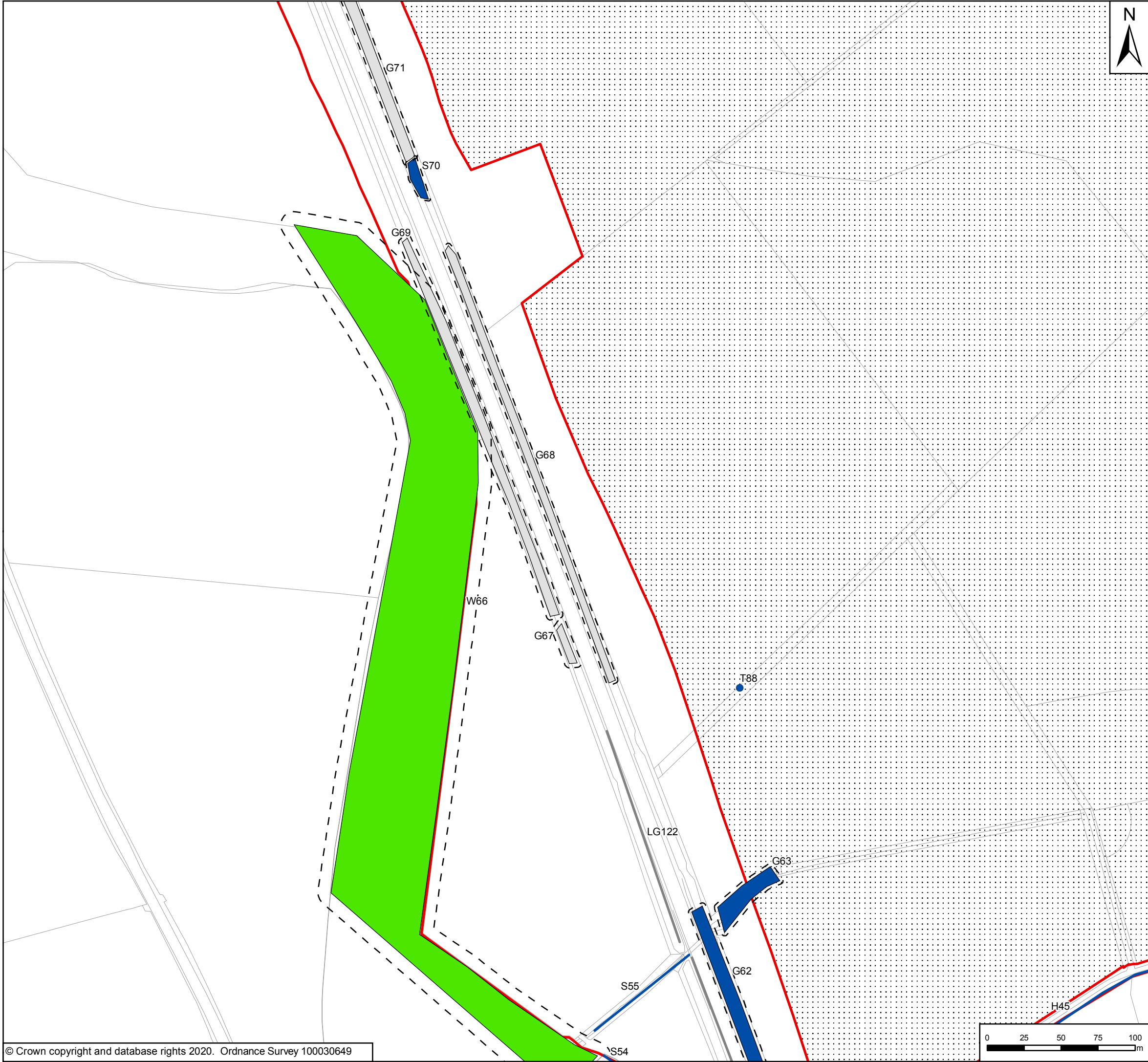
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For Information	S1

Drawing Number	Originator	Volume	Project Ref. No.
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A2E	RP	LE	2130
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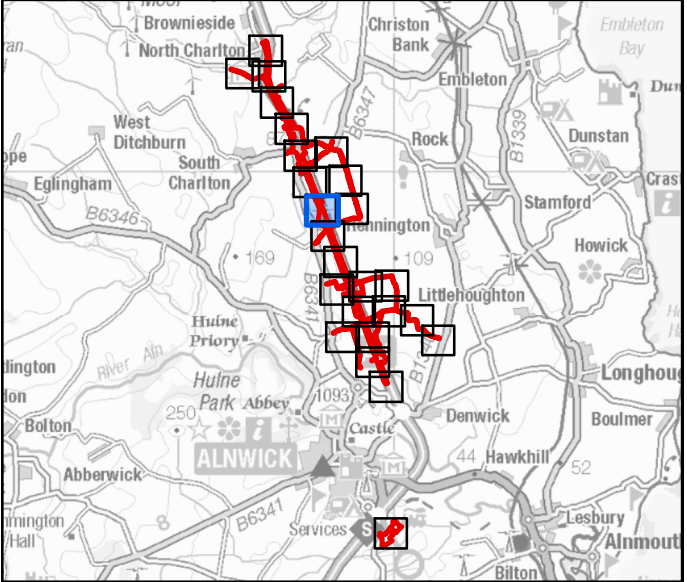
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- Order Limits
- Areas Excluded from Order Limits
- Tree Preservation Area
- Ancient - Veteran Tree
- The Avenue - Historic Tree Lined Road

Tree Category

- A
- B
- C
- U

Root Protection Area



Rev	Date	Description	By	Chk'd	App'd
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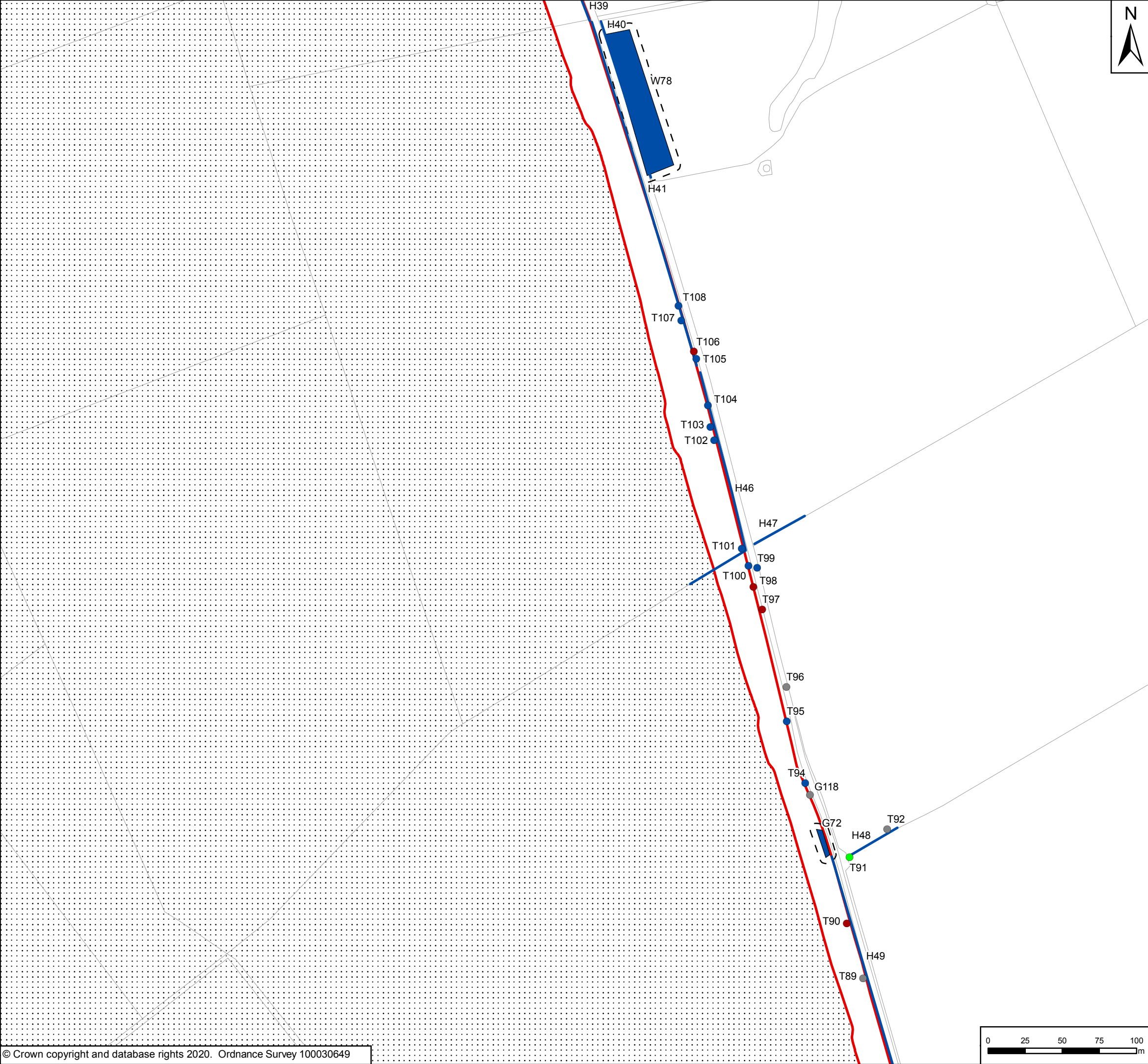
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A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 1
Arboriculture Constraints Plan
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Key

Order Limits

Areas Excluded from Order Limits

Tree Preservation Area

Ancient - Veteran Tree

The Avenue - Historic Tree Lined Road

Tree Category

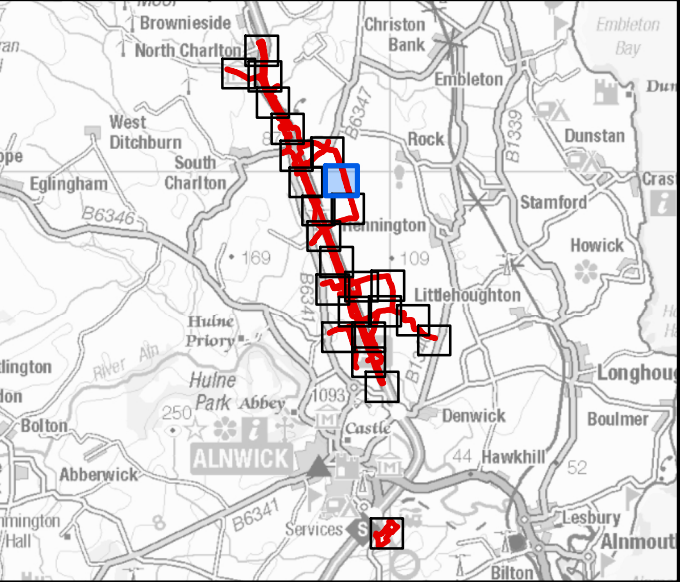
A

B

C

U

Root Protection Area



P03	11/02/20	Third Issue	GH	JM	KS
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Project Title

A1 in Northumberland: Alnwick to Ellingham

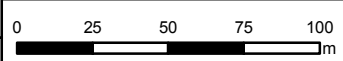
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Arboriculture Constraints Plan
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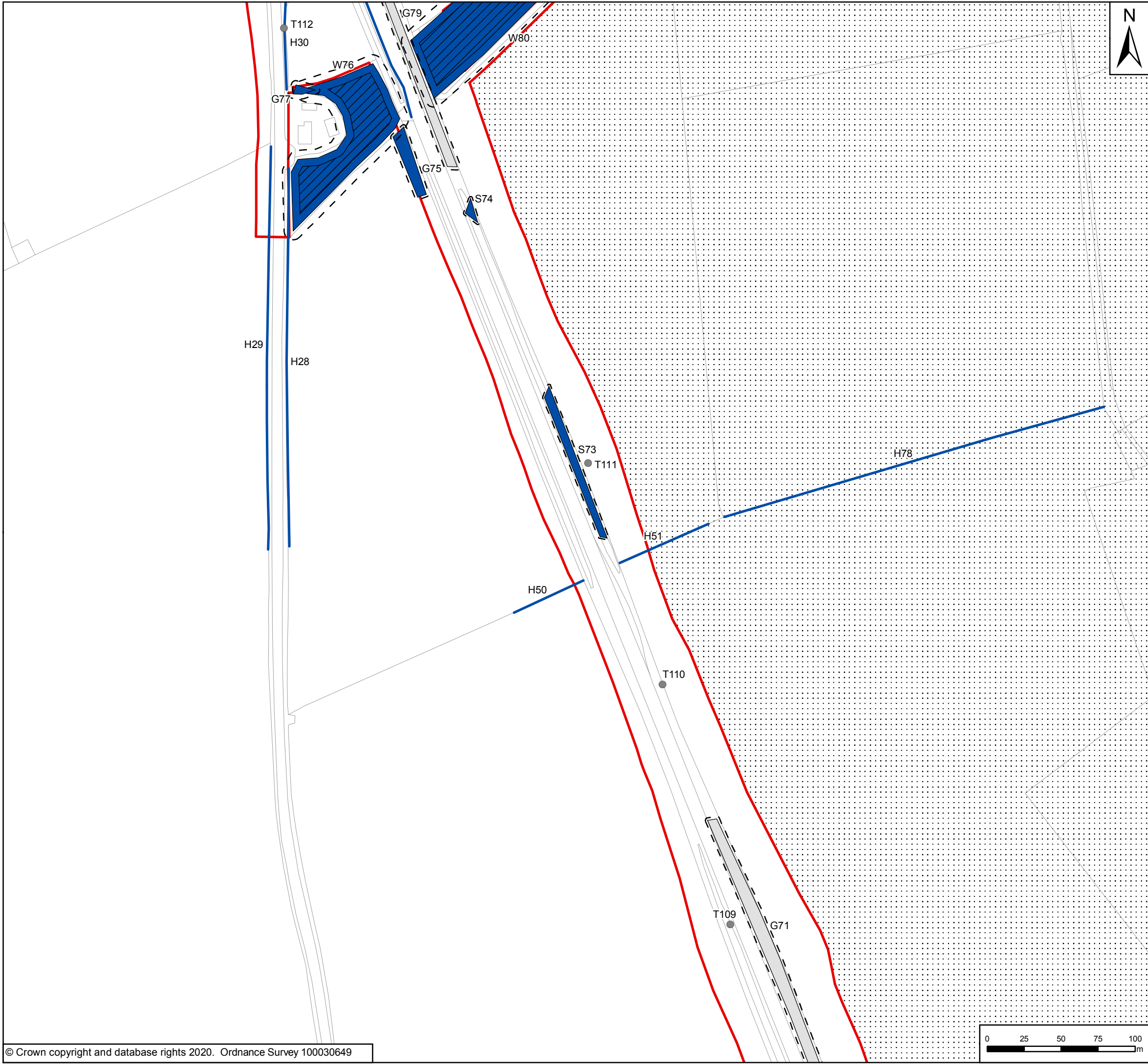
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Key

- Order Limits
- Areas Excluded from Order Limits
- Tree Preservation Area
- Ancient - Veteran Tree
- The Avenue - Historic Tree Lined Road

Tree Category

- A
- B
- C
- U
- Root Protection Area

P03	11/02/20	Third Issue	GH	JM	KS
P02	19/12/19	Second Issue	GH	JM	KS
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Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

Figure 1
Arboriculture Constraints Plan
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Drawing Status

For Information

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Project Ref. No.

70044137

Revision

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Type

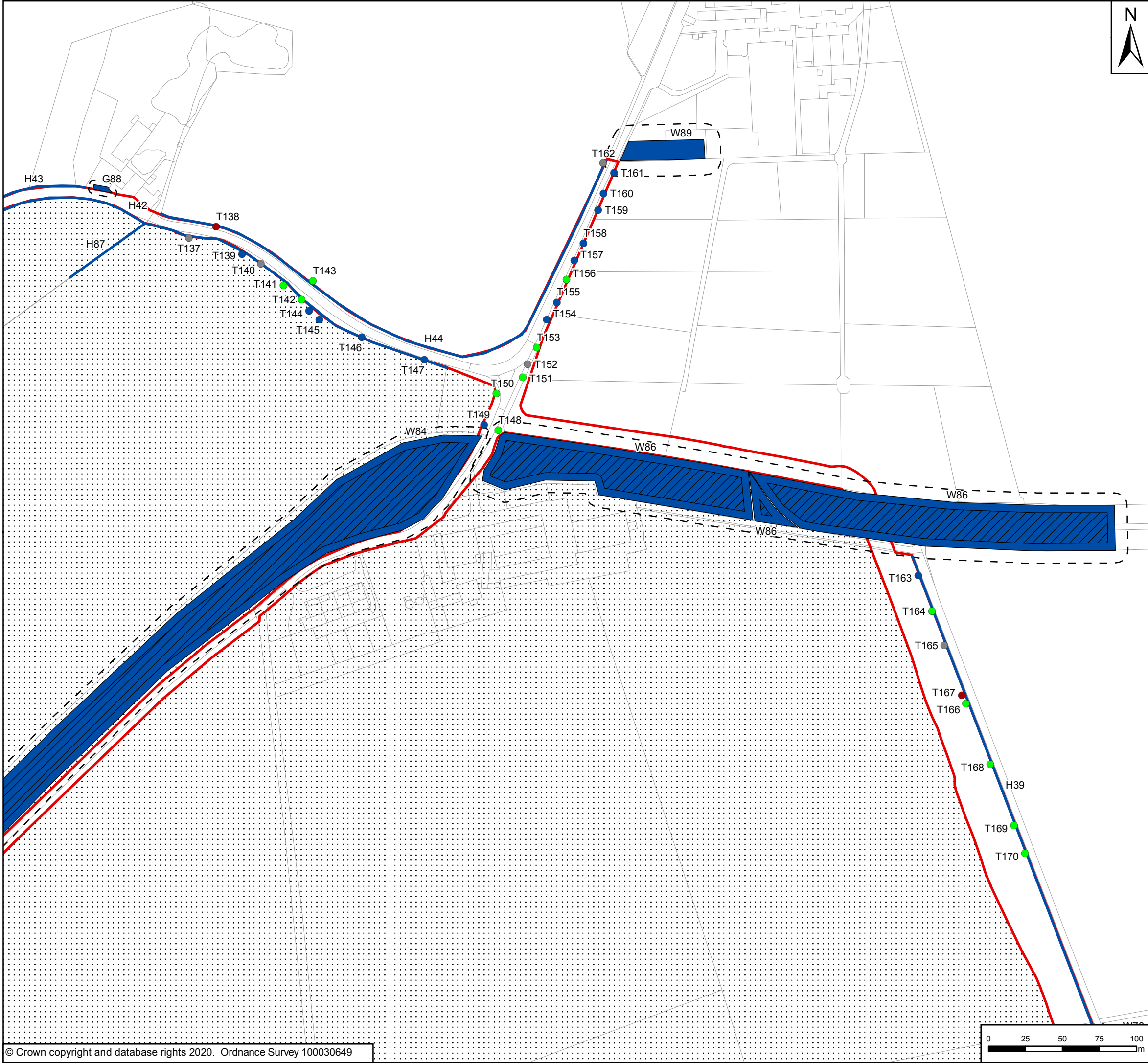
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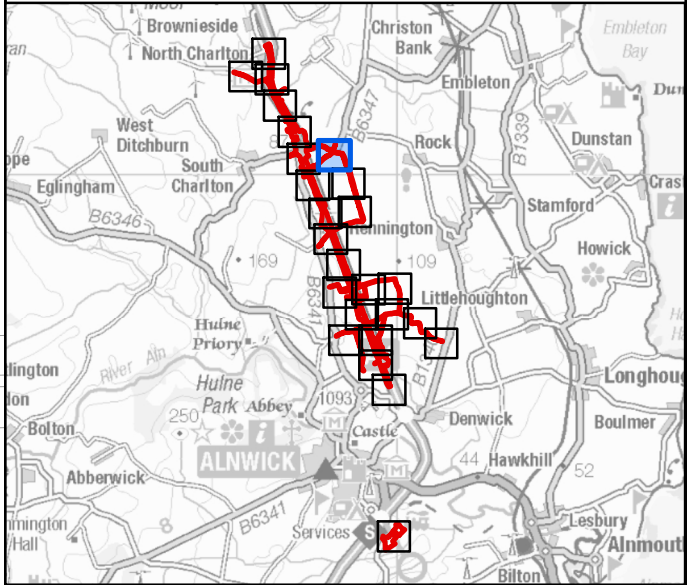
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- Order Limits
- Areas Excluded from Order Limits
- Tree Preservation Area
- Ancient - Veteran Tree
- The Avenue - Historic Tree Lined Road

