Land at Upton's Gardens, Whitminster

Stroud District Local Plan Review Pre-Submission Draft Local Plan Reg 19 Consultation

On behalf of Newland Homes and Swan Hill Homes

July 2021

ORIGIN3

Planning . Design . Development

Contents

DOCUMENT	Stroud District Local Plan Review Draft Plan for Consultation
ISSUE DATE	July 2021
DOCUMENT STATUS	Issue
REVISION	
AUTHOR	[redacted]
CHECKED BY	

1 Introduction

1.1 These representations to the Stroud District Local Plan Review: Pre-Submission Draft Plan (May 2021) have been prepared by Origin3 on behalf of Newland Homes and Swan Hill Homes in relation to their development interests at land West of Upton's Gardens, Whitminster.

1.2 This representation is accompanied by a Concept Plan (746-02) demonstrating how residential development could be delivered on the emerging allocation PS45. Together with the following background technical studies:

- Pre-development Tree Survey and Constraints prepared by Tree Maintenance Ltd – 2019;
- Correspondence from Tree Maintenance Ltd in respect of the North Boundary Feature (16 November 2020); and
- Ecology Assessment prepared by All Ecology dated February 2021.
- Heritage Statement July 2021

The Concept Plan and technical studies are appended to this representation statement.

1.3 These representations comment on the following policies:

- Core Policy CP2 (Strategic Growth and Development Locations)
- Core Policy CP3 (Settlement Hierarchy)
- PS45 (Land West of Upton's Gardens).

1.4 This representation statement includes the following:

- The inclusion of a housing requirement of 50 dwellings in Core Policy CP2 for the settlement of Whitminster is supported.
- The identification of Whitminster as a Tier 3a settlement in Core Policy CP3 is supported. Whitminster is one of the District's larger villages and provides an important local employment, service and community role.
- The identification of our client's land West of Upton's Gardens (ref. PS45) as a site allocation for housing is supported. However, the identification of the land for 10 dwellings is contested, as based on the site area and density it is believed that the site could accommodate a greater number dwellings.
- Initial master-planning and layout testing work has demonstrated that the site could accommodate around 11 dwellings and therefore the draft policy text for PS45 should reflect this in order to support a flexible and design-led approach.
- The requirement to prepare a masterplan for the site to be approved by the District Council is considered to be an overly onerous requirement for a development of this scale.

- To promote the development of a good mix of sites, the NPPF at paragraph 68 requires local planning authorities to identify, through the Development Plan, land to accommodate at least 10% of their housing requirement on sites no larger than one hectare. The site at land West of Upton's Gardens (PS45) measures 0.90ha and can therefore contribute to this requirement.

2 Core Policy CP2 – Strategic Growth and Development Locations

2.1 Section 2.9 (Core Policies) of the Stroud District Local Plan Presubmission Draft Plan, within Core Policy CP2 explains that there is a housing requirement for at least 630 new homes per year (12,600 for the period 2020-2040). The housing requirement has reduced by 200 dwellings compared to the previous consultation stages of the Local Plan Review, to take into account existing completions.

2.2 Core Policy CP2: Strategic Growth and Development Locations, sets out that the District will accommodate at least 12,600 additional dwellings. The approach to establishing the minimum number of homes needed in the District is generally supported, as is the reference to the plan being kept under review given that the Government's Standard Methodology is currently being reviewed and may be subject to amendment in the future.

2.3 Core Policy CP2 lists the number of dwellings to arise from the Local Development Sites. For Whitminster this is 50 dwellings, an increase of 10 compared to previous consultation draft versions of the Local Plan. The allocation of specific development sites through the Local Plan process not only provides a greater degree of certainty and confidence in delivery for both the local community and the development industry, but is also in accordance with the NPPF which, sets out that plan-making should positively seek opportunities to meet the development needs of their area (paragraph 11 of the NPPF). The identification of a housing requirement for Whitminster is also fully supported for the reasons set out in subsequent sections of this representation.

2.4 Development at Whitminster is wholly supported as it is a settlement that has a range of local facilities and already benefits from good transport links, to the nearby towns of Stroud and Wotton-under-Edge. Stroud District Council should be actively promoting additional growth in sustainable locations to satisfy market forces and ensure that sufficient numbers and types of new dwellings are delivered at locations where they are needed.

2.5 Whitminster also has a strong service role. The retail offer is good given the size of settlement with a range of local shops to serve the day-to-date needs of the community and also the surrounding area. The garden centre acts as a local hub. The village also offers access to a range of key local community services and facilities including a primary school, mobile post office, pub, village hall, playing field / sport pitch which includes a well-equipped playground.

2.6 Whitminster is a sustainable settlement, it performs an important local employment, service and community role and is relatively free of environmental designations and constraints. The provision of additional housing development will improve self-containment levels and diversify the demographic baseline of the settlement, allowing the settlement to grow and expand organically.

2.7 The settlement of Whitminster is relatively free of constraints. The settlement is not situated within or in close proximity to the Cotswold AONB. The settlement is wholly located within Flood Zone 1 and is therefore at low risk of flooding from rivers or the sea. The settlement is also largely unconstrained by environmental or topographic constraints.

2.8 Paragraph 78 of the NPPF is clear that in order to promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. Planning policies should identify opportunities for rural communities to grow and thrive, especially where they will support local services.

2.9 The inclusion of a Local Development Site and the associated housing requirement in Core Policy CP2 for the settlement of Whitminster is supported. However, given the Site at Upton Gardens site area the site is suitable for delivering more than 10 dwellings and the requirement of 50 for Whitminster could be marginally increased to reflect this.

3 Policy CP3 – Settlement Hierarchy

3.1 Core Policy CP3 sets out the Local Plan settlement hierarchy which will inform the growth and development across the District's settlements. Six tiers are identified:

- Tier 1 – Main Settlements
- Tier 2 – Local Service Centres
- Tier 3a - Accessible Settlements with Local Facilities
- Tier 3b – Settlements with Local Facilities
- Tier 4a - Accessible Settlements with Basic Facilities
- Tier 4b – Settlements with Basic Facilities

3.2 Proposals are required to be located in accordance with the hierarchy and should seek to reduce the need to travel and promote sustainable communities, based on the services and facilities that are available in each settlement.

3.3 Whitminster is identified as a Tier 3a settlement which is defined as an 'Accessible Settlement with Local Facilities'. This tier covers medium-sized and large villages that are generally well-connected and accessible places with a good range of local services and facilities for their communities. They are also closely connected to higher tier settlements, enabling residents to access additional key services and facilities and have greater employment opportunities than in the immediate settlement. These Tier 3a settlements are considered to offer the best opportunities for growth to improve self-containment outside the District's Main Settlements (Tier 1) and Local Services Centres (Tier 2).

3.4 The identification of Whitminster as a Tier 3a settlement is wholly supported. Whitminster is one of the District's larger villages and performs an important local employment, service and community role. It provides access to a range of key local services and facilities including a primary school, mobile post office, pub, village hall, playing field / sport pitch which includes a well-equipped playground. The settlement is well placed in terms of access to the strategic road network being circa 1 mile from Junction 13 of the M5 and is in close proximity to the larger "Main Settlement" (Tier 1) of Stonehouse, which offers access to a wider range of services and facilities. It clearly meets the criteria identified for a Tier 3a settlement.

3.5 Paragraph 59 of the NPPF sets out that to support the Government's objective of significantly boosting the supply of homes, it is important that a sufficient amount and variety of land can come forward where it is needed. Furthermore, paragraph 78 highlights that in order to promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. Planning policies should identify opportunities for villages to grow

and thrive, especially where this will support local services. This approach is true for Whitminster and the approach taken in the Draft Plan is supported.

3.6 The development strategy for Tier 3a settlements which allows for (inter-alia) organic growth on the edge of these settlements to meet local housing, employment and community infrastructure needs, is wholly supported. Tier 3a settlements such as Whitminster can accommodate a level of growth needed to support the vitality of these communities and can provide for flexibility and diversity in the housing supply through the range and type of sites they can bring forward.

4 PS45 – Land West of Upton's Gardens

4.1 The identification of our client's land West of Upton's Gardens (ref. PS45) as a site allocation for housing is wholly supported. However, the identification of the land for 10 dwellings and the requirement for a masterplan is contested.

4.2 It appears that the allocation for 10 dwellings has arisen from the site's SHLAA entry, rather than preparation of any sketch layouts and capacity analysis. The site was assessed through the Strategic Land Availability Assessment in 2017 to inform emerging Local Plan allocations. This assessment concluded that the site (ref. WHI004 Land West of Upton's Garden) was suitable, available and achievable for development with for a range of potential uses including residential, community, sports and leisure uses. The development potential summary notes:

"*Taking account of the character of the site and its surroundings, this site could be developed for community, sports and leisure or low density development typically comprising a mix of detached, semi -detached and terraced dwellings at an average density of about 25 dph, and the suggested yield is around 10 units*"

4.3 The above assessment has informed the draft allocation. The SHLAA states that there are no known physical constraints that would prevent the development of the site. The site is suitable for development based on the level of local support, limited site constraints (all of which can be overcome) and its connectivity with the existing settlement. The SHLAA states that for the site to come forward, the site access needs consideration. Informal pre-application discussions have taken place with Highways Officers at Gloucestershire County Council regarding the proposed access. The outcome was that they considered that a safe and appropriate access could be delivered (adjacent to 24 Upton Gardens). The application for planning permission would be accompanied by a Transport Statement.

4.4 Parklands House is a Grade II listed building lying immediately to the south of the site. The only concern regarding the suitability of the site appears to be any potential impact of designated heritage assets, namely Parkland House. Recent heritage studies completed to support proposals for the site confirm that 11 homes on the site, located predominately to the east of the parcel, would result in no harm. As a result of this concern, the SHLAA confirms that the north eastern half of the site has development potential. It was noted that the existing tree boundaries should be protected and enhanced and a new strong south-western planted boundary put in place to screen the development and form a new permanent edge to the settlement. Taking into account the character of the site and its surroundings, the site was identified as having potential for a low density development (circa 10

dwellings) comprising a mix of detached, semi-detached and terraced dwellings at an average density of 25 dph.

4.5 By taking into consideration the siting of new development, open space and landscaping, it is considered that a sensitively designed scheme could be brought forward on this site, respecting the nearby heritage assets and its setting. It is considered that the site can accommodate more than 10 dwellings and initial masterplanning and layout feasibility work, appended to this representation, demonstrates that the site has capacity for 11 dwellings along with open space uses and landscaping. The proposed layout responds to the heritage constraint whilst making an efficient use of land as is required by the NPPF (para 117).

4.6 The site is contiguous with the current built envelope of Whitminster with existing residential development to the east and south. The site is well enclosed with mature trees and hedging on all boundaries which can help reduce any potential landscape or visual impact. There are no known physical constraints that would prevent development of this site. The site offers good access to services and facilities in the local area including access to the primary school along a route entirely serve by existing footpaths.

4.7 The site is located outside of a Conservation Area and is not at risk of flood by river or sea (Flood Zone 1). The SHLAA assessment confirms that an initial desktop biodiversity and geodiversity assessment of the site has indicated there is potential to develop this site without harm to a designated natural environment site. The site is not within 1km of internationally or nationally designated sites or 250m of locally designated sites.

4.8 The site is under a single land ownership and is considered suitable available and achievable for residential development within the next five years. An application for planning permission is likely to be submitted to Stroud District Council in Summer 2021.

4.9 Comment on the wording of policy PS45 (Land West of Upton's Garden) is set out below. For ease of reference the wording is set out below.

Land south of Whitminster Playing Field, as identified on the policies map is allocated for a development comprising 10 dwellings and open space uses and strategic landscaping. Particular issues to address include conserving and enhancing heritage assets through high quality design, retaining the western half of the site in open space uses, minimising landscape impacts and

safeguarding and enhancing local biodiversity. A masterplan to be approved by the District Council, will detail the way in which the land uses and infrastructure will be developed in an integrated and co-ordinated manner.

4.10 The draft policy wording sets out that the site is allocated for 10 dwellings along with associated open space uses and strategic landscaping. On the basis of the above it is considered that the policy wording for PS45 be amended to state "*Land south of Whitminster Playing Field, as identified on the policies map is allocated for a development comprising around 10 dwellings and open space uses and strategic landscaping".*

4.11 This proposed amendment would provide for a more flexible and design-led approach for the site responding positively the sites constraints and opportunities. As noted in national guidance, planning policies should promote the effective use of land in meeting the need for homes and other uses.

4.12 The requirement for a Masterplan is not supported and should be removed from the policy wording. A Masterplan is considered to be an overly onerous requirement given the scale of the proposed development / site. Masterplans are usually associated with larger, more complex development schemes. Furthermore, given the nature and characteristics of the site there is likely to be only a limited number of ways in which the site could be developed. A robust masterplan underpinned by the relevant technical baseline assessment and surveys would be prepared in consultation with the Parish and consultant team at the pre-application stage. This masterplan would then be robustly tested through the development management process, where key stakeholders and planning officers would be able to provide further comments / inputs. Discussions undertaken with the Parish Council insofar have recorded support for development of the emerging allocation.

4.13 Policy PS45 (Land West of Upton's Gardens) provides the opportunity to enhance the sustainability of a smaller settlement enabling organic growth and providing a small scale, deliverable housing opportunity without overriding infrastructure requirements.

4.14 National planning policy guidance is clear that strategic policies should identify a sufficient supply and mix of sites, including small and medium sized sites which can make an important contribution to meeting housing requirements.

4.15 To promote the development of a good mix of sites, the NPPF at paragraph 68 requires local planning authorities to (inter-alia) identify, through the Development Plan, land to accommodate at least 10% of their housing requirement on sites no larger than one hectare. The site at Land West of

Upton's Gardens (policy ref. PS45) is 0.90ha (net developable area comprise 0.38ha) and can therefore contribute to this requirement of the LPA and its plan-making approach.

5 Conclusion

5.1 In conclusion, the content of the Stroud District Local Plan Review is largely supported and this stage welcomed. The opportunity to work with the Council in order to bring forward our client's site at land West of Upton's Gardens (policy ref. PS45) which is a draft housing allocation, for delivery within the new Plan is supported.

5.2 The identification of Whitminster as a Tier 3a settlement is supported. Whitminster is one of the District's larger villages and provides for an important local employment, services and community role and function. The provision of additional housing development in sustainable locations such as Whitminster which allow settlements to organically grow and expand is supported.

5.3 Land West of Upton's Gardens is a credible and deliverable housing options and presents a suitable and sustainable location to direct new housing development. The allocation PS45 is strongly supported. The site is available for development immediately and an application will be submitted to the Council Summer 2021. Our client, is committed to delivering 11 dwellings on this emerging allocation PS45 and has commenced pre-application tasks including appointing the project consultant team, instructing technical assessments and documents, preparing sketch layout options and importantly engaging with Whitminster Parish Council.

5.4 The policy wording for the draft allocation of our clients site (PS45 – Land West of Upton's Gardens) should be amended to "*11 dwellings..*" in order to support a flexible design led approach and the requirement for a masterplan to be approved removed, given that it is an onerous requirement for a development / site of this scale.

5.5 Newland Homes is leading the way in terms of the standard of homes build within Stroud District. This site will utilise renewables and low carbon technologies in construction, homes will be powered by solar and air source resulting in zero carbon in terms of energy requirements. Reflecting the Councils ambitions recently announced in their Climate Emergency and target for housing in the future.

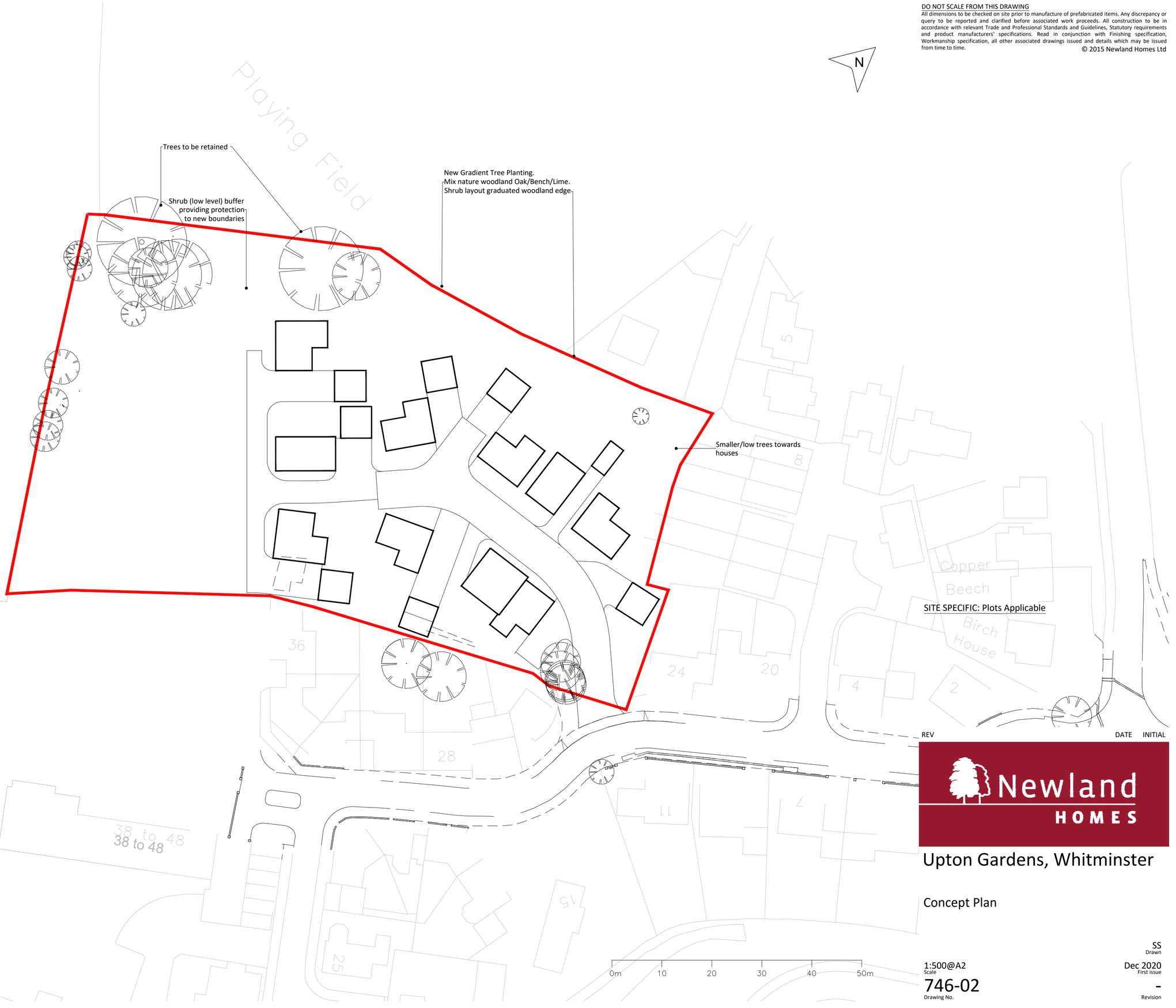
6 Appendices

Appendix 1.	Newland Homes Limited, Upton Gardens, Whitminster, Concept Plan, 746-02, December 2020
Appendix 2.	Tree Maintenance Limited, Pre-Development Tree Survey and Constraints, Land at Upton Gardens Whitminster, Undated
Appendix 3.	Tree Maintenance Limited, North Boundary Feature Tree Management, Upton Gardens, Whitminster, 16th November 2020
Appendix 4.	All Ecology Limited, Walkover Survey, Upton Gardens Whitminster, February 2021
Appendix 5.	Cotswolds Archaeology, Heritage Assessment, Upton Gardens, Whitminster, Gloucestershire, July 2021

A2 Appendix 1.

DO NOT SCALE FROM THIS DRAWING

All dimensions to be checked on site prior to manufacture of prefabricated items. Any discrepancy or query to be reported and clarified before associated work proceeds. All construction to be in accordance with relevant Trade and Professional Standards and Guidelines, Statutory requirements and product manufacturers' specifications. Read in conjunction with Finishing specification, Workmanship specification, all other associated drawings issued and details which may be issued from time to time.



REV DATE INITIAL

Newland HOMES

Upton Gardens, Whitminster

Concept Plan

SS
Drawn

1:500@A2
Scale

Dec 2020
First issue

746-02
Drawing No.

-
Revision

Appendix 2.

[redacted]

Newland Homes Limited

PRE-DEVELOPMENT TREE SURVEY AND CONSTRAINTS

Land at Upton Gardens, Whitminster

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Registered Consultant

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1.0 INTRODUCTION

1.1 [redacted] I am a senior Arboricultural Consultant with Tree Maintenance Limited. I have 34 years' experience in arboriculture; I am a Fellow of the Arboricultural Association and a Chartered Arboriculturalist through the Institute of Chartered Foresters. I am also a qualified Professional Tree Inspector as assessed by the industry lead body, Lantra.

1.2 In accordance with quotation [redacted] dated 1st October 2020. I have been instructed by [redacted] of Newland Homes to:

- Attend land to the rear of Upton Gardens, Whitminster and to carry out a tree survey in accordance with section 4.4 of British Standard 5837 Trees in relation to design, demolition and construction – Recommendations 2012 (BS 5837:2012)
- Provide a schedule of findings
- Using and relying upon the accuracy of Topograpical Plan 20235 supplied, provide a Tree Survey and Constraints Plan showing the position, crown spread, dimensions and grade of each tree surveyed, and Root Protection Areas calculated, in accordance with section 5.2 British Standard 5837: 2012.
- Provide information in electronic format.

1.3 Explanation of the survey methodology and abbreviations are included at Appendix 1, Survey Schedules for both individual trees and groups are attached at Appendix 2 with the Tree Survey and Constraints Plan included at Appendix 3.

2.0 SUMMARY

2.1 Five individual trees and eight groups on or adjacent to the site were surveyed

2.2 There is one ‘U’ grade, no ‘A’ grade trees, two ‘B’ grade and two ‘C’ grade trees (see Figure 1). Groups consist of two ‘U’ grade groups, no ‘A’ grade groups, one ‘B’ grade groups, and five ‘C’ grade groups.

2.3 With regard to individual trees, there are: no young trees, one semi-mature tree, two middle-aged trees, two mature trees and no over mature trees (see Figure 2). This is a fair age spread overall and could be improved as part of the future landscape proposals.

2.4 The assessed physiological condition of the individual tree population consists of 40 % good, 40% fair and 20% poor (see Figure 3).

2.5 The assessed structural condition of the individual tree population consists of 20% good, 40% fair and 40% (see Figure 4).

Fig.1 Tree Grade

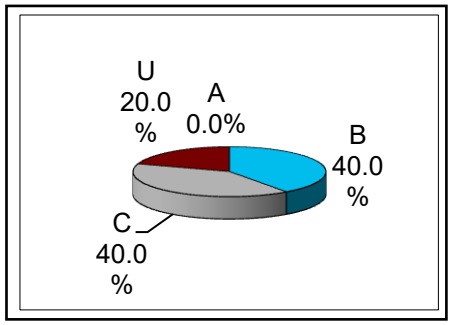


Fig.2 Age Spread

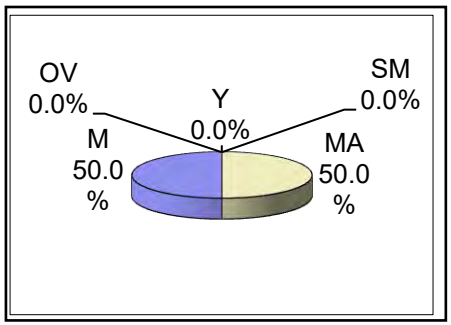


Fig.3 Physiological Condition

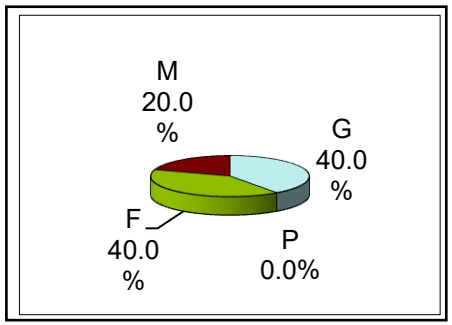
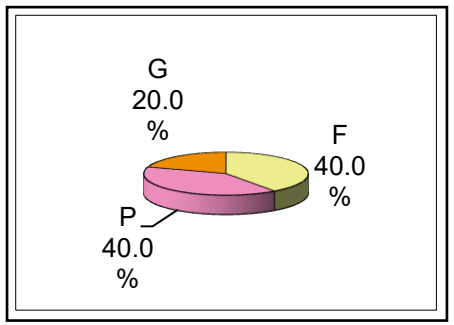


Fig.4 Structural Condition



2.6 Overall, the tree population is in fair - poor condition. The tree stock will continue to decline without future management, and consideration should be given improving this as part of the future landscape proposals.

2.7 The tree group along the north western boundary provide a significant visual break between the site and open space. Unfortunately, this group of trees consists of mainly Ash and coppiced Horse Chestnut. The Ash are already showing evidence of early stage Ash Dieback and the Horse Chestnut trees have basal decay, included forks and extensive bark wounds which are also starting to decay. Any coppice stools which are acceptable are likely to become unstable once exposed following the removal of the poor quality trees. Remaining trees on other boundaries and internal to the site are in most cases self sown, small and contribute little to the local or wider landscape; however, consideration should be given to retaining grade B trees where possible, and C quality trees where these do not significantly impact on the optimum design layout.

3.0 SITE DESCRIPTION

3.1 The site is located on the western outskirts of Whitminster village. It is surrounded by Upton Gardens to the east and south, sports fields to the north and agricultural fields to the west (Figure 5).

3.2 The site is generally level, and has smaller groups of developing self-sown trees developing along the eastern, southern and western boundaries consisting of mainly Elm, Ash and Goat Willow. A larger group of Ash and Horse Chestnut coppice trees extends along the northern boundary (Figure 6).

Figure 5. Approximate site location (Google Earth 2020)

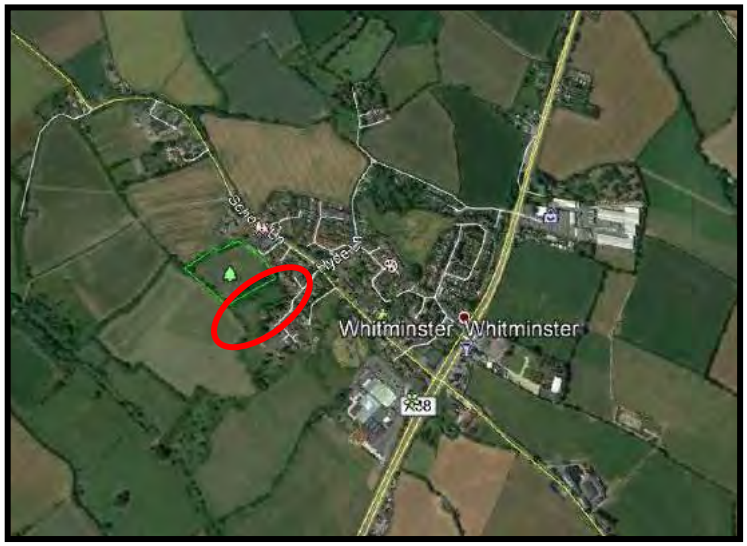


Figure 6. Approximate site outline (Google Earth 2019)

4.0 SOILS AND DRAINAGE

4.1 Careful consideration should be given to soil care and management within the RPA of retained trees and within areas of structural landscaping. Sudden changes in soil structure, ph (acidity/ alkalinity), nutrient availability and hydrology can have a catastrophic impact on the health and longevity of existing and newly planted trees. It is crucial to tree survival that soils are not impoverished or significantly altered. It is, however, possible to improve poor quality soils as part of the site works.

4.2 Basic soil information has been obtained using the Cranfield University web site and provides a broad overview of the soils within the general locality (soil data © Cranfield University (NSRI) and for the Controller of HMSO 2014 www.landis.org.uk.).

4.3 The soils are likely to consist of Lime-rich loamy and clayey soils of high fertility and with impeded drainage.

4.4 At the time of the site survey, the site was well drained and free from areas of waterlogging or ponding.

4.5 As the soil appears to contain a clay element, it may be prone to volumetric change as a result of past existing and future vegetation. This will need to be considered when designing foundations if future damage is to be avoided. Clay soils are also prone to compaction, especially if trafficked when wet or with heavy, wheeled machinery. Compaction will be detrimental to tree establishment and the future health of existing trees. Ideally, landscape areas should not be compacted so as to avoid additional remediation works prior to final landscaping.

4.6 As a minimum, soils should be handled and managed in accordance with BS 3882 Top Soil 2015 and DEFRA guidance Construction Code of Practice for Sustainable Use of Soils on Construction Sites 2009 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf). It is advised that any imported soil has a certificate of compliance from the soil supplier.

5.0 TREE CONSTRAINTS

5.1 **Primary Constraints**.

5.1.1 Below ground constraints (Root Protection Areas (RPAs)) are shown on the Tree Survey and Constraints Plan 15065/64293 (Appendix 3). This is the minimum area which should remain undisturbed and protected from construction activity. At this stage it is represented as a circle centred on the trunk of each tree. Groups of small trees are shown with root protection areas 1 metre outside the plotted canopy, groups of large trees are based on the largest stem diameter within the group to ensure sufficient space has been provide. As a default position, construction, services and working space should not be required within the RPAs of retained trees.

5.1.2 Subject to assessment by the project arboriculturalist, the shape of the RPA may be changed providing, adequate protection can be provided to the root system to meet the existing and long term biological requirements of the tree. Any new hard surfacing or structures should not generally exceed 20% of any unsurfaced ground within the RPA. Where hard surfacing or structures must be proposed within the RPA they should be designed to completely avoid or at least require minimal excavation. Foundation designs should consider the use of surface mounted slabs or ground beams with pile, pad or cantilevered supports. New hard surfaces should be designed with a porous surface and sub base. Levels of these surfaces must be taken into account at the outset as it will require an increase in final floor levels and damp proof courses.

5.1.3 The size and shape of the RPAs will be considered during the Arboricultural Implications Assessment. Consideration will be given to the likely shape and extent of the root system which may have been influenced by past or existing site conditions. Consideration will also be given to the likely tolerance of the particular tree to root disturbance, damage and general construction pressures.

5.1.4 Where trees are to be retained as part of the new layout, all efforts should be made retain existing levels and avoid the installation of services within their RPAs. This would remove the added cost of specialist installation methods and supervision during installation. Service installation, level changes and landscaping details within the RPA of retained trees require careful consideration as cumulative effects of seemingly minor construction operations can have a significant detrimental effect on the health and longevity of retained trees.

5.1.5 Detailed information on soil type, structure, site topography, existing underground structures and drainage will be of assistance when determining and justifying changes to RPAs. The draft and final Tree Protection Plan (TPP) will show the required protected area shown as a polygon, as opposed to a circle. This might include temporary site huts as part of the protection and could have implications for the layout, implementation and traffic plan.

5.2 Secondary Constraints

5.2.1 Future growth of retained trees must be considered at the design stage if future pressure to inappropriately prune or remove the retained tree/s is to be avoided. This is of particular importance where trees are young, semi mature and middle aged as these trees will have the greatest potential for further growth.

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5.2.2 Trees 748, 751, 752 and Group 3 and are potentially large specimen with high crown density and large leaves. If retained, their position within residential gardens need to be carefully considered if problems and conflicts such as shading, leaf fall and insect secretions are to be avoided which may increase pressure from future residents to remove them.

5.2.3 Obstruction of sun and daylight. Sunlight obstruction has been crudely estimated on the tree constraints plan. It is represented by a grey segment the height of the tree from east through north to south west, centred on the trunk of the tree. This depicts the approximate area of shade from May to September between 10.00am to 6.00pm daily. Detailed sunlight and daylight obstructions were not requested at the time of the instruction but can be provided subject to agreement of costs. Those trees on the south and west boundary are likely to require the greatest consideration.

5.2.4 Construction requirements. At this stage no information has been provided regarding the layout, method and phasing of demolition or construction. Ideally site offices, permanent and temporary access, material storage, contractor parking, working space and scaffolding should be provided without encroaching on the RPA of retained trees.

5.2.5 Consideration will need to be given to the positioning of new underground services which should be located outside the RPA of retained trees if specialist installation methods are to be avoided.

5.2.6 New hard surface installation may be possible within the RPA of retained trees. This will need to be considered at the outset of the design as the increased levels may impact on required finished levels of floor slabs and connecting surfaces. New surfaces should be constructed using a 'no dig' construction method using a porous sub base and wearing surface. Depending on the load exerted some form of three dimensional load suspension system may be required to prevent ground compaction during and following construction. Working methods should also be considered as new surfaces should be constructed as a rolling programme working over the engineered surface.

5.2.7 Areas for new landscape planting should be identified as part of the design process. Large areas of amenity space should be protected from degradation of the soil quality and compaction with either ground protection or fencing. As part of any design consideration should be given to the genetic suitability of species, their mature size and biological requirements of the selected species to ensure they are met throughout their lives. Poor species selection, compacted sub-soils, shallow or limited soil volumes or contaminated soils will all have a significant and detrimental effect on the long term health and longevity of installed trees. Tree Maintenance Ltd is able to provide assistance in the design and implementation of new planting to ensure it meets it full design potential.

6.0 PLANNING CONSIDERATIONS

6.1 It has been confirmed on the Stroud District Council web site that the trees within the site are not protected by a Tree Preservation Order or located within a Conservation Area. Therefore, at the time of writing there are statutory constraints to prevent works being completed prior to the granting of planning consent. This does not however preclude the Authority from issuing an order at any point where they consider trees of

high amenity value are at risk from development.

