



Planning Committee Date	1st November 2023
Report to	Cambridge City Council Planning Committee
Lead Officer	Joanna Davies
Reference	23/0119/TTPO
Site	St Matthews Centre, Sturton Street
Ward / Parish	Petersfield
Proposal	Remove (fell) to ground level and treat stumps to prevent regrowth
Presenting Officer	Joanna Davies
Reason Reported to Committee	Objections to the proposed removals have been received from residents, ward cllrs and Friends of St Matthew's Piece
Options	Grant consent Grant consent subject to conditions Refuse consent

1.0 Executive Summary

- 1.1 In 2022 a tree work application was received to reduce the height by 5m and spread by 4m of three London Plane trees located within the grounds of St Matthews Centre opposite 193 Sturton Street. This application was refused at committee because of incomplete data supporting the application, the lack of heave assessment and the lack of information regarding the installation of a root barrier.
- 1.2 The current application concerns the same three trees. It is alleged that following additional movement of foundations the removal of the three trees is now necessary.
- 1.3 Numerous objections to the trees' removals have been received from residents, councillors and other groups. Officers have been requested to seek independent expert assessment of the application submissions.
- 1.4 Expert opinion has been requested from an independent structural engineer. The structural engineer has confirmed technical data supports a causal link between the trees and damage to the building and that the risk of heave associated with tree removal is minimal.
- 1.5 Legal advice has also been sort from counsel and the advice supports the information contained in this report.
- 1.6 Consideration has been given to underwriting possible cost associated with refusing permission but the financial consequences of doing so, or of refusing consent were, at the time of the previous committee report not considered to be justified.
- 1.7 Members may refuse consent, grant consent unconditionally or grant consent subject to conditions/informatives

2.0 Site Description and Context

None-relevant		Tree Preservation Order	X
Conservation Area	X	Listed Building	NA

*X indicates relevance

- 2.1 The St Matthews Centre is located on the corner of Sturton Street and New Street within the Mill Road conservation area. The TPOd trees on the west, north and east boundaries of St Matthews Centre form part of a larger group that extends into the adjacent St Matthews Piece, one of the three open spaces cited to have significance in the conservation area appraisal.
- 2.2 The three subject trees are located on the west boundary of St Matthew's Centre. They form part of the visually significant group that bounds the

Centre and the adjacent St Matthew's Piece. The three subject trees are located within the line of 13 trees that run the full length of the combined boundary with Sturton Street.

3.0 Relevant Site History

Reference	Description	Outcome
22/0271/TTPO	Reduce the height of 3 London Plane trees by 5m and spread by 4m	Refused

4.0 Legislation and Policy

4.1 Town and Country Planning Act 1990 Part VIII Chapter I and Town and Country Planning (Tree Preservation)(England) Regulations 2012. Tree Preservation Order number 04/2005. National Planning Policy Framework (NPPF). Planning Practice Guidance (PPG)

5.0 Consultations

5.1 The application was published on public access in addition to standard councillor and extended resident consultation. A Site Notice was issued for display.

6.0 Third Party Representations

6.1 Comments have been received from a large number of local residents, councillors, Cambridge Past, Present and Future and The Friends of St Matthew's Piece. These can be viewed in full via Public Access using the reference 23/0119/TTPO. Objections are consolidated and summarised in the table at Appendix 1 and a response provided.

6.2 Additional comments and questions have been received following the independent structural engineer review. These are provided below at Appendix 2 in full along with the officer response in italics.

6.3 A letter was also received from Richard Buxton Solicitors. This is addressed at Appendix 4

7.0 Member Representations

7.1 A formal objection to the removal of the trees has been received from the Green Party.

7.2 Cllr Thornburrow expressed concerns over the accuracy of the evidence provided and requested that the submitted evidence be reviewed by an independent structural engineer. Additional questions following that review have been received and are set out below at Appendix 3 in full with the officer response in italics.

7.3 Full details of all representations are available on the Council's website.

8.0 Assessment

8.1 Planning Considerations

Amenity – Do the trees still make a significant contribution to the character and appearance of the area?

Condition/Nuisance – Are the works proposed excepted from the requirement to apply for permission in accordance with 14 and 15 of the Town and Country Planning (Tree Preservation) (England) Regulations 2012.

Justification for Tree Works – Are there sound practical or arboricultural reasons to carry out tree works?

- i. What is the justification
- ii. Is there a financial consideration
- iii. Is there a health and safety consideration
- iv. Does the nuisance outweigh the benefit of retention

8.2 Officer Assessment

Amenity – St Matthew's Centre visually forms part of St Matthews Piece, one of two important open spaces with public access in the Mill Road Conservation Area. As cited in the conservation area appraisal its mature trees are important in long and short views. The trees are highlighted on the Townscape Analysis Map as Important Trees/Tree Groups. Officer opinion is that the trees have a significant amenity value.

Condition/Nuisance – Section 14.-(1)(a)(ii) of The Town and Country Planning (Tree Preservation)(England) Regulations 2012 states that nothing shall prevent the cutting down, topping, lopping or uprooting of a tree in compliance with any obligation imposed by or under an Act of Parliament or so far as may be necessary for the prevention or abatement of a nuisance. The courts have held that nuisance must be actionable in law, where it is causing, or there is an immediate risk of it causing actual damage. However when deciding what is necessary to prevent or abate a nuisance consideration should be given to steps other than tree work.