Tree Category

- A
- B
- C
- U

Root Protection Area



Rev	Date	Description	By	Chk'd	App'd
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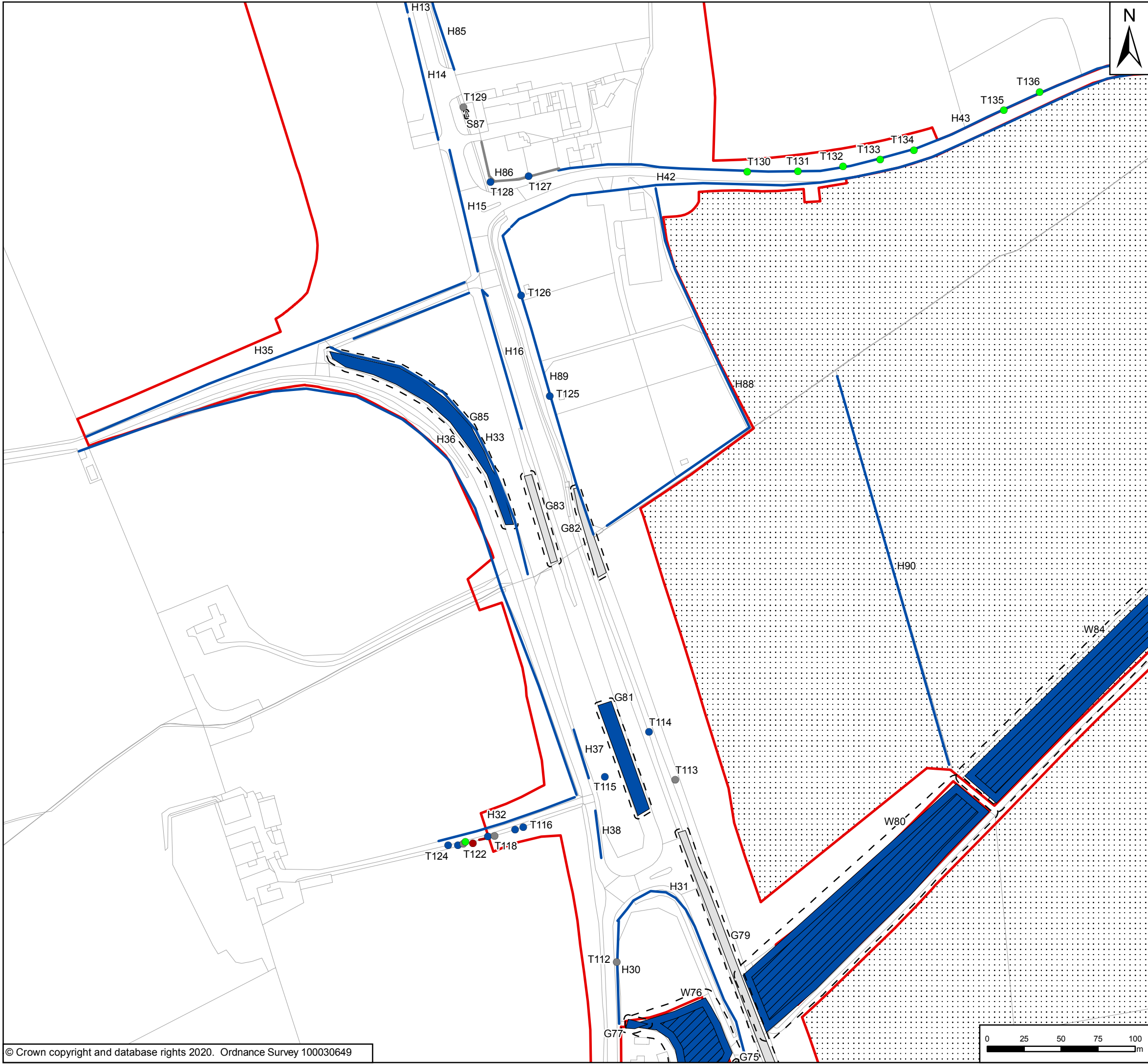
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Project Title
A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 1
Arboriculture Constraints Plan
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Key

- Order Limits
- Areas Excluded from Order Limits
- Tree Preservation Area
- Ancient - Veteran Tree
- The Avenue - Historic Tree Lined Road

Tree Category

- A
- B
- C
- U

Root Protection Area

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Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

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Arboriculture Constraints Plan
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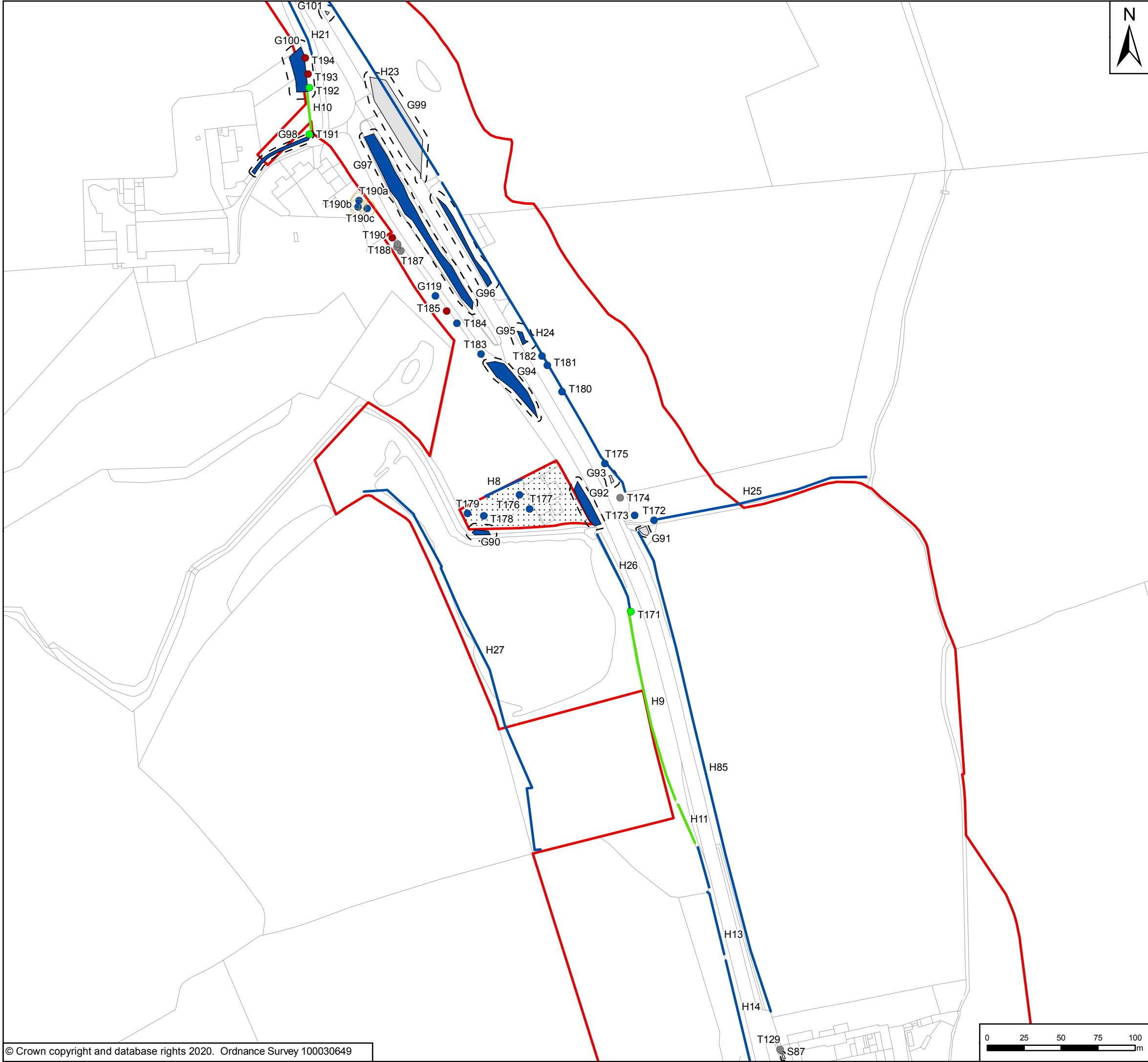
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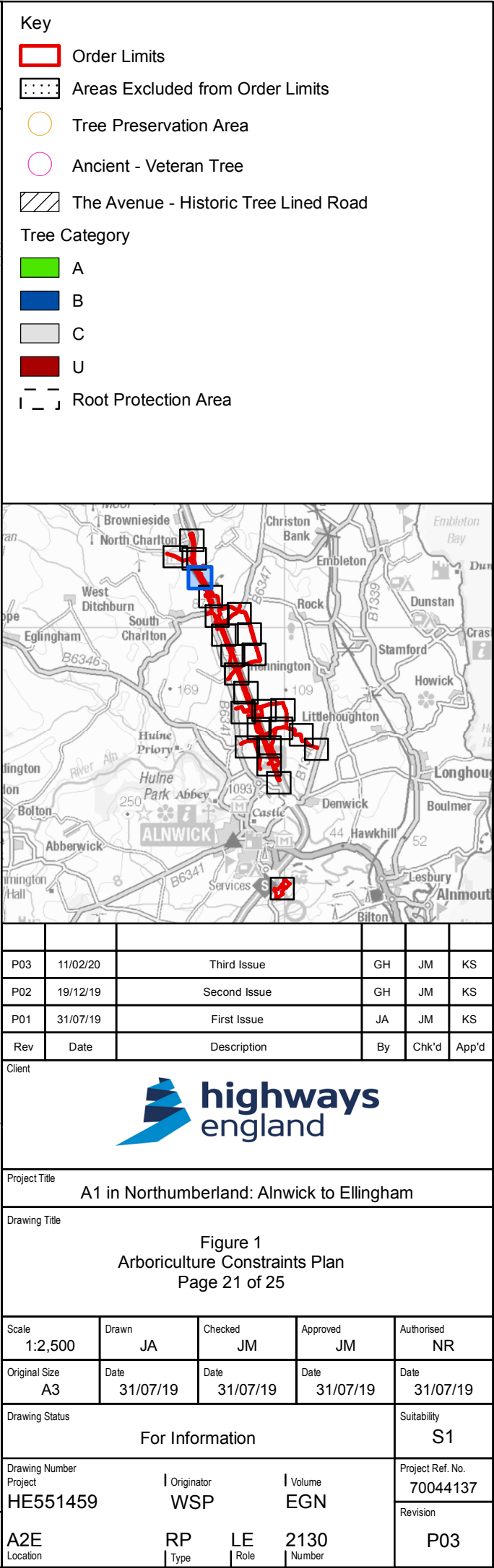
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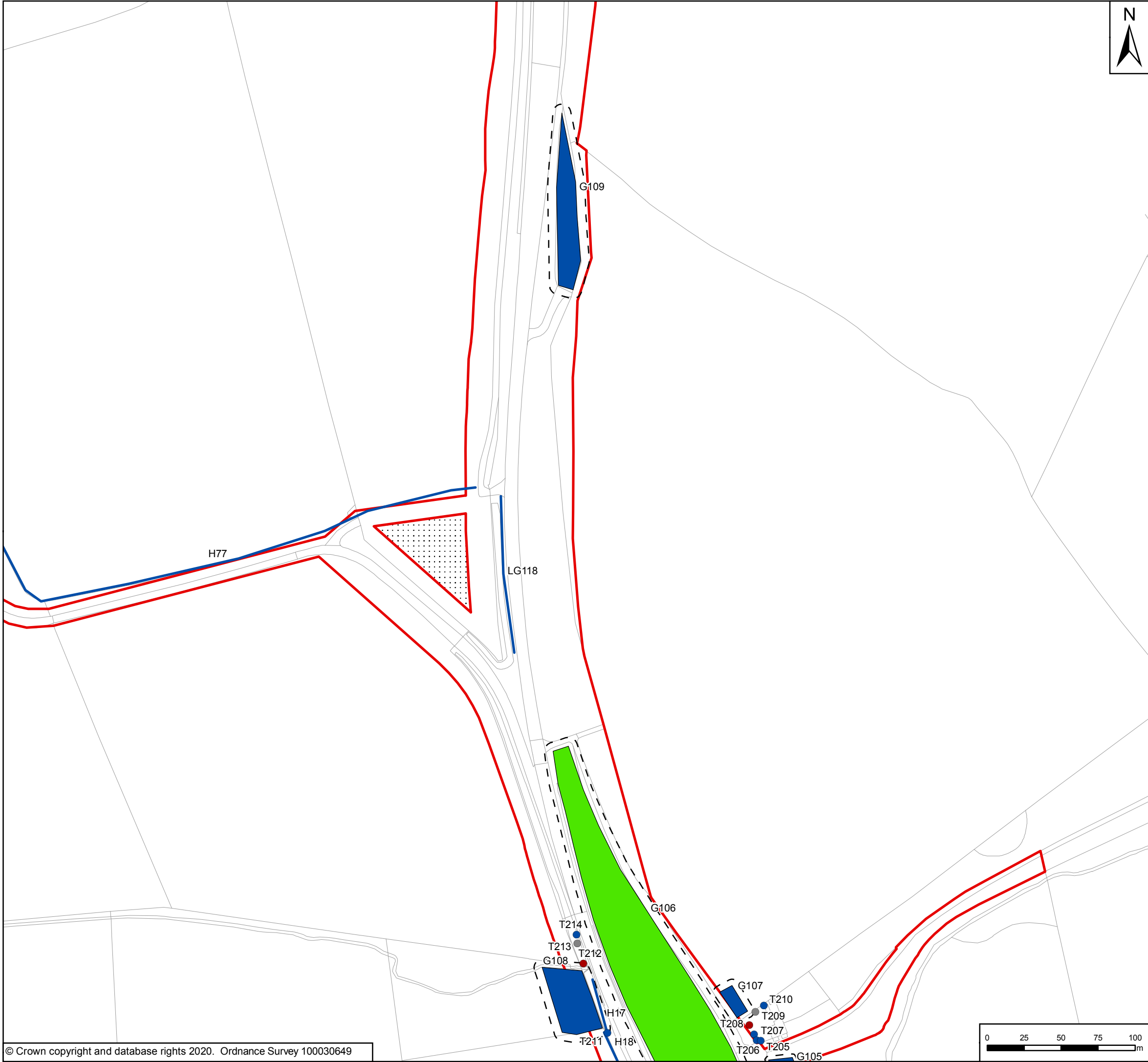
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Key

- Order Limits
- Areas Excluded from Order Limits
- Tree Preservation Area
- Ancient - Veteran Tree
- The Avenue - Historic Tree Lined Road

Tree Category

- A
- B
- C
- U

Root Protection Area

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Rev	Date	Description	By	Chk'd	App'd

Client

Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

Figure 1
Arboriculture Constraints Plan
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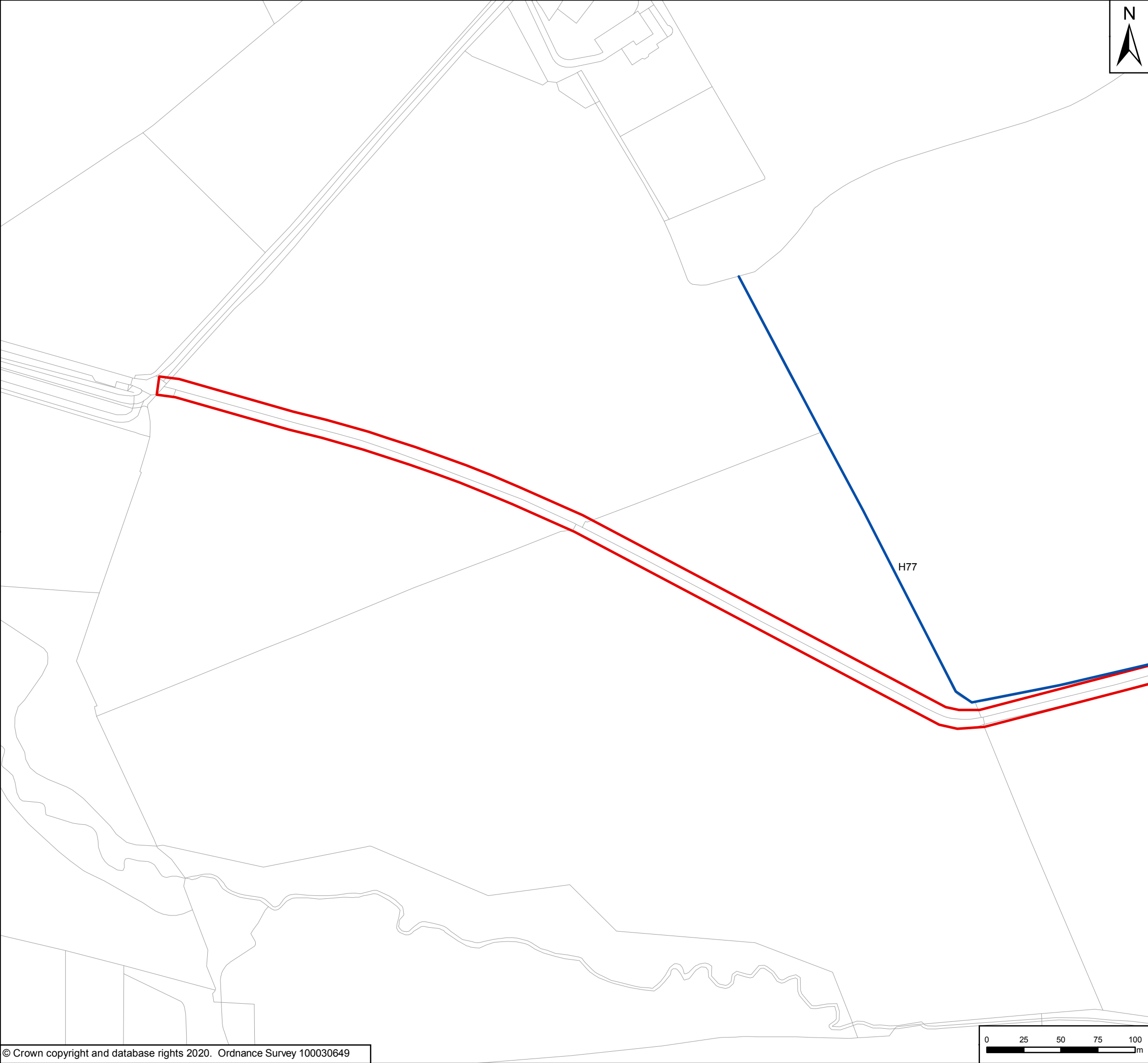
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Project						Revision	P03
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
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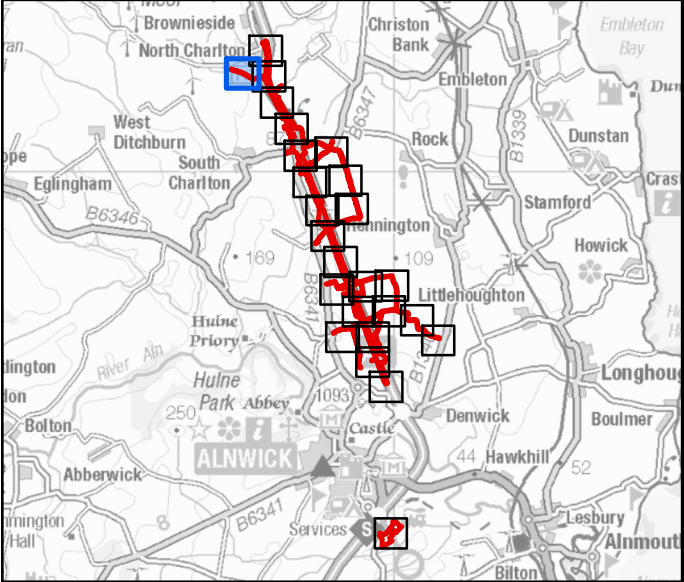


Key

-  Order Limits
-  Areas Excluded from Order Limits
-  Tree Preservation Area
-  Ancient - Veteran Tree
-  The Avenue - Historic Tree Lined Road

Tree Category

-  A
-  B
-  C
-  U
-  Root Protection Area



Rev	Date	Description	By	Chk'd	App'd
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Client