7.0 WILDLIFE ISSUES

7.1 Bats. Under current legislation it is an offence to 'intentionally or recklessly disturb a bat' or 'damage, destroy or block access to the resting place of any bat' (Countryside and Rights of Way Act 2001 and further strengthened by other legislation). Where work is being carried out and bats are present, or if the tree is a known roost, consultation must be made with the Statutory Nature Conservancy Organisation Natural England 0845 6003078 www.naturalengland.org.uk. A European Protected Species Habitat Regulations Licence is likely to be required. Work to trees with the potential for roosting bats is best done from late August to early October. March through to April is also suitable although this may conflict with nesting birds (see below).

7.2 Birds. It is an offence under Section 1 of The Wildlife and Countryside Act 1981 (as amended) to kill, injure or take any wild bird; intentionally or recklessly disturb any wild bird or take, damage or destroy the nest of any wild bird while it is in use or being built. Therefore work likely to disturb nesting birds should be avoided from late March to August.

7.3 All trees requiring work should be evaluated prior to work starting as part of a normal on-site risk assessment. If bird or bat issues are suspected then the tree works will be suspended and further advice from our office should be sought.

7.4 Ivy has significant ecological benefit, in particular as a late nectar source and habitat for insects, and as a nesting or roosting site for birds and bats. It is non-parasitic, only using the tree for support and to reach the light. However, when extensive it can become disadvantageous to the tree through displacing foliage, preventing new shoots arising (making a 'hollow' crown), masking defects preventing a proper inspection and, in particular, adding wind load. Therefore, it has been recommended for removal (or severing at the base, when it will die off) where the growth is extensive, defects are suspected and the location of the tree critical to safety.

7.5 As with ivy, dead trees, cavities and deadwood often provide important habitat and often do not constitute a danger where they are positioned away from targets. Therefore they normally only warrant action when risk assessed is considered high. Where risks remain acceptable, all efforts should be made to retain deadwood within and adjacent to sites.

8.0 LIMITATIONS

8.1 This report has been compiled as a preliminary assessment of the current health and condition of trees within and immediately adjacent to the site. It provides guidance on their suitability for retention when considering future development. This is an initial survey and no detailed tree

inspection or invasive investigation to confirm suspected defects has been carried out. Where this is considered necessary, it will be highlighted in recommendations

8.2 It is a data collection exercise from which broad constraints advice is provided. It is not an Arboricultural Implications Assessment of the scheme or, full or detailed safety survey. The assessment considers the trees only within their existing setting and does not consider any future development requirements.

8.3 Due to the changing nature of trees – and possibly other site circumstances – the dimensions given within this report are limited to a two year period after which time a resurvey of trees will be required. Observations relating to health and condition of the tree are valid on the day of the survey and could possibly change between the survey and submission of a Planning Application. The project arborist must be notified by client if any significant changes are to have occurred.

8.4 Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer occasional damage under only average weather conditions. A lack of recommended work does not imply that a tree will never suffer damage. This report could be invalidated if any alterations are made to the site that could change the conditions as seen at time of inspection.

8.5 Under certain circumstances, roots can affect existing foundations, drains and other underground services. These issues are beyond the scope of instruction and have not been addressed by this report. Whilst comments relating to built structures and soil data appear any opinion expressed is qualified as that of a competent arboriculturalist and should be confirmed by an appropriately qualified professional.

Signed:

[redacted]

Senior Arboricultural Consultant

DATE: 22nd October 2020

9.0 REFERENCES

British Standard 5837:2012 *Trees in relation to demolition design and construction - Recommendations*
British Standard 3998:2010 '*Recommendations for Tree Work'*
Diagnosis of ill-health in trees. Strouts & Winter. DOE/HMSO. 1994.

Principles of Tree Hazard Assessment and Management. Lonsdale. DETR/HMSO. 1999.
Tree Roots in the Built Environment Robert, Jackson & Smith. HMSO 2006
The Body Language of trees. Mattheck & Breloer. DOE/HMSO. 1994.
Updated Field Guide for Visual Tree Assessment. C. Mattheck. Karlsruhe Research Centre. 2007

APPENDIX 1. METHOD AND DEFINITIONS

A.1 Trees have been surveyed using the Visual Tree Assessment method expounded by Mattheck and Breloer (The body language of trees, DoE Booklet Research into Amenity Trees No. 4, 1994 and Mattheck, Updated Field Guide for Visual tree Assessment 2007). It is a preliminary assessment from ground level using binoculars to inspect crown features where necessary. Suspected defects have been subject to cursory ground level investigation using a light steel probe and/or soft faced mallet. Where considered necessary, further investigations may be recommended within the Survey Schedule.

A.2 **Tree No.** Trees are identified with sequentially numbered metal tags. Where possible these are installed at 1.5-2 metres on the north side of the trunk. Numbers are recorded within the Survey Schedule and shown on Tree Survey and Constraints Plan 15065/64293included at Appendix 2. Groups, woodlands and hedges are not numbered on site but are marked on the plan. Trees are marked (Y) yes or (N) no on the tree number column on the survey schedule to indicate if they were tagged or not, as access allowed.

A.3 **Species.** Both common and botanical names are given. Botanical names are *italicised. sp.* after the genus name indicates that genus only has been identified. For groups, hedges and woodlands the first five most common species are listed with common name only together with the estimated number of each of the main species. There may be other less frequent species included in the group which are not listed but will be reflected in the number of trees within a group.

A.4 (Yes), (No) or (TBC,(to be confirmed)) beneath the name indicates if the tree or group are at the time of survey known to be protected by a Tree Preservation Order (TPO) or located within a Conservation Area. Private Covenants and land charges have not be investigated.

A.5 **Age Class.** This is a best predicted assessment considering the tree species together with its environment.

NP	**New Planting**	Recently planted young trees capable of easy relocation.
Y	**Young**	Newly established trees of less than ¼ life expectancy .
SM	**Semi mature**	Established trees between ¼ but less than ⅓ predicted life expectancy
MA	**Middle Aged**	Trees within ⅓ and ⅔ predicted life expectancy
M	**Mature**	Trees over ⅔ predicted life expectancy with limited potential for future growth
OM	**Over mature**	Towards end of normal life expectancy and showing some signs of decline
V	**Veteran**	Over mature trees which have significant cultural, landscape or biological interest

A.6 **Number of Trunks.** Identifies the number of vertical trunks assessed and recorded. Up to 10 individual trunks are recorded followed by ranges 10-20 or more than 20.

A.7 **Measurements.** (E) Indicates that measurements are estimated, (M) indicates diameters are measured. Where trees are located offsite or in inaccessible locations within the site, all measurements will be estimated and a 'best available' assessment made. Trees shown using estimated data will be marked as para. 3.5

Trunk Diameters. Measured using a metric diameter tape which provides an average stem diameter in millimetres. Trees are measured at 1.5 metres above ground level including those with more than one trunk (up to 5 stems are recorded). Where trees have more than 5 stems all stems are measured but only the mean average stem diameter and numbers of stems are recorded. (BS 5837: 2012 Section 4.6). On sloping ground all measurements are taken on the uphill side of the trunk but below bulges and flares where these would significantly distort the measurements. Measurements are rounded up to the nearest 10mm. Trees within a group are awarded a single trunk measurement of the largest tree measured within the group.

Tree Height. Measured with an optical measuring device to ensure consistency where a clear view can be made otherwise heights are estimated to the nearest metre.

Branch Spread. Measured and rounded up to the nearest metre. For individual trees these are recorded in the four compass point directions from the centre of the trunk. Groups are recorded to the maximum canopy extent in each of the four compass point directions.

Height and Direction of First Branch. Estimated in metres from ground level and expressed in the main four compass point directions.

Height of Crown above Ground Level. This is estimated in metres to the lowest point in the four cardinal compass point directions. Trees with extensive basal growth or drooping crowns may be recorded as a zero height.

A.8 **Physiological Condition**. An assessment of the tree's overall health (ability to resists strain) which affects its ability to tolerate changes such as, climate, local environment and colonisation by pests and diseases. The assessment is based on bud density and distribution, leaf size and colour, crown density, annual extension and wound closure compared with similar species within the locality.

G	**Good**	A tree with a fully functioning biological system showing evidence of strong sustained growth.
F	**Fair**	A tree with fully functioning biological system showing evidence of continuing growth which has the potential to improve or decline depending on environmental conditions and future management.
P	**Poor**	A tree with a biological system of limited functionality and declining health, unlikely to recover but which may remain in a moribund state for a significant period of time.
D	**Dead**	A tree which lacks any significant live tissue or functioning biological systems.

A.9 **Structural Condition**. This relates to the physical condition of a tree including its roots, trunk, branch unions and limbs. It is an overall assessment of bio mechanical strength based on visible defects or defect indicators identified at the time of the survey.

G	**Good**	No significant structural defects.
F	**Fair**	Structural defects which can be improved or removed through moderate remedial tree surgery or other management practices.
P	**Poor**	Significant structural defects which cannot be alleviated through moderate tree surgery or other management practices.

A.10 **Observations and Comments**. Provides specific descriptive and analytical comments on the tree and its environment. These are likely to be of assistance at later stages of the design process in determining suitability of trees for retention, tree protection requirements and necessary management works. It will identify major observable defects and signs of ill health.

A.11 **Useful Life Expectancy.** A best assessment given the tree's environment, health and structural condition at the time of the survey. This estimate does not take into account the possible effects of future development on the trees health and longevity. The trees are assessed as being within the broad bands of <10, 10-20, 20-40 or 40+ years.

A.12 **BS Category.** Based on the above information trees are classified into one of the following categories as defined in section 4.5 and Table 1 of BS 5837:2012. Trees may be given one or more sub categories however this does not increase the value of the tree but indicates identifiable attributes. Where trees cannot be fully assessed due to access they will be awarded they highest possible grade they could reasonably achieve but may be reviewed following access being obtained and trees being re-surveyed at a later date.

Category and identification Colour on plan	**1. Mainly arboricultural values**	**2. Mainly landscape values**	**3. Mainly cultural values**
U (red)			
Trees of such a condition that they can not be realistically retained as living trees in the context of the current land use for longer than 10 years	• Trees that have serious, irremediable, structural defect, such that their early loss is expected due to collapse including those which will become unviable after the removal of other category U trees (where for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *Note Category U trees can have existing or potential conservation value which might be desirable to preserve*		
A (green)			
Trees of high quality with an estimated life expectancy of at least 40 years	Trees that are a particularly good example of their species, especially if rare or unusual, essential components of groups or of formal or semi-formal features (e.g. the dominant or principle trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural or landscape features	Trees, groups of trees or woodlands of significant conservation, historical or other value (e.g. veteran or wood pasture
B (blue)			
Trees of moderate quality with a remaining life expectancy of at least 20 Years	Trees which may be in the A category but are downgraded due to their impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such they are unlikely to be suitable for retention for beyond 40 years; trees lacking the special quality necessary to merit category A designation	Trees that are in numbers, usually growing 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.	Trees with material identifiable conservation or other cultural benefits
C (grey)			
Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them any greater collective landscape value ; and/or trees offering low or only temporary /transient landscape benefits	Trees with no material conservation or other cultural value

A.13 **Recommendations**. Are those required for reasons of health and safety which a prudent owner may wish to carry out. If necessary further investigation works may be recommended to ascertain the extent and implications of suspected major defects. Works necessary to facilitate development have not been included as part of this exercise but will form part of a comprehensive schedule of works included within the draft arboricultural implications assessment and final arboricultural method statement (if required). Specified works should be completed within the designated time frame to ensure compliance with owner/occupiers general duty of care. All works should be completed in accordance with British Standard 3998 Tree work – recommendations 2010 by a suitably competent, qualified and insured arboricultural contractor.

A.14 **Priority.** For specified works and are the reasonable recommended time frames in which work should be reasonably completed in order to comply with the general duty of care or obtain further data to guide the design process.

Months	Priority	Definition
1-3	Urgent	Indicates works that are and relate to imminently dangerous trees or tree parts and should be completed without delay.
3, 6, 12	Works required	A guide in which non urgent but necessary works should be completed. Most re-inspection works should be completed within 1-3 months in order to guide the design process.
ABA	As Budgets Allow	Non urgent works, mainly for cultural future management
N/A	Not Applicable	No works specified at the time of survey

APPENDIX 2. TREE SURVEY SCHEDULES

Unit 60, Aston Down, Stroud
Gloucestershire GL6 8GA
Tel 01285 760466 (4 lines) / 760983 fax
www.treemaintenance.co.uk
sales@treemaintenance.co.uk

Geoffrey March Dip. Arb. (RFS) F.Arbor.A.
Registered Consultant, Arboricultural Association

Stephen Gillis
Contracts Director

TREE SURVEY

Client: Newland Homes	Site: Upton Gardens, Whitminster.
Date: 21/10/2020	[redacted]
Tagged: Yes	Weather: Overcast and raining.

Tree No. (Tagged Yes /No)	Species Common Name (Botanical name) (Legal Protection)	Age Class	No. of Stems (Measured (M) / Estimated (E))	Stem Diameter	Height (M)	Crown Spread (M) N	E	S	W	Ht. & Direct. 1st Branch (M)	Crown Height (M) N	E	S	W	Physiological Condition	Structural Condition	Observations and comments	Useful life Expectancy.(Yrs.)	BS Category	Recommendations	Priority	RPA Radius (M) (RPA (m2))
748 (Y)	Weeping Willow *(Salix chrysocoma)* (No)	MA	1 (E)	600	16	4	7	3	5	2 E	8	4	3	4	F	F	Boundary edge tree. Part of group. Ivy on trunk. Trunk leans to South. Crown shape distorted due to group pressure. Crown weighted to South. Major deadwood in crown.	10 to 20 yrs	C1 +2	Remove major dead wood.	A B A	7.20 (162)
749 (Y)	Sycamore *(Acer pseudoplatanus)* (No)	SM	2 (M)	2700	10	2	1	5	4	5 w			5	5	F	P	Boundary edge tree. Part of group. Vulnerable to windthrow if exposed. Suppressed and stunted. Multi stemmed at ground level with included bark. Trunk leans to South. Trunk leans to West. Tight forks with included bark. Crown weighted to South and West.	10 to 20 yrs	C1	No works required at time of survey.	N/ A	3.24 (32.)

Tree No. (Tagged Yes /No)	Species Common Name *(Botanical name)* (Legal Protection)	Age Class	No. of Stems (Measured (M) / Estimated (E))	Stem Diameter	Height (M)	Crown Spread (M)				Ht. & Direct. 1st Branch (M)	Crown Height (M)				Physiological Condition	Structural Condition	Observations and comments	Useful life Expectancy.(Yrs.)	BS Category	Recommendations	Priority	RPA Radius (M) (RPA (m2))
						N	E	S	W		N	E	S	W								
751 (Y)	Common Horse Chestnut *(Aesculus hippocastanum)* (No)	M	1 (M)	790	17	6	3		6	5 N		6		4	G	F	Boundary edge tree. Part of linear group. Woodland edge tree. Vulnerable to windthrow if exposed. Large buttress roots. Large surface roots. Ivy on trunk. Crown shape distorted. Crown weighted to North. Crown weighted to West. Broken hanging branches. Minor deadwood in crown. Recently exposed following collapse of adjacent tree.	20 to 40 yrs	B1 +2	Reduce entire crown by 3-4 metres back to a suitable growing point that maintains a flowing branch line and character of the tree.	3	9.48 (282)
750 (Y)	Common Horse Chestnut *(Aesculus hippocastanum)* (No)	MA	10 (M)	480	14	4	5	6	14	3 N	4	6	6	0	M	P	Boundary edge tree. Part of linear group. Woodland edge tree. Partially collapsed coppice stool.	<10 yrs	U1	Fell to ground level. Stumps to remain untreated.	3	15.00(706.)
752 (Y)	Common Horse Chestnut *(Aesculus hippocastanum)* (No)	M	1 (M)	990	17	5	4	2	9	3 S		6	2	4	G	G	Boundary edge tree. Part of linear group. Woodland edge tree. Vulnerable to windthrow if exposed. Large surface roots. Ivy on trunk. Crown weighted to South. Crown weighted to West. Probably part of original planting.	20 to 40 yrs	B1 +2	Reduce entire crown by 2-3 metres if neighbouring trees are removed.	A B A	11.8 (443)

Group No.	Species (Common name) (Number in group)	Age Class	No. of Trees	Average Stem Diameter	Height (M)	Average Crown Height (M)	Condition		Observations and comments	Useful life Expectancy.(Yrs.)	BS Category	Recommendations	Priority (Months)	Root Protection Area (M) (Beyond group outline)
							Physiological	Structural						
1 (TBC)	Willow(4)	Y	5	150	10	2	G	P	Crown shape distorted due to group environment. Self-sown group. Tall and etiolated due to group environment. Vulnerable to wind throw if exposed. Multiple trees with tight forks and included bark. Multi stemmed at ground level with included bark.	10 to 20 yrs	C1	No works required at time of survey.	N/A	1
2 (TBC)	Prunus(5) Maple(3) Hawthorn(4)	SM; MA	11 to 15	100	5	0	F	F	Boundary edge feature. Crown shape distorted due to group environment. Tall and etiolated due to group environment. Multi stemmed at ground level. Multiple trees with tight forks and included bark. Over grown group dominated by Laurel.	10 to 20 yrs	C1	Thin density by 50% to improve growth of better quality specimens and ground flora.	ABA	1
3 (TBC)	Sycamore(2)	MA	2	580	10	2	G	G	Boundary edge feature. Self-sown group. Ivy on trunks and throughout crowns. Crown shape distorted due to group pressure. Squirrel damaged branches.	20 to 40 yrs	B1 +2	Sever Ivy at base and allow to die off.	ABA	2
4 (TBC)	Elm(10)	SM	10	180	8	2	M	P	Boundary edge feature in decline due to Dutch Elm Disease.	<10 yrs	U1	Fell to ground level.	6	

Group No.	Species (Common name) (Number in group)	Age Class	No. of Trees	Average Stem Diameter	Height (M)	Average Crown Height (M)	Condition		Observations and comments	Useful life Expectancy.(Yrs.)	BS Category	Recommendations	Priority (Months)	Root Protection Area (M) (Beyond group outline)
							Physiological	Structural						
5 (TBC)	Ash(12) Horse Chestnut(40-50) Elm(50+) Sycamore(8) Hawthorn(10)	SM;MA	41+	450	14	2	F	P	Boundary edge feature. Crown shape distorted due to group environment. Self-sown group. Wind thrown trees present. Bark wounds occluded on trunks. Multi stemmed at ground level. Ivy on trunks. Multiple trees with tight forks and included bark. Crown shape distorted due to group pressure. Tight forks with included bark. Elm, mainly internal to site, dead or moribund due to Dutch Elm disease. Ash at stage 1 and 2 Ash Dieback. Majority of Horse Chestnuts regrown multi stemmed coppice stools with extensive bark wounds. Starting to collapse from base due to bark inclusions and decay.	10 to 20 yrs	C1 +2	See Comment	ABA	2
6 (TBC)	Ash(2) Hawthorn(4)	Y;SM	6	250	6	1	F	F	Boundary edge feature. Linear feature. Self-sown group. Ash Stage 1 and 2 ADB.	10 to 20 yrs	C1	Fell diseased trees.	12	1
7 (TBC)	Prunus(9)	MA	9	100	6	0	G	F	Boundary edge feature. Purple Plum with thicket of basal suckers.	10 to 20 yrs	C1 +2	No works required at time of survey.		1

Group No.	Species (Common name) (Number in group)	Age Class	No. of Trees	Average Stem Diameter	Height (M)	Average Crown Height (M)	Condition		Observations and comments	Useful life Expectancy.(Yrs.)	BS Category	Recommendations	Priority (Months)	Root Protection Area (M) (Beyond group outline)
							Physiological	Structural						
8 (TBC)	Willow(8) Ash(14)	Y	16 to 20	200	7	0	P	P	Self sown group. Goat Willows multi stemmed at ground level with included bark, tall and drawn with end loaded limbs. Ash at stage1and 2 ADB.	<10 yrs	U1	Fell to ground level, stumps to remain untreated.	ABA	1

APPENDIX 3. TREE SURVEY AND CONSTRAINTS PLAN

[redacted]

Unit 60, Aston Down,
Stroud, Gloucestershire
GL6 8GA
Tel 01285 760466 Fax 01285 760983
sales@treemaintenance.co.uk.
www.treemaintenance.co.uk

Land At Upton Garden Whitminster
Tree Survey and Constraints Plan

SCALE : 1 : 500

DATE : 22/10/2020

MAP FILENAME [redacted]

Based on Topograpical Plan 20235.
This plan must be read and reproduced in colour

N

Legend

Crown Spread

Root Protection Area

Shading Arc

Category 'A'

Category 'B'

Category 'C'

Category 'U'

0 40m

750
751
U
B
Grp.5
Ash

Grp.4
Elm

Grp.3
Sycamore

748
C

Grp. 1
Willow

749
C

Grp. 2
Prunus

752
B

Grp.8
Willow

Grp. 6
Ash

Grp. 7
Prunus

Appendix 3.

Arboricultural Association Fellow Member

Consulting Arborist Society Professional Member

Institute of Chartered Foresters Registered Consultant

Tree Maintenance Ltd

Unit 60, Aston Down, Stroud
Gloucestershire GL6 8GA
Tel 01285 760466
sales@treemaintenance.co.uk
www.treemaintenance.co.uk

[redacted]

Newland Homes Ltd
Brighouse Court
Barnett Way
Barnwood
GLOUCESTER
GL4 3RT

16 November 2020

Our Reference: 15065 / 64489

Dear [redacted]

North Boundary Feature - Upton Gardens, Whitminster

Following our meeting last week, please find listed below my thoughts regarding the management of trees along the northern boundary.

Current position

The northern boundary is formed by a visually significant tree group which provides screening and visual separation of the Upton Gardens site from public open space and playing fields to the north. The group forms Group 5 of the recent Tree Survey and Constraints advice (ref 15065/64293) completed in October 2020. The area is used for informal play, with many of the small coppice stems being vandalised and damaged. The area has also been subject to fly tipping with litter and other detritus being present through the woodland belt (see Photograph 1).

Photograph 1. Informal path and vandal damaged Coppice Stool.

The group consists of two large mature Horse Chestnuts (Trees 751 and 752), young Yew, Ash, regenerating Elm and developing Horse Chestnut and a few Lime coppice stools.

Elm are developing from root suckers and have a limited life expectancy as they tend to develop to around 150-300 mm diameter and then succumb to Dutch Elm disease as can be seen in Group 4.

Although due to the time year it could not be fully assessed, the crowns of the young and middle aged Ash appeared to be suffering from early stage Ash Dieback. This is a windborne, very infectious and progressive disease and is likely to result in the loss of the Ash trees within 3 years.

Photograph 2. Dead and declining Elm and Ash.

Many of the Horse Chestnut coppice stools show evidence of significant basal decay with stems developing close to ground level with weak included forks. The group at present is fairly dense, resulting in tall trunks with high canopies. They are mutually self-supporting by providing companion shelter for one another. Trees will have an increased risk of failure if suddenly exposed by the loss of neighbouring trees. Failure of coppice stools has already started, as shown by tree 750, and will be accelerated by the loss of adjacent Ash and Elm.

Photograph 3. Tree 750 collapsing Coppice Stool

Without proactive management, the group, as a feature, is likely to be lost within a decade and during this time period will pose an increasing risk to informal users of the area and those using the

sports fields to the north. Natural regeneration of the Ash, Elm and Horse Chestnut will occur but will be subject to cyclic loss as is currently occurring. Any development of the site will further bring more targets within falling distance of the trees thereby further increasing the risk of injury and/or damage.

Management Options

Clearly the trees in this group pose an increasing risk of collapse as they continue to succumb to disease, decay and structural weaknesses. The risk is going to increase as trees become more exposed and, without careful management, the group will continue to suffer cyclic loss with an ever increasing liability being placed on the land owner.

Removal of the dead and declining Ash and Elm will reduce companion shelter to the structurally weak Horse Chestnut coppice stools, increasing their risk of failure. The worst of the stools could be re-coppiced, but this would then lead to further increase in the exposure of the remaining stools which will then be more prone to failure. New planting in amongst coppice stools will be problematic as coppice growth will easily out-compete the establishing trees. In addition, establishing trees will be at risk of damage as the retained coppice stools will require ongoing maintenance on a 10 -15 year cyclic operation. Coppicing will result in a permanent lower level feature potentially with a more diverse ground flora as a result of periodic opening up of the canopy. After the initial works, a cyclic programme could be established. Any retained coppice stools will have an increased risk of failure.

Phased replacement could be considered, where part of the group is removed and replaced with new planting, over say a 20 - 30 year period. This would allow the partial retention of the existing feature whilst trees become established but, as above, exposed trees will have an increased risk of failure and new planting will be at risk of damage during subsequent felling cycles. New planting may be more difficult to establish due to above and below ground competition and shading.

Although resulting in the initial loss of the majority of the feature, complete removal and replacement with a diverse mix of native woodland species would provide a long term and sustainable solution. This option would minimise risk of future failure and contribute to the local and wider landscape for decades to come. Trees 751 and 752 would be retained, as they are dominant trees and well above the existing canopy. The rest of the group would be felled and stumps ground out. Larger felled material could be stacked to create dead wood habitat piles. A few larger trunks could left at 2-3 metres high as standing deadwood, providing song and hunting posts for birds. Brash could be chipped to provide organic mulch around new planting to suppress weed growth and provide a slow release of nutrients into the soil. Lime coppice stools to the eastern end of the group would be retained and re-coppiced to provide a more instant effect. Any good quality existing Yew would also be retained. A broad mix of native trees and woodland shrubs will be installed and maintained until established.

Recommendations

In terms of providing a safe, sustainable and manageable landscape feature for the future the preferred arboricultural option should be to remove the existing feature and replace it is in its entirety.

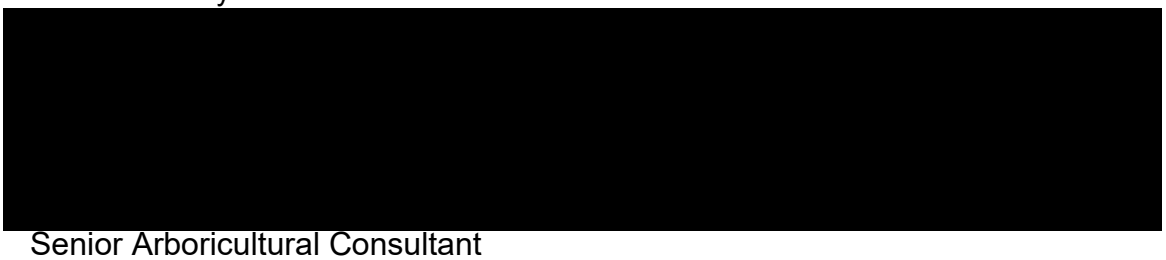
This would remove the ongoing liability associated with further opening up an already unstable and declining group, it will remove species which are unable to achieve their mature size and will decline cyclically and it will provide new planting which is manageable as a linear woodland in perpetuity. Retention of deadwood and the planting of a new woodland understorey would also improve wildlife

habitat and provide ancillary benefits such as safe community access from the sports area to the north.

Consideration should be given to the implementation of the replacement scheme as soon as is reasonably possible to ensure planting is established and thriving before the end of the development of the site. Winter 2020 would be advised as this would avoid the 2021 bird nesting season running from March to August which could preclude and reduce the extent of works which could be carried out.

I trust this assists in your discussions and deliberations

Yours sincerely



Senior Arboricultural Consultant

Appendix 4.

All Ecology

Upton Gardens, Whitminster, GL2 7LP

Walkover Survey

February 2021

All Ecology Ltd

Tel: 01453 393001
Email: info@allecology.co.uk
Web: www.allecology.co.uk

Document Control

Site: Upton Gardens, Whitminster, GL2 7LP

Title: Walkover Survey

For: Newland Homes

[redacted]

Document Version: 1.0

Survey Date(s): 22nd October 2020

Document Date: 11th February 2021

[redacted]

England and Wales Office

All Ecology Ltd,
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Coaley,
Dursley,
Gloucestershire,
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Notice to Readers:

The results of the survey and assessment work undertaken by All Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

All Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

All Ecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

Contents

1.0 Introduction

Background

1.1 In October 2020, All Ecology was commissioned to undertake a Walkover Survey of site known as Upton Gardens, Whitminster, GL2 7LP. The site is an area of grassland with fringes of scrub and a narrow strip of woodland along the northwest edge of the site beyond which is a cricket pitch. The southwest boundary is formed by a hedge, the southeast and northeast boundaries are formed by fences shared with adjacent gardens.

1.2 The site is the subject of a planning application for a new housing development of 12 dwellings. The woodland would be retained and the existing access used. Open space and an attenuation pond would be created in the southwest portion of the site.

1.3 Previous ecological studies have been undertaken on site. The following surveys were carried out by Five Valleys Ecology in 2016:

- Ecological Appraisal – This identified woodland and trees as being the habitats of most value on site and the potential for protected and notable species of fauna.
- Bat Activity Survey – No roosts or obvious commuting routes across the site were noted during the surveys, although the highest activity levels were generally recorded along the southern boundary of the woodland and the western boundary of the site. Some rarer bat species, specifically Lesser Horseshoe, which are particularly sensitive to light, were active on site, however, overall activity levels for this species were low. The site would not be expected to be a particularly significant foraging resource for bats given the type and extent of the habitats present.
- Great Crested Newt – Four ponds in the surrounding area all returned negative eDNA results and it was concluded that Great Crested Newts are absent from these and therefore the site.
- Reptile Survey – No reptiles were recorded and it was concluded that reptiles are absent from the site.

Objectives and Aim

1.4 The main objectives and aim of the survey were to carry out an update and identify features of ecological interest, undertake a basic search of habitats present for evidence of use, or potential use, by protected species, and to identify any other possible ecological constraints to the latest proposed development.

Site Location

Figure 1: Site location plan.

Figure 2: Aerial photograph.

2.0 Methodology

Personnel

2.1 The survey was carried out by [redacted] an ecologist with over 13 years' experience working as a consultant. [redacted] has extensive experience of managing environmental contracts, and particular experience in surveying, assessment and mitigation for rare and protected species. He has considerable knowledge of the development and planning process including Ecological Impact Assessments, sustainable ecological design and he has completed ecology chapters of Environmental Statements. [redacted] holds a number of protected species licences including bats (all species, all counties, Class Licence Registration No. 2015-12313-CLS-CLS), and Great Crested Newts (Class Licence Registration No. 2016-20363-CLS-CLS). He has successfully obtained European Protected Species mitigation licences for a number of bat species including Lesser Horseshoe, Greater Horseshoe, Serotine, Brown Long-eared, Common Pipistrelle and Natterer's bats, for a number of roost types including maternity and hibernation sites

Habitat Survey

2.2 The site was visited on the 22nd October 2020 and surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2010). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.

Fauna

2.3 Trees on site were assessed for their potential to support bat roosts by visually inspecting them from the ground using binoculars and high-powered torches where appropriate. Potential roosting features such as gaps, holes, enclosed roof voids, holes, cavities or splits were recorded and then inspected where possible for signs of bats, which including grease/urine stains, scratch marks, droppings or the bats themselves.

2.4 The site and surroundings, for a minimum distance of 30 m where access was available, were searched for signs of Badgers. These include setts, latrines, dung pits, snuffle marks or hairs caught in hedges or on fencing.

2.5 Incidental observations of invertebrates and birds were recorded and a search made for any signs of previous nesting.

2.6 Any refuges on site such as logs or other debris were lifted and inspected for reptiles and amphibians.

Valuation of Ecological Features

2.7 The valuation process used in this report follows the Guidelines for Ecological Impact Assessment in the UK and Ireland from the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018).

2.8 The value of areas of habitat and plant communities has been measured against published criteria where available. Biodiversity Action Plans (BAPs) have been searched to identify whether action has been taken to protect all areas of a particular habitat and to identify current factors causing loss and decline of particular habitats. The presence of injurious and legally controlled weeds has also been taken into account.

2.9 When assigning a level of value to a species, its distribution and status (including a consideration of trends based on available historic records) has been taken into account. Other factors influencing the value of a species are: legal protection, rarity and Species Action Plans (SAPs). Guidance, where it is available, for the identification of populations of sufficient size for them to be considered of national or international importance has also been taken into account.

Nomenclature

2.10 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2007) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

Limitations

2.11 The site was fully accessible with no limitations to undertaking the survey in accordance to the stated methodology.

3.0 Results

Habitats

3.1 The following habitats or vegetation types were identified during the course of the habitat survey:

- Poor semi-improved grassland
- Dense/scattered scrub/tall ruderal
- Scattered trees
- Semi-natural broadleaved woodland
- Arable
- Defunct species-poor hedge and trees
- Fence

Poor semi-improved grassland

3.2 The grassland was classified as poor semi-improved grassland. This was in its winter condition and had been mown relatively recently. It appeared to be co-dominated by False Oat-grass and Yorkshire-fog with abundant Fescue sp., and frequent Creeping Buttercup, Ground-ivy, Cleavers, Sorrel and Cock's-foot. There was also occasional Cow Parsley, Creeping Thistle, Creeping Cinquefoil, Yarrow and Red Clover.

Dense/scattered scrub/tall ruderal

3.3 Fringes of dense and scattered scrub were present around the peripheries of the grassland and this included recently cleared stands of Bramble and Cherry Laurel with some remnant areas and rare Butterfly-bush. Areas of Common Nettle were mixed with the scrub and Pendulous Sedge, Creeping Buttercup and Lesser Trefoil were also recorded here.

