



**TREE SURVEY,
ARBORICULTURAL IMPACT ASSESSMENT,
TREE PROTECTION PLAN &
ARBORICULTURAL METHOD STATEMENT
Rev:3,**

with regard to proposed development at:

**Land at Pound Farm (East), Bedford Road,
Holwell, (Ickleford), Hitchin, SG5 3RS,**

for:

Bugler Homes Ltd..

Job no. MJC-25-0162A

30th January 2026.

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1.0 Instruction

1.1 MJC Tree Services Limited have been instructed by Bugler Homes Ltd., as follows:

“Re: Development Site Tree Survey & Reports in Accordance With BS5837:2012 at Land at Pound Farm, Bedford Road, Holwell, (Ickleford), Hitchin, SG5 3RS.

To visit the above site and carry out the following works:

- *To carry out a ground level and visual survey of trees on and adjacent to the site that are identified for survey and assessment under the criterion given in British Standard 5837:2012 ‘Trees in Relation to Design, demolition and Construction – Recommendations’ (BS5837:2012):*
- *To draw up a Tree Constraints Plan and Tree Survey Schedule in accordance with BS5837:2012, using as a base plan the supplied topographical survey plan:*
- *To provide an explanation of the tree constraints to the design team:*
- *To combine these elements into a single report and to supply the completed report in an electronic format as a .pdf file, with the plans available as .dwg (AutoCAD) files.”*

And:

“In response to specific additional instruction from yourself, to carry out the following works:

- *To discuss the proposed development as necessary and remotely (via telephone, email, Teams/Zoom meetings) with the design team in the light of the identified tree constraints with a view to arriving at a proposed layout and design that is acceptable in arboricultural planning terms:*
- *To draw up an Arboricultural Implications Assessment for the proposed development, using the tree constraints information for reference and a proposed site layout plan (including all access and service plan details) that will need to be supplied, via email, as a .dwg file to the above office before the report can be completed:*
- *To draw up a Tree Protection Plan and Arboricultural Method Statement for the proposed development that will provide adequate protection to the retained trees on site. To discuss the content of the Statement as necessary and remotely (via telephone, email, Teams/Zoom meetings) with the design team and/or construction contractors to arrive at a workable solution to the tree protection requirements of the site:*
- *To combine these elements into a single report and to supply the completed report in an electronic format as a .pdf file, with the drawings used in the report also available as .dwg (AutoCAD) files.”*

2.0 Qualifications and Caveats

2.1 The author of this report is a:

- Fellow of the Institute of Chartered Foresters:
- Chartered Arboriculturist:
- Chartered Surveyor:
- Registered Consultant of the Institute of Chartered Foresters.
- Professional Member of the Arboricultural Association:

He also holds the Royal Forestry Society's Professional Diploma in Arboriculture and has over 31 years' experience in UK arboriculture. A full CV and CPD record are available as a .pdf file upon request to the above office.

2.2 The tree survey was preliminary in nature and was carried out from ground level using visual techniques only. No trees were climbed or internally investigated. Should a more detailed inspection be required then this will be recommended in this report.

2.3 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees in high use areas should be checked on a regular basis, preferably at least once every eighteen months. The conclusions and recommendations in this report are based only on the observations made by the author during the tree survey.

2.4 This report is for the sole use of the above-named client and refers only to those trees identified within. It may not be reproduced in whole or in part, or sold, lent, hired out or divulged to any third party not directly involved in the subject matter, without our consent. Use by any other person(s) in attempting to apply its contents for any purpose other than stated in this report renders the report invalid for that purpose.

2.5 This report is supplied subject to our terms and conditions in force at the time of our instruction by the client.

3.0 Documents Supplied & Used in this Report

3.1 The following documents have been supplied and are used in this report:

- Mksurveys topographical survey plan ref. 35089:
- Onarchitecture drawing no. 22.072 100 D RevP11:
- DHA drawing no. 34362-H-01 Rev.P2.

4.0 Introduction

- 4.1 This report is presented largely in the form of annotated drawings with a tree survey schedule that are intended to be read in the sequence they are presented in the Appendices section of this report, cross referencing as instructed in the in-drawing texts.
- 4.1.1 The reason for this graphical form of report presentation is to make its interpretation easier by the greater design team and the demolition/construction teams. These teams work in a graphical environment, and if the arboricultural reports involved in the design and development processes are to be easily interpreted and followed by these teams they must also be presented in a graphical format. To do otherwise would create an unhelpful disconnect between the arboricultural information and the design and development teams. It also allows the report and the proposed development to be assessed on site by officers of the Local Planning Authority (LPA) whilst referencing a small number of single page documents, thereby avoiding the need to keep flicking backwards and forwards through a written report whilst holding open a large site drawing.
- 4.1.2 The layout and order of the drawings and schedule are intended to illustrate a logical progression from the existing site (Tree Constraints Plan drawing and Tree Survey Schedule – Appendix 1 and Appendix 2), through the proposed development, its impact on the trees in terms of tree works and losses required, the establishment of conflicts with the trees identified to be retained and how these conflicts are justified and will be resolved in principle (Arboricultural Impact Assessment drawing – Appendix 3), to the specific tree protection measures and construction/demolition methodologies required (Tree Protection Plan and Arboricultural Method Statement drawing – Appendix 4).
- 4.1.3 The in-drawing texts are designed to be large enough to be easily read when the drawings are viewed or printed off at the correct scale. If it is not possible to view or print off these drawings at the correct scale, it may not be possible to read the in drawing texts. In order to address this possibility, the in drawing text for each of the three drawings is reproduced as a separate block of text in italics immediately following the relevant drawing, and these form Appendices 1A, 3A, and 4A of this report.
- 4.2 The tree works recommended on the Tree Survey Schedule are based on the current context of the site, **they are not the tree works or tree felling required as a result of any proposed development.** This is to comply with section 4.4.1.1 of BS5837:2012 that states "...the tree survey should be completed and made available to designers prior to and/or independently of any specific proposals for the development". **Any and all tree works and tree felling required and proposed as a result of the proposed development are detailed in the Arboricultural Impact Assessment drawing.**

5.0 Summary

- 5.1 It is proposed to develop the eastern part of the site for residential use with a new school, playing fields, with three new accesses off Bedford Road, namely one vehicle access, one pedestrian and cycle path access, and an emergency vehicle access, all as illustrated in the Arboricultural Impact Assessment drawing forming Appendix 3 of this report.
- 5.2 The western part of the site will be the subject of a separate planning application for residential development.
- 5.2 For the reasons set out in the Arboricultural Impact Assessment drawing, there are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures suggested in the Arboricultural Impact Assessment drawing and detailed in the Tree Protection Plan & Arboricultural Method Statement drawing are updated and implemented as suggested in the Arboricultural Impact Assessment drawing, along with the implementation of the proposed soft landscaping for the site. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission subject to an appropriately worded planning condition requiring the following:
- The pre-commencement updating, submission, approval and implementation of the Tree Protection Plan & Arboricultural Method Statement drawing ref. MJC-25-0162A-03 rev.3 ((see Tree Protection Plan & Arboricultural Method Statement forming Appendix 4 of this report):
 - The implementation of the proposed soft landscaping scheme for the site as part of the proposed development.
- 5.2.1 The use of these conditions is reasonable, necessary and commonplace. Therefore, the required use of these conditions should not form a legitimate reason for the LPA to object to the proposed development.

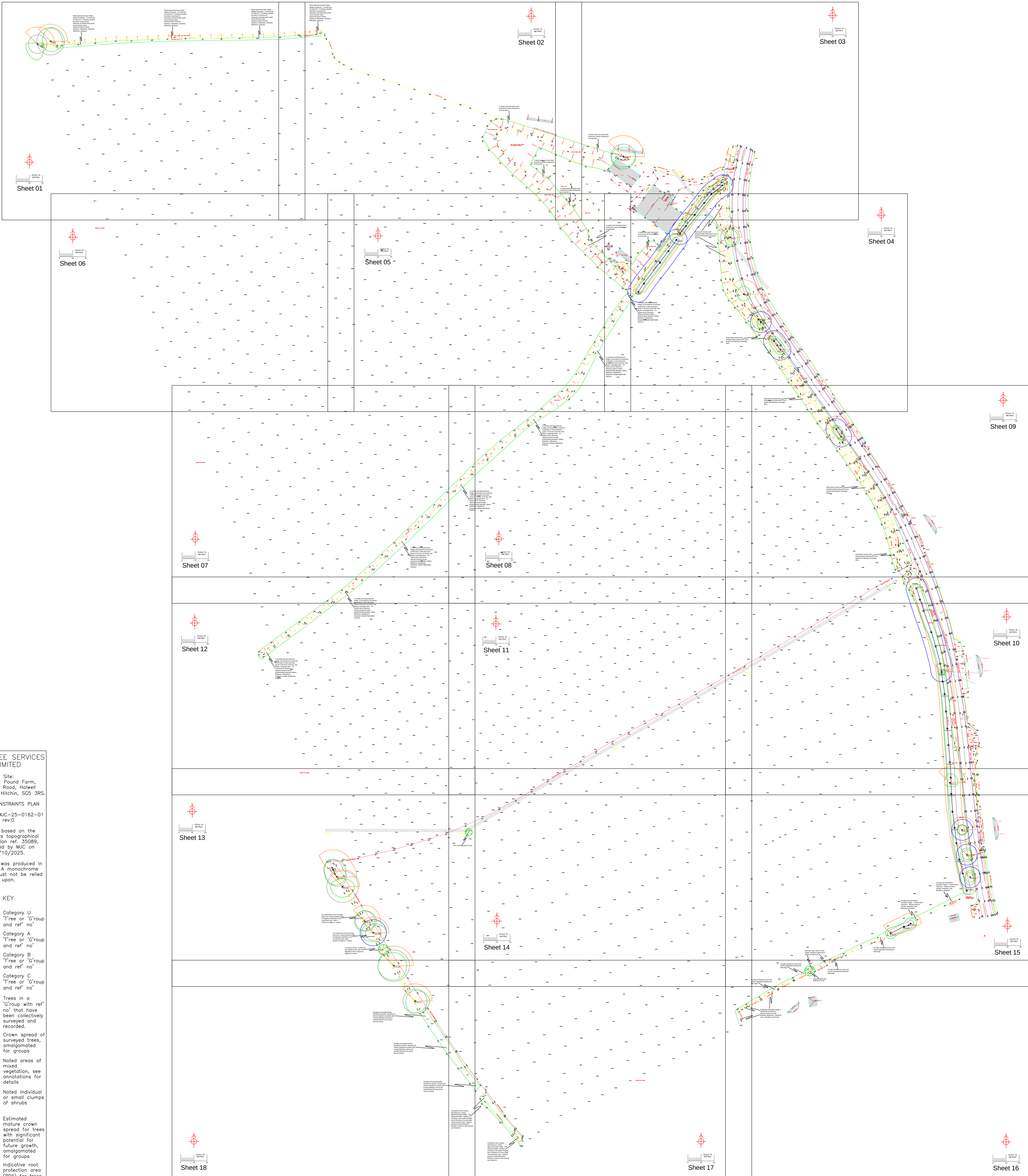
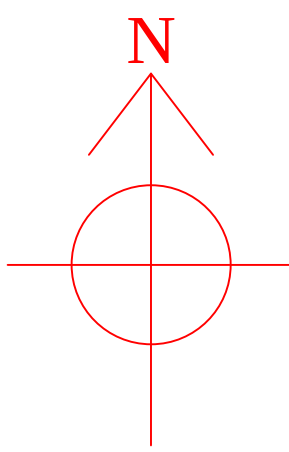
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6.0 Appendices

Appendix 1 Tree Constraints Plan drawing



MJC TREE SERVICES LIMITED

Site:
Land at Pound Farm,
Bedford Road, Holwell
(Ickleford), Hitchin, SG5 3RS.

TREE CONSTRAINTS PLAN
Plan no. MJC-25-0162-01
rev0

This is based on the
mksurveys topographical
survey plan ref. 35089,
amended by MJC on
17/10/2025.

This plan was produced in
colour. A monochrome
version mustn't be relied upon.

KEY

- Category U
Tree or 'Group
and ref' no.
- Category A
Tree or 'Group
and ref' no.
- Category B
Tree or 'Group
and ref' no.
- Category C
Tree or 'Group
and ref' no.
- Trees in a
'Group with ref'
no that have
been collectively
surveyed and
recorded.
- Crown spread of
surveyed trees,
amalgamated for
groups
- Noted areas of
mixed
vegetation, see
annotations for
details
- Noted individual
or small clumps
of shrubs
- Estimated mature crown
spread for trees
with significant
potential for
future growth,
amalgamated
for groups
- Indicative root
protection area
(RPA) for trees,
amalgamated
for groups
- Direction of
significant
branch for
individual trees,
length of arrow
indicates height
i.e. the longer
the arrow the
higher the
branch
- Areas of
potentially
significant shade
constraint for A,
B & C grade
trees, based on
surveyed heights
and amalgamated
for groups
- SCALE
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Following sheets =
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Tree Constraints Plan Notes

1.0 Introduction

- 1.1 The tree survey was carried out on the 15th October 2025.
- 1.2 The survey was carried out in accordance with British Standard BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations' (BS5837:2012).
- 1.3 The tree survey was preliminary in nature and was carried out from ground level using visual techniques only. No trees were climbed or internally investigated. Should a more detailed inspection be required then this will be highlighted in the recommendations section of the Tree Survey Schedule.
- 1.4 The tree works recommended on the enclosed Tree Survey Schedule are based on the current content of the site, they are not tree works or tree felling required as a result of any proposed development. This is to comply with section 4.4.1.1 of BS5837:2012 that states "...the tree survey should be completed and made available to designers prior to and/or independently of any specific proposals for the development". Any and all tree works and tree felling required and proposed as a result of the proposed development will be detailed in the Arboricultural Impact Assessment drawing.

2.0 The Trees

- 2.1 The details of the individual tree survey are provided in the following Tree Survey Schedule.
- 2.1.1 Individual trees are pre-fixed with the letter 'T'.
- 2.1.2 Trees that form cohesive groups are recorded collectively and are pre-fixed with the letter 'G'.
- 2.1.3 Other vegetation has also been noted, see the in-drawing annotations for details.

- 2.2 The tree constraints have been calculated and are illustrated in accordance with BS5837:2012, see the key for details.
- 2.3 Some of the elements within group no. 015 were not plotted in the supplied topographical survey plan, and their position has been estimated by eye whilst on site. If the position of group no. 015 becomes critical to any proposed development of the site, their positions should be confirmed by a competent land surveyor and this drawing updated accordingly.

2.4 Root Protection Areas (RPA)

- 2.4.1 The indicative and circular RPA of the surveyed trees are based on the trunk diameters recorded in the Tree Survey Schedule, and have been derived using the calculation provided at section 4.4.1 of BS5837:2012.
- 2.4.2.1 For individual trees, the indicative RPA is illustrated by a grey circle in this drawing.
- 2.4.2.2 For groups of trees, the outermost extent of the RPA of the individual trees making up the group are illustrated in this drawing as an amalgamated polygon in grey outline. In this way, the group is illustrated with a single and amalgamated RPA, but this is based on the overlapping and circular RPA for the individual trees making up the group.
- 2.4.2 The RPAs represent the surface area of the minimum soil rooting volume required by the tree if it is to remain viable. The actual root spread of the tree will be much larger than the RPA, but BS5837:2012 implicitly accepts that a tree will tolerate a degree of root loss, in much the same way as a tree would tolerate a degree of crown pruning. By default, the existing soil levels and structure in the RPA of retained trees must be protected from the proposed development. Section 5.3.1 of BS5837:2012 allows for the construction of structures over the RPA of retained trees "where there is an overriding justification and if technical solutions to the construction over the RPA are available that will adequately protect the retained trees".

- 2.4.3 Section 7.4.2.3 of BS5837:2012 states that the coverage of the RPA of any one tree by a new permanent surface must not exceed 20% of the unsurfaced RPA of that tree. However, it is not clear whether this restriction applies to all new permanent surfaces or just impermeable surfaces. Section A1.5.4 of BS5837:2012 states: "Surface paving and near-sloped gravel". These surfaces can consist of porous or impermeable material. As the intention of the restriction is to prevent root growth from being blocked by trees, it is advisable for such surfaces to be laid following the same principles as those for impermeable surfaces, therefore its use within the RPA also needs to be restricted to the 20% RPA recommendation (7.4.2.3). This statement strongly indicates that the 20% restriction only applies to impermeable surfaces, or surfaces that will become impermeable through normal use, and that the 20% restriction would not apply to permanently permeable surfaces.
- 2.4.4 Section 4.6.2 of BS5837:2012 states "Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution."
- 2.4.5 It was not considered likely that any of the pre-existing site conditions within the RPA of the surveyed trees had caused significant asymmetric rooting. Therefore, no modification of the RPA has been made.

- 2.5 The areas of potentially significant shade illustrated in this drawing have been derived following the guidance provided at section 5.2.2 Note 1 of BS5837:2012. This does not indicate an area where development may not take place, it merely indicates an area where tree shade may have an adverse impact on a proposed development. If that part of the development has a need for high levels of direct and natural light e.g. patios and living room windows, and it may also reduce people's amenity space in gardens. If tree shade is considered to have a potentially significant impact on the proposed development, a daylight and shade analysis will need to be carried out by a suitably qualified person.

