Greater Cambridge Local Plan – Regulation 18: Issues and Options Consultation 2020
Land to the North of Station Road, Cambridge
Jesus College
February 2020

BIDWELLS

LAND TO THE NORTH OF STATION ROAD, CAMBRIDGE

GREATER CAMBRIDGE LOCAL PLAN – REGULATION 18: ISSUES AND OPTIONS CONSULTATION 2020

Quality Assurance

Site name:	Land to the north of Station Road, Cambridge
Client name:	Jesus College
Type of report:	Regulation 18: Issues and Options Consultation 2020
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1.0 Introduction

Background

1.1 These representations have been prepared by Bidwells LLP on behalf of Jesus College who own land to the north of Station Road, Cambridge ("the Site") and in response to the Greater Cambridge Local Plan Regulation 18: Issues and Options 2020 consultation ("the consultation document"). Please refer to **Appendix 1** for site location plan.

1.2 These representations follow those submitted in March 2019 as part of the 'Call for Sites' consultation and provide greater detail on the significant opportunity that the site presents, informed by additional site assessment work.

1.3 The consultation document has been published by Cambridge City Council and South Cambridgeshire District Council as the first formal stage of consultation towards preparing the new joint Local Plan for Cambridge and South Cambridgeshire; the Greater Cambridge Local Plan. Consultation took place from 13 January 2020 to 24 February 2020.

1.4 The Greater Cambridge Local Plan is proposed to set out future land use and planning policies for the Greater Cambridge area to 2040 in respect of accommodating growth for new homes, jobs and infrastructure.

1.5 The consultation document explores four 'big themes' that will influence how homes, jobs and infrastructure are planned. The big themes are:

- **Climate change** – how the plan should contribute to achieving net zero carbon, and the mitigation and adaptation measures that should be required through developments;
- **Biodiversity and green spaces** – how the plan can contribute to our 'doubling nature' vision, the improvement of existing green spaces and the creation of more;
- **Wellbeing and social inclusion** – how the plan can help spread the benefits of growth, helping to create healthy and inclusive communities; and
- **Great places** – how the plan can protect what is already great about the area, and design new developments to create special places and spaces.

1.6 Within the above four big themes, the consultation document then identifies what the Councils' consider are the key issues and options for where future growth (jobs and homes) might go. This includes an option of '**Densification of existing urban areas'** which is outlined as an option which could provide more homes and jobs on underused land within Cambridge and also potentially in existing new settlements. This could be by building taller buildings or redeveloping underused sites at higher densities.

1.7 A combination of approaches to the distribution of spatial growth are considered likely to be necessary in order to allow for sufficient flexibility when considering the locations of new housing and employment development in the district.

However, **the principle of densification is supported and Land to the north of Station Road presents an ideal opportunity for densification of an underused, brownfield site in a highly sustainable location.**

1.8 **The principle of focusing growth along key public transport corridors and around transport hubs (the 'Public Transport Corridors' option) is also supported.** In order to reduce climate change impacts, the Local Plan will need to promote sustainable development in locations that allow existing communities to grow and thrive but also enable travel by low-carbon modes such as walking, cycling and public transport. Land to the north of Station Road would achieve both of these measures, being located in central location within walking distance of the city centre and Cambridge railway station.

1.9 Land to the north of Station Road has an important role to play in the continuing redevelopment and revitalisation of the emerging central business district along Station Road. It is therefore requested that the boundaries of the **'Station Areas West and Clifton Road Area of Major Change', under Policy 21 of the adopted Cambridge Local Plan 2018, is reviewed as part of the emerging Greater Cambridge Local Plan, to include for Land to the north of Station Road.**

1.10 The College is at an early stage in considering potential development concepts for the site and currently consider that a commercial-led scheme would be most appropriate. The College is keen to engage with the Council, stakeholders and the local community to refine and discuss the proposals further as part of the ongoing consultation on the emerging Greater Cambridge Local Plan.

1.11 These representations respond to the relevant questions within the consultation document in respect to the redevelopment opportunity at land to the north of Station Road, Cambridge and within the context of the four big themes and options for growth. They should be read in conjunction with the following standalone documents:

- Vision Document (Allies and Morrison)
- Employment Needs Appraisal (Bidwells LLP)
- Updated Heritage Impact Assessment (Bidwells LLP)

1.12 The representations are also supported by the following documents as a series of appendices:

- Appendix One : Site Location Plan
- Appendix Two : Sustainable Transport Appraisal (Vectos)
- Appendix Three : Preliminary Ecology Appraisal (Ecology Solutions)
- Appendix Four : Arboricultural Survey and Constraints Plan (Haydens)

2.0 Land to the North of Station Road, Cambridge

Question 2. **Please submit any sites for employment and housing you wish to suggest for allocation in the Local Plan. Provide as much information and supporting evidence as possible.**

2.1 Land to the north of Station Road, Cambridge is submitted as a potential allocation for employment in the Local Plan. The extent of the site is shown on the site location plan at **Appendix 1.**

2.2 The Site is located on the north side of Station Road, Cambridge and stretches from the Hills Road/ Station Road junction eastward to Tenison Road. The site is composed of eleven buildings, comprising 1 - 4 Arundel Villas (semi-detached), St Andrews (detached) and 1 - 6 Salisbury Villas (detached). In this document, they are all collectively referred to as the 'Salisbury Villas', for simplicity. The villas are currently in Use Class B1(a) (office) and Use Class D1 (language school).

2.3 The villas are set back approximately 16m from Station Road and, what would have originally been separate front gardens, have been joined together to form a second access road, parallel to Station Road, with parking behind a row of mature lime trees.

2.4 The Site can be accessed from Station Road and the junction of Station Road and Tenison Road.

2.5 The Site is surrounded by office development to the east and south, as part of the 'Area of Major Change' to the Station Area, and residential properties lie to the north. No.s 55-59 Hills Road and No.s 1-7 Station Road (also within the ownership of Jesus College) lie to the west and are in retail use.

The Vision

2.6 The vision is to breathe new life into the Site, continuing the successful transformation of this part of the city and to provide additional capacity to support the clustering in the local area, which has proven so important to Cambridge's economy.

2.7 In order to guide the future development of the site, the College has developed four core objectives:

- Supporting a sustainable Cambridge by making appropriate and efficient use of a site in a highly accessible location;
- Spearheading solutions to move to a net zero-carbon society in the context of the climate emergency in this highly sustainable and accessible location;
- Delivering a lasting legacy of high-quality architecture with a distinctive character to create a unique sense of place as part of the College's long-term endowment portfolio;
- Enhancing the green space and public realm at this important gateway into the city centre.

2.8 The supporting Vision Document provides further detail on the significant opportunity that the site presents, informed by additional site assessment work and in light of the four 'big themes' identified in the consultation document.

The Economic Context

2.9 National Planning Policy confirms that planning policies should help create the conditions in which businesses can invest, expand and adapt (NPPF, paragraph 80). The NPPF specifically states that "***Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development"*** (emphasis added). The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future.

2.10 The NPPF continues, at paragraph 81, in advising the planning policies should:

> *"a) set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth, having regard to Local Industrial Strategies and other local policies for economic development and regeneration;*
>
> *b) set criteria, or identify strategic sites, for local and inward investment to match the strategy and to meet anticipated needs over the plan period;*
>
> *c) seek to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment; and*
>
> *d) be flexible enough to accommodate needs not anticipated in the plan, allow for new and flexible working practices (such as live-work accommodation), and to enable a rapid response to changes in economic circumstances."*

2.11 Paragraph 82 adds that:

> *"Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; …at a variety of scales and in suitably accessible locations"*

2.12 The Cambridgeshire and Peterborough Independent Economic Review (CPIER) (2018) and the Cambridgeshire and Peterborough Industrial Strategy (2019) provide such a vision and have each outlined ambitious plans for growth over the next 20 years.

2.13 Furthermore, the Cambridgeshire and Peterborough Combined Authority (CPCA) has a target of doubling the regional economic growth (GVA) over the next 25 years as part of the Devolution Deal.

This requires the area going beyond what it has achieved in the past (to double an economy over twenty-five years requires an average annual growth rate of 2.81%. Historically, since 1998, the local economy has only grown at around 2.5%.). Achieving this requires employment growth and more importantly productivity growth, as we are already at comparatively high levels of employment

2.14 In order to deliver this 'step change' in economic performance, the Consultation document states that around 2,900 homes a year would need to be built in Greater Cambridge if the jobs growth is achieved – an indicative total of 66,700 homes over 2017 – 2040. This compares with 1,800 homes per year to meet local needs using the Government's standard method.

2.15 There is clearly a need to provide for an amount of housing above the standard methodology to take account of the pressing and worsening affordability issue and to support the aspiration to grow the Greater Cambridge economy and double the GVA across the Greater Cambridgeshire and Peterborough area.

The Opportunity

2.16 The Station Road area in Cambridge has changed beyond all recognition since the preparation of the Station Area Development Framework (SADF), adopted in April 2004. Significant development has since come forward in recent years along Station Road as part of the Area of Major Change resulting in the delivery of a bustling city quarter today. The Site now finds itself located at the heart of Cambridge's newly formed Central Business District (CBD) and it has attracted a number of significant pre-lets; a sign of its desirability.

2.17 The area has seen job growth of 4% since 2015, much of which has been focused along Station Road where 0.5 million sf ft of offices has been built since 2013. The new occupants (such as Microsoft, Amazon, Samsung and Apple) have created a new Research and Development (R&D), AI and business services cluster. Such knowledge intensive industries tend to cluster together, pulled by the forces of agglomeration (easy access to knowledge, workforce, supply chains, markets).

2.18 This clustering has significant benefits to Cambridge and the wider UK economy and to grow this cluster requires office development in close proximity to the existing occupants. However, future business development in the area is constrained by the lack of high-quality office space. All the commercial buildings within the 'CB1' masterplan area, along Station Road, now have planning permission or a resolution to grant permission. Current availability in this area is now less than 1.5%, with no Grade A space.

2.19 The supporting Employment Needs Appraisal, prepared by Bidwells LLP, confirms that this limited supply and strong demand has led to significant increases in rent of 32% over the past five years. For the R&D, AI and business services sector, the location decisional drivers are access and ability to recruit the right skill sets. Central Cambridge provides this, but the small size of the core central area, the lack of available space and lack of development pipeline puts that resilience at risk and could undermine the growth of the R&D sector.

2.20 Land to the north of Station Road is the last section of the Station Road area to benefit from a clear and shared long-term vision and so represents a significant opportunity to continue the successful transformation of this part of the city and provide additional capacity to support the further clustering around the Station.

2.21 The Site is within single ownership and capable of delivering a well-designed, high quality development that could make efficient use of a brownfield site, in a highly sustainable location, whilst also being able to respect its historic context. The site's proximity to Cambridge railway station, links to the Chisholm trail and the transport interchange at the Station also enables opportunities to promote sustainable transport modes.

Responding to the Four Big Themes

2.22 Since the submission of the 'Call for Sites' representations in March 2019, Jesus College has appointed a masterplanner, Allies and Morrison, to undertake a detailed analysis of the site constraints and opportunities, informed by further technical assessment work. A summary of this assessment work is provided below. These assessments have specifically sought to respond to the four 'big themes' of the emerging Local Plan and in turn help shape the emerging concept proposals for the Site.

Climate Change

2.23 The two Councils and the County Council have committed to achieve net zero carbon by 2050. In order to meet this challenge, the Local Plan will need to plan for low-carbon lifestyles and encourage low carbon activities and alternatives to private car use.

2.24 The Local Plan will also need to promote highly sustainable patterns for growth, such as densification of underused brownfield sites like Land to the north of Station Road, that enables travel by low-carbon modes thus reducing car use to ease congestion and reduce airborne pollutants. The same measure offers opportunities to promote active travel choices (walking, cycling) to enhance health and wellbeing.

2.25 A Sustainable Transport Appraisal for the Site has been prepared by Vectos and accompanies these representations. This confirms that the site is extremely well located for access to key facilities and services, including transport infrastructure such as Cambridge Railway Station and the Cambridgeshire Guided Busway (CGB) and the city centre; all within a 10 minute walk. Furthermore, there are a number of strategic schemes coming forward which will improve mobility in the area (the Chisholm Trail, extensions to the CGB, Cambridge Autonomous Metro). Along with a rare opportunity to reduce the amount of car parking within a City Centre location.

2.26 A Sustainability Appraisal for the Site has been undertaken by Hoare Lea and this has been incorporated into the accompanying Vision Document. This reviews the emerging concept proposals from a sustainability perspective and outlines a number of climate change mitigation and adaptation measures that could be incorporated into redevelopment proposals for the Site, such as:

- Passive design measures which lower the cooling requirement and have shorter lifecycles, such as solar shading and high fabric performance;
- Improvements to water efficiency, such as water efficient fittings and metering and systems which recover water;
- Design measures to minimise waste volume as far as possible, through the careful selection of materials and the use of techniques such as off-site and modern methods of construction, material consumption, waste volumes, and product quality;
- Improvements to flood resilience through removal of large areas of hardstanding and incorporation of a range of future climate scenarios that better manage the water runoff into the wider city drainage system. Specifically, there is opportunity to explore the integration of measures such as green or blue roofs and sustainable drainage systems; and
- Green infrastructure to offer greater resilience to a warmer and drier climate than currently exists, to provide a 10% net biodiversity gain in ecosystem habitats and to provide broader ecosystem services such as forming part of a sustainable drainage system.

2.27 The operational emissions of a building are defined as those emissions (measured in CO2 equivalent, or "CO2e") arising from the use of energy in the day to day running of the building from uses such as lighting, heating, ventilation, and equipment. This can be measured in absolute terms but, in order to allow comparability between buildings, is often quoted as an intensity metric, such as CO2e/FTE; which represents the carbon emissions generated from a building on a per full time employee basis.

2.28 Development at scale presents an opportunity to radically reduce the carbon intensity per employee at the site.

2.29 The Local Plan will be required to allocate land to provide for an increase in employment floorspace across Greater Cambridge. These additional jobs will have to be allocated somewhere; there is great benefit to provide these new jobs in a highly accessible location and in a manner that would improve the operational carbon intensity of an existing site.

Biodiversity and Green Spaces

2.30 Both Councils have declared biodiversity emergencies and, as members of the Natural Cambridgeshire Local Nature Partnership, the Councils support the Partnership's vision to double the area of rich wildlife habitats and natural greenspaces within Cambridgeshire and Peterborough.

2.31 Jesus College recognise the importance of improving the natural environment and is committed to achieving net biodiversity gain in respect to potential redevelopment proposals at Land to the north of Station Road, Cambridge. The Site in particular presents an opportunity to greatly improve the public realm along the Station Road frontage and in turn create wellbeing through improved public spaces to relax, move through and socialise. As referred to above, new areas of green infrastructure also provide opportunities to mitigate against climate change, through creating resilient new habitats.

2.32 A site-wide ecological appraisal and background desk study was completed by Ecology Solutions in December 2019 and accompanies these representations.

2.33 The key findings from the appraisal are summarised below:

- There are no statutory or non-statutory designated sites within or directly adjacent to the site;
- The habitats within the site are of limited intrinsic ecological interest;
- There are no overriding ecological constraints to redevelopment of the Site;
- The villas offer potential opportunities for roosting bats and as such further surveys are required. However, there is good scope for providing enhancements for bats as part of any redevelopment proposal; and
- The site presents opportunities to achieve a 10% biodiversity net gain through a sensitively designed, landscape-led scheme which would incorporate, wherever possible, native species of local provenance and those of known value to native wildlife to offer biodiversity gains post-development.

2.34 A Tree Survey and Constraints Plan was prepared by Haydens in January 2020 and accompanies these representations.

2.35 The key findings from the survey work are summarised below:

- A total of sixty-nine individual trees, nine groups of trees and two areas of trees have been surveyed. These were found to be of mixed condition and age providing a variety of amenity benefits;
- Three of the trees are identified as Category A trees (high quality and value). These are as follows:
  - T012: Austrian Pine
  - T059: Beech (this tree is located on neighbouring land, but due to its proximity to the boundary, it could nonetheless affect development proposals)
  - T066: European Lime
- The majority of the other mature trees are classified as Category B (moderate quality and value), with the remainder either category C (low quality and value) or U (remove);
- All the trees along Station Road are Lime and classified as Category B;
- The tree species in the back gardens are more mixed and are mainly either Sycamore, False Acacia or European Lime; and
- Any redevelopment proposal would need to consider the siting and design of the layout in respect to the presence of trees, particularly those of the highest quality, and add new trees where possible.

Wellbeing and Social Inclusion

2.36 Cambridge City Council has an Anti-Poverty Strategy which includes an action plan. This identified that while the Cambridge economy continues to thrive, there are high levels of income

inequality in the city. Cambridge City Council also has an Air Quality Action Plan 2018-2023 and sets out Cambridge City Council's priority actions for improving areas of poor air quality in the city and maintaining a good level of air quality in a growing city.

2.37 Redevelopment of Land to the north of Station Road has the potential to achieve 'good growth' that promotes wellbeing and social inclusion, as outlined below. These benefits also serve to reinforce the potential of the site for employment densification:

- Securing improvements in air quality through promotion of a car-free development thus reducing car use to ease congestion and reducing airborne pollutants within a designated Air Quality Management Area (AQMA);
- Encouraging healthy lifestyles through provision of employment opportunities in a highly accessible location by low-carbon modes, thus encouraging active travel. The Site is also within five minutes walk of the Botanic Gardens, which provides open space of a scale that can absorb a large number of people, thereby having the capacity to serve high density employment development;
- Proximity to a range of shops and services which offer healthy eating choices;
- Proximity to local services and amenities bringing opportunities for social interaction and community development. Particularly important given a large number of potential employees will not likely be resident in Cambridge and have established local networks;
- Opportunities for new build design to provide all-electric heating and hot water systems to avoid the on-site combustion of fossil fuels and incorporate passive design to support indoor air quality, improved acoustic performance and adequate levels of daylight;
- Creation of a safe and inclusive community through provision of a wide range of jobs; and
- Creation of high-quality buildings and public realm that meet the WELL Building standards and offer natural sociability, interaction and access to nature.

Great Places

2.38 Greater Cambridge has a track record as a place where contemporary design and the historic environment co-exist in harmony. A key issue for Land to the north of Station Road will be how to balance heritage with the demands of growth.

2.39 The Site is located within the New Town and Glisson Road Common Conservation Area.

2.40 None of the buildings within the Site are listed, however they are all identified as 'Buildings of Local Interest' (51-53 Hills Road and the Station Mews are excluded from this list). In addition, they are identified as 'Buildings of Positive Townscape Value' in the New Town and Glisson Road Conservation Area Character Appraisal (2012), (51-53 Hills Road and the Station Mews are excluded from this list). As such, the existing buildings are considered to be "non-designated heritage assets".

2.41 In light of the above, the College recognise that it is important to understand the relative merits of the existing buildings and land in the context of these designations and the relevant legislation and policy framework.

The College have therefore has prepared an Initial Significance Assessment to understand the historic interest of the existing properties, attached. The Assessment concludes the following:

- The villas are 'non-designated assets' in their own right, and are therefore subject to the provisions of the NPPF;
- The villas contribute positively to the character and appearance of the Conservation Area (a designated heritage asset) and are therefore subject to the provisions of the NPPF;
- As a group, and in their contribution to the Conservation Area, the Villas hold a value ranging from moderate to good (although some buildings individually have a lower level of value as a result of lower original quality and adaptations to them); and
- The site could however accommodate some form of development within its heritage context and indeed a number of benefits to the character and appearance of the Conservation Area could be secured through any future redevelopment.

2.42 In the case of designated heritage assets (such as Conservation Areas and listed buildings), paragraph 193 of the National Planning Policy Framework (NPPF) explains 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*". In the event that "less than substantial harm" would be caused, the policy requires this harm to be clearly outweighed by public benefits. In the event that substantial harm is caused, this level of harm should be *"exceptional and could only be outweighed by substantial public benefits."*

2.43 In the case of non-designated heritage assets (such as locally listed buildings or buildings of positive merit) Paragraph 197 of the NPPF requires a Local Planning Authority to make a "*balanced judgement*" having regard to the scale of any harm or loss of the heritage asset.

2.44 Ultimately, a balanced judgement would be required for any redevelopment proposals in terms of the impact on the significance of designated and non-designated heritage assets and the public benefits arising. The Site has the potential to deliver significant public benefits, as outlined below:

- The opportunity to deliver high quality B1a (office) accommodation in a Core City District and in a sustainable travel location close to central Cambridge railway station;
- Supporting the local economy and community through expansion of an established R&D and AI Cluster and associated supply chains; inclusive growth that considers the needs of vulnerable groups; can compete on the international office market; and takes a large step toward to meeting regional growth targets;
- Supporting economic growth in a manner that promotes health and wellbeing for employees and the wider community through;

    - high quality architecture and passive design measures which lower the cooling requirement and have shorter lifecycles, such as solar shading and high fabric performance;

    - significant improvements to public realm along Station Road frontage;

    - opportunities to travel sustainably and helping to tackle air pollution, as well as bring physical benefits;

- Improvements to flood resilience through removal of large areas of hardstanding and incorporation of a range of future climate scenarios that better manage the water runoff into the wider city drainage system. Specifically, there is opportunity to explore the integration of measures such as green or blue roofs and sustainable drainage systems;
- Green infrastructure to offer greater resilience to a warmer and drier climate than currently exists, to provide a 10% net biodiversity gain in ecosystem habitats and to provide broader ecosystem services such as forming part of a sustainable drainage system;
- Helping to maximise the benefits arising from major investment in a key public transport corridor associated with sustainable transport and active travel; and
- A landowner who wishes to work the community in order to shape a proposal which meets the needs of and can provide wider benefits to the area.

The Emerging Concept Proposals

2.45 The supporting Vision Document includes three potential scenarios for the site to represent the wide-reaching opportunities that the site offers;

- Scenario A – Do nothing (the existing accommodation extends to circa 3,500m^2, including outbuildings);
- Scenario B – Retention of Salisbury Villas with development to the rear, potentially linked to the Villas (a total net floor space of circa 16,000m^2 could potentially be delivered plus public realm improvements along Station Road); and
- Scenario C – Demolition and redevelopment of Salisbury Villas (a total net floor space of circa 24,000m^2 could potentially be delivered plus public realm improvements along Station Road).

2.46 The three scenarios have been assessed within the context of the four 'big themes' of the consultation document. The detailed scenarios assessment is included in the Vision Document but for reference a summary is included below.

Scenario A: Do nothing

2.47 This scenario represents the status quo. The existing tenants would remain in place, essential repairs to the buildings would continue to be carried out, and the existing hard-standing and car parking would remain.

2.48 However, this also means that none of the potential benefits of redevelopment and the associated investment could be realised: no new floor space would be created for businesses to grow, no additional jobs would be delivered, the public realm would not be revitalised, no new trees would be planted or biodiversity gains implemented, no social value opportunities initiated and the existing villas would remain carbon-intensive and in need of rejuvenation.

2.49 Ultimately, this scenario would provide little opportunity for the Site to contribute to the four big themes and to 'do nothing' would represent a significant missed opportunity.

Scenario B: Retention of Salisbury Villas with new development to the rear

2.50 This scenario retains and refurbishes the villas, including removing the unsightly outbuildings in the rear gardens. Several of the gardens could be joined to form larger development plots.

2.51 A group of three larger buildings, likely commercial in use, are proposed to the rear of the villas as free-standing buildings. These new buildings are envisaged to be connected to the existing villas through linking elements, but they could also remain separate from the villas with their own access. These linking elements might accommodate stair cores and lifts, and are inserted either side of glazed atriums that provide light and ventilation. Placing the cores in this arrangement creates large and efficient rectangular floor plates with no interruptions.

2.52 The existing villas can be refurbished to comprise reception rooms, meeting rooms, break out spaces, executive offices and other supporting facilities. New deeper basements can also be considered to maximise area.

2.53 The buildings will most likely require some level of articulation and stepping, to mitigate potential overlooking and overshadowing towards the north. Some stepping may also be required along the west boundary towards the houses at Claremont Gardens.

2.54 This Option clearly provides a greater range of benefits when compared to scenario A, in terms of creating a range of new jobs, boosting the local economy and spearheading the move to a net zero-carbon society.