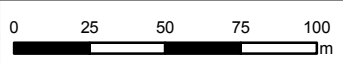
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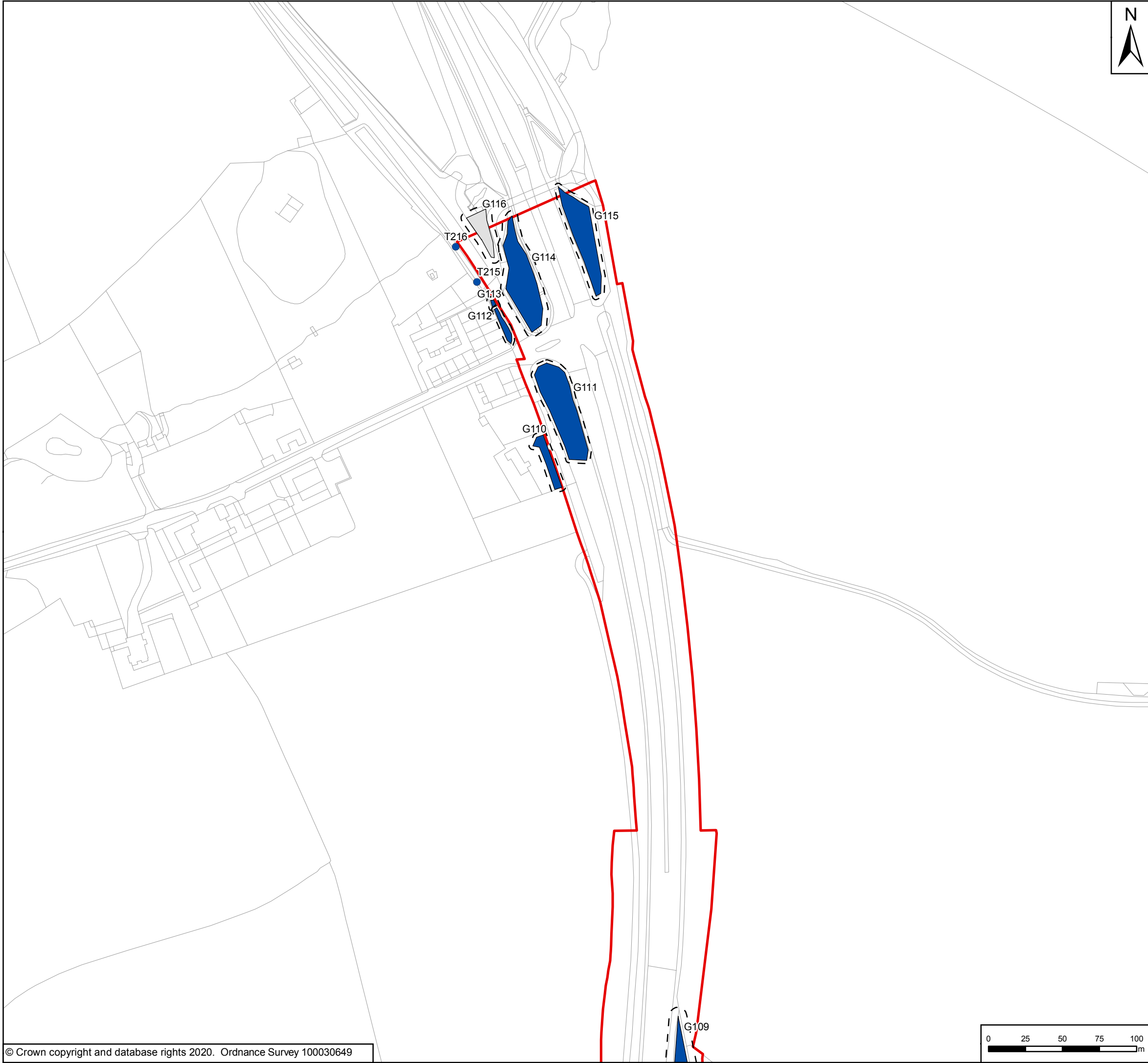
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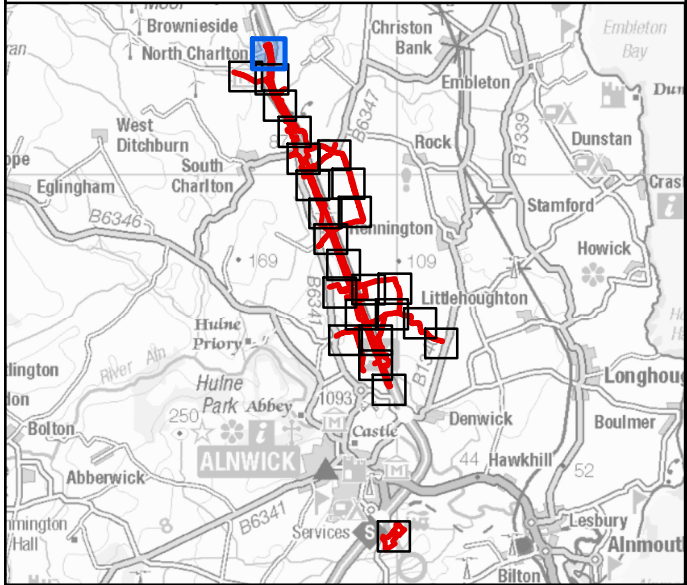
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- Key**
- Order Limits
 - Areas Excluded from Order Limits
 - Tree Preservation Area
 - Ancient - Veteran Tree
 - The Avenue - Historic Tree Lined Road
- Tree Category**
- A
 - B
 - C
 - U
- Root Protection Area



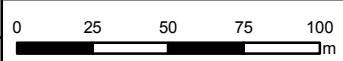
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Client

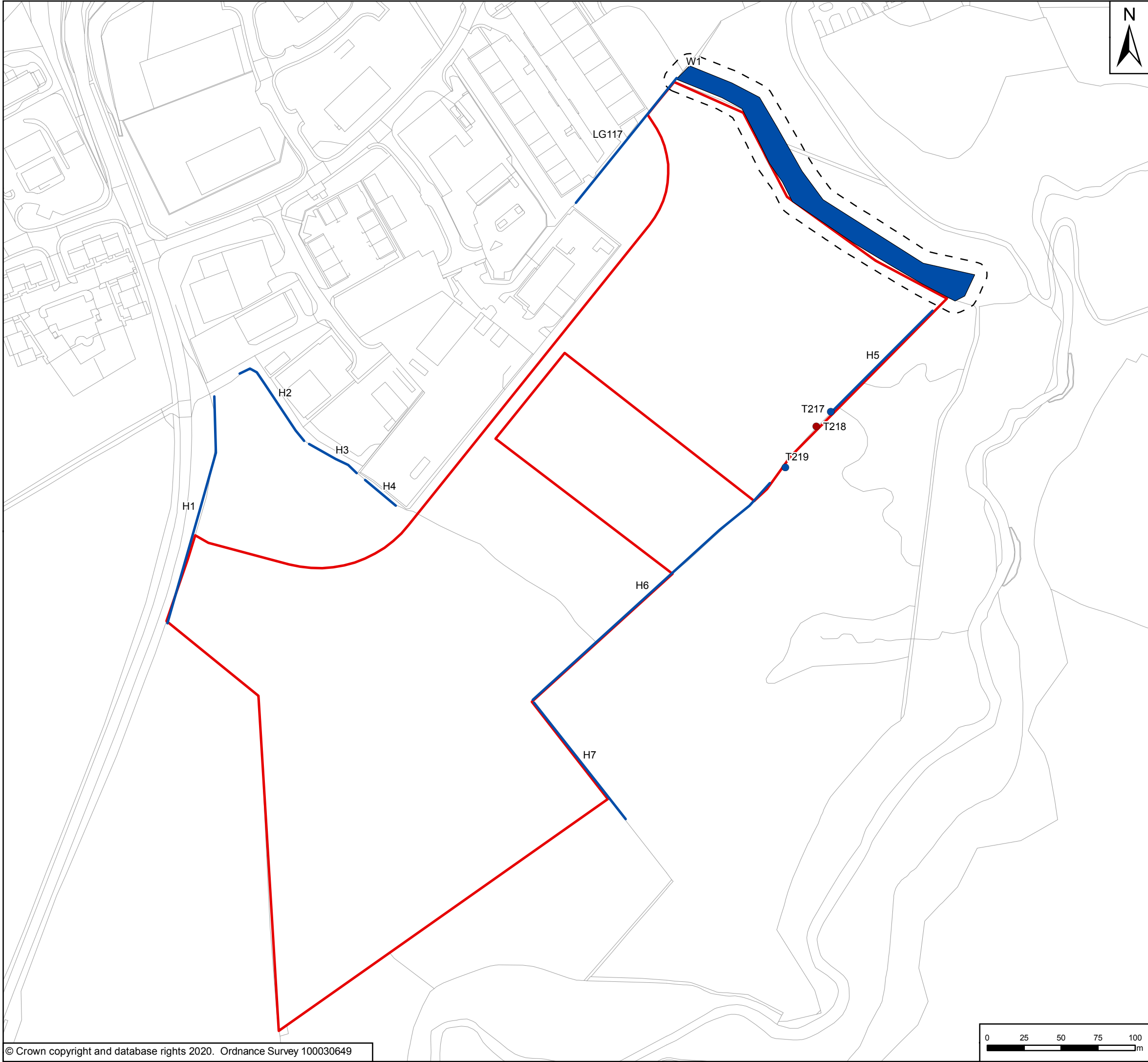
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Drawing Title
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Arboriculture Constraints Plan
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Originator WSP				Volume EGN
Revision				P03
A2E Location	RP Type	LE Role	2130 Number	



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Order Limits

Areas Excluded from Order Limits

Tree Preservation Area

Ancient - Veteran Tree

The Avenue - Historic Tree Lined Road

Tree Category

A

B

C

U

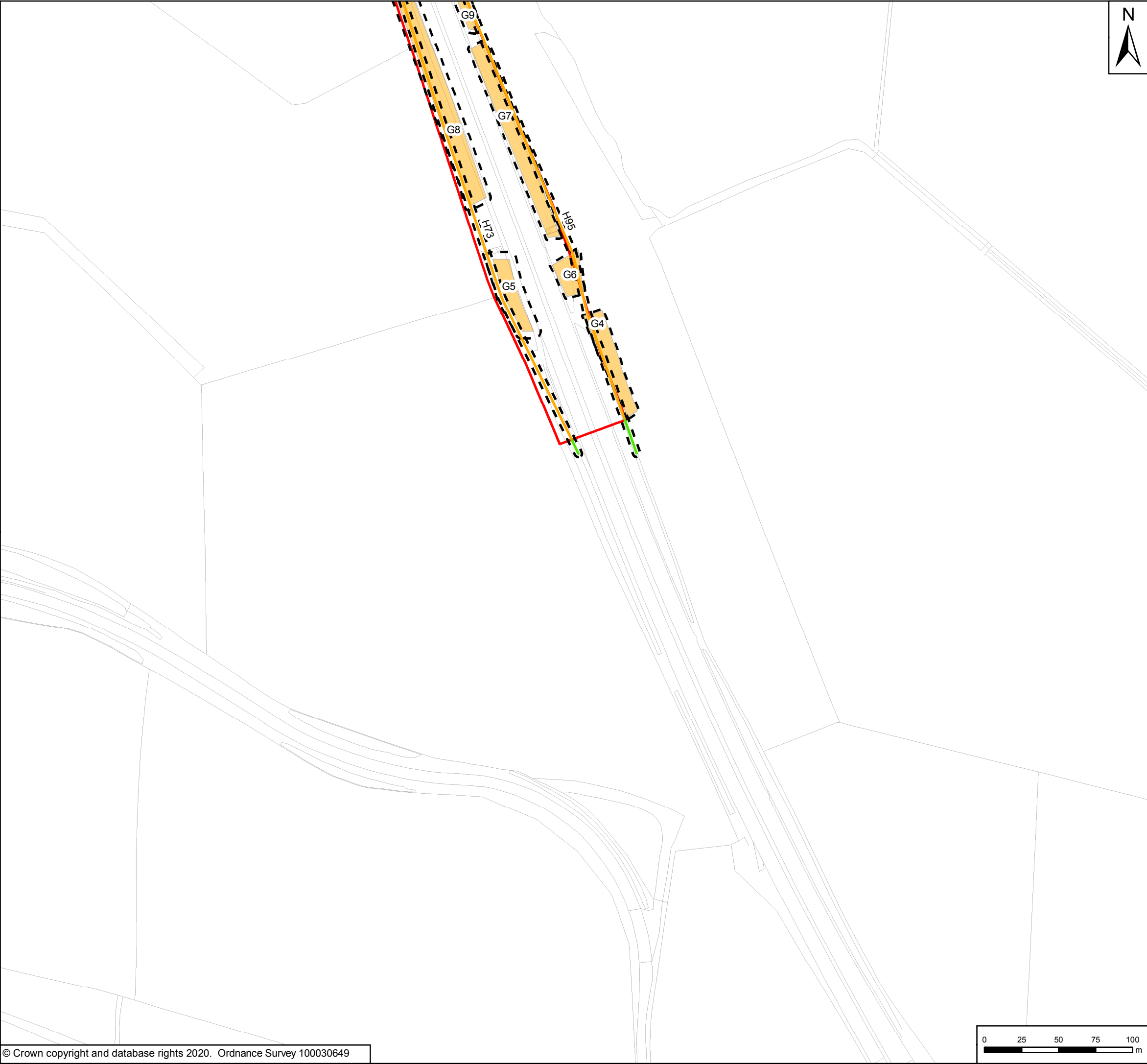
Root Protection Area

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Project Title A1 in Northumberland: Alnwick to Ellingham					
Drawing Title Figure 1 Arboriculture Constraints Plan Page 25 of 25					
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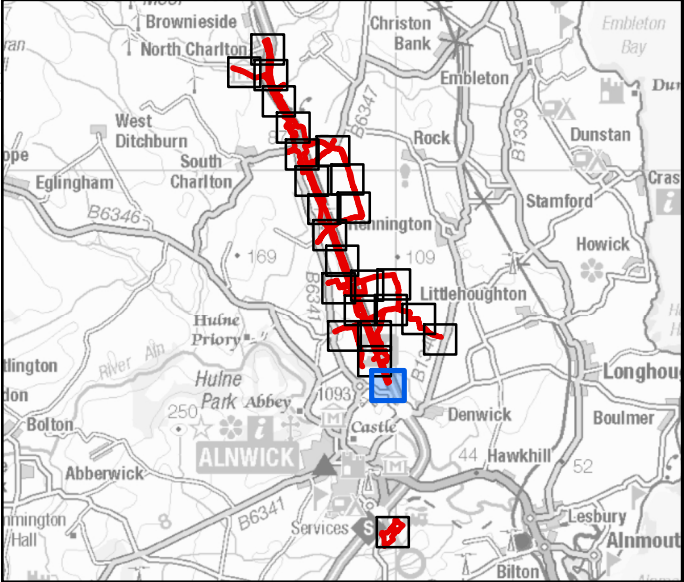
Appendix B.2

TREE PROTECTION PLAN

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- Key
- Order Limits
 - General_Arrangement
 - Feature Lost
 - Feature Protection Required
 - Feature Retained
 - Root Protection Area



Rev	Date	Description	By	Chk'd	App'd
P03	11/02/20	Third Issue	GH	CP	JM
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P01	31/07/19	First Issue	JA	JM	KS

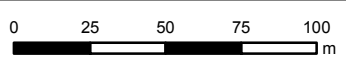
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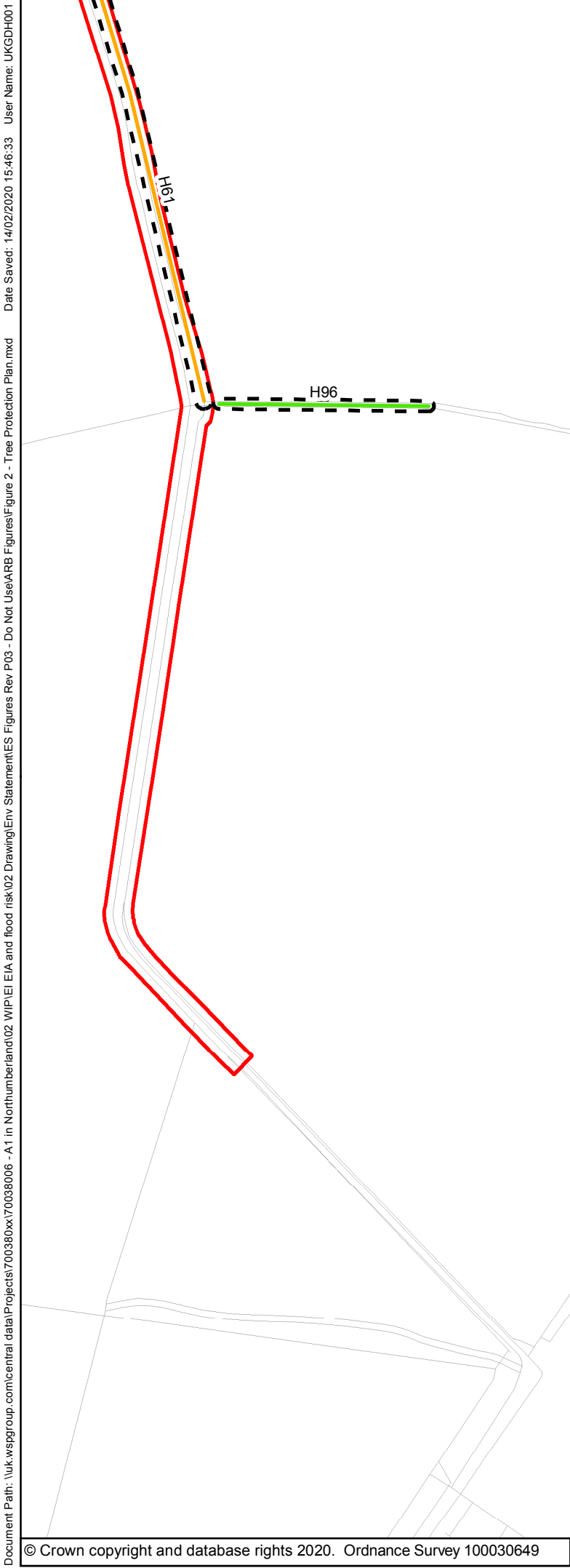


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A1 in Northumberland: Alnwick to Ellingham

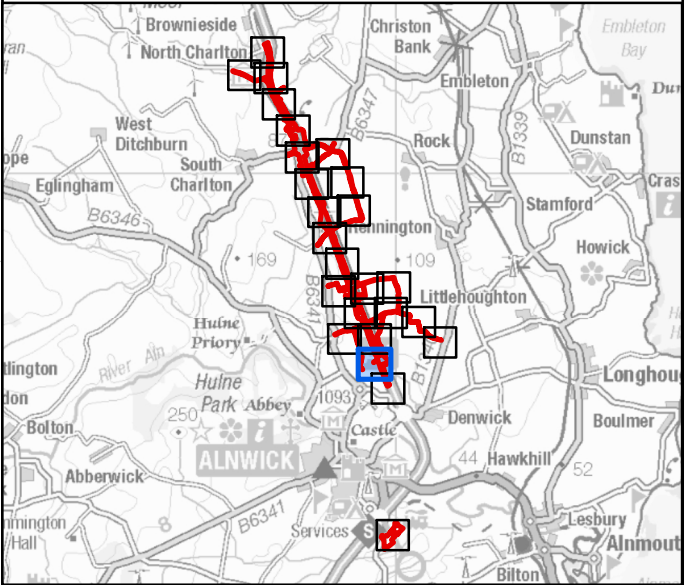
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Figure 2
Tree Protection Plan
Page 1 of 25

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For Information									S1
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HE551459			WSP			EGN			70044137
A2E			RP			LE			Revision
Location			Type			Role			P03
						2130			
						Number			





- Key
- Order Limits
 - General Arrangement
 - Feature Lost
 - Feature Protection Required
 - Feature Retained
 - Root Protection Area



P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

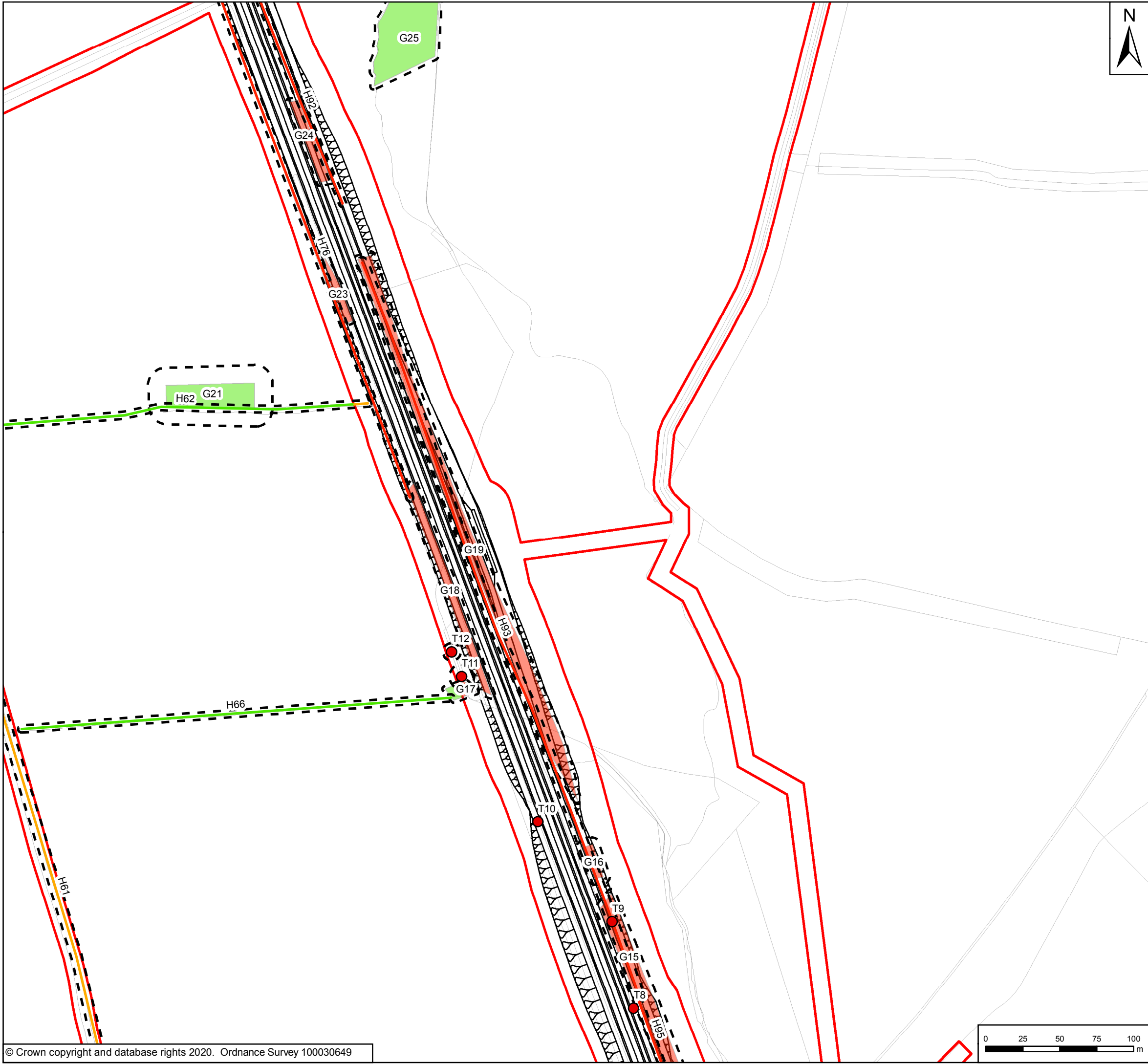


Project Title
A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 2
Tree Protection Plan
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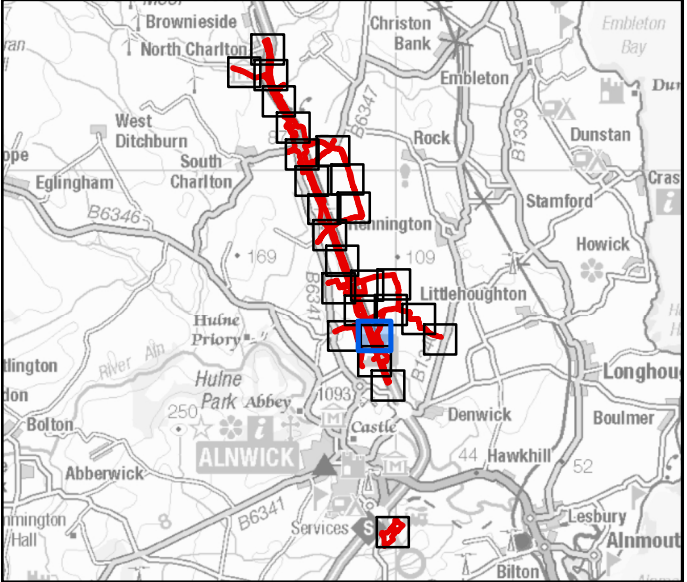
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Key