Scattered trees

3.4 Standard trees of Ash, Sycamore, Poplar sp., Prunus sp., Weeping Willow, and Goat Willow were present along the southeast and northeast boundaries. A small Ash and two Hawthorn shrubs were present in the southwest portion of the grassland.

Semi-natural broadleaved woodland

3.5 Woodland was present in a narrow band along the northwest boundary of the site. The canopy was formed by a mix of Horse-chestnut, Ash, English Elm, Wych Elm, Poplar sp., and Sycamore. The understorey was patchy and mainly present along the southeast edge of the woodland and extending out into the grassland forming a woodland fringe. This was formed by a mix of English Elm, Bramble, Dog-rose, Hedge Bindweed, Holly, Ash and Hawthorn. Detectable ground flora present at the time of the survey was mainly Ivy with Cow Parsley and Common Nettle also recorded.

Arable

3.6 Vegetable plots were present along the part of the southwest boundary, created by one or of the neighbouring properties.

Defunct species-poor hedge and trees

3.7 The southwest boundary of the site was formed by a defunct species-poor hedge and trees. This was formed by mainly Blackthorn and Hawthorn with Bramble growing through the hedge and trees of Ash and English Elm. Cow Parsley and Hedge Bindweed were also present.

Fence

3.8 A post and rail fence was present along the northwest boundary of the site. Timber featherboard fencing formed the northeast and part of the southeast boundary with the remainder of this boundary marked with an iron rail fence.

Photograph 1: View of the grassland looking northeast.

Photograph 2: Southwest boundary hedge and cleared Bramble.

Photograph 3: More open southwest portion of the woodland.

Photograph 4: Northeast part of the woodland with dense understorey.

Photograph 5: Woodland edge with cleared Bramble.

Photograph 6: Northeast boundary.

Photograph 7: Vegetable plots along the southeast boundary fence.

Photograph 8: View of the grassland looking west.

Photograph 9: Scrub along the southeast boundary.

Photograph 10: Southeast boundary iron railings.

Fauna

Bats

3.9 There were no buildings on site. With regard to the trees, minor holes and crevices were noted in trees within the woodland but these appeared offer little shelter and no further investigation was made as these are to be retained. None of the remaining trees appeared to offer any potential roosting features for bats.

3.10 The general area is known to support a range of bat species and optimal habitats such as woodland, waterbodies are present the surrounding area. The woodland, woodland edge, scrub and hedge all provide good foraging and commuting habitats and bats are expected to utilise these as well as the associated grassland for foraging. The previous activity survey recorded low levels of activity but by a range of species; this is discussed in further detail below.

Badgers

3.11 The site provides good foraging habitat in the short grassland. Hedge, scrub, and the woodland provide good opportunities for the construction of setts; however, no evidence of Badgers was recorded and they are likely to be generally absent, although they may pass through the site or forage on occasion.

Otters and Water Voles

3.12 There are no watercourses on or near to the site and therefore, Otters and Water Voles are considered to be absent.

Dormice

3.13 The hedge, scrub and woodland provide the main potential for Dormice and while these do connect to hedges in the wider area, these appear to be a loose network of hedges that are poorly connected to the wider area. This species is likely to be absent.

Other mammals

3.14 The site is expected to support a number of common small mammals and hedgehogs may pass through the site on occasion. The site is unlikely to support any other rare or notable mammal species.

Birds

3.15 Species recorded on site or overhead during the surveys were Robin, Jackdaw, Carrion Crow, Starling and Pheasant. The site provides foraging habitat for garden and woodland birds and the trees, scrub and woodland all provide nesting habitat. No nests were recorded but nests could easily have been missed in the denser vegetation.

Reptiles

3.16 The main part of the site is now short grassland although the hedges, scrub and woodland edge provide cover and good habitat for reptiles. The previous reptile survey did not record any reptiles when the habitat was optimal across the site. The site has since been managed to cut the grassland short and clear much of the Bramble scrub. The site is relatively isolated in the landscape and it is unlikely that reptiles would have colonised the site since the previous survey. Reptiles are therefore still likely to be absent from the site.

Amphibians

3.17 With the exception of the short grassland, which is currently poor habitat, the habitats on site provide optimal terrestrial habitat for amphibians. There are no ponds on site but the nearest shown on OS maps is 160 m to the southwest. This pond, along with three others in the surrounding landscape within 500 m were subject eDNA analysis in 2016, all of which returned negative results. These survey results are now considered to be out of date and although it is unlikely that Great Crested Newts have colonised these ponds further consideration is required.

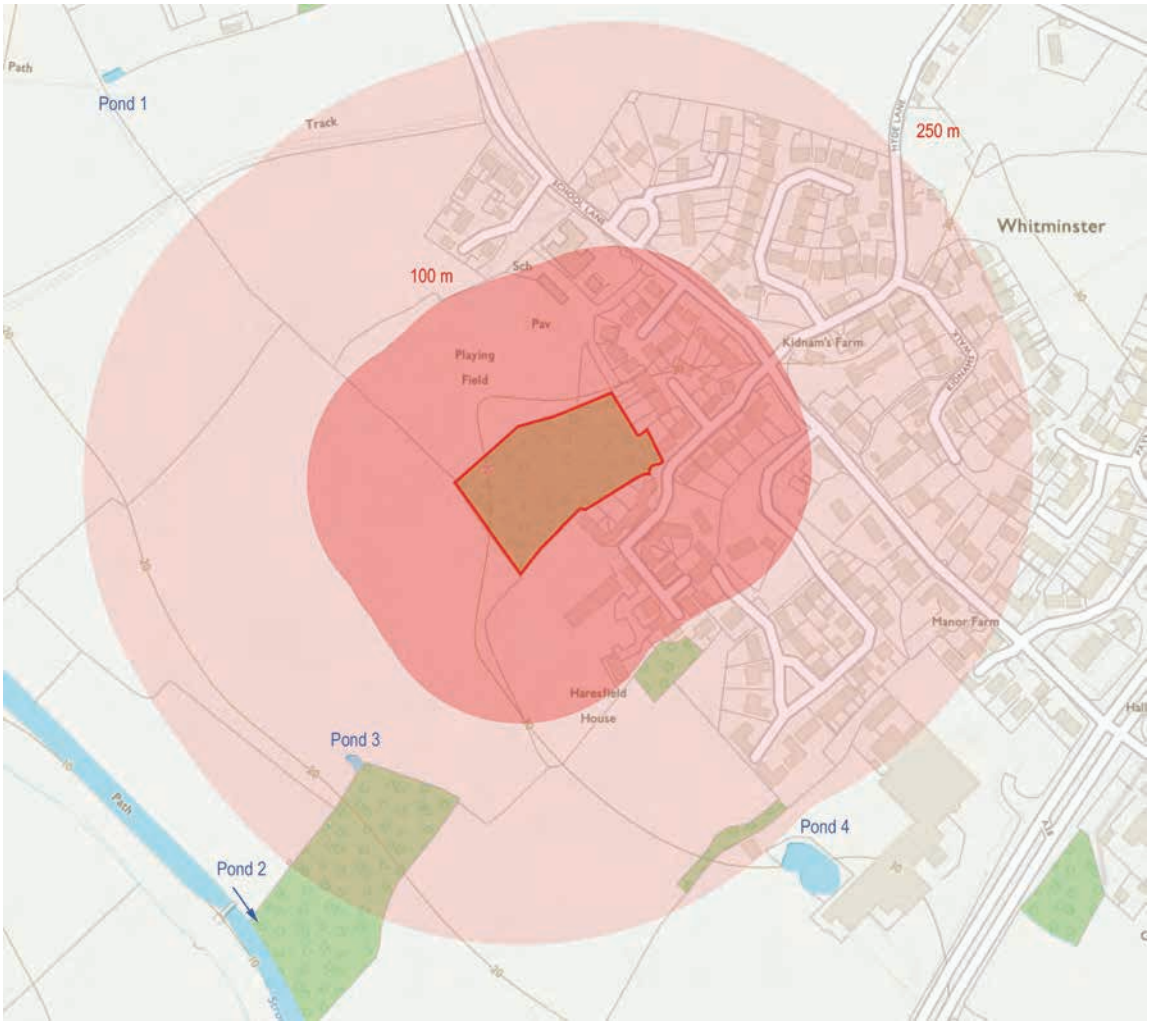

Figure 3: Pond location plan.

- Pond 1 – 360 m NW
- Pond 2 – 290 m SW
- Pond 3 – 160 m SW
- Pond 4 – 260 m SE

Invertebrates

3.18 The habitats on site are common habitat types that do not provide much potential for rare invertebrate species. It is mostly common assemblages of invertebrates that are expected to be present on site.

4.0 Impacts and Recommendations

Impacts

4.1 The site is the subject of a planning application for a new housing development of 12 dwellings. The woodland would be retained and the existing access used. Open space and an attenuation pond would be created in the southwest portion of the site.

Habitats

4.2 The NERC Priority Habitats include all hedgerows with at least 80% cover of at least one woody UK native species (JNCC, 2017). The hedge along the southwest boundary had at least 80% cover of native species and as such qualifies as NERC Priority Habitat. This would be retained and therefore no further assessment is required. There is significant scope to enhance this hedge through better management and by augmenting with additional species to increase diversity.

4.3 Lowland Mixed Deciduous Woodland is a NERC Priority Habitat but the woodland on site is unlikely to qualify as such. Woodland is nevertheless a valuable habitat in the local context and this will be retained. Opportunities for enhancing this woodland could include selective thinning to remove weaker trees and allow larger mature trees to develop. Mature trees are more likely to develop cracks and rot holes that can be used by a variety of animals, as well as being home to invertebrate species and fungi.

4.4 The poor semi-improved grassland does not fit the criteria to qualify as a NERC Priority Habitat (JNCC, 2015). In order to qualify as NERC Priority Habitat, grassland typically has to be unimproved (good semi-improved grassland can also qualify) and would have to be examples of lowland calcareous grassland or lowland dry acid grassland, habitats not found on site.

4.5 A new attenuation pond is to be created on site and ideally this should be designed so that part of this permanently holds some water. There are opportunities for significant biodiversity gains from the creation of a pond. Depending on the final character of the pond, it may be beneficial to plant native local plants to increase its value; non-native plants, many of which are invasive, should be avoided. Given the likely limited depth and area of water, planting should concentrate on marginal plants such as Brooklime, Water Mint, Marsh Marigold, Water Plantain, Yellow Iris, and rushes.

4.6 Where other new areas of habitat are to be created, consideration should be given to the seeding of these areas using appropriate seed mixes. Where possible these seeds should be locally sourced to support the genetic integrity of local wild plant populations. Where new trees or shrubs are to be planted, native tree and shrub species should be used as these are most beneficial to invertebrates, and many also produce seeds, nuts and berries that are food for native mammals and birds. Planting of non-native plant species should be limited to those that are not invasive and should prioritise those that provide a good source of nectar for invertebrates.

Protected and Notable Species

Bats

4.7 There are no buildings on site and none of the trees appeared to have any features with any reasonable likelihood of being used by roosting bats; in any case the majority of these are within the woodland and would be retained.

4.8 The woodland, woodland edge, scrub and hedge all provide good foraging and commuting habitats and bats are expected to utilise these as well as the associated grassland for foraging. The previous activity survey recorded at least seven bat species: Brown Long-eared, Common Pipistrelle, Soprano Pipistrelle, Lesser Horseshoe, *Myotis* sp., Noctule and Serotine. No roosts or obvious commuting routes across the site were noted during the surveys, although the highest activity levels were generally recorded along the southern boundary of the woodland and the western boundary. Some rarer bat species, specifically Lesser Horseshoe, which are particularly sensitive to light, were active on site during the automated activity survey; however, overall activity levels for this species were low with two registrations being recorded throughout the surveys. The site was not be expected to be a particularly significant foraging resource for bats given the type and extent of the habitats present.

4.9 It is a given that bats will still forage on site but the key habitats, the woodland and the boundary hedge would be retained. The loss of the grassland and small areas of scrub is unlikely to be significant and provided a suitable lighting strategy is implemented bats will continue to be able to utilise the main woodland and hedge habitats. The creation of the pond would also provide additional habitat. Measures include the use of lighting only where absolutely necessary utilising highly directional warm white LED lighting, an example being down spots at 2.5 m high using warm white (2700 K) 8W LED lamps, 550 lumens, 35 degree beam angle. These could be individually activated by PIR sensors on a 5 minute cut off to further reduce their impacts. These will assist in lighting only the areas where lighting is required and minimising light spill either directly or through reflected light.

4.10 The proposed development provides an opportunity to enhance the site for roosting bats and the local planning authority will usually expect enhancements included regardless of any roosting on site. The provision of large open roof spaces for species such as long-eared bats is unlikely to be desirable or feasible, but there are many ways in which the buildings could be enhanced for crevice-dwelling species without inconveniencing prospective occupants. Bat tubes can be integrated into the walls or panels can be attached to the building exteriors. Boxes such as the Schwegler Bat Box 1FF can be installed on nearby trees.

Badgers and Other mammals

4.11 The potential for other species of protected or notable mammal species to use the site is deemed to be low. No constraints are predicted as a result of the potential presence of small mammals and passing Badgers. As a precaution it is recommended that during the construction phase of the project any trenches and other excavations are back-filled before nightfall or a ramp left to allow animals to easily exit, and any open pipes larger than 150 mm should be capped off overnight.

Birds

4.12 The site provides foraging habitat for birds and an abundance of nesting habitat, most of which would be retained.

4.13 All nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments). No further surveys are required at this time but as a precaution it is recommended that any clearance of small trees or scrub be carried out outside of the bird-nesting season of March to August. Where this is not possible, the vegetation would need to be surveyed for nesting birds by a suitably qualified ecologist prior to works commencing. If they are found, then the nest and surrounding habitat must remain intact until the young have fledged.

4.14 In order to compensate for the minimal loss of nesting sites and enhance the site for birds, the following options could be explored for inclusion on the buildings:

- Nest boxes for swifts could be incorporated into the eaves. These not only provide nesting sites for Swifts but can also be used by other species such as House Sparrows and Starlings.
- House Martin nests could be provided under the eaves.
- Individual boxes, such as the Schwegler Bird Home 1MR, could also be installed at a height of at least 2 m, on the east to north sides of the buildings.
- Groups of multiple small bird boxes could also be installed at a height of least 2 m on east to north sides of the building to provide nesting sites for birds such as House Sparrow.

Amphibians

4.15 There are no ponds on site but there is an abundance terrestrial habitat for amphibians. Great Crested Newts were considered to be absent in 2016 following eDNA analysis of water samples taken from four ponds in the surrounding area. The likelihood of Great Crested Newts colonising these ponds since this time is low but it cannot be entirely ruled out.

4.16 Great Crested Newts and their places of breeding or rest are protected under the Wildlife and Countryside Act 1981 (and amendments) and The Conservation of Habitats and Species Regulations 2010 making it illegal to kill, injure, capture or disturb a Great Crested Newt and to damage or destroy a breeding or resting site of this species. All activities that would otherwise constitute an offence under The Conservation of Habitats and Species Regulations 2010 must be licensed by Natural England. Great Crested Newts are also a NERC Priority Species.

4.17 The whole site is approximately 0.88 ha in size, 0.6 ha of which will be developed or subject to some form of works. There are no ponds on site and in terms of terrestrial habitat, all of the 0.6 ha falls within 250 m of the nearest potential breeding pond. Using Natural England's rapid risk assessment, where any land (not just newt habitat) falls within 250 m of any breeding pond where greater than 0.5 ha is to be lost or damaged, the risk of an offence being committed it classified as 'amber: offence likely'.

4.18 Using Natural England's survey guidance table, where no ponds are to be lost or damaged, the development is 100-250 m from the nearest pond, and the loss or damage to terrestrial habitat is greater that 0.5 ha, the maximum age of survey data is three years. The previous surveys are therefore out of date and it is likely that the local planning authority will request that these be updated OR a district licence application be made to NatureSpace. This would negate the need for further surveys and instead a payment towards this licence would mitigate for potential impacts to this species and allow works to proceed without delay. However, the most cost

effective solution is likely to be updating the previous eDNA surveys of the ponds in the surrounding area, which in all likelihood would return negative results and avoid the costs associated with the district licence.

4.19 The new pond could be enhanced to provide suitable aquatic habitat for this species and other amphibians and wildlife. Hibernacula could be positioned near the pond. The pond edges should not be straight and there should be a sloping aspect at one side of the pond to allow wildlife to get in and out. Shallow shelved areas should also be created to provide a diversity of conditions for flora and fauna. If implemented, these measures would result in a significant gain for biodiversity

Invertebrates

4.20 The site provides a variety of habitats for invertebrates and only limited areas will be lost, most of which will be temporary. The creation of new garden habitats is likely to provide opportunities for invertebrates. Further enhancement for invertebrates could be achieved by creating deadwood piles in the woodland and/or providing invertebrate homes for pollinators.

5.0 References

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, SI 2007/1843, London: HMSO.

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Defra (2011) *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. Defra.

JNCC (2007). *UK BAP Priority Species*. [Online]. Available at: http://jncc.defra.gov.uk/page-5717 [accessed on 11th February 2021]

Mitchell-Jones, A.J. (2004). *The Bat Mitigation Guidelines*. English Nature: Peterborough.

Wildlife and Countryside Act 1981 (and amendments), (c.69), London: HMSO.

Appendix 5.

Cotswold Archaeology

Upton's Garden, Whitminster
Gloucestershire

Heritage Assessment

Report prepared for:
Newland Homes Ltd.

[redacted]

July 2021

Andover Cirencester Milton Keynes Suffolk

Upton's Garden, Whitminster
Gloucestershire

Heritage Assessment

prepared by date	
checked by date	
approved by signed date	

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ILLUSTRATIONS

PHOTOGRAPHS

SUMMARY

Project Name: Upton's Garden
Location: Whitminster, Stroud
NGR: 377312, 208150

In May 2021, Cotswold Archaeology was commissioned by Newland Homes Ltd. to undertake a Heritage Assessment in respect of land at Upton's Garden, Whitminster, Stroud. Presently the Site comprises an area of overgrown grass but has been recently used as a construction compound during the construction of the housing scheme to the south-east.

No significant known archaeological remains have been identified within the Site, however, there is considered to be a potential for Roman remains to survive within the Site. Therefore, further investigation is required in order to fully understand the archaeological potential of the Site and therefore the likely effects of the proposed development on this resource. It is recommended that this investigation initially comprises a geophysical survey followed by a programmed of trial trenching. The scope of this investigation will be agreed through a formal Written Scheme of Investigation (WSI) with the Council Archaeologist.

It is considered that the proposals would not lead to harm to the significance of any potentially sensitive heritage assets being consistent with the requirements of the Planning (Listed Buildings and Conservation Areas) Act, 1990, the NPPF, and the Local Plan.

1. INTRODUCTION

1.1. In May 2021, Cotswold Archaeology was commissioned by Newland Homes Ltd. to undertake a Heritage Assessment in respect of land at Upton's Garden, Whitminster, Stroud (hereafter referred to as 'the Site'). Presently the Site comprises an area of rough grass but has been recently used as a construction compound during the construction of the housing scheme to the south-east. The Site is located to the north of Upton's Garden road on the western edge of Whitminster, *c.* 6km north-west of Stroud (NGR: 377312, 208150; Fig. 1).

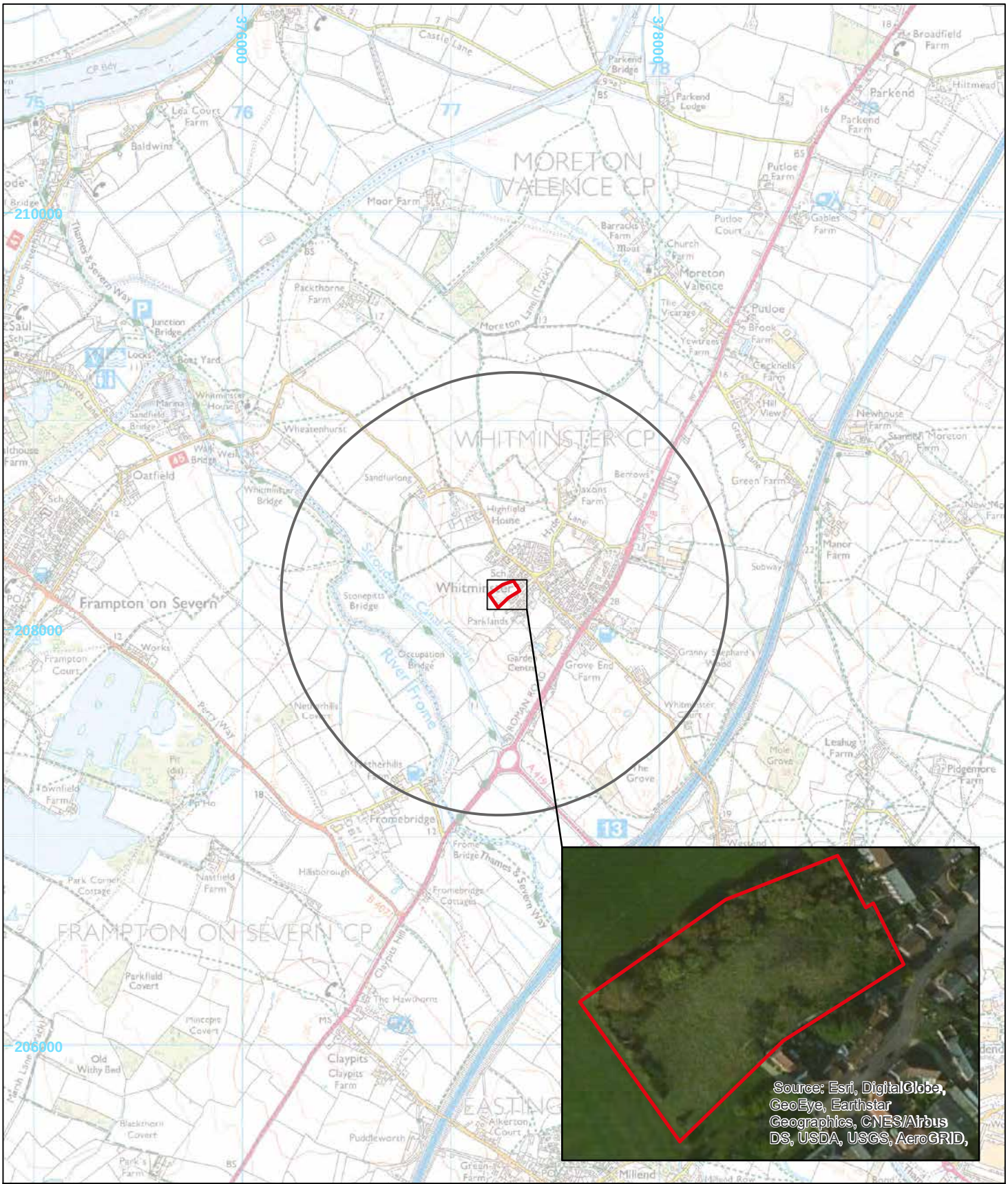
1.2. The proposed development will comprise the construction of 11 two-storey residential dwellings with associated garages and infrastructure in the east of the Site. The land in the west is to be retained as open space with the existing boundary planting retained.

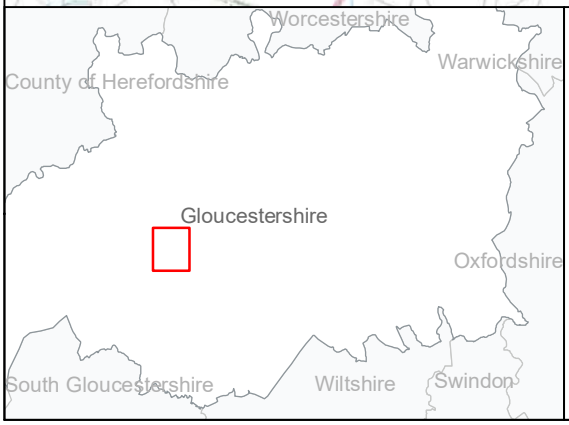
Objectives and professional standards

1.3. The composition and development of the historic environment within the Site and wider landscape are discussed in this report. A determination of the significance of any heritage assets located within the Site, and any heritage assets beyond the Site boundary that may potentially be affected by the development proposals, is presented. Any potential development effects upon the significance of these heritage assets (both adverse and/or beneficial) are then described.

1.4. Cotswold Archaeology is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA). This report has been prepared in accordance with appropriate standards and guidance, including the 'Standard and Guidance for Historic Environment Desk-Based Assessment' published by CIfA in 2014 and updated in 2017 and 2020. This states that, insofar as they relate to the determination of planning applications, heritage desk-based assessments should:

> *'…enable reasoned proposals and decisions to be made [as to] whether to mitigate, offset or accept without further intervention [any identified heritage] impact' (CIfA 2020, 4).*





Site

Study Area

0 1 km

Cotswold Archaeology

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Milton Keynes 01908 564660
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PROJECT TITLE

Upton Gardens, Whitminster, Gloucestershire

FIGURE TITLE

Site location plan

PROJECT NO. [redacted]
DATE 03/06/2021
SCALE @ A4 1:25,000

FIGURE NO. 1

1.5. The 'Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment' (Historic England 2015), further clarifies that a desk-based assessment should:

> *'…determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within a specified area, and the impact of the proposed development on the significance of the historic environment, or will identify the need for further evaluation' (Historic England 2015, 3).*

Statute, policy and guidance context

1.6. The Site is located in the local authority of Stroud District Council and the local development plan, the Stroud District Local Plan, was adopted in 2015. The relevant policy for the historic environment is Policy ES10: Valuing our historic environment and assets.

1.7. This assessment has been undertaken within the key statute, policy and guidance context presented within Table 1.1. The applicable provisions contained within these statute, policy and guidance documents are referred to, and discussed, as relevant, throughout the text. Fuller detail is provided in Appendix 1.

Statute	Description
Ancient Monuments and Archaeological Areas Act (1979)	Act of Parliament providing for the maintenance of a schedule of archaeological remains of the highest significance, affording them statutory protection.
Planning (Listed Buildings and Conservation Areas) Act (1990)	Act of Parliament placing a duty upon the Local Planning Authority (or, as the case may be, the Secretary of State) to afford due consideration to the preservation of Listed Buildings and their settings (under Section 66(1)), and Conservation Areas (under Section 72(2)), in determining planning applications.
National Heritage Act 1983 (amended 2002)	One of four Acts of Parliament providing for the protection and management of the historic environment, including the establishment of the Historic Monuments & Buildings Commission, now Historic England.
Conservation Principles (Historic England 2008)	Guidance for assessing heritage significance, with reference to contributing heritage values, in particular: *evidential* (archaeological), *historical* (illustrative and associative), *aesthetic*, and *communal*.
National Planning Policy Framework (2019)	Provides the English government's national planning policies and describes how these are expected to be applied within the planning system. Heritage is subject of Chapter 16 (page 54).
National Planning Practice Guidance (updated July 2019)	Guidance supporting the National Planning Policy Framework.

Statute	Description
Good Practice Advice in Planning: Note 2 (GPA2): Managing Significance in Decision-Taking in the Historic Environment (Historic England, 2015)	Provides useful information on assessing the significance of heritage assets, using appropriate expertise, historic environment records, recording and furthering understanding, neglect and unauthorised works, marketing and design and distinctiveness.
Good Practice Advice in Planning: Note 3 (GPA3): The Setting of Heritage Assets, Second Edition (Historic England, 2017)	Provides guidance on managing change within the settings of heritage assets, including archaeological remains and historic buildings, sites, areas, and landscapes.
Historic England Advice Note 12: Statements of Heritage Significance: Analysing Significance in Heritage Assets (Historic England, 2019)	This Historic England advice note covers the National Planning Policy Framework requirement for applicants for heritage and other consents to describe heritage significance to help local planning authorities to make decisions on the impact of proposals for change to heritage assets. Understanding the significance of heritage assets, in advance of developing proposals for their buildings and sites, enables owners and applicants to receive effective, consistent, and timely decisions.
Stroud District Local Plan (2015)	Comprises the local development plan (local plan), as required to be compiled, published, and maintained by the local authority, consistent with the requirements of the NPPF (2019). Intended to be the primary planning policy document against which planning proposals within that local authority jurisdiction are assessed. Where the development plan is found to be inadequate, primacy reverts to the NPPF (2019).
Hedgerows Regulations (1997)	Provides protection for 'important' hedgerows within the countryside, controlling their alteration and removal by means of a system of statutory notification.

Table 1.1 Key statute, policy and guidance

Consultation

1.8. This assessment has been undertaken in accordance with a Written Scheme of Investigation (WSI), formalising the adopted scope and methodology (CA 2021). The WSI was submitted to the Archaeological Officer, Gloucestershire County Council (GCC), on 3rd June 2021 for review, comment, and approval prior. Confirmation of the scope was received on 25th June 2021. The officer indicated that the results of the recent geophysical survey and evaluation at the east of Whitminster should be included within the report. This excavation report is currently in draft form; however, [redacted] at RPS kindly provided summary information to include within this assessment.

2. METHODOLOGY

Data collection, analysis and presentation

2.1. This assessment has been informed by available historic environment information, subject to limitations due to the current health and safety restrictions as a result of COVID-19. In this instance, this is considered to be sufficient to understand the archaeological potential of the Site, the significance of identified heritage assets, and any potential development effects. This approach accords, where practicable under present restrictions, with the provisions of the NPPF (2019) and the guidance issued by CIfA (2020). The data has been collected from a wide variety of sources and where this has not been possible to obtain this has been outlined in the summary set out in Table 2.1. Limitations to the study are specifically set out in 'limitations' below.

Source	Data
National Heritage List for England (NHLE)	Current information relating to designated heritage assets, and heritage assets considered to be 'at risk'.
Gloucestershire Historic Environment Record (HER)	Heritage sites and events records, Historic Landscape Characterisation (HLC) data, and other spatial data supplied in digital format (shapefiles) and hardcopy.
Historic England Archives (HEA)	Currently not available due to COVID-19 government-imposed restrictions.
Gloucestershire Archives	Historic mapping, historic documentation, and relevant published and grey literature.
Historic England's Aerial Photograph Research Unit	Vertical and oblique aerial photography ranging in date from the 1940s to present.
Defra Data Services Platform (environment.data.gov.uk)	LiDAR imagery and point cloud data, available from the Defra Data Services Platform
Genealogist, Envirocheck, Know your Place, National Library of Scotland & other cartographic websites	Historic (Ordnance Survey and Tithe) mapping in digital format.
British Geological Survey (BGS) website	UK geological mapping (bedrock & superficial deposits) & borehole data.

Table 2.1 Key data sources

2.2. Prior to obtaining data from these sources, an initial analysis was undertaken in order to identify a relevant and proportionate study area. This analysis utilised

industry-standard GIS software, and primarily entailed a review of recorded heritage assets in the immediate and wider landscape, using available datasets.

2.3. On this basis a 1km study area, measured from the boundaries of the Site, was considered sufficient to capture the relevant HER data, and provide the necessary context for understanding archaeological potential and heritage significance in respect of the Site. All of the spatial data held by the HER – the primary historic data repository – for the land within the study area, was requested. The records were analysed and further refined in order to narrow the research focus onto those of relevance to the present assessment. Not all HER records are therefore referred to, discussed or illustrated further within the body of this report, only those that are relevant. These are listed in a cross-referenced gazetteer provided at the end of this report (Appendix 2) and are illustrated on the figures accompanying this report.

2.4. A Site visit was also undertaken as part of this assessment on Thursday 17th June 2021. The weather was sunny and clear. The primary objectives of the site visit were to assess the Site's historic landscape context, including its association with any known or potential heritage assets, and to identify any evidence for previous truncation of the on-site stratigraphy. The Site visit also allowed for the identification of any previously unknown heritage assets within the Site, and assessment of their nature, condition, significance and potential susceptibility to impact. The wider landscape was examined, as relevant, from accessible public rights of way.

Aerial photographs held at Historic England Archives

2.5. The Site is covered by the Frampton on Severn National Mapping Programme (Dickson 2007), a detailed aerial survey which examined aerial images of the survey area and recorded any identified archaeological features. This data was provided by the GHER and reviewed and analysed for the current assessment. The Historic England Archives, which hold aerial photographs ranging in date from 1942 to 1990 is currently open but is operating at a reduced service in light of COVID-19 restrictions. As such, the NMP was considered sufficient for this assessment and any available photographs as held at the Historic England Archives were not examined.

2.6. To further complement the data available, any additional images held by online repositories such as Britain from Above, were examined, as well as data collated by CA for projects within the surrounding area.

LiDAR imagery

2.7. Existing 1m Digital Terrain Model (DTM) LiDAR data was analysed with the specific aim of clarifying the extent any potential archaeological remains.

2.8. LiDAR DTM tiles were obtained from the Environment Agency (EA), through the Government Open Data portal (environment.data.gov.uk). The data was available at 50cm-resolution for the western extent of the study area. DTM tiles were downloaded in ASCII (.asc) format, with each .asc file covering an area measuring 100x100m-square. EA state that their specifications for Lidar data require absolute height error to be less than +-15cm, and relative error to be less than +-5cm (EA, 2016). The planar accuracy of the data is guaranteed to +- 40cm (absolute), while relative planar accuracy depends on the altitude of the survey aircraft but can generally be said to be +-20cm (ibid.).