- 2.6 Some of the surveyed trees were considered to have significant potential for future growth. The potential and estimated mature crown spread of these trees is illustrated by a blue crown spread margin in this drawing. This potential future crown spread is an indicative guide only as there are many variables that influence the future growth of trees and these cannot all be adequately anticipated and/or quantified at this time.
- 2.7 The online mapping system provided by the Local Planning Authority (LPA) was consulted on the 1st October 2025 in order to check on the protected status of the surveyed trees. This check indicated the following:

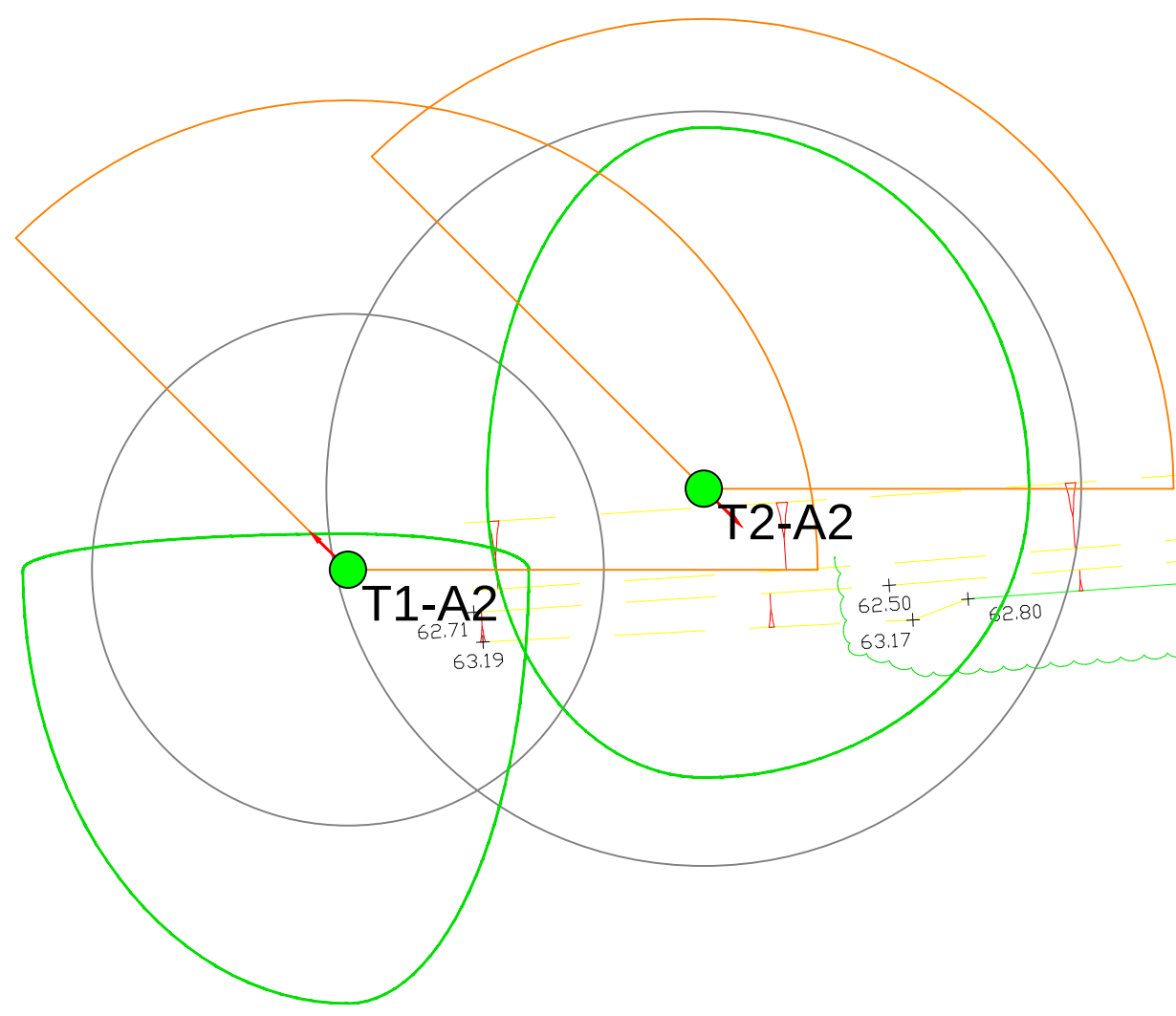
- 2.7.1 None of the surveyed trees are protected by a Tree Preservation Order.
- 2.7.2 The site is not in a Conservation Area.
- 2.8 The online Multi Agency Geographical Information for the Countryside (MAGIC) mapping system provided by DEFRA was consulted on the 1st October 2025 in order to check whether any ancient woodlands were present on or close to the site. This check indicated that no ancient woodlands were present on or close to the site.
- 2.9 The tree survey has not identified any ancient and/or veteran trees on or close to the site.
- 2.10 The trees on site will be protected by the Forestry Act 1967. Therefore, it will be necessary to obtain a Felling Licence from the Forestry Commission prior to felling any trees onsite unless one or more of the following exemptions apply.
- 2.10.1 In any one calendar quarter it is permitted to fell up to 5 cubic metres of landscape timber in the form of growing trees on any one holding without a Felling Licence, as long as no more than 2 cubic metres are sold.
- 2.10.1.1 Calendar quarters are defined as: 1 January to 31 March, 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December.
- 2.10.1.2 The volume of timber in a standing tree is assessed by measuring the amount of wood in the main tree stem(s) where this is greater than 8cm in diameter over bark.
- 2.10.2 An exemption applies for tree works involving tree surgery by way of lopping or topping, for example, pollarding.

- 2.10.3 An exemption applies for felling trees that, when measured at a height of 1.3 metres from the ground have a diameter over bark of 8cm or less, or if thinning, have a diameter over bark of 10cm or less. N.B. Thinning is defined within the Forestry Act 1967 as "felling carried out in order to improve the growth of other trees". The UK Forestry Standard's definition is "The removal of a proportion of trees in a forest after canopy closure, usually to promote growth and greater value in the remaining trees". If undersized or existing coppice (i.e. previously managed by cutting to promote multi-stemmed growth arising at or near ground level), individual stems that have a diameter over bark of 15cm or less are also exempted.
- 2.10.4 An exemption applies to fruit trees, for example, orchard species like apple, pear or plum.
- 2.10.5 An exemption applies to trees standing or growing in an orchard, garden, churchyard or public open space.
- 2.10.6 An exemption applies to trees growing in the inner London boroughs.
- 2.10.7 An exemption applies for the felling of a tree or trees necessary for the prevention of danger or the prevention or abatement of a nuisance.

- 2.11 Various animal species that use trees and some of their habitats that can be found in trees, including Badgers, Bats, Great Crested Newts, and many bird species, are protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010. A qualified ecologist should be engaged to check if these species and/or habitats are present in any of the surveyed trees, and their advice followed.
- 2.12 The site is not in a Conservation Area.
- 2.13 The site comprised open agricultural fields with a limited number of trees around the boundary.
- 2.14 Surrounding land use was as follows; to the north was agricultural land, to the west was public highway, to the south was a mix of residential development and agricultural land, to the west was agricultural land.
- 2.15 An online check with the British Geological Survey's Geology of Britain Viewer was made on 1st October 2025.

- 2.16 This check indicated that the soils on site were likely to be made up of the following:
Bedrock Geology: Gault Formation – Mudstone. Sedimentary bedrock formed between 113 and 100.5 million years ago during the Cretaceous period.
Superficial deposits:
Oxfordian Limestone Formation – Sandstone. Sedimentary superficial deposit formed between 480 and 433 thousand years ago during the Quaternary period.
Oxfordian Limestone Formation – Sand and gravel. Sedimentary superficial deposit formed between 860 and 116 thousand years ago during the Quaternary period.

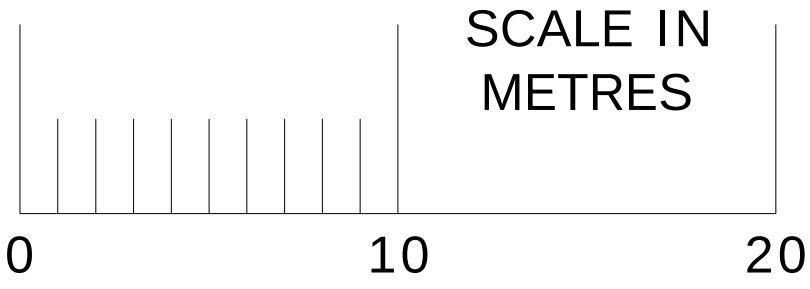
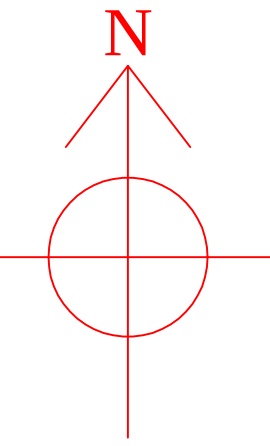
- 2.17 These types of soils may be susceptible to significant and persistent volumetric changes in response to moisture content. Therefore, there could be a risk of tree root related subsidence on this site, and this risk must be considered and assessed by a suitably qualified and experienced engineer, and accommodated in any proposed development of the site.
- 2.18 The local topsoil will be prone to rapid compaction to the point that tree root growth is impeded. In areas where the existing soil structure needs to be protected i.e. in the RPA of retained trees or proposed new tree and shrub planting areas, the soil must be protected from demolition and construction activities and traffic by either free protection barriers or adequate temporary ground protection.
- 2.19 No dig methods of hard surface and road/drive construction using a three dimensional cellular confinement sub-base can be used on these types of soil over the RPA of retained trees, but in order to provide adequate protection to tree roots in these areas the sub-base may need to be thicker than is routinely used, and it is recommended that the advice of the sub-base manufacturer is sought before proposing such constructions.



Mixed agricultural-type hedge, slightly overgrown. 4 metres tall at maximum. Providing valuable boundary screening but otherwise of limited wider public visual amenity value. Species present include - Hawthorn, Blackthorn, Bramble, Elderberry, Dogrose.

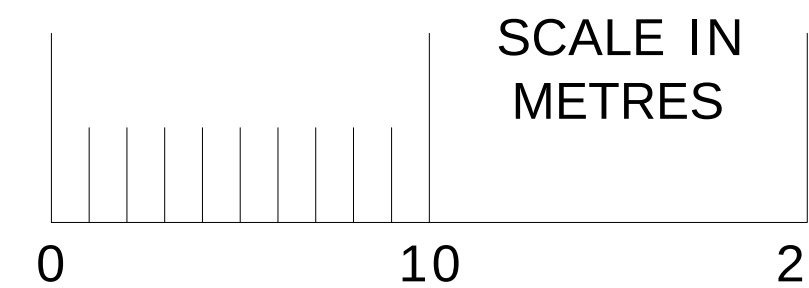
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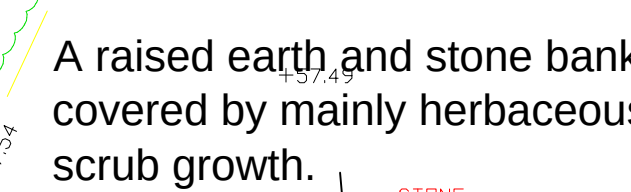


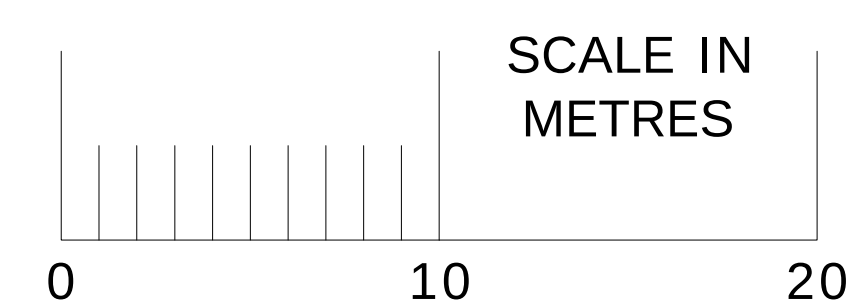
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A raised earth and stone bank covered by mainly herbaceous scrub growth.





A raised earth and stone bank covered by mainly herbaceous scrub growth.

A raised earth and stone bank covered by mainly herbaceous scrub growth.

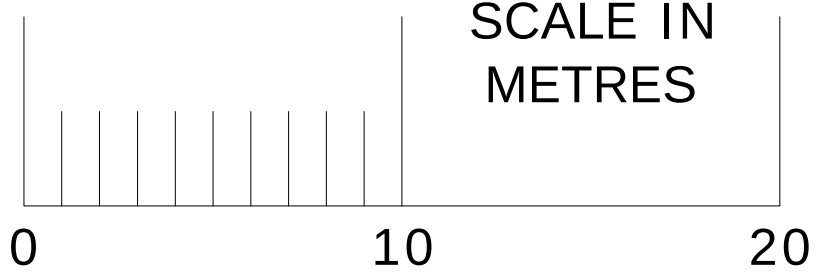
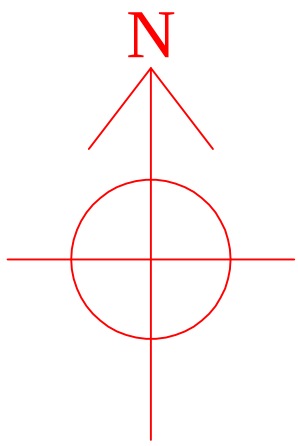
Earth bank covered with predominantly herbaceous scrub growth and flanking a drainage ditch.

A scrubby and discontinuous hedge, punctuated by occasional small trees or trees that have grown in the form of shrubs, that flanks a drainage ditch. 4.5 metres tall at maximum. Species present include predominantly Bramble, Willow, Elderberry, Blackthorn, Dogwood, Deadly Nightshade, Dogrose.

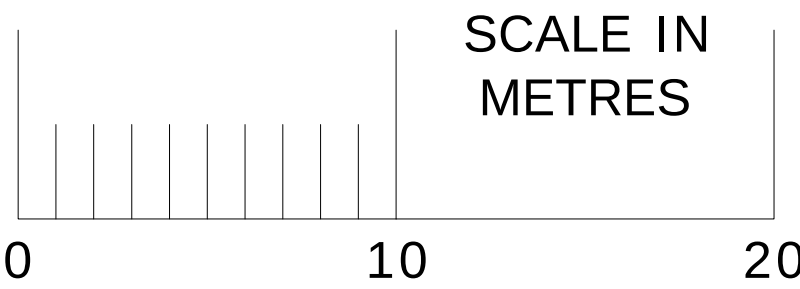
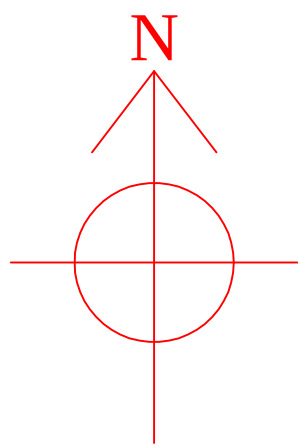
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Earth bank covered with predominantly herbaceous scrub growth and flanking a drainage ditch.

Earth bank covered with predominantly herbaceous scrub growth and flanking a drainage ditch.