Scenario C: Demolition and redevelopment of Salisbury Villas

2.55 This scenario envisages the complete demolition of the villas and their boundary walls in order to create larger development plots for a series of new buildings with efficient and modern floorplates.

2.56 In this scenario, there is an opportunity to move the building line slightly further forward closer to the road, while still retaining the avenue of lime trees and the potential for generous public realm improvements.

2.57 This option delivers the most floor space overall, and has scope for adding greater height to the new buildings along the Station Road frontage as well as notable benefits through the construction of modern, purpose-built commercial floorspace built to the highest environmental standards to create the largest opportunity for new jobs in a highly-accessible location.

Summary

2.58 The site represents an opportunity to provide a commercial-led scheme in a highly accessible location; a location that has a proved track-record to attract high calibre businesses.

A high-tech AI (Artificial Intelligence) cluster has already formed in the adjacent new commercial buildings; attracted by their modern, efficient floorspace all group together to revel in the well-evidenced benefits of clustering.

2.59 The site is the last piece of Station Road that does not have a long-term Vision for how it should respond to Area of Major Change Policy and the major development changes that are occurring to the Station Area. The site is an underused asset in one of the most accessible and sustainable locations in Greater Cambridge and it is appropriate for the emerging Local Plan to include the site for commercial development. A suite of supporting documents accompany this representation, including a Vision Document to set out an understanding of the existing site and to present three development scenarios that represent the wide-ranging opportunities that the site offers; from a do-nothing scenario to a full redevelopment. Each scenario has its pros and cons, but the greater the development, the greater the benefits for job creation and forming sustainable development.

2.60 The full redevelopment offers the greatest opportunity to achieve the lowest carbon intensity; the lowest carbon per employee on site.

2.61 The Council has recognised the climate emergency and aspires to move to a net zero carbon society. To achieve this, it cannot repeat the pattern of historic decisions and previous planning priorities. It must make some strong choices to prioritise those developments that can maximise long-term sustainable benefits; to so this there will be impacts to other planning matters, not all matters can be prioritised.

2.62 The development potential held by the Site offers the opportunity to achieve a number of significant benefits:

- To **reduce the carbon intensity four-fold** of the site per employee (CO2e/FTE) as CO2e/FTE from 0.75 for the existing building down to 0.18 through a modern redevelopment;
- To **increase the GVA** contribution from circa £9 million from the existing buildings to £85 million from a full redevelopment;
- To **increase the number of jobs** (full time equivalent) from 170 jobs to 1,800 jobs
- To achieve **significant public realm benefits** to Station Road – including major enhancements for pedestrians and cyclists as a major thorough-fare to Cambridge Station;
- To **increase the amount of public open space** facing Station Road, from what is currently a completely private and walled site;
- To **reduce car parking** in a city centre location;
- To deliver **bespoke high-quality architecture**; a landowner that wishes to engage with stakeholders and provide architecture that will be a legacy to be proud of; and
- To deliver 10% **net biodiversity gain.**

3.0 General

Question 4. Do you agree that planning to 2040 is an appropriate date in the future to plan for? Please choose from the following options:

Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree

If not, what would be a more appropriate date and why?

3.1 Agree.

3.2 The proposed Local Plan period up to 2040 is considered appropriate and to accord with the requirements set out within the NPPF for local authorities to identify a sufficient supply and mix of sites between years 1-15 of the plan (Para 67).

4.0 Themes

Question 6. Do you agree with the potential big themes for the Local Plan?

4.1 Agree.

4.2 The four big themes for the Local Plan are considered suitable and all are considered to be important in the consideration of the spatial distribution of growth in the district, and for the determination of planning applications. The four big themes will generate a new way of planning, this may require a different way to make decisions; to allow other impacts to happen in order to achieve these four priorities. The Local Plan policy framework will need to allow for a clear planning balance to take place to assess and prioritise impacts.

Question 7. How do you think we should prioritise these big themes? Rank the options below 1-4 (1-Most Preferred 4-Least Preferred)

4.3 The four big themes are all considered to be important aspects to achieving positive development. All four themes should be used to inform the spatial strategy within the Local Plan in terms of distributing growth and determining planning applications to deliver growth. It is therefore not considered necessary to rank the options in order of preference.

Theme 1 Climate Change

Question 8. How should the Local Plan help us achieve net zero carbon by 2050?

4.4 The increased focus on climate change is welcomed. Climate change policy and good practice is changing quickly, and the plan will need to build in suitable flexibility to accommodate these changes within the lifetime of the plan. Climate change scenarios predict extensive changes by 2050, much of which is dependent on government and human action so there is substantial uncertainty over outcomes.

4.5 A needlessly stringent policy may inadvertently impede progress towards later years in the plan or undermine results by not allowing for site-specific refinement. For example, policy for electric vehicle charging points should be sufficiently flexible to accommodate that quickly changing technology, as well the current grid challenges in implemented EV charging places. Energy policies should include flexibility for changing legislation, and technology, as well as the opportunity to refine a plan-wide policy for site specifics. As the Zero Carbon Futures Symposium Report (2019) submitted within the evidence base notes on page 10: where targets are too limited, and without consideration of project contexts, policy can drive dysfunctional behaviour such as photovoltaic solar panels being installed on North facing roofs merely to achieve policy compliance not to produce effective carbon reductions.

4.6 Allowing for changing technologies and approaches should also help with viability as technology and approaches improve and are more widely adopted, thereby reducing costs.

Escalating targets and policies may be able to accommodate these changes, while providing clarity to developers on the costs of development over time.

4.7 The local plan Sustainability Appraisal (SA) should address variable climate change scenarios, as we would expect that different climate changes scenarios will be of interest at examination. Lack of rigorous assessment of these scenarios in the SA is could lead to the plan being found unsound.

4.8 The Plan needs a policy framework that priorities climate change and zero carbon in a planning balance judgement.

Question 9. How do you think we should be reducing our impact on the climate? Have we missed any key actions?

4.9 Greater Cambridge is a leading local authority on climate change policy, such as through the early declaration of a climate change emergency and also through the newly adopted Sustainable Development SPD. This leadership should continue, as it is central to the sustainable development of Cambridge, leading to better development for humans, the environment, and for economic development. It should be borne in mind that Cambridge's knowledge economy increasingly demands high sustainability standards: sustainability, health and wellbeing, with climate change at the heart, is a key part of continuing Cambridge's economic development. This should remain a priority as part of a policy framework the recognises climate change as a key part of sustainable development across social, environmental and economic objectives.

Question 10. Do you think we should require extra climate adaptation and resilience features to new developments?

4.10 A policy approach with multiple options for delivering net zero carbon is likely to be most effective in delivering development, as well as carbon neutrality. A multi-pronged approach should allow different solutions for different developments, reflecting context.

Question 11. Are there any other things we should be doing to adapt to climate change? We want to hear your ideas!

4.11 The Local Plan should form a flexible policy framework, so as not to stifle the benefits of new technology or modern methods of construction.

4.12 For reference as to how Land to the north of Station Road could contribute towards adapting to climate change and achieving net zero carbon please refer to Section 2 of these representations, the Vision Document prepared by Allies and Morrison, the Sustainable Transport Appraisal prepared by Vectos, the Preliminary Ecological Appraisal prepared by Ecology Solutions and the Arboricultural Survey prepared by Haydens.

4.13 The Plan needs a policy framework that priorities climate change and zero carbon in a planning balance judgement.

Theme 2 Biodiversity and Green Spaces

Question 12. How should the Local Plan help us improve the natural environment?

4.14 This Local Plan must deliver effective policy which protects and enhances natural capital. We support delivery of net gain for new development. Such policy must be flexible enough to enable creative and cost-effective solutions for the delivery of net gain and support the Vision for the Natural Future of Cambridgeshire in 2050 as outlined by Natural Cambridgeshire and affiliated organisations. An off-site net gain solution should be clearly allowed for by policy. While it is a Local Plan priority as a part of one of the four big themes, the Local Plan policy must allow for a planning judgement and balanced decision to allow for site and development specific issues to be taken into account.

4.15 For reference as to how Land to the north of Station Road could improve the natural environment please refer to Section 2 of these representations, the Vision Document prepared by Allies and Morrison, the Sustainable Transport Appraisal prepared by Vectos, the Preliminary Ecological Appraisal prepared by Ecology Solutions and the Arboricultural Survey prepared by Haydens. A site that can offer 10% net biodiversity gain.

Question 13. How do you think we should improve the green space network?

4.16 This should come through from an up to date base assessment of Greater Cambridge assets, which leads to a Local Plan wide (and beyond) strategy. Development proposals can then be shaped around the identified priorities. As part of a policy framework that allows for off-site mitigation and off-site net gain enhancements can be used to improve the wider green space network.

4.17 Development proposals that can enhance the quantum and connectivity of green and public spaces should be supported.

Question 14. How do we achieve biodiversity net gain through new developments?

4.18 The new Local Plan must ensure that policy in this matter is sufficiently flexible to accommodate the required biodiversity net gain in the most effective and efficient way for each development, with both on-site and off-site solutions possible.

Question 15. Do you agree that we should aim to increase tree cover across the area?

4.19 Yes. With the right trees, in the right areas. A policy framework to seek tree cover increase but allows for a planning balance within decision-making to enable the benefits and impacts of each development to be assessed.

4.20 This could be part of an on-site/off-site solution, which could generate notable s106 funds to achieve significant, meaningful and long-term planted and ecological areas. Ecological outcomes rather than an unconditional focus on native species should be considered in new planting.

Theme 3 Wellbeing and Social Inclusion

Question 16. How should the Local Plan help us achieve 'good growth' that promotes wellbeing and social inclusion?

4.21 The Local plan should include a spatial strategy that connects homes with jobs; good quality public transport; facilities/services and high-quality open spaces. Policies should also highlight wellbeing and social inclusion as a key priority for new developments.

4.22 Good growth that promotes wellbeing (including health) should be inclusive and include anti-poverty measures including:

- Energy efficient homes and employment space that deliver low energy and water consumption;
- Promotion of commercial development and job creation that offers the Living Wage and opportunities for those on lower incomes to increase wages to easily access jobs;
- Allow for a wide range of social infrastructure and open space in new developments; and
- Promotion of 'fully accessible' social and low-cost housing, within active travel of employment.

4.23 The Local Plan should include for a policy framework that requires a Health Impact Assessment (HIA) throughout the Greater Cambridge area, using a Health Impact Assessment (HIA) methodology that reflects best practice. Thresholds for HIAs should reflect the scale of the scheme and its ability to effect health outcomes.

4.24 The Local plan should ensure a policy framework is developed that is based on empirical evidence of how good growth is delivered, rather than rely on policies based on perceived, and sometimes unproven, determinants of wellbeing and social inclusion. Policies should focus on what really makes a difference.

4.25 For reference as to how Land to the north of Station Road could help achieve 'good growth' please refer to Section 2 of these representations, the Vision Document prepared by Allies and Morrison, the Sustainable Transport Appraisal prepared by Vectos, the Preliminary Ecological Appraisal prepared by Ecology Solutions and the Arboricultural Survey prepared by Haydens. The site offers an opportunity to provide for a range of jobs in a highly accessible location and a development that can be built to the highest Well Building Standards.

Question 17. How do you think our plan could help enable communities to shape new development proposals?

4.26 The Local Plan could help enable communities to shape new development proposals through creating policies and procedures that encourage meaningful consultation and require developers to demonstrate how schemes have been influenced by local communities.

4.27 Community engagement should be sought during the design process, during construction and through opportunities to influence the scheme and /or be engaged in its management and maintenance after completion (where relevant), particularly in circumstances where unforeseen consequences emerge.

4.28 Jesus College is committed to providing a positive legacy from the development that it promotes, and this can be achieved from meaningful engagement with the local community to gain their input, including to the site layout, design and provision of specific local infrastructure or contributions towards it. The College is a landowner that takes a long-term view of delivering development that can provide benefits for the local community.

Question 18. How do you think we can make sure that we achieve socially inclusive communities when planning new development?

4.29 First and foremost, the Local Plan can achieve socially inclusive communities when planning new development by forming a spatial strategy that ensures that new development is accessible or can be made accessible. Providing everyone with the opportunity to walk, bus and cycle to jobs, schools, shops, services and social activities will be vital.

4.30 Socially inclusive communities are created by people, but it helps if infrastructure is provided in time for first residents, either as a temporary facility or a smaller version of the final product. It will be important to ensure that support systems and management strategies are in place for community infrastructure.

4.31 Social inclusion can also be delivered by building in public realm to all forms of development (housing, employment and leisure) that encourages informal meeting and ‘bumping’ into people.

Question 19. How do you think new developments should support healthy lifestyles?

4.32 New developments should support healthy lifestyles by the Local Plan creating a spatial strategy that can support connected spaces where people do not have to rely on the private car for their daily routine of school, work, shopping and leisure. Enabling active lifestyles and opportunities for social interaction is a priority.

4.33 The Local Plan should provide open space within developments where possible, particularly when they can improve provision for existing communities.

4.34 A further measure to ensure new developments should support healthy lifestyles is for them to consider the needs of all age ranges and abilities in the detailed design of open spaces and public realm.

Question 20. How do you think we should achieve improvements in air quality?

4.35 Improvements in air quality should be achieved principally through the reduced use of polluting vehicles by:

- Locating development, particularly schools, places of work and other facilities that have a high footfall, where there is good access to active travel and affordable, frequent, reliable and high-quality public transport options;
- Better cycle lanes, parking and cycle security – achieved by developments directly and through a coordinated s106 infrastructure programme;
- Reducing the volume of car movements in the city;
- Encouraging the use of less polluting vehicles, particularly during peak hours when emissions from stationary traffic makes conditions for pedestrians and cyclists and other vulnerable groups particularly bad; and
- Tree planting along road frontages: species selected for their pollution absorbing properties.

Theme 4 Great Places

Question 21. How should the Local Plan protect our heritage and ensure new development is well-designed?

4.36 The Local Plan should include for a policy framework that sets out a positive strategy for development to respond to the historic environment. New development within or in proximity to heritage assets can be appropriate and make a positive contribution to local character and distinctiveness. This is supported by the NPPF (paragraph 185).

Question 22. How do you think we should protect, enhance and adapt our historic buildings and landscapes?

4.37 New development can provide opportunities for improvements in the quality of the historic environment. For example, the setting of heritage assets often have elements that detract from the significance of the asset. However, it will be important for the Local Plan to balance heritage with the demands of sustainable growth.

Question 23. How do you think we could ensure that new development is as well-designed as possible?

4.38 'Place-making' – creating and sustaining a positive and distinctive character in an area – is important to the economic success of the Greater Cambridge area, as identified by the CPIER. This is also supported by the NPPF (paragraph 124) which confirms that good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities.

4.39 The NPPF continues by advising that plans should set out a clear design vision and expectations and design policies should be developed with local communities, so they reflect local aspirations. To provide maximum clarity about design expectations at an early stage, plans or SPDs should use visual tools such as design guides and codes. The Cambridgeshire Quality Charter for Growth sets out core principles of the level of quality to be expected in new developments in Cambridgeshire and the four 'C's' of Community, Connectivity, Climate and Character align well with the four big themes of the emerging Local Plan. This forms a good basis to set out a design vision for the new Local Plan.

5.0 Jobs / Economy

Question 24. How important do you think continuing economic growth is for the next Local Plan?

5.1 As referred to in Section 2 of these representations, National Planning Policy confirms "*Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development"* (NPPF, paragraph 80). The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future.

5.2 Cambridge's hi-technology clusters, particularly in AI, bio-tech and agri-tech are recognised in the UK Industrial Strategy as an essential element of the UK economy to support *"…towns such as MK, Oxford and Cambridge* (that) *have been hot spots for job creation. We must promote growth through fostering clusters and connectivity across cities, towns and surrounding areas."*

5.3 Growth relies on increases in employment and productivity and the Cambridge and Peterborough Independent Economic Review (CPIER) emphasises the need for productivity growth in this region as employment rates are so high. Economic growth is therefore essential for the next Local Plan. As part of the devolution contract to Cambridgeshire and Peterborough is a commitment to doubling the economic output of the area (Gross Value Added) over 25 years. This is a challenging target and needs to factor at the heart of the Plan.

Question 25. What kind of business and industrial space do you think is most needed in the area?

5.4 A wide variety of business and industrial space is needed in Greater Cambridge, in terms of location, size, function and price, in order to support the growth of the economy, offering choice to meet an occupier's individual needs:

> "*The requirements for physical space, like finance, have stages. What a business needs in its start-up phase is different to its needs as it matures and grows. It is vital, if an innovation ecosystem is to be effective for there to be variety and availability at every stage*[1].

5.5 The Science and Technology sector is the engine of the Cambridge Phenomenon that has driven the economy and it will remain an important part of the local economy and job market. One particular requirement is to support and grow the burgeoning high-tech and AI sector forming in the Cambridge Station area that has attracted high-calibre global companies. Land north of Station Road represents an opportunity to make more efficient use of previously developed land

[1] Cambridgeshire and Peterborough Industrial Strategy 2019 p 41

in a highly accessible location and provide more jobs to support the cluster and increase the site's contribution to GVA by some £75 million.

5.6 All new employment space should be located and built to maximise the health and wellbeing of employees and visitors. Healthy buildings in locations that reduce commute times and improve the sleep and wellbeing of its occupants contribute significantly to their productivity. Improving productivity is a primary route through which the Greater Cambridgeshire economic expansion objectives of doubling GVA and inclusive growth will be achieved.

> "*If workers can be more productive, they can bring home more take home pay, which will flow into the local economy. And they will be able to enjoy a higher standard of life. It is this, before anything else, which needs to be looked at to create an inclusive economic future*." CPIER p38

Question 26. Do you think we should be protecting existing business and industrial space?

5.7 A broad range of employment opportunities accessible by active modes of transport (including public transport) needs to be maintained in urban and rural areas to ensure local jobs are available. All existing space and allocations should be assessed to understand their suitability for employment uses in the current climate of energy use reduction, the need for local employment, access for the workforce by public transport or active means of travel, which locations can deliver the highest health and wellbeing for workers and surrounding people and which employment areas should be actively supported, such as the burgeoning Cambridge Station Area.

Question 27. How should we balance supporting our knowledge intensive sectors, with creating a wide range of different jobs? What kind of jobs would you like to see created in the area?

5.8 The CPIER notes a missed opportunity to supply AI, science and technology and bio-medical clusters from within the region: 10.8% of supplies come from within the company's local area (30mile radius) while 27.8% came from overseas[2]. Growing these local supply chains, particularly the high value ones would help disperse the economic benefits and provide a wide range of different jobs. Availability of suitable sites and premises in excellent locations outside of Cambridge is a key factor in spreading the economic growth.

5.9 The redevelopment of areas around Cambridge central station for high quality offices which offer a healthy working environment would be welcomed. The delivery of a high-quality public realm which provides both recreational space and efficient management of pedestrian and cycle through traffic is essential in these areas. Land north of Station Road would support an established sector and can provide for a range of jobs; further detail on the economic need and

[2] CPIER p54

benefits in relation to Land to the north of Station Road is provided in the supporting Employment Needs Appraisal prepared by Bidwells LLP.

Question 28. In providing for a range of employment space, are there particular locations we should be focusing on? Are there specific locations important for different types of business or industry?

5.10 The UK industrial Strategy advocates focusing on our strengths, "*fostering clusters and connectivity across cities, towns and surrounding areas*" [3] Sites which support these clusters are necessary and could be urban, edge of town or rural.

5.11 Locations with high levels of public transport access should be identified for businesses with high employment densities. This would include sites within walking distance of train stations, travel hubs and along transport corridors.

> "*by ensuring good quality public transport is in place before development, the number of those new residents who will use the transport is maximised. This is also likely to be the best way to stretch some of the high-value businesses based within and around Cambridge out into wider Cambridgeshire and Peterborough. These companies will not want to be distant from the city, but these clusters could 'grow' out along the transportation links, providing connection to other market towns*." [4]

5.12 Taller prime office buildings could locate at Cambridge's railway stations to focus development at transport hubs; keeping the city compact, but supporting the demand for high quality office space, particularly that arising from knowledge intensive (KI), especially artificial intelligence firms around Cambridge Central station. This supports CPIERs third key recommendation: "*Ensuring that Cambridge continues to deliver for KI businesses should be considered a nationally strategic priority"*.

5.13 The cluster effect is well-evidenced in Cambridgeshire and an opportunity exists for Greater Cambridge to encourage the forces of agglomeration through promotion of sites around existing groups of same-sector companies; this is certainly the case for the high-tech cluster at the Cambridge Station Area. A spatial strategy to provide for a range of commercial and job opportunities should be informed by the cluster approach particularly to transport corridors.

[3] UK Industrial Strategy 2017 p18
[4] CPIER p41

6.0 Homes

Question 31. How should the Local Plan help to meet our needs for the amount and types of new homes?

6.1 There should be flexibility within the Local Plan to respond to changing housing needs over the Local Plan period. It is important to identify a baseline housing need but there should be scope for further development to come forward if it meets a particular housing need. This would support the Government's objective of significantly boosting the supply of homes to ensure that a sufficient amount and variety of land can come forward where it is needed and that the needs of groups with specific housing requirements are addressed (NPPF Para. 59).

Question 32. Do you think we should provide for a higher number of homes than the minimum required by government, to provide flexibility to support the growing economy?

6.2 To support the Government's objective of significantly boosting the supply of homes, a sufficient amount and variety of land needs to be identified to meeting housing needs within the Joint Local Plan area. The Cambridge and Peterborough Independent Economic Review (CPIER) (September 2018) suggests that higher housing target numbers are likely to be needed in Cambridgeshire if the potential for higher growth in employment is to be met.

6.3 Housing requirements are minimums, not maximums to stay under at all costs. There is a well-evidenced affordability problem in Greater Cambridge; a greater supply of homes will be part of the solution. "*Too many of the people working in Cambridge have commutes that are difficult, long and growing: not out of choice, but necessity due to high housing costs*."[5]

6.4 There is an underlying and systemic affordability issue that is making it increasingly difficult for those on lower incomes to afford to live in the Greater Cambridge area. Alongside, the Cambridge economy has seen a prolonged and steady increase, which has attracted a larger workforce and increased the pressure on the housing market; availability and affordability. Alongside this trend is a clear political aspiration to see the Cambridge economy grow further; mostly clearly expressed by the Combined Authority that has a growth target as set out in its Devolution Deal of doubling GVA over 25 years. All of this clearly points to the need to plan for an amount of housing well above the minimum housing requirement.

Question 33. What kind of housing do you think we should provide?

6.5 There should be flexibility within the Local Plan to respond to changing housing needs over the Local Plan period. Consideration of individual site circumstances and the circumstances of a local area should be taken into account to determine the appropriate type of housing for development sites. Separate housing needs assessments should be used to inform the appropriate size, type

[5] Cambridgeshire and Peterborough Industrial Strategy 2019, p13

and tenure of housing needed for different sections of the community, as set out within the Greater Cambridge Housing Strategy 2019-2023.

6.6 Flexibility will be key to a successful Local Plan; through market housing, low-cost and affordable housing.

Question 35. How should we ensure a high standard of housing is built in our area?

6.7 Local Plan policies can require a high standard of design for new residential development, leading from Government policy and guidance. Appropriately worded design policies should require a high-quality design for new dwellings. This could include sustainable design principles including measures to improve the energy efficiency of new homes, water saving measures, use of efficient insultation material and heating systems, the reduction and recycling of construction materials, provision of appropriate amenity space and accessibility. Policy should not be prescriptive for precisely how it will be accomplished, it can set a policy-level, but developers should be able to use a host of options to achieve the target.

6.8 Health impact assessments on developments of a scale that can deliver meaningful health improvements can create a higher level of built environment in housing developments.

7.0 Infrastructure

Question 37. How should we encourage a shift away from car use and towards more sustainable modes of transport such as public transport, cycling and walking?