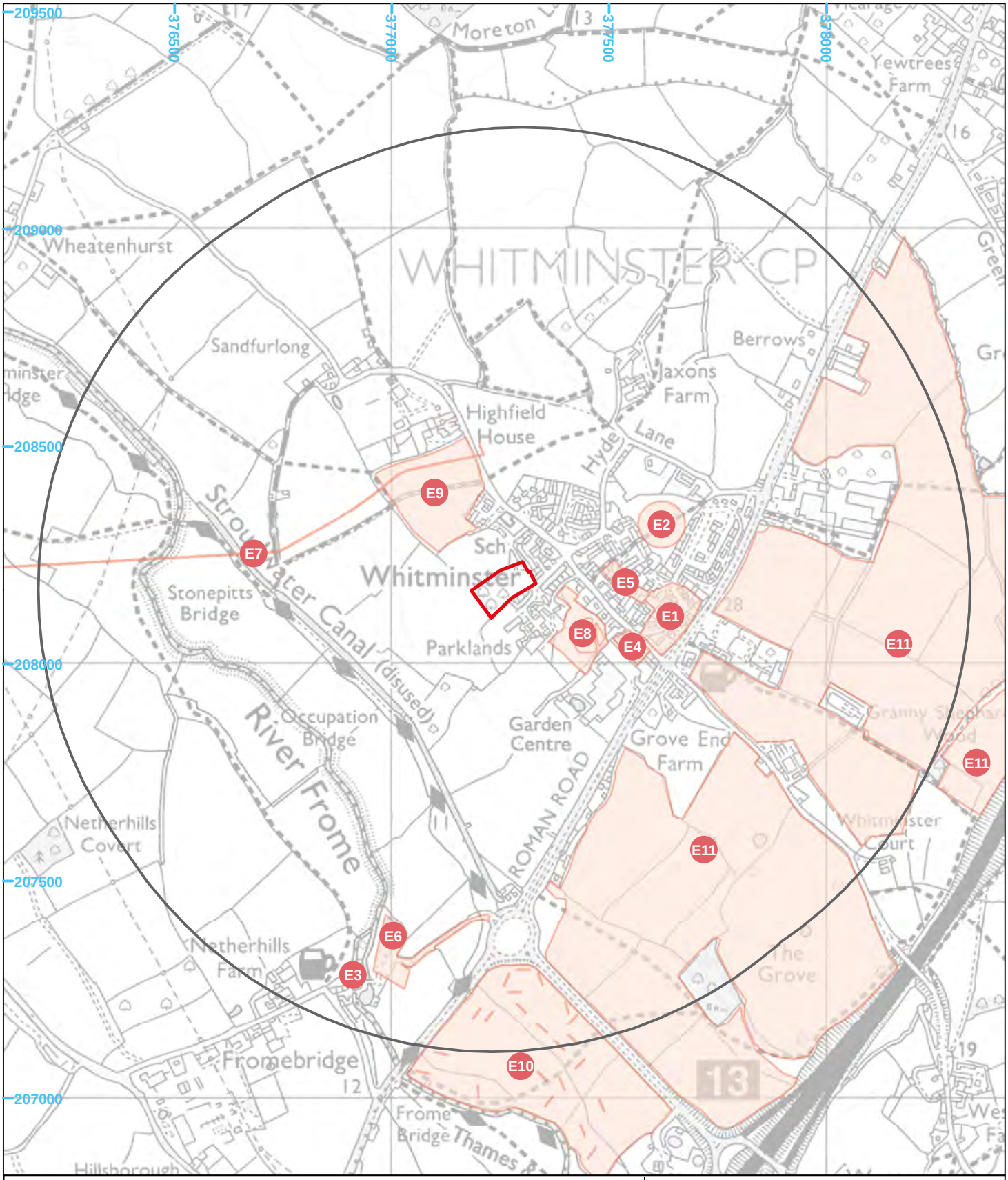
2.9. The LiDAR .asc files contain British National Grid as the "native" coordinate reference system. Esri's ArcMap 10.5.1was employed to create and visualize the data in ways which emphasize the micro-topographical variation suitable for identifying potential archaeological features. The DTM tiles were combined into mosaic raster datasets using QuantumGIS 3.4.

2.10. A number of visualizations were then produced including multi-direction hillshading and local relief model using ArcMap 10.5.1. The parameters were set to those appropriate for the topography of the area. The output images from the RVT software were then imported into the geodatabase, and further settings manipulation was undertaken to enhance the visualization for archaeological feature detection in ArcMap 10.5.1.

2.11. The results of the analysis of the LiDAR are shown on Fig. 5.

Previous archaeological investigations

2.12. A considerable amount of archaeological fieldwork has previously been carried out within the study area. Intrusive investigations, which include watching briefs, evaluations and excavations, are illustrated on Fig. 2. The recorded geophysical survey on land to the east of the A38 and north of the A419 (Fig. 2, **EV11**) comprises the area for the recent evaluation undertaken by RPS. As stated above, this evaluation is not yet recorded within the HER as the excavation report is currently in draft form. Information discussed within Section 4 below has been provided for the purposes of this assessment.



Site

Study Area

Previous Investigations

0 500m

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Suffolk 01449 900120

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PROJECT TITLE

Upton Gardens, Whitminster
Gloucestershire

FIGURE TITLE

Previous Archaeological Investigations

[redacted]

PROJECT NO [redacted]
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FIGURE NO. 2

2.13. Previous investigations of relevance to this assessment are listed in Appendix 2. The results of these investigations are discussed in Section 4, below.

Assessment of heritage significance

2.14. The significance of known and potential heritage assets within the Site, and any beyond the Site which may be affected by the proposed development, has been assessed and described, in accordance with paragraph 189 of the NPPF (2019), the guidance issued by CIfA (2020), Historic Environment Good Practice Advice in Planning Note 2 (HE 2015) and Advice Note 12: Statements of Heritage Significance: Analysing Significance in Heritage Assets (Historic England 2019). Determination of significance has been undertaken according to the industry-standard guidance on assessing heritage value provided within Conservation Principles (English Heritage 2008). This approach considers heritage significance to derive from a combination of discrete heritage values, principal amongst which are: i) evidential (archaeological) value, ii) historic (illustrative and associative) value, iii) aesthetic value, iv) communal value, amongst others. Further detail of this approach, including the detailed definition of those aforementioned values, as set out, and advocated, by Historic England, is provided in Appendix 1 of this report.

Assessment of potential development effects (benefit and harm)

2.15. The present report sets out the ways in which identified susceptible heritage assets might be affected by the proposals, as well as the anticipated extent of any such effects. Both physical effects, i.e. resulting from the direct truncation of archaeological remains, and non-physical effects, i.e. resulting from changes to the setting of heritage assets, have been assessed. With regard to non-physical effects or 'settings assessment', the five-step assessment methodology advocated by Historic England, and set out in the Second Edition of GPA3 (Historic England, 2017), has been adhered to (presented in greater detail in Appendix 1).

2.16. Identified effects upon heritage assets have been defined within broad 'level of effect' categories (Table 2.2 below). These are consistent with key national heritage policy and guidance terminology, particularly that of the NPPF (2019). This has been done in order to improve the intelligibility of the assessment results for purposes of quick reference and ready comprehension. These broad determinations of level of effect should be viewed within the context of the qualifying discussions of significance and impact presented in this report.

2.17. It should be noted that the overall effect of development proposals upon the designated heritage asset are judged, bearing in mind both any specific harms or benefits (an approach consistent with the Court of Appeal judgement Palmer v. Herefordshire Council & ANR Neutral Citation Number [2016] EWCA Civ 1061).

2.18. In relation to non-designated heritage assets, the key applicable policy is paragraph 197 of the NPPF (2019), which states that:

> 'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset [our emphasis].'

2.19. Thus, with regard to non-designated heritage assets, this report seeks to identify the significance of the heritage asset(s) which may be affected, and the scale of any harm or loss to that significance.

Level of effect	Description	Applicable statute & policy
Heritage benefit	The proposals would better enhance or reveal the heritage significance of the heritage asset.	Enhancing or better revealing the significance of a heritage asset is a desirable development outcome in respect of heritage. It is consistent with key policy and guidance, including the NPPF (2019) paragraphs 185 and 200.
No harm	The proposals would preserve the significance of the heritage asset.	Preserving a Listed building and its setting is consistent with s66 of the Planning (Listed Buildings and Conservation Areas) Act (1990). Preserving or enhancing the character or appearance of a Conservation Area is consistent with s72 of the Act. Sustaining the significance of a heritage asset is consistent with paragraph 185 of the NPPF and should be at the core of any material local planning policies in respect of heritage.
Less than substantial harm (lower end)	The proposals would be anticipated to result in a restricted level of harm to the significance of the heritage asset, such that the asset's contributing heritage values would be largely preserved.	In determining an application, this level of harm should be weighed against the public benefits of the proposals, as per paragraph 196 of the NPPF (2019). Proposals involving change to a Listed building or its setting, or any features of special architectural or historic interest which it possesses, or change to the character or appearance of Conservation
Less than substantial harm	The proposals would lead to a notable level of harm to the significance of the heritage asset. A	

Level of effect	Description	Applicable statute & policy
(upper end)	reduced, but appreciable, degree of its heritage significance would remain.	Areas, must also be considered within the context of Sections 7, 66(1) and 72(2) of the 1990 Act. *The provisions of the Act do not apply to the setting of Conservation Areas*. Proposals with the potential to physically affect a Scheduled Monument (including the ground beneath that monument) will be subject to the provisions of the Ancient Monuments and Archaeological Areas Act (1979); *these provisions do not apply to proposals involving changes to the setting of Scheduled Monuments*. With regard to non-designated heritage assets, the scale of harm or loss should be weighed against the significance of the asset, in accordance with paragraph 197 of the NPPF.
Substantial harm	The proposals would very much reduce the heritage asset's significance or vitiate that significance altogether.	Paragraphs 193 - 196 of the NPPF (2019) would apply. Sections 7, 66(1) and 72(2) of the Planning Act (1990), and the Ancient Monuments and Archaeological Areas Act (1979), may also apply. In relation to non-designated heritage assets, the scale of harm or loss should be weighed against the significance of the asset, in accordance with paragraph 197 of the NPPF.

Table 2.2 Summary of level of effect categories (benefit and harm) referred to in this report in relation to heritage assets, and the applicable statute and policy.

2.20. The July 2019 revision of the Planning Practice Guidance (PPG) defines non-designated heritage assets as those identified as such in publicly accessible lists or documents provided by the plan-making body. Where these sources do not specifically define assets as *non-designated heritage assets*, they will be referred to as *heritage assets* for the purpose of this report. The assessment of *non-designated heritage assets* and *heritage assets* will be equivalent in this report, in line with industry standards and guidance on assessing significance and impact. They may not, however, carry equivalent weight in planning as set out within the provisions of the NPPF.

Limitations of the assessment

2.21. This assessment is principally a desk-based study and has utilised secondary information derived from a variety of sources, only some of which have been

directly examined for the purpose of this assessment. The assumption is made that this data, as well as that derived from secondary sources, is reasonably accurate. The records held by HER are not a record of all surviving heritage assets, but a record of the discovery of a wide range of archaeological and historical components of the historic environment. The information held within these repositories is not complete and does not preclude the subsequent discovery of further elements of the historic environment that are, at present, unknown.

2.22. A review of historic aerial photographs of the Site and study area held by Historic England was excluded from the scope of this assessment, given that the area was studied as part of the Frampton On Severn National Mapping Programme undertaken by Historic England and the data from this survey was provided by the HER. A review on photographs available at online repositories such as Britain from Above was also undertaken (accessed June 2021). No available photographs of the Site were identified.

2.23. The Gloucestershire Archives online catalogue was consulted, and no sources were identified that would be vital to this assessment. Whilst the archive is now open there are still ongoing restrictions in place as a result of the COVID-19 pandemic and safe and healthy concerns. As such, no archive visit was undertaken. There may be other relevant material held by the National Archives, other local repositories, and in private collections, although sufficient information to respond to the scope of this assessment was available in from the resources consulted.

2.24. A walkover survey was conducted within the Site on Thursday 17th June 2021, which was undertaken in dry and clear weather conditions. Access was afforded within the Site, although such observations are limited since archaeological remains can survive below-ground with no visible surface indications of their presence. It is possible that unknown archaeological remains may be present within the Site. There was also sufficient access to heritage assets to assess likely impacts upon the significance of the assets due to changes to their setting.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Landscape context

3.1. The Site is a small area of grass wasteland bordered by mature trees (Photos 1 and 2) to the north of Upton's Garden and south of the Whitminster playing field and pavilion (Fig. 1). The Site lies on the western edge of the village of Whitminster with agricultural land lying to the west. The Site is relatively flat and lies at *c.* 32m above Ordnance Datum (aOD).

Photo 1: Image of the Site taken from the western edge looking north-east

3.2. The wider environs of the Site lie within the Severn and Avon Vales, a national character area which is characterised by low lying open agircultral land with the M5 motorway running though the centre. The River Frome lies c. 500m west of the Site and the M5 motorway lies c. 1.2km to the east. The study area comprises the village of Whitminster surrounded by agricultural land.

Geology

3.3. The Site is located on a bedrock of Blue Lias Formation and Charmouth Mudstone Formation, a sedimentary bedrock formed approximately 183 to 210 million years ago in the Jurassic and Triassic periods (BGS 2021). No superficial deposits have been recorded within the Site.

Photo 2: Image of the woodland in the north of the Site, looking west

Historic Landscape Character

3.4. Within the Gloucestershire Historic Landscape Characterisation (HLC) (Hoyle 2006), the Site lies within an area categorised as '*Less irregular enclosure partly reflecting former unenclosed cultivation patterns*' and '*Existing settlement - present extent*'.

3.5. The characteristics of this type are based on irregular shaped fields with the field boundaries from this phase of enclosure generally preserving the outline of the old fieldstrips, with dog-leg angles indicating the place where neighbouring strips were amalgamated. A notable degree of field boundary loss has taken place in the environs of the Site. This form of field system is relatively well-represented both in the local and wider landscape, and as such it is not a rare form of field system. It is not considered that the field arrangement comprises a 'heritage asset' in and of itself.

Designated heritage assets

3.6. There are no designated heritage assets within the Site, however, within the study area the Stroud Industrial Heritage Conservation Area (Fig. 14, **A**) lies *c.* 150m

south-west of the Site. There are also a number of Listed Buildings within the study area, including the following:

- Grade II listed Parklands (Fig. 14, **B**) *c.* 50m south of the Site,
- Grade II listed Parklands Farmhouse (Fig. 14, **C**) *c.* 70m south of the Site,
- Grade II listed Yew Tree Cottage (Fig. 14, **D**) *c.* 150m east of the Site,
- Grade II listed The Old Forge (Fig. 14, **E**) *c.* 380m south-east of the Site,
- Grade II listed Oak Cottage (Fig. 14, **F**) *c.* 410m north-east of the Site,
- Grade II listed King's Orchard (Fig. 14, **G**) *c.* 480m north-east of the Site,
- Grade II listed Jaxons Farmhouse (Fig. 14, **H**) *c.* 490m north-east of the Site,
- Grade II listed Fromebridge Mill (Fig. 14, **I**) *c.* 880m south-west of the Site, and
- Grade II listed Millowner's House (Fig. 14, **J**) *c.* 910m south-west of the Site.

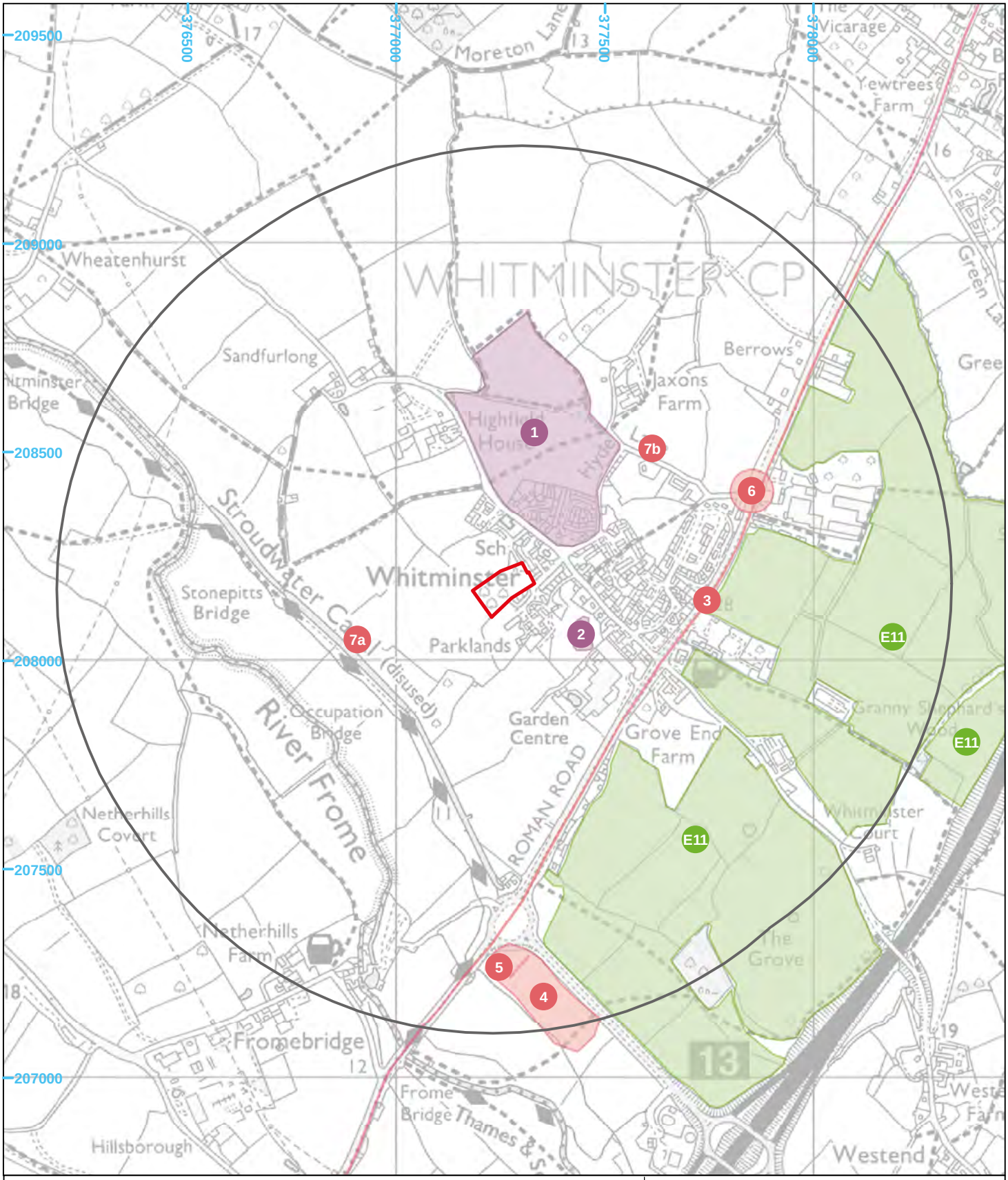
3.7. These assets are detailed in Appendix 2 and discussed in the historic background below, where relevant, and in Section 4.

Prehistoric

3.8. No known remains of the prehistoric period are recorded within the Site and there is a lack of confirmed prehistoric archaeological features within the study area.

3.9. The only feature of the period recorded within the HER is an area of land *c.* 90m north of the Site which may have comprised a prehistoric enclosure (Fig. 3, **1**). The area was annotated with the name 'Oldbury' on the 1837 Whitminster tithe map. The word 'Bury' is an Old English word meaning *fortified enclosure* and indicates an area of historic land use. This feasibly could also date to the Romano-British period but has been identified as *possible prehistoric* by the HER. This name is preserved in the modern street names 'Holbury Crescent', and 'Little Holbury'.

3.10. An unstratified residual worked flint was also recovered from the evaluation works undertaken at Parklands Farm *c.* 140m south of the Site within the Site (Fig. 2, **E8**; Fig 3, **2**).



- Site
- Study Area
- Prehistoric features
- Romano-British features
- 2021 Excavation (EV11) with identified Roman remains

0 500m

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PROJECT TITLE

Upton Gardens, Whitminster
Gloucestershire

FIGURE TITLE

Prehistoric and Romano-British Archaeological features

DATE 01/07/2021
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FIGURE NO. 3

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3.11. Prehistoric archaeological remains within the wider area have been largely identified along river valleys, across interfluves and prominent ridge lines/escarpments. Given the location of the Site *c.* 500m east of the River Frome, it is feasible that the wider environs of the Site were subject to some level of prehistory activity. However, as limited remains have been identified during intrusive survey work within the study area (Fig. 2), it is believed that there is low potential for prehistoric archaeological remains to survive within the Site.

Romano-British

3.12. No known remains dating to the Romano-British period are recorded within the Site, however, there is evidence of activity within the wider environs of the Site.

3.13. Within the study area, the HER records the alignment of the supposed Romano-British road, connecting Gloucester to Sea Mills, running *c.* 360m to the east of the Site and following the course of the A38 (Fig. 3, **3**). The alignment of the road has been tested and confirmed by fieldwork across its route but none of these investigations took place within the study area (Sermon 2003). Romano-British roads usually are in association, along their route, with some type of roadside settlement which might include anything from small rural settlement sites, field systems and paddocks, to villas or burial sites.

3.14. Within the study area an area of settlement (Fig. 3, **4**) has been identified *c.* 790m south-east of the Site along the course of the Roman road. An evaluation conducted in 2019 as part of the missing mile project (Fig. 2, **EV10**) identified ditches, pits and possible structural remains which were dated to the Romano-British period through artefactual evidence, and appear to correspond with a previously identified Roman field boundary (Fig. 3, **5**) *c.* 860m south-east of the Site. It is possible that this settlement was also associated with the identified Whitminster Roman villa (location not reproduced) *c.* 1.5km south-east of the Site beyond the M5 motorway.

3.15. An additional area of Iron Age/Roman activity has been identified as part of the recent excavations undertaken by RPS (Fig. 2, **EV11**). Whilst no specific data has been provided, the excavation report being in its draft form, a summary of the results has indicated that three distinct areas of activity were identified in the northern part of the site with more dispersed activity in the south (*Pers comms. Neil Wright)*. Identified remains include ditched enclosures, gullies, pits, and occasional

postholes. These remains have been interpreted as a low status rural site which was occupied up until at least the 3rd century AD (*Ibid*).

3.16. Additional finds within the study area include a single findspot of a coin of Constantine I found *c.* 500m to the north-east of the Site (Fig. 3, **6**), and a copper alloy brooch (Fig. 3, **7a**) recorded as part of the Portable Antiquities Scheme *c.* 310m south-west of the Site. The HER however, records this find as located *c.* 400m north-east of the Site (Fig. 3, **7b**). It is unknow which of these locations is accurate.

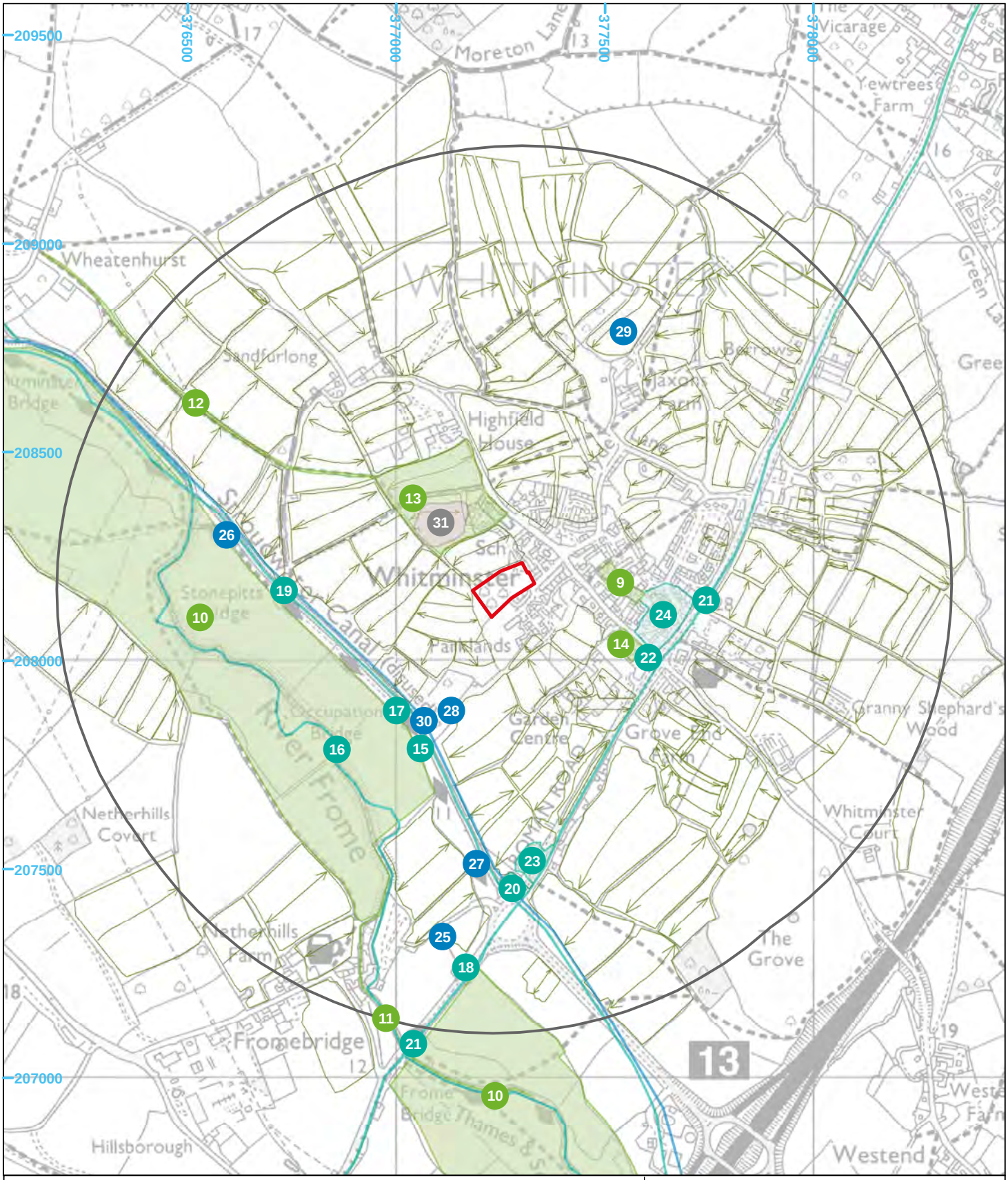
3.17. Evidence to date indicates that Romano-British activity within this area was concentrated along the route of the Roman Road. This activity seems to continue further east, beyond the limits of the study area, as indicated by the presence of the Whitminster Roman villa. The Romano-British resource for the area to the west of the Roman Road is currently fairly scarce, however, given the extensive occupation to the west of the road there is a high potential for either settlement or agricultural activity to have extended west.

Early medieval and medieval

3.18. No known early medieval or medieval archaeological features have been recorded within the Site.

3.19. The Site is situated within the parish of Whitminster, which was formerly known as 'Wheatenhurst'. Both names were used interchangeably for some time, but gradually this evolved to 'Whitminster' and was formalised in 1945 (VCH 1972). The placename 'Witenhert' appears in the Domesday Book in AD 1086, likely refering to a wooded hill (Watts 2010). The parish church and manor house lie in a small settlement, still known as Wheatenhurst, in the centre of the parish *c.* 1.5km north-west of the Site, and it is probable that the early settlement referred to in Domesday was in this more westerly location.

3.20. Medieval manorial estates are commonly associated with an open field system which are generally comprised of three large fields which are worked in selions/strips. The Site may have been located within this open field system or part of the wider common or waste land. Surviving remains of medieval open field systems within the landscape include earthworks of medieval ridge and furrow and dog-leg field boundaries.



- Site
- Study Area
- Medieval features
- Post-medieval features
- Modern features
- Undated features
- Medieval/ Post-medieval Ridge and furrow earthworks (8)

0 500m

Cotswold Archaeology

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PROJECT TITLE

Upton Gardens, Whitminster
Gloucestershire

FIGURE TITLE

Medieval, post-medieval and Modern Archaeological features

PROJECT NO [redacted]
DATE 01/07/2021
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FIGURE NO. 4

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3.21. Within the study area areas of ridge and furrow have been identified as part of the NMP (Fig. 3, **8**), however, these earthworks have been broadly dated to the medieval and/or post-medieval period. As the individual photographs analysed as part of the NMP were not viewed as part of this assessment, the date of these earthworks could not be verified. One area of confirmed medieval ridge and furrow has been identified during the1997 evaluation at Kidnams Farm (Fig. 2, **EV5**) *c.* 150m east of the Site (Fig. 4, **9**). Dog-leg field boundaries, however, are present, particularly to the north-west or south-west of the Site, which does indicate that the Site was within the open field system.

3.22. Analysis of the LiDAR data has identified remains of ridge and furrow in the environs of the Site (Fig. 5), with the earthworks to the south-west and west of the Site of post-medieval or modern origin. The earthworks to the north of the Site, however, appear sinuous in nature and thus are likely medieval in date. Only very faint remnant of ridge and furrow are present within the south-west corner of the Site (Fig. 5). The absence of earthworks with the remainder of the Site is likely as a result of previous ploughing or impacts associated with the use of the Site as a compound.

Fig. 5: LiDAR Imagrey of the Site

3.23. Within the floodplains of the River Frome *c.* 340m to the west of the Site, earthworks of a medieval or post-medieval water meadow have been identified as part of the NMP (Fig. 4, **10**). This water meadow is defined by a system of parallel and perpendicular ditches and is located either side of Fromebridge Mill. Water management earthworks relating to the construction of a leat leading to the Frombridge mill were also recorded *c.* 850m south-west of the Site (Fig. 4, **11**).

3.24. Additional medieval features within the study area include a medieval trackway visible as earthworks which was recorded *c.* 360m to the north-west of the Site (Fig. 4, **12**), and a medieval chantry chapel (Fig. 4, **13**) at the southern end of this trackway *c.* 100m north of the Site. The chantry chapel was documented in 1270 and was dedicated to the Holy Trinity. Further evidence of medieval activity was uncovered in 1972 adjacent to the junction of the A38 with School Lane, during the construction of the housing estate now named 'The Close', *c.* 220m south-east of the Site (Fig. 4, **14**; Fig. 2, **EV4**). Several sherds of pottery dating from the 12th to 14th centuries were recovered, as well as an elongated depression and sub-bell-shaped feature containing a large concentration of iron-working slag, indicating some kind of rural settlement which likely is the origins of the current settlement of Whitminster.

3.25. Within the medieval period, the Site likely comprised either part of the open field system or wasteland on the southern edge of the medieval settlement at Wheatenhurst. No ridge and furrow earthworks survive within the Site. Any below-ground remnants of furrows, or any other remnant agricultural features of this period, are unlikely to be of sufficient heritage significance to comprise 'heritage assets'.

Post-medieval and modern

3.26. No known post-medieval or modern heritage assets are documented within the Site.

3.27. During the post-medieval period, the Site and surrounding landscape remained largely agircultral in nature, as evidenced by the recorded ridge and furrow identified by the NMP (Fig. 4, **8**). The former open fields of Whitminster parish were enclosed piecemeal in the early post-medieval period, with the archives holding a deed dated to 1757 which details '*One piece of Wheatenhurst Enclosure'*.

3.28. Throughout the 18th century the production and trade of cloth saw considerable growth and the cloth industry became established throughout the Stroud Valleys.

The expansion of the cloth industry was greatly aided by an upgrading of the transport network within the Stroud Valley. Most of the development of Whitminster happened due to its location by the River Severn where it intersects several canals, smaller tributaries, including the River Frome and with the construction of the Stroudwater Canal. There was a number of attempts to link the woollen mills within the Stroud Valley to the River Severn, in order to increase the transportation of trade. The third attempt was the first successful one, the Stroudwater Canal (Fig. 4, **15**), which was built between 1775 and 1779, and is now partly infilled. The two previous unsuccessful attempts were the Cambridge and Kemmett (Fig. 4, **16**) Canals.

3.29. The Stroudwater Canal, known as the Stroudwater Navigation allowed flat bottomed trows, the standard work vessels of the River Severn, to travel up the valley to Stroud. It was thus built as a 'broad' canal, with locks and bridges capable of taking vessels up to just under 70 ft long and 16 ft in the beam. There was, however, no towpath for horses until the start of the nineteenth century, which coincided with the use of towpaths on the River Severn. There are a few features associated with the canal within the study area, as well as the route of the canal both infilled and existing. Features within the study area include:

- A 18th century bridge over the now infilled section of the canal (Fig. 4, **17**), *c.* 300 south-west of the Site
- A 19th century culvert (Fig. 4, **18**) *c.* 850m south of the Site
- The site of a swing bridge (Fig. 4, **19**) *c.* 450m west of the Site, and
- Whitminster coal wharf (Fig. 4, **20**) of which only two cottage buildings remain, *c.* 610m south of the Site.

3.30. Additional post-medieval features within the study area include the 1726 turnpike road from Gloucester to Fromebridge (Fig. 4, **21**) *c.* 350m east of the Site; the site of a toll house (Fig. 4, **22**) *c.* 300m east of the Site; and a possible post-medieval gravel pit (Fig. 4, **23**) recorded by the NMP *c.* 540m south-east of the Site. A watching brief undertaken in 1972 during work at The Close, Whitminster (Fig. 2, **EV1**) uncovered building foundations and pottery sherds (Fig. 4, **24**) dated between the 16th and 19th centuries.