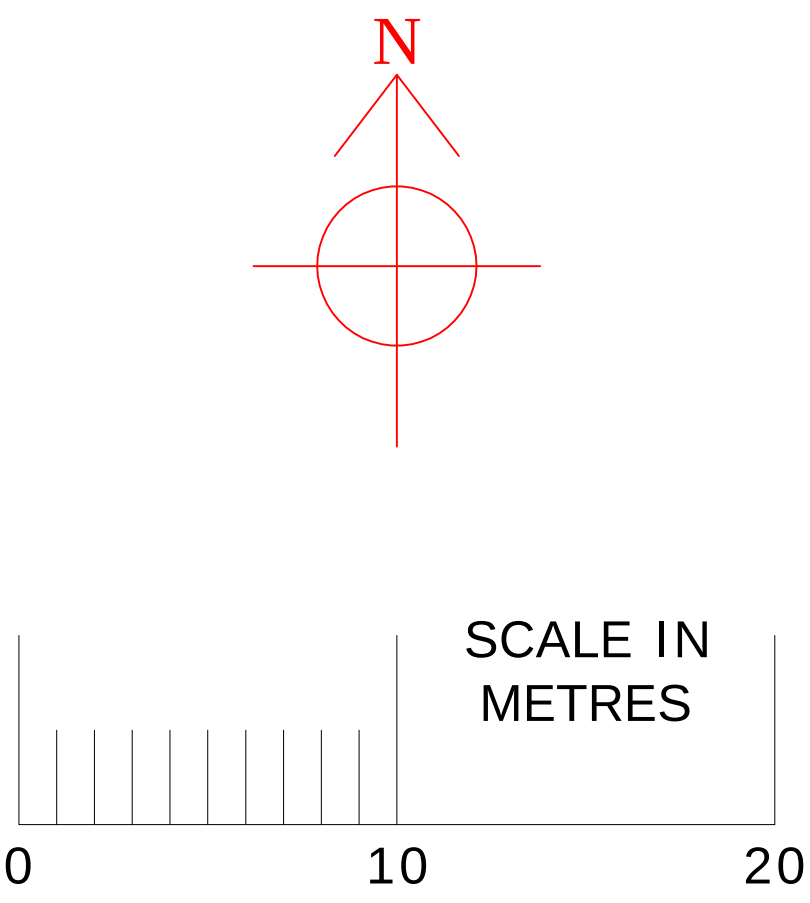
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Sheet 06

BOUNDARY NOT DEFINED

ARABLE



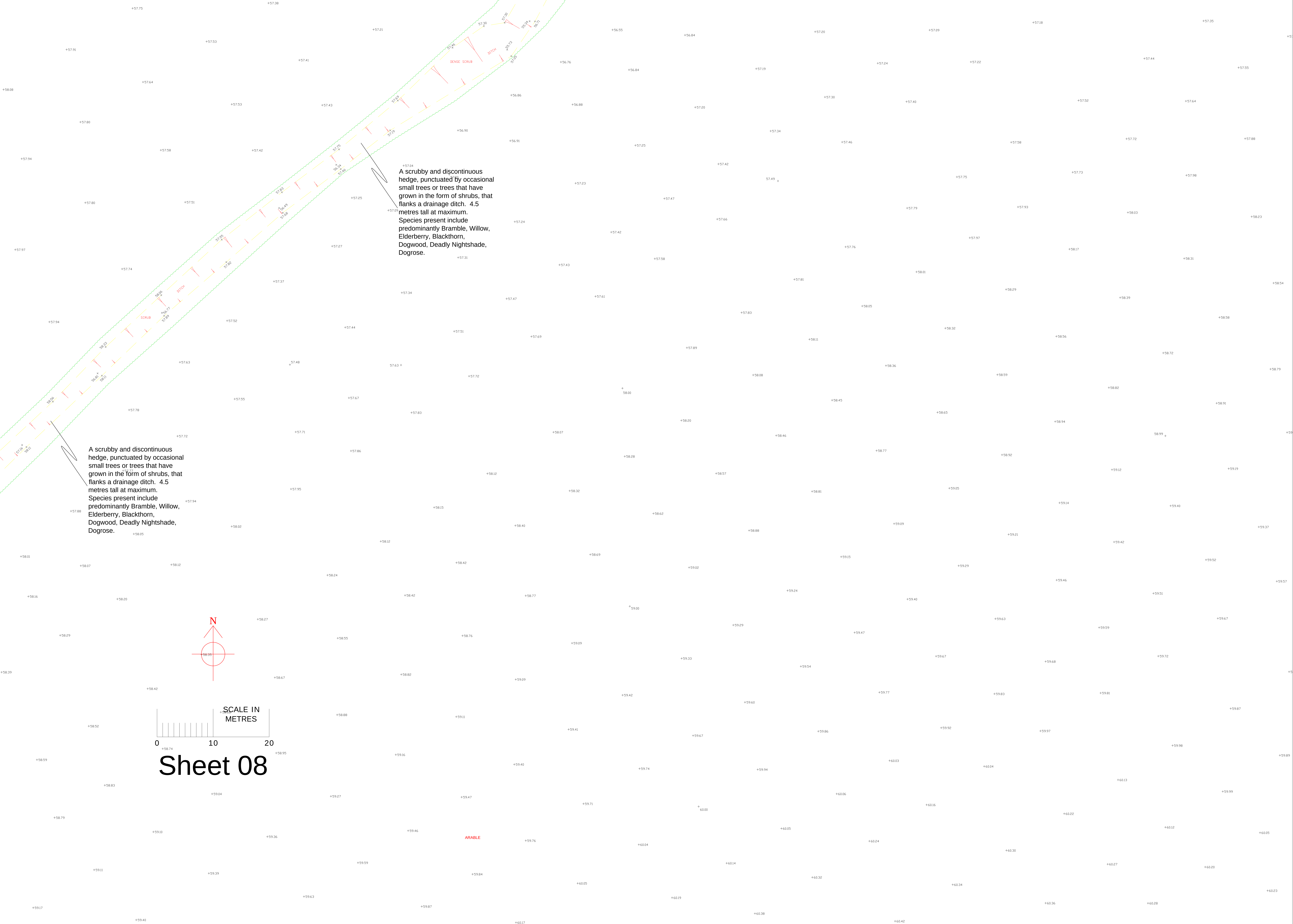
Sheet 07

BOUNDARY NOT DEFINED

A scrubby and discontinuous hedge, punctuated by occasional small trees or trees that have

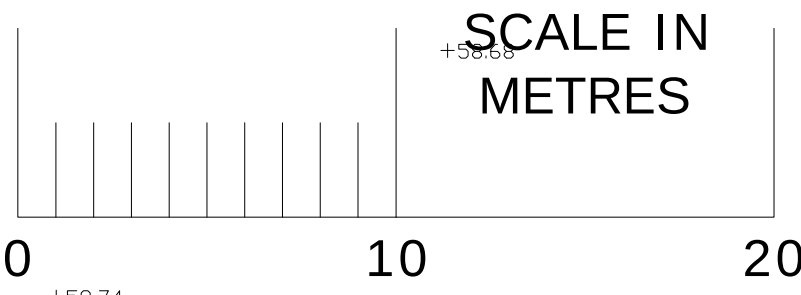
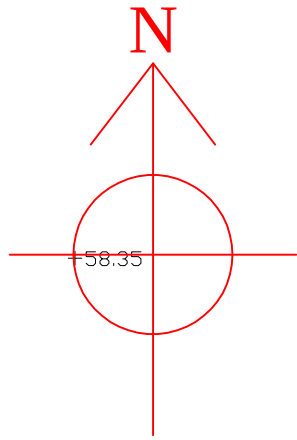
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A scrub hedge, punctuated by occasional small trees or trees that have grown in the form of shrubs, that flanks a drainage ditch. 4.5 metres tall at maximum. Species present include predominantly Bramble, Willow, Elderberry, Blackthorn, Dogwood, Deadly Nightshade, Dogrose.

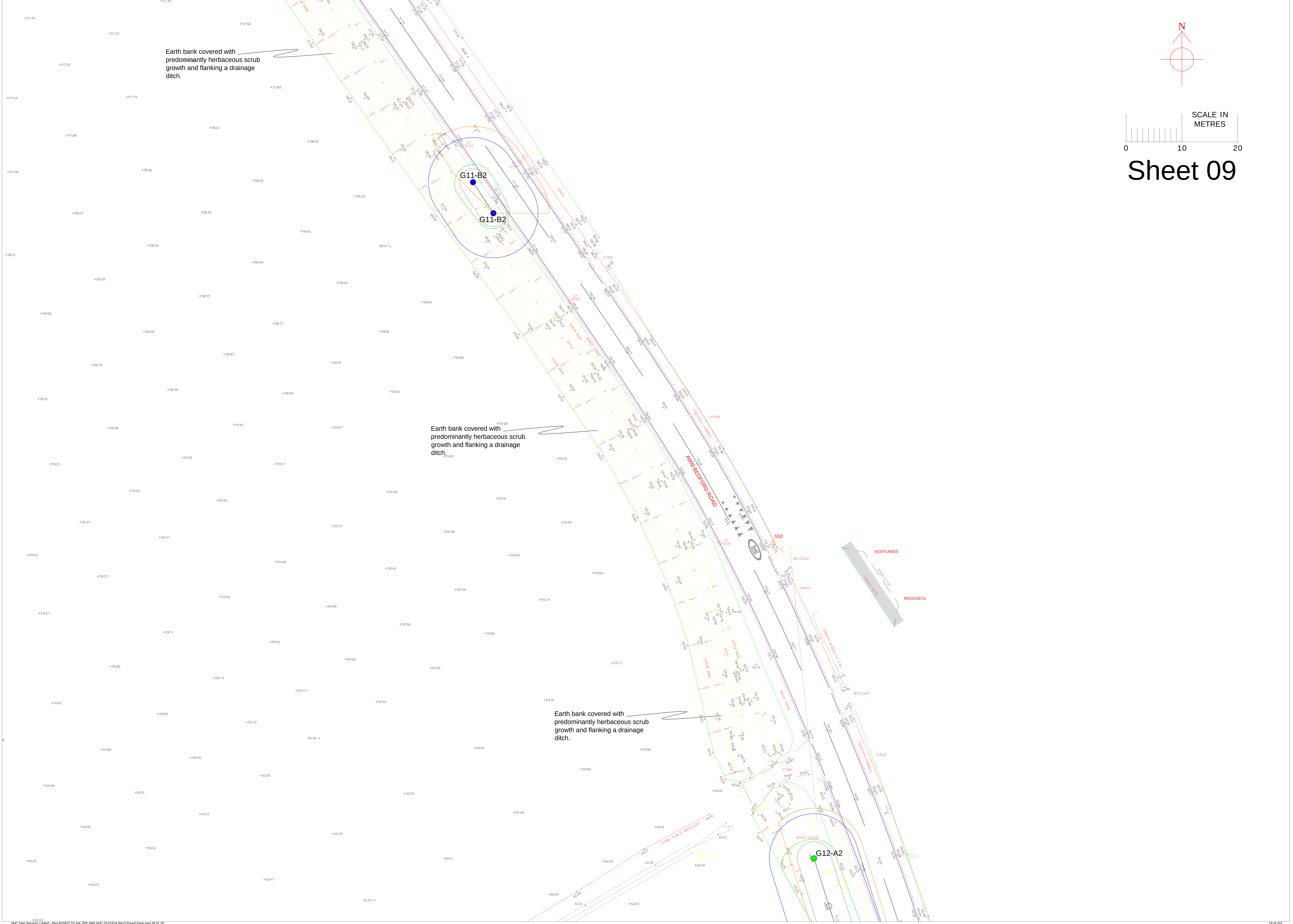


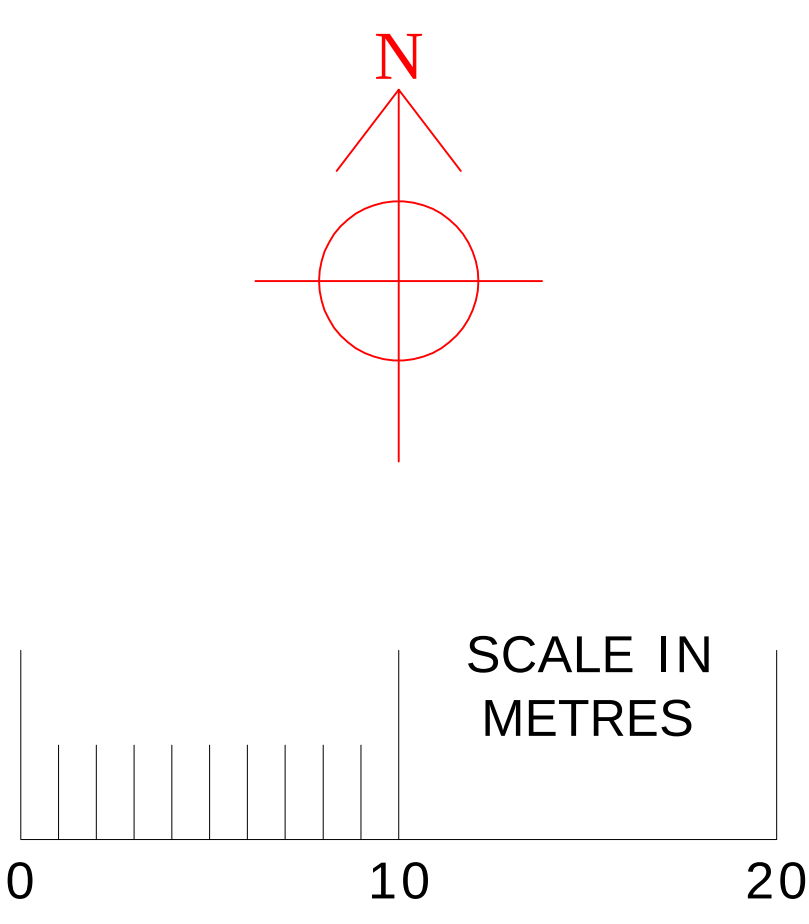
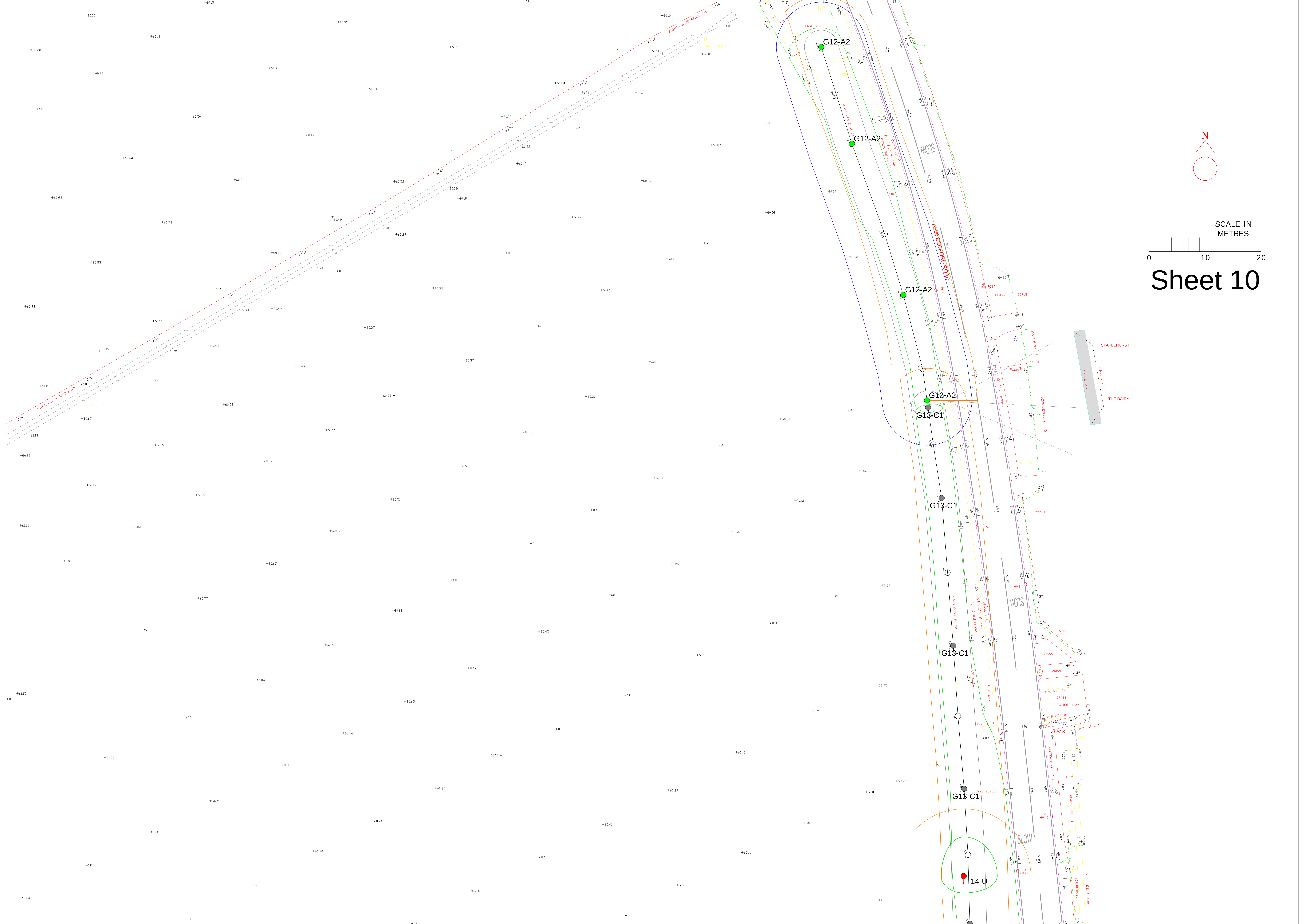
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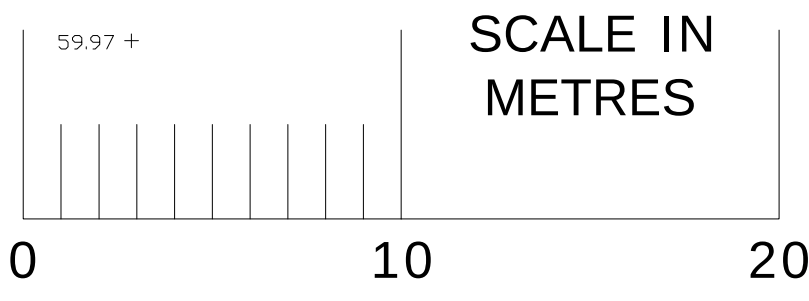
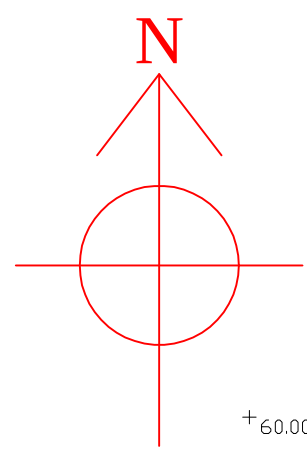