7.1 National Planning Policy advises (paragraph 102) that transport issues should be considered from the earliest stages of plan-making and development proposals so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

7.2 The NPPF continues, at paragraph 103, in stating that the planning system should actively manage patterns of growth in support of the above objectives. "*Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health."*

7.3 It is therefore important for the Local Plan to ensure developments create an environment where accessibility to day to day services and other facilities is easy and a choice of transport modes is available. This will enable the local community to choose the more socially inclusive and sustainable methods of travel. New developments need to be designed so that this can happen from first occupation when habits start to form.

7.4 Land to the north of Station Road is an ideal example of a site that has the opportunities to accommodate additional growth and encourage a shift away from car use and towards more sustainable modes of transport. It is a site located in a highly accessible area and its development can achieve a reduction in car parking in a city centre location. Further detail is provided in Section 2 of these representations and in the supporting Sustainable Transport Appraisal prepared by Vectos.

8.0 Where to Build?

Question 42. Where should we site new development? Rank the options below 1-6 (1 Most Preferred 6-Least Preferred)

8.1 A combination of approaches to the distribution of spatial growth are considered likely to be necessary in order to allow for sufficient flexibility when considering the locations of new housing and employment development in the Greater Cambridge area.

Question 43. What do you think about densification?

8.2 Densification of existing urban areas has many advantages as outlined in the consultation document;

- Reduces the need to use greenfield land to accommodate growth;
- Living in central, well-connected and vibrant areas is important for many people;
- Reduces the need to travel by car and so makes a positive contribution to addressing climate change;
- Sites growth near to existing centres, which can continue to support their vitality and viability.

8.3 The principle of densification is supported. The NPPF confirms, at paragraph 118, that planning policies should "*give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs"* and *"promote and support the development of under-utilised land and buildings".* The NPPF continues, at paragraph 112, in advising that planning policies should support development that makes efficient use of land, taking into account, *inter alia,* the identified need for different types of housing and other forms of development, and the availability of land suitable for accommodating it.

8.4 As set out above, a combination of approaches for the spatial distribution of growth in the area is likely to be required. However, opportunities for densification of existing urban areas in locations well served by public transport should be maximised wherever possible.

8.5 Land to the north of Station Road, Cambridge is in single ownership and provides an opportunity to meet an identified need for Grade A office space within a newly formed city quarter. The Site presents a significant opportunity for redevelopment whilst still being able to respond to local character and protect the historic environment. The Site is proposed for allocation in the emerging Local Plan to achieve densification in a highly accessible location and to support an established high-tech cluster.

Question 48. What do you think about siting development along transport corridors?

8.6 Development is best suited to being located along transport corridors to promote sustainable development and transport issues should be considered from the earliest in accordance with Para. 102 of the NPPF.

8.7 Jesus College support the principle of siting development along transport corridors, in accordance with national planning policy and guidance which encourages development to be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.

8.8 Land North of Station Road is located on a key public transport corridor and is in one of the most connected areas for public transport within the whole of Greater Cambridge, being within easy walking distance of Cambridge central station, the city centre and a vast number of bus services. It is in a highly sustainable location for growth.

9.0 Any Other Issues?

Question 49. Do you have any views on any specific policies in the two adopted 2018 Local Plans? If so, what are they?

‘Cambridge Railway Station, Hills Road Corridor to the City Centre Opportunity Area’ (Policy 25) Cambridge Local Plan 2018

9.1 Land to the north of Station Road falls within the ‘Cambridge Railway Station, Hills Road Corridor to the City Centre Opportunity Area’ (Policy 25) of the adopted Cambridge Local Plan (2018).

9.2 Policy 25 confirms that development proposals within the Cambridge Railway Station, Hills Road Corridor to the City Centre Opportunity Area will be supported if they help promote and coordinate the use of sustainable transport modes, and deliver and reinforce a sense of place and local shops and services. Development proposals are also expected to deliver a series of coordinated streetscape and public realm improvements.

9.3 The College is fully supportive of the aims and objectives of Policy 25 and the drive to deliver an improved public realm along Station Road. This policy objective should be followed through to the new Greater Cambridge Local Plan and the Site should continue to fall within the Opportunity Area.

‘Station Areas West and Clifton Road Area of Major Change’ (Policy 21) Cambridge Local Plan (2018)

9.4 Within the Local Plan 2006, the Site was located within the identified Station Area ‘Area of Major Change’ under Policy 9/9. This Area of Major Change was taken forward into the adopted Cambridge Local Plan (2018) under Policy 21 – the ‘Station Areas West and Clifton Road Area of Major Change’. However, Land to the north of Station Road was excluded from the designation at because it was not a central focus of the masterplan at that time. (see Figure 1.1 below).

9.5 Land to the north of Station Road has an important role to play in the continuing redevelopment and revitalisation of the emerging central business district along Station Road. It is therefore requested that the boundaries of the ‘Station Areas West and Clifton Road Area of Major Change’, under Policy 21 of the adopted Cambridge Local Plan 2018, is reviewed as part of the emerging Greater Cambridge Local Plan, to include for Land on north side of Station Road to make sure its long-term future is properly considered to best support the Cambridge Station Area.

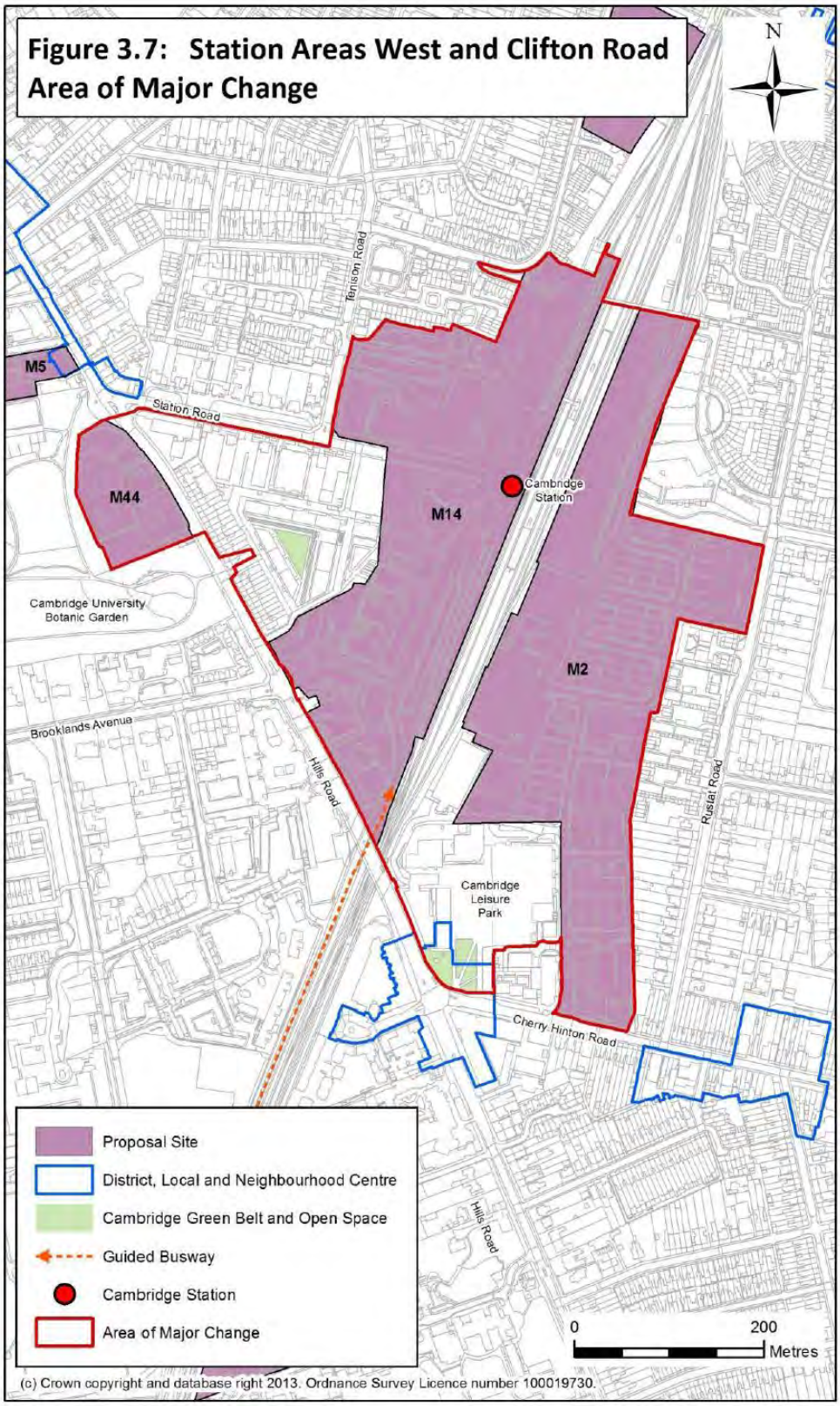

Figure 1.1 Figure 3.7 : Station Areas West and Clifton Road Area of Major Change (Cambridge Local Plan 2018)

APPENDIX 1
SITE LOCATION PLAN

Land North of Station Road, Cambridge

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BIDWELLS

Scale: 1:2,000 @ A4 OS Ref: TL 4557 Drawing No: A.49,858c Date: 24/02/2020

Produced by Bidwells GIS Mapping - 01223 559288

APPENDIX 2
SUSTAINABLE TRANSPORT APPRAISAL

Land to the North of Station Road, Cambridge

Site Accessibility Overview

January 2019

195160/N01

Introduction

1. Vectos has been appointed by Jesus College to provide traffic and transport advice in relation to the proposed development of land to the north of Station Road, Cambridge, hereafter referred to as 'the site'. The site is currently owned by Jesus College, whom Bidwells are acting on behalf of. The site location is illustrated in **Figure 1** below.

Figure 1: Site Location Plan

2. The site comprises a number of buildings which line from northern side of Station Road, from the junction of Hills Road / Station Road, eastward to the junction of Station Road / Tenison Road.

3. The site includes a variety of buildings, which are of different types (i.e. terraced, semi-detached and detached) and currently have different land uses including: residential, a barber, night club, cafes/restaurants, a bakery, nursery/pre-prep school, English language school, offices and a sixth form.

4. This note sets out the site's accessibility in relation to both local and strategic amenities.

Site Location

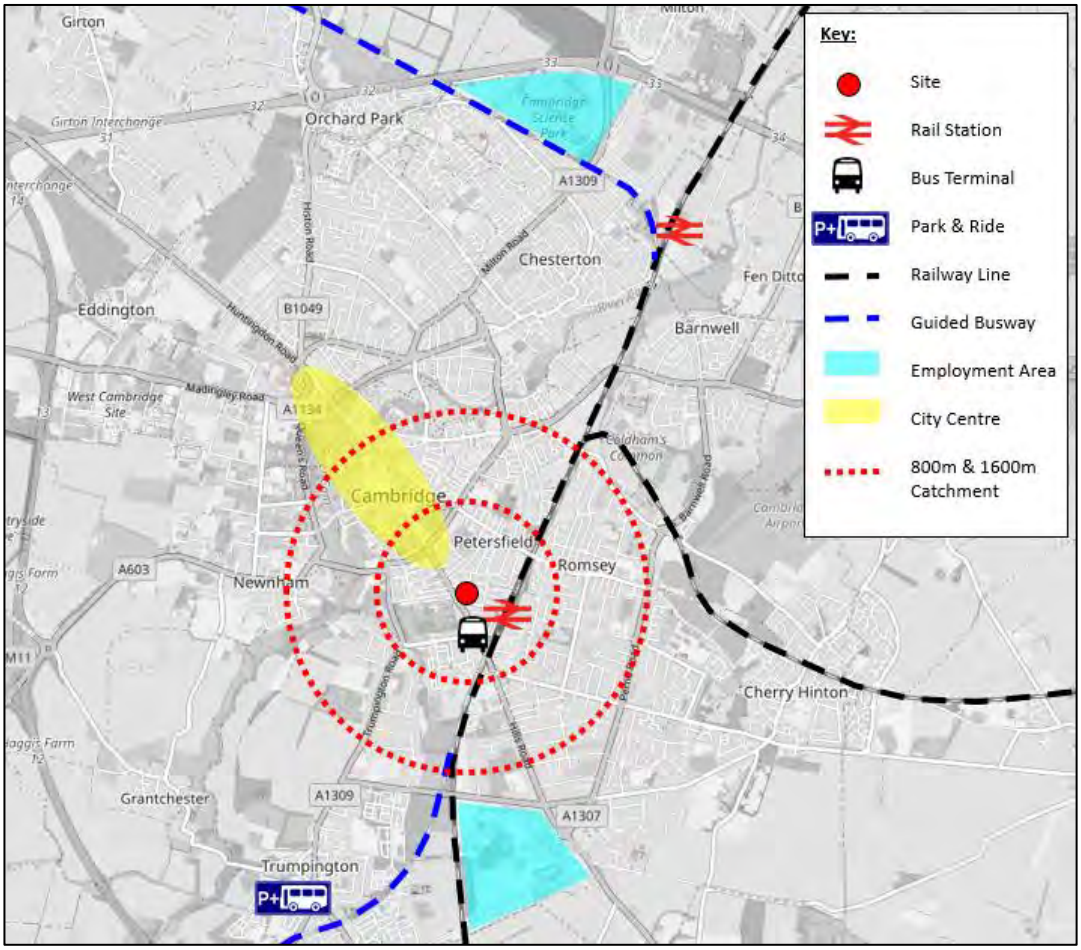
5. The site is well located for access to key facilities and services, including transport infrastructure such as Cambridge Railway Station and the Cambridgeshire Guided Busway, which in turn, form important links to wider settlements and local employment areas.

6. The site is located within the CB1 postcode area and is adjacent to the CB1 development area around Cambridge Railway Station. This new development consists of new homes, offices, hotels and retail space and has also resulted in improvements to the public realm in the surrounding area.

7. The sites location within the south-eastern segment of central Cambridge offers opportunities to walk and cycle to key amenities along Hills Road and within the city centre.

8. **Figure 2** shows the site in relation to key transport infrastructure and proximity to these services within 800m and 1.6km, i.e. a 10-minute and 20-minute walk, or 3-minute and 6-minute cycle ride.

Figure 2: Key Transport Infrastructure



Existing Site Access Arrangements

Vehicular Access Points

9. The site can currently be accessed from a total of five locations by vehicles, these accesses are located on Station Road and Hills Road.

10. The vehicular access on Hills Road is located in the north-west corner of the site and is shared with some properties which fall outside of the site. The access road is named Claremont and provides access to six residential properties (within the site boundary), provides access to an office building (outside the site boundary) and provides access to the rear of the commercial properties which site upon the corner of the Hills Road/Station Road junction. The Claremont access road is shown in **Figure 3** below.

Figure 3: Claremont Vehicular Access Road

11. The remaining vehicle accesses are location on Station Road as follows:

- Towards the western end of Station Road a wide crossover is provided which provides access to both the rear of the commercial properties located on the corner of the Hills Road / Station Road junction and an access to the western loop road, providing access to St Andrew's College (see **Figure 4**).

Figure 4: Access on Station Road to Commercial Properties and St Andrew's College Pedestrian Access Points

- The next vehicular access to the east, is a point of egress to both of the loop roads which front the properties on Station Road. Again, a wide crossover is provided, which allows both loop roads to exit in the same location.
- The vehicular access located a short distance to the east of this one is used as a point of vehicular entry and exit to the eastern loop road providing access to Sancton Wood School and commercial properties (see **Figure 5**).

Figure 5: Access and Egress Point to Eastern Loop Road on Station Road

- The final vehicle access is located on the corner where Station Road meets Tenison Road (see **Figure 6**). The access provides a point of entry to the site (it is unclear if exits are also made in this location). The access point is relatively narrow due to the site boundary wall and visibility is constrained. The proximity of the access to the Tenison Road Junction is not ideal and its removal / relocation provides opportunity for betterment that would be well received by the highway authority.

Figure 6: Access at Junction of Station Road and Tenison Road

12. In terms of pedestrian access to the site; the commercial properties located on the corner of Station Road/ Hills Road junction are accessed directly from the footway. The properties located along Station Road, which are set back from the footway do not provide any access points which are completely segregated from the vehicular access points but may be accessed on foot in this way.

13. The western loop road does provide pedestrian routes into the site however they are provided alongside the vehicular access and are segregated by railings within the site. The eastern access loop road does not provide any form of segregated features for pedestrians either at the accesses or within the site.

14. It is noted that within the western section of the site on Station Road there is a pedestrian route through the site, which is marked out by railings. A small zebra crossing is provided to connect walking route to the nearest access / egress point for pedestrians to the site. It is presumed this is to afford some separation between car parking and pedestrian movement.

Car Parking

15. There are multiple areas of on-site parking within the site, they include:

- Private parking for the residential properties on Claremont.
- An area of parking behind the commercial properties at the Station Road/ Hills Road junction.
- Parking located along the front of the western loop road on Station Road. The parking is provided as a gravel surface and is not provided as marked bays.
- Marked bays provided on a hardcourt surface to the rear of 13 Station Road.
- Parking along the front of the eastern loop road on Station Road. This provision is again unmarked as it is provided on a gravel surface. It is noted that double parking occurs. Some signage is provided which indicates where bays should be located and whether the 'space' is reserved to a particular property.
- Further parking is provided to the rear of two of the properties along the eastern loop road.

Servicing

16. Considering the existing land uses it is anticipated that all deliveries to the existing sites can be accommodated within the site.

17. It is envisaged that refuse collection is undertaken from Station Road at present.

18. It is noted that Claremont includes a gated residential community, which has a relatively narrow driveway and turning area, as such it may not be possible to collect refuse within the site from this access. It is therefore anticipated that refuse may be wheeled to the kerbside of Hills Road for collection for the residential and commercial properties in this location.

19. It is noted that St Andrew's College provides a bin store adjacent to its vehicular access (see **Figure 7**), which could easily allow collection from both within the site or for the refuse bins to be wheeled to the kerbside. It is anticipated that collection occurs from Station Road at present.

Figure 7: Access to St Andrew's College (and bin store)

20. Along the eastern loop roads there are some refuse bins being stored between the buildings, it is again anticipated that servicing likely occurs along Station Road.

Accessibility

Walking

21. The site is served by footways on both sides of Station Road. Station Road provides a direct route to Cambridge Railway Station at its eastern end and to Hill Road, which leads towards the city centre, at its western end.

22. Cambridge Railway Station and its associated amenities, including a Sainsburys Local, retail facilities, cycle parking and cycle hire facility can be reached from the site within 450m walk of the western extent of the site (which is furthest from the station), which is a 5-6-minute walk.

23. The site is surrounded by a footway network that affords access to a range of shops and facilities along Hills Road, and access into the city centre within 1.3km, or a 17-minute walk.

24. Within the vicinity of the site there are residential neighbourhoods, employment sites, commercial premises, retail areas, education facilities, a leisure centre and other services. The site is well connected to these various destinations by footways and suitably located crossing points, making the site highly accessible on foot.

25. The site is also accessible to local transport hubs within reasonable walking distances, which further encourages sustainable mode use to destinations in the wider area.

26. It is noted that while the footway outside the site frontage is wide and continuous, on both Station Road and Hills Road, it is in need of maintenance in some areas (see **Figures 8** and **9**). The footways due east of the site have recently been improved as part of the CB1 development area in order to provide an improved public realm (see **Figure 10**). Similar improvements may be expected as part of any significant redevelopment of the site.

Figure 8: Footways Along Site Frontage on Station Road

Figure 9: Footway Along Site Frontage on Hills Road

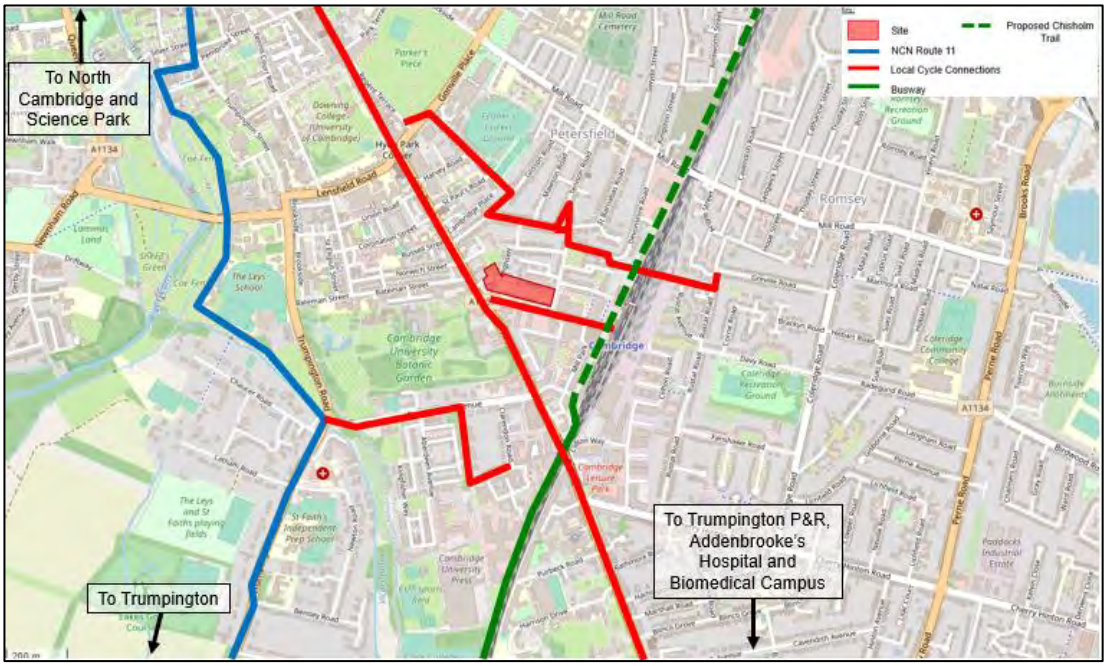
Figure 10: Footways Along Station Road, Outside CB1 Development

Cycling

27. The site is extremely well located for cycle access. A signed primary network on-road route exists along Station Road, Hills Road, Gresham Road and along St Andrew's Square that leads northbound to the city centre. There are also lengths of traffic free routes available to the south and east of the site which connect to employment areas and other key destinations.

28. **Figure 11** shows the cycle routes in the immediate vicinity of the site. The railway station provides direct access to cycle parking facilities and cycle hire options, including electric bike hire, at Rutland Cycling.

Figure 11: Cycle Routes in Immediate Vicinity of the Site



29. A cycle route is provided alongside the Cambridge Guided Busway which connects the Station Place bus hub to Trumpington. The cycle route follows the busway and provides a safe and segregated route suitable for cyclists of all abilities. This route provides access to employment sites including Addenbrooke's Hospital, Cambridge Biomedical Campus and the Park and Ride site in Trumpington.

30. Cycle facilities are also provided on Trumpington Road to Trumpington, in the form of a shared surface footway/cycleway.

31. Additionally, the dockless bike sharing scheme Mobike operates within Cambridge, with bikes often readily available for hire at key transport interchanges such as Cambridge Railway Station, bus stops along Station Place and within the city centre.

32. At a more strategic level, the proposed Chisholm Trail is set to open in the summer of 2020. The trail will offer a new, predominantly off-road cycling route between Cambridge Railway Station, Addenbrooke's Hospital and the Biomedical Campus in the south, and Cambridge North Railway Station, the Cambridge Business Park and Cambridge Science Park in the north.

33. The Chisholm Trail will closely follow the railway line and provide a quicker and safer route for occupants of the site to key employment areas.

34. Additionally, National Cycle Network Route (NCNR) 11 can be accessed from the Guided Busway and routes to Trumpington Park and Ride, Great Shelford and the villages beyond, as shown in **Figure 12**.