3.31. During World War II a series of defensive structures including four pillboxes (Fig. 4, **25**, **26**, **27**, and **28**) and a searchlight battery site (Fig. 4, **29**) were constructed in association with the River Frome and the Sharpness and Stroudwater Canals as

part of the defensive network to protect Gloucester, forming the green GHD defence line (Fig. 4, **30**).

3.32. Additional undated archaeological features within the study area comprise a series of undated pits and linear features (Fig. 4, **31**) of archaeological origin uncovered during a trail trench evaluation at School Lane (Fig. 2, **EV9**) *c.* 130m north of the Site.

Historic Map Regression

3.33. The earliest map of the Site viewed as part of this assessment is the altered 1931 map from the original 1838 Tithe Map of Whitminster (Fig. 6). This shows the Site as comprising a part of two larger fields (plots 126 and 136) and a band of woodland in the north (plot 135). All plots are owned by Richard Martin Esquire, with plot 126 being occupied by William Martin. Plot 136 and plot 126 are both recorded as pasture with plot 126 named 'The Tining' and plot 136 named 'Paddock, indicating its land use. The name 'The Tining' is derived from the Old English word for *enclosure* and indicates that this field may have been enclosed since the Saxon period.

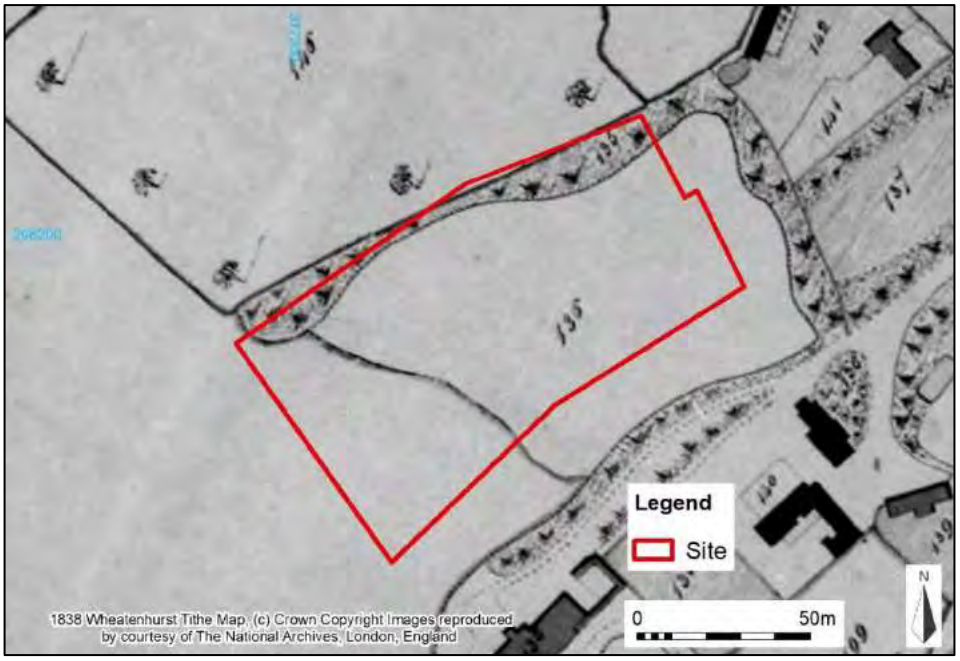


Fig. 6: 1838 Tithe Map of the Parish of Whitminster

3.34. The First Edition Ordnance Survey Map from 1883-4 (Fig. 7) shows the Site in more accurate detail and scale. This map shows a realignment of the field boundaries; however, the Site is still comprised of a part of two larger fields bounded to the

north by a band of woodland. Trees are represented also beyond the band of woodland and within the fields and field boundaries.

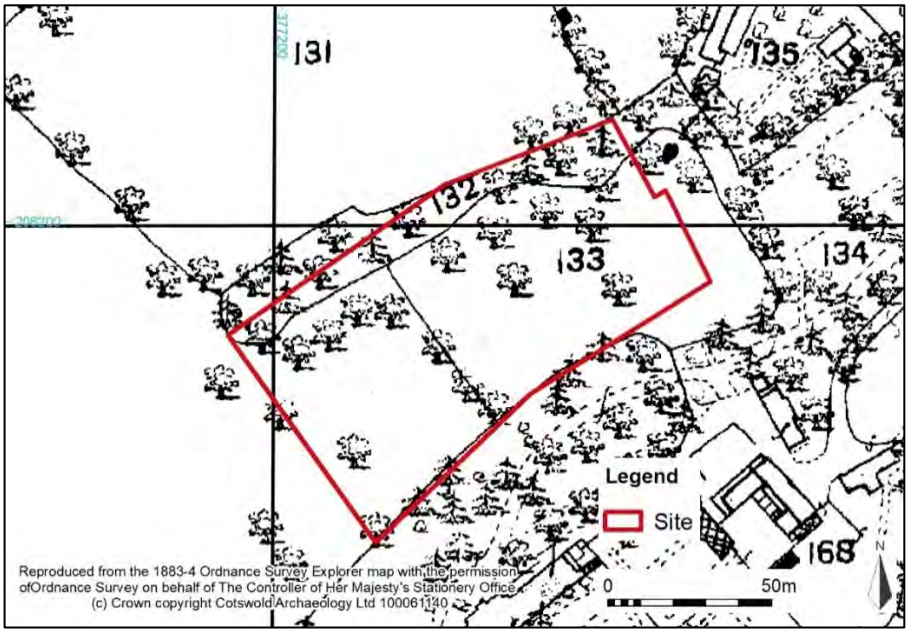


Fig. 7: 1883-4 First Edition OS Map

3.35. By 1902 (Fig. 8) an additional field boundary occurs along the western edge of the Site, which now is formed of one smaller field in the west, part of a larger field to the east, and woodland to the north.

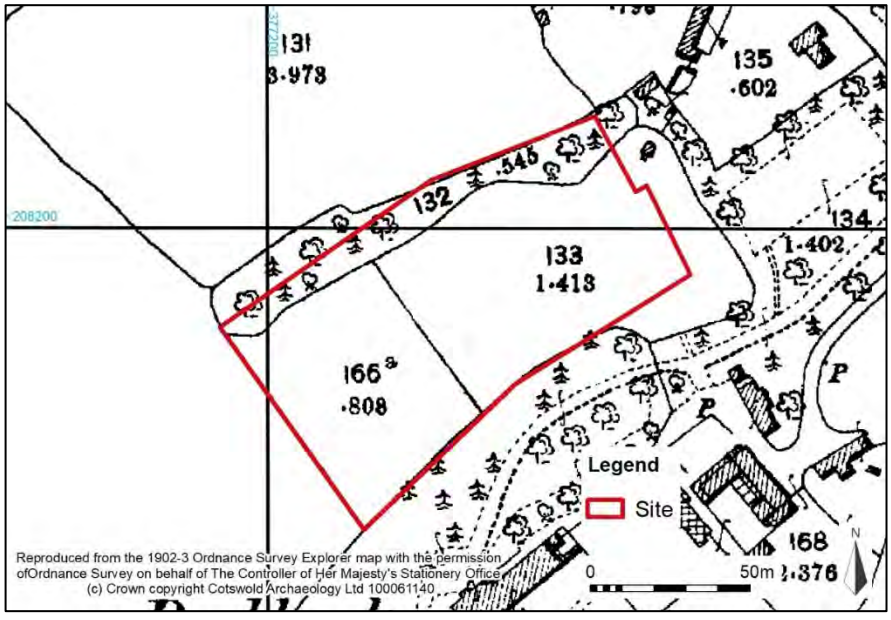


Fig. 8: 1902-3 OS Map

3.36. No further change is shown in the cartographic record until the 1970s (Appendix 3). The 1977 OS Map (Fig. 9) shows a footpath or additional boundary within the east

of the Site, represented by a dashed line. Two structures are shown to the east of this line (outside of the current Site redline area) which likely represent agricultural structures or temporary buildings. These are no longer depicted by the 1993 OS Map (Fig. 10). By the mid-1990s, all fields were amalgamated forming a single field with the area of woodland to the north.

3.37. By the late 1999s an additional temporary structure is shown in the east of the Site (Fig. 11). In the early 2000s the land to the immediate south and east of the Site was developed into residential properties. During the construction of these properties, land within the Site was used as an access area and hardstanding (Fig. 12). The Site was returned to grassland in 2006 (Fig. 13). No further change has occurred within the Site.

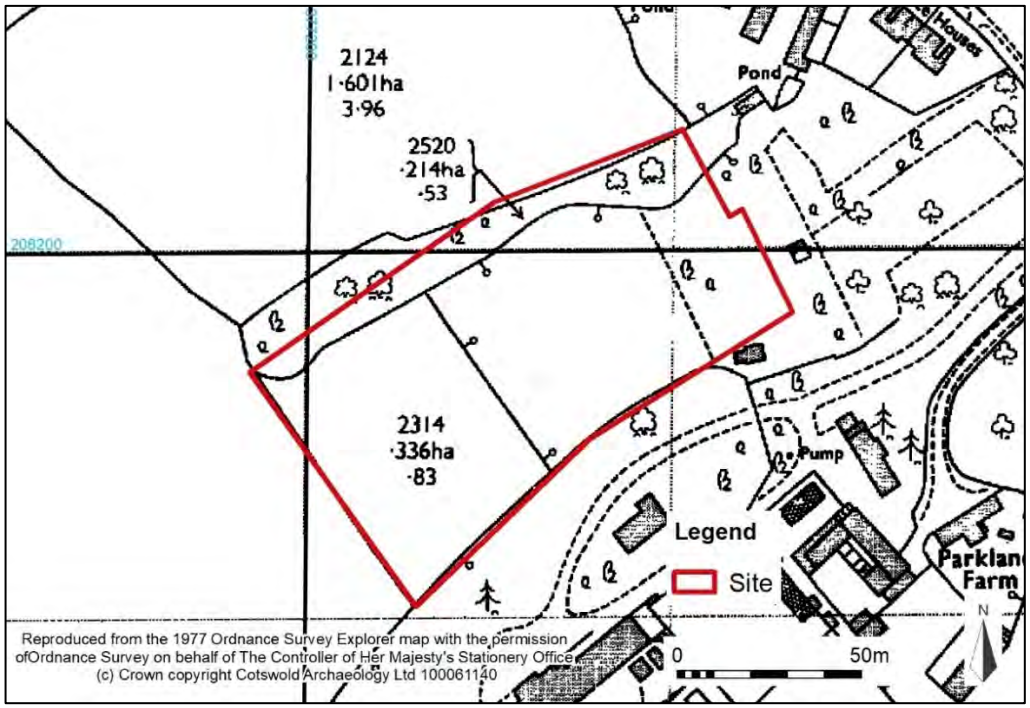


Fig. 9: 1977 OS Map

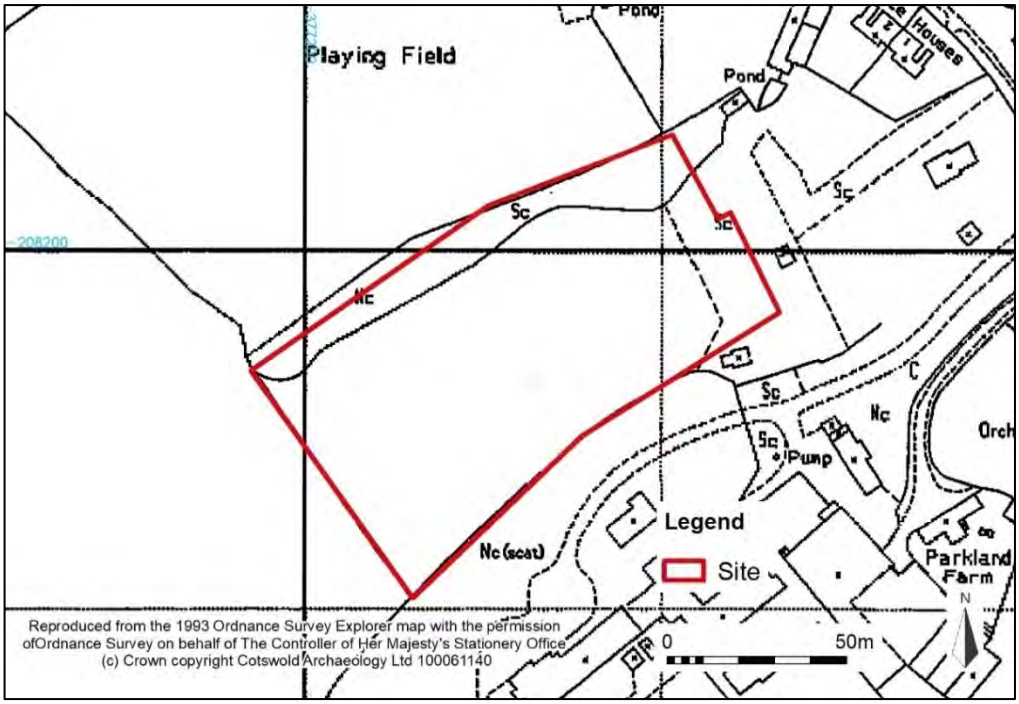


Fig. 10: 1993 OS Map

Fig. 11: 1999 Aerial Image of the Site

Fig. 12: 2005 Aerial Image of the Site

Fig. 13: 2006 Aerial Image of the Site

Important Hedgerows

3.38. The northern boundary of the Site is comprised of a woodland strip (Fig. 13) which is recorded on the 1838 Tithe map (Fig. 5). It is not considered that the woodland strip comprises a 'hedgerow' and thus is not considered important under The Hedgerow Regulations 1997. The hedgerows within the Site, which comprise its southern, eastern and western border (Fig. 13) postdate 1845 which is set out as a benchmark test in the 1896 Short Titles Acts. As such, none of the hedgerows within the Site are considered 'important hedgerows' under the 1997 Act. Thus, their removal is not a heritage constraint or matter.

4. SETTING ASSESSMENT

4.1. This section considers potential non-physical effects upon the significance of susceptible heritage assets within the Site environs. Non-physical effects are those that derive from changes to the setting of heritage assets as a result of new development. All heritage assets included within the settings assessment are summarised in the gazetteer in Appendix 2 and shown on Figure 14. Those assets identified as potentially susceptible to non-physical impact, and thus subject to more detailed assessment, are discussed in greater detail within the remainder of this section.

Step 1: Identification of heritage assets potentially affected

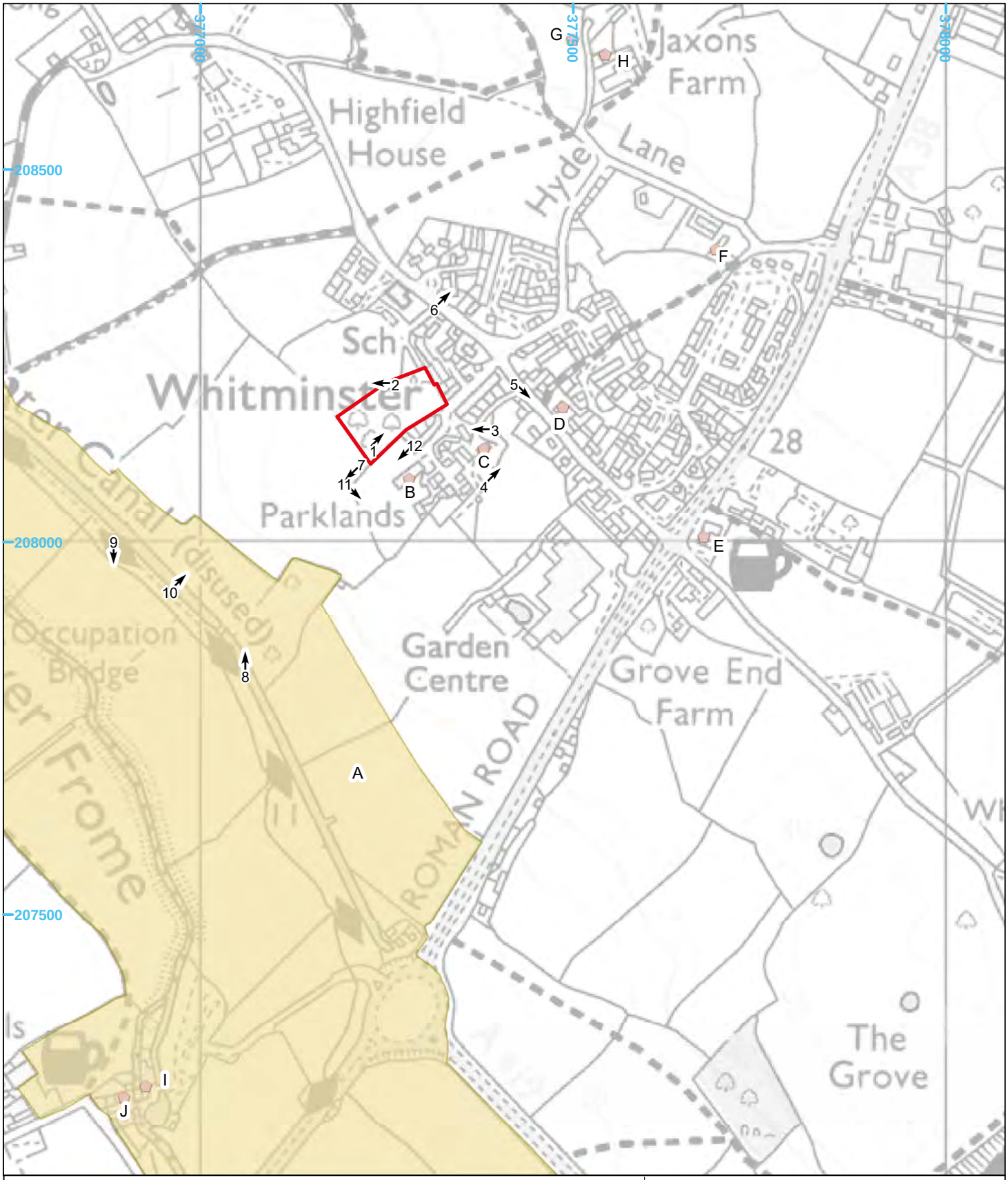
4.2. Step 1 of the Second Edition of Historic England's 2017 'Good Practice Advice in Planning: Note 3' (GPA3) is to 'identify which heritage assets and their settings are affected' (see Appendix 1). GPA3 notes that Step 1 should identify the heritage assets which are likely to be affected as a result of any change to their experience, as a result of the development proposal (GPA3, page 9).

4.3. A number of heritage assets were identified as part of Step 1, as potentially susceptible to impact as a result of changes to their setting. These included the following:

- Stroud Industrial Heritage Conservation Area (Fig. 14, **A**) *c.* 150m south-west of the Site, and
- Grade II listed Parklands (Fig. 14, **B)** *c*. 50m south of the Site.

4.4. These assets have been identified using a combination of GIS analysis and field examination, which has considered, amongst other factors, the surrounding topographic and environmental conditions, built form, vegetation cover, and lines of sight, within the context of the assets' heritage significance.

4.5. The Site visit, and study area walkover, identified that there would be no non-physical impact upon the significance of any other heritage assets as a result of changes to the use and/or appearance of the Site. These unaffected assets comprise late-19th century townhouses consistent with the local vernacular and are as follows:



Site

Industrial Heritage Conservation Area

Grade I Listed Building

Grade II* Listed Building

Grade II Listed Building

Photo locations

0 350m

Cotswold Archaeology

Andover 01264 347630
Cirencester 01285 771022
Milton Keynes 01908 564660
Suffolk 01449 900120

w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Upton Gardens, Whitminster
Gloucestershire

FIGURE TITLE

Designated Assets

CR0751

DATE 01/07/2021

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- Grade II listed Parklands Farmhouse (Fig. 14, **C**) c. 70m south of the Site,
- Grade II listed Yew Tree Cottage (Fig. 14, **D**) *c.* 150m east of the Site,
- Grade II listed The Old Forge (Fig. 14, **E**) *c.* 380m south-east of the Site,
- Grade II listed Oak Cottage (Fig. 14, **F**) *c.* 410m north-east of the Site,
- Grade II listed King's Orchard (Fig. 14, **G**) *c.* 480m north-east of the Site,
- Grade II listed Jaxons Farmhouse (Fig. 14, **H**) *c.* 490m north-east of the Site,
- Grade II listed Fromebridge Mill (Fig. 14, **I**) *c.* 880m south-west of the Site, and
- Grade II listed Millowner's House (Fig. 14, **J**) *c.* 910m south-west of the Site.

4.6. In all instances, this was due to a combination of the distance between the assets and the Site, the intervening built form, topography and vegetation. Beyond the visual considerations, there was also found to be no discernible historical associations between these assets and the land within the Site. As such, no further assessment was either proportionate or necessary in respect of these assets. These assets were given additional consideration as part of Step 1, as discussed briefly below, but were not progressed for further assessment.

4.7. The Grade II Listed Parklands Farmhouse (Fig. 14, **C**) located *c.* 70m south of the Site is currently surrounded by modern residential housing (Photos 3 and 4) and its historic setting, that of the wider Parkland farm complex, is no longer extant. Thus, the significance of the Parklands Farmhouse is now solely derived from its physical built form which provides evidential and historical (illustrative) value. The presence of the surrounding modern built form means that there is no visibility between the Farmhouse and the Site and thus, the Farmhouse is not sensitive to changes within the Site.

Photo 3: Image of the Listed Parklands Farmhouse (C) looking west

Photo 4: Image of the Listed Parklands Farmhouse (C) looking north-east

4.8. Both the Grade II Listed Yew Tree Cottage (Fig. 14, **D**) and The Old Forge (Fig. 14, **E**) are located along the historic core of Whitminster, now known as School Lane to the north of the A38 and Grove Lane to the south. The significance of these Listed Buildings derives from historical and evidential values embodied by their physical forms. The setting of these assets is provided by the village core itself, which provides context for these buildings. The Site lies to the north of these buildings, forming part of the wider rural landscape which is no longer part of the setting of these Listed Buildings due to the intervening built form which has severed connections between the historic built and rural environments. There is also no visibility from these Listed Buildings due to the intervening built form (Photo 5).

4.9. There are three Listed Buildings to the north-east of the Site on the edge of Whitminster comprising Oak Cottage (Fig. 14, **F**), Kings Orchard (Fig. 14, **G**) and Jaxons Farmhouse (Fig. 14, **H**). The significance of these Listed Buildings derives from their historical and evidential values embodied by their physical form and relationship with the immediate rural landscape in which they are located. There is no visibility between the Site and the Listed Buildings as a result of the intervening modern built development (Photo 6) and as such, the Site does not contribute to the significance of the Listed Buildings.

Photo 5: Image from School Lane east of the Site, looking south-east towards Listed Buildings D and E

Photo 6: Image from School Lane east of the Site, looking north-east towards Listed Buildings F, G and H

4.10. Similarly, the significance of the Listed Buildings to the south-west of the Site, Fromebridge Mill (Fig. 14, **I**) and Millowners House (Fig. 14, **J**) is derived from their historical and evidential values embodied by their physical form and their association with the Stroudwater Canal. There is no visibility between these Buildings and the Site due to naturally sloping topography and intervening vegetation (Photo 7). As such, the Site does not contribute to the significance of the Listed Buildings.

4.11. The setting of these assets would not be altered, and would be preserved, as would the assets' key contributing values and views. As such, the proposals will not result

in any non-physical harm to the significance of these assets, and they have not been assessed in any further detail.

Photo 7: Image from the west of the Site looking south-west towards Listed Buildings I and J

4.12. All heritage assets assessed as part of Step 1, but which were *not* progressed to Steps 2 – 3, are included in the gazetteer in Appendix 2 of this report.

Steps 2 – 3: Assessment of setting and potential effects of the development

4.13. This section presents the results of Steps 2 to 3 of the settings assessment, which have been undertaken with regard to those potentially susceptible heritage assets identified in Step 1. Step 2 considers the contribution that setting makes to the significance of potentially susceptible heritage assets. Step 3 then considers how, if at all, and to what extent any anticipated changes to the setting of those assets, as a result of development within the Site, might affect their significance.

Stroud Industrial Heritage Conservation Area (Fig. 14, A)

4.14. Stroud Industrial Heritage Conservation Area (IHCA), which was first designated in September 1987, is a linear Conservation Area, following the valleys of the River Frome and the Nailsworth Stream, extending to the east, west and south of Stroud. The IHCA follows not only these watercourses, but the various 18th and 19th century transport infrastructures, which were developed along these waterways, representing a new era of industry in the Stroud Valleys. The linear nature of the IHCA serves as a link between these industrial developments and was designed to preserve the context of Stroud's industrial legacy.

4.15. The IHCA was established to preserve and protect the industrial legacy of the Stroud Valleys, following the industrial waterways east to west along the valley, and to 'acknowledge the influences that industry has had in forming the built environment' (CAS, paragraph 3.11). The Conservation Area is comprised of industrial elements, i.e. watermills, industrial warehouses, and associated transport infrastructure (roads and railways), and rural and bucolic elements, i.e. meadows and green corridors. The relationship between the built and natural environments contributes to its character and aesthetic value of the Conservation Area.

4.16. An updated Conservation Area Statement (CAS) was produced between 2006-8 which provided an overview of the IHCA's characteristic, and special architectural and historical significance. This document was adopted as Supplementary Planning Advice (SPA) in November 2008 and comprises four volumes:

- Volume 1: Summary and Character Overview
- Volume 2: Character Parts
- Volume 3: Conservation Area Management Proposals
- Volume 4: Design Guide.

4.17. Due to the expansive, linear nature of the Conservation Area, a number of different character parts have been identified, as detailed in Volume 2 of the CAS. The character part which falls within and proximal to the Site is identified as having the potential to be affected by the proposal. This comprises character part 4.2: Wheatenhurst to Fromebridge which forms part of the wider 'Character Area 4: The Green Corridor: Rural Frome Vale' which provides part of the rural, natural character of the Conservation Area. Volume 1, Chapter 3 'Character Summary' states that:

> *'The green spaces along the IHCA are as important to its character as the built environment, acting not only as a visual setting for the buildings, but also providing a valuable insight into the historic co-existence of agriculture and industry… they play an important part in punctuating and balancing the built form and pattern of settlement in the conservation area.' [para 3.85]*

4.18. The special character of the IHCA derives from its potential to yield information of the social history of the evolution of trade and transport networks through the country, and of materials and techniques. The significance of the IHCA primarily derives from its historic (illustrative and associative), aesthetic and communal values.

Physical Surrounds – 'What Matters and Why'

4.19. This section of the Stroudwater Canal included within Character Area 4.2 runs between Wheatenhurst and Fromebridge and comprises a rural part of the canal surrounded by agricultural land. The setting of this part of the IHCA is the River Frome, which provides the historical context of the waterway's navigation, thus providing evidential and historic interest and positively contributing to the special character of the IHCA.

4.20. The immediately surrounding agricultural fields, which are included within the boundary of this section of the IHCA, provide context for the canal, as a route of travel through the rural valleys connecting areas of dispersed industrial development, positively contributing to the significance and special character of the IHCA. The wider agricultural landscape in which the canal passes through forms a part of the wider landscape, adding to its aesthetic, however, does not directly contribute to the special character of the IHCA and therefore has a neutral contribution to its significance.

4.21. The special character of this section of the IHCA is also provided by the built features associated with the canal, such as the bridge shown in Photo 8. These elements provide evidential value through the use of the canal and as such positively contribute to the significance of the IHCA.

Photo 8: Image of the Bridge on the Stroudwater Canal, looking north

4.22. This section of the Stroudwater Canal contains water; however, it is not currently used as a navigable route due to the infilling of the 'missing mile' section to the

east. This results in a loss of the functional character of the canal, which makes a negative contribution to the significance of this section of the IHCA.

Experience – 'What Matters and Why'

4.23. Historically the IHCA would have been best experienced from a boat on the canal or from the adjacent towpath which contributes to the historic, aesthetic, and evidential interest of the canal through evidencing its historic use, and thus positively contributing to the overall special character of the IHCA. This section of the Stroudwater Canal is in water; however, it is not currently used as a navigable route due to the infilling of the 'missing mile' section to the east and thus this experience is no longer available. This detracts from the experience of the IHCA and thus contributes negatively to its significance.

4.24. Currently the best way to experience this section of the IHCA is along the footpath with runs to the west of the canal. This follows the historic transport route and thus enables a similar experience whilst not on the canal itself, this enables a retention of a historic experience thus maintain its illustrative value and positively contributing to the character of the IHCA.

4.25. This section of the canal is characterised by open rolling agricultural fields to the west (Photo 9) which provide a rural aesthetic and positively contribute to the experience of travelling through a bucolic landscape. Long distance views are available over this rural landscape to the west. By contrast views to the east are short distance only due to the sloping topography which limits long distances (Photo 10) and provides a sense of enclosure. The limited modern development within proximity to the IHCA in this section enables the retention of the experience of a waterway travelling through the rural landscape.

Photo 9: Image from the west of the Stroudwater canal looking south

Photo 10: Image from the west of the Stroudwater canal looking north-east towards the Site

Contribution of the Site

4.26. The Site does not lie within the setting of the IHCA and does not contribute to its special historic interest. The Site lies within part of the wider agricultural land which is not visible from the IHCA due to the naturally sloping topography and existing vegetation. Additionally, there is no visibility between the Site and the IHCA and therefore it is concluded that the Site makes no contribution to the special character of the Conservation Area.

Summary of development effects

4.27. The special character of the IHCA is largely derived from the route of the Stroudwater canal and associated features, the River Frome, and the immediately surrounding agricultural fields. The wider agricultural fields, whilst contributing to the rural aesthetic do not add to the special character of the IHCA.

4.28. The Site lies of the western edge of Whitminster located *c.* 150m to the east of this section of the IHCA. The Site does not lie within the setting of the IHCA and is not visible from the IHCA due to the rising topography to the east which limits any views (Photo 10). Similarly, the IHCA is not visible from the Site itself due to the natural undulating topography, in which the IHCA is nestled in a natural depression and hidden in views to the west (Photo 7).

4.29. Accordingly, the Site does not contribute to the special character of the IHCA and is not visible from the designated area, neither enhancing nor detracting from its appearance and experience. Therefore, the IHCA is not sensitive to the proposed residential change within the Site. As such, the proposed housing development within the Site will result in **no harm** to the special character of the IHCA.

Grade II listed Parklands (Fig. 14, B)

4.30. Grade II Listed Parklands House (Fig. 14, **B**), henceforth the House, is a Grade II Listed 19th century regency house located *c.* 50m south of the Site. The House is comprised of limestone ashlar and rendered brick and is built in a classical villa style and echoes contemporary development in Bristol and Cheltenham (Historic England 2003). The plan of the House is a double-depth villa with the entrance in the north-west. To the north-east there is a service block (Photo 11).

4.31. The tithe map of Whitminster, recorded in 1938, shows the House as being under ownership of [redacted], along agricultural land to the west and the associated Parklands Farm (Fig. 14, **C**). Thus, it is likely that the House historically comprised of the rural residence of a wealthy landowner.

4.32. The House derives its significance from its historical, architectural, and evidential values embodied by its physical form (fabric and architectural style).

Photo 11: Image of the Grade II Listed Parklands (B), looking south-east

Photo 12: Image of the service wing of Parklands (B) looking south-west

Physical Surrounds – 'What Matters and Why'

4.33. The historic setting of the House was comprised of the grounds of the House, and the associated farm complex. The layout of the house and its grounds displays many design aspects typical of the period, when smaller country houses were built with small designed landscapes inspired by much larger landscape parks. The carriage drive, accessed from School Lane (Fig. 15) led to the front of the house, which is on the north-west facing side. The turning-circle for the carriages was at

this point, and the vestibule is reached through the front entrance here. The House was surrounded by a woodland area to the north with a more open area to the west. This design resulted in the screening of the servant's wing of the House and the farm complex to the east, whilst retaining an open and visible presence of the High-status elements of the House. This deliberate design yields further information as to the structure and design of both the House and garden and provides evidential and historic (illustrative value), thus positively contributing to the significance of the House.

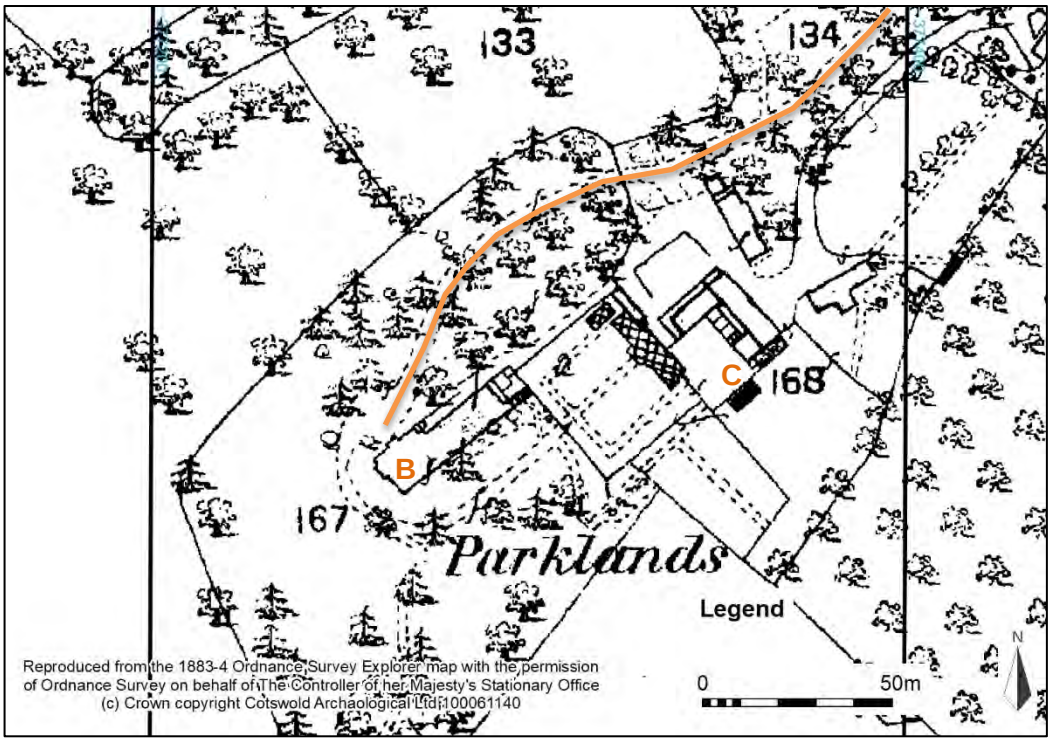

Fig. 15: First Edition OS Map showing Parklands (B) with access shown in orange and Parklands Farmhouse (C)

4.34. Originally the physical setting of the House also included the associated Farmhouse (Fig. 14 and 15, **C**) and yard, and the surrounding agricultural fields. These elements evidenced the spatial relationship between stately houses and the associated farm complexes. This relationship is no longer discernible as the farm complex is no longer extant and the farmhouse (Fig. 14 and 15, **C**) is now surrounded by modern residential developments. Similarly, the relationship between the House and the wider farmland is no longer appreciable and the historic links have been severed. This results in a negative contribution to the significance of the House through a loss of function legibility and hence of the evidential and historical values.