Sheet 08





Sheet 10



Sheet 11

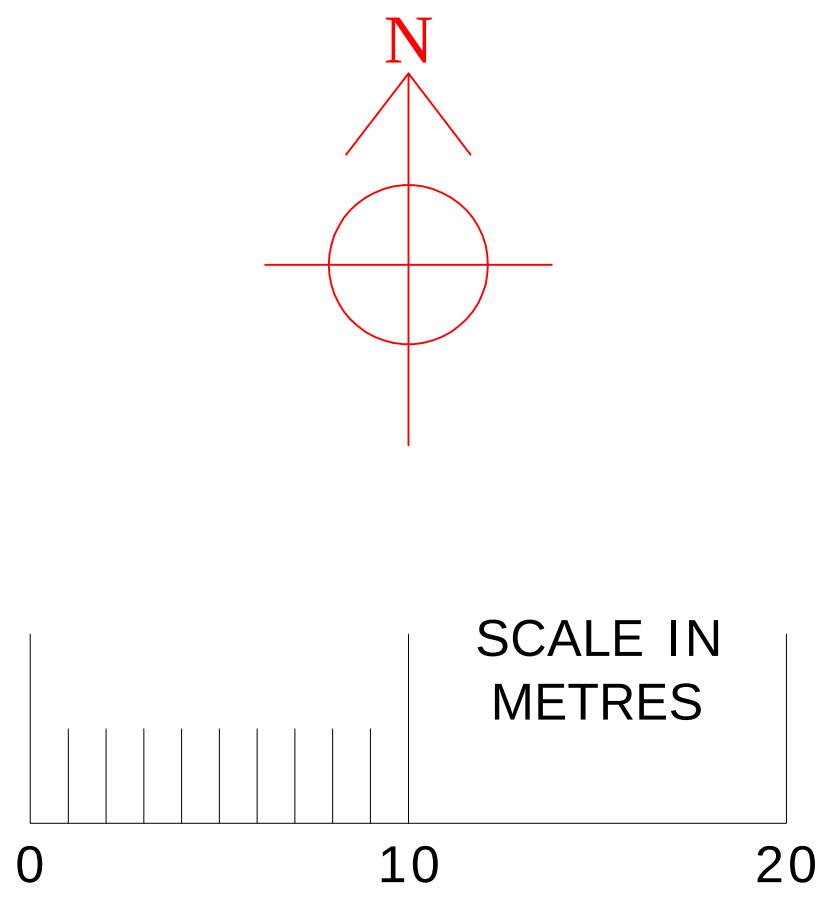
ARABLE

+60.25

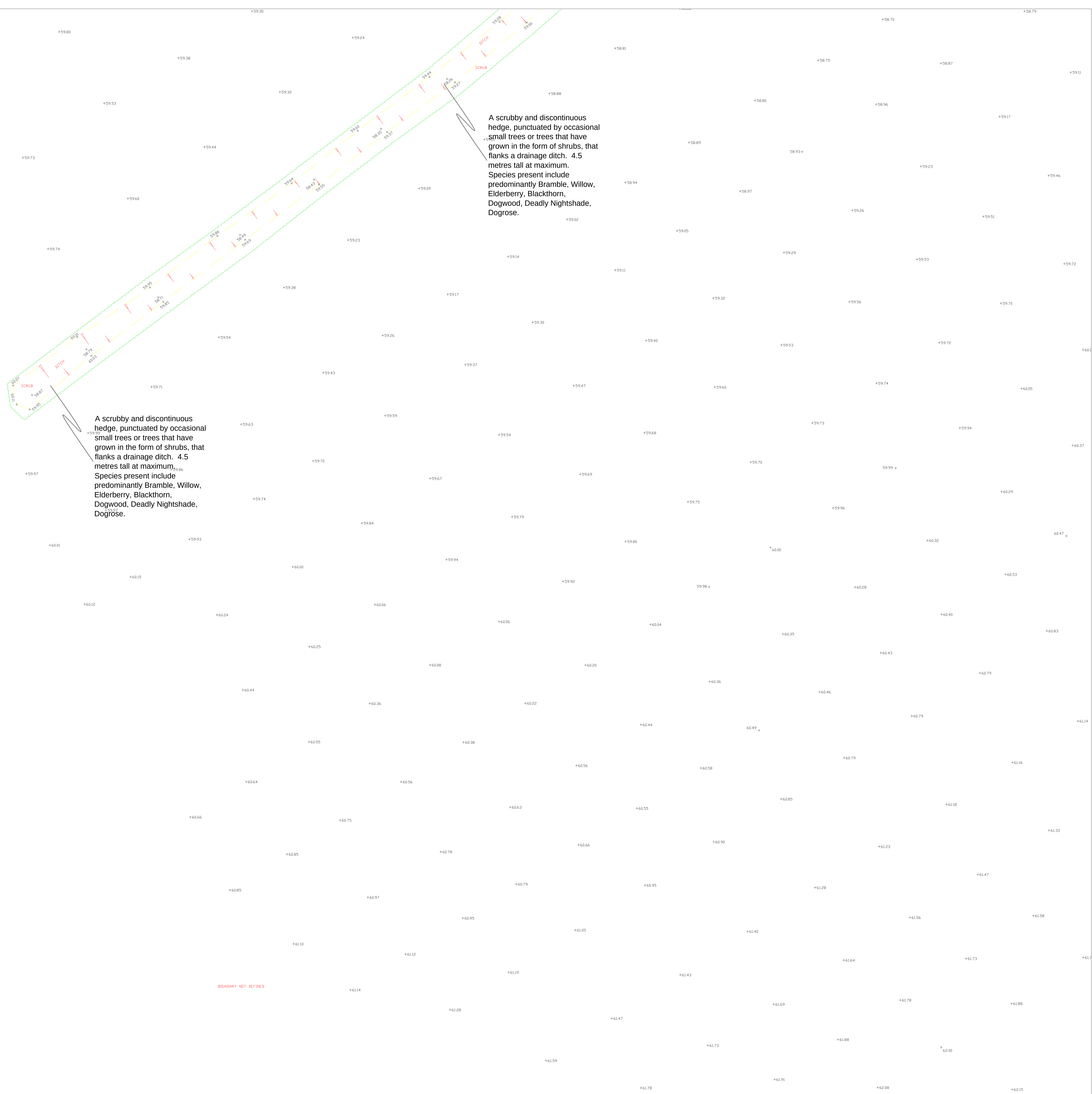
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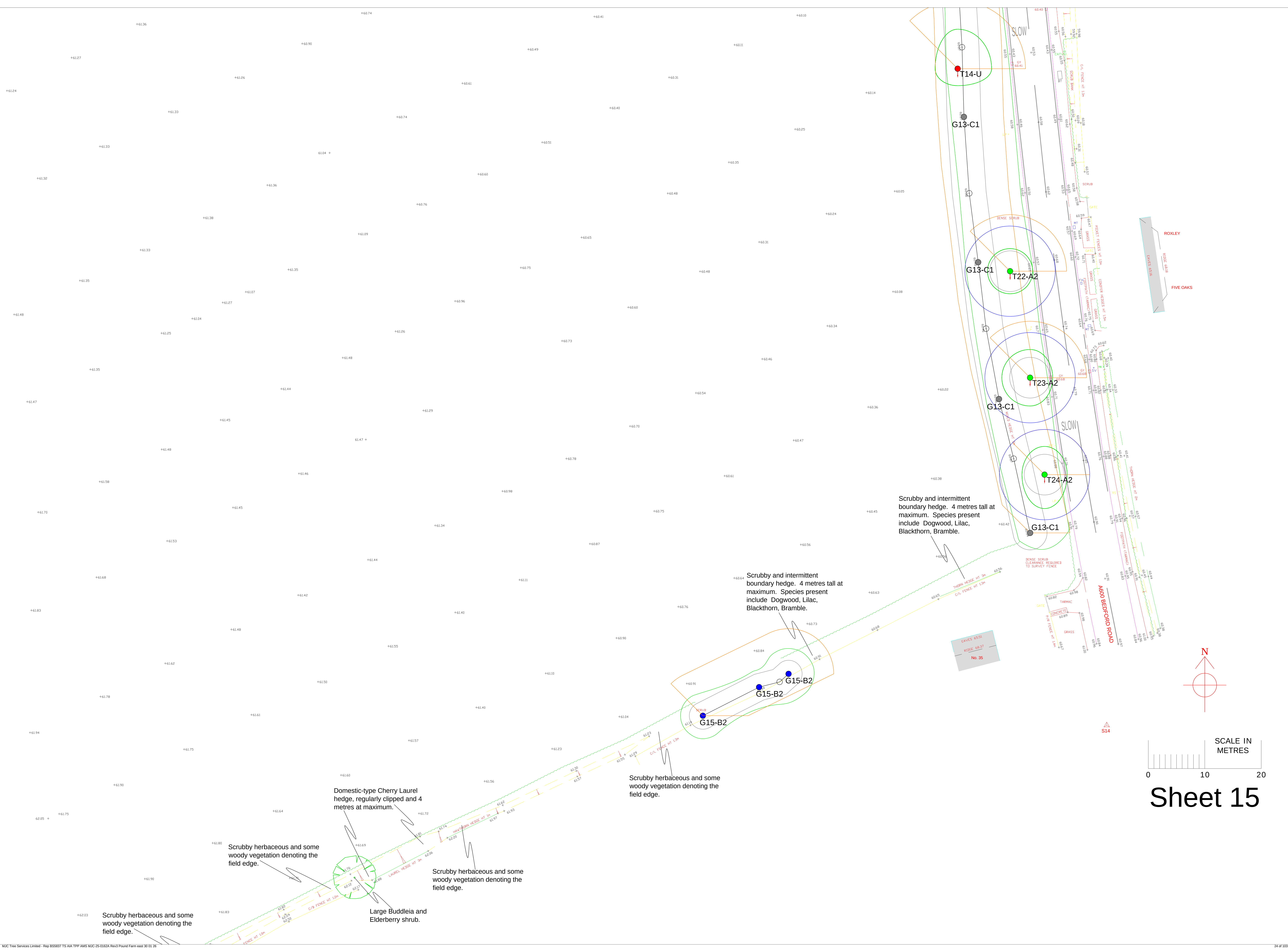
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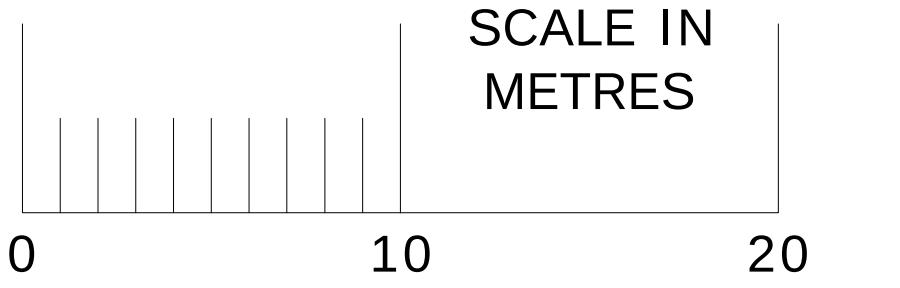
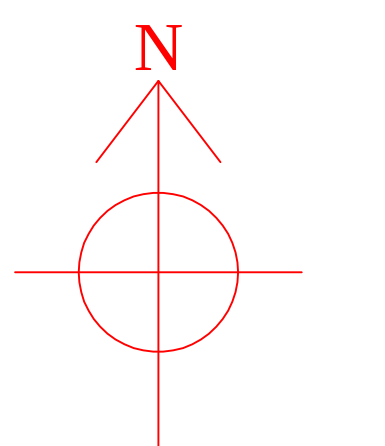
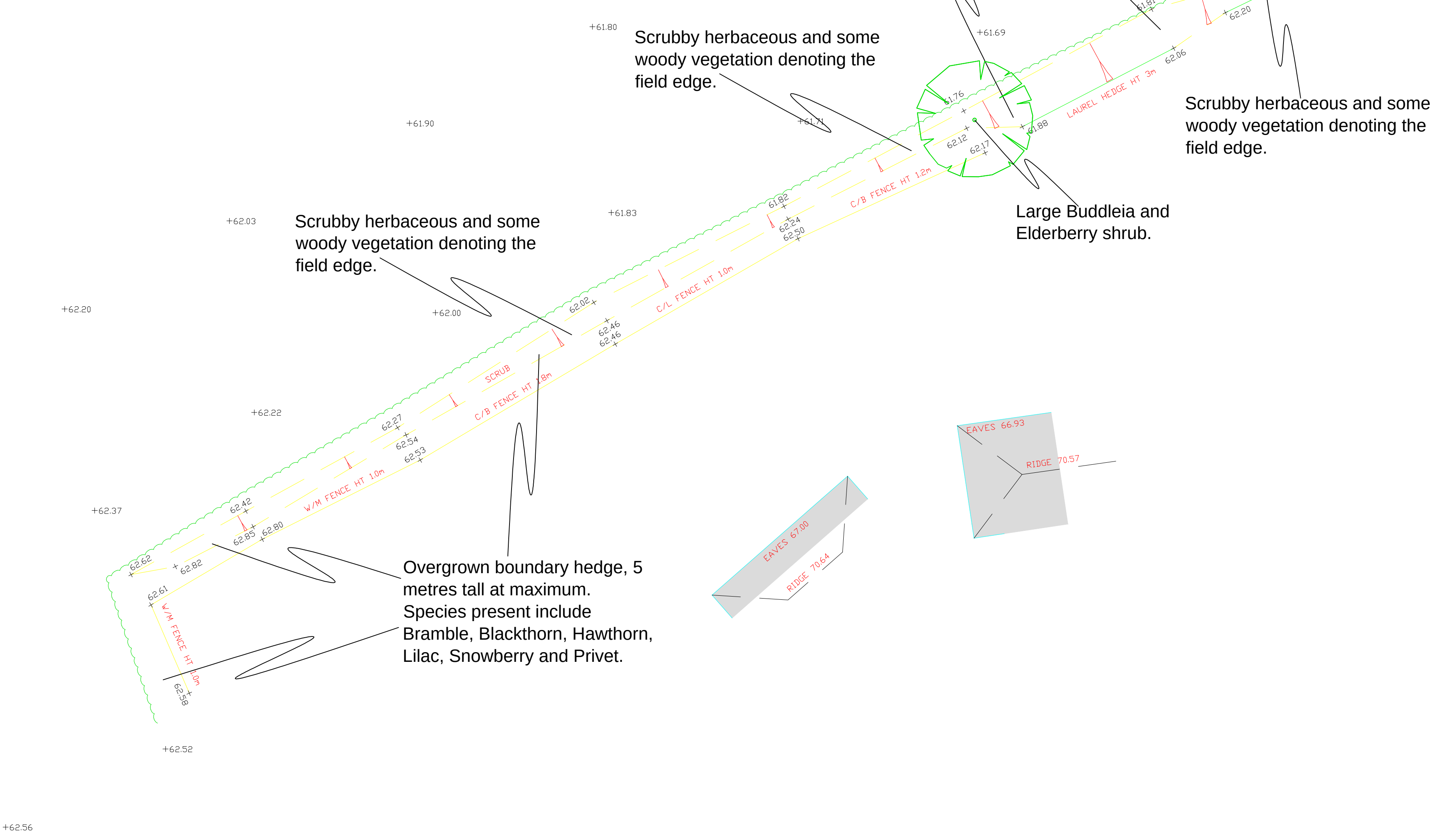
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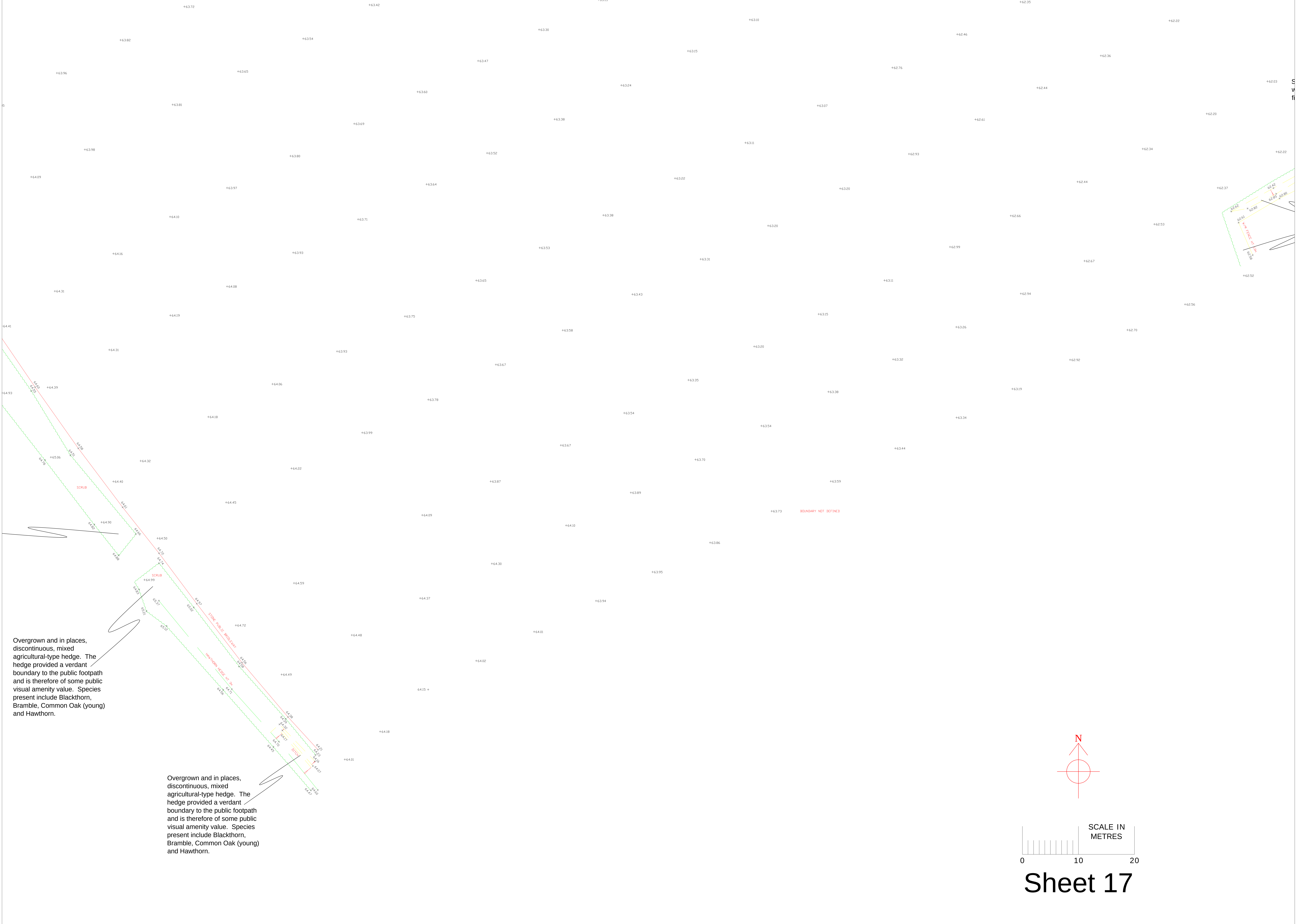
Sheet 12