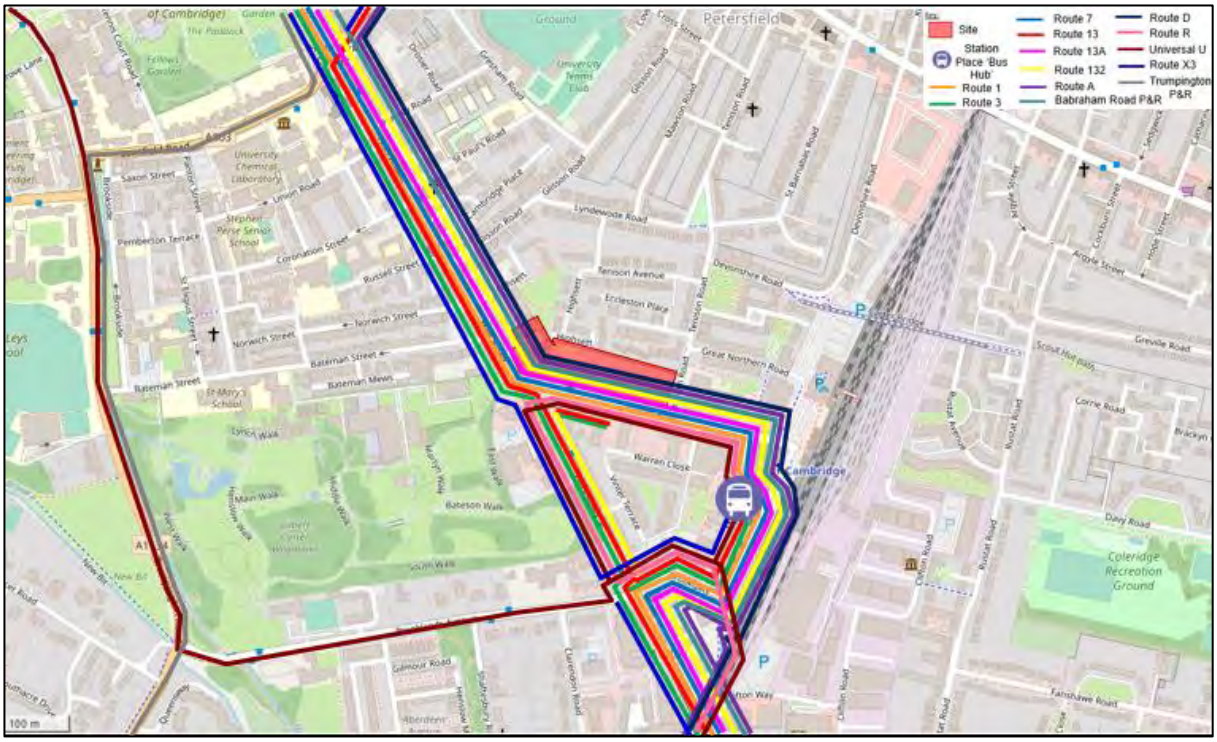
Figure 12: National Cycle Network

Bus Services

35. A bus stop is located immediately outside the site on Station Road, it is served by a total of 7 services, including the park and ride service. The bus stop comprises a flag and timetable.

36. Station Place is located immediately south of Cambridge Railway Station and provides a bus service hub. Station Place is within 450m walk of the site and is therefore easily accessible from the site on foot (circa 6 minutes' walk). **Figure 13** provides an overview of the bus services which are available in the immediate area surrounding the site.

Figure 13: Local Bus Services



37. The Cambridgeshire Guided Busway routes from Station Place between Huntingdon, St Ives, Cambridge and Trumpington Park and Ride. The Busway offers a direct link to Trumpington Park and Ride, Cambridge Science Park, Biomedical Campus, Northstowe and St Ives with services running every 15 minutes.

38. Trumpington Road also provides bus stops along its length, which are served by the Park and Ride service. The Park and Ride site on Trumpington Road is served by a total of 8 bus routes, which allow access into Cambridge and the surrounding villages.

39. It is noted that either the Park & Ride bus service or the R route of the guided busway can be used to directly access the site from the Park and Ride in Trumpington.

40. A bus and coach station is also provided on Drummer Street, in the centre of Cambridge. This station provides access to 24 bus services, including guided busway routes and services to residential areas in the wider area. This bus station is a 17 minute walk from the site, or can be accessed in circa 9 minutes through local bus services.

Rail Services

41. Cambridge Railway Station is located a short distance to the east of the site (210m from the south-east extent of the site). The station can be reach within a 3 minute walk from the eastern extent of the site and a 6 minute walk from the furthest extent of the site, making the site highly accessible by rail mode.

42. Cambridge Railway Station provides a strategic link between Cambridge and other major cities including London, Brighton, Birmingham and Norwich. The station also provides a link to Cambridge North station (circa 4 minutes journey time), where there are extensive employment land uses and education facilities.

43. Direct train services run from Cambridge to London at a 30 minute frequency throughout the day, with the journey taking approximately 1 hour and 15 minutes. This provides a strong connection for commuting and business purposes.

44. Additionally, the station is served by routes which make stops at towns and villages in the local area which is beneficial to encouraging sustainable commuting into Cambridge.

45. The station provides 2,850 cycle parking spaces within the CyclePoint bike park offering sheltered and secure parking.

Taxi

46. A taxi pick-up and drop-off area is provided immediately outside of Cambridge Railway Station with bays provided adjacent the site on Station Road, a further taxi bay is located to the east of the site, also on Station Road.

Car Clubs

47. Enterprise Car Club is the official car club provider for Cambridge and offers residents access to a pay-as-you-go car hire service. 35 low-emission hybrid vehicles are located across Cambridge both on street and within Enterprise branches.

48. In proximity to the site, there are cars available for rent on Aberdeen Avenue, Russell Street, Great Eastern Street and Gwydir Street Car Park, all within 800m, or a 10-minute walk of the site.

49. Enterprise are continually expanding and improving their car club offering and this will present a viable option for ad-hoc car travel for users of the site in the future without the need for car ownership.

Existing and Emerging Mobility Options

50. There are a number of relevant authorities and organisations who each may influence matters relating to mobility and strategic transport opportunities in the local and regional area. Those of particular prominence are as follows:

- The Local Planning Authorities:
    - Cambridge City Council;
    - South Cambridge District Council;
- The Local and Strategic Highways Authorities:
    - Cambridgeshire County Council (Local); and
    - Highways England (Strategic).

51. In addition to these there are additional organisations which take responsibility for strategic transport matters and delivery of improvement schemes, these include:

- Cambridgeshire and Peterborough Combined Authority; and
- The Greater Cambridge Partnership.

52. A summary of the emerging transport proposals set out by these above bodies are detailed in the following section.

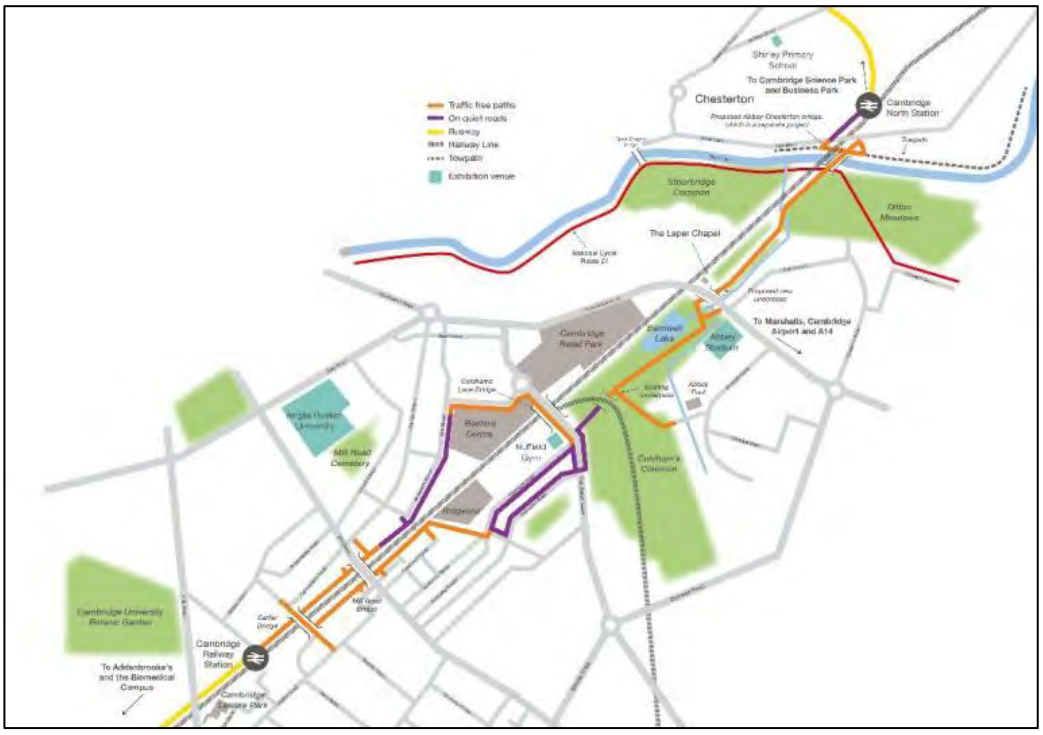
Summary of the Strategic Mobility Initiatives

Chisholm Trail

53. The Chisholm Trail is a route which will provide a north-south connection following the railway line along much of its route. It is proposed to be a mostly off-road and traffic-free walking and cycling route. In its entirety, the route will run 26km from Trumpington to St Ives providing cycling connection throughout the city.

54. The 3.5km section currently being developed runs from Cambridge Railway Station to Cambridge North Railway Station and will avoid busy junctions and link up to green spaces. This section of the route will be key in providing north-south connections through Cambridge to destinations including Cambridge Science Park, Cambridge Business Park, Addenbrooke's Hospital, Cambridge Biomedical Campus and Cambridge Leisure Park.

Figure 14: Overview Map of Chisholm Trail

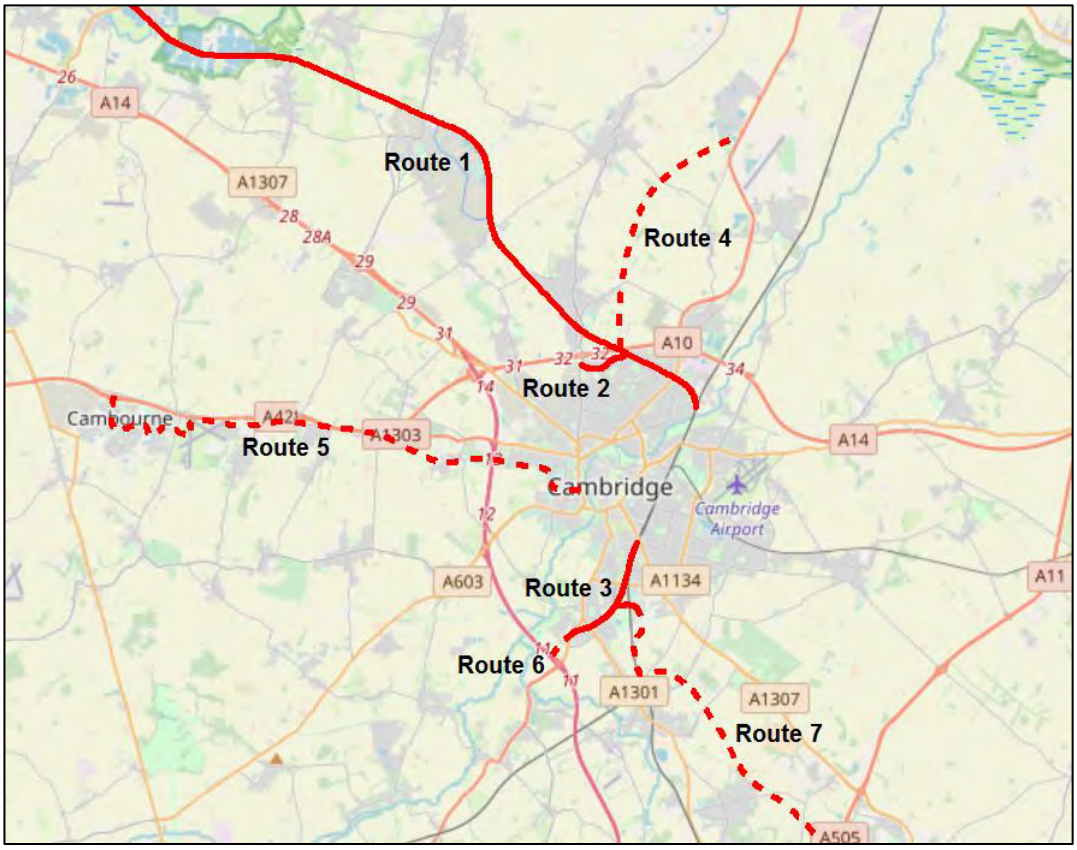


Source: https://www.greatercambridge.org.uk/transport/transport-projects/chisholm-trail/

Emerging Busways

55. Within Cambridgeshire, the busway is a key mode of transport by which people travel. The busway operates along a number of routes, some of which are segregated and some are on-street. **Figure 15** below shows a visual representation of the existing and emerging busway routes.

Figure 15: Existing and Emerging Busway Routes



56. Developing the extent of the busway is seen a key way of encouraging further sustainable travel within Cambridge. A number of extensions are emerging, and these are illustrated in **Figure 15**. A description of the extent of these schemes is provided below.

Waterbeach New Town (Route 4)

57. As discussed above in conjunction with the construction of a new town to the north of the existing village of Waterbeach, containing approximately 8,000-9,000 new homes, an extension to the busway will be provided that will allow improved and more reliable journey times.

58. To achieve the emphasis on providing a sustainable movement framework within the development, the existing segregated busway will be extended to provide high-quality public transport links to Cambridge. The extension is proposed to run from Cambridge North Railway Station to Waterbeach New Town.

Cambourne to Cambridge (Route 5)

59. The Cambourne to Cambridge Public Transport Route is a priority project and is the first phase of the areas plans for a Cambridgeshire Autonomous Metro (CAM). With 8,000 extra homes planned in the area, improved public transport connections are key.

60. Subject to finalisation, the route is proposed to run from Cambourne, through Bourne Airfield, past Madingley Mulch Roundabout through the West Cambridge development before joining existing public transport routes in central Cambridge.

Cambridge South West Travel Hub (Route 6)

61. The south-west of Cambridge is already a key point of entry into Cambridge due to Junction 11 of the M11. When this is combined with the expected significant growth in housing and employment, there is a requirement for the existing transport infrastructure to be upgraded.

62. It is proposed to provide a new Travel Hub to the west of Junction 11 with approximately 2,250 parking spaces to encourage the use of public transport for the final section of people's journeys. This will involve the extension of the busway from the Trumpington Park and Ride site, across a bridge over the M11, before connecting with the new Travel Hub. This will be supported by an increase in the frequency of services and an extension in service hours.

South East Cambridge Transport Corridor (Route 7)

63. This project aims to improve sustainable transport options in the A1301 / A1307 area including provision of a new travel hub and a new public transport route which will also form part of the future CAM development.

64. The proposed off-road segregated busway will run from the existing segregated busway at the Cambridge Biomedical Campus to the A11. It will serve locations including Sawston, Stapleford and Great Shelford as well as connections to Babraham, the Babraham Research Campus and Granta Park.

Cambridge Autonomous Metro

65. The existing and emerging busways are being developed to accommodate proposals for a regional Cambridge Autonomous Metro network. Initially this would run rubber-tyre high-quality buses along the routes at a high frequency. The intention would be to increase frequencies and move towards an autonomous system.

66. Under the proposals which is being promoted by the Mayor and Combined Authority, the busways would be linked through underground tunnels providing a true network. The site is well placed to take advantage of the emerging CAM proposals where Cambridge Railway Station will act as a key nodal point.

67. A trial of autonomous pods is planned for 2020 which would see vehicles moving people between Cambridge Railway Station and Trumpington Park and Ride. The site is well placed to this trial.

Review of Local Policy Requirements

Cambridge Local Plan – October 2018

68. The Cambridge Local Plan provides standards and guidance upon which the number of car parking, disabled parking, electric vehicle charging bays and cycle parking spaces can be determined. It is noted that the Local Authority may have some flexibility over these standards depending on the nature of the development and extent to which a departure from the standards is proposed.

69. As the proposals are still at an early stage and it is not clear what land uses are proposed for the site, nor what the floor areas (or other factors used for calculating the require spaces) will be. It is therefore not possible to quantify the numbers of spaces required at this point in time.

70. The Cambridge Local Plan Policy 82 (parking management) outlines that planning permission may be denied where the various parking standards are not met by the development proposals (i.e. providing too much car parking, not providing adequate cycle parking and not providing adequate disabled or inclusive parking).

71. The policy goes on to state that the Council supports the provision of electric vehicle charging points within developments (or alternatively the infrastructure to allow its implementation in the future) and says that this should be provided 'where reasonable and proportionate', however the guidance does not provide a specific rate at which is should be provided.

72. The various relevant parking standards and guidance for these land uses are summarised in the following paragraphs to provide some indication of what the future development should provide.

Office Land Use

73. The various parking standards which should be considered for offices are as follows:

- The car parking standard for office uses within a controlled parking zone is: 1 space per 100sqm Gross Floor Area plus disabled car parking. As Station Road is within the Tenison Area resident parking zone it is considered that this is the relevant standard to apply.

- Blue badge bays:
    - Workplaces should provide 1 space for each employee who is a disabled motorist and a further 5% of the total parking capacity for visiting disabled motorists. There should also be the potential to provide additional future provision for a further 5% of the total parking capacity as blue badge parking bays.
    - The blue badge bays should measure 2.4m wide by 4.8m long with a zone 1.2m wide provided between the bays and at the rear of the bay to enable a disabled driver or passenger to get in and out of the vehicle easily and access the boot of the car, without being in conflict with any other object.

- Cycle parking: a minimum of 2 spaces for every 5 members of staff or 1 space per 30sqm gross floor area (whichever is greater). Some visitor parking on merit.

Residential Land Use

74. The various parking standards which should be considered for residential dwellings are as follows:

- The car parking standards for residential dwellings state that for dwellings within a controlled parking zone no more than 1 parking space per dwelling should be provided, this standard applies across all sizes of dwellings.
- Cycle parking should be provided at a minimum rate of the following:
    - 1 space per bedroom for up to 3-bedroom dwellings.
    - Then 3 spaces for 4-bedroom dwellings and 4 spaces for 5-bedroom dwellings and so forth.
    - Visitor cycle parking should be provided in the form of a ring or bar attached to a wall or a Sheffield stand outside the individual houses where the cycle parking provision is located in the back garden.
    - Should residential land uses be sought at the development site then the cycle parking should be designed to accord with the Cycle Parking Guide for New Residential Developments, which has been produced by the Council.

Summary

75. The site is located in an excellent location to achieve mobility either as an origin for trips or as a destination in its own right.

76. The proximity of the site to local destinations and amenities, are complemented by facilities afforded to pedestrians and cyclists.

77. For wider travel, the railway station, nearby bus stops, Trumpington Busway and wider cycle infrastructure will facilitate mobility associated with a range of areas. Car clubs and cycle hire schemes add to the overall mobility offer.

78. There are a number of strategic schemes coming forward which will improve mobility in the area. Station Road is located in proximity to these schemes and will benefit from them, with improved links to key areas including employment zones.

79. Given the excellent location of the site and its high accessibility, the mobility focus for the development proposals should be on maximising its potential by ensuring facilities are provided within the development.

80. The clear advantage in this regard is also that the sites high accessibility would justify low car parking provision or car free development.

81. Initial mobility considerations that should be incorporated within the development of the Masterplan include:

- Enhanced public realm, improved quality footway and possibly wider footway provision along Station Road
- Rationalised vehicle access, principally from Station Road with opportunity to remove the access at the Station Road Tenison Road Junction.
- High quality, covered and secure cycle parking within the site for residents, visitors and workers as appropriate to the scheme.
- Provision for ebike charging and cargo bikes
- Changing washing and storage facilities to make cycling attractive
- Low car parking provision. Any car parking to consider disabled provision and maximise electric vehicle charging opportunities.
- Car club parking spaces

APPENDIX 3
PRELIMINARY ECOLOGICAL APPRAISAL

APPENDIX 4
ARBORICULTURAL SURVEY AND CONSTRAINTS PLAN

HAYDEN'S
Arboricultural Consultants

TREE SURVEY & CONSTRAINTS PLAN
IN ACCORDANCE WITH BS 5837:2012

Proj. No **7909**	**Land to the North of Station Road, Cambridge, CB1 2RS**
Client:	Bidwells (Cambridge)
Date of Report:	15/01/2020

Contact Details

Client – Bidwells (Cambridge)			
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Address The Guildhall Cambridge Cambridgeshire CB2 3QJ	**Trees Officer** Ms Joanna Davies	**Tel:** **E-mail:**	

Arboricultural Consultant – Hayden's Arboricultural Consultants Limited			
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Contents

1.0 Introduction

1.1 Terms of Reference

1.1.1 Hayden's Arboricultural Consultants Limited has been commissioned by Bidwells (Cambridge) to prepare a Tree Survey and Constraints Plan for the existing trees at Land to the North of Station Road, Cambridge, CB1 2RS.

1.1.2 The site survey was carried out on the 9th January 2020. The relevant qualitative tree data was recorded in order to assess the condition of the existing trees, their constraints upon the prospective development and the necessary protection required to allow their retention as a sustainable and integral part of any future permitted development.

1.1.3 Information is given on condition, age, size and indicative positioning of all the trees, both on and affecting the site. This is in accordance with the British Standard 5837:2012 *Trees in relation to design, demolition and construction - Recommendations.*

1.2 Scope of Works

1.2.1 The survey of the trees and any other factors are of a preliminary nature. The trees were inspected on the basis of the Visual Tree Assessment (VTA) method as developed by Mattheck and Breloer (1994). The trees were inspected from ground level with no climbing inspections undertaken. It is not always possible to access every tree and as such some measurements may have to be estimated. Trees with estimated measurements are highlighted in the schedule of trees. No samples have been removed from the site for analysis. The survey does not cover the arrangements that may be required in connection with the removal of existing underground services.

1.2.2 Whilst this is an arboricultural report, comments relating to non arboricultural matters are given, such as built structures and soil data. Any opinion thus expressed should be viewed as provisional and confirmation from an appropriately qualified professional sought. Such points are clearly identified within the body of the report.

1.2.3 An intrinsic part of tree inspection in relation to development is the assessment of risk associated with trees in close proximity to persons and property. Most human activities involve a degree of risk with such risks being commonly accepted, if the associated benefits are perceived to be commensurate. In general, the risk relating to trees tends to increase with the age of the trees concerned, as do the benefits. It will be deemed to be accepted by the client that the formulation of the recommendations for all tree management will be guided by the cost-benefit analysis (in terms of amenity), of the tree work.

1.3 Documentation

1.3.1 The following documentation was provided prior to the commencement of the production of this report;

- Email of instruction from Jess R. Hill dated 09/12/2020
- Definition of site boundary
- Topographical survey

2.0 The Site

2.1 Site Overview

2.1.1 The site is Land to the North of Station Road, Cambridge, CB1 2RS.

2.2 Soils

2.2.1 The soils type commonly associated with this site are freely draining lime-rich loams. They are of moderate fertility and mainly support herb-rich chalk and limestone pastures, and lime-rich deciduous woodland type habitats. This soil type constitutes approximately 3.7% the total English land mass.

2.2.2 The data given was obtained from a desk top study which provides indications of likely soil types. By definition, this information is not comprehensive and therefore any decisions taken with regards the management, usage or construction on site should be based on a detailed soil analysis.

2.2.3 Further to item 2.2.2, this report provides no information on soil shrinkability. It may be necessary for practitioners in other disciplines (e.g. engineers considering foundation design) to obtain this data as required.

2.3 Statutory Tree Protection

2.3.1 Conservation Area

The site is located within a locality specifically identified by Cambridge City Council as a "Conservation Area". This is a planning designation that seeks to provide control over the built environment, but which also has provision for tree protection. The effect of this on the owners, managers or any persons wishing to undertake work on trees sited within a Conservation Area is to require them to submit 6 weeks written notice detailing the surgery or felling they plan to undertake. No work may be carried during the 6-week period unless written permission has been received from Cambridge City Council. The local Planning authority can only prevent works notified to them within the 6-week period by serving a Tree Preservation Order. If this happens, the owner of the tree has a right to object to the serving of the order.

There are certain circumstances where written permission from the local planning authority may not be necessary before undertaking works. These include;

- Making a tree safe if it is an imminent threat to people or property.
- Removing dead wood, or a dead tree.
- Trees with stem diameters of less than 75mm (measured at 1.5m from ground level). If the works being carried out are to help promote the growth of other trees then trees with stem diameters of less than 100mm (at 1.5m) may be removed or pruned.