4.35. As such, the current setting is provided only by the grounds of the House, the designed elements of which have largely been retained and thus positively contributing to its significance through a retention of historic value. The modern houses to the west of the House do not contribute to the significance of the House neither detracting nor enhancing its appearance or experience. Thus, the modern built elements have a neutral impact on significance. Similarly, the relationship between the surrounding agricultural land and the House has been severed and as such, the agrarian landscape has a neutral contribution to the significance of the House. Whilst forming part of the wider landscape context, this landscape no longer forms part of the evidential or historic value of the House.

Experience – 'What Matters and Why'

4.36. The historic experience of the House would have been from the carriage approach, for which the woodland provided the picturesque setting. The woodland also extended to the end of the house, and thus views from the entrance were essentially of this woodland, creating a secluded experience. The views from the House to the north would have been from the main entrance over the turning circle and carriage way. This view would have been limited given the presence of woodland, however, from the upper storeys the wider landscape stretching north-west may have been visible. The main view from the House was on the south-west elevation, facing over lawns and specimen trees towards the wider agrarian landscape.

4.37. Currently, the House is best experienced from close proximity due to screening provided by the trees within the garden and the modern building developments to the east and south. Whilst this results in the retention of the screening of the House, the sense of isolation and seclusion is lost due to the infringement of modern residential developments. Views of the House are available from the Upton's Garden estate (Photo 10) or from the footpath that runs along the edge of the garden to the west of the House (Photo 9).

4.38. The main experience from the House is likely from the original main house on the western edge. Here large plated glass sash and French windows (Photo 11) likely enable for good long-distance views over the agricultural landscape to the north-west and west. This however could not be confirmed as access to the House was not possible. The view to the north of the House from the main entrance is now more open, however some trees remain providing some limited screening.

Contribution of the Site

4.39. Whilst historically part of the grounds of the House, modern development surrounding the House and the change of use within the Site to wasteland, has resulted in the setting of the House being reduced to only the surviving grounds, with its main significance derived from its physical form. As such, the Site does not currently lie within the setting of the House. Instead the Site forms a grass wasteland on the edge of the modern urban development of Whitminster and agricultural land, both of which have a neutral contribution to the significance of the House.

4.40. The Site is not located within any of the main views of the House. Main views from the House are to the south-west and from the main entrance to the north. The Site is partially visible in views from the House to the north, however, the eastern part of the Site is effectively screened as a result of existing vegetation. The western part of the Site is subject to some partial screening as a result of trees lining the boundary of the grounds of the House, however there is still glimpsed visibility. This visibility is likely to be greater from upper storeys although this was not confirmed as access to the House was not possible.

Summary of development effects

4.41. The significance of the House is derived from the built form of the House and its grounds and as such, the Site does lie within the setting of the Site. The proposed development will result in the change in land use of the Site from grassland forming part of the rural landscape to urban residential. This land however has a neutral contribution on the significance of the Site and thus the proposed development will not alter the values of the House, resulting in no change to its significance.

4.42. Whilst the Site does not lie in any available views towards the House, which are largely from Upton's Gardens and the footpath to the west of the House (Photo 11), available views from the House to the north encompass the western part of the Site. With the east of the Site is effectively screened as a result of existing vegetation.

4.43. The proposed development is for the construction of 11 two-storey residential dwellings with associated garages and infrastructure in the east of the Site. The land in the west is to be retained as an open space with the existing boundary planting retained.

4.44. The proposed construction of 11 dwellings in the east of the Site will likely be screened from the House and will not obstruct any views of the House. As such, this aspect of the proposal will result in no change. The proposed development in the west of the Site comprises open space with the existing boundary to be retained. Accordingly, there will only be negligible change in views which will occasion an improved view of the area which will be maintained rather than left to waste and overgrowing, as in its current state.

4.45. Accordingly, whilst the Site does not lie within the setting of the House, the Site is located within the view from main entrance of the House to the north. The eastern part of the Site, which is proposed for residential development is screened and thus will not be visible. The western part of the Site which is proposed to be retained as open land with the enhancement of the boundary and grounds in the likely resulting in improved view. These changes will not affect the physical and experiential elements of the House or its significance. As such, the proposed development will result in **no harm** to the House.

5. CONCLUSIONS

Previous impacts

5.1. The cartographic record shows that the Site comprised of pastureland from at least the 1830s, forming two fields which were later amalgamated. In 2005 the Site was used for access and hardstanding area/compound used during the construction of the residential development to the east and south.

5.2. There is thus likely to have been some localised impacts into the stratigraphic sequence, but most of the Site is not likely to have been affected to any significant degree.

Known heritage assets and archaeological remains

5.3. No known designated heritage assets, including archaeological remains, are documented within the Site. No known non-designated heritage assets have been identified within the Site as part of this assessment.

Potential for currently unrecorded archaeological remains

5.4. This assessment has identified a high potential for Romano-British remains within the Site. Evidence to date indicates that Romano-British activity within this area was concentrated along the route of the Roman Road with evidence of settlement and agricultural activity identified during excavations in 2019 and 2021. Given the extensive occupation to the west of the road there is a potential for either settlement or agricultural activity to have extended west.

5.5. In the medieval period, the Site appears to have comprised part of the open-fields on the edge of the Whitminster settlement. Medieval ridge and furrow has been identified to the north of the Site and sub-surface remains may survive in the Site itself. Any such remnants would be unlikely to be of sufficient heritage significance to comprise ‘heritage assets’.

Potential development effects

Physical effects

5.6. No significant known archaeological remains have been identified within the Site, however, there is considered to be a high potential for Roman remains to survive within the Site. It is recommended that geophysical survey is carried out as a next stage survey in order to provide further information on this below-ground potential.

The scope of this investigation should be agreed through a formal Written Scheme of Investigation (WSI) with the GCC archaeology officer.

Non-physical effects

5.7. It is considered that the proposals would not lead to harm to the significance of any potentially sensitive heritage assets being consistent with the requirements of the Planning (Listed Buildings and Conservation Areas) Act, 1990, the NPPF, and the Local Plan.

6. REFERENCES

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VCH 1972 *The Victoria History of the County of Gloucester* Vol 10

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Cartographic sources (viewed at Know Your Place, The Genealogist and Envirocheck)

1838	Wheatenhurst Tithe Map
1883-4	First Edition Ordnance Survey Map
1902-3	Ordnance Survey Map
1922-23	Ordnance Survey Map
1938	Ordnance Survey Map
1955	Ordnance Survey Map
1977	Ordnance Survey Map
1981	Ordnance Survey Map
1990	Ordnance Survey Map
1993	Ordnance Survey Map
1996	Ordnance Survey Map

Subsequent Ordnance Survey maps viewed at: http://www.envirocheck.co.uk/ and www.maps.nls.uk/geo/find/

Aerial photographs (Viewed at Google Earth)

Dec 1999	© 2021 Infoterra Ltd & Bluesky
Apr 2005	© 2021 Infoterra Ltd & Bluesky
Dec 2006	© 2021 Getmapping plc
Jul 2013	© 2021 Google Earth
Jun 2018	© 2021 Google Earth
Apr 2019	© 2021 CNES/ Airbus
Apr 2021	© 2021 CNES/ Airbus

APPENDIX 1: HERITAGE STATUTE POLICY & GUIDANCE

Heritage Statute: Scheduled Monuments

Scheduled Monuments are subject to the provisions of the Ancient Monuments and Archaeological Areas Act 1979. The Act sets out the controls of works affecting Scheduled Monuments and other related matters. Contrary to the requirements of the Planning Act 1990 regarding Listed buildings, the 1979 Act does not include provision for the 'setting' of Scheduled Monuments.

Heritage Statute: Listed Buildings

Listed buildings are buildings of 'special architectural or historic interest' and are subject to the provisions of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act'). Under Section 7 of the Act 'no person shall execute or cause to be executed any works for the demolition of a listed building or for its alteration or extension in any manner which would affect its character as a building of special architectural or historic interest, unless the works are authorised.' Such works are authorised under Listed Building Consent. Under Section 66 of the Act 'In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any feature of special architectural or historic interest which it possesses'.

Note on the extent of a Listed Building

Under Section 1(5) of the Act, a structure may be deemed part of a Listed Building if it is:

(a) fixed to the building, or
(b) within the curtilage of the building, which, although not fixed to the building, forms part of the land and has done so since before 1st July 1948

The inclusion of a structure deemed to be within the 'curtilage' of a building thus means that it is subject to the same statutory controls as the principal Listed Building. Inclusion within this duty is not, however, an automatic indicator of 'heritage significance' both as defined within the NPPF (2019) and within Conservation Principles (see Section 2 above). In such cases, the significance of the structure needs to be assessed both in its own right and in the contribution it makes to the significance and character of the principal Listed Building. The practical effect of the inclusion in the listing of ancillary structures is limited by the requirement that Listed Building Consent is only needed for works to the 'Listed Building' (to

include the building in the list and all the ancillary items) where they affect the special character of the Listed building as a whole.

Guidance is provided by Historic England on 'Listed Buildings and Curtilage: Historic England Advice Note 10' (Historic England 2018).

Heritage Statue: Conservation Areas

Conservation Areas are designated by the local planning authority under Section 69(1)(a) of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act'), which requires that '*Every local planning authority shall from time to time determine which parts of their area are areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance*'. Section 72 of the Act requires that '*special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area*'.

The requirements of the Act only apply to land within a Conservation Area; not to land outside it. This has been clarified in various Appeal Decisions (for example APP/F1610/A/14/2213318 Land south of Cirencester Road, Fairford, Paragraph 65: '*The Section 72 duty only applies to buildings or land in a Conservation Area, and so does not apply in this case as the site lies outside the Conservation Area*.').

The NPPF (2019) also clarifies in Paragraph 201 that '*Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance*'. Thus land or buildings may be a part of a Conservation Area, but may not necessarily be of architectural or historical significance. Similarly, not all elements of the setting of a Conservation Area will necessarily contribute to its significance, or to an equal degree.

National heritage policy: the National Planning Policy Framework

Heritage assets and heritage significance

Heritage assets comprise 'a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest' (the NPPF (2019), Annex 2). Designated heritage assets include World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields and Conservation Areas (designated under the relevant legislation; NPPF (2019), Annex 2). The NPPF (2019), Annex 2, states that the significance of a heritage asset may be archaeological, architectural, artistic or historic. Historic England's 'Conservation Principles' looks at significance as a series of 'values' which include 'evidential'. 'historical', 'aesthetic' and 'communal'.

The July 2019 revision of the Planning Practice Guidance (PPG) expanded on the definition of non-designated heritage assets. It states *that 'Non-designated heritage assets are buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of heritage significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets.'* It goes on to refer to local/neighbourhood plans, conservation area appraisals/reviews, and importantly, the local Historic Environment Record (HER) as examples of where these assets may be identified, but specifically notes that such identification should be *made 'based on sound evidence'*, with this information *'accessible to the public to provide greater clarity and certainly for developers and decision makers'*.

This defines *non-designated heritage assets* as those which have been specially defined as such through the local HER or other source made accessible to the public by the plan-making body. Where HERs or equivalent lists do not specifically refer to an asset as a *non-designated heritage asset*, it is assumed that it has not met criteria for the plan-making body to define it as such, and will be referred to as a *heritage asset* for the purpose of this report.

The assessment of *non-designated heritage assets* and *heritage assets* will be equivalent in this report, in line with industry standards and guidance on assessing significance and impact. They may not, however, carry equivalent weight in planning as set out within the provisions of the NPPF, should there be any effect to significance.

The setting of heritage assets

The 'setting' of a heritage asset comprises 'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral' (NPPF (2019), Annex 2). Thus it is important to note that 'setting' is not a heritage asset: it may contribute to the value of a heritage asset.

Guidance on assessing the effects of change upon the setting and significance of heritage assets is provided in 'Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets', which has been utilised for the present assessment (see below).

Levels of information to support planning applications

Paragraph 189 of the NPPF (2019) identifies that 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be

proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance'.

Designated heritage assets

Paragraph 184 of the NPPF (2019) explains that heritage assets 'are an irreplaceable resource and should be conserved in a manner appropriate to their significance'. Paragraph 193 notes that 'when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance'. Paragraph 194 goes on to note that 'substantial harm to or loss of a grade II listed building…should be exceptional and substantial harm to or loss of designated heritage assets of the highest significance (notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites)…should be wholly exceptional'.

Paragraph 196 clarifies that 'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including, where appropriate, securing its optimum viable use'.

Development Plan

Delivery Policy ES10 Valuing our historic environment and assets

Stroud District's historic environment will be preserved, protected or enhanced, in accordance with the principles set out below:

1. Any proposals involving a historic asset shall require a description of the heritage asset significance including any contribution made by its setting, and an assessment of the potential impact of the proposal on that significance, using appropriate expertise. This can be a desk-based assessment and a field evaluation prior to determination where necessary and should include the Gloucestershire Historic Environment Record.

2. Proposals and initiatives will be supported which conserve and, where appropriate, enhance the heritage significance and setting of the Districts heritage assets, especially those elements which contribute to the distinct identity of the District. These include:

A. the 68 sites of national archaeological importance (which are designated as Ancient Monuments), any undesignated archaeology of national significance, and the many buildings that are Listed as having special architectural or historic interest

B. the stone, bronze, iron age and roman settlements and remains; the medieval settlements including Berkeley Castle; historic houses; historic parks; gardens and villages

C. the townscapes of the larger towns such as Stroud where the industrial heritage influenced its historic grain, including its street layouts and plot sizes

D. the District's historic market towns and villages, many with designated conservation areas, such as Berkeley, Wotton Under Edge, Minchinhampton, Painswick and Dursley.

3. Proposals will be supported which protect and, where appropriate, enhance the heritage significance and setting of locally identified heritage assets, such as buildings of local architectural or historic interest, locally important archaeological sites and parks and gardens of local interest.

4. Proposals will be supported which protect and, where appropriate, enhance key views and vistas, especially of the spires and towers of historic churches and mills.

5. Any harm or loss would require clear and convincing justification to the relevant decision-maker as to why the heritage interest should be overridden. A full programme of work shall be submitted with the application, together with proposals to mitigate any adverse impact of the proposed development, and where appropriate, be implemented through measures secured by planning condition(s) or through a legal agreement.

Good Practice Advice 1-3

Historic England has issued three Good Practice Advice notes ('GPA1-3') which support the NPPF. The GPAs note that they do not constitute a statement of Government policy, nor do they seek to prescribe a single methodology: their purpose is to assist local authorities, planners, heritage consultants, and other stakeholders in the implementation of policy set out in the NPPF. This report has been produced in the context of this advice, particularly 'GPA2 – Managing Significance in Decision-Taking in the Historic Environment' and 'GPA3 – The Setting of Heritage Assets'.

GPA2 - Managing Significance in Decision-Taking in the Historic Environment

GPA2 sets out the requirement for assessing 'heritage significance' as part of the application process. Paragraph 8 notes 'understanding the nature of the significance is important to understanding the need for and best means of conservation.' This includes assessing the extent and level of significance, including the contribution made by its 'setting' (see GPA3 below). GPA2 notes that 'a desk-based assessment will determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within a specified area, and the impact of the proposed development on the significance of the historic environment, or will identify the need for further evaluation to do so' (Page 3).

GPA3 – The Setting of Heritage Assets

The NPPF (Annex 2: Glossary) defines the setting of a heritage asset as 'the surroundings in which a heritage asset is experienced…'. Step 1 of the settings assessment requires heritage assets which may be affected by development to be identified. Historic England notes that for the purposes of Step 1 this process will comprise heritage assets 'where that experience is capable of being affected by a proposed development (in any way)…'.

Step 2 of the settings process 'assess[es] the degree to which these settings and views make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated', with regard to its physical surrounds; relationship with its surroundings and patterns of use; experiential effects such as noises or smells; and the way views allow the significance of the asset to be appreciated. Step 3 requires 'assessing the effect of the proposed development on the significance of the asset(s)' – specifically to 'assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it', with regard to the location and siting of the development, its form and appearance, its permanence, and wider effects.

Step 4 of GPA3 provides commentary on 'ways to maximise enhancement and avoid or minimise harm'. It notes (Paragraph 37) that 'Maximum advantage can be secured if any effects on the significance of a heritage asset arising from development liable to affect its setting are considered from the project's inception.' It goes on to note (Paragraph 39) that 'good design may reduce or remove the harm, or provide enhancement'.

Heritage significance

Discussion of heritage significance within this assessment report makes reference to several key documents. With regard to Listed buildings and Conservation Areas it primarily discusses 'architectural and historic interest', which comprises the special interest for which they are designated.

The NPPF provides a definition of 'significance' for heritage policy (Annex 2). This states that heritage significance comprises 'The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic'. This also clarifies that for World Heritage Sites 'the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance'.

Regarding 'levels' of significance the NPPF (2019) provides a distinction between: designated heritage assets of the highest significance; designated heritage assets not of the highest significance; and non-designated heritage assets.

Historic England's 'Conservation Principles' expresses 'heritage significance' as comprising a combination of one or more of: evidential value; historical value; aesthetic value; and communal value:

- Evidential value – the elements of a historic asset that can provide evidence about past human activity, including physical remains, historic fabric, documentary/pictorial records. This evidence can provide information on the origin of the asset, what it was used for, and how it changed over time.
- Historical value (illustrative) – how a historic asset may illustrate its past life, including changing uses of the asset over time.
- Historical value (associative) – how a historic asset may be associated with a notable family, person, event, or moment, including changing uses of the asset over time.
- Aesthetic value – the way in which people draw sensory and intellectual stimulation from a historic asset. This may include its form, external appearance, and its setting, and may change over time.
- Communal value – the meaning of a historic asset to the people who relate to it. This may be a collective experience, or a memory, and can be commemorative or symbolic to individuals or groups, such as memorable events, attitudes, and periods of history. This includes social values, which relates to the role of the historic asset as a place of social interactive, distinctiveness, coherence, economic, or spiritual / religious value.

Effects upon heritage assets

Heritage benefit

The NPPF clarifies that change in the setting of heritage assets may lead to heritage benefit. Paragraph 200 of the NPPF (2019) notes that 'Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals

that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably'.

GPA3 notes that 'good design may reduce or remove the harm, or provide enhancement' (Paragraph 28). Historic England's 'Conservation Principles' states that 'Change to a significant place is inevitable, if only as a result of the passage of time, but can be neutral or beneficial in its effects on heritage values. It is only harmful if (and to the extent that) significance is reduced' (Paragraph 84).

Specific heritage benefits may be presented through activities such as repair or restoration, as set out in Conservation Principles.

Heritage harm to designated heritage assets

The NPPF (2019) does not define what constitutes 'substantial harm'. The High Court of Justice does provide a definition of this level of harm, as set out by Mr Justice Jay in *Bedford Borough Council v SoS for CLG and Nuon UK Ltd*. Paragraph 25 clarifies that, with regard to 'substantial harm': 'Plainly in the context of physical harm, this would apply in the case of demolition or destruction, being a case of total loss. It would also apply to a case of serious damage to the structure of the building. In the context of non-physical or indirect harm, the yardstick was effectively the same. One was looking for an impact which would have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced'.

Effects upon non-designated heritage assets

The NPPF (2019) paragraph 197 guides that 'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset'.

APPENDIX 2: GAZETTEER OF SELECTED RECORDED HERITAGE ASSETS

CA Ref.	Description	Grade/Period	NGR	HE ref. HER ref. *PAS ref.*
E1	1972 Watching brief undertaken during work at The Close, Whitminster	-	SO 77700, 08100	15342
E2	1972 Watching brief during drainage ditch excavations at Kidnams Farm	-	SO 77625, 08320	15343
E3	1993 watching brief during groundworks at Fromebridge Mill, Frampton on Severn	-	SO 76911, 07283	38539
E4	1995 Excavation at land south-west of School Lane	-	SO 77550, 08050	15394 15464
E5	1997 Evaluation of land adjacent to Kidnams Farm, Whitminster	-	SO 77519, 08205	50214
E6	1998-9 Watching brief during stripping for carpark at Fromebridge Mill, Frampton on Severn	-	SO 76990, 07324	49791
E7	2011 Watching brief of the Whitminster Sewage Pumping Station	-	SO 76189, 08263	42628
E8	2013 Magnetometer survey and 2014 evaluation of land at parklands Farm, Whitminster	-	SO 77417, 08080	46105 46912 46920 48631
E9	2014 Geophysical survey and watching brief on land at School Lane, Whitminster	-	SO 77109, 08386	47652 47660
E10	2017 Magnetometry survey and 2019 evaluation at Stroudwater Missing Mile	-	SO 77340, 07055	50248 51693
E11	2020 Geophysical survey at land east of the A38 and north of the A419	-	SO 78070, 07770	51847
A	Stroud Industrial Heritage Conservation Area	Post-medieval/ Conservation Area	SO 76900 07400	**n/a**
B	Parklands	Post-medieval/ Grade II Listed Building	SO 77280 08085	**1410003**
C	Parklands Farmhouse	Post-medieval/ Grade II Listed Building	SO 77380 08125	**1156015**
D	Yew Tree Cottage	Post-medieval/ Grade II Listed Building	SO 77486 08181	**1091306**
E	The Old Forge	Post-medieval/ Grade II Listed Building	SO 77675 08007	**1303091**
F	Oak Cottage	Post-medieval/ Grade II Listed Building	SO 77691 08393	**1091305**
G	King's Orchard	Post-medieval/ Grade II Listed Building	SO 77499 08674	**1303065**

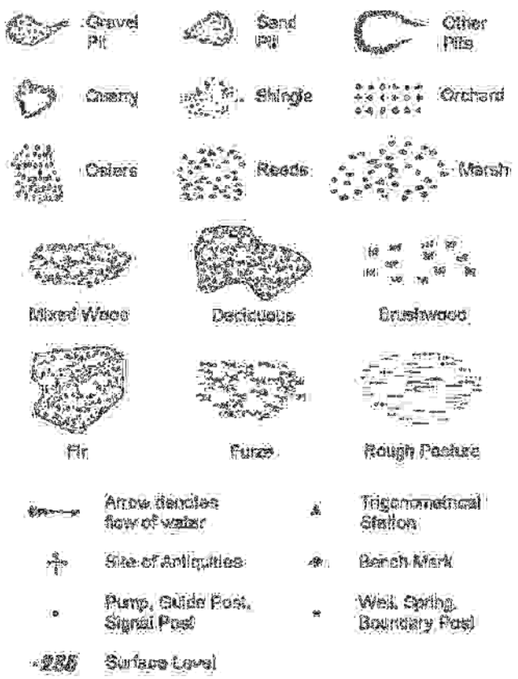
CA Ref.	Description	Grade/Period	NGR	HE ref. HER ref. *PAS ref.*
H	Jaxon's Farmhouse	Post-medieval/ Grade II Listed Building	SO 77543 08654	**1340372**
I	Fromebridge Mill	Post-medieval/ Grade II Listed Building	SO 76927 07270	**1090532**
J	Millowners House	Post-medieval/ Grade II Listed Building	SO 76898 07255	**1340725**
1	Possible prehistoric enclosure identified through placename evidence	Prehistoric?	SO 77300 08500	17264
2	Prehistoric flint	Prehistoric	SO 77417, 08080	n/a
3	Roman Road between Gloucester and Sea Mills	Romano-British	SO 81200 15000	7365
4	Remains of a Romano-British settlement	Romano-British	SO 77349 07194	51694
5	Roman field boundary	Romano-British	SO 77230 07290	13180
6	Roman coin	Romano-British	SO 77800 08400	7509
7	Copper alloy brooch identified by PAS	Romano-British	SO 77000 08000	*GLO-25E8C9*
8	Ridge and furrow identified during NMP	Medieval/ Post-medieval	n/a	n/a
9	Ridge and furrow identified during excavation	Medieval/ Post-medieval	SO 77530 08190	50215
10	Water meadows identified during NMP	Medieval/ Post-medieval	SO 76580 08060 SO 77580 06470	40488 40794
11	Leat earthworks at Fromebridge Mills	Medieval	SO 77300 06960	13105
12	Medieval trackway	Medieval	SO 76470 08650	40757
13	Medieval chantry chapel	Medieval	SO 96732 15919	51857
14	Medieval finds and structural remains	Medieval	SO 77550 08050	19917
15	Route of the Stroudwater Canal	Post-medieval	SO 75100 10500	11154
16	Route of the kemmett Canal	Post-medieval	SO 376319 06894	30711
17	18th century bridge	Post-medieval	SO 77020 07870	41578
18	19th century culvert under A38 at Fromebridge	Post-medieval	SO 77180 07270	13198
19	Site of a swingbridge	Post-medieval	SO 76730 08170	41577

CA Ref.	Description	Grade/Period	NGR	HE ref. HER ref. *PAS ref.*
20	Whitminster Wharf	Post-medieval	SO 77200 07400	30715
21	Turnpike road at A38	Post-medieval	SO 77320 07320	13136
22	Tollhouse at Whitminster crossroads	Post-medieval	SO 77600 08000	5232
23	Gravel pit	Post-medieval	SO 77320 07520	40778
24	Finds and buildings remains	Post-medieval	SO 77700 08100	9831
25	Second World War pillbox	Modern	SO 77100 07300	20852
26	Second World War pillbox	Modern	SO 76500 08400	20853
27	Second World War pillbox	Modern	SO 77193 07512	14097
28	Second World War pillbox	Modern	SO 77110 07880	13987
29	Second World War battery searchlight	Modern	SO 77540 08780	27071
30	Green HGQ line	Modern	SO 88860 97250	21835
31	Undated pits and linear features	Undated	So 77106 08335	14945

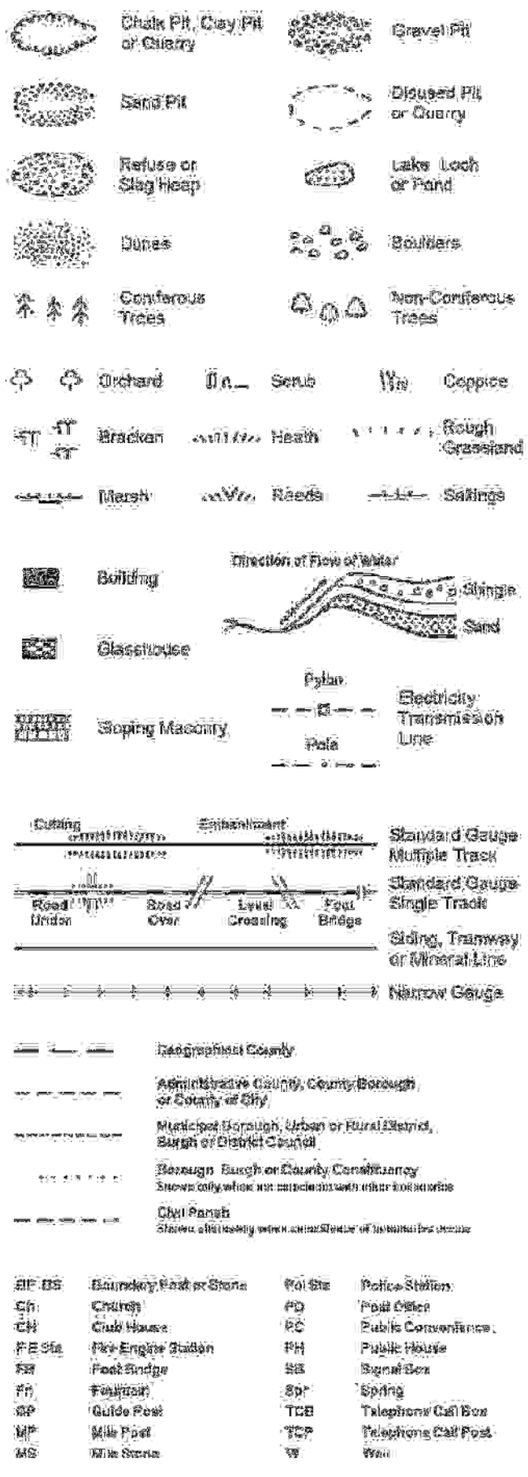
APPENDIX 3: HISTORIC ORDNANCE SURVEY MAPPING

Historical Mapping Legends

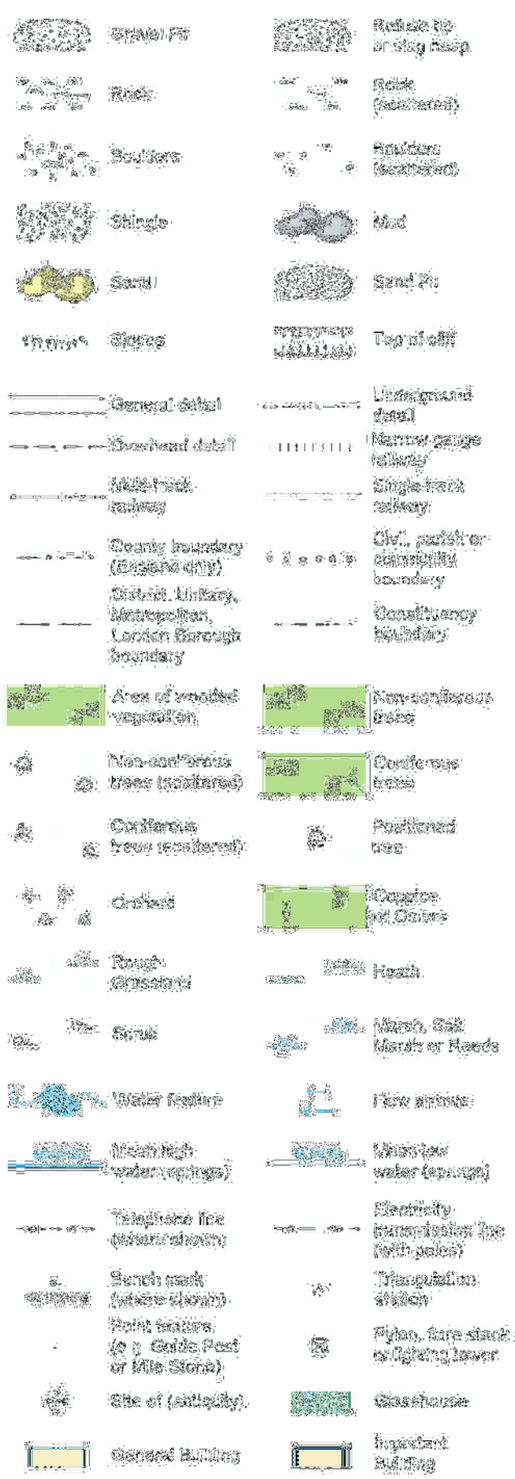
Ordnance Survey County Series 1:10,560



Ordnance Survey Plan 1:10,000



1:10,000 Raster Mapping



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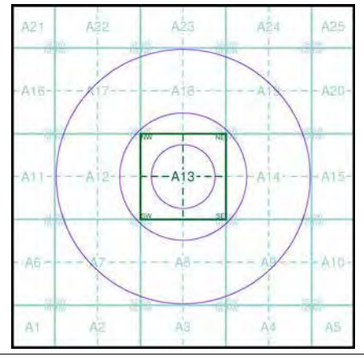
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Gloucestershire	1:10,560	1886	2
Gloucestershire	1:10,560	1903	3
Gloucestershire	1:10,560	1924	4
Gloucestershire	1:10,560	1938	5
Ordnance Survey Plan	1:10,000	1955	6
Ordnance Survey Plan	1:10,000	1972	7
Ordnance Survey Plan	1:10,000	1981	8
Ordnance Survey Plan	1:10,000	1993	9