- Order Limits
- General_Arrangement
- Feature Lost
- Feature Protection Required
- Feature Retained
- Root Protection Area



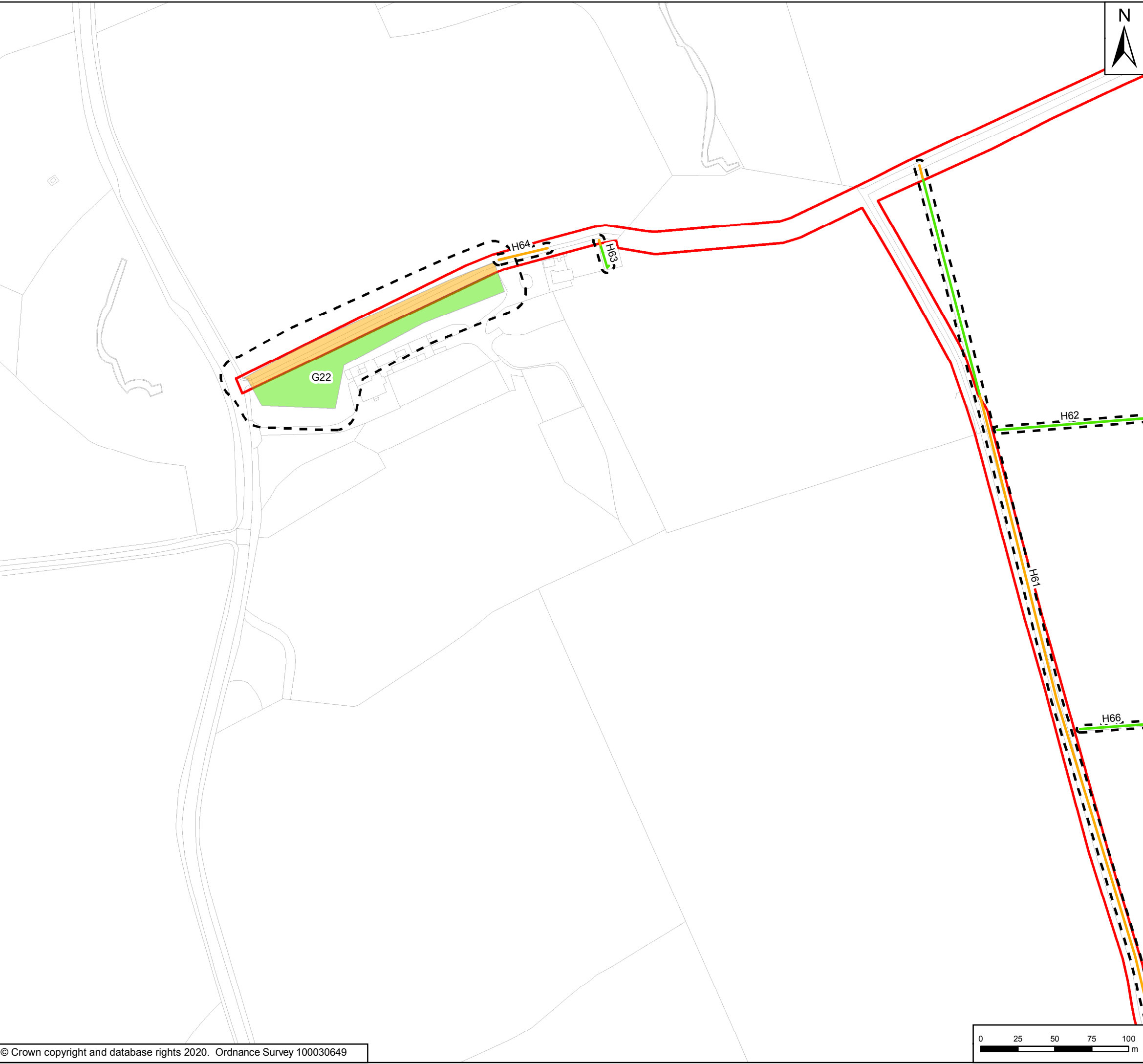
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Rev	Date	Description	By	Chk'd	App'd

Client

Project Title
A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 2
Tree Protection Plan
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Key

- Order Limits
- General_Arrangement
- Feature Lost
- Feature Protection Required
- Feature Retained
- Root Protection Area

P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
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Rev	Date	Description	By	Chk'd	App'd

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A1 in Northumberland: Alnwick to Ellingham

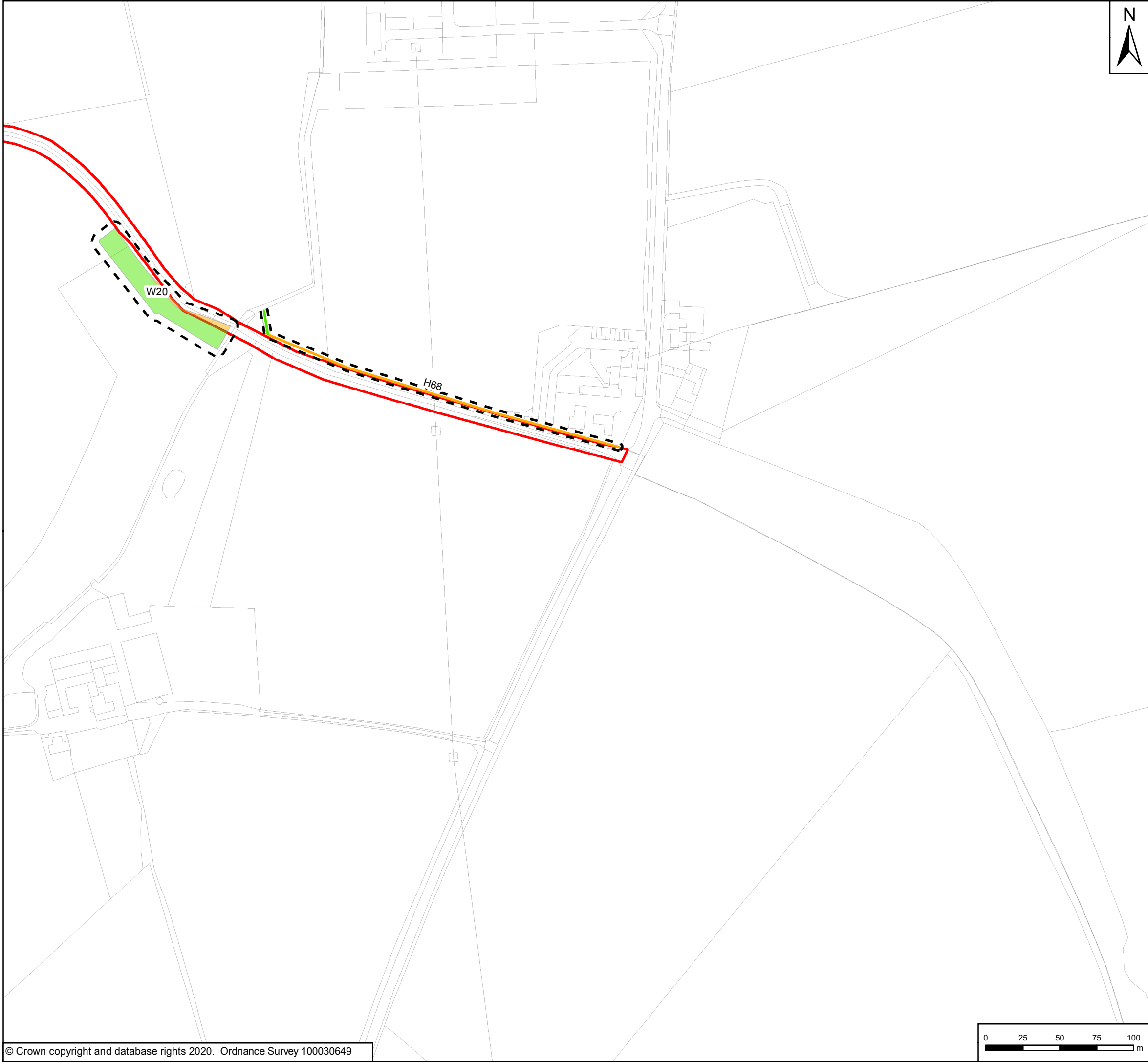
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Tree Protection Plan
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Drawing Status	Suitability
For Information	S1

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Key

- Order Limits
- General_Arrangement
- Feature Lost
- Feature Protection Required
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- Root Protection Area

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P02	13/12/19	Second Issue	GH	JM	KS
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Rev	Date	Description	By	Chk'd	App'd

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Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

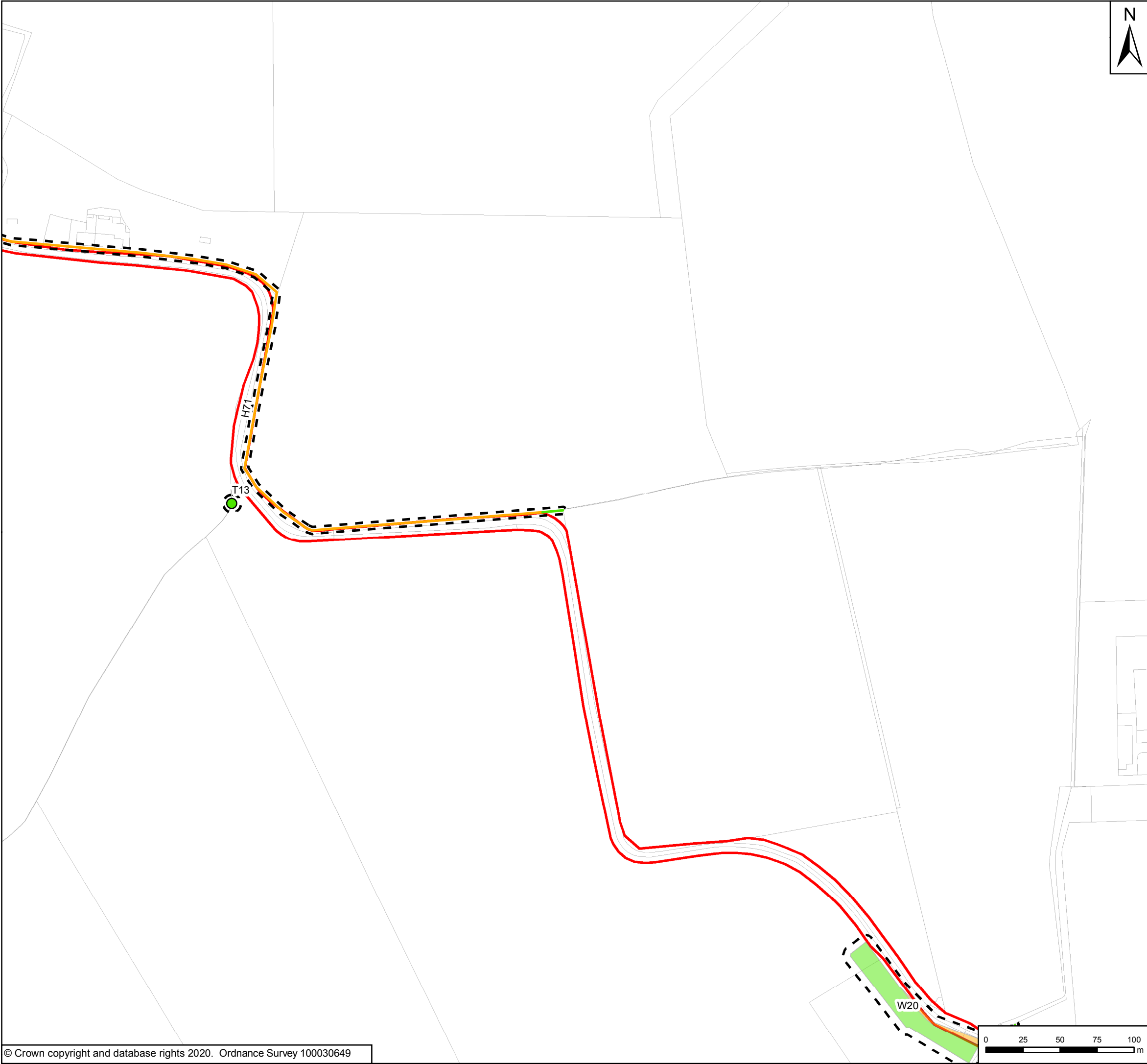
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Tree Protection Plan
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For Information				S1
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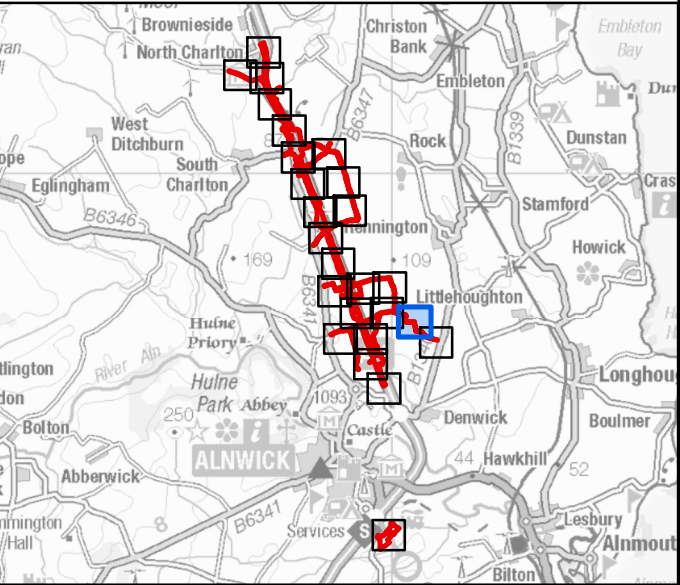
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- Key
- Order Limits
 - General_Arrangement
 - Feature Lost
 - Feature Protection Required
 - Feature Retained
 - Root Protection Area



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Project Title
A1 in Northumberland: Alnwick to Ellingham

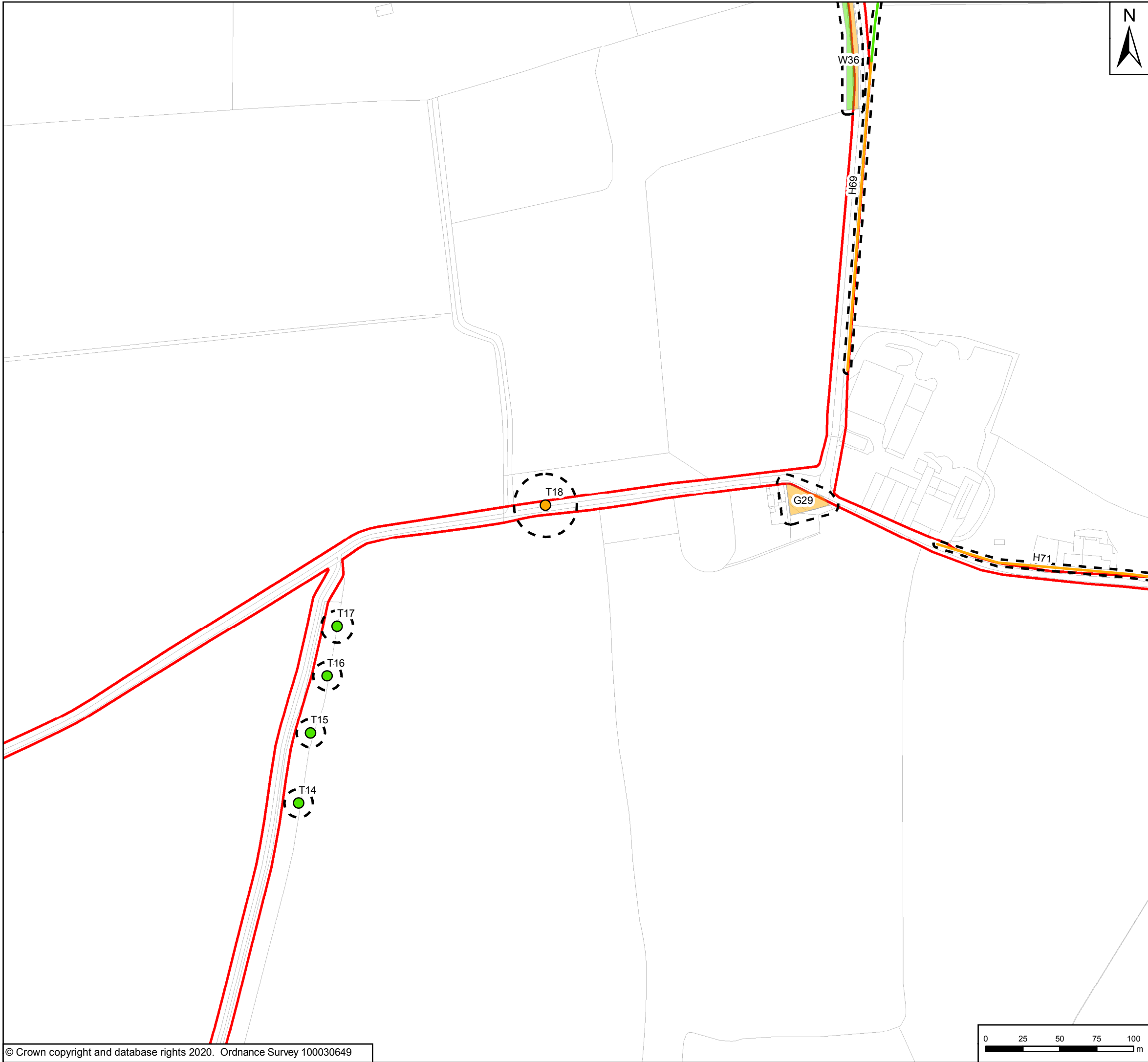
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Tree Protection Plan
Page 6 of 25

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Drawing Status	Suitability
For Information	S1

Drawing Number	Originator	Volume	Project Ref. No.
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A2E	RP	LE	2130
Location	Type	Role	Number
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Key

- Order Limits
- General Arrangement
- Feature Lost
- Feature Protection Required
- Feature Retained
- Root Protection Area

P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
P01	31/07/19	First Issue	JA	JM	KS
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Client

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A1 in Northumberland: Alnwick to Ellingham

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Scale	Drawn	Checked	Approved	Authorised
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Original Size	Date	Date	Date	Date
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Drawing Status