Owners, managers or any persons wishing to undertake work as an exemption to the written notification process are **required** to provide the local planning authority with 5 days' notice prior to attending to a tree which they deem as being dead or dangerous; unless such works are required in an emergency. It is the tree owner's responsibility to provide proof that the tree was indeed dead or dangerous should this exception be challenged; hence, it is advisable always to request an inspection by the Local Planning Authority prior to carrying out such operations.

Furthermore, and even in the event of an emergency situation, there is still a duty to notify the local planning authority that work has been completed including supplying an explanation of the necessity. Failure to comply with the requirements of Conservation Area legislation can lead to a maximum fine of up to £20,000 per tree in the Magistrates Court. Fines in the Crown Court are unlimited.

If **detailed planning permission** is granted and as part of the relevant approval, works (felling or surgery) to trees located within a Conservation Area are agreed as acceptable by the local planning authority, no **additional** written permission to proceed will be required provided that (i) the planning permission remains live, (ii) the works are in strict accordance with the specification of the extant planning permission, and (iii) the works are being completed solely to implement the detailed planning permission.

2.3.2 Felling Licence

All trees within the United Kingdom are protected under the Forestry Acts. In general, anyone felling more than 5 cubic metres of timber in any calendar quarter requires a Felling Licence from the Forestry Commission. There are exemptions however and these are as follows:-

A Felling Licence is not required in the following instances:

- To fell trees in a garden, an orchard, a churchyard, or a designated open space (Commons Act 1899).
- To carry out surgery operations such as pruning, reduction, dead wooding or pollarding.
- To fell less than 5 cubic metres in a calendar quarter. (Please note that not more than 2 cubic metres in a calendar quarter may be sold).
- To fell trees that are 8 centimetres or less in diameter when measured 1.3 metres from the ground. Trees removed for thinning may have a diameter of up to 10 centimetres and trees managed under a coppice regime may have a diameter of up to 15 centimetres.
- To fell trees previously approved for removal under a Dedication Scheme, or where Detailed Planning Permission has been granted.

Substantial fines exist for not complying with the requirements of a Felling Licence.

2.3.3 Hedgerow Regulations and Inclosure Act

Certain hedgerows within the United Kingdom are protected under The Hedgerow Regulations 1997. The regulations apply to any hedgerow growing in, or adjacent to, any common land, protected land (local nature reserves and SSSIs), or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys, if it: (a) has a continuous length of, or exceeding 20m; or (b) it has a continuous length of less than 20m and, at each end, meets another hedgerow. The regulations do not apply to hedgerows within the curtilage of, or marking a boundary of the curtilage of, a dwelling house.

Anybody wishing to remove or destroy a hedge must apply to their Local Planning Authority (LPA) for consent. Substantial fines exist for not complying with the requirements The Hedgerow Regulations.

Older hedges could be protected by old Inclosure Acts. These Acts may require that hedges are retained and managed forever more.

It is recommended professional legal advice be sought before removing hedgerows to determine whether the hedgerow might be protected by an Inclosure Act. Many Inclosure Acts are deposited in Local Records Offices.

3.0 Tree Survey

3.1 As part of this survey a total of sixty-nine individual trees, nine groups of trees and two areas of trees have been identified. These have been numbered T001 – T069, G001 – G009 and A001 – A002 respectively.

3.2 A topographical survey was provided which showed the position of the trees on site. It should be noted however that topographical surveys are not always comprehensive and sometimes it is considered appropriate to record details of trees and landscape features omitted from or beyond the scope of the plan. If this circumstance occurs, the location of the individual tree or landscape feature is estimated. The position of each tree is shown on the attached drawing no. 7909-D-CP.

3.3 In order to provide a systematic, consistent and transparent evaluation of the trees included within this survey, they have been assessed and categorised in accordance with the method detailed in item 4.3 of *BS 5837:2012 "Trees in Relation to Design, Demolition and Construction - Recommendations"*. For further information, please see the attached Explanatory Notes.

3.4 The detailed assessment of each tree and its work requirements with priorities are listed in the attached Schedule of Trees.

3.5 Several items would benefit from tree surgery or additional investigation, be it for health and safety, cultural, aesthetic, or structural reasons as detailed in the attached Schedule of Trees. Including the trees recommended for felling, the items requiring the **most urgent** intervention are as follows:

Within six months:

G003	Re-pollard.
G006	Remove basal growth Remove Epicormic growth. Repollard
T040	Remove all deadwood.
T041	Remove all deadwood.
T042	Remove all deadwood.
T051	Remove all deadwood.
T057	Remove all deadwood.
T061	Reinspect in one year. Remove all deadwood.

3.6 In accordance with item 4.2.4 (c) of BS 5837:2012, the items inspected and detailed within this report have been selected for inclusion due to the likely influence of any proposed development on the trees, rather than strictly adhering to the curtilage of the site. However, it must be understood that there may be trees beyond the site and not included in this survey which may exert an influence on the development. Where works for cultural, health and safety, quality of life, or development purposes have been recommended on trees outside the ownership of the site, these can only progress with the agreement of the owner, except where it involves portions of the trees overhanging the boundary.

4.0 Constraints Upon Proposed Development

4.1 Physical Extent of the Trees

4.1.1 The Root Protection Areas (RPA) for the trees deemed worthy of retention are indicated on the attached Drawing No.7909-D-CP. These define the below ground constraints of the trees.

4.1.2 The crown spreads of the trees deemed worthy of retention are also indicated on the attached Drawing No.7909-D-CP. These define the above ground constraints of the trees.

4.2 Design Considerations

4.2.1 The combination of the above and below ground constraints outlined at 4.1 above, should be used to inform the layout and design of any proposed development by considering the following principal factors;

4.2.2 **Shade.** Consideration will be needed regarding the size, positioning and aspect of windows, together with the internal layout of dwellings in close proximity to trees to ensure sufficient daylight enters rooms or buildings. Consideration should also be given to the future growth potential of trees in close proximity to prospective development.

4.2.3 **Water Demand.** The water demand of the trees deemed worthy of retention, as listed by the NHBC, is given in the attached *Schedule of Trees* in order to inform the foundation design process.

4.2.4 **Siting.** Ideally, the footprint of any proposed building should be no closer than 2 metres from the edge of any RPA or crown spread of any trees to be retained. This is to ensure that sufficient room is provided to allow the construction of the proposed development without any encroachment into the RPA or under the crown spread. If it is considered acceptable and appropriate to construct within the RPA, specialist engineering techniques (e.g. cantilever, piling, or pad and above ground beam foundations) and ground protection measures will be required to minimise the impact on the roots.

4.2.5 **Practicality.** It is important to ensure that any garden attached to a dwelling has a significant area of open ground that is not covered by the crowns of retained trees.

4.3 Construction Measures

4.3.1 In order to ensure that trees intended for retention are not harmed during the construction processes, the following matters require consideration and implementation as necessary. Please note that once the design is finalised, Hayden's Arboricultural Consultants will provide a Preliminary Arboricultural Method Statement & Tree Protection Plan that will satisfy the requirements for obtaining planning permission.

4.3.2 **Protective Fencing.** The trees to be retained will need to be protected by the use of stout barrier fencing. This fencing must be in accordance with the requirements of BS 5837:2012 and will be erected prior to any development on the site, therefore ensuring the maximum protection. All tree protection barrier fencing will be regarded as sacrosanct and, once erected, will not be removed or altered without the prior consent of the Local Planning Authority Arboricultural Officer.

4.3.3 **Services.** Ideally, all service runs will be routed outside of the RPA of any retained trees. If a service has to be installed across an RPA, works must be undertaken in accordance the guidance of the National Joint Utilities Group Guidance Note 4 "*Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees*" (NJUG 4 paragraph 4) and installation of such a method as to reduce any possible detrimental effect on roots to an absolute minimum.

4.3.4 **Hard Surfaces.** Hard surfaces may be constructed under the crown spreads of retained trees and within the RPA if specific detail is paid to the design and specification. In these areas, the design will comply with the principles of the Arboricultural Advisory Information Services (AAIS) Practice Note 12 "*Through the Trees to Development*" - the only difference being that instead of a geo-grid, a geo-textile base is provided, and the no-fines road stone is incorporated in, and retained by, a geo-web cellular confinement system. Given the individual requirements of each site, it is essential that a specialist engineer is consulted to specify the construction detail. Where the hard surface proposed is impermeable, it must not cover more than 20% of the RPA. Larger extents of permeable surfacing may be acceptable, dependent on the individual circumstances of the site.

5.0 Conclusions

5.1 The site is Land to the North of Station Road, Cambridge, CB1 2RS. This location has been subjected to a total health and safety inspection, together with a consideration of the tree related constraints on development.

5.2 Within the area specified for inspection, a total of sixty-nine individual trees, nine groups of trees and two areas of trees have been surveyed. These were found to be of mixed condition and age providing a variety of amenity benefits.

5.3 Consideration is being given to undertaking development within the site, but no definite layout has as yet been determined.

5.4 Ideally, all development should take place outside the RPA of the trees considered most worthy or appropriate for retention thus allowing a traditional construction process. It is usually technically possible (though not necessarily desirable) to build within a very limited portion of the RPA of one or more trees using specialist engineering techniques, but inevitably this is more difficult and expensive than traditional construction methods and may not be acceptable to the local planning authority.

5.5 Irrespective of any development proposals, a number of trees require attention as detailed items in the *Schedule of Trees*. As recorded at item 3.5 above six specimens and two landscape features need attention within six months.

6.0 Recommendations

6.1 It is recommended that the siting and design of the layout considers the presence of trees, particularly the highest quality, and where feasible seeks to incorporate them within any proposed development.

6.2 Tree surgery should be completed as detailed in the *Schedule of Trees*. Where this has been identified for reasons other than to permit development, this work should be completed within the advised timescales irrespective of any development proposals.

6.3 The tree surgery works proposed as part of the Survey are recommended to mitigate any identified health and safety problems and to promote longevity in retained trees in the context of a potential development site. To this end, should these recommendations be overruled, this Survey stands as the opinion of Hayden's Arboricultural Consultants Limited, and therefore any damage or injury caused by trees recommended by this practice for felling or tree surgery works, to which the proposed schedule of works has been altered or the tree has been requested to be retained by the Local Planning Authority, cannot be the responsibility of this practice.

7.0 Limitations & Qualifications

Tree inspection reports are subject to the following limitations and qualifications.

General exclusions

Unless specifically mentioned, the report will only be concerned with above ground inspections. No below ground inspections will be carried out without the prior confirmation from the client that such works should be undertaken.

The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available prior to and during the inspection process. No checking of independent third-party data will be undertaken. Hayden's Arboricultural Consultants Limited will not be responsible for the recommendations within this report where essential data are not made available or are inaccurate.

This report will remain valid for one year from the date of inspection subject to the recommendations specified within being adhered to. It must also be appreciated that recommendations proposed within this report may be superseded by extreme weather, or any other unreasonably foreseeable events.

However, if any additional alterations to the property or soil levels are carried out and/or further tree works undertaken other than specified within the report, it will become invalid and a new tree inspection strongly recommended.

It will be appreciated, and deemed to be accepted by the client and their insurers, that the formulation of the recommendations for the management of trees will be guided by the following: -

1. The need to avoid reasonably foreseeable damage.
2. The arboricultural considerations - tree safety, good arboricultural practice (tree work) and aesthetics.

The client and their insurers are deemed to have accepted the limitation placed on the recommendations by the sources quoted in the attached report. Where sources are limited by time constraints or the client, this may lead to an incomplete quantification of the risk.

Signed:

January 2020…….
For and on Behalf of Hayden's Arboricultural Consultants Limited

8.0 References

British Standards Institute. (2010). *Recommendations for Tree Work BS 3998:2010* BSI, London.

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9.0 Appendices

Appendix	**A**	Species List & Tree Problems
Appendix	**B**	Schedule of Trees
Appendix	**C**	Schedule of Works - Irrespective of Development
Appendix	**D**	Explanatory Notes
Appendix	**E**	Tree Preservation Order Enquiry/Response
Appendix	**F**	Advisory Information & Sample Specifications

1. BS 5837:2012 Figure 1 - Flow Chart – Design and Construction & Tree Care
2. European Protected Species and Woodland Operations Checklist (v.4)
3. BS 5837:2012 Figure 2 - Default specification for protective barrier
4. BS 5837:2012 Figure 3 - Examples of above-ground stabilising systems
5. Picus Sonic Tomograph Information

Appendix	**G**	Drawing No 7909-D-CP

Appendix A - Species List & Tree Problems

Species List:

Apple	*Malus sp*
Ash	*Fraxinus excelsior*
Austrian (or Black) Pine	*Pinus nigra*
Beech	*Fagus sylvatica*
Cherry	*Prunus sp*
Cherry Plum	*Prunus cerasifera*
Elder	*Sambucus nigra*
Elm	*Ulmus sp*
English Yew	*Taxus baccata*
European Lime	*Tilia x europaea*
False Acacia	*Robinia pseudoacacia*
Holly	*Ilex aquifolium*
Holm Oak	*Quercus ilex*
Horse Chestnut	*Aesculus hippocastanum*
Laburnum	*Laburnum anagyroides*
Norway Spruce	*Picea abies*
Pear	*Pyrus sp*
Rowan	*Sorbus aucuparia*
Silver Birch	*Betula pendula*
Stag Horn Sumach	*Rhus typhina*
Sycamore	*Acer pseudoplatanus*
Wild Cherry	*Prunus avium*

Tree Problems:

This gives a brief description of the problems identified in the attached Tree Survey.

Name: Basal Suckers	
Symptoms/damage type and cause:	A profusion of shoots emanating from the base of the main stem close to ground level. Several species of trees but most notably Limes produce suckers as part of their naturalised habit however in some species this can be an indicator of elevated stress upon the tree.
Consequence:	Suckers do not cause direct harm to the tree in their self however they can be problematic where they impede free use of space such as where a tree is adjacent to a footpath or roadway. Where suckers are established, they can impede visibility of the basal area of the stem and prevent identification of more significant defects such as decay cavities or fungal growths. If left unchecked the suckers can establish to become large limbs in their own right and spoil the form of the tree and presenting issues for future management as removal would leave large wounds around the stem base providing opportunity for ingress of decay.
Control:	Regular pruning away of new sucker growth is recommended to prevent the development of the issues mentioned above dependent upon the implications and the trees location.
Species affected:	Most tree species can be affected.

Name: Deadwood	
Symptoms/damage type and cause:	This relates to dead branches in the crown of the tree. In the majority of cases, this is caused by the natural ageing process of the tree or shading due to its close proximity to neighbouring trees. However, in some situations, it may be related to fungal, bacterial or viral infection.
Consequence:	Depending upon the location and mass of dead wood removal of the affected tissue may be necessary to prevent harm to persons or property as the wood will become unstable as it decays and in some circumstances is likely to fall from the tree with little or no warning.
Control:	Detailed monitoring should be undertaken on those trees showing signs of excessive deadwood production to identify the underlying cause.
Species affected:	Most tree species.
Images:	 

Name: Epicormic growth	
Symptoms/damage type and cause:	This is the production of numerous shoots on the main stem and branches of the tree. They are produced by the bursting into life of otherwise dormant buds. It is commonly associated with elevated levels of stress on the tree.
Consequence:	Whilst epicormic growth is usually symptomatic of an issue elsewhere within the tree, heavy proliferation can cause the trees resources to become depleted or may mask significant structural weaknesses within the framework of the tree.
Control:	Pruning off epicormic growth may be necessary to improve the visual amenity of the tree or prevent the development of a hazard or obstruction. No direct means of prevention are available other than therapeutic measures to alleviate stresses on the tree.
Species affected:	Most tree species, including European Lime, Willow species, Sweet Chestnut, and Silver Maple.
Images:	  

Name: *Hedera helix* (Ivy)	
Symptoms/damage type and cause:	Ivy may grow to varying degrees on all areas of a tree from the base to the upper crown. It is possible that in doing so it will out-compete the host tree for available light thereby suppressing the host.
Consequence:	This is generally only harmful to the tree on already unhealthy specimens which may be constricted by large ivy stems around the trunk or may have their top growth suppressed by a mass of flowering shoots in the crown. Ivy can also mask potentially dangerous faults on a tree.
Control:	Ivy should only be removed if absolutely necessary because it provides abundant cover to wildlife and then by severing twice close to the ground and removing a length of stem thereby causing the gradual dying away of the aerial parts of the plant providing extended benefit to wildlife whist relieving the pressure on the tree.
Species affected:	Most trees can be affected.
Images:	 

Name: *Phytophthora cactorum* **(Phytophthora Bleeding Canker)**	
Symptoms/damage type and cause:	This is a bark killing infection presenting itself as scattered drops of rusty-red, yellow-brown or almost black, gummy liquid oozing from small or large patches on the bark. These run a little down the bark and dry as dark brown or black, often shiny, brittle encrustations or on the underside of branches as little pendulous knobbles. The centre of the oozing patch of bark may be cracked and bearing fruit bodies of wood-rotting decay. Further confirmation of the infection can be seen on the inner bark of the oozing patch. This will be a watery orange colour and is often clearly mottled. The underlying wood may be stained blue-black. It has not yet been determined how the spores of the disease reach the aerial parts of trees. Infection does not seem to be dependent on injury to the bark. The exuded gum does not contain the fungus.
Consequence:	The fungus grows through and kills the phloem and cambium and over a number of years may girdle limbs or the main stem leading to death of the host tree.
Control:	The disease is slow spreading as it is confined to the bark and can be excised where infection is localised, although later invasion of the wood by decay fungi can represent a problem.
Species affected:	*Aesculus hippocastanum*

Appendix **B**

Schedule of Trees

SCHEDULE OF TREES

Land to the North of Station Road, Cambridge,

Surveyed By: Matthew Plane-Da'Silva Date: 09/01/2020
Managed By: Matthew Plane-Da'Silva