Historical Map - Slice A



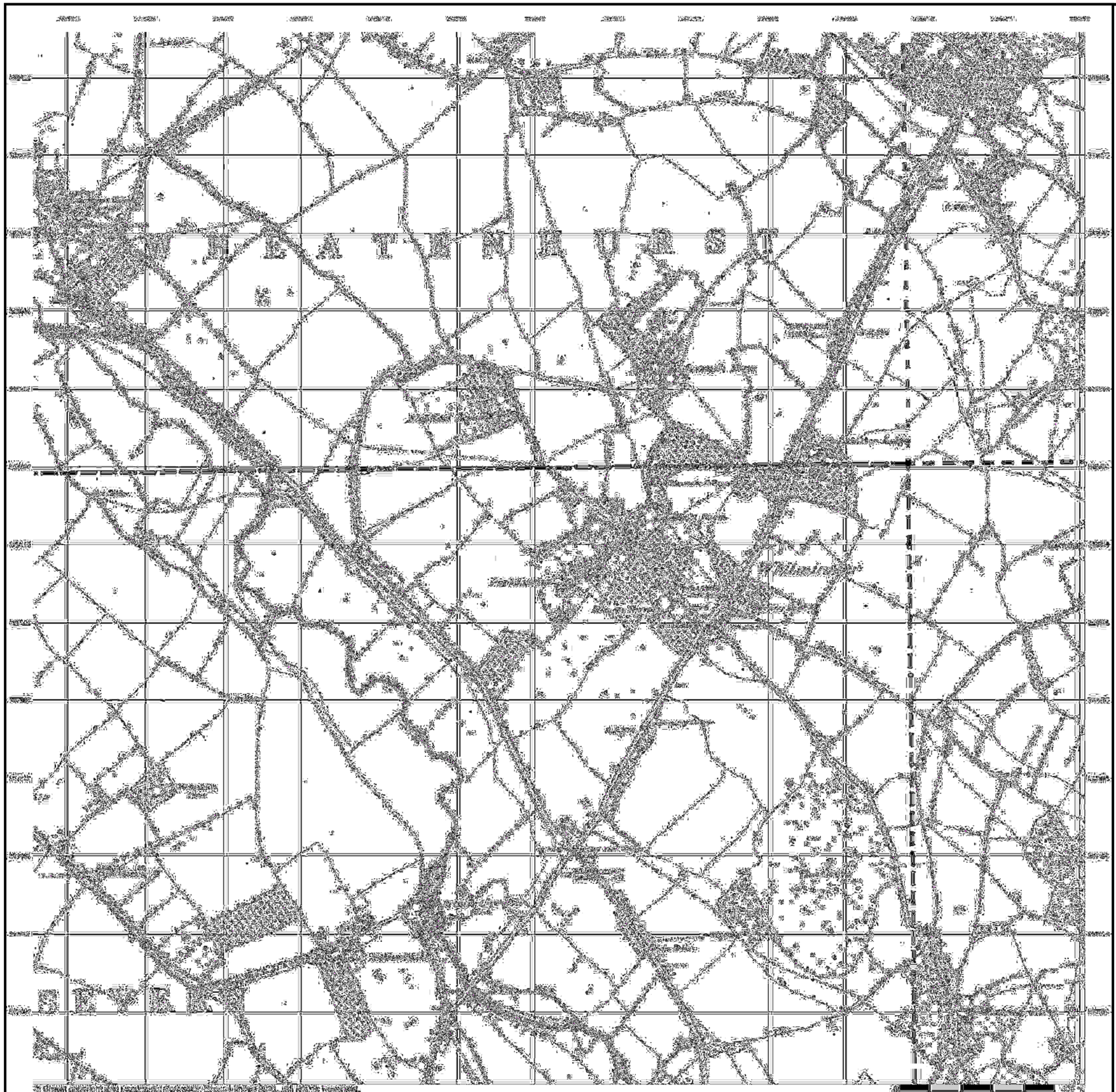
Order Details

Order Number: [redacted]
Customer Ref:
National Grid Reference: 377260, 208160
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at, Whitminster, Gloucestershire

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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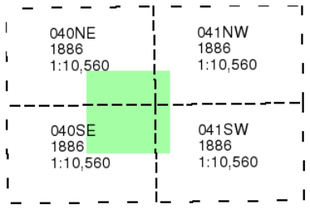
Gloucestershire

Published 1886

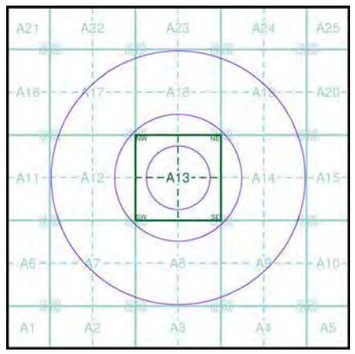
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: [redacted]
Customer Ref:
National Grid Reference: 377260, 208160
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at, Whitminster, Gloucestershire

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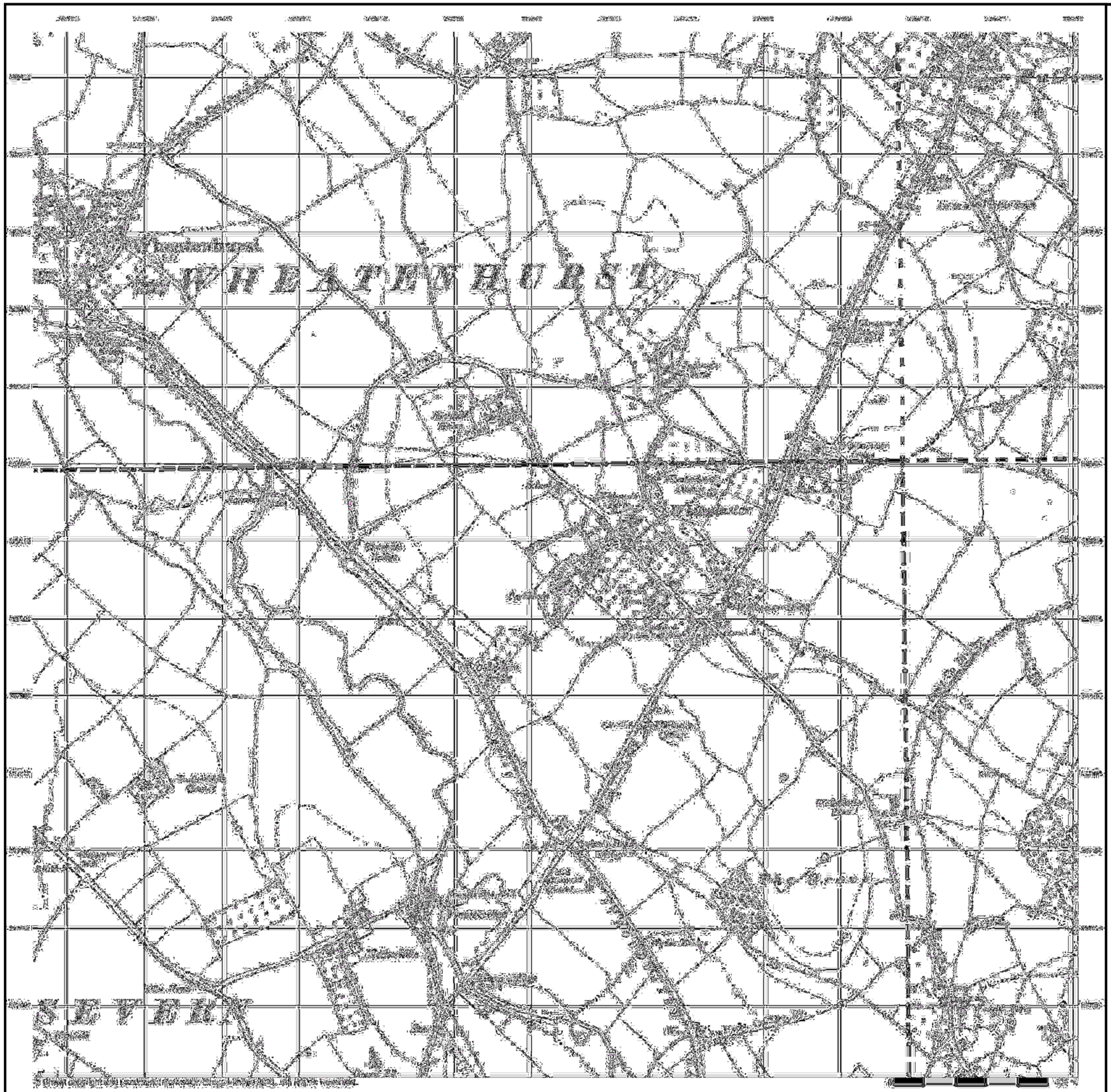

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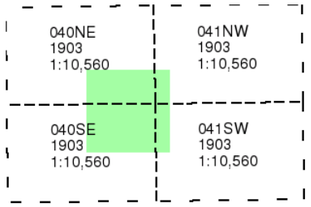
Published 1903

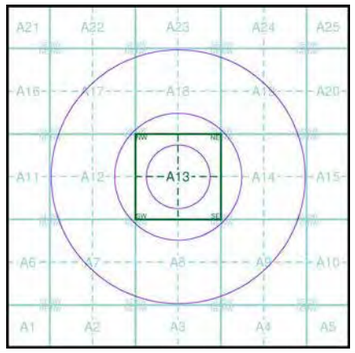
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: [redacted]
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Site Details

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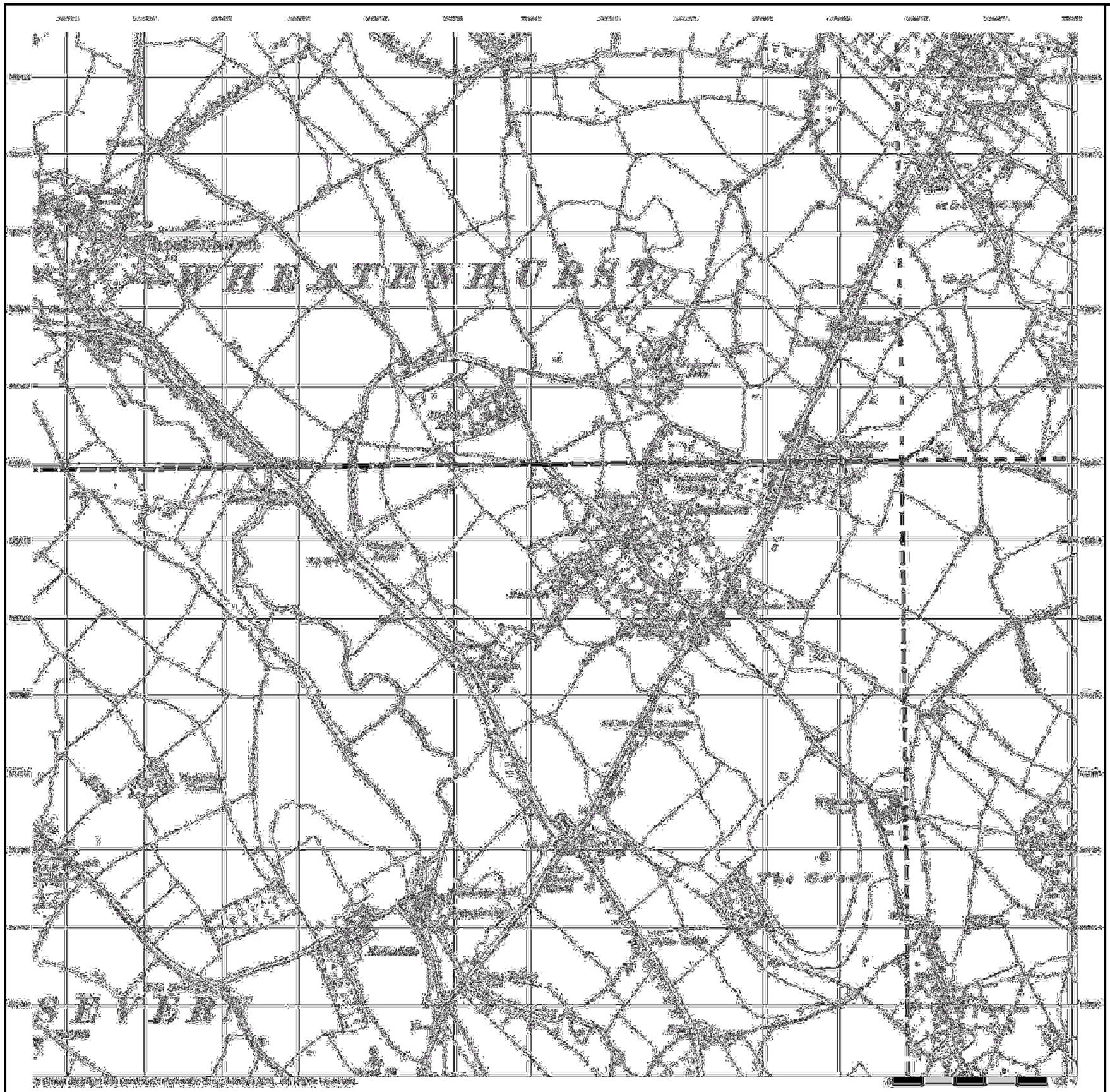

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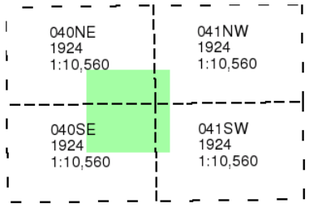
Gloucestershire

Published 1924

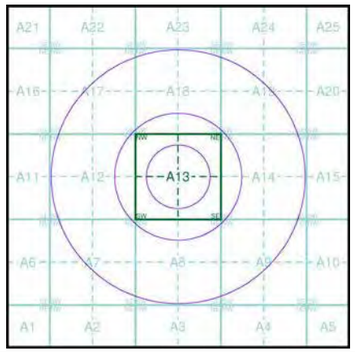
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

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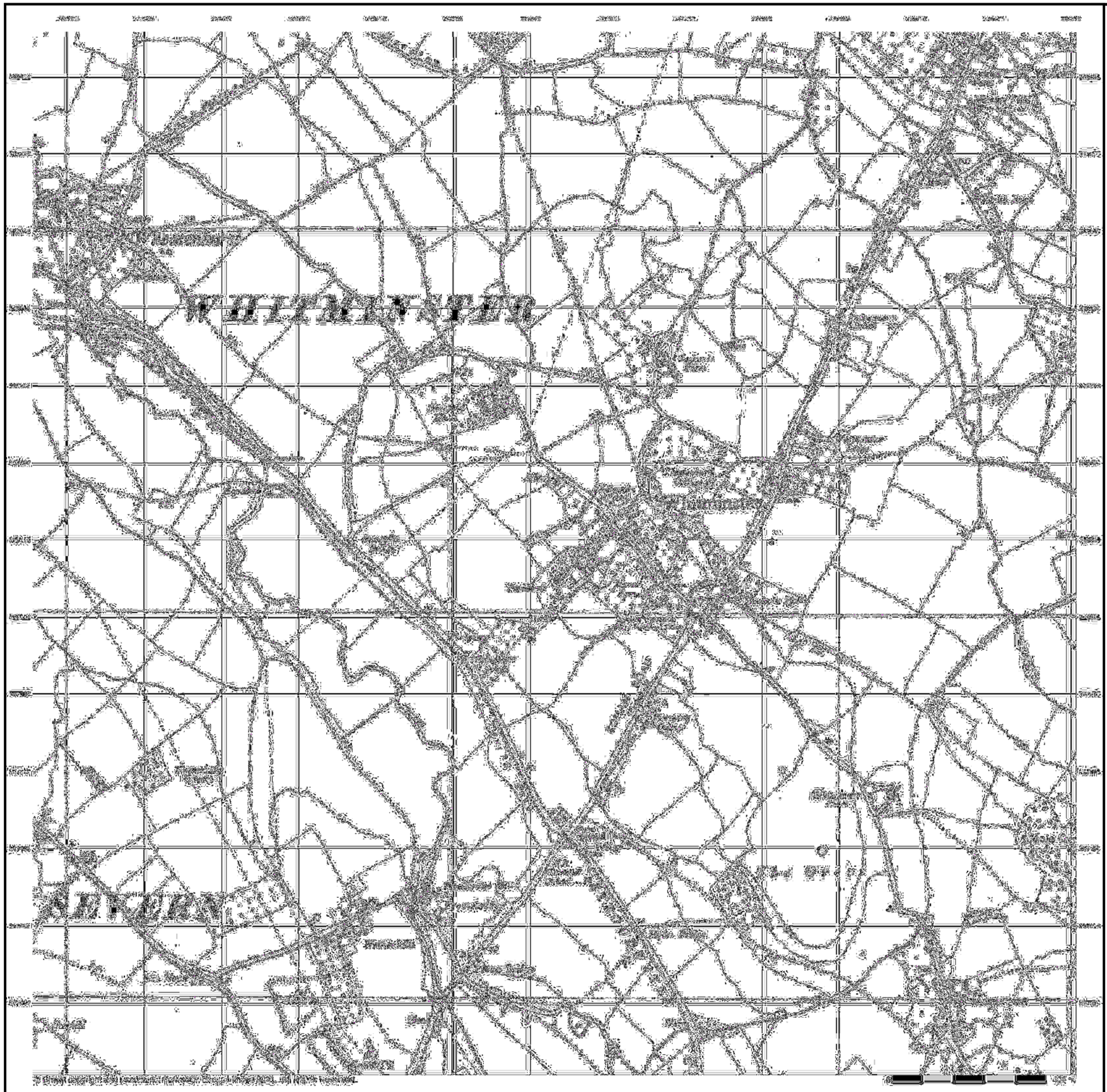

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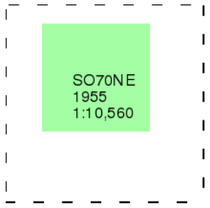
Ordnance Survey Plan

Published 1955

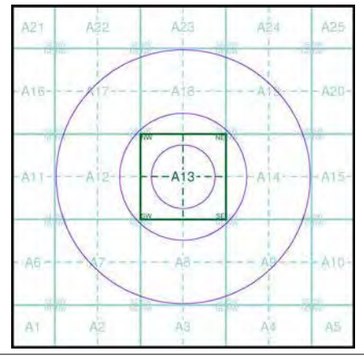
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

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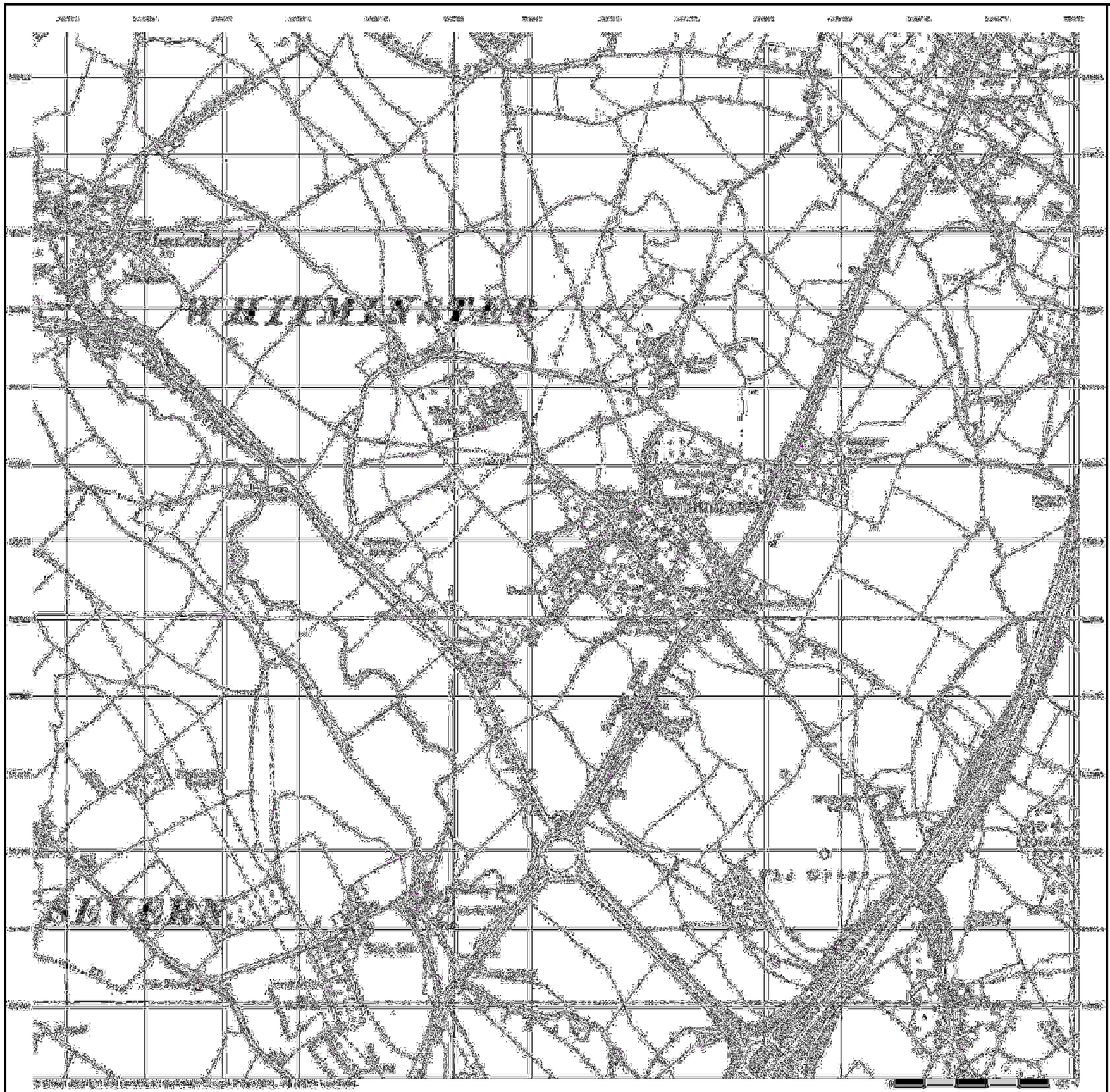

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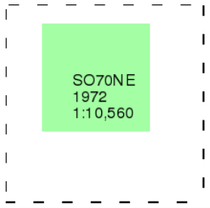
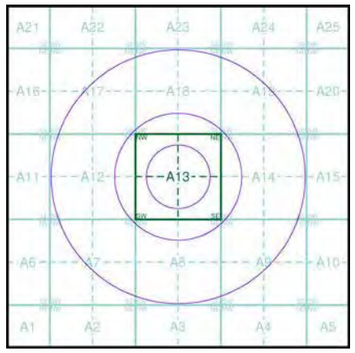
Ordnance Survey Plan
Published 1972
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

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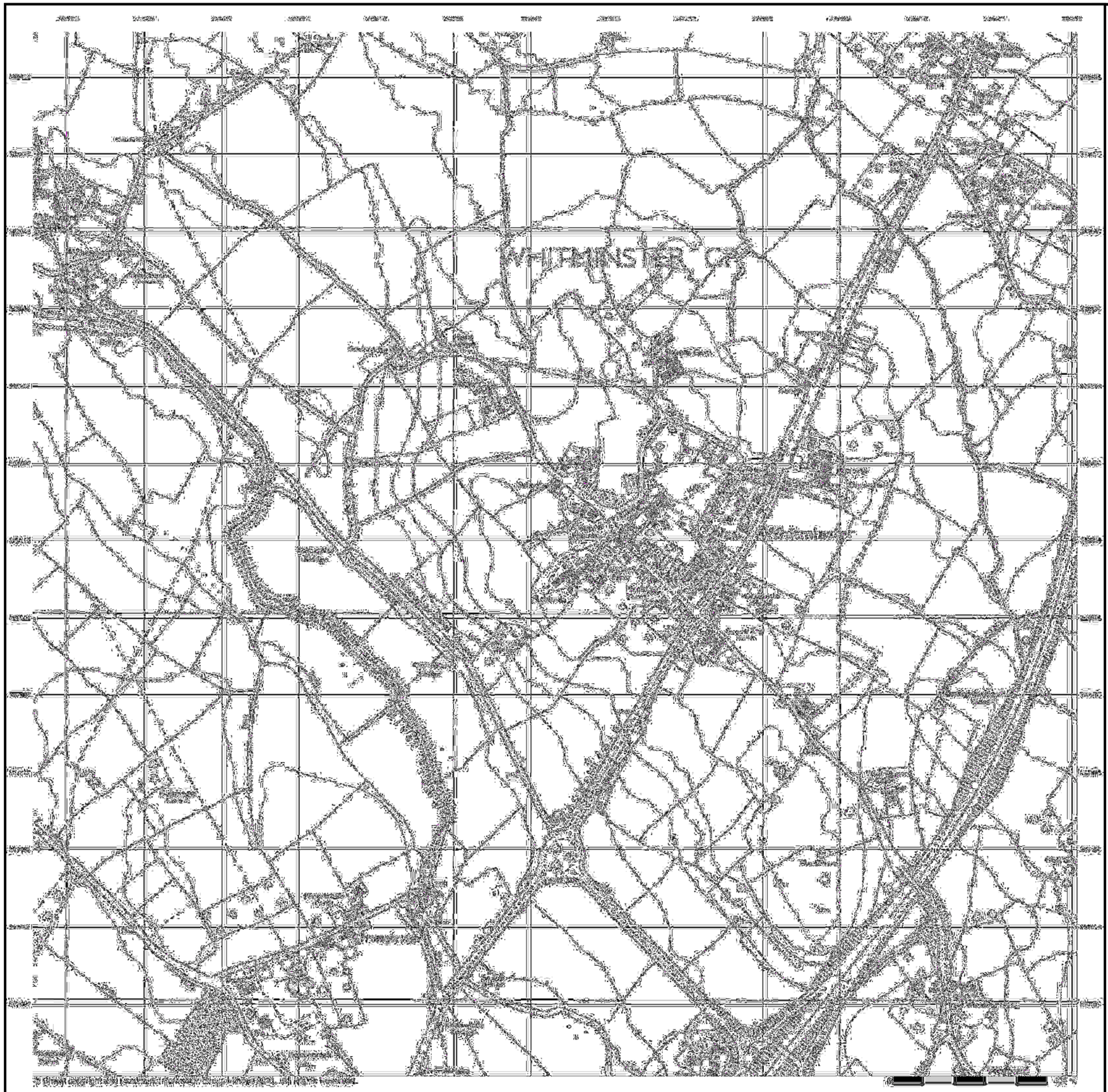
National Grid Reference: 377260, 208160
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at, Whitminster, Gloucestershire



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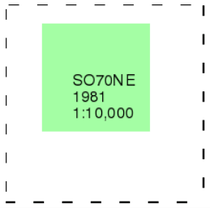
Ordnance Survey Plan

Published 1981

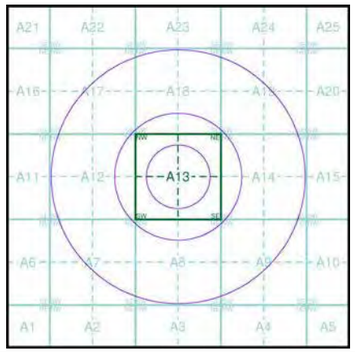
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: [redacted]
Customer Ref:
National Grid Reference: 377260, 208160
Slice: A
Site Area (Ha): 0.01
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Site Details

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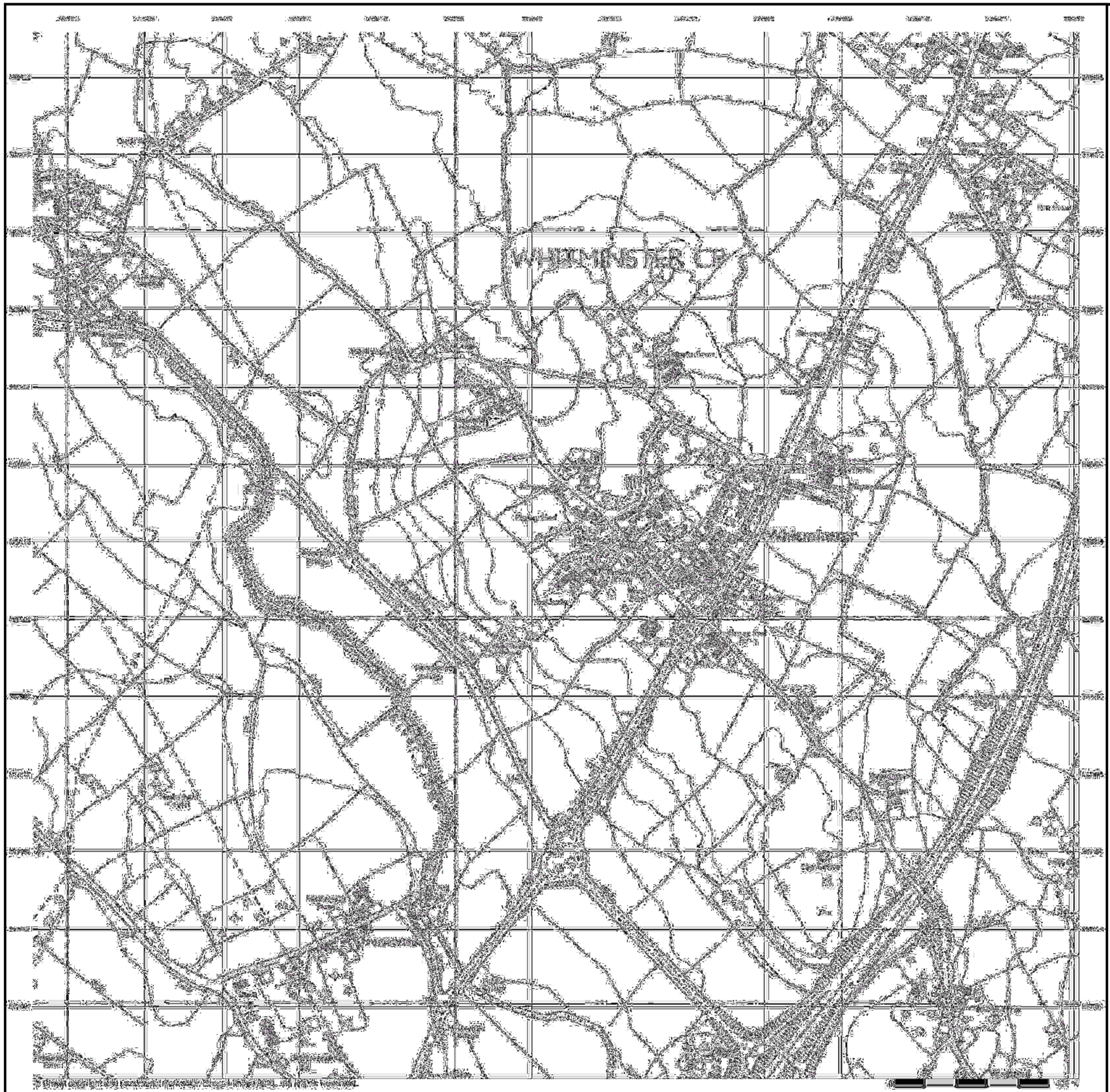

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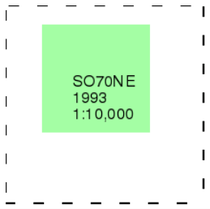
Ordnance Survey Plan

Published 1993

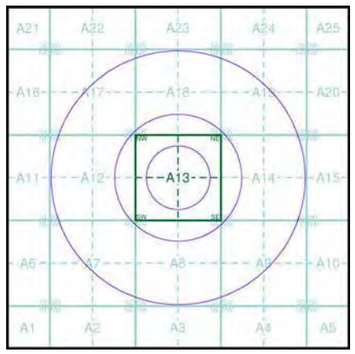
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: [redacted]
Customer Ref:
National Grid Reference: 377260, 208160
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at, Whitminster, Gloucestershire

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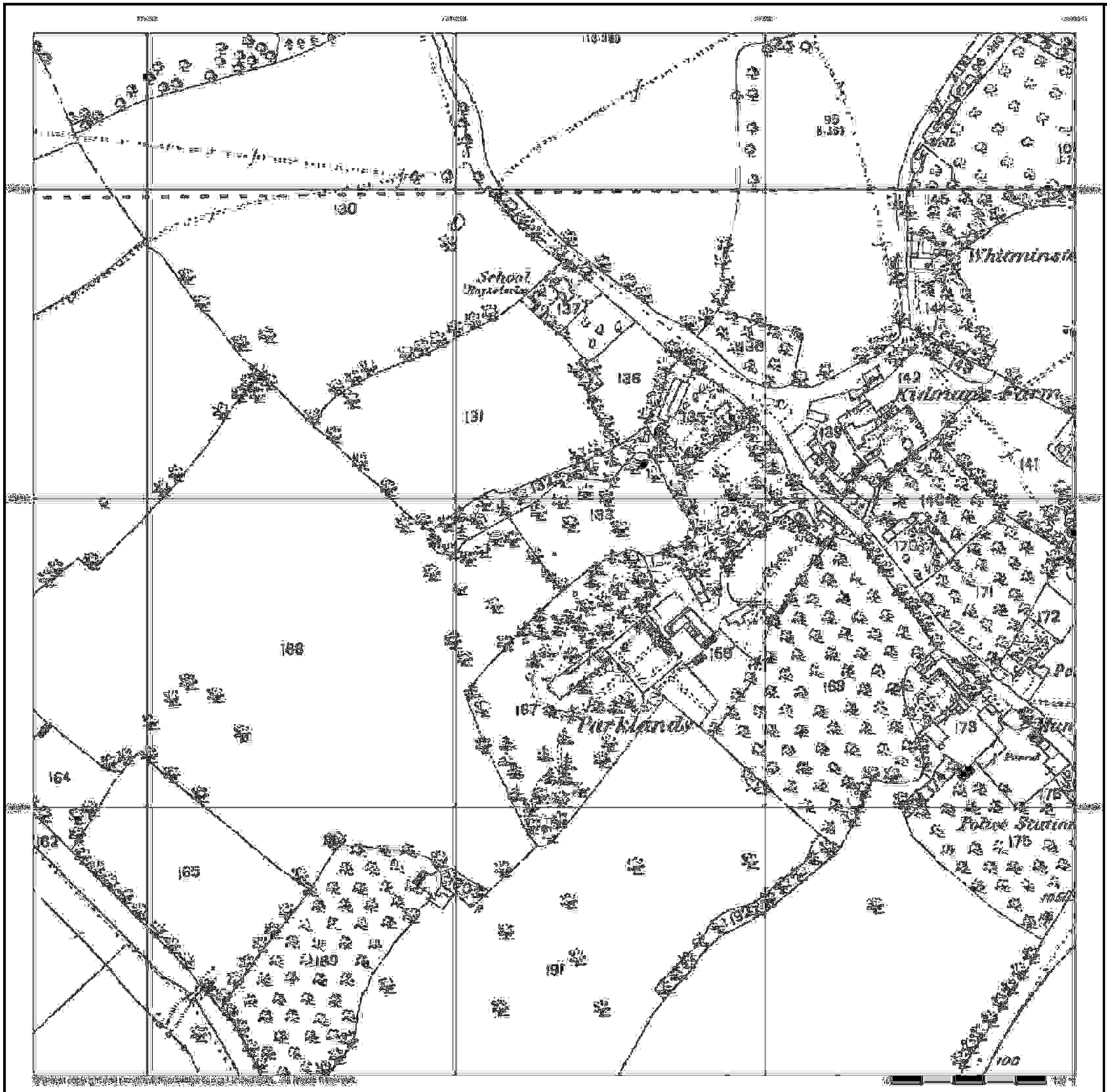