For Information

Drawing Number	Originator	Volume	Project Ref. No.
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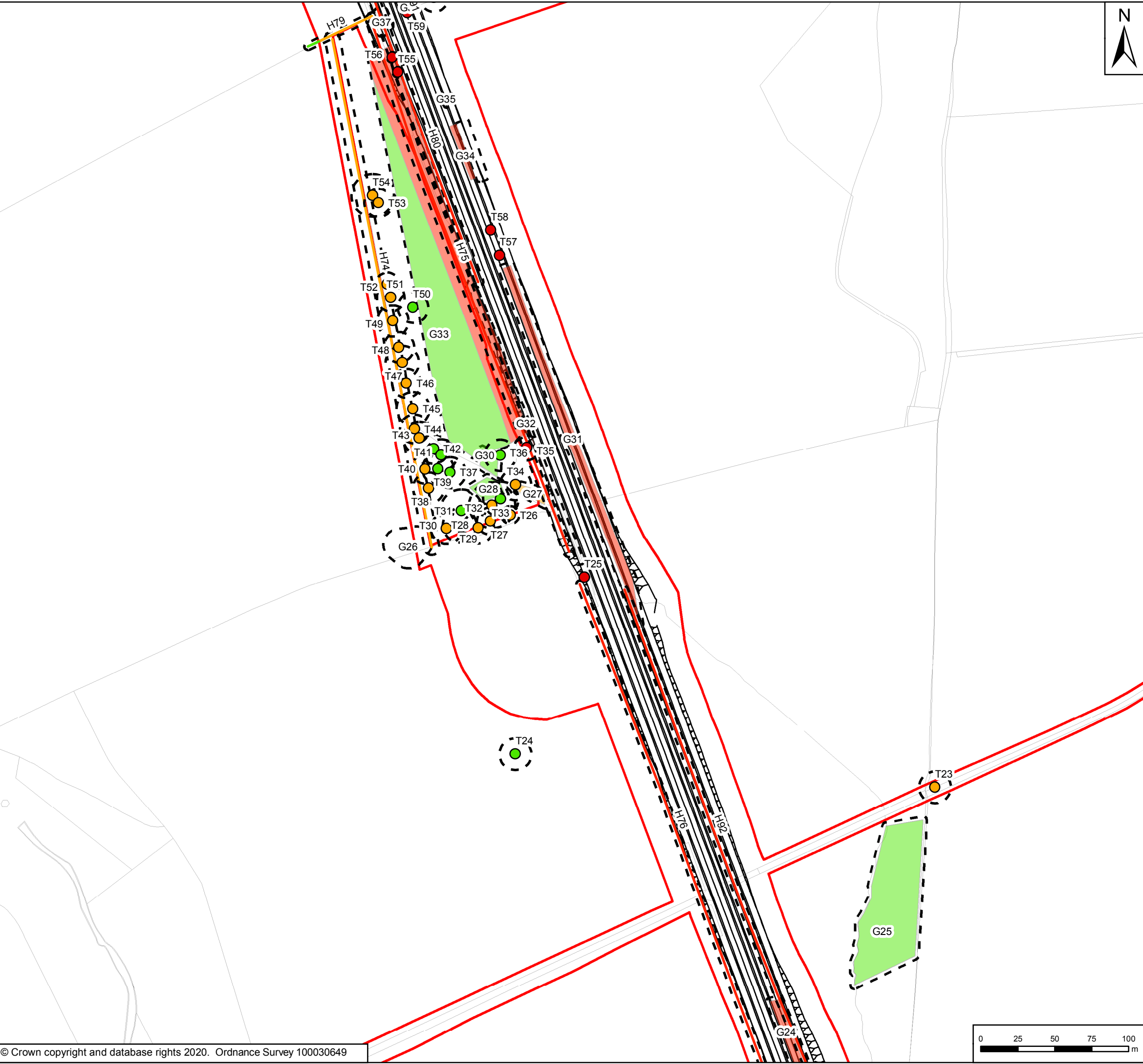
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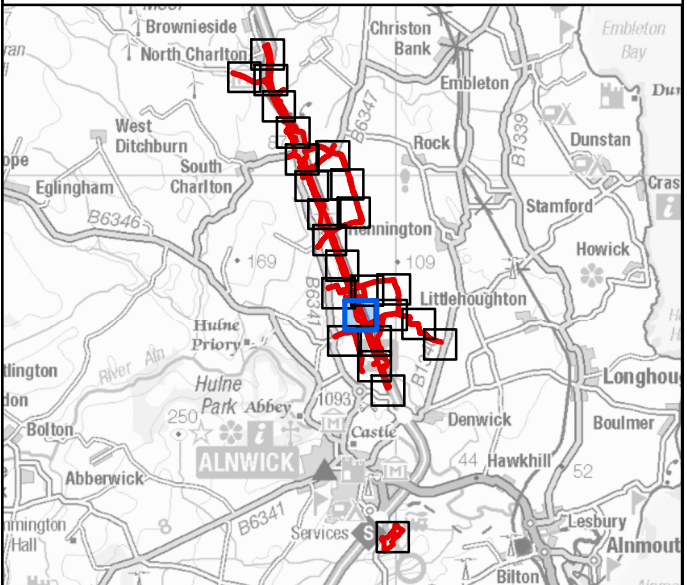
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Key

- Order Limits
- General Arrangement
- Feature Lost
- Feature Protection Required
- Feature Retained
- Root Protection Area



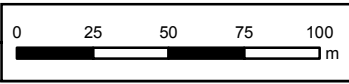
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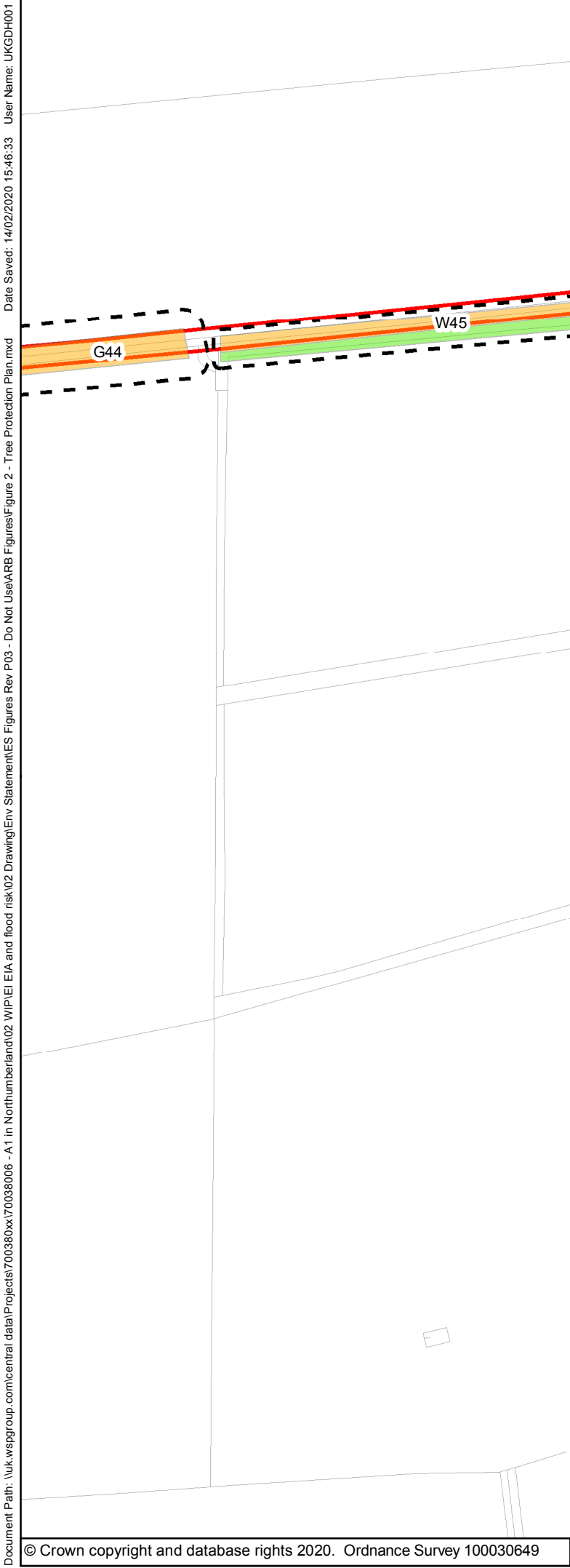
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Project Title
A1 in Northumberland: Alnwick to Ellingham

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Figure 2
Tree Protection Plan
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A2E Location		RP Type	LE Role	2130 Number
				Revision P03





N

Key

Order Limits

General_Arrangement

Feature Lost

Feature Protection Required

Feature Retained

Root Protection Area

P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
P01	31/07/19	First Issue	JA	JM	KS
Rev	Date	Description	By	Chk'd	App'd

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A1 in Northumberland: Alnwick to Ellingham

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Tree Protection Plan
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Scale	Drawn	Checked	Approved	Authorised
1:2,500	JA	JM	JM	NR
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Drawing Status

For Information

Suitability

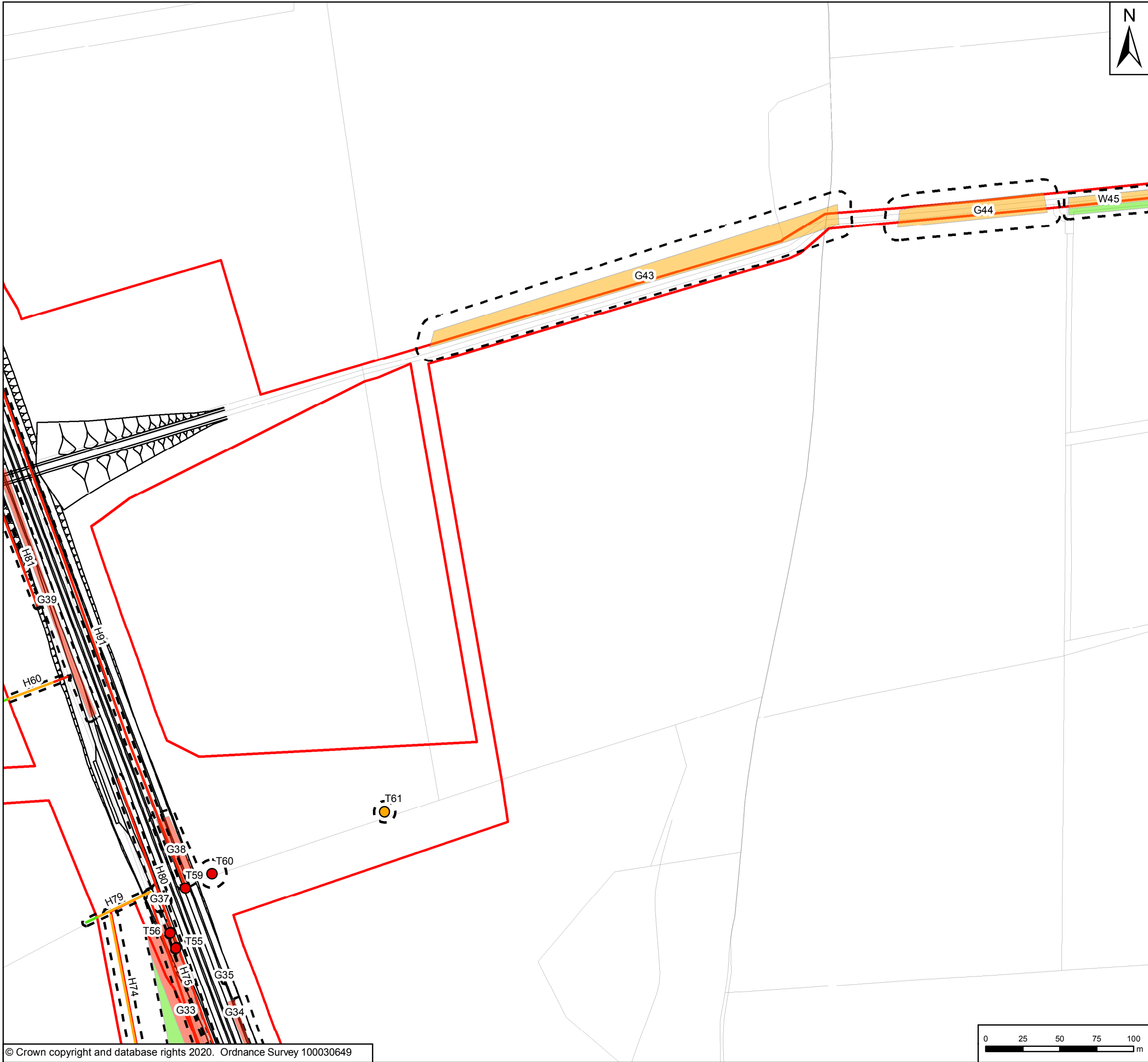
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A2E	RP	LE	2130
Location	Type	Role	Number

Revision

P03

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Key

- Order Limits
- General_Arrangement
- Feature Lost
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P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
P01	31/07/19	First Issue	JA	JM	KS
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A1 in Northumberland: Alnwick to Ellingham

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Scale	1:2,500	Drawn	JA	Checked	JM	Approved	JM	Authorised	NR
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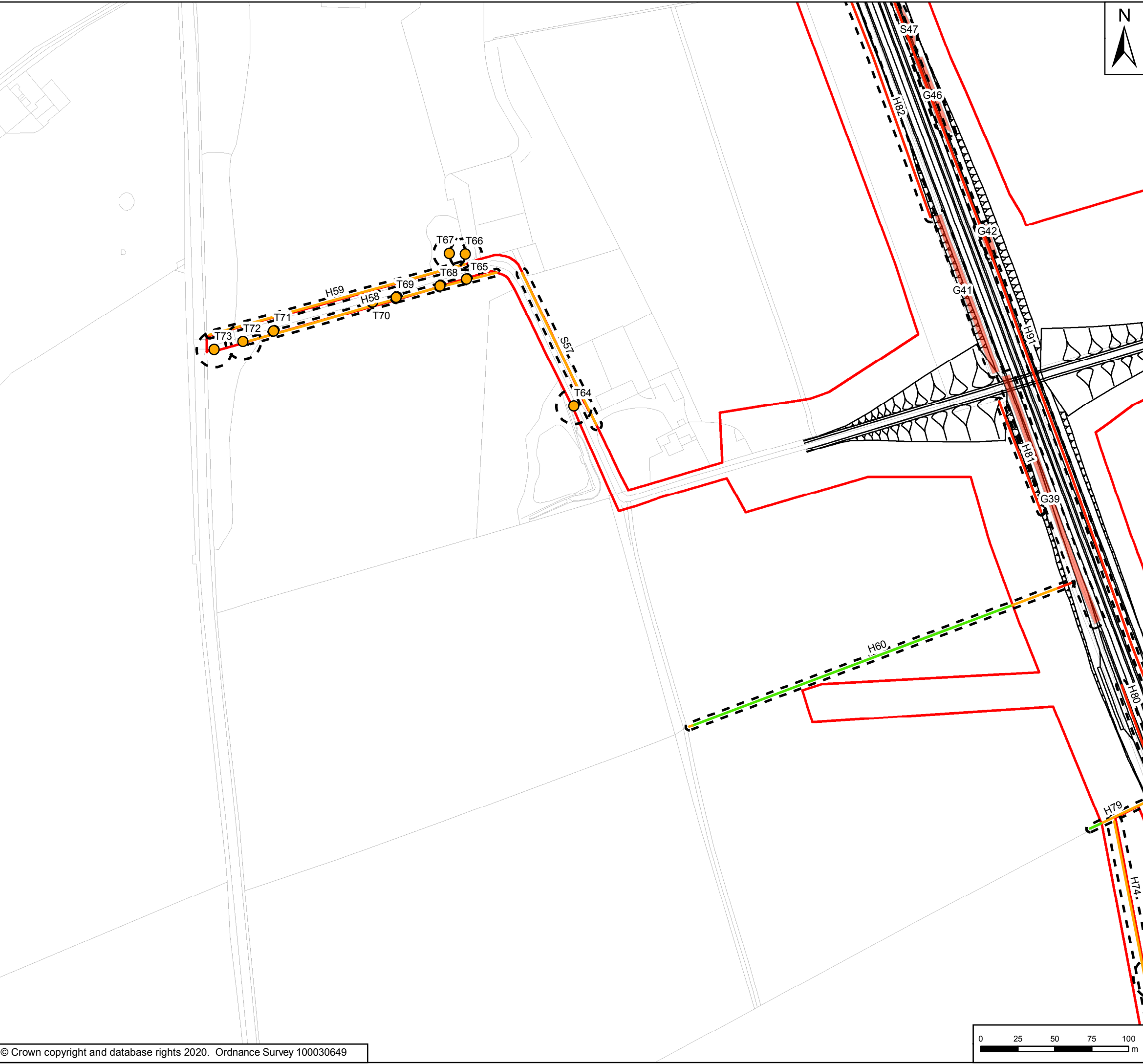
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Project						Revision	P03

A2E	RP	LE	2130
Location	Type	Role	Number

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Key

Order Limits

General_Arrangement

Feature Lost

Feature Protection Required

Feature Retained

Root Protection Area

P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
P01	31/07/19	First Issue	JA	JM	KS
Rev	Date	Description	By	Chk'd	App'd

Client

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A1 in Northumberland: Alnwick to Ellingham

Drawing Title

Figure 2
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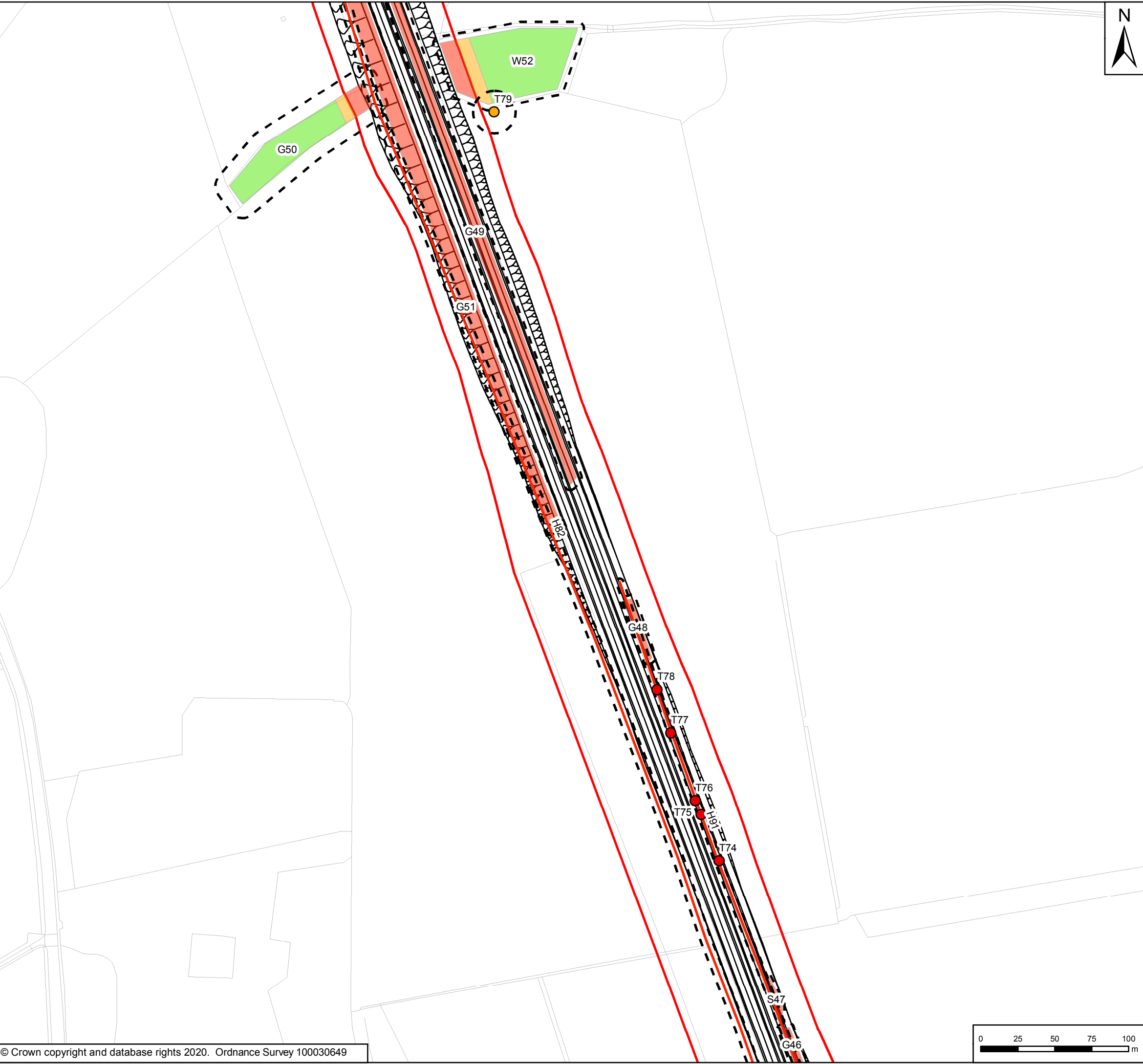
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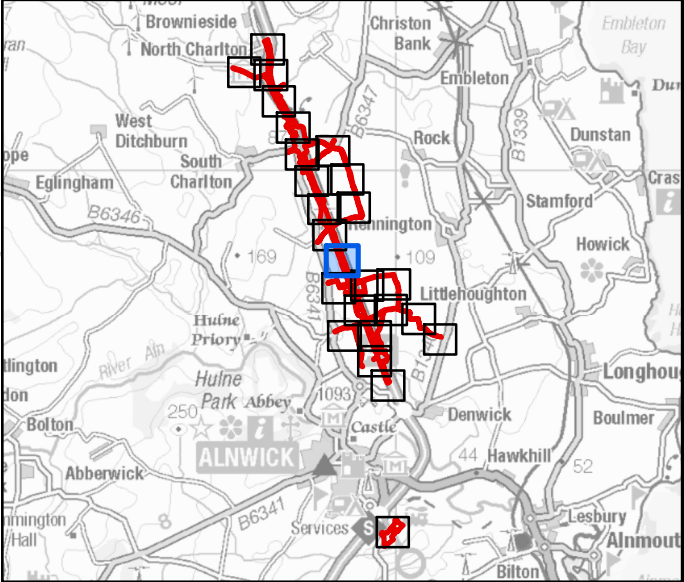
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- Key
- Order Limits
 - General_Arrangement
 - Feature Lost
 - Feature Protection Required
 - Feature Retained
 - Root Protection Area