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover				
A001	Silver Birch, Wild Cherry, Sycamore	220	9		Low	N2, E1.5, S3.5, W1.5	Trees situated off-site therefore a full detailed inspection was not possible, heavily colonised by Ivy.	C2	No work required.	4
		2.64	2		SM	Moderate				
No		21.9			10+ years	Off-site/no access				
A002	Holm Oak, False Acacia	600	16		High	N8, E8, S8, W8	An area of off-site trees with no access and limited view. Will likely impact the site. All dimensions are estimated.	B2	No work required.	4
		7.2	1.5		M	High				
No		162.9			20+ years	Off-site/no access				
G001	Sycamore	370	15		Moderate	N5, E5, S5, W5	Group of Sycamore trees no significant defects at time of inspection. Tree on the most northern aspect bifurcates at approximately 1 metre. There are signs of included bark however these are not deemed structurally significant at time of inspection.	B2	No work required.	4
		4.44	4		EM	Moderate				
Yes		61.9			20+ years	Mixed soft/hard surface				
G002	False Acacia	480	15		Moderate	N5.5, E5.5, S5.5, W5.5	Group of three Robinia trees. Trees are in a good overall condition displaying large volume of budding material throughout their crowns. Branches have started to grow low over the footpath.	B2	Raise branches over footpath to approximately 2.4 metres.	3
		5.76	2.5		SM	Moderate				
Yes		104.2			20+ years	Shrub bed				
G003	Lime	530	16		High	N6.5, E6.5, S6.5, W6.5	Trees are located along the boundary. Boundary wall to street is approximately 0.5 metres from base of trees in most cases. Gravel parking is located less than 0.5 metres on the site side. This leaves a limited space for the trees rooting environment. Where the car park has been installed root damage has occurred with exposed severed roots present. Trees are pollarded specimens with most being pollarded at approximately 5 metres. The pollard points on most trees show some localised decay which is considered typical. All trees are at a point where repollarding should take place. Some minor and major deadwood present in crowns overhanging the car park and public pavement/street.	B2	Re-pollard.	2
		6.36	4		EM	Moderate				
Yes		127.1			20+ years	Mixed soft/hard surface				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
G004	Lime	650	16		High	N5, E5, S5, W5	A line of Lime along the front boundary. Trees are situated in a verge between the boundary wall which merges into a gravel car park. Some stems are within 0.5 metres of boundary wall. RPA is compacted by parking. Basal suckers at the base of some trees. Epicormic growth on main stems which does obscure car parking slightly. The crowns have been managed by way of pollarding and reduction. The first main pollard point was done at between 5 - 8 metres with a second pollard point being established higher up at between 8 -10 metres. The crowns have then been reduced as well. For management it is recommended to repollard to the second, higher pollard point.	B2	Remove basal growth. Remove Epicormic growth. Repollard.	3
		7.8	1.5		M	Moderate				
Yes		191.1			20+ years	Bare earth, Gravel				
G005	English Yew	300	9.5		Moderate	N3.5, E3.5, S3.5, W3.5	Tree situated in raised bed in bin store. Trees are typically low and squat in form with vigorous growth. Growth encroaches onto end house. Some browning of foliage in crown but no sign as to cause.	C2	No work required.	4
		3.6	0.5		EM	Moderate				
Yes		40.7			20+ years	Mixed soft/hard surface				
G006	Lime	460	15		High	N5, E5, S5, W5	A line of Lime along the front boundary. Trees are situated in a verge between the boundary wall which merges into a gravel car park. Some stems are within 0.5 metres of boundary wall. RPA is compacted by parking. Basal suckers at the base of some trees. Epicormic growth on main stems which does obscure car parking slightly. The crowns have been managed by way of pollarding. The first main pollard point was done at 5 metres. The regrowth is good but trees need repollarding.	B2	Remove basal growth Remove Epicormic growth. Repollard.	2
		5.52	2		EM	Moderate				
Yes		95.7			20+ years	Bare earth, Gravel				
G007	Lime	500	17		High	N5, E5, S5, W5	A line of Lime along the front boundary. Trees are situated in a dense shrub bed which does obscure the base and lower main stems. Ivy encroachment on some trees. Some stems are within 0.5 metres of boundary wall. A portion of the RPA is compacted by parking. Basal suckers at the base of some trees. Epicormic growth on main stems. The crowns have been managed by way of historic pollarding and more recent reductions. The first main pollard point was done at 5 metres.	B2	Clear Ivy, undergrowth and Basal suckers away from base and lower main stems and reinspect.	3
		6	1.5		M	Moderate				
Yes		113.1			20+ years	Shrub bed				
G008	Lime	650	17		High	N5, E5, S5, W5	A line of Lime along the rear boundary between villas. Trees are situated in Ivy which does obscure the base of the trees. One stem is within 0.5 metres of the boundary wall. A portion of the RPA is compacted by parking. Epicormic growth on main stems. The crowns have been managed by way of historic pollarding and more recent reductions. The first main pollard point was done at 6 metres.	B2	No work required.	4
		7.8	2		M	Moderate				
Yes		191.1			20+ years	Ivy, Bare earth, Gravel				
G009	Rowan	120	7		Moderate	N2.5, E2.5, S2.5, W2.5	Two off-site trees. No access and all dimensions are estimated. No signs of significant defects or disease.	C2	No work required.	4
		1.44	2		EM	Moderate				
No		6.5			10+ years	Off-site/no access				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T001	Sycamore	670	16.5		Moderate	N6.5, E5.5, S6, W6.5	Tree divides into 3 main stem just above ground level. No significant defects at time of inspection.	B1	No work required.	4
		8.04	4		EM	Moderate				
Yes		203.1			20+ years	Mixed soft/hard surface				
T002	English Yew	400	9.5		Moderate	N4.5, E4, S5.2, W5	Tree is in good overall condition, no significant defects at time of inspection. Branches have started to grow low over cycle storage area.	B1	Raise branches over bike area.	3
		4.8	1.5		EM	Moderate				
Yes		72.4			20+ years	Mixed soft/hard surface				
T003	Sycamore	480	13.5		Moderate	N4.5, E5, S5, W5.2	Tree bifurcates at approximately 1.5 metres. Minor signs of included bark, not deemed as structurally significant at time of inspection.	B1	No work required.	4
		5.76	2		EM	Moderate				
Yes		104.2			20+ years	Mixed soft/hard surface				
T004	English Yew	150	4.5		Low	N1, E2.1, S2.5, W2	Tree is in good overall condition, no significant defects at time of inspection. Considered to be of little merit and low value.	C1	No work required.	4
		1.8	1.8		Y	Moderate				
Yes		10.2			20+ years	Shrub bed				
T005	Cherry Spp	200	5		Low	N2, E2, S2, W2	Tree appears to be in a good overall condition displaying large volume of budding material. All dimensions are estimated due to restricted access tree is considered to be of little merit and low value.	C1	No work required.	4
		2.4	1.5		SM	Moderate				
Yes		18.1			20+ years	Off-site/no access				
T006	Cherry Sp	150	5		Low	N2, E2, S1, W0.5	Tree appears to be in a good overall condition displaying large volume of budding material. All dimensions are estimated due to restricted access tree is considered to be of little merit and low value.	C1	No work required.	4
		1.8	1		SM	Moderate				
Yes		10.2			20+ years	Off-site/no access				
T007	Wild Cherry	250	14		Low	N3, E3.5, S3, W3	Tree is situated off-site therefore a full detailed inspection was not possible. Branches have started to encroach on the building on the eastern aspect.	C1	Reduce branches back from building to give adequate clearance of 2m	4
		3	3		EM	Moderate				
Yes		28.3			20+ years	Gravel				
T008	Norway Spruce	290	15		Moderate	N3.5, E3.6, S3, W1	Tree is in a fair overall condition. There is deadwood in the lower canopy on the eastern aspect at approximately 5 metres. Tree is suppressed on the western aspect due to neighbouring trees.	C1	No work required.	4
		3.48	1.5		EM	Moderate				
Yes		38			20+ years	Bare earth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover				
T009	Silver Birch	240	13		Moderate	N2.5, E3.2, S2.4, W1.3	Tree appears to be in a good overall condition displaying large volume of budding material. No significant defects at time of inspection.	C1	No work required.	4
		2.88	1.5		SM	Low				
Yes		26.1			20+ years	Grass				
T010	Rowan	160	8		Low	N2.5, E1.8, S2.4, W2.3	Tree is in good overall condition, no significant defects at time of inspection. Considered to be of little merit and low value. Minor deadwood.	C1	No work required.	4
		1.92	2		SM	Moderate				
Yes		11.6			20+ years	Grass				
T011	Sycamore	510	13.5		Moderate	N6.5, E8, S6, W6	Tree is in good overall condition, no significant defects at time of inspection. Large open well balanced canopy. Minor deadwood. Displaying a large amount of budding material.	B1	No work required.	4
		6.12	2		M	Moderate				
Yes		117.7			20+ years	Grass, Bare earth				
T012	Austrian Pine	670	18.5		High	N5.5, E4.2, S6, W4	Well balanced crown. No significant defects at time of inspection. High visual amenity in car parking area.	A1	No work required.	4
		8.04	7		M	Moderate				
Yes		203.1			40+ years	Mixed soft/hard surface				
T013	Sycamore	620	15.5		Moderate	N6.3, E6, S7, W5.5	Tree divides into four main unions at approximately 1 metre. The stems have caused overcrowding which has resulted in included bark at main union points. Ivy is present which restricts visibility of the base. Given the defects the tree has a limited safe life expectancy. The surrounding area is a children's play area to the west and a sitting area to the east for this reason I would advise that the tree is removed.	U	Fell, structural decline.	3
		7.44	2		M	Moderate				
Yes		173.9			<10 years	Light undergrowth				
T014	False Acacia	550	17.5		Moderate	N4, E7.5, S7.5, W6.5	Tree is in a good overall condition displaying large volume of budding material. Minor deadwood. Limb located on the eastern aspect grows towards the adjacent building. Limb should be reduced back to appropriate growth point to alleviate the load on the union point and provide clearance over building.	B1	Reduce lowest limb to appropriate growth points on the eastern aspect by 2m.	3
		6.6	3		M	Moderate				
Yes		136.8			20+ years	Shrub bed				
T015	False Acacia	580	17		Moderate	N4, E4.5, S6, W7.5	Tree is in a good overall condition displaying large volume of budding material. Minor deadwood.	B1	No work required.	4
		6.96	3		M	Moderate				
Yes		152.2			20+ years	Shrub bed				
T016	False Acacia	290	16		Moderate	N1.5, E2, S1, W3.2	Tree is in close proximity the neighbouring trees which has caused a suppressed crown on the northern and southern aspect. Tall spindly form. No significant defects at time of inspection.	B1	No work required.	4
		3.48	3.5		M	Moderate				
Yes		38			20+ years	Shrub bed				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T017	Sycamore	440	16.5		Moderate	N7.5, E6.5, S1.5, W4.5	Tree is supressed on the southern aspect due to neighbouring tree. No significant defects at time of inspection. Branches on eastern aspect have started to grow over outbuilding. Selective removal to appropriate growth points should be undertaken to allow adequate clearance.	B1	Crown raise over building to give adequate clearance of 2m to appropriate growth points.	3
		5.28	4		M	Moderate				
Yes		87.6			20+ years	Bare earth				
T018	Sycamore	300	14		Moderate	N3, E4.5, S4.2, W5	Tree is in a good overall condition displaying large volume of budding material. Minor deadwood. No significant defects at time of inspection.	B1	No work required.	4
		3.6	2.5		SM	Moderate				
Yes		40.7			20+ years	Gravel, Bare earth				
T019	Holly	190	10.5		Low	N0.5, E3.1, S3.7, W1	Tree has an asymmetric canopy due neighbouring trees which have been removed. Branches are low over the footpath. No significant defects at time of inspection.	C1	Raise branches over footpath to approximately 2.4 metres.	3
		2.28	1.5		SM	Low				
Yes		16.3			20+ years	Shrub bed				
T020	Cherry Plum	350	7		Low	N3, E2.5, S3.5, W3	Tree bifurcates at approximately 1.5 metres, no signs of included bark. Deadwood has started to accumulate in the crown. Tree is situated in close proximity with the wall located on the northern aspect.	C1	No work required.	4
		4.2	2		EM	Moderate				
Yes		55.4			10+ years	Mixed soft/hard surface				
T021	Wild Cherry	140	3		Low	N2, E2, S1.5, W2	Young Cherry tree, suboptimal main union which will lead to potential failure as the tree matures.	C1	No work required.	4
		1.68	1.5		Y	Moderate				
Yes		8.9			10+ years	Shrub bed				
T022	Staghorn Sumac	120	4		Low	N2.5, E2, S2.5, W1.5	Tree is in a good overall condition displaying large volume of budding material. No significant defects at time of inspection. Considered to be of low value and little merit.	C1	No work required.	4
		1.44	1.5		Y	Moderate				
Yes		6.5			20+ years	Shrub bed				
T023	Silver Birch	390	17		Moderate	N5, E2, S5.5, W5.8	Tree is in a good overall condition displaying large volume of budding material. No significant defects at time of inspection. Branches are low over the play area.	B1	Raise branches to approximately 2.4 metres to provide adequate clearance.	
		4.68	1.8		M	Low				
Yes		68.8			20+ years	Bare earth				
T024	European Lime	760	14		Moderate	N3, E3.5, S4.5, W3.5	Previously pollarded Lime tree, appears to be in a good overall condition however visibility of the western aspect of the base is restricted due to the close proximity to retaining wall. No significant defects at time of inspection.	B1	Repollard as part of good arboricultural management.	3
		9.12	2		M	Moderate				
Yes		261.3			20+ years	Bare earth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover				
T025	Holly	250	10		Low	N3, E3.5, S2, W1.5	Tree has a slight lean to the eastern aspect however not deemed to be a structural issue at time of inspection.	C1	No work required.	4
		3	0.5		EM	Low				
Yes		28.3			20+ years	Bare earth				
T026	European Lime	640	12		Low	N2, E2.5, S2, W2.5	Previously pollarded Lime tree, appears to be in a good overall condition. No significant defects at time of inspection. Branches on western aspect are in direct contact.	B1	Repollard as part of good arboricultural management.	3
		7.68	2		M	Moderate				
Yes		185.3			20+ years	Bare earth				
T027	English Yew	630	14.5		Moderate	N2, E4, S4.5, W4	Able to carry out a full detailed inspection due to the presence of Ivy which extends from ground level into the main canopy masking possible defects. Branches are low over the outbuilding in the neighbouring property, direct contact.	B1	Remove Ivy to allow clear sight of unions, crown raise on western and southern aspect.	3
		7.56	1		M	Moderate				
Yes		179.6			20+ years	Bare earth				
T028	European Lime	800	16.5		Moderate	N4.2, E3.6, S2.5, W4.5	Previously pollarded Lime tree, appears to be in a good overall condition. No significant defects at time of inspection. Typical form to age of species.	B1	Remove lower Epicormic growth. Repollard has part of good arboricultural management.	3
		9.6	1.8		M	Moderate				
Yes		289.5			20+ years	Bare earth				
T029	Elm Sp	120	7.5		Low	N2, E2, S1.5, W2.5	Tree is in a good overall condition displaying large volume of budding material. No significant defects at time of inspection. Considered to be of low value and little merit.	C1	No work required.	4
		1.44	0		Y	Moderate				
Yes		6.5			10+ years	Bare earth				
T030	Sycamore	340	14.5		Low	N4.5, E1, S4.5, W5.5	Tree is in a good overall condition displaying large volume of budding material. No significant defects at time of inspection. Considered to be of low value and little merit.	C1	No work required.	4
		4.08	3.5		SM	Moderate				
Yes		52.3			20+ years	Bare earth				
T031	Elder	260	12		Low	N1, E1, S3.5, W4.5	Tree is in a poor overall condition, limited growing potential. Tree has started to grow in neighbouring tree. Tree bifurcates just above ground level. Suboptimal main union point which will become a structural issue as the tree matures making it prone to failure. Deadwood has started to accumulate in the canopy.	U	Fell structural decline.	3
		3.12	1.8		SM	Low				
Yes		30.6			<10 years	Bare earth				
T032	European Lime	550	11.5		Moderate	N3.5, E5, S1.5, W3.2	Previously pollarded Lime tree, appears to be in a good overall condition. Typical form to age of species. Ivy clad stem prevents full inspection extends from ground level into the main union point.	B1	Remove Ivy to facilitate a future inspection.	3
		6.6	2		M	Moderate				
Yes		136.8			20+ years	Bare earth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover				
T033	Holly	420	16.5		Moderate	N1.8, E3, S1, W3	Large Holly tree which is situated between two Limes trees therefore has become suppressed on the northern and southern aspect. Tree is in a good overall condition displaying good vigour throughout the crown. No significant defects at time of inspection.	B1	No work required.	4
		5.04	2.5		M	Low				
Yes		79.8			20+ years	Bare earth				
T034	European Lime	570	13		Moderate	N1, E4, S5, W4.5	Previously pollarded Lime tree that appears to be in a good overall condition. Typical form for age of species.	B1	No work required.	4
		6.84	2.5		M	Moderate				
Yes		147			20+ years	Bare earth				
T035	European Lime	750	13		Moderate	N3, E3.5, S3, W3.5	Previously pollarded Lime tree that appears to be in a good overall condition. Typical form for age of species. Lower growth has started to encroach on car parking bay.	B1	Crown raise smaller branches over car parking bay to give a clearance of 2.4m.	3
		9	2		M	Moderate				
Yes		254.5			20+ years	Bare earth				
T036	Apple Sp	140	3		Low	N3.5, E2.2, S2, W1	Tree is in a poor overall condition, just above ground level on the eastern aspect there is a pocket of decay present which has development from a historic failure of a previous secondary leader. Tree has started to accumulate deadwood.	U	Fell, terminal decline	3
		1.68	2		EM	Moderate				
Yes		8.9			<10 years	Shrub bed				
T037	Sycamore	430	16.5		Moderate	N6, E6, S6.5, W6	Tree is in a good overall condition displaying large volume of budding material. No significant defects at time of inspection.	B1	No work required.	4
		5.16	3.5		M	Moderate				
Yes		83.6			20+ years	Shrub bed				
T038	Horse Chestnut	520	13		Moderate	N5, E4.5, S4.5, W4.5	Tree is in a fair overall condition, tree appears to be lacking in vigour. A cavity has been noted on the eastern aspect at approximately 0.5 metres. Depth tested but not conclusive. Another cavity is present at approximately 3 metres on southern aspect, unknown if the two cavities meet. Multiple tear out wounds in canopy.	C1	Undertake a Picus test to ascertain extent of decay.	3
		6.24	1		M	Moderate				
Yes		122.3			10+ years	Shrub bed				
T039	False Acacia	700	14		High	N5, E3.5, S7.5, W7	Some crown dimensions estimated due to boundary. Specimen trifurcates between 2 metres and 3 metres with tight unions. The crown is very asymmetric to the west in competition for light. Split out wound in crown on main scaffold branch. Some minor and major deadwood in crown some of which is over a parking area.	B2	Remove all deadwood.	2
		8.4	4		M	Moderate				
Yes		221.7			20+ years	Bare earth				
T040	Lime	340	13		High	N7, E3, S3, W4.5	Some crown dimensions estimated due to boundary. The crown is very asymmetric to the north in competition for light. Some minor and major deadwood in crown over parking area off-site.	C2	Remove all deadwood.	2
		4.08	3		EM	Moderate				
Yes		52.3			10+ years	Bare earth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T041	False Acacia	540	14		High	N6.5, E7.5, S5, W4	Some crown dimensions estimated due to boundary. Specimen is twin stemmed from 0.5 metres with a tight union. The crown is very asymmetric to the east in competition for light. Crossing and rubbing of some main scaffold limbs. Some minor and major deadwood in crown some of which is over a parking area and off-site building.	B2	Remove all deadwood.	2
		6.48	4		M	Moderate				
Yes		131.9			20+ years	Bare earth				
T042	Lime	250	13		High	N3.5, E2, S2, W3.5	A tall and slightly spindly specimen but balanced in form. Some slight suppression from neighbouring spruce.	C2	No work required.	4
		3	2		SM	Moderate				
Yes		28.3			20+ years	Bare earth				
T043	Sycamore	570	12		High	N4.5, E6, S5.5, W4.5	Base of tree touches boundary wall but no damage appears to have occurred. Tree is twin stemmed from base with some fusion of the stems occurring. Larger stem divides at 2.5 metres into a open spreading crown. Some minor deadwood but is not a concern.	B2	Remove all deadwood.	3
		6.84	4		EM	Moderate				
Yes		147			20+ years	Bare earth				
T044	Laburnum	110	6.5		Moderate	N0.5, E2, S2.5, W2	Base of tree touches boundary wall but no damage appears to have occurred. Tree appears to have once been multi-stemmed but only one stem remains. Crown is asymmetric in competition for light. Growth is interfering with adjacent Sycamore.	C1	No work required.	4
		1.32	2		SM	Moderate				
Yes		5.5			10+ years	Bare earth, Gravel				
T045	Ash	320	12		High	N4.5, E4.5, S3, W4.5	All dimensions estimated as tree is off-site. Tree is asymmetric to the north in competition for light. No significant defects at time of inspection.	B2	No work required.	4
		3.84	2.5		SM	Moderate				
No		46.3			20+ years	Mixed soft/hard surface				
T046	Sycamore	340	10		High	N3, E4.5, S3, W3	Some crown dimensions estimated due to boundary. Specimen is twin stemmed from 0.5 metres with a tight union. Crown is in fairly good form.	C1	No work required.	4
		4.08	3.5		EM	Moderate				
Yes		52.3			20+ years	Bare earth, Gravel				
T047	Sycamore	340	12		High	N2, E5.5, S5.5, W5	Some crown dimensions estimated due to boundary. Base of tree touches boundary wall with some minor damage occurring. Long exposed surface roots. Crown is slightly asymmetric.	B1	No work required.	4
		4.08	4		EM	Moderate				
Yes		52.3			20+ years	Bare earth, Gravel				
T048	Silver Birch	110	7		High	N2.5, E1.5, S2, W2	Small Silver Birch located within gravel parking area. RPA is compacted by parking. Main stem and crown display no signs of significant defects or disease.	C1	No work required.	4
		1.32	2		SM	Low				
Yes		5.5			20+ years	Gravel				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T049	Sycamore	270	12		High	N4.5, E3, S0.5, W3	Tree is situated in gravel car park area. RPA has been compacted due to parking. Lower main stem is clad in Ivy. Main stem and crown is asymmetric to the north.	C1	Remove all Ivy.	3
		3.24	3		EM	Moderate				
Yes		33			20+ years	Bare earth, Gravel				
T050	False Acacia	560	15		High	N6, E6.5, S5.5, W3.5	Main stem emerges in paved area. Some of the slabs have slightly lifted. Tree may have once been multi-stemmed with dead decayed stumps at base. Only the one mature main stem remains. Main stem and crown are asymmetric to the east. Main stem bifurcates at 2 metres with a tight union. Crossing and rubbing structural branches in crown. Some minor deadwood in crown.	B1	Remove all deadwood.	2
		6.72	5		M	Moderate				
Yes		141.9			20+ years	Block paving				
T051	False Acacia	450	16		High	N4.5, E4.5, S5, W4.5	Off-site tree with no access. All dimensions are estimated. Main stem is close to boundary wall. Crown appears in good health and condition with only some minor deadwood.	B1	No work required.	4
		5.4	4		M	Moderate				
No		91.6			20+ years	Off-site/no access				
T052	English Yew	130	4.5		Moderate	N2.5, E2, S2, W2	Small squat specimen which has been topped. No significant defects at time of inspection. Crown encroaches into bin store.	C1	Prune growth to clear bin store.	3
		1.56	1.5		SM	Moderate				
Yes		7.6			20+ years	Mixed soft/hard surface				
T053	Sycamore	590	15		High	N2, E3, S4.5, W3	Multi-stemmed specimen from base. Stems are densely clad in Ivy preventing full assessment and taking of DBH measurement. Tree has been heavily reduced in the past. Regrowth is ok.	B2	Remove all Ivy and reinspect.	3
		7.08	4.5		EM	Moderate				
Yes		157.5			20+ years	Gravel				
T054	Sycamore	470	17		High	N3, E5, S4.5, W5	Tree located in gravel parking area. RPA is compacted by parking. Some Ivy encroachment on main stem. Main stem bifurcates at 2 metres with a tight union. Crown has been heavily reduced in the past but regrowth is good.	B2	No work required.	4
		5.64	3		EM	Moderate				
Yes		99.9			20+ years	Bare earth, Gravel				
T055	English Yew	470	14		High	N5, E5.5, S4, W5	Stem is almost touching tarmac drive. Epicormic growth on main stem. Crown is typically low and squat. Foliage is sparse but no sign as to cause.	B2	Reinspect in one year.	3
		5.64	2		EM	Moderate				
Yes		99.9			20+ years	Mixed soft/hard surface				
T056	Sycamore	640	17		High	N9, E6, S3, W9	A mature pollarded Sycamore on the boundary. Original pollard point is at 7 metres. Crown is made up of lapsed pollard regrowth. Crown is asymmetric to the north. Major and minor deadwood throughout crown over garden and parking.	B2	Remove all deadwood.	2
		7.68	3		M	Moderate				
Yes		185.3			20+ years	Ivy, Gravel, Bare earth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover				
T057	Ash	330	7		Moderate	N2.5, E2, S2, W2.5	A pollarded Ash stump with regrowth. Tree of limited form.	C3	No work required.	4
		3.96	2		M	Moderate				
Yes		49.3			10+ years	Ivy, Gravel, Bare earth				
T058	Rowan	170	6		Moderate	N3.5, E3, S3, W3	Off-site tree with no access. All dimensions are estimated. Tree appears twin stemmed. Crown appears in good health and condition.	C1	No work required.	4
		2.04	2		EM	Moderate				
No		13.1			20+ years	Off-site/no access				
T059	Beech	650	16		High	N8, E9, S8, W9	A mature Beech in neighbouring land. No access to tree and all dimensions are estimated. Visual inspection from site side only. Ivy encroaching on main stem. Main stem has a distorted form. Crown is low, open and domed. Growth and vigour appear good. Crown just overhangs into site by approximately 1 metre. High quality specimen.	A1	No work required.	4
		7.8	2		M	Moderate				
No		191.1			40+ years	Off-site/no access				
T060	Horse Chestnut	780	16		High	N7, E8.5, S6.5, W6.5	Tree located in rear corner. Some minor Ivy encroachment on lower main stem. Some black stains on lower main stem likely caused by Bleeding Canker. Crown is low and open with some minor and major deadwood present. Construction has taken place within RPA of tree which may have caused damage. Materials dumped in RPA. No tree protection.	B1	Reinspect in one year. Remove all deadwood. Protect from construction.	2
		9.36	1.5		M	Moderate				
Yes		275.2			20+ years	Ivy, Light undergrowth				
T061	Silver Birch	330	15		High	N3.5, E1.5, S3.5, W3.5	Construction within 0.5 metres of main stem, likely soil relevelling and compacting of hardcore surface. Main stem almost touches boundary wall. Crown in good condition. Machinery and materials in RPA. No tree protection.	C1	Reinspect in one year. Protect from construction.	3
		3.96	1.5		M	Low				
Yes		49.3			10+ years	Bare earth, Gravel				
T062	Apple	220	6		Moderate	N1.5, E3, S2.5, W2	Construction within 0.5 metres of main stem, likely soil relevelling and compacting of hardcore surfacing. Crown in fair condition. Poor pruning cuts throughout to clear new structure and for access. Machinery and materials in RPA. No tree protection.	C1	Reinspect in one year. Protect from construction.	3
		2.64	1.5		M	Moderate				
Yes		21.9			10+ years	Mixed soft/hard surface				
T063	Pear	320	5		Moderate	N2.5, E0.5, S2.5, W4.5	Construction within 0.5 metres of main stem, likely soil relevelling and compacting of hardcore surfacing. Crown in fair condition. Poor pruning cuts throughout to clear new structure and for access. Main stem has a heavy lean towards structure. Machinery and materials in RPA. No tree protection.	C1	Reinspect in one year. Protect from construction.	3
		3.84	2		M	Moderate				
Yes		46.3			10+ years	Off-site/no access				
T064	English Yew	200	5		Moderate	N0.5, E3, S2.5, W2.5	Soil levelling and construction up to stem with compacting of hardcore surfacing. All growth on north side pruned back leaving unbalanced tree. Remaining foliage is in good condition. Machinery and materials in RPA. No tree protection.	C1	Reinspect in one year. Protect from construction.	3
		2.4	1.5		SM	Moderate				
Yes		18.1			10+ years	Gravel				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T065	English Yew	250	8		Moderate	N2.5, E3, S1, W3	Tree is right up against existing villa. Limited space. Epicormic growth on main stem prevents full inspection and measurement of DBH. Construction in RPA. Machinery and materials in RPA. No tree protection.	C1	Reinspect in one year. Protect from construction.	3
		3	0		EM	Moderate				
Yes		28.3			10+ years	Mixed soft/hard surface				
T066	European Lime	1100	19		High	N9.5, E9, S6.5, W6	Main stem in gravel parking area. RPA is compacted by parking. Main stem is obscured by Ivy preventing full assessment and measurement of DBH. Main stem is right next to boundary wall and is causing movement to wall. Crown is tall and wide spreading and appears in good condition.	A1	No work required.	4
		13.2	4.5		M	Moderate				
Yes		547.4			40+ years	Gravel, Ivy				
T067	Holly	420	8		Moderate	N4, E3, S3, W4	Typical domed specimen with a dense crown. Foliage encroachment on villa. No significant defects at time of inspection.	B2	No work required.	4
		5.04	2		M	Moderate				
Yes		79.8			20+ years	Bare earth				
T068	English Yew	250	7		High	N2.5, E3, S4, W3	Tree is on boundary with main street. Limited space. RPA is compacted by parking. Epicormic growth on main stem prevents full inspection and measurement of DBH.	B2	No work required.	4
		3	1.5		SM	Moderate				
Yes		28.3			20+ years	Gravel, Bare earth				

Appendix C

Schedule of Works

SCHEDULE OF WORK

Land to the North of Station Road, Cambridge,

Surveyed By: Matthew Plane-Da'Silva
Surveyed: 09/01/2020
Managed By: Matthew Plane-Da'Silva

Tree No.	Species	Work required	Priority
G003	Lime	Re-pollard.	**2**
G006	Lime	Remove basal growth Remove Epicormic growth. Repollard.	**2**
T039	False Acacia	Remove all deadwood.	**2**
T040	Lime	Remove all deadwood.	**2**
T041	False Acacia	Remove all deadwood.	**2**
T050	False Acacia	Remove all deadwood.	**2**
T056	Sycamore	Remove all deadwood.	**2**
T060	Horse Chestnut	Reinspect in one year. Remove all deadwood. Protect from construction.	**2**
G002	False Acacia	Raise branches over footpath to approximately 2.4 metres.	**3**
G004	Lime	Remove basal growth. Remove Epicormic growth. Repollard.	**3**
G007	Lime	Clear Ivy, undergrowth and Basal suckers away from base and lower main stems and reinspect.	**3**
T002	English Yew	Raise branches over bike area.	**3**
T013	Sycamore	Fell, structural decline.	**3**
T014	False Acacia	Reduce lowest limb to appropriate growth points on the eastern aspect by 2m.	**3**
T017	Sycamore	Crown raise over building to give adequate clearance of 2m to appropriate growth points.	**3**
T019	Holly	Raise branches over footpath to approximately 2.4 metres.	**3**
T024	European Lime	Repollard as part of good arboricultural management.	**3**
T026	European Lime	Repollard as part of good arboricultural management.	**3**
T027	English Yew	Remove Ivy to allow clear sight of unions, crown raise on western and southern aspect.	**3**
T028	European Lime	Remove lower Epicormic growth. Repollard has part of good arboricultural management.	**3**
T031	Elder	Fell structural decline.	**3**
T032	European Lime	Remove Ivy to facilitate a future inspection.	**3**
T035	European Lime	Crown raise smaller branches over car parking bay to give a clearance of 2.4m.	**3**
T036	Apple Sp	Fell, terminal decline	**3**
T038	Horse Chestnut	Undertake a Picus test to ascertain extent of decay.	**3**
T043	Sycamore	Remove all deadwood.	**3**
T049	Sycamore	Remove all Ivy.	**3**
T052	English Yew	Prune growth to clear bin store.	**3**
T053	Sycamore	Remove all Ivy and reinspect.	**3**
T055	English Yew	Reinspect in one year.	**3**
T061	Silver Birch	Reinspect in one year. Protect from construction.	**3**
T062	Apple	Reinspect in one year. Protect from construction.	**3**
T063	Pear	Reinspect in one year. Protect from construction.	**3**

Tree No.	Species	Work required	Priority
T064	English Yew	Reinspect in one year. Protect from construction.	**3**
T065	English Yew	Reinspect in one year. Protect from construction.	**3**

Appendix D

Explanatory Notes

Explanatory Notes

HAYDEN'S Arboricultural Consultants

Categories

Below is an explanation of the categories used in the attached Tree Survey.