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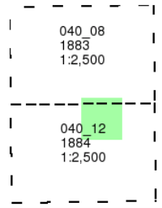
Gloucestershire

Published 1883 - 1884

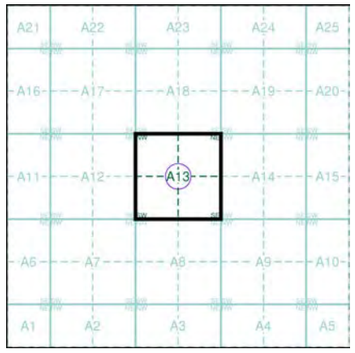
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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Customer Ref:
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Site Details

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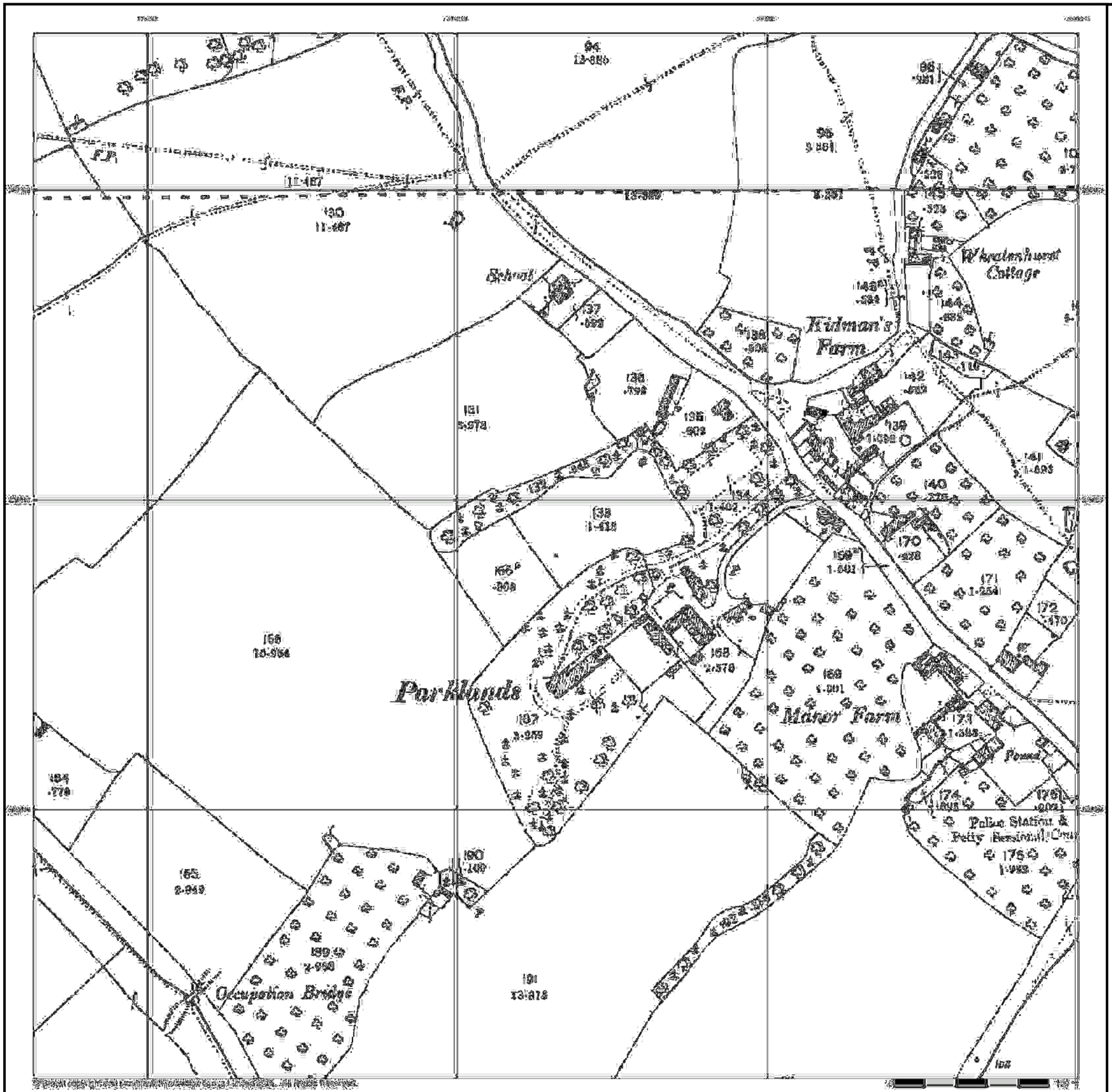

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Gloucestershire

Published 1902 - 1903

Source map scale - 1:2,500

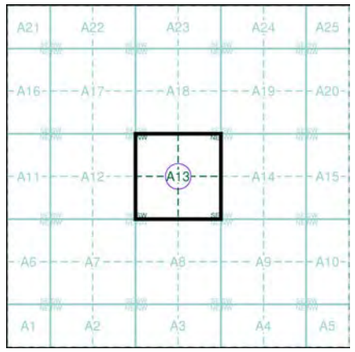
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

040_08
1902
1:2,500

040_12
1903
1:2,500

Historical Map - Segment A13



Order Details

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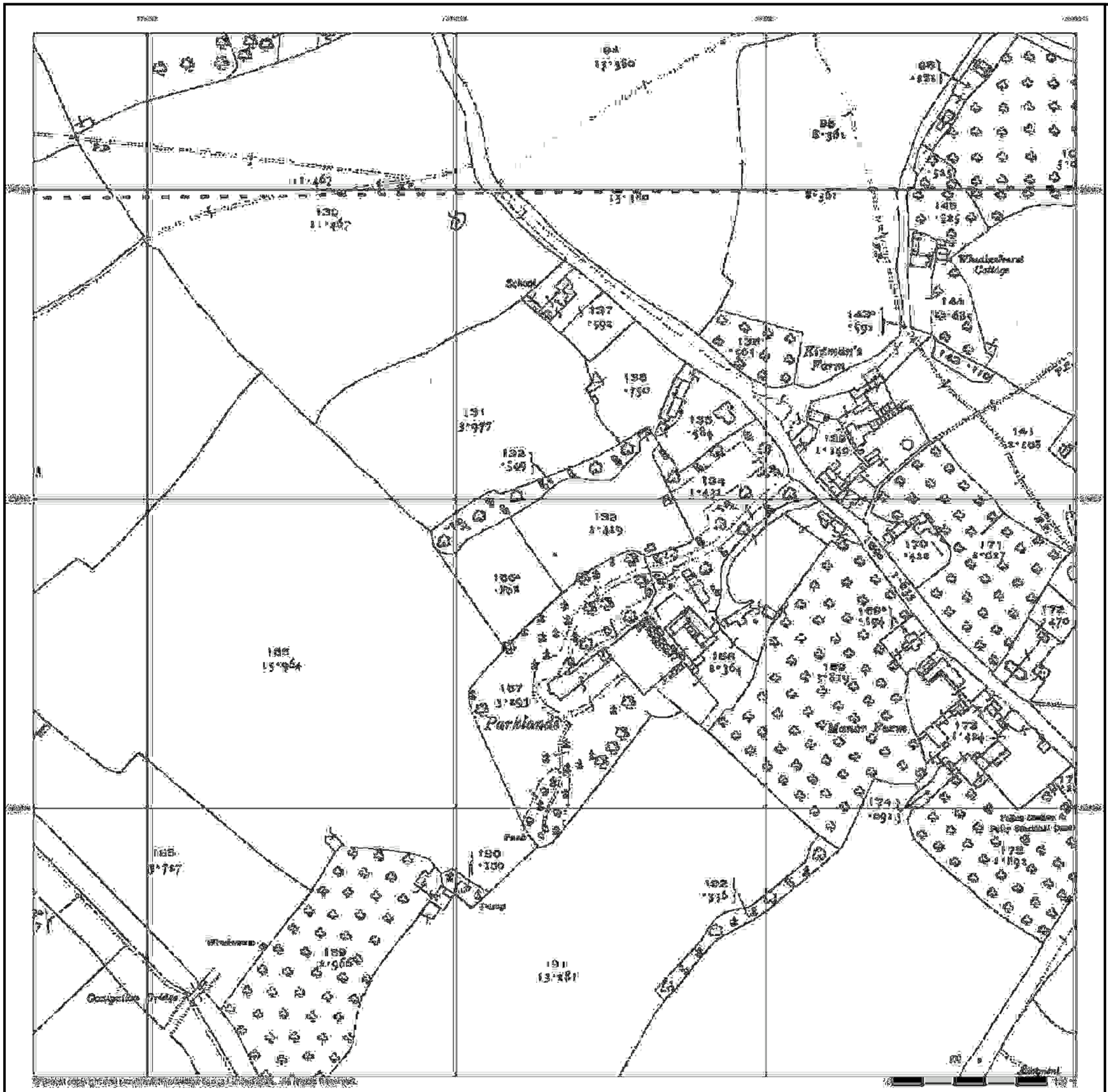

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Gloucestershire

Published 1922 - 1923

Source map scale - 1:2,500

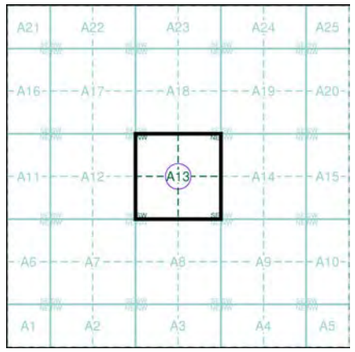
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

040_08
1923
1:2,500

040_12
1922
1:2,500

Historical Map - Segment A13



Order Details

Order Number: [redacted]
Customer Ref:
National Grid Reference: 377260, 208160
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Site Details

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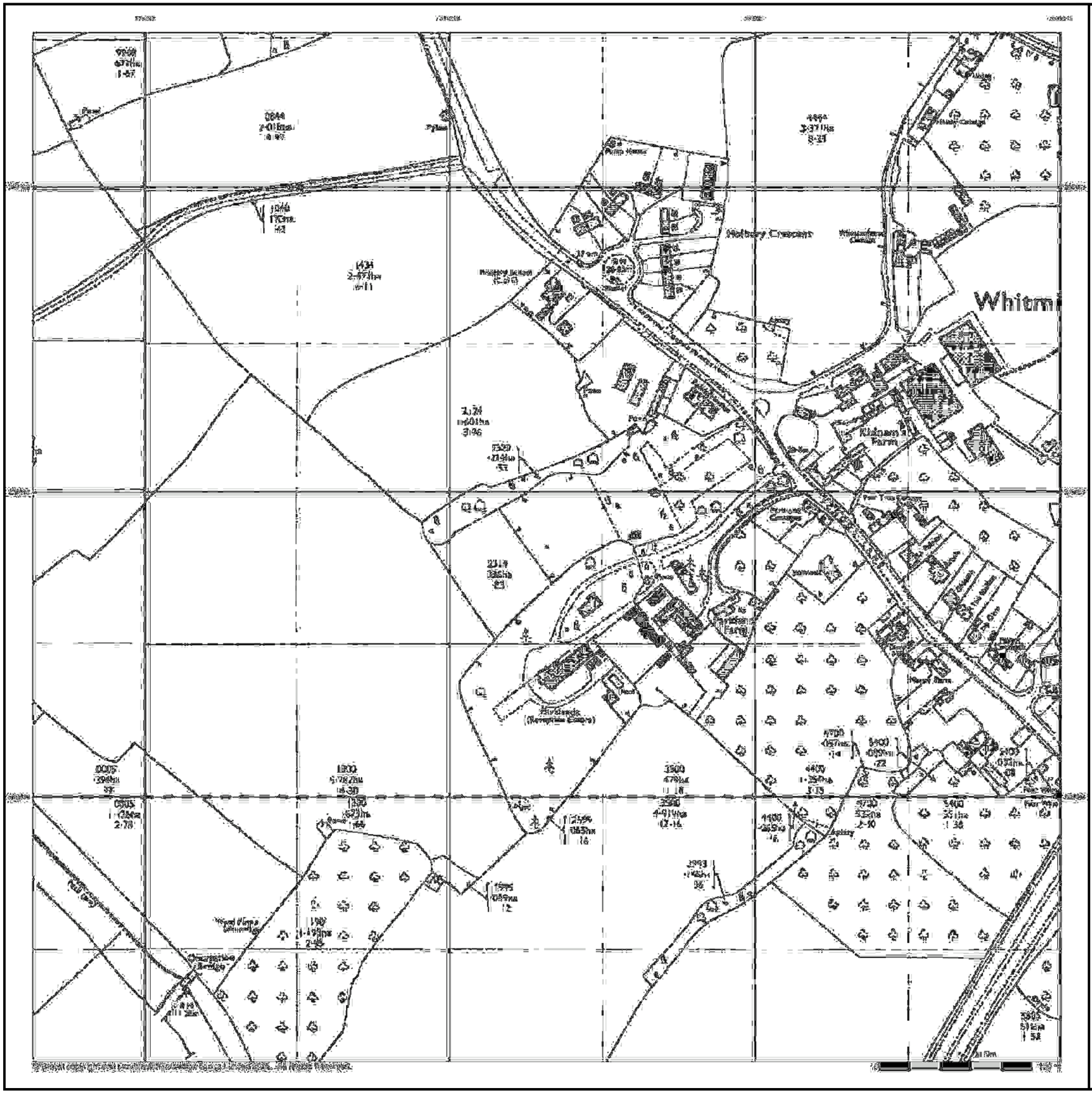

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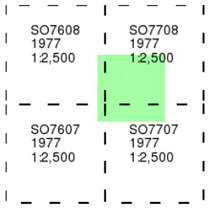
Ordnance Survey Plan

Published 1977

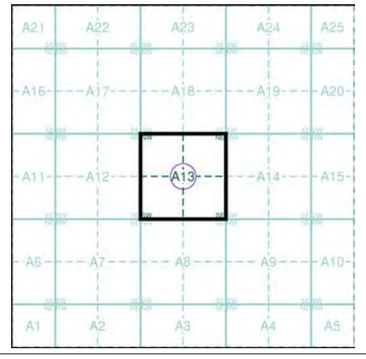
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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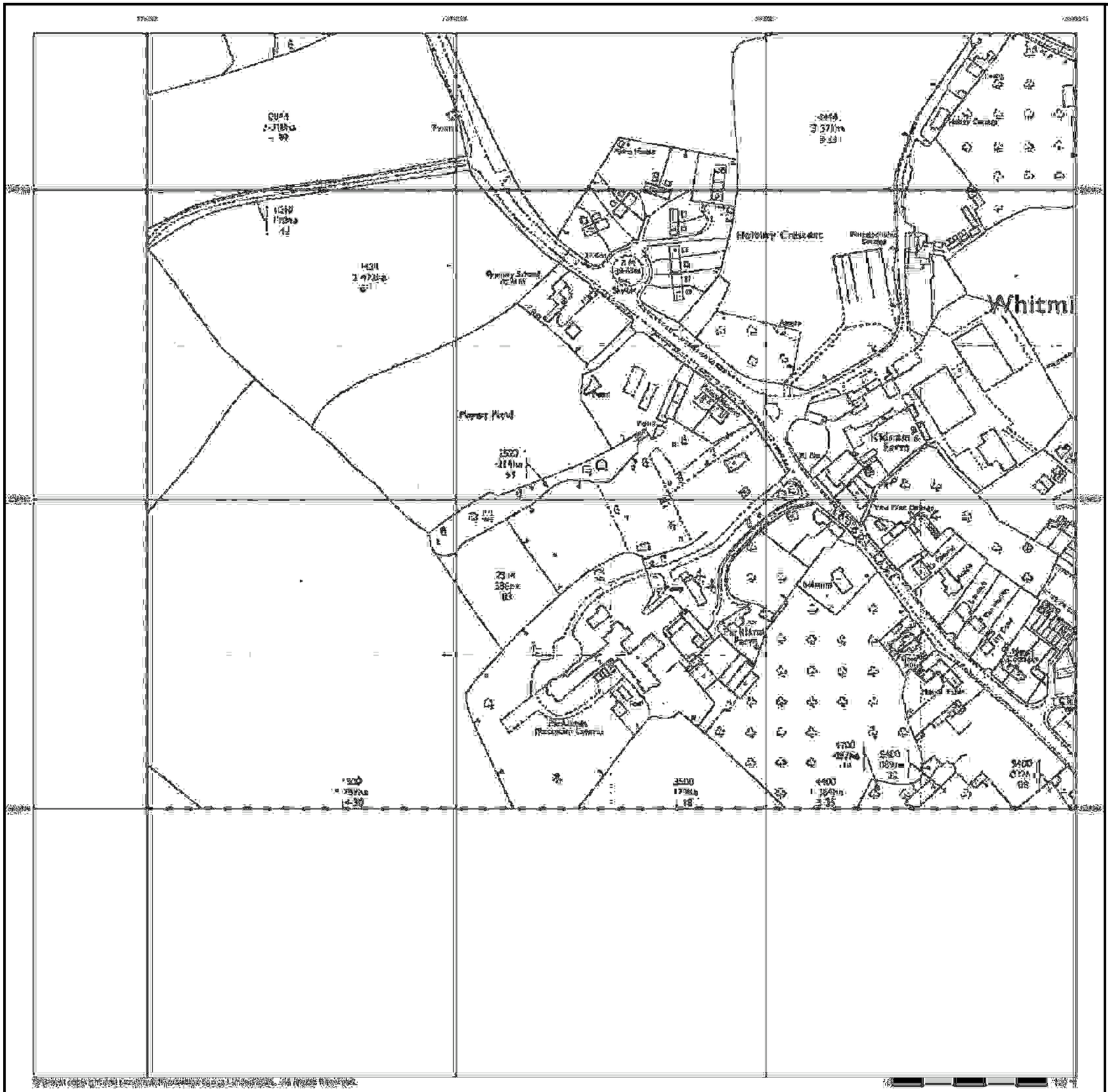

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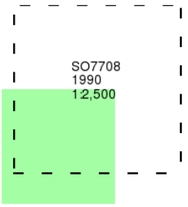
Additional SIMs

Published 1990

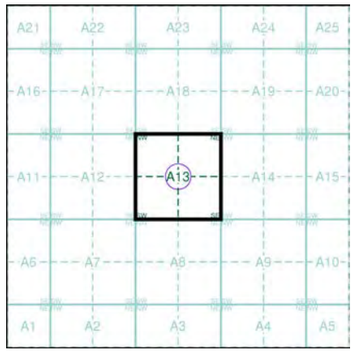
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

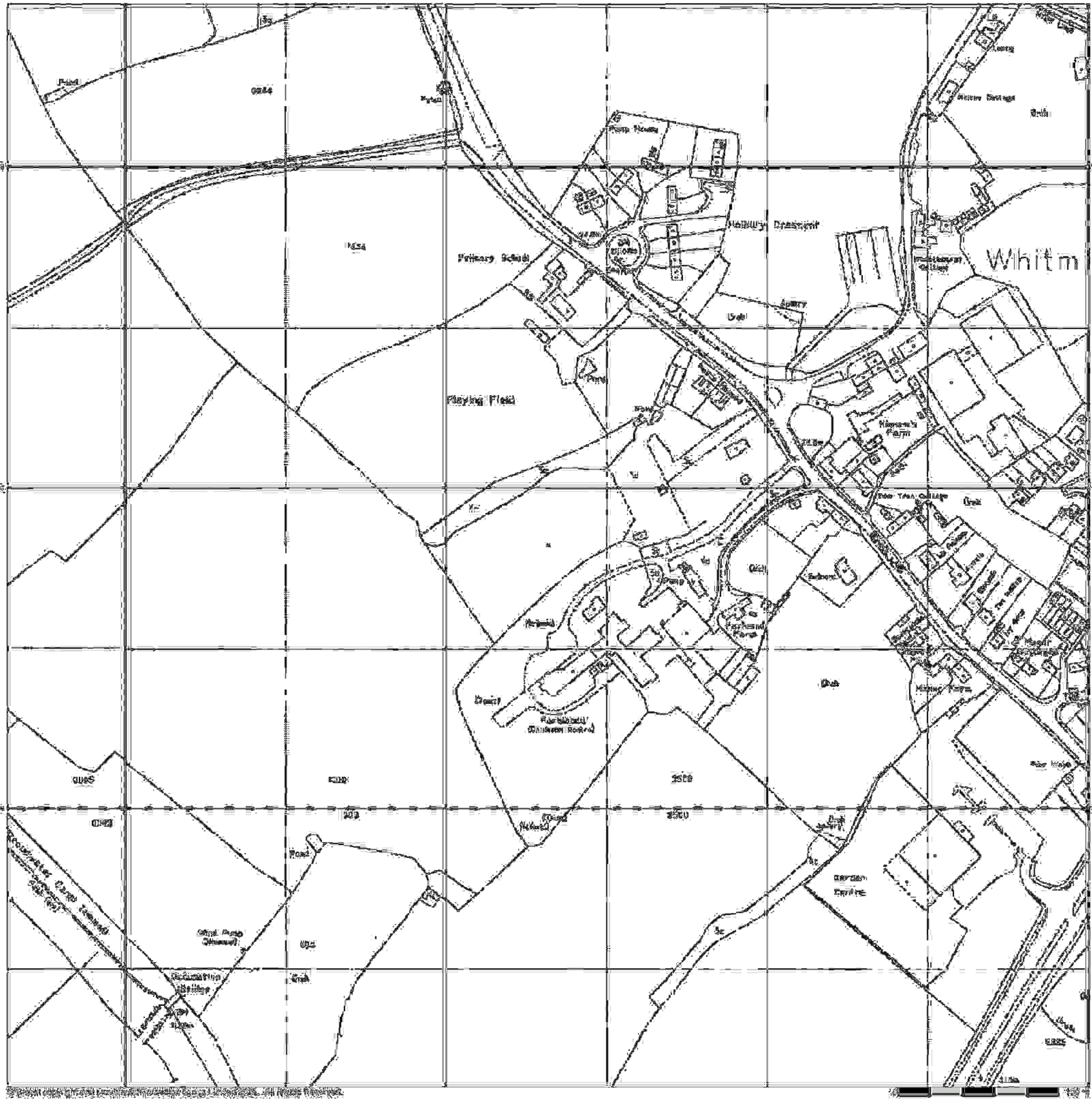


Order Details

Order Number: [redacted]
Customer Ref:
National Grid Reference: 377260, 208160
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at, Whitminster, Gloucestershire



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LANDMARK INFORMATION GROUP®

Large-Scale National Grid Data

Published 1993

Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

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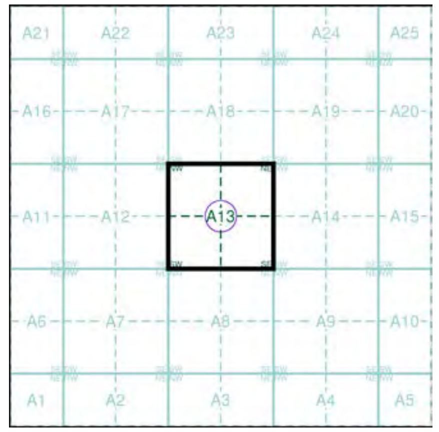
SO7607 1993 1:2,500	SO7707 1993 1:2,500

Historical Map - Segment A13



Order Details

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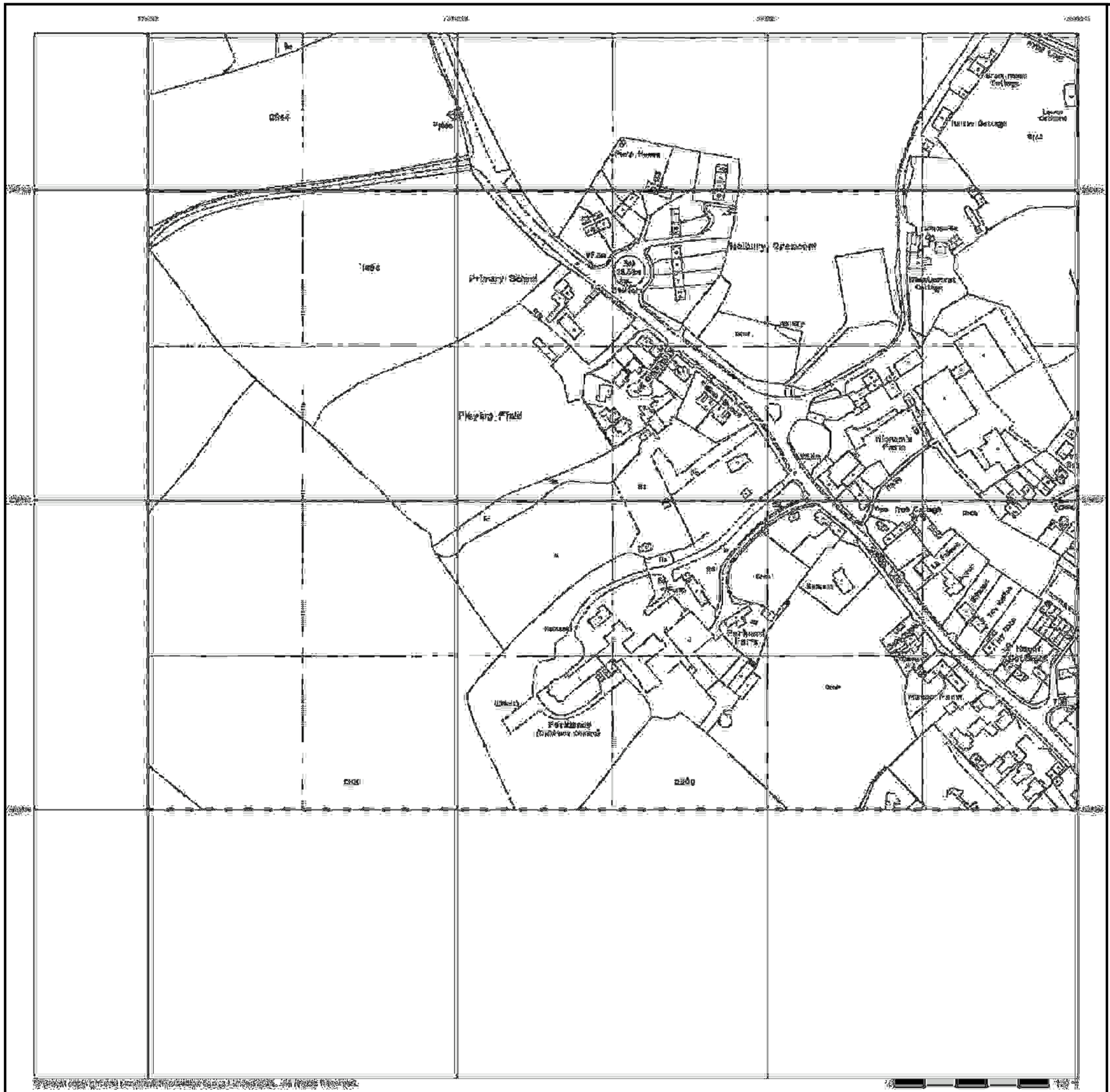
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at, Whitminster, Gloucestershire



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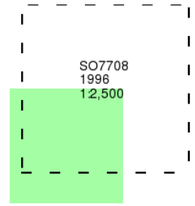
Map Name(s) and Date(s)



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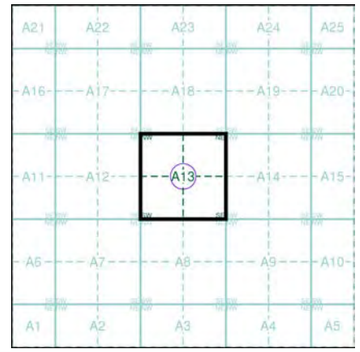

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Customer Ref:
National Grid Reference: 377260, 208160
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at, Whitminster, Gloucestershire

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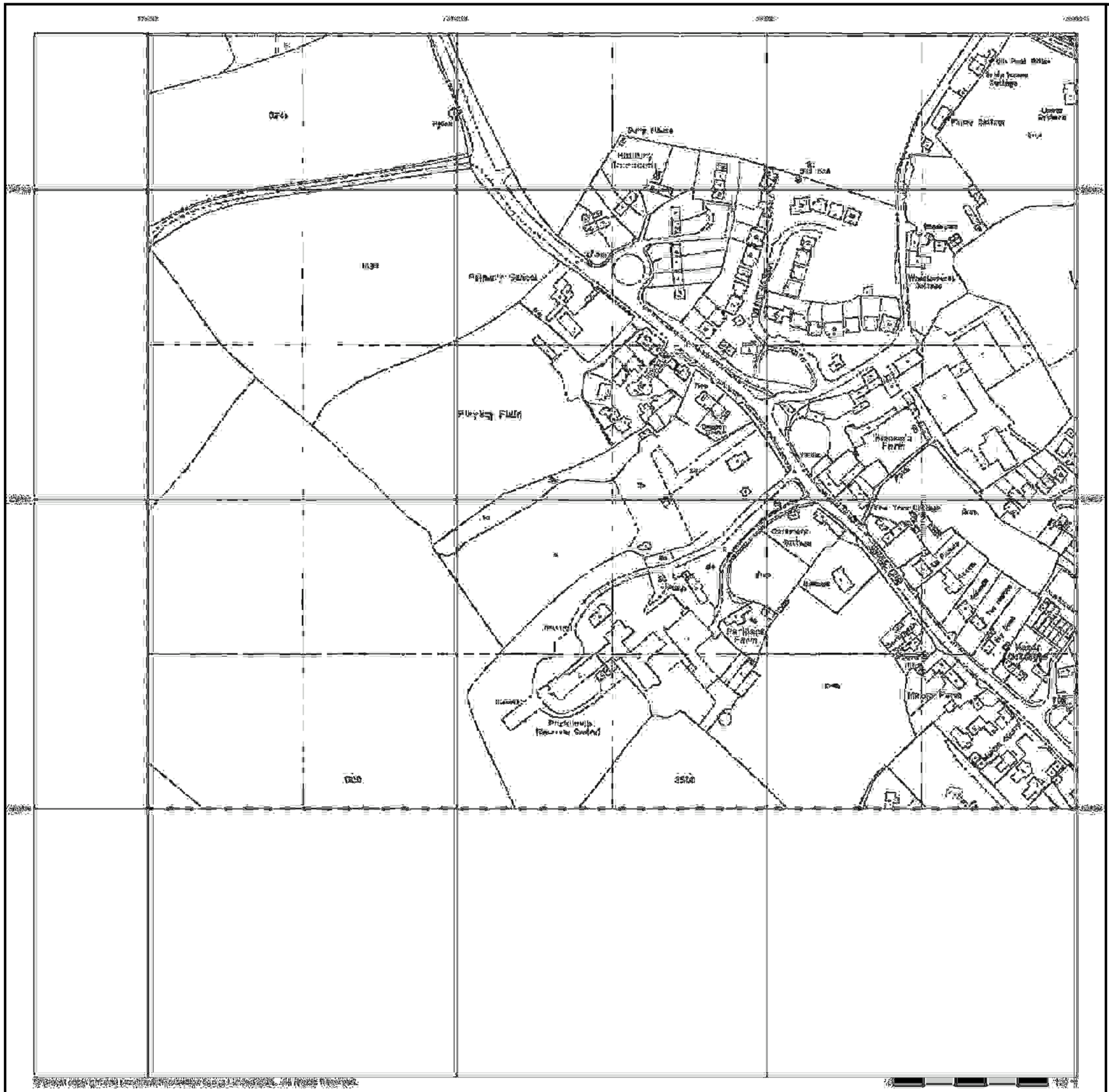

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Large-Scale National Grid Data
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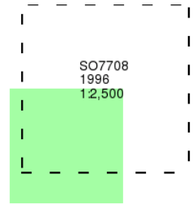
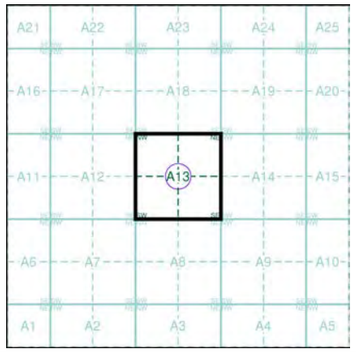
Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details
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Site Details
Site at, Whitminster, Gloucestershire

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