Rev	Date	Description	By	Chk'd	App'd
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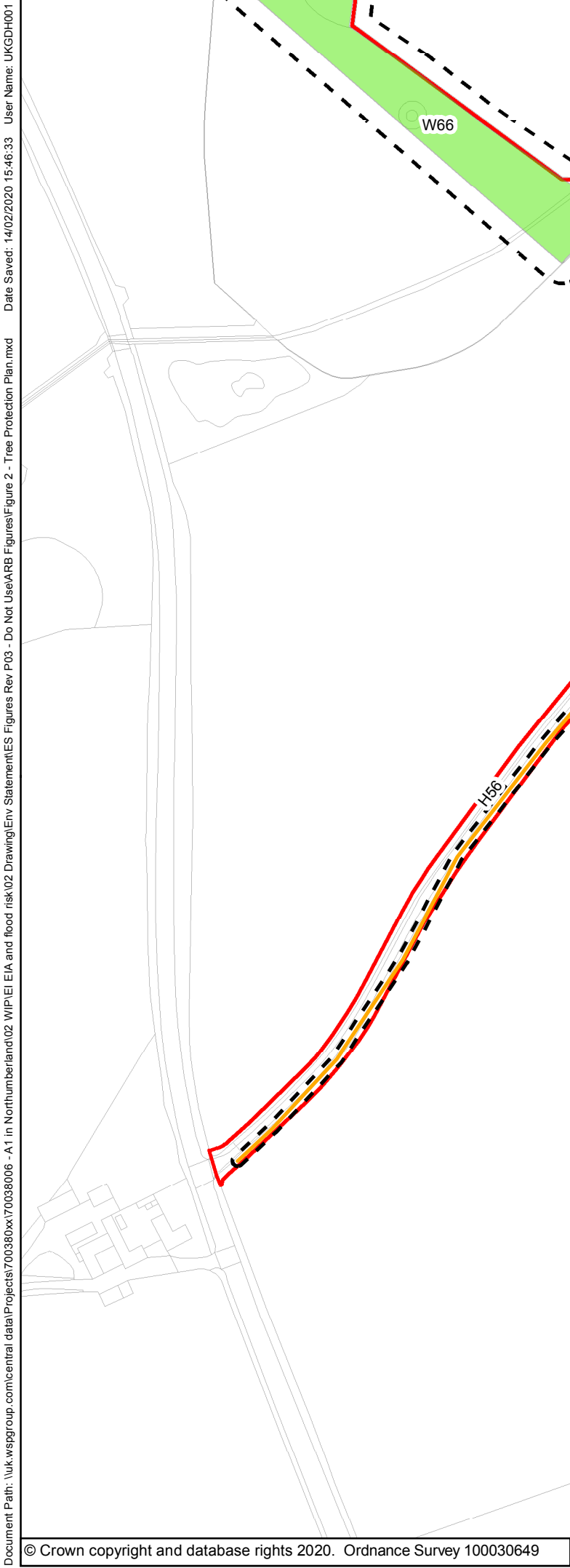
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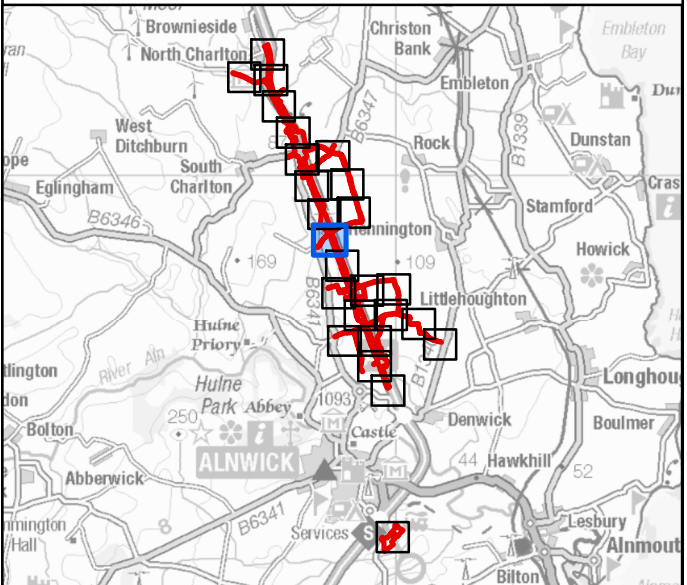
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Tree Protection Plan
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A2E		RP		LE		2130		Revision P03	
Location		Type		Role		Number			





- Key
- Order Limits
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Rev	Date	Description	By	Chk'd	App'd
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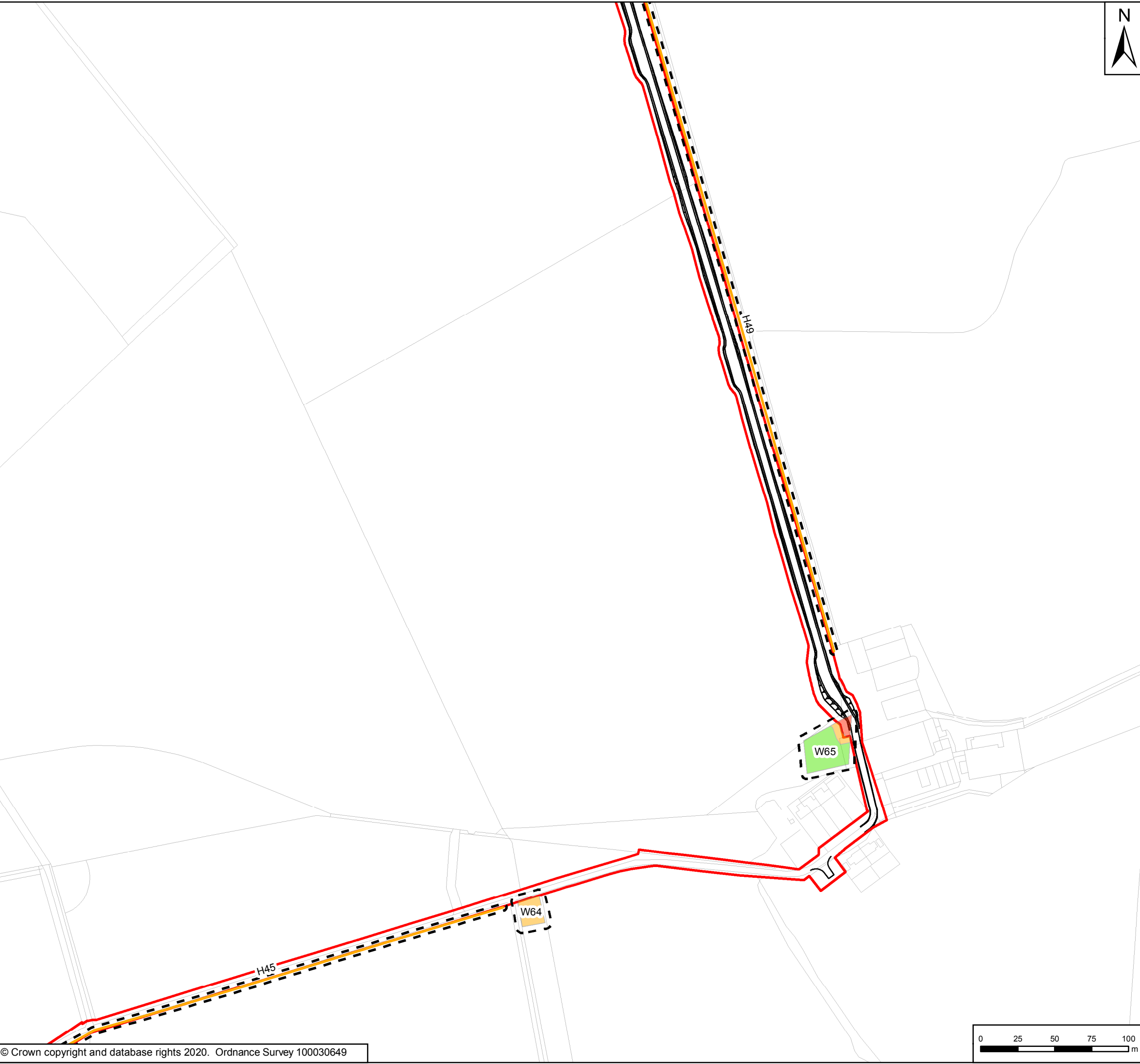
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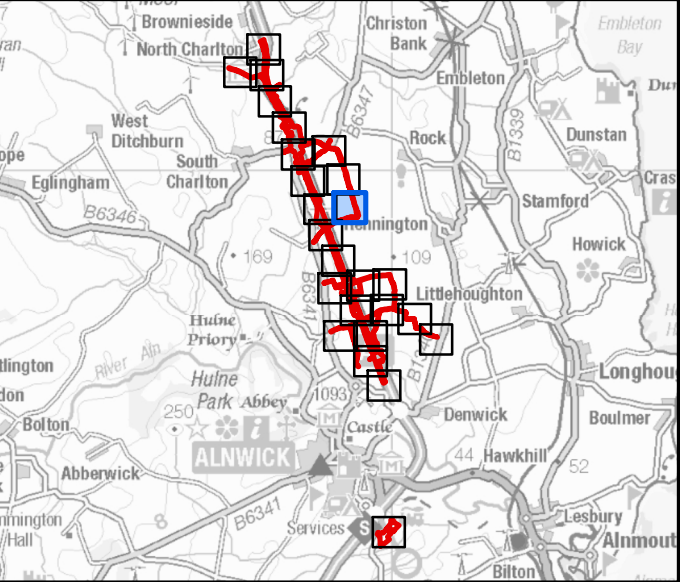
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Tree Protection Plan
Page 13 of 25

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- Key
- Order Limits
 - General Arrangement
 - Feature Lost
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Rev	Date	Description	By	Chk'd	App'd
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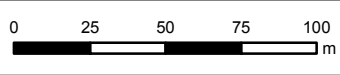
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A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 2
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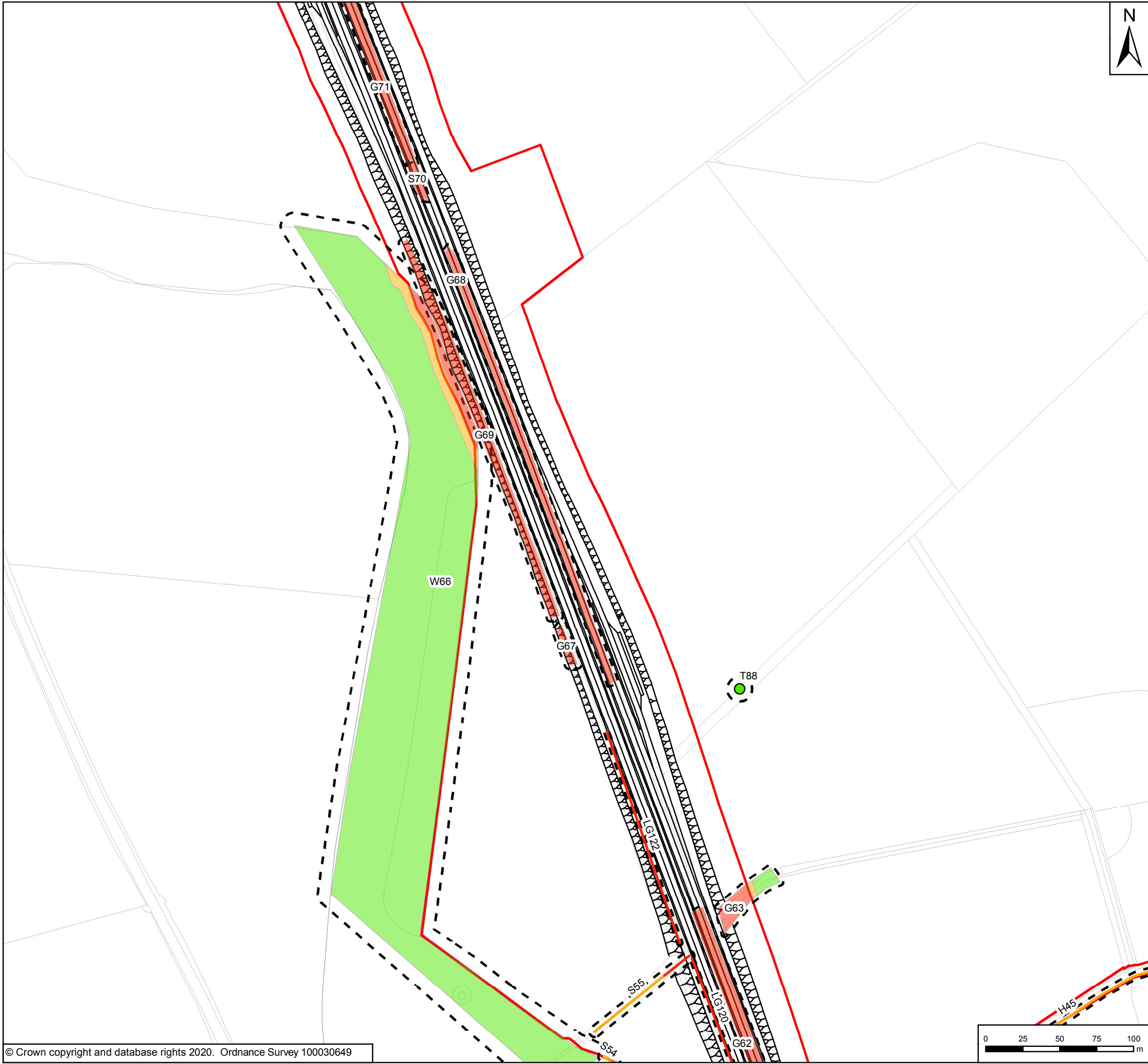
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Drawing Status	For Information	Suitability	S1
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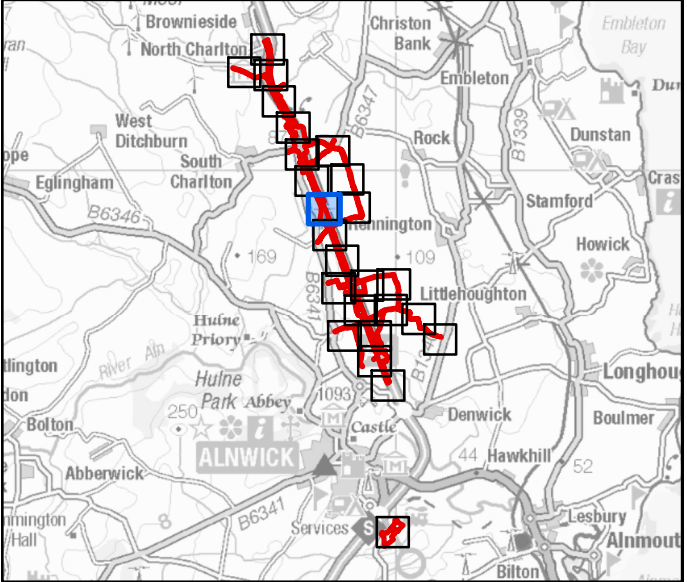


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Key

- Order Limits
- General Arrangement
- Feature Lost
- Feature Protection Required
- Feature Retained
- Root Protection Area



Rev	Date	Description	By	Chk'd	App'd
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Project Title
A1 in Northumberland: Alnwick to Ellingham

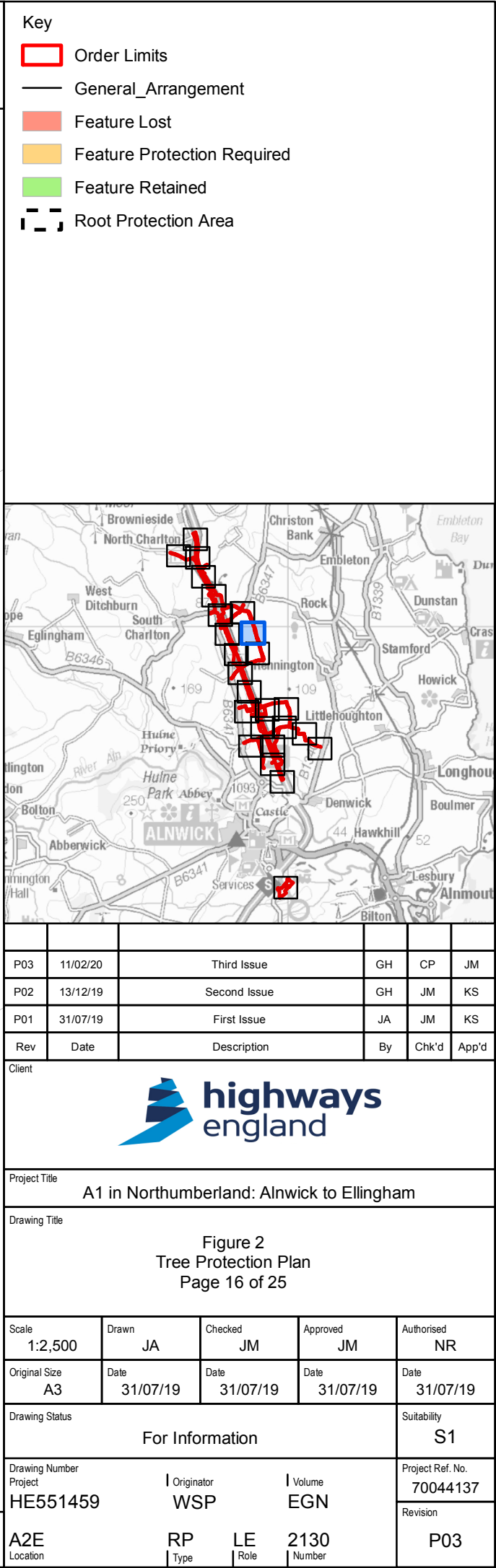
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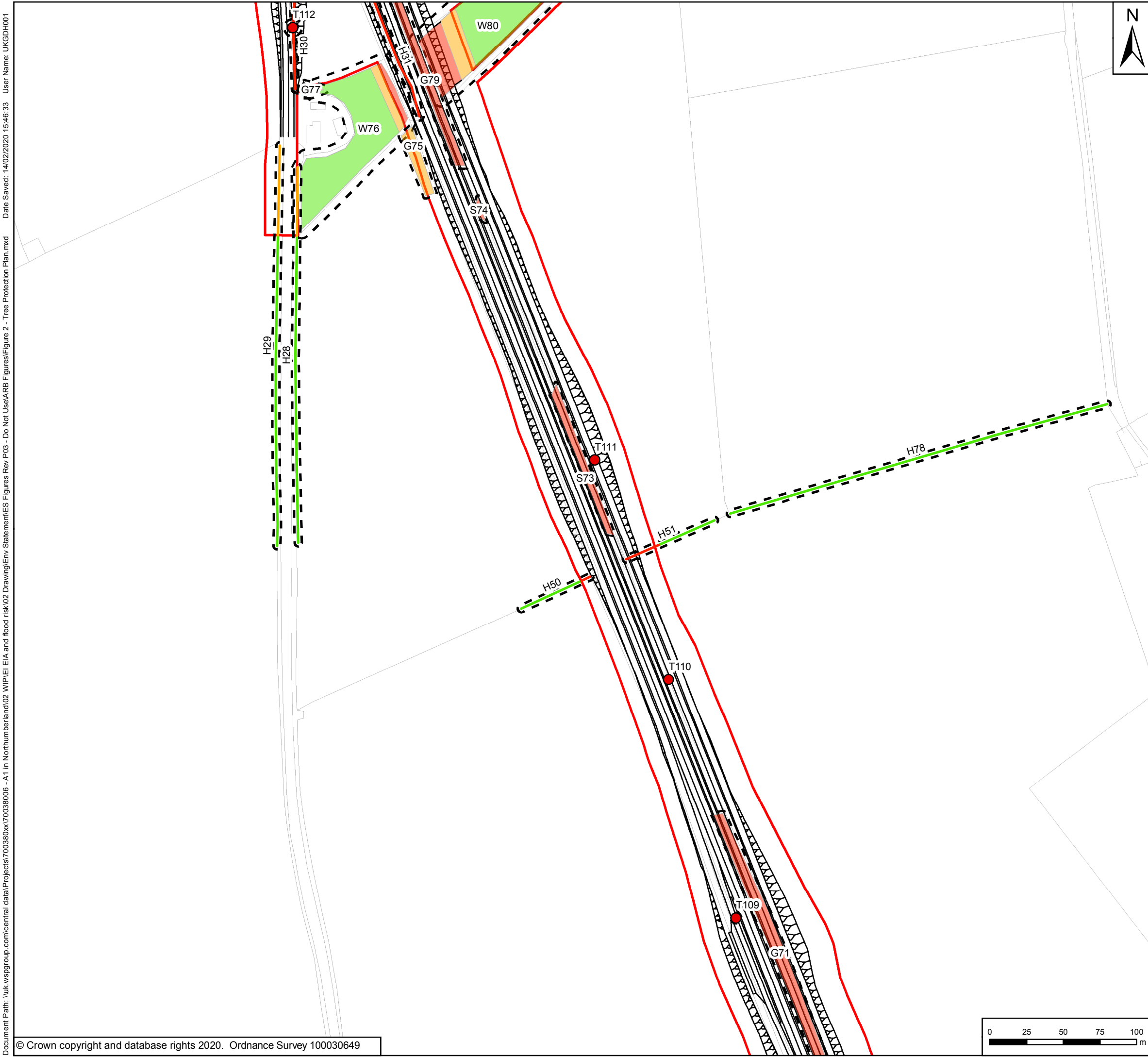
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Key