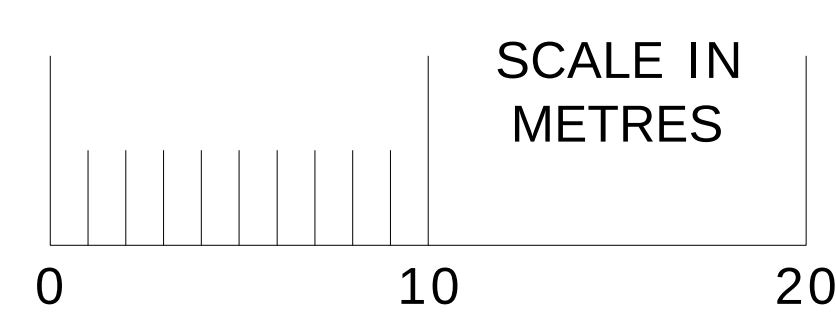
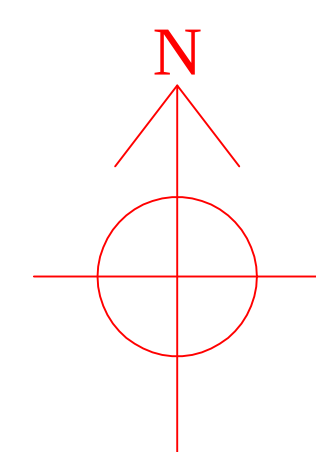
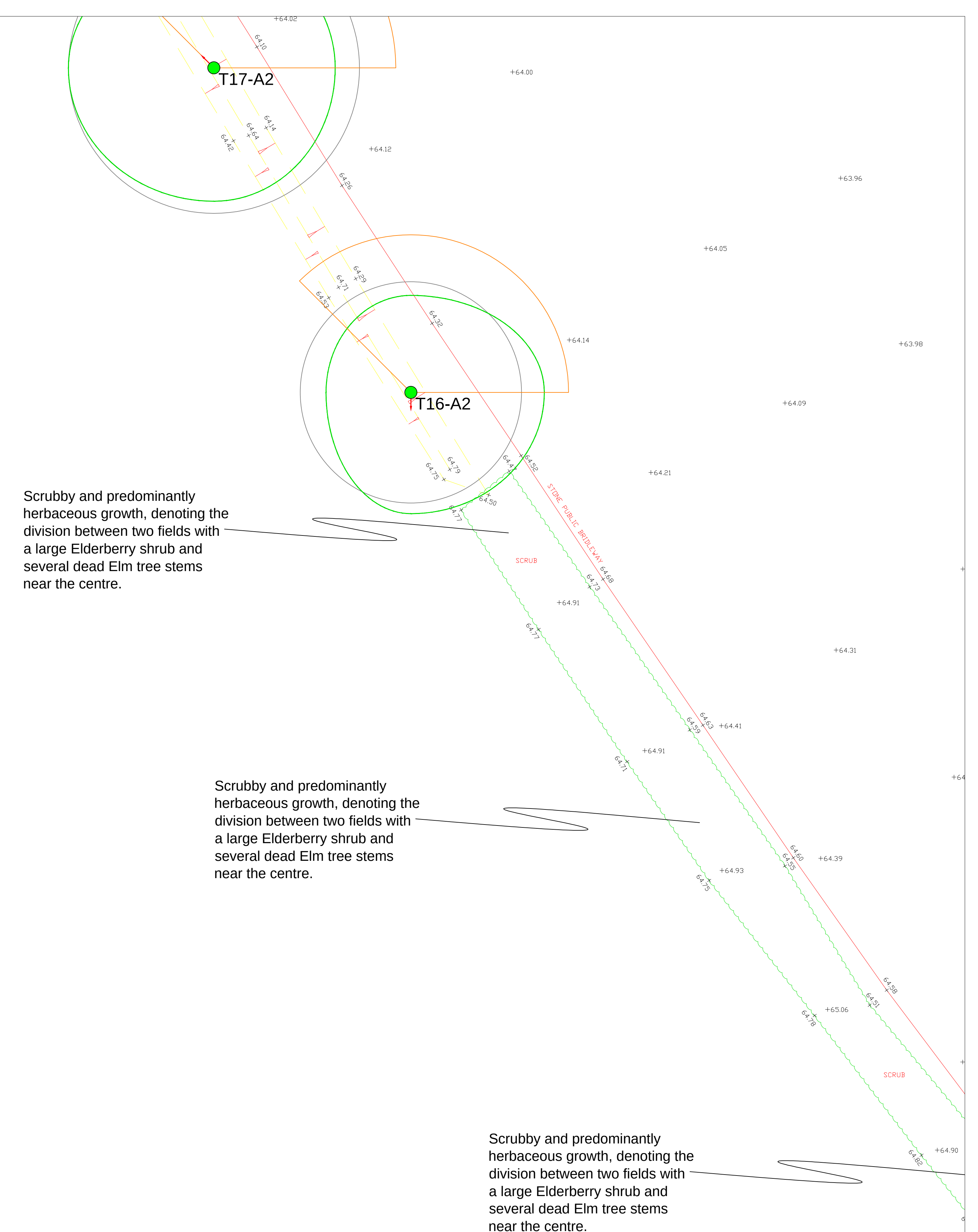


Sheet 16



Overgrown and in places, discontinuous, mixed agricultural-type hedge. The hedge provided a verdant boundary to the public footpath and is therefore of some public visual amenity value. Species present include Blackthorn, Bramble, Common Oak (young) and Hawthorn.

Overgrown and in places, discontinuous, mixed agricultural-type hedge. The hedge provided a verdant boundary to the public footpath and is therefore of some public visual amenity value. Species present include Blackthorn, Bramble, Common Oak (young) and Hawthorn.



Appendix 1A In-drawing text from the Tree Constraints Plan drawing

Tree Constraints Plan Notes

1.0 Introduction

1.1 The tree survey was carried out on the 15th October 2025.

1.2 The survey was carried out in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' (BS5837:2012).

1.3 The tree survey was preliminary in nature and was carried out from ground level using visual techniques only. No trees were climbed or internally investigated. Should a more detailed inspection be required then this will be highlighted in the recommendations section of the Tree Survey Schedule.

1.4 The tree works recommended on the enclosed Tree Survey Schedule are based on the current context of the site, **they are not tree works or tree felling required as a result of any proposed development.** This is to comply with section 4.4.1.1 of BS5837:2012 that states "...the tree survey should be completed and made available to designers prior to and/or independently of any specific proposals for the development". **Any and all tree works and tree felling required and proposed as a result of the proposed development will be detailed in the Arboricultural Impact Assessment drawing.**

2.0 The Trees

2.1 The details of the individual tree survey are provided in the following Tree Survey Schedule.

2.1.1 Individual trees are pre-fixed with the letter 'T'.

2.1.2 Trees that form cohesive groups are recorded collectively and are pre-fixed with the letter 'G'.

2.1.3 Other vegetation has also been noted, see the in-drawing annotations for details.

2.2 The tree constraints have been calculated and are illustrated in accordance with BS5837:2012, see the key for details.

2.3 Some of the elements within group no. G15 were not plotted in the supplied topographical survey plan, and their position has been estimated by eye whilst on sight. If the position of group no. G15 becomes critical to any proposed development of the site, their positions should be confirmed by a competent land surveyor and this drawing adjusted accordingly.

2.4 Root Protection Areas (RPA)

2.4.1 *The indicative and circular RPA of the surveyed trees are based on the trunk diameters recorded in the Tree Survey Schedule, and have been derived using the calculation provided at section 4.6.1 of BS5837:2012.*

2.4.2.1 *For individual trees, the indicative RPA is illustrated by a grey circle in this drawing.*

2.4.2.2 *For groups of trees, the outermost extent of the RPA of the individual trees making up the group are illustrated in this drawing as an amalgamated polygon in grey outline. In this way, the group is illustrated with a single and amalgamated RPA, but this is based on the overlapping and circular RPA for the individual trees making up the group.*

2.4.2 *The RPA's represent the surface area of the **minimum** soil rooting volume required by the tree if it is to remain viable. The actual root spread of the tree will be much larger than the RPA, but BS5837:2012 implicitly accepts that a tree will tolerate a degree of root loss, in much the same way as a tree would tolerate a degree of crown pruning. By default, the existing soil levels and structure in the RPA of retained trees must be protected from the proposed development. Section 5.3.1 of BS5837:2012 allows for the construction of structures over the RPA of retained trees "where there is an overriding justification and if technical solutions to the construction over the RPA are available that will adequately protect the retained trees".*

2.4.3 *Section 7.4.2.3 of BS5837:2012 states that the coverage of the RPA of any one tree by a new permanent surface must not exceed 20% of the unsurfaced RPA of that tree. However, it is not clear whether this restriction applies to all new permanent surfaces or just impermeable surfaces. Section A.1.5.4 of BS5837:2012 states:*

"Bitumen paving and resin-bonded gravels

These surfaces can consist of porous or impermeable material. As the interstices in unsealed tar paving will eventually become blocked by fines, it is advisable for such surfaces to be laid following the same principles as those for impermeable surfaces, therefore its use within the RPA also needs to be restricted to the 20% RPA recommendation (7.4.2.3)."

This statement strongly indicates that the 20% restriction only applies to impermeable surfaces, or surfaces that will become impermeable through normal use, and that the 20% restriction would not apply to permanently permeable surfaces.

2.4.4 *Section 4.6.2 of BS5837:2012 states "Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution."*

- 2.4.5 *It was not considered likely that any of the pre-existing site conditions within the RPA of the surveyed trees had caused significant asymmetric rooting. Therefore, no modification of the RPA has been made.*
- 2.5 *The areas of potentially significant shade illustrated in this drawing have been derived following the guidance provided at section 5.2.2 Note 1 of BS5837:2012. This area does not indicate an area where development may not take place, it merely indicates an area where tree shade may have an adverse impact on a proposed development if that part of the development has a need for high levels of direct and natural light e.g. patios and living room windows, and it may also reduce useable amenity space in gardens. If tree shade is considered to have a potentially significant impact on the proposed development, a daylight and shade analysis will need to be carried out by a suitably qualified person.*
- 2.6 *Some of the surveyed trees were considered to have significant potential for future growth. The potential and estimated mature crown spread of these trees is illustrated by a blue crown spread margin in this drawing. This potential future crown spread is an indicative guide only as there are many variables that influence the future growth of trees and these cannot all be adequately anticipated and/or quantified at this time.*
- 2.7 *The online mapping system provided by the Local Planning Authority (LPA) was consulted on the 1st October 2025 in order to check on the protected status of the surveyed trees. This check indicated the following.*
- 2.7.1 *None of the surveyed trees are protected by a Tree Preservation Order.*
- 2.7.2 *The site is not in a Conservation Area.*
- 2.8 *The online Multi Agency Graphical Information for the Countryside (MAGIC) mapping system provided by DEFRA was consulted on the 1st October 2025 in order to check whether any ancient woodlands were present on or close to the site. This check indicated that no ancient woodlands were present on or close to the site.*
- 2.9 *The tree survey has not identified any ancient and/or veteran trees on or close to the site.*
- 2.10 *The trees on site will be protected by the Forestry Act 1967. Therefore, it will be necessary to obtain a Felling Licence from the Forestry Commission prior to felling any trees onsite unless one or more of the following exemptions apply.*
- 2.10.1 *In any one calendar quarter it is permitted to fell up to 5 cubic metres of licensable timber in the form of growing trees on any one holding without a Felling Licence, as long as no more than 2 cubic metres are sold.*

2.10.1.1 *Calendar quarters are defined as: 1 January to 31 March, 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December.*

2.10.1.2 *The volume of timber in a standing tree is assessed by measuring the amount of wood in the main tree stem(s) where this is greater than 8cm in diameter over bark.*

2.10.2 *An exemption applies for tree works involving tree surgery by way of lopping or topping, for example, pollarding.*

2.10.3 *An exemption applies for felling trees that, when measured at a height of 1.3 metres from the ground have a diameter over bark of 8cm or less, or if thinning, have a diameter over bark of 10cm or less. N.B. Thinning is defined within the Forestry Act 1967 as "felling carried out in order to improve the growth of other trees". The UK Forestry Standard's definition is "The removal of a proportion of trees in a forest after canopy closure, usually to promote growth and greater value in the remaining trees." If underwood or existing coppice (i.e. previously managed by cutting to promote multi-stemmed growth arising at or near ground level), individual stems that have a diameter over bark of 15cm or less are also exempted.*

2.10.4 *An exemption applies to fruit trees, for example, orchard species like apple, pear or plum.*

2.10.5 *An exemption applies to trees standing or growing in an orchard, garden, churchyard or public open space.*

2.10.6 *An exemption applies to trees growing in the inner London boroughs.*

2.10.7 *An exemption applies for the felling of a tree or trees necessary for the prevention of danger or the prevention or abatement of a nuisance.*

2.11 *Various animal species that use trees and some of their habitats that can be found in trees, including Badgers, Bats, Great Crested Newts, and many bird species, are protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010. A qualified ecologist should be engaged to check if these species and or habitats are present in any of the surveyed trees, and their advice followed.*

3.0 *The Site*

3.1 *The site comprised open agricultural fields with a limited number of trees around the boundary.*

3.2 *Surrounding land use was as follows; to the north was agricultural land; to the east was public highway; to the south was a mix of residential development and agricultural land; to the west was agricultural land.*

3.3 *An online check with the British Geological Survey's Geology of Britain Viewer was made on 1st October 2025.*

3.3.1 *This check indicated that the soils on site were likely to be made up of the following:*

- *Bedrock Geology: Gault Formation - Mudstone. Sedimentary bedrock formed between 113 and 100.5 million years ago during the Cretaceous period.*
- *Superficial deposits:*
 - o *Either: Lowestoft Formation - Diamicton. Sedimentary superficial deposit formed between 480 and 423 thousand years ago during the Quaternary period.*
 - o *Or: Glaciofluvial Deposits, Mid Pleistocene - Sand and gravel. Sedimentary superficial deposit formed between 860 and 116 thousand years ago during the Quaternary period.*

3.3.2 *These types of soils may be susceptible to significant and persistent volumetric changes in response to moisture content. Therefore, there could be a risk of tree root related subsidence on this site, and this risk must be considered and assessed by a suitably qualified and experienced engineer, and accommodated in any proposed development of the site.*

3.3.3 *The local soils are likely to be neutral in pH terms, and prone to drought stress during prolonged periods of low or no rainfall. These factors should be borne in mind when selecting trees and shrubs for planting on this site.*

3.3.4 *The local topsoil will be prone to rapid compaction to the point that tree root growth is impeded. In areas where the existing soil structure needs to be protected i.e. in the RPA of retained trees or proposed new tree and shrub planting areas, the soil must be protected from demolition and construction activities and traffic by either tree protection barriers or adequate temporary ground protection.*

3.3.5 *No dig methods of hard surface and road/drive construction using a three dimensional cellular confinement sub base can be used on these types of soil over the RPA of retained trees, but in order to provide adequate protection to tree roots in these areas the sub base may need to be thicker than is routinely used, and it is recommended that the advice of the sub base manufacturer is sought before proposing such constructions.*

Appendix 2 Tree Survey Schedule

TREE SURVEY SCHEDULE

Key:

- o **Ht** = Height estimated in metres.
- o **Stem Diam** = Stem or trunk diameter, measured and calculated in accordance with Annex C and section 4.6 of BS5837:2012.
 - o **oi** = Measurement taken over ivy, which is likely to produce an exaggerated figure;
 - o **cmb** = combined stem diameter value for multi stem trees.
- o **Crown Spread** = Crown spread to the cardinal points in metres, measured by pacing.
- o **1st significant branch ht' & direction** = First significant branch height in metres and direction of growth e.g. N = North.
- o **Crown base ht'** = Minimum distance between surrounding ground level at the trunk base and the base of the main crown, estimated by eye in metres.
- o **Life stage** is chosen from the four following categories;
 - Y = Young;
 - SM = Semi mature;
 - EM = Early mature;
 - M = Mature;
 - OM = Over Mature.
- o **General observations** = Particularly of structural and/or physiological condition, significant features and defects, and the effect these may have on the health, stability and safe retention of the tree.
- o **Preliminary management recommendations** = any significant works identified as necessary in the current context, irrespective of any proposed development of the site.
- o **Rem' cont'** = an estimate, in years, of the remaining period over which the tree can be retained at an acceptable level of risk whilst still providing significant amenity benefits with no significant management intervention.
- o **Reten' Cat'** = Desirability for retention category. Refers to BS5837:2012 which categorises trees on development sites into one of four categories – A, B, C or U, A being very good and U meaning that felling is appropriate regardless of any proposals. The suffix 1, 2 or 3 refers to a subcategory relating to tree, landscape or cultural/ecological values respectively.
- o **agl** = Above ground level
- o **#** = Estimated dimension.
- o **typ** = Typical dimension where several are present.
- o **n/a** = Not applicable.
- o **n/k** = Not known.