No Identifies the tree on the drawing.

Species Common names are given to aid understanding for the wider audience.

BS 5837 Main Category Using this assessment (BS 5837:2012, Table 1), trees can be divided into one of the following simplified categories, and are differentiated by cross-hatching and by colour on the attached drawing:

Category A - Those of high quality with an estimated remaining life expectancy of at least 40 years;

Category B - Those of moderate quality with an estimated remaining life expectancy of at least 20 years;

Category C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm;

Category U - Those trees in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

BS 5837 Sub Category Table 1 of BS 5837:2012 also requires a sub category to be applied to the A, B, C, and U assessments. This allows for a further understanding of the determining classification as follows:

Sub Category 1 - Mainly arboricultural qualities;

Sub Category 2 - Mainly landscape qualities;

Sub Category 3 - Mainly cultural values, including conservation .

Please note that a specimen or landscape feature may fulfil the requirements of more than one Sub Category.

DBH (mm) Diameter of main stem in millimetres at 1.5 metres from ground level. Where the tree is a multi-stem, the diameter is calculated in accordance with item 4.6.1 of BS 5837:2012.

Age Recorded as one of seven categories:

Y Young. Recently planted or establishing tree that could be transplanted without specialist equipment, i.e. less than 150 mm DBH.

S/M Semi-mature. An established tree, but one which has not reached its prospective ultimate height.

E/M Early-mature. A tree that is reaching its ultimate potential height, whose growth rate is slowing down but if healthy, will still increase in stem diameter and crown spread.

M Mature. A mature specimen with limited potential for any significant increase in size, even if healthy.

O/M Over-mature. A senescent or moribund specimen with a limited safe useful life expectancy. Possibly also containing sufficient structural defects with attendant safety and/or duty of care implications.

D Dead.

Height	Recorded in metres, measured from the base of the tree.
Crown Base	Recorded in metres, the distance from ground and aspect of the lowest branch material.
Lowest Branch	Recorded in metres, the distance from ground and aspect of the emergence point of the lowest significant branch.
Life Expectancy	Relates to the prospective life expectancy of the tree and is given as 4 categories: 1 = 40 years+; 2 = 20 years+; 3 = 10 years+; 4 = less than 10 years.
Crown Spread	Indicates the radius of the crown from the base of the tree in each of the northern, eastern, southern and western aspects.
Minimum Distance	This is a distance equal to 12 times the diameter of the tree measured at 1.5 metres above ground level for single stemmed trees and 12 times the average diameter of the tree measured at 1.5 metres above ground level tree for multi stemmed specimens. (BS 5837:2012, section 4.6).
RPA	This is the Root Protection Area, measured in square metres and defined in BS5837:2012 as "a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority". The RPA is shown on the drawing.. Ideally this is an area around the tree that must be kept clear of construction, level changes of construction operations. Some methods of construction can be carried out within the RPA of a retained tree but only if approved by the Local Planning Authority's tree officer.
Water Demand	This gives the water demand of the species of tree when mature, as given in the NHBC Standards Chapter 4.2 "Building Near Trees".
Visual Amenity	Concerns the planning and landscape contribution to the development site made by the tree, hedge or tree group, in terms of its amenity value and prominence on the skyline along with functional criteria such as the screening value, shelter provision and wildlife significance. The usual definitions are as follows: Low — An inconsequential landscape feature. Moderate — Of some note within the immediate vicinity, but not significant in the wider context. High — Item of high visual importance.
Problems/ Comments	May include general comments about growth characteristic, how it is affected by other trees and any previous surgery work; also, specific problems such as deadwood, pests, diseases, broken limbs, etc.
Work Required (TS)	Identifies the necessary tree work to mitigate anticipated problems and deal with existing problems identified in the "Problems/comments" category.

Work Required (AIA)	Identifies the tree work specifically necessary to allow a proposed development to proceed.
Priority	This gives a priority rating to each tree allowing the client to prioritise necessary tree works identified within the Tree Survey. **1** Urgent – works required immediately; **2** Works required within 6 months; **3** Works required within 1 year; **4** Re-inspect in 12 months, **0** Remedial works as part of implementation of planning consent.

BS 5837:2012 Terms and Definitions

Access Facilitation Pruning	One-off tree pruning operation, the nature and effects of which are without significant adverse impact on tree physiology or amenity value, which is directly necessary to provide access for operations on site.
Arboricultural Method Statement	Methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained.
Arboriculturist	Person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction.
Competent Person	Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached. *NOTE - a competent person is expected to be able to advise on the best means by which the recommendations of this British Standard may be implemented.*
Construction	Site-based operations with the potential to affect existing trees.
Construction Exclusion Zone	Area based on the root protection area from which access is prohibited for the duration of a project.
Root Protection Area (RPA)	Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
Service	Any above or below ground structure or apparatus required for utility provision. **NOTE** - examples include drainage, gas supplies, ground source heat pumps, CCTV and satellite communications.
Stem	Principal above ground structural component(s) of a tree that supports its branches.
Structure	Manufactured object, such as a building, carriageway, path, wall, service run, and built or excavated earthwork.
Tree Protection Plan	Scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing trees for retention and illustrating the tree and landscape protection measures.
Veteran Tree	Tree that, by recognized criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned. **NOTE** - these characteristics might typically include a large girth, signs of crown retrenchment and hollowing of the stem.

Appendix E

Tree Preservation Order Enquiry/Response

Beth Jennings

From:
Sent:
To: Beth Jennings
Subject: Ticket: E34831C5E9A09 Re: TPO Enquiry | 7909 | Land to the North of Station Road, Cambridge,CB1 2RS

Good afternoon,

Thank you for your enquiry - I can confirm the whole area does lie within a conservation area.

Because of this, a treeworks application would be required before any work is carried out. This can be found at:

https://www.cambridge.gov.uk/tree-works-and-preservation-orders

Regards,

Julie

Senior / Customer Service Advisor

From: Beth Jennings <k>
Sent: 2020/01/13 14:46:49
To:
Subject: TPO Enquiry | 7909 | Land to the North of Station Road, Cambridge,CB1 2RS

Good afternoon,

Could you please advise if the above mentioned site is covered by TPO or is located within a Conservation Area?

I have attached a site map for your use.

I look forward to hearing from you.

Kind Regards

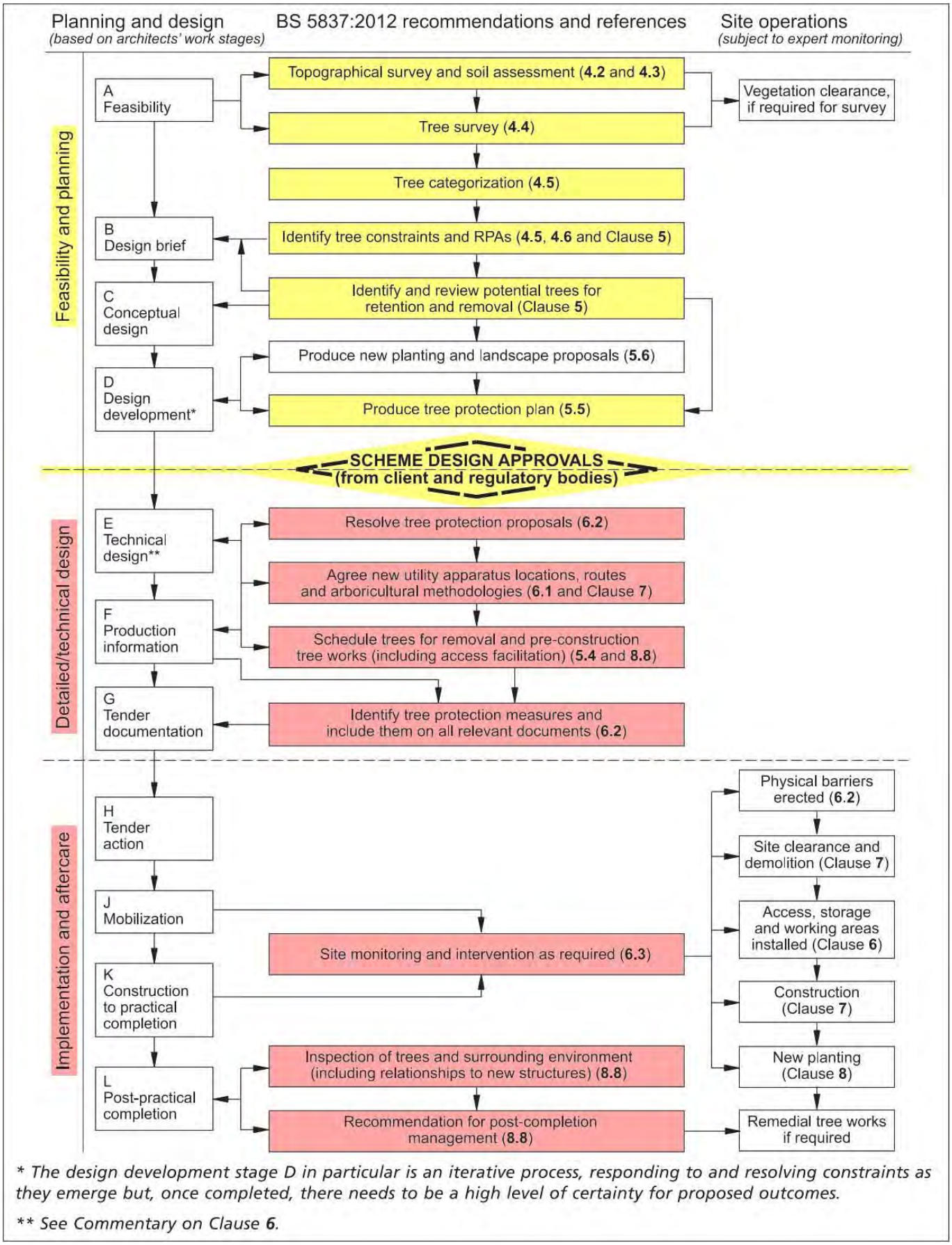
Beth Jennings
Administrator

Head Office: 5 Moseley's Farm Business Centre, Fornham All Saints, Bury St. Edmunds, Suffolk, IP28 6JY
Southern Office: Units 6 and 7, Enterprise House, Cherry Orchard Lane, Salisbury, Wiltshire, SP2 7LD

Appendix F

Advisory Information & Sample Specifications

1. BS 5837:2012 Figure 1 - Flow Chart – Design and Construction & Tree Care



** The design development stage D in particular is an iterative process, responding to and resolving constraints as they emerge but, once completed, there needs to be a high level of certainty for proposed outcomes.*

*** See Commentary on Clause **6**.*

2.

European Protected Species and woodland operations. (V4)

Complete all sections of the Checklist

✔

Checklist

1 **Are you within, or close to, the known mapped range of any of the protected species OTHER THAN BATS which are potentially everywhere? Tick any that apply.**
See distribution maps in the Good Practice Guidance for each species -

- ☐ Dormice
- ☐ Otters
- ☐ Great crested newts
- ☐ Sand lizards
- ☐ Smooth snakes

YES ☐ NO ☐

2 **Does your wood contain any of the following habitats? Tick any that apply.**

- ☐ Old trees with holes and crevices which might be used bats
- ☐ Species rich scrub/coppice, early growth stage plantations and forest interfaces
- ☐ Rivers on which otters might be found
- ☐ Ponds which might be occupied by great crested newts
- ☐ Open areas on heathy soils

YES ☐ NO ☐

3 **Have any of the protected species been recorded in this wood or on adjoining sites? Tick any that apply.**
Indicate which sources of information you have checked:

- ☐ National Biodiversity Network (www.nbn.org.uk)
- ☐ Local Biological Records Centre
- ☐ Local Wildlife Trust
- ☐ Other

Specify Other:

YES ☐ NO ☐

4 **Have your inspections or any expert surveys found any of the following signs or evidence? Tick any that apply.**

- ☐ Signs (e.g. otter spraint, nuts gnawed by dormice, leaves folded by newts)
- ☐ Sightings (or echo-location)
- ☐ Potential breeding or roosting sites (e.g. veteran trees, old trees with crevices, riverside hollow trees, ponds, timber stacks, large fallen deadwood)
- ☐ Confirmed breeding or roosting sites (i.e. evidence of sites actually being used)

Details:

YES ☐ NO ☐

CHECK POINT

If you have answered NO to ALL of the above then only bats need to be considered in your operations.

If you have answered YES to any of the above then the species concerned must be considered as well as bats.

5 **Do the operations comply with Good Practice for bats and any other species found (or likely to be found in your wood) or can the operations be modified to do so?**
Details: Use reverse of form to expand as required:

YES ☐ NO ☐

6 **Whether or not a licence is required...**
Has the information been communicated to operators (including the location of breeding sites and sensitive areas)? Tick any that apply.

- ☐ Included in documentation (e.g. contract, letter of instruction, site assessment or other management plan)
- ☐ Shown to operators and/or their supervisor
- ☐ Marked with paint or hazard tape
- ☐ Shown on the site plan

Other means:

YES ☐ NO ☐

7 **Have arrangements for supervision been made to ensure Good Practice guidance is complied with during the operations?**
Details:

YES ☐ NO ☐

Details

Name of Wood:

Grid Reference:

Area: (ha)

Date of Assessment:

Name of Assessor:

Notes

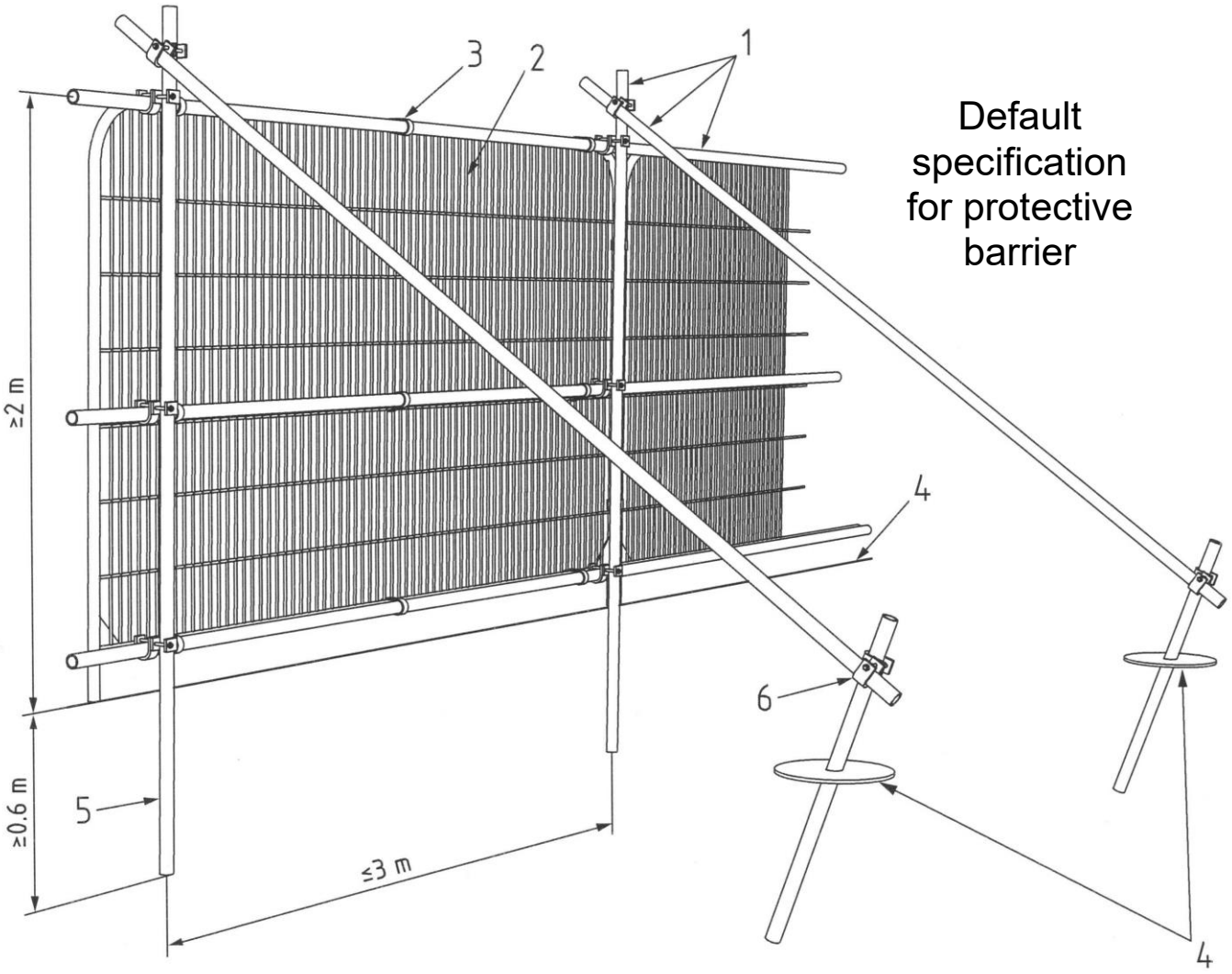
A licence is not required but continue to sections 6 and 7 below

You will need to obtain a licence BEFORE carrying out the work (see EPS Licence Application Forms and Notes)

You may commit an offence if you do not tell your operators about the protected species in your wood.

You may commit an offence if you do not take steps to ensure that your operators comply with the Good Practice guidance.

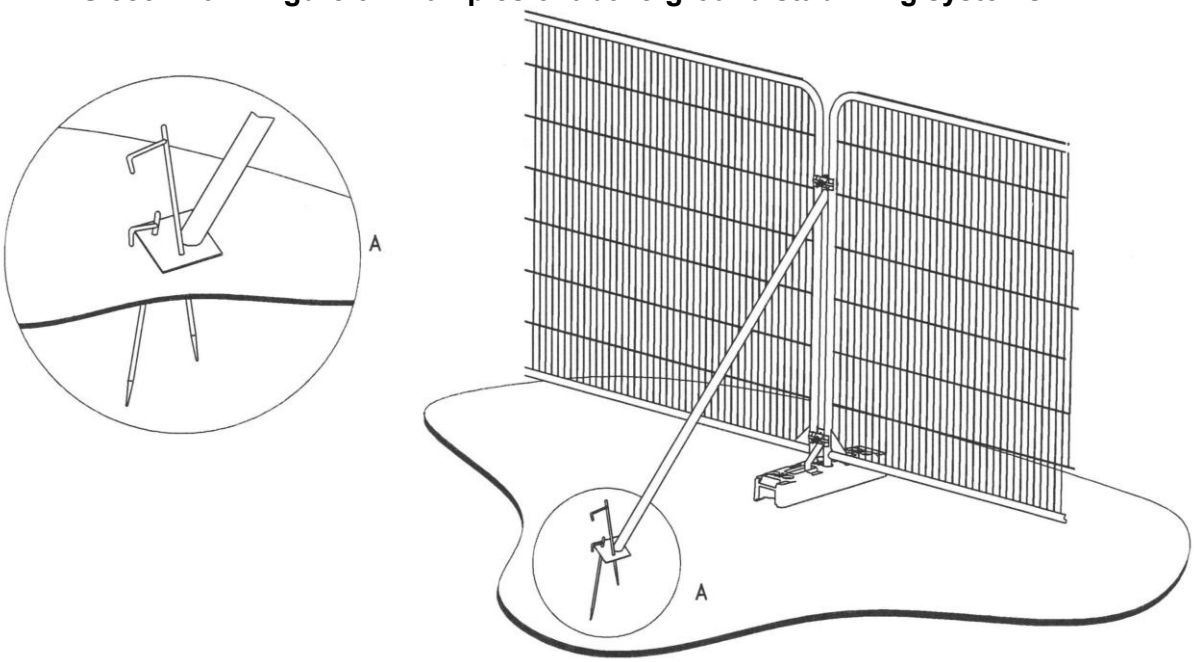
3. BS 5837:2012 Figure 2: Default specification for protective barrier



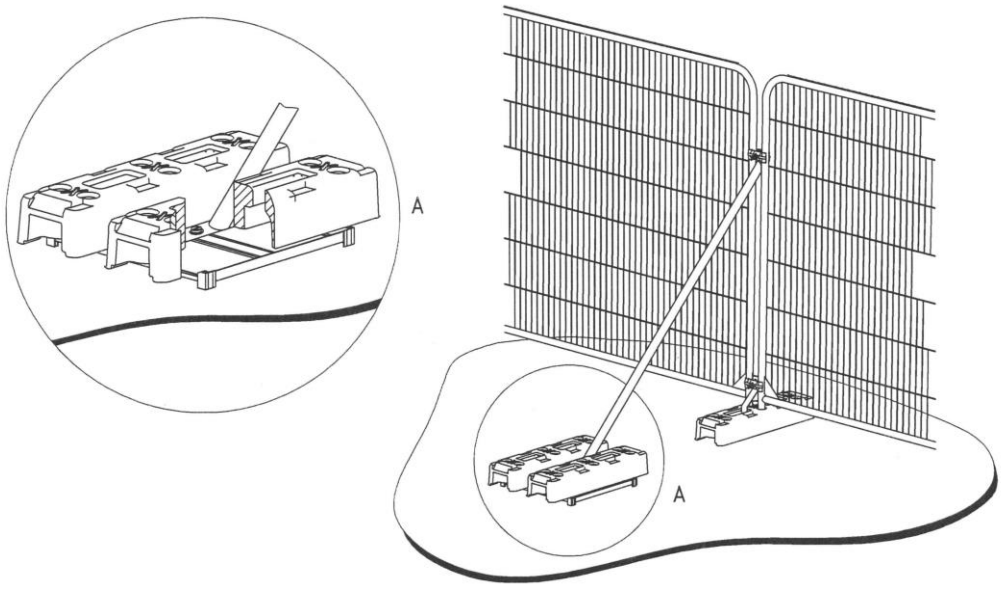
Key

1	Standard scaffold pole
2	Heavy gauge 2m tall galvanised tube and welded mesh infill panels
3	Panels secured to uprights and cross-members with wire ties
4	Ground level
5	Uprights driven into the ground until secure (minimum depth 0.6m
6	Standard scaffold clamps

4. BS 5837:2012 Figure 3: Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Picus© Sonic Tomograph

The Picus© Sonic Tomograph has been developed by a German company called Argus-Electronic-Gmbh. This advanced electronic equipment has been specifically designed for arboriculturalists and operates on hand-held computers. The great benefit of this apparatus is that it uses non invasive technology to allow the internal structure of trees to be assessed.