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Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

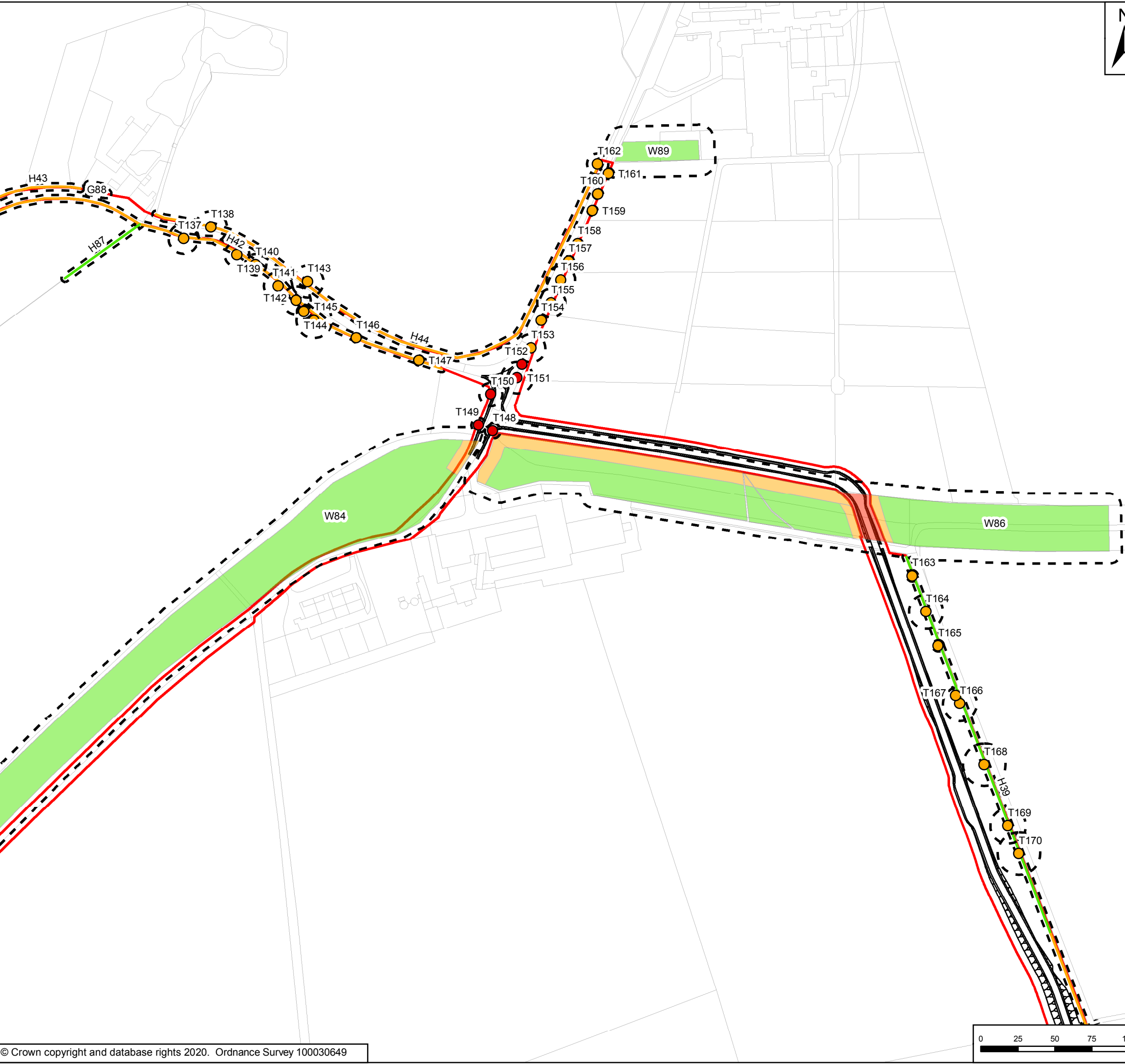
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Tree Protection Plan
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A2E		RP		LE		2130		Revision	
Location		Type		Role		Number		P03	

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N

Order Limits

General_Arrangement

Feature Lost

Feature Protection Required

Feature Retained

Root Protection Area

P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
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Scale	1:2,500	Drawn	JA	Checked	JM	Approved	JM	Authorised	NR
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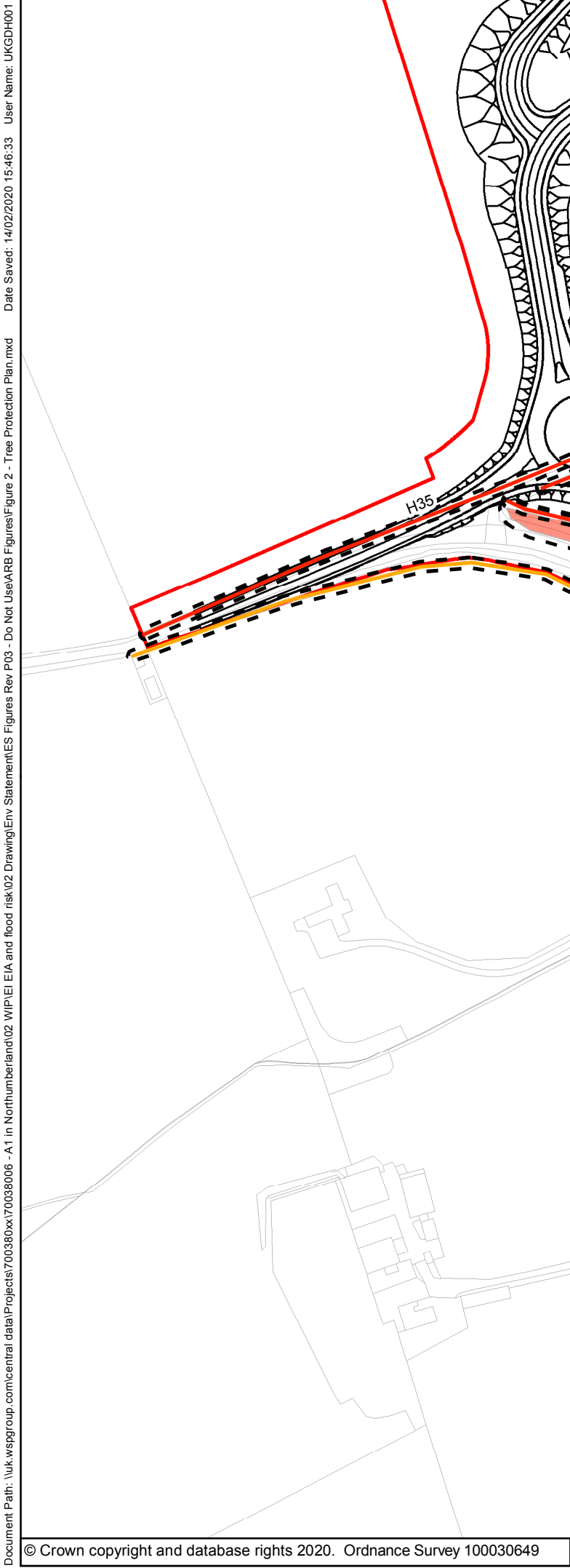
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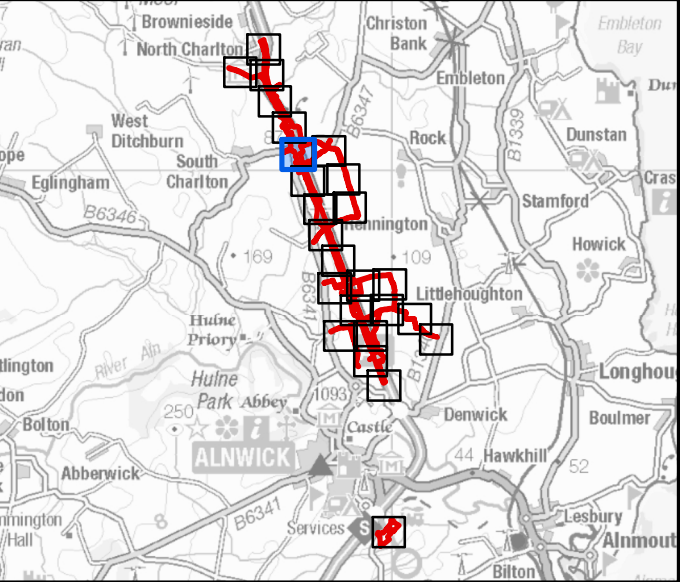
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Key

- Order Limits
- General_Arrangement
- Feature Lost
- Feature Protection Required
- Feature Retained
- Root Protection Area



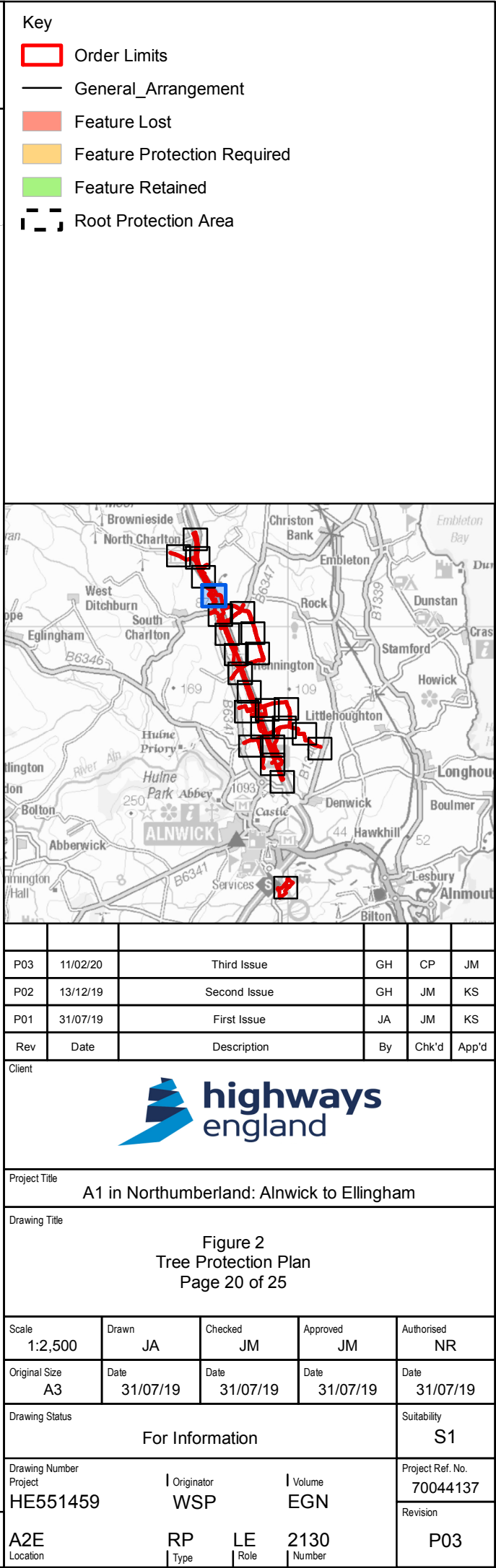
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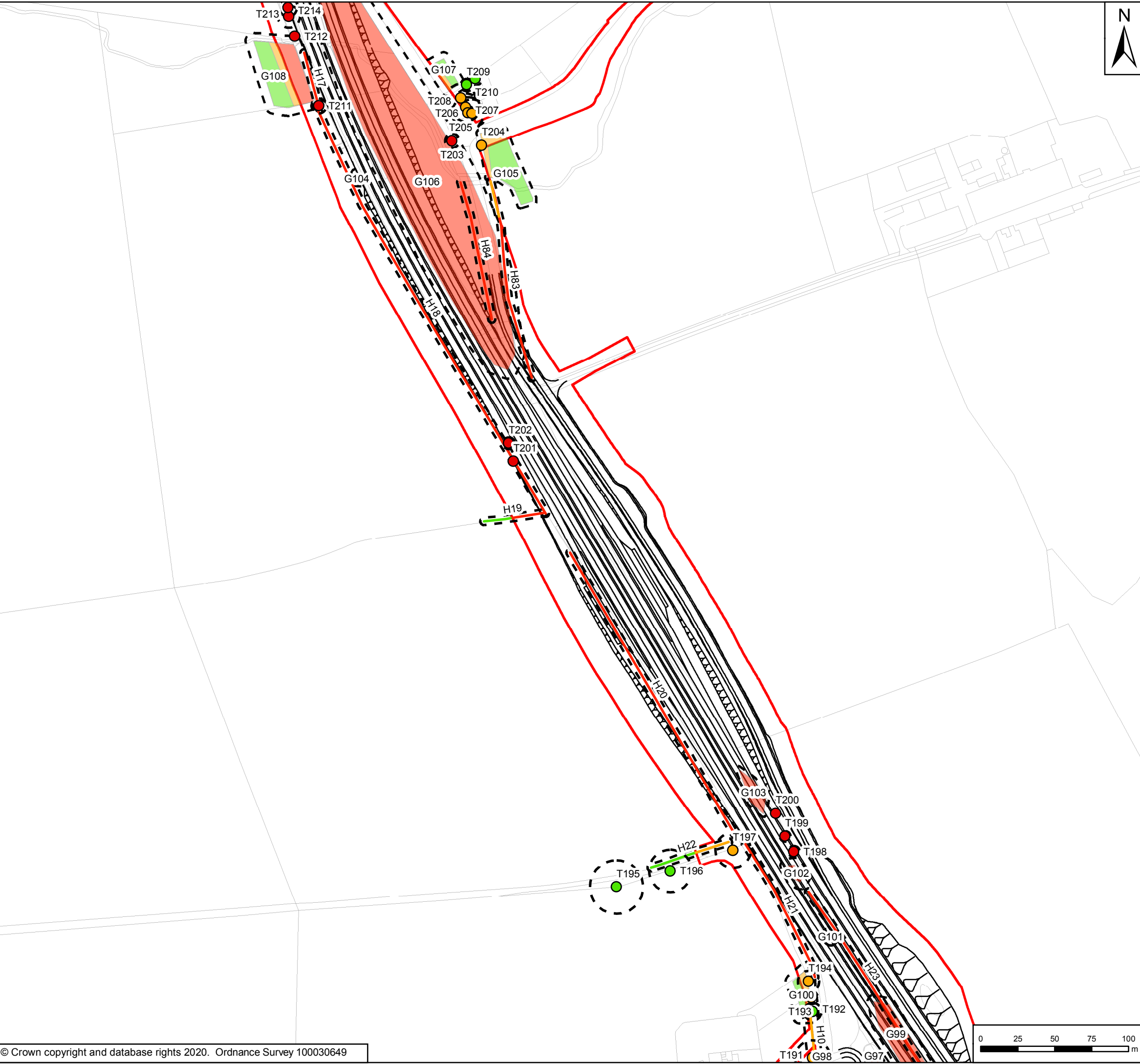
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Project Title
A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 2
Tree Protection Plan
Page 19 of 25

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A2E	Location	RP	Type	LE	Role	2130	Number	Revision	P03





N

Order Limits

General_Arrangement

Feature Lost

Feature Protection Required

Feature Retained

Root Protection Area

P03	11/02/20	Third Issue	GH	CP	JM
P02	13/12/19	Second Issue	GH	JM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

Figure 2
Tree Protection Plan
Page 21 of 25

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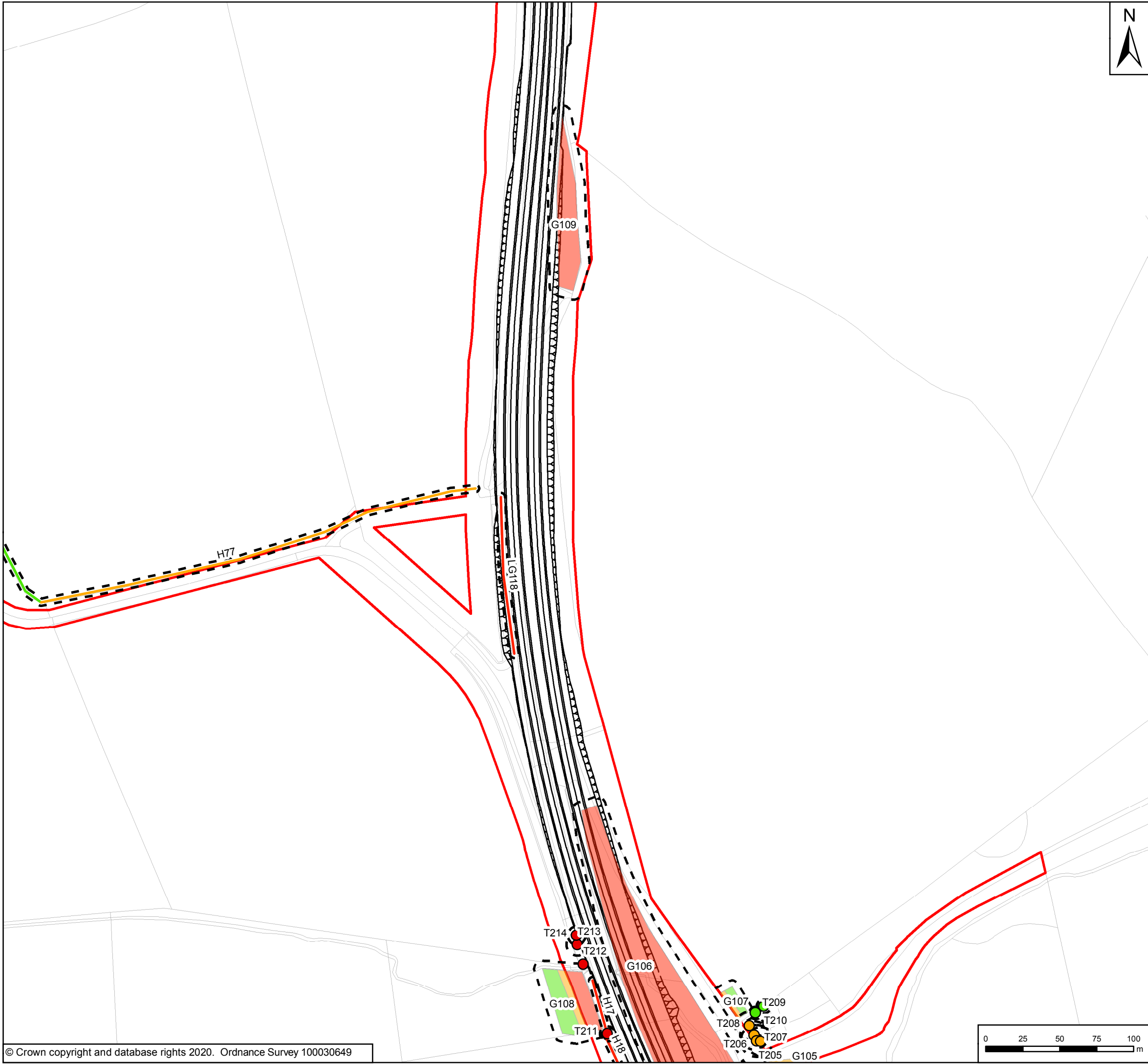
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Location	Type	Role	Number				

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P02	13/12/19	Second Issue	GH	JM	KS
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Rev	Date	Description	By	Chk'd	App'd