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T1	Common Oak	13	590	1	1	5	12	9	2.5	NW	1.1	EM	- The tree was a prominent boundary feature that provided valuable boundary screening and was visible from the public footpath as an horizon-line feature, therefore the tree was of significant public visual amenity value. - The crown was asymmetric as a result of competition for light and space with nearby trees. - Minor deadwood was present throughout the crown as is commonly the case with trees of this species and age but none of this was considered to pose a significant risk of harm should it fall, due to its generally secure attachment and small size.	- No works currently identified. - RPA: radius = 7.1 metres; area = 158 square metres.	40+	A2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T2	Common Oak	13	870	1	10	9	8	6	2.8	SE	1	EM	- The tree was a prominent boundary feature that provided valuable boundary screening and was visible from the public footpath as an horizon-line feature, therefore the tree was of significant public visual amenity value. - The crown was asymmetric as a result of competition for light and space with nearby trees. - Minor deadwood was present throughout the crown as is commonly the case with trees of this species and age but none of this was considered to pose a significant risk of harm should it fall, due to its generally secure attachment and small size.	- No works currently identified. - RPA: radius = 10.4 metres; area = 342 square metres.	40+	A2
G3	Predominantly Field Maple with occasional Native Willow	5 max	150 typical	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0.7 typical	SM	- The linear group had the appearance of a planted feature, possibly planted in order to screen the industrial unit to the north. - The group was visible from the public highway and the public footpath, therefore it was of some public visual amenity value. However, the group had significant potential for future growth that would increase its public amenity value in the future. - Many of the trees were multi stemmed from ground level or just above but this is not uncommon in this species and it is not considered likely to seriously curtail the life expectancy of the trees.	- No works currently identified. - RPA: radius per individual = 1.8 metres; area = 10 square metres.	40+	B2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G4	Hornbeam	4 max	150 typical	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0 min	Y – SM	- The linear group had the appearance of a planted feature, possibly planted in order to screen the industrial unit to the north. - The group has been topped in the past at approximately 1.8 metres above ground level and side trimmed almost as if it was intended to be maintained as a hedge, but this maintenance has lapsed for some period of time. - The group was visible from the public highway and the public footpath, therefore it was of some public visual amenity value. However, the group had significant potential for future growth that would increase its public amenity value in the future.	- No works currently identified. - RPA: radius per individual = 1.8 metres; area = 10 square metres.	40+	B2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T5	Ash	16	400# + 220# + 300# + 400# + 400# + 200# = 784 cmb	6	7#	9#	8#	9#	4.5#	E#	2#	M#	- The tree was offsite and inaccessible therefore all assessments and measurements used were estimates made by eye and from a distance. - The tree was a significant boundary feature, visible from the public highway and therefore of some public visual amenity value. - The crown had been variously reduced and lifted in the past in order to clear the two close-by buildings and the tree is considered to be in general conflict with these buildings. - The tree was multi stemmed from just above ground level with potentially weak basal forks and the presence of these structural defects was considered likely to curtail the ultimate life expectancy of the tree. - The tree was considered to vulnerable to Ash Dieback, caused by the exotic fungus <i>Hymenoscyphus fraxineus</i>. However, at the time of survey, no obvious symptoms of this pathogen were observed.	- No works currently identified as the tree is offsite and beyond the control and responsibility of my Client. - RPA: radius per individual = 9.4 metres; area = 278 square metres.	20+#	B2#
T6	Ash	9	600# @ base	1	6	6	6	4	0.7	W	0	WM	- The tree had been frequently topped in order to clear the overhead powerlines and this has resulted in poor crown form and significant crown asymmetry over the highway. - Given the proximity of the overhead powerlines and the growth habit of the tree out over the highway, the long-term retention was not anticipated.	- Consider felling to remove conflict with the overhead powerlines and the highway. - RPA: radius = 7.2 metres; area = 163 square metres.	10+	C1

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T7	Ash	11	600# @ 1m agl	1	6	5	5	5	1	E	0.5	EM	- Significant crown dieback was present and the tree was retaining large bunches of blackened seed keys, both features of which are indicative of Ash Dieback, caused by the exotic fungus <i>Hymenoscyphus fraxineus</i>. - This fungus causes an embrittlement of the timber and an increased risk of cross-sectional branch and/or trunk failure and the tree was considered to pose a significant risk to users of the public highway.	- Fell. - RPA: radius = 7.2 metres; area = 163 square metres.	<10	U
T8	Ash	10	200 typical	12	7	5	7	5	1	E	0	EM	- Significant crown dieback was present and the tree was retaining large bunches of blackened seed keys, both features of which are indicative of Ash Dieback, caused by the exotic fungus <i>Hymenoscyphus fraxineus</i>. - This fungus causes an embrittlement of the timber and an increased risk of cross-sectional branch and/or trunk failure and the tree was considered to pose a significant risk to users of the public highway.	- Fell. - RPA: radius = 2.4 metres; area = 18 square metres.	<10	U
T9	Field Maple	8	190 typical	7	2	2	5	3	0.7	S	0	SM	- The tree was an attractive roadside feature and had some potential for future growth, therefore the tree could act as a replacement for the nearby and diseased Ash tree. - The tree was multi stemmed from ground level and just above. However, this is common in this species and was not considered likely to significantly curtail the life expectancy of the tree.	- No works currently identified. - RPA: radius = 2.3 metres; area = 16 square metres.	20+	B2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G10	Field Maple	7	180 typical	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0 min	SM	- The linear group was superficially similar in many ways to group no. G3. - The group was an attractive roadside feature that provided a small degree of boundary screening. - Therefore, the group was of some public visual amenity value. - The group had significant potential for future growth and this would increase the amenity value of the group in time.	- No works currently identified. - RPA: radius per individual = 2.2 metres; area = 15 square metres.	40+	B2
G11	Field Maple	10	200 typical	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0 min	SM	- The linear group was superficially similar in many ways to group no. G3. - The group was an attractive roadside feature that provided a small degree of boundary screening. - Therefore, the group was of some public visual amenity value. - The group had significant potential for future growth and this would increase the amenity value of the group in time.	- No works currently identified. - RPA: radius per individual = 2.4 metres; area = 18 square metres.	40+	B2
G12	Field Maple Hazel Elderberry Ash Hornbeam Clematis Bramble Hawthorn Blackthorn Dogrose Elm Ivy	9 max	250 typical	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	SM	- The linear group was in essence an overgrown hedge that was beginning to evolve into a linear group of small trees. - The group provided valuable boundary screening and was a prominent roadside feature of significant public visual amenity value. - The group had some potential for future growth.	- No works currently identified. - RPA: radius per individual = 3.0 metres; area = 28 square metres.	40+	A2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G13	Predominantly Elm with some Hawthorn Blackthorn Field Maple Ivy Bramble	7 max	250 typical	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	SM	- The vast majority of the Elm trees present had died of Dutch Elm Disease and were now standing dead trees. - It was considered likely that the roots of these trees would still be alive and new growth would be able to emerge from them, but in the intervening period, the group is likely to degenerate into an intermittent area of woody shrubs and small trees before growing back into a linear group of trees. - Given the proximity of the dead Elm trees to the public highway, these were considered to pose some risk of harm to users of the highway.	- Fell all dead Elm trees from within the group and allow the rootstock of these Elm trees to regrow. - RPA: radius per individual = 3.0 metres; area = 28 square metres.	10+	C1
T14	Ash	12	800#	1	7	6#	3	4	3.2	S	3	M	- The tree was heavily covered in Ivy which greatly restricted the extent of visual survey possible. - Significant crown dieback was present, strongly indicative of Ash Dieback, caused by the exotic fungus <i>Hymenoscyphus fraxineus</i>. This fungus is known to cause embrittlement of the timber and at the time of survey, shattered branch stubs were visible indicating that this process has already started. - Extensive lower trunk decay and bark killing was present such that the stability of the tree is likely to be significantly compromised within the next 10 years at this. - This, combined with the presence of Ash Dieback, and the tree's proximity to the public highway, makes its retention inadvisable on the grounds of health and safety.	- Fell. - RPA: radius = 9.6 metres; area = 290 square metres.	<10	U

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G15	Blackthorn	8 max	200 typical	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	0	EM	- The linear group was formed of a section of Blackthorn hedge that had now become overgrown and was evolving into a distinct linear group of trees. - The group could be seen from the public footpath, therefore it was of some public visual amenity value. - Some of the elements within this group were not plotted in the supplied topographical survey plan, and their position has been estimated by eye whilst on sight.	- No works currently identified. - RPA: radius per individual = 2.4 metres; area = 18 square metres.	20+	B2
T16	Common Oak	13	760	1	8	11	10	7	2	S	0.6	EM	- The tree was a prominent boundary feature, set next to the public footpath, and of significant public visual amenity value as a result. - Minor deadwood was present in the crown. However, this was not considered to pose any significant risk of harm to users of the public highway due to the small size and lightweight of any deadwood considered likely to fall.	- No works currently identified. - RPA: radius = 9.1 metres; area = 261 square metres.	40+	A2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T17	Common Oak	15	1000 #	1	10	10	11	12	3.5	NW	0.3	EM	- The tree was a prominent boundary feature, set next to the public footpath, and of significant public visual amenity value as a result. - The tree was heavily covered in Ivy, which greatly restricted the extent of visual survey possible and also meant that the stem diameter had to be estimated. - A small bleeding canker was visible on the trunk bark on the northern side at approximately 1.3 metres above ground level. This could indicate the presence of the bacterial infection termed Acute Oak Decline. - However, crown vitality did not seem to be particularly impaired, therefore, it is reasonable to assume that the tree is currently successfully co-existing with this bacterial infection. - Minor deadwood was present in the crown. However, this was not considered to pose any significant risk of harm to users of the public highway due to the small size and lightweight of any deadwood considered likely to fall.	- No works currently identified. - RPA: radius = 12.0 metres; area = 452 square metres.	40+	A2
T18	Common Oak	12	500	1	7	10	7	9	4	E	0	EM	- The tree was a prominent boundary feature, set next to the public footpath, and of significant public visual amenity value as a result. - The tree had some potential for future growth.	- No works currently identified. - RPA: radius = 6.0 metres; area = 113 square metres.	40+	A2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T19	Common Oak	12	650#	1	8	9	7	7	1.6	N	0.2	EM	- The tree was a prominent boundary feature, set next to the public footpath, and of significant public visual amenity value as a result. - Close access to the base of the tree was impeded, therefore, an estimated stem diameter measurement has been used to calculate the root protection area. - The trunk bifurcated at approximately 2 metres above ground level with a fork that seemed to be slowly developing into a relatively strong saddle-like structure.	- No works currently identified. - RPA: radius = 7.8 metres; area = 191 square metres.	40+	A2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T20	Common Oak	13	1000 #	1	6	9	8	9	2.2	SW	0.5	EM	- The tree was a prominent boundary feature, set next to the public footpath, and of significant public visual amenity value as a result. - The tree had experienced extensive crown dieback and major branch attachment failure, resulting in several large beams of stable deadwood above the branch bole and a large longitudinal bark wound on the east north eastern side of the trunk. - The crown vitality was good and the tree was steadily filling the spaces created by this past crown dieback. - The structural stability of the tree is a concern given its proximity to the public footpath. However, if any branch attachment fails in the future, it is most likely to fail during a storm event and it is also very unlikely that anyone will be walking along the footpath during such a storm. Therefore, the risk of harm posed by the tree was not considered unacceptable in the current context of the site.	- Monitor and assess condition at 18-monthly intervals for reasons of health and safety. - If the site is to be developed, then the risk posed by this tree will need to be re-assessed in the light of that development. - RPA: radius = 12.0 metres; area = 452 square metres.	20+	B2

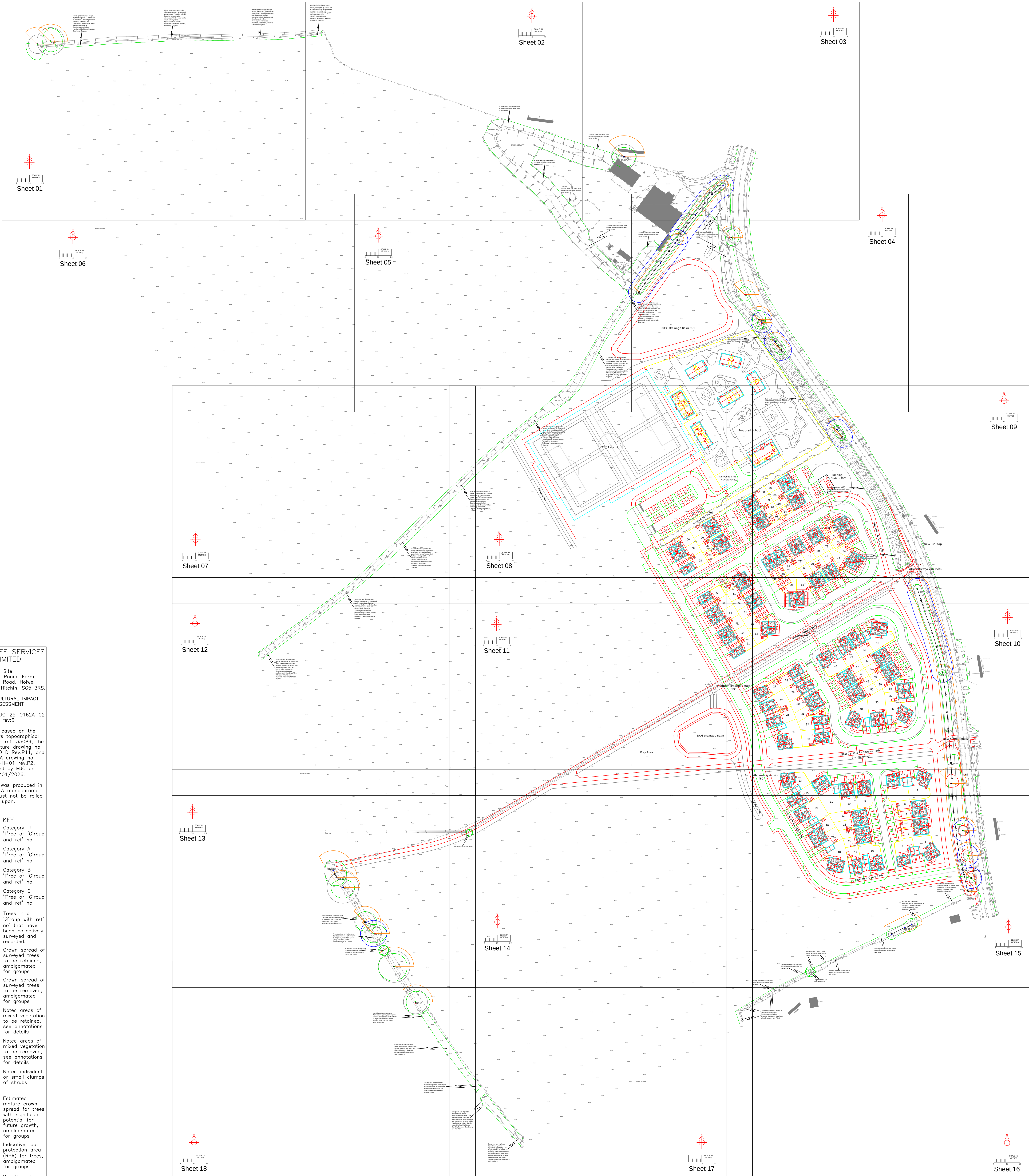
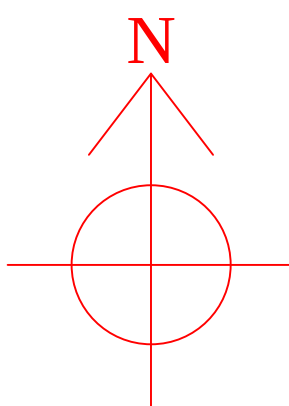
Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G21	Ash	15 max	600# typical @ base	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	1	EM	- The linear group comprised three individual trees, whose crowns had merged to form a cohesive unified and mutually interdependent structure. - All three trees were two stemmed from approximately 0.5 metres above ground level with potentially weak forks developing between those stems and the presence of this structural defect was considered likely to result in the removal of these trees on the ground of health and safety, given their proximity to the public footpath, within the next 10-20 years at least. - The group was a prominent feature to the side of the footpath and was therefore of significant public visual amenity value. - The group was considered to be vulnerable to Ash Dieback caused by the exotic fungus <i>Hymenoscyphus fraxineus</i>. However, no obvious symptoms of this exotic pathogen were observed at the time of survey.	- Monitor and assess condition at 18-monthly intervals for reasons of health and safety. - RPA: radius per individual = 7.2 metres; area = 163 square metres.	10+	C1

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T22	Hornbeam	10#	300#	1	4#	4#	4#	4#	1.7#	S#	3#	SM#	- Close access to the tree was impeded by dense surrounding undergrowth and close viewing of the tree was not possible, as this could only be achieved by standing in a busy highway with no pavement. Therefore, all assessments and measurements used are estimates made from a distance. - The tree was a significant and roadside feature of high public visual amenity value. - The tree had some potential for future growth.	- No works currently identified. - RPA: radius = 3.6 metres; area = 41 square metres.	40+#	A2#
T23	Hornbeam	10#	300#	1	5#	4#	5#	5#	1.3#	S#	1#	SM#	- Close access to the tree was impeded by dense surrounding undergrowth and close viewing of the tree was not possible, as this could only be achieved by standing in a busy highway with no pavement. Therefore, all assessments and measurements used are estimates made from a distance. - The tree was a significant and roadside feature of high public visual amenity value. - The tree had some potential for future growth.	- No works currently identified. - RPA: radius = 3.6 metres; area = 41 square metres.	40+#	A2#

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 st sig' branch ht' (m)	Direction of 1 st sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T24	Hornbeam	8#	300#	1	5#	4#	6#	4#	1.6#	S#	1#	SM#	- Close access to the tree was impeded by dense surrounding undergrowth and close viewing of the tree was not possible, as this could only be achieved by standing in a busy highway with no pavement. Therefore, all assessments and measurements used are estimates made from a distance. - The tree was a significant and roadside feature of high public visual amenity value. - The tree had some potential for future growth.	- No works currently identified. - RPA: radius = 3.6 metres; area = 41 square metres.	40+##	A2#

Appendix 3

Arboricultural Impact Assessment drawing



MJC TREE SERVICES LIMITED

Site:
Land at Pound Farm,
Bedford Road, Hoiwell
(Kleford), Hitchin, SG5 3RS.