The Picus© uses a series of sensors positioned strategically around a tree to both send and receive sound waves that are generated by the tapping of the sensors with a hammer. Once all the sensors have been tapped, the software generates a tomograph image depicting the condition of the wood as a series of colours. The colours are dependant on the speed of the sound waves measured as they travel between the sensors. Sound travels more quickly through healthy wood and more slowly through degenerate/dead wood and therefore the tomograph generated should, if correctly interpreted, give an accurate depiction of the levels of decay within the tree.

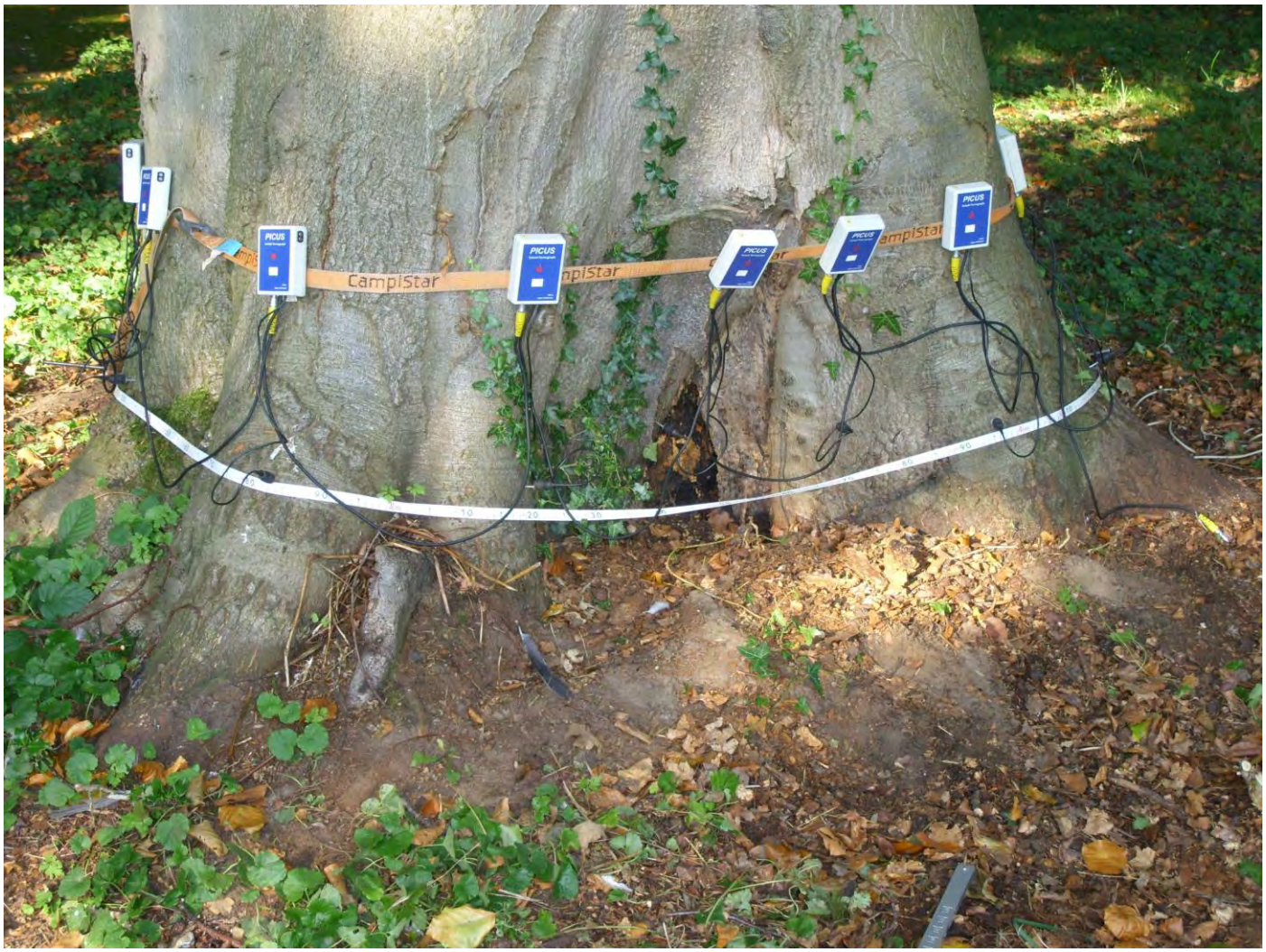


Figure 1 Picus© sensors attached to a sample tree

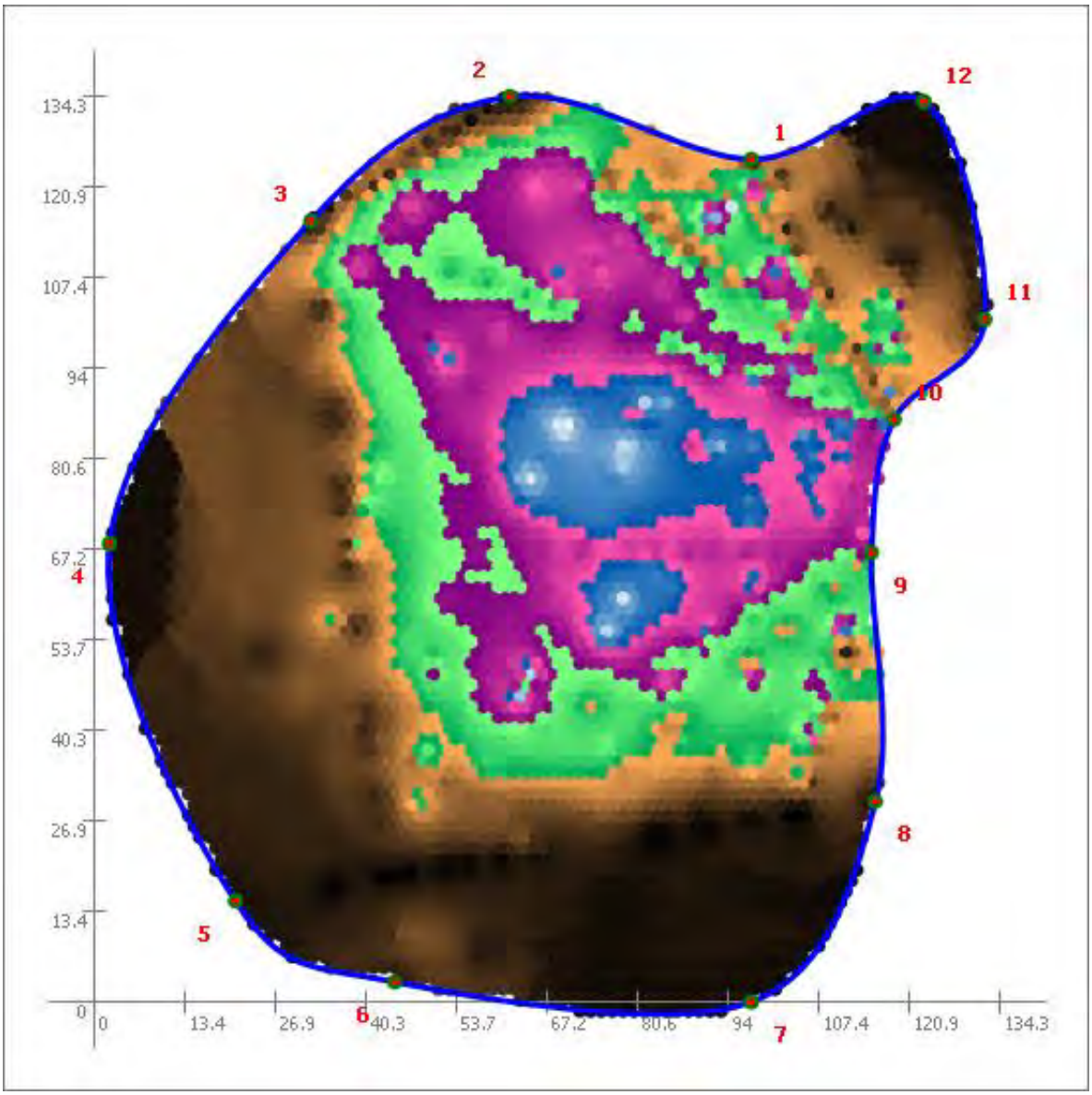


Figure 2
Sample Picus© Tomograph obtained from the tree tested in Figure 1

The differing colours depicted in Figure 2 represent the varying levels of decay. These can generally be interpreted as follows, depending on the type of decay present;

Colour	Condition of timber
	Sound timber
	Sound timber
	Incipient decay
	Incipient decay
	Decaying timber
	Badly decayed timber
	Badly decayed/hollow timber

Three Dimensional Picus© Sonic Tomograph

Below is an example of a series of Picus© Sonic Tomograph readings taken at different distances from ground level. These can be used to produce a three dimensional model.

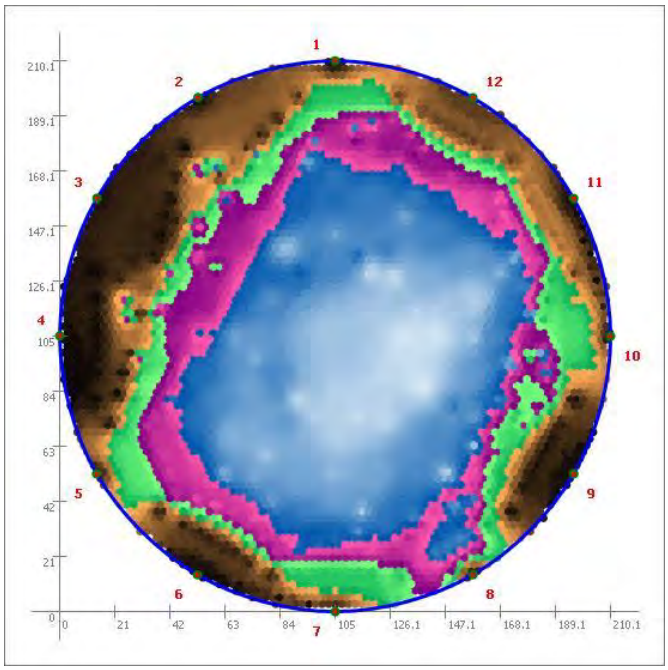


Figure 3.
Tomograph of sample tree at 30cm from ground level

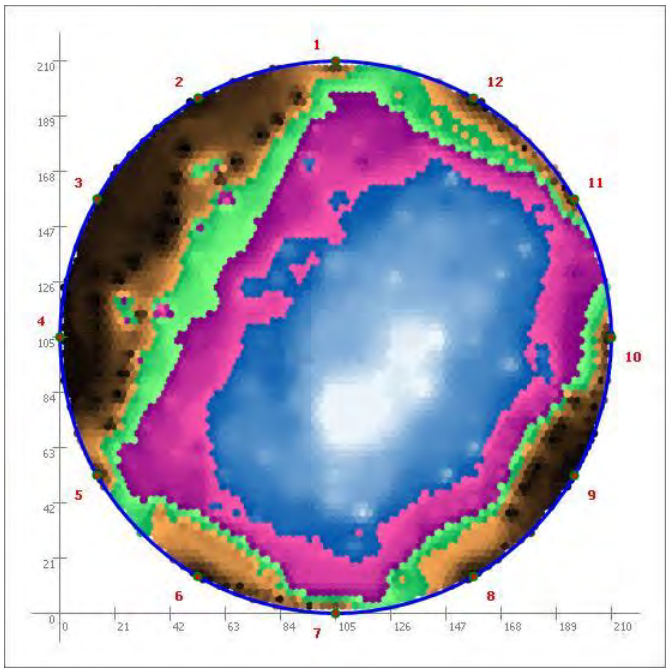


Figure 4. Tomograph of Cedar tree at 60 cm from ground level

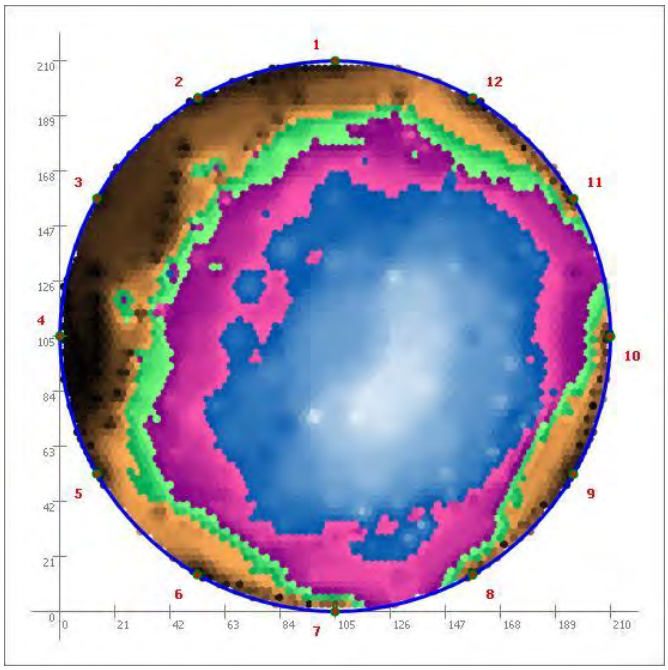


Figure 5.
Tomograph of sample tree at 90 cm from ground level

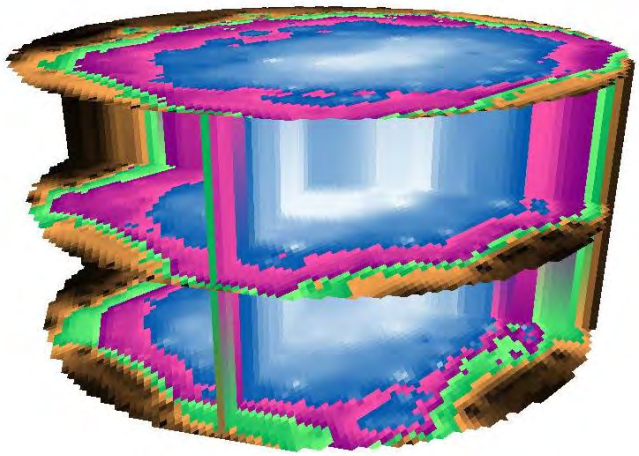
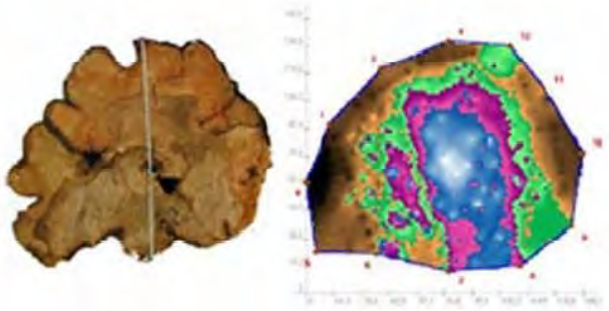
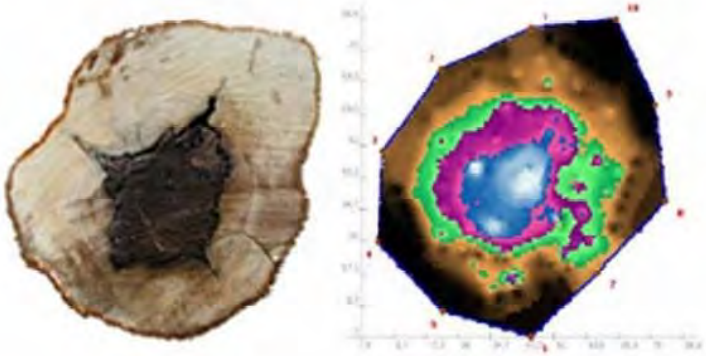


Figure 6. Three dimensional model of the sample tree

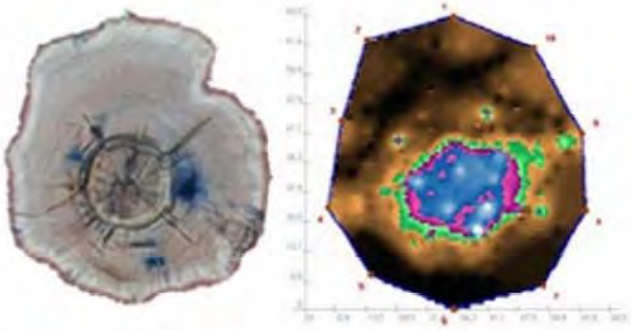
Examples of the Picus© Sonic Tomograph



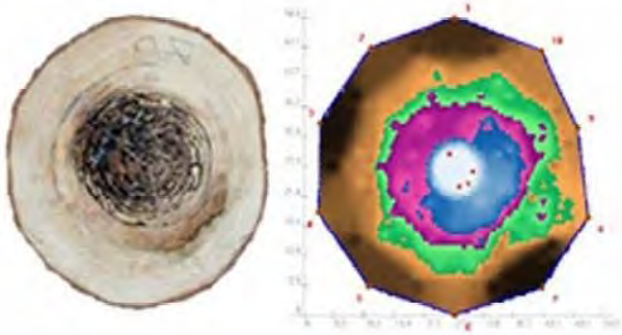
Linden tree with a severe *Ustulina deusta* infection (Germany)



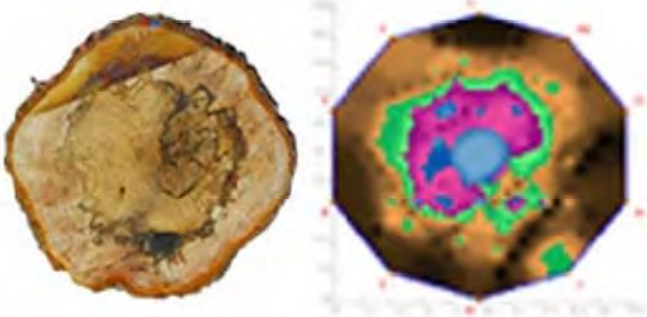
Linden tree with a large filled cavity (Germany)



Red oak with shake (circular crack) (Germany)



Spruce with *Heterobasidion annosum* and ant damage (Germany)

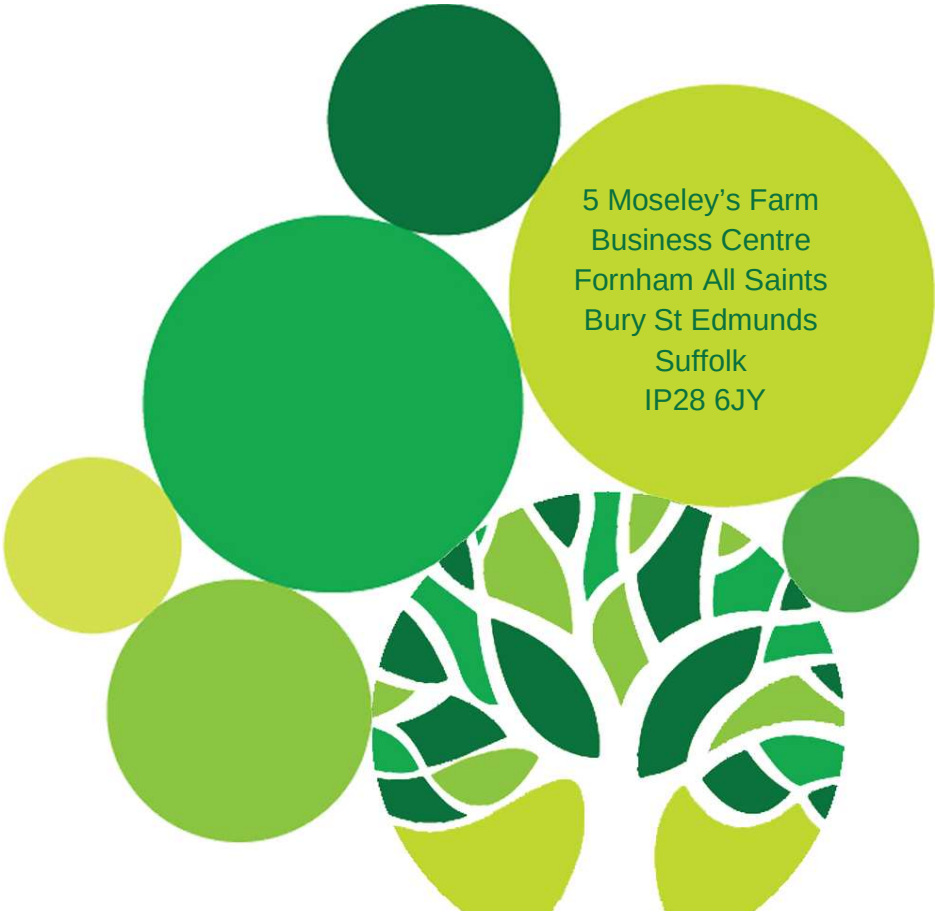


Birch with rot (Germany)

Appendix G

Hayden’s Drawing

- Arboricultural Impact Assessments
- Arboricultural Method Statements
- Tree Constraints Plans
- Arboricultural Feasibility Studies
- Shade Analysis
- Picus Tomography
- Arboricultural Consultancy for Local Planning Authority
- Quantified Tree Risk Assessment
- Health & Safety Audits for Tree Stocks
- Tree Stock Survey and Management
- Mortgage and Insurance Reports
- Subsidence Reports
- Woodland Management Plans
- Project Management
- Ecological Surveys



5 Moseley's Farm
Business Centre
Fornham All Saints
Bury St Edmunds
Suffolk
IP28 6JY

Existing Site Plan

CATEGORY AND DEFINTION

Trees unsuitable for retention	
Category U	Those in such condition that they cannot realistically be retained as living trees in the current land use for longer than 10 years
Trees to be considered for retention	
Category A	**Trees of high quality** with an estimated remaining life expectancy of at least 40 years
Category B	**Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years
Category C	**Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

LEGEND

- Existing Tree/Feature BS 5837:2012 Category A
- Existing Tree/Feature BS 5837:2012 Category B
- Existing Tree/Feature BS 5837:2012 Category C
- Existing Tree/Feature BS 5837:2012 Category U
- Line of Root Protection Area (RPA) - calculated following guidelines set in BS 5837:2012
- Existing Tree/Feature to be Removed BS 5837:2012 Category U
- Additional feature which doesn't meet BS 5837: 2012 categorisation but is included for reference

NOTE:

Hayden's Arboricultural Consultants were provided with a Topographical Survey but these do not always show the positions of all the trees/features on site. The locations of any additional features have been fixed using GPS. As such the position of the trees/landscape features should not be taken as exact but gives a fair distribution of their locations on site.

Rev:	Date:	By:	Revision:
-	15.01.20	NT	Based on Topographical Survey

The position, condition, and dimensions of the trees are based on a site survey undertaken on 09/01/2020

"The original of this drawing was produced in colour - a monochrome copy should not be relied upon"

Scale 1:500

0m 10m 20m 30m 40m

HAYDEN'S Arboricultural Consultants

5 Moseleys Farm Business Centre
Fornham All Saints,
Bury St Edmunds
Suffolk IP28 6JY

Client:	Bidwells (Cambridge)
Drawing Title:	TS & CP
Site:	Land to the North of Station Road Cambridge
Date:	15.01.20
Drawn By:	KFJ
Cad File Ref:	Cli\Pro\7909-D-CP Land to the North of Station Road
Scale:	1:500 (A2)
Checked By:	Check
Drawing No:	7909-D-CP
Rev:	-