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Project Title

A1 in Northumberland: Alnwick to Ellingham

Drawing Title

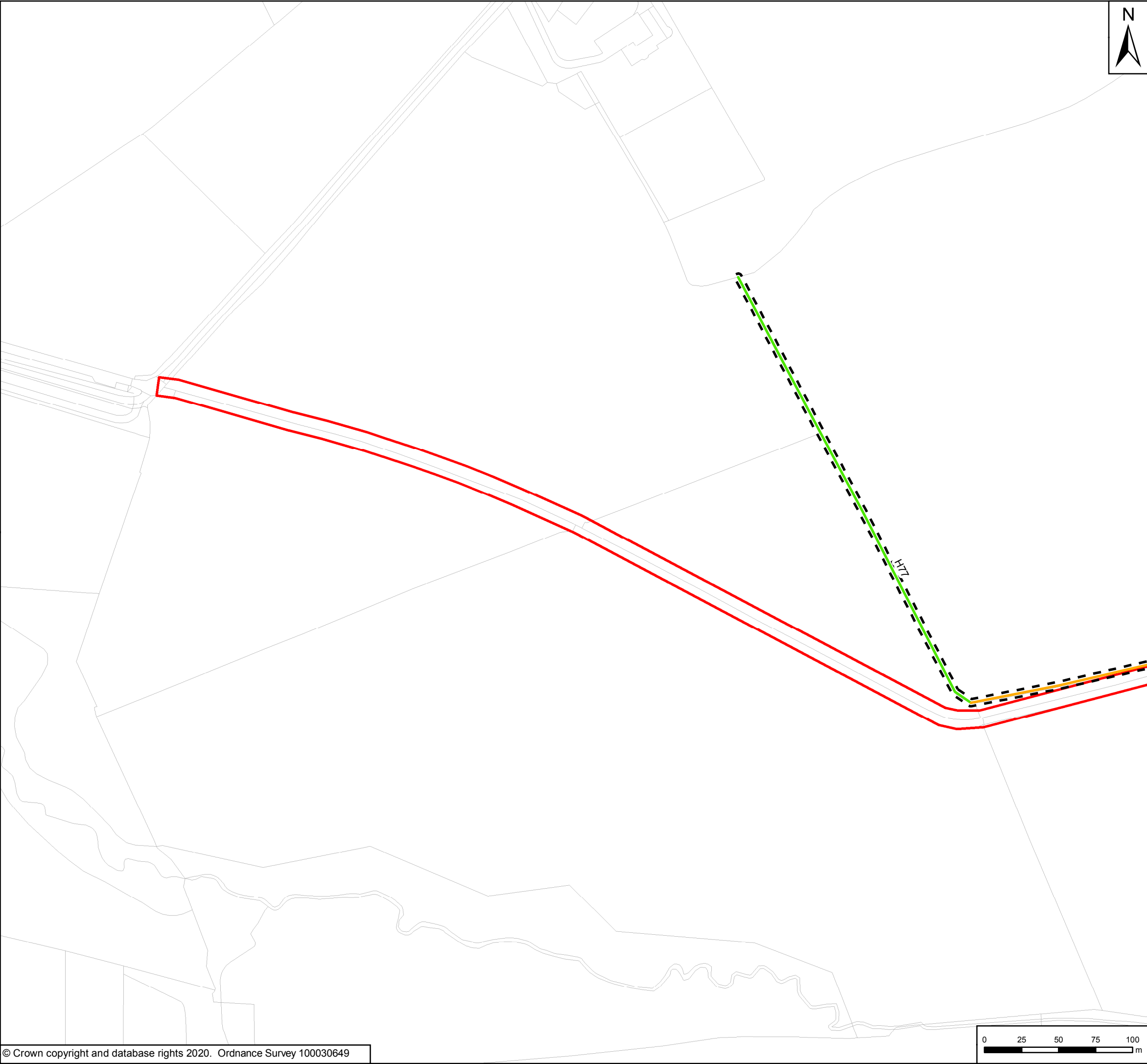
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Tree Protection Plan
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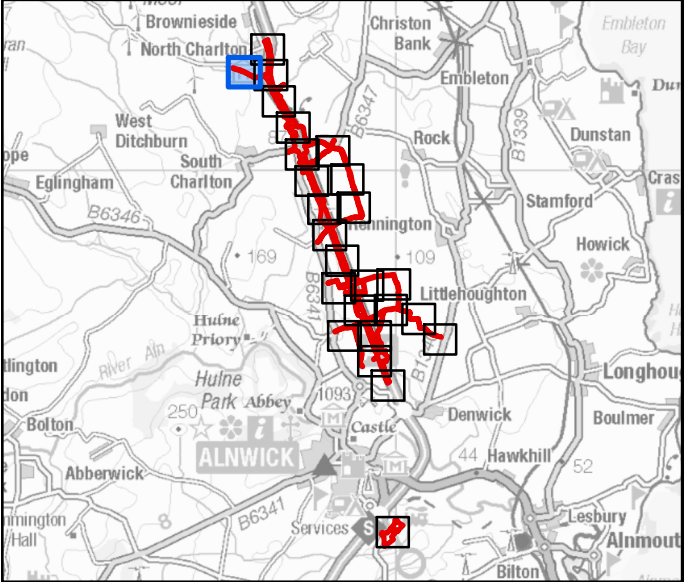
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Key

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- General Arrangement
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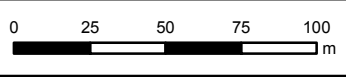
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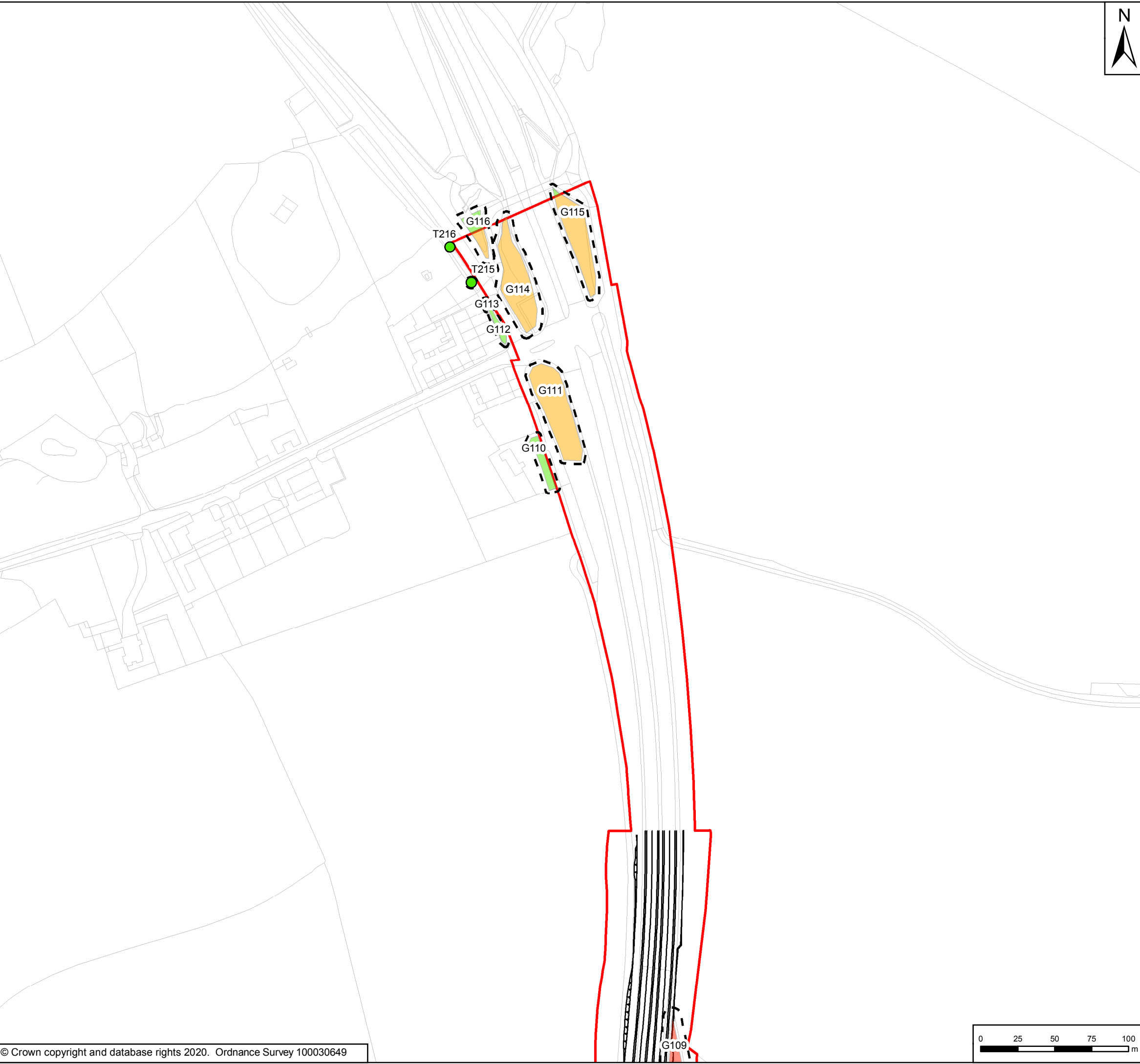
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Page 23 of 25

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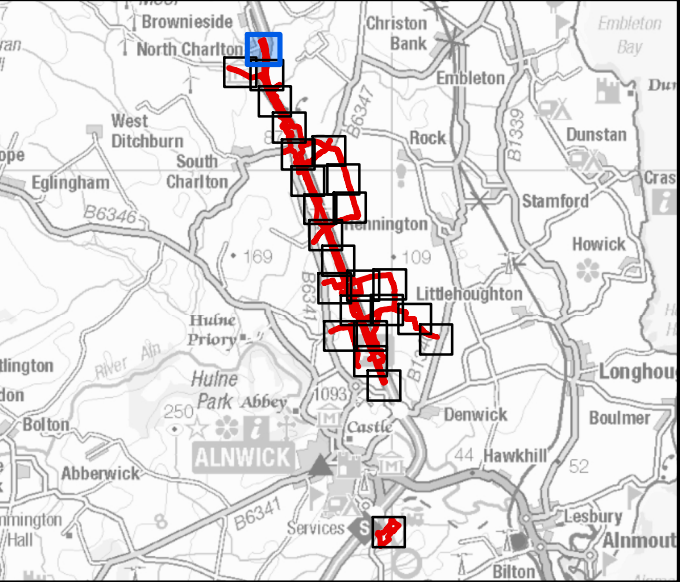
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- Key
- Order Limits
 - General_Arrangement
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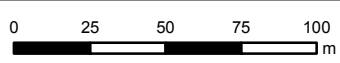
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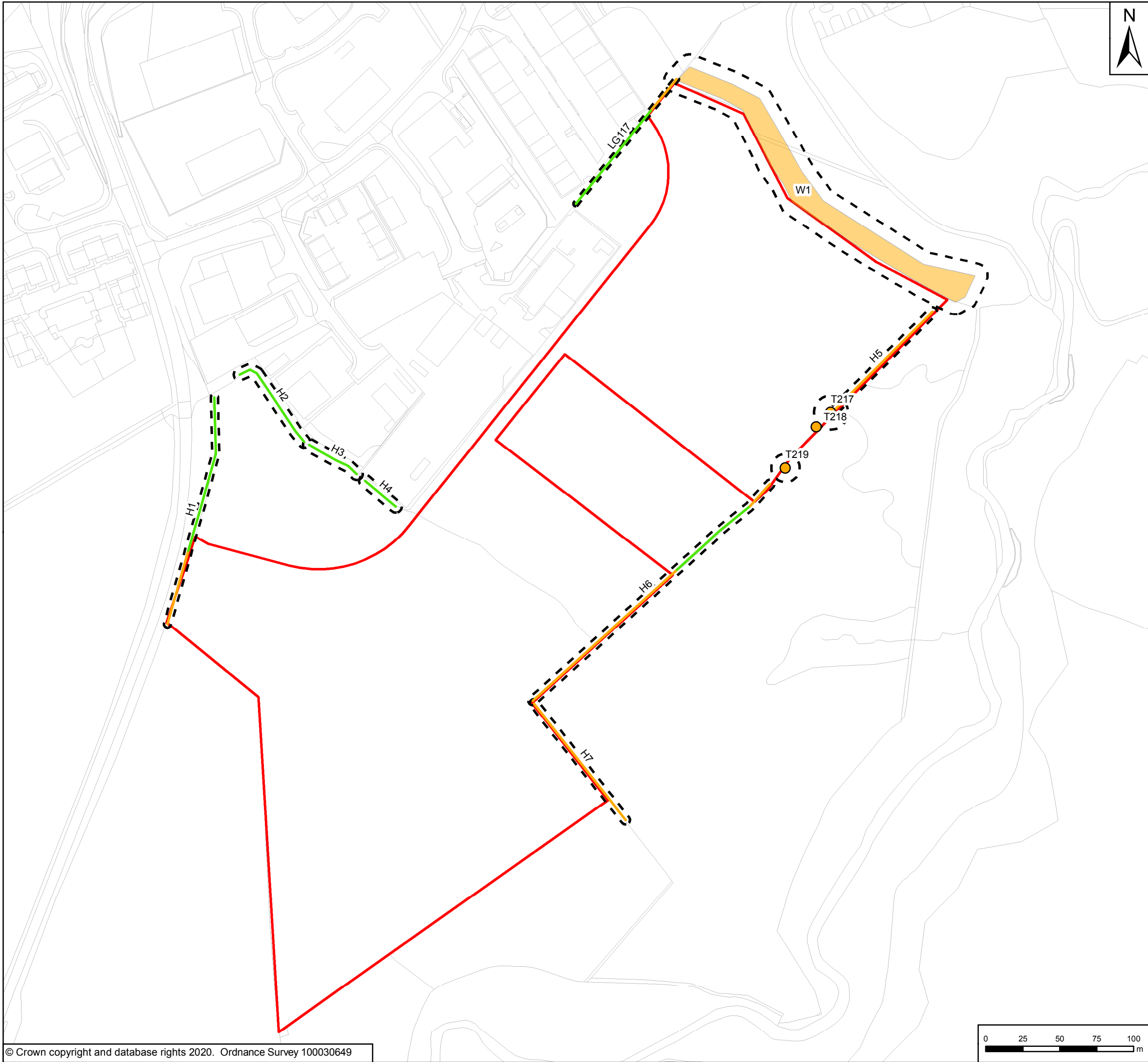
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A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 2
Tree Protection Plan
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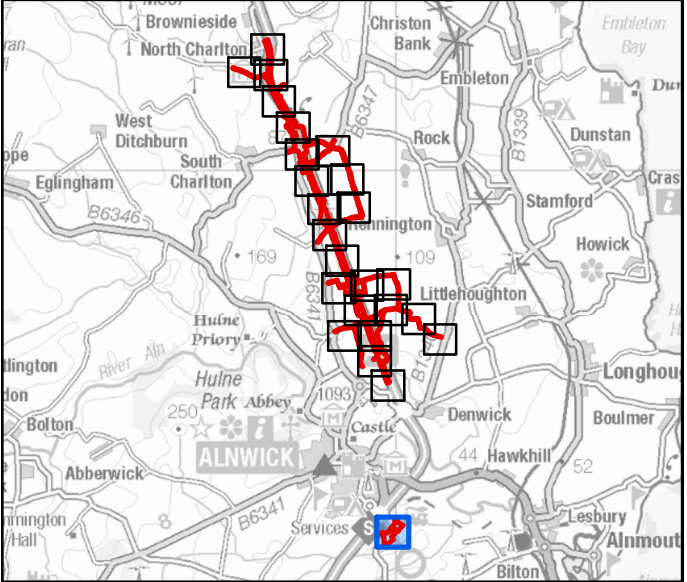


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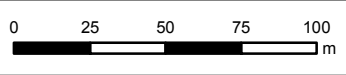
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A1 in Northumberland: Alnwick to Ellingham

Drawing Title
Figure 2
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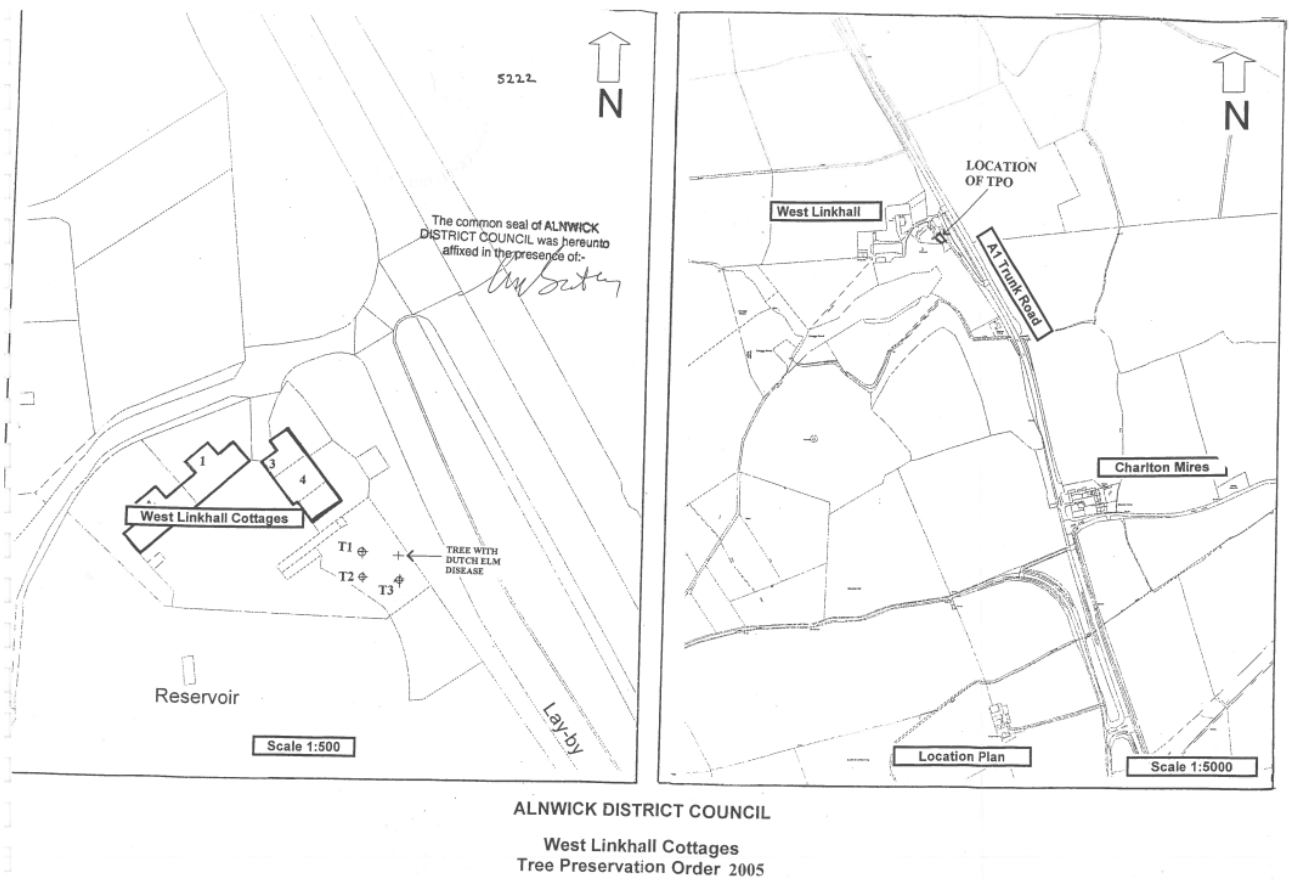


Appendix C

SUPPORTING INFORMATION

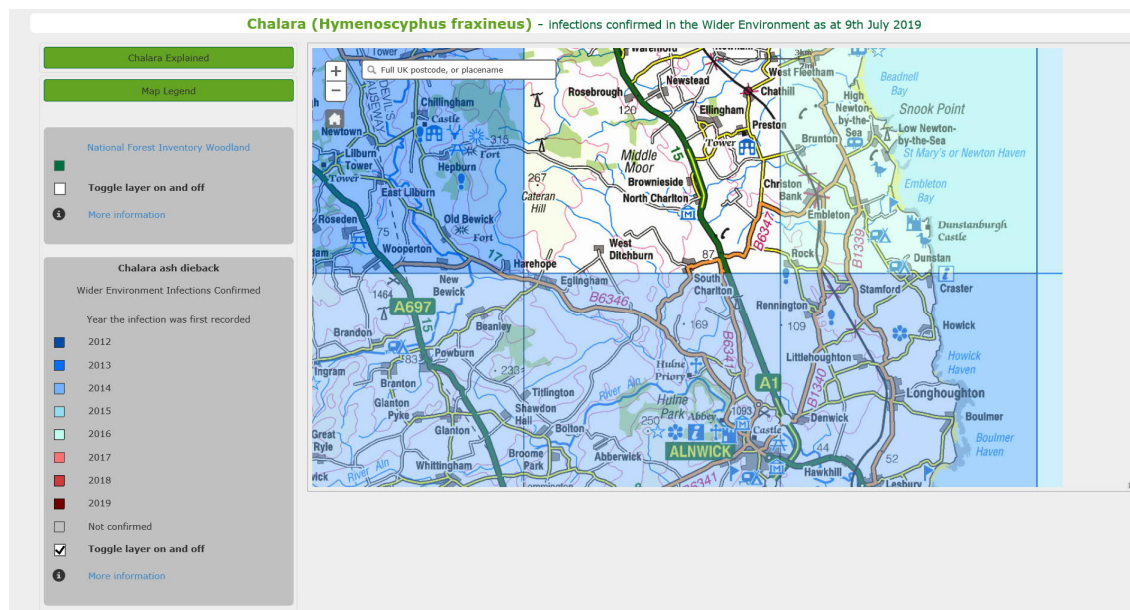
Appendix C.1

TREE PRESERVATION ORDER



Appendix C.2

ASH DIEBACK



Appendix C.3

1828 MAP OF NORTHUMBERLAND



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