ARBORICULTURAL IMPACT
ASSESSMENT

Plan no. MJC-25-0162A-02
rev.3

This is based on the
mksurveys topographical
survey plan ref. 35089, the
architecture drawing no.
22.072 100 D Rev.P11, and
the DHA drawing no.
34362-H-01 rev.P2,
amended by MJC on
30/01/2026.

This plan was produced in
colour. A monochrome
version must not be relied
upon.

- KEY**
- Category U
"Tree or 'G' group
and ref' no"
 - Category A
"Tree or 'G' group
and ref' no"
 - Category B
"Tree or 'G' group
and ref' no"
 - Category C
"Tree or 'G' group
and ref' no"
 - Trees in a
'G' group with ref'
no" that have
been collectively
surveyed and
recorded.
 - Crown spread of
surveyed trees
to be retained,
amalgamated
for groups
 - Crown spread of
surveyed trees
to be removed,
amalgamated
for groups
 - Noted areas of
mixed vegetation
to be retained,
see annotations
for details
 - Noted areas of
mixed vegetation
to be removed,
see annotations
for details
 - Noted individual
or small clumps
of shrubs
 - Estimated crown
spread for trees
with significant
potential for
future growth,
amalgamated
for groups
 - Indicative root
protection area
(RPA) for trees,
amalgamated
for groups
 - Direction of
lowest
significant
branch for
individual trees,
based on
surveyed heights
and
amalgamated
for groups
 - Required
highway visibility
splays
- SCALE**
- This sheet - NTS
Following sheets -
1:200 @ A0

Arboricultural Impact Assessment

1.0 Introduction

- 1.1 It is proposed to develop the eastern part of the site for residential use with a new school, playing fields, with three new accesses off Bedford Road, namely one vehicle access, one pedestrian and cycle path access, and an emergency vehicle access, as illustrated in this drawing.
- 1.2 The western part of the site will be the subject of a separate planning application for residential development.
- 1.3 The trees, their constraints, and the arboricultural impacts of the proposed development, are illustrated in accordance with the key.
- 2.0 Tree Works**
- 2.1 The proposed development requires the following tree works to be carried out:
- 2.1.1 All trees nos. T14, T22, T23 and T24, one part of group no. G12, two parts of group no. G13, and free areas of local growth. These trees are illustrated in this drawing with circular red crown margins. This group and the areas of local growth are illustrated with partial red and green crown margins in this drawing, i.e. the red crown margin indicates the parts of the group and scrub vegetation to be felled, and the green crown margin indicates the parts of the group and scrub vegetation to be retained.
- 2.2 These tree works are required, and are considered acceptable in arboricultural planning terms, for the following reasons:
- 2.2.1 Tree no. T14 needs to be felled in the current context of the site due to the risk of harm it poses to users of Bedford Road, see the Tree Survey Schedule record of this tree for details. Therefore, the felling of this tree should not be regarded as a consequence of the proposed development as it should be felled irrespective of any proposed development of the site.
- 2.2.2 Tree no. T14 is a 'U' grade with regard to its quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as 'Trees of high quality which are estimated remaining life expectancy of at least 40 years.'

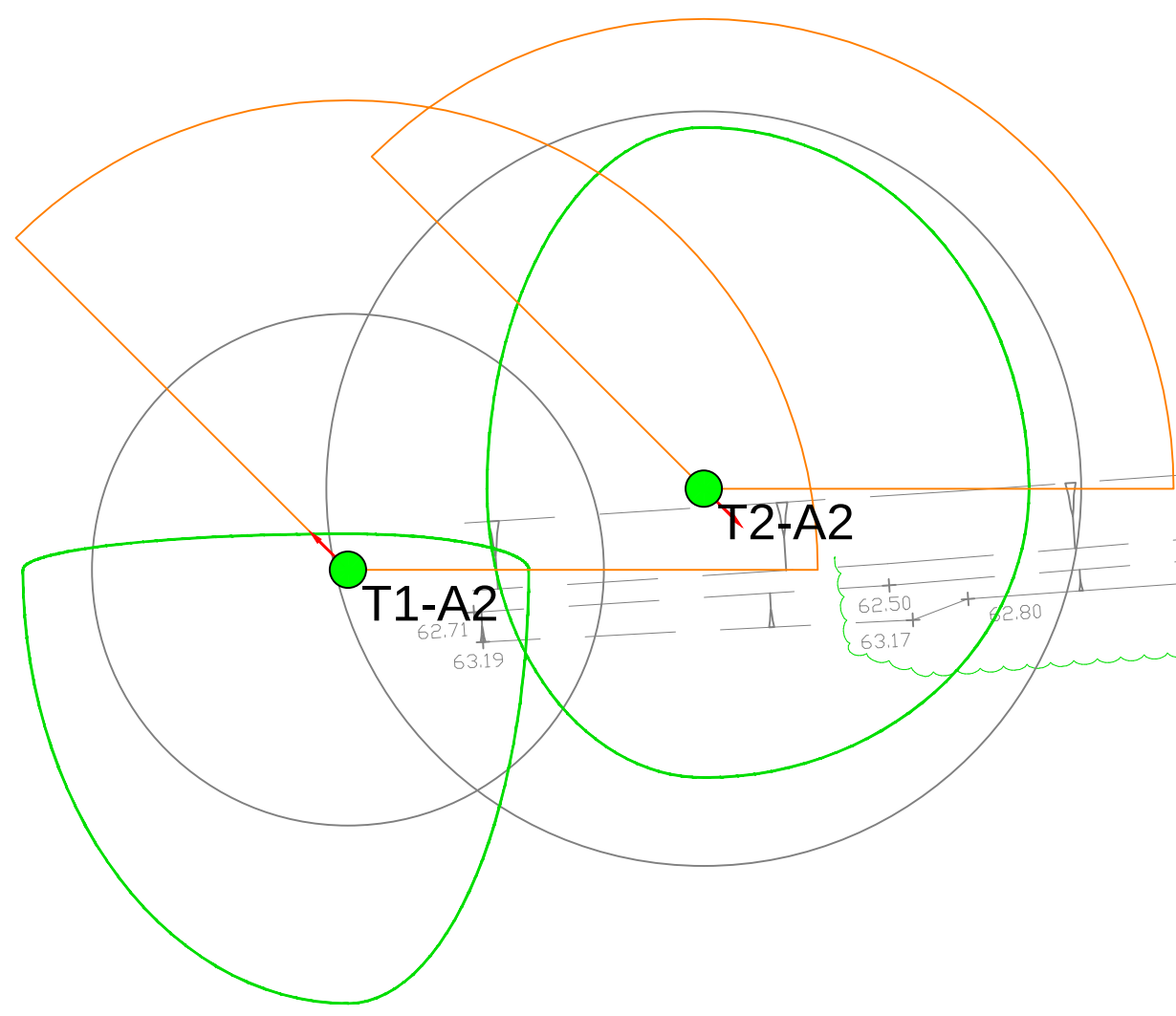
- 2.2.1.3 Such a tree cannot be considered to be of high public amenity value, and the required removal of such a low grade tree cannot form a legitimate reason for the Local Planning Authority (LPA) to object to the proposed development.
- 2.2.2 One part of G12 and two parts of Group no. G13 to be felled.
- 2.2.2.1 If the site is to be developed as proposed it is necessary to create new vehicle, pedestrian, and cycle accesses off Bedford Road with the necessary visibility splays, and this makes it inevitable that some parts of the groups alongside Bedford Road will need to be removed to create these accesses.
- 2.2.2.1.1 For reasons of health and safety, the design team have separated the vehicular access from the pedestrian and cycle access, which is why two accesses in addition to the emergency access onto Bedford Road are proposed.
- 2.2.2.1.2 It must also be noted that the location of both these accesses onto Bedford Road have been carefully located so as to avoid removing any substantive parts of the 'A' grade group no. G12.
- 2.2.2.2 Group no. G13 is a 'U' grade with regard to its quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as 'Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.'
- 2.2.2.3 Such trees cannot be considered to be of high public amenity value as individuals, although they may collectively accrue some public amenity value if they are present in sufficient numbers. The required removal of these trees is likely to form a substantive reason for the LPA to object to the proposed development. However, the LPA may take note of the relative loss of retained trees represented by the removal of these trees, and to require the planting of new trees as part of the proposed development to compensate for this collective loss. Therefore, the required removal of these trees should not form a substantive reason for the LPA to object to the proposed development providing adequate mitigation planting of new trees is carried out as part of the proposed development.
- 2.2.2.3.1 Group no. G12 is an 'A' grade group with regard to its quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as 'Trees of high quality with an estimated remaining life expectancy of at least 40 years.'

- 2.2.2.3.1 The required removal of 'A' grade trees is likely to form a substantive reason for the LPA to object to a proposed development. However, in this case, G12 is merely being side trimmed to a small degree along its roadside here. As such, this work is no more than could reasonably be carried out in the current context of the site for highway and/or maintenance reasons. Therefore, the required side trimming of group no. G12 should not form a substantive reason for the LPA to object to the proposed development.
- 2.2.2.4 A comprehensive soft landscaping proposal for the proposed development is being submitted as part of the application bundle. This soft landscaping proposal has, in part, been informed by the identified tree losses and it includes specific new tree planting to compensate for the loss of these trees. The LPA can ensure the proposed soft landscaping proposal is implemented by granting planning permission for the proposed development subject to an appropriately worded planning condition requiring the implementation of the proposed soft landscaping proposal.
- 2.2.3 Tree nos. T22, T23 and T24 to be felled.
- 2.2.3.1 These trees need to be felled to accommodate the new vehicle access onto Bedford Road and the required visibility splays.
- 2.2.3.1.1 For reasons of health and safety, the design team have separated the vehicular access from the pedestrian and cycle access, which is why two accesses in addition to the emergency access onto Bedford Road are proposed.
- 2.2.3.1.2 In order to allow the efficient development of the site, and to maintain good separation distances between the proposed dwellings and the site boundaries, a generally peripheral route is required for the main internal roads serving the proposed development. This has made it necessary for the vehicular access to be located in the south eastern corner, and this will result in the loss of these three trees.
- 2.2.3.1.3 Consideration was given to locating the vehicular access where the pedestrian and cycle path is proposed. However, the pedestrian and cycle path has been carefully located so as to align with the existing bridleway on the far side of Bedford Road. Therefore, this location was ruled out as far as an access across is concerned.
- 2.2.3.2 These trees are all 'A' grade with regard to their quality assessment as defined in Table 1 of BS5837:2012. BS5837:2012 describes such trees as 'Trees of high quality with an estimated remaining life expectancy of at least 40 years.'

- 2.2.3.3 The required removal of 'A' grade trees is likely to be of concern to the LPA in arboricultural planning terms. However, in this case, the removal of these three 'A' grade trees is considered acceptable in arboricultural planning terms for the following reasons:
- 2.2.3.3.1 Despite being 'A' grade trees, all three trees are still small for their species, and this can be seen by comparing their existing crown spreads with their anticipated potential future crown spreads. Therefore, these trees have yet to achieve their maximum public amenity value, and this reduces the impact of their felling in arboricultural planning terms.
- 2.2.3.3.2 The small size of these trees makes it easier to adequately compensate for their felling with new tree planting alongside Bedford Road, and this can be carried out as part of the proposed development.
- 2.2.3.3.3 A comprehensive soft landscaping proposal for the proposed development is being submitted as part of the application bundle. This soft landscaping proposal has, in part, been informed by the identified tree losses and it includes specific new tree planting to compensate for the loss of these trees. The LPA can ensure the proposed soft landscaping proposal is implemented by granting planning permission for the proposed development subject to an appropriately worded planning condition requiring the implementation of the proposed soft landscaping proposal.
- 2.2.4 These areas of scrub growth to be removed.
- 2.2.4.1 These three areas of scrub growth need to be removed in order to accommodate the proposed bus stop and associated pavement, to improve the width available for the emergency access, and to create the required visibility splays.
- 2.2.4.2 Scrub growth is not a significant material consideration in arboricultural planning terms. Therefore, the required removal of these two areas of scrub growth should not form a substantive reason for the LPA to object to the proposed development.
- 3.0 Root Protection Areas (RPA)**
- 3.1 The proposed development boundaries have avoided the RPA of all the retained trees. Therefore, the proposed development does not have any direct impact on the RPA of the retained trees. However, construction access and storage of plant and materials may encroach over the RPA of some retained trees and the following measures will need to be taken:

- 3.1.1 Tree protection barriers will need to be erected at the outset of the construction stage. See the enclosed Tree Protection Plan & Arboricultural Method Statement drawing for details of these barriers.
- 3.1.2 It is likely that the tree protection barriers can be combined with the site hoarding in order to avoid creating dual barriers in the vicinity of trees. However, the location of the site hoarding will not be defined until after planning permission has been granted and the construction stage commences. Therefore, it will be necessary to update the Tree Protection Plan & Arboricultural Method Statement after planning permission has been granted in order to design an efficient layout for the combined tree protection barriers and the site hoarding.
- 3.1.3 The LPA can ensure this update takes place by granting planning permission for the proposed development subject to an appropriately worded planning condition requiring the pre-commencement submission and approval of a final Tree Protection Plan & Arboricultural Method Statement.
- 4.0 Future Pressures to Unreasonably Prune or Fell Retained Trees**
- 4.1 The inappropriate retention of trees within a new development can lead to future conflicts between the residents of the new development and the trees, thereby creating future pressures to unreasonably prune or fell trees that had been retained in the design and development process. Section 5.3.4 (d) of BS5837:2012 requires this issue to be considered and avoided at the design stage of a proposed development. In order to comply with this requirement, the following considerations have been made during the design phase:
- 4.2 Crown proximity**
- 4.2.1 The proposed development layout has maintained a minimum clearance between the dwellings and the crown edge of retained trees of 10 metres. This is considered a more than sufficient separation distance to avoid the creation of legitimate feelings of overbearing and dominance in the minds of future residents, and crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
- 4.2.2 Some of the retained trees have potential for future crown growth that will increase their crown spread and bring their crown edges closer to the proposed dwellings. However, it is considered that this future growth will not bring any crown edge any closer than the 10 metres. Therefore, the proposed development has avoided placing dwellings so close to the potential future crown spreads of retained trees that legitimate feelings of overbearing and dominance will be created in the minds of future residents, and potential future crown proximity should not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.

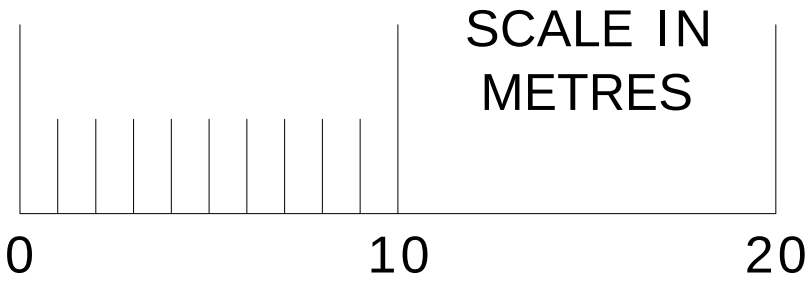
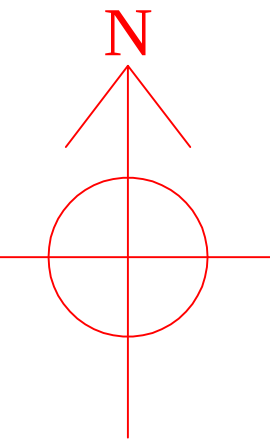
- 4.2.3 None of the proposed gardens are overhanging by existing and potential future crown spreads. Therefore, tree crowns will have no impact on the usable amenity space in the proposed gardens, and will not create any legitimate pressures to unreasonably prune or fell the retained trees in the future.
- 4.3 Tree shade**
- 4.3.1 At the layout design stage, the indicative shade segment suggested at section 5.2.2.3.1 of BS5837:2012 was used to assess the impact of shade on the proposed gardens and dwellings.
- 4.3.2 This assessment indicated that none of the proposed dwellings and gardens would experience any significant tree shade. Therefore, tree shade will not result in any legitimate pressures to unreasonably prune or fell the retained trees in the future.
- 5.0 Summary**
- 5.1 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures suggested above and detailed in the Tree Protection Plan & Arboricultural Method Statement drawing are updated and implemented as suggested above, along with the implementation of the proposed soft landscaping for the site. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission subject to an appropriately worded planning condition requiring the following:
- 5.1.1 The pre-commencement updating, submission, approval and implementation of the Tree Protection Plan & Arboricultural Method Statement drawing ref. MJC-25-0162A-03 rev.3 (see enclosed Tree Protection Plan & Arboricultural Method Statement drawing).
- 5.1.2 The implementation of the proposed soft landscaping scheme for the site as part of the proposed development.
- 5.2 The use of these conditions is reasonable, necessary and proportionate. Therefore, the required use of these conditions should not form a legitimate reason for the LPA to object to the proposed development.



Mixed agricultural-type hedge, slightly overgrown. 4 metres tall at maximum. Providing valuable boundary screening but otherwise of limited wider public visual amenity value. Species present include - Hawthorn, Blackthorn, Bramble, Elderberry, Dogrose.

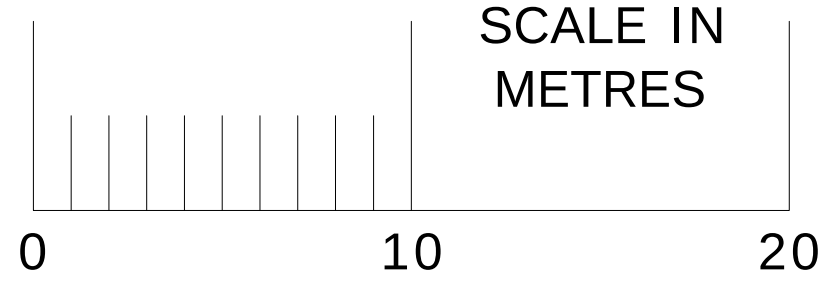
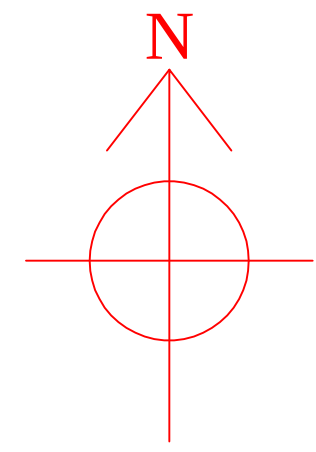
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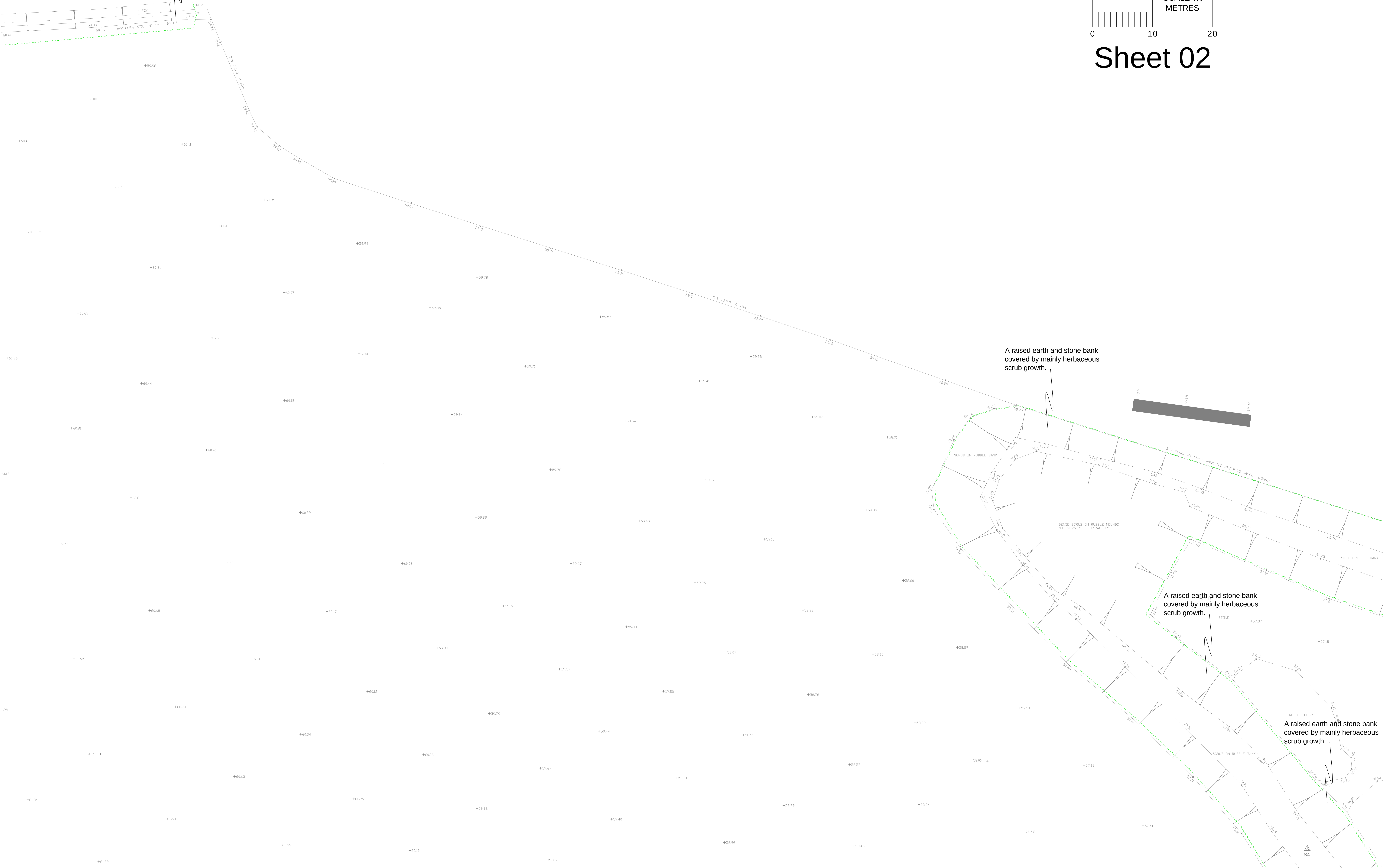


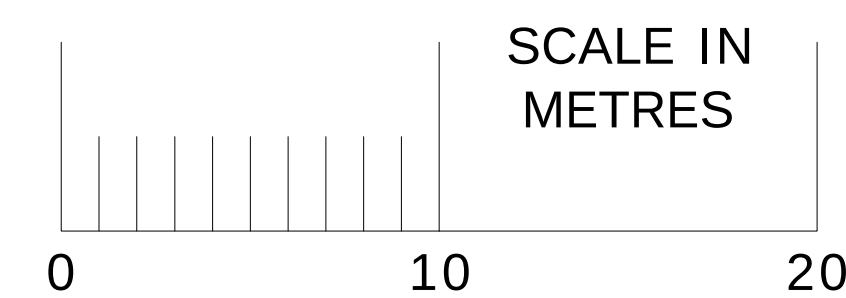
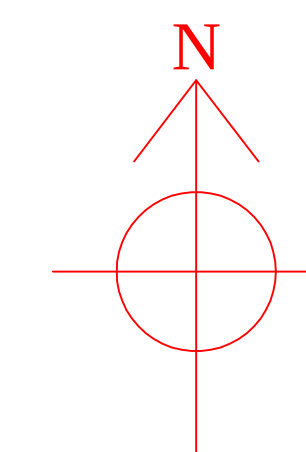
Sheet 01

Mixed agricultural-type hedge, slightly overgrown. 4 metres tall at maximum. Providing valuable boundary screening but otherwise of limited wider public visual amenity value. Species present include - Hawthorn, Blackthorn, Bramble, Elderberry, Dogrose.

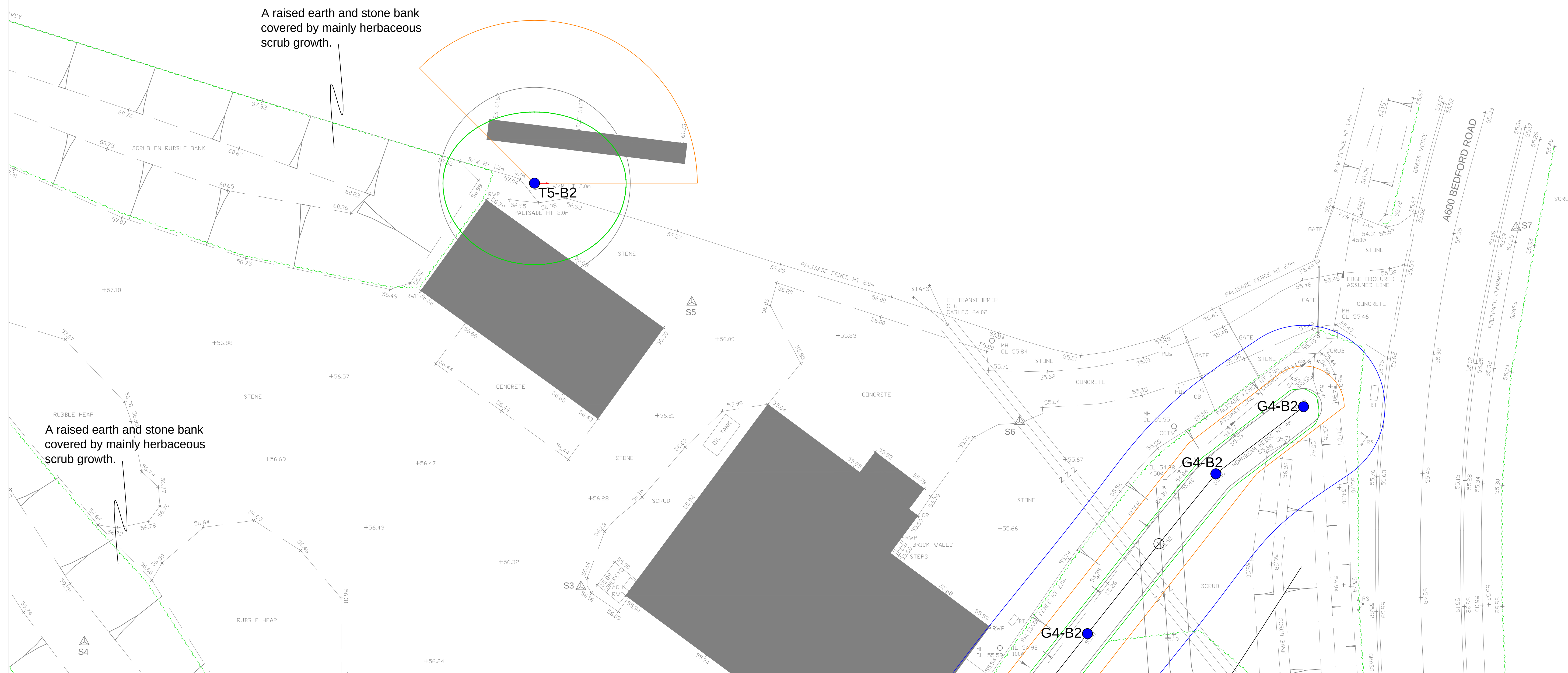


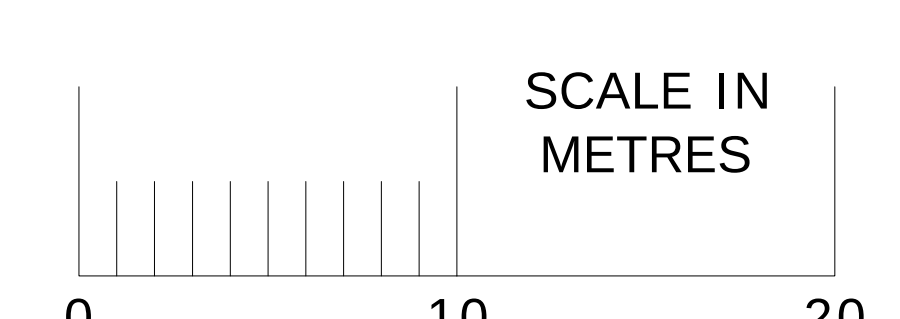
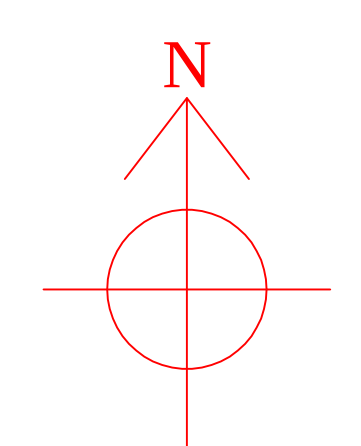
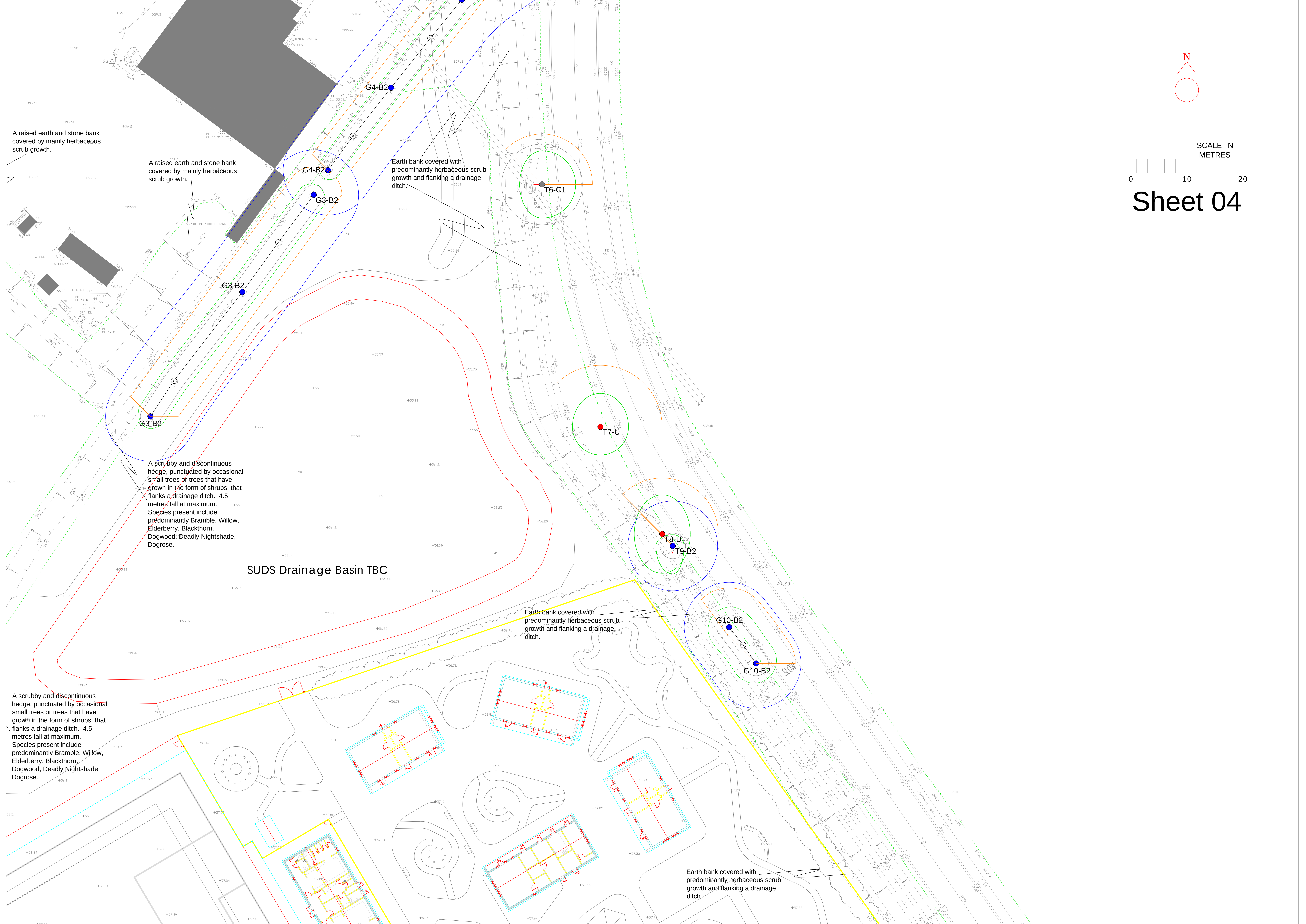
Sheet 02





Sheet 03





Sheet 04