Justification for Works – It is alleged that the trees are responsible for root induced clay shrinkage subsidence damage to 193 Sturton Street.

Foundations are bearing on a clay subsoil with a Low to High potential for volumetric change relating to changes in soil moisture. Moisture content comparisons suggest moisture depletion in two locations to the west (TP/BH2) and north (TP/BH3) of the property. Roots from London Plane trees were recovered from samples in TP/BH3. The subject trees are located to the east of the property.

Level monitoring has recorded a pattern of seasonal soil drying below the property foundations.

Submitted evidence has been reviewed by an independent structural engineer who has concluded that;

- the technical site inspections are in accordance with current best practices and no further inspection methodologies would provide additional benefit to the technical assessment and conclusions.
- on the balance of probability there is a causal link between the trees, the underlying geology and damage to the building.
- the heave assessment methodologies are in accordance with current best practices in relation to tree related subsidence and
- the conclusion that the risk of heave is minimal is concurred with.

8.3 Observations and Implications

Under regulation 14(1)(a)(ii) of the Town and Country Planning (Tree Preservation) (England) Regulations 2012, nothing in regulation 13 prevents the cutting down, topping, lopping or uprooting of a tree so far as may be necessary for the prevention or abatement of a nuisance.

In *Perrin* [2008] 1 WLR 1307 the Court of appeal held that whether or not works are necessary to prevent or abate a nuisance must involve consideration of all of the circumstances, including the existence of alternative engineering solutions which would or might prevent or abate the nuisance. In this case, and as explained below, alternative engineering schemes involving underpinning the property to allow for future changes in soil volume without additional damage to the building or the installation of a root barrier to restrict root growth in the vicinity of the property foundations are available. In those circumstances, the Council has proceeded on the basis that consent is required for the proposed work.

The Planning Practice Guidance (reference ID 36-090-20140306) states that when considering an application for consent the local authority should:

- assess the amenity value of the tree or woodland and the likely impact of the proposal on the amenity of the area;
- consider, in the light of this assessment, whether or not the proposal is justified, having regard to the reasons and additional information put forward in support of it;
- consider whether any loss or damage is likely to arise if consent is refused or granted subject to conditions;
- consider whether any requirements apply in regard to protected species;

- consider other material considerations, including development plan policies where relevant; and
- ensure that appropriate expertise informs its decision.

Officers have considered the amenity value of the trees and have concluded that their amenity value is significant. In this regard officers note that the trees are in a conservation area and give very considerable importance and weight to the contribution that the amenity value of the trees makes to the character and appearance of the conservation area. Officers have taken into account section 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990 requiring it to pay special attention to the desirability of preserving or enhancing the character and appearance of that area. It is accepted that the loss of the trees would harm the character and appearance of the conservation area and that this harm must carry great weight in accordance with the NPPF and the principles of relevant policies in the Council's adopted development plan including policies 14, 55, 59, 61, 67, 69 and 71, which seek to protect amenity to which the trees contribute in terms of, history, character and appearance and in terms of ecology/biodiversity and other environmental considerations. Taking all of the above into account, officers believe that the amenity value of the trees is high and carries substantial weight.

However, on the basis of the independent structural engineer's opinion (whose expertise the tree team regards as being appropriate), the tree team is satisfied that the evidence provided by the applicant demonstrates on the balance of probability that there is a causal relationship between the trees and the damage to the subject property. The work proposed will remove the trees' influence on soil moisture beneath the subject property's foundations allowing the property to stabilise and superstructure repairs to be carried out with the estimated cost of £16,000. Officers also accept that the risk of heave associated with the trees' removal is minimal. In this regard, the tree team is of the view that the works for which consent is sought may be justified, subject to the consideration of other factors identified below.

There are two alternatives to tree work, underpinning the property to allow for future changes in soil volume without additional damage to the building or the installation of a root barrier to restrict root growth in the vicinity of the property foundations. Both these solutions could have financial implications for Cambridge City Council and/or the property owners if permission for tree removal is not granted. The trees make a significant contribution to amenity, sufficient that consideration should be given to underwriting the cost of alternatives to removal. The cost of underpinning has been estimated at £120,000 and the cost of installing a root barrier has been quoted at £79,571.40 + VAT but excluding the removal and reinstatement of the highway surface. To underwrite the cost of underpinning or the full costs of installing a root barrier, which is the less expensive of the two options identified, might be disproportionate and not justified notwithstanding the significant contribution that the trees make to amenity and a preliminary Capital Asset Value for Amenity Trees (CAVAT) valuation of the trees, which is in the region of £200,000. In this regard, the Council is required to balance

a wide range of competing considerations and financial demands. Whilst the preliminary CAVAT valuation of £200,000 exceeds the costs quoted for underpinning or the installation of a root barrier, the requirement to underwrite the cost of such works would necessitate the making of a payment by the Council which could be regarded as being unjustified and disproportionate to the benefit of retaining the trees when considered in the context of all demands upon the Council's finances.

The PPG is clear that in taking a decision on an application for consent to carry out works to a protected tree, authorities should bear in mind that they may be liable to pay compensation for loss or damage as a result of refusing consent or granting consent subject to conditions, but that where the authority believes that some loss or damage is foreseeable, it should not grant consent automatically, but should take this factor into account alongside other key considerations, such as the amenity value of the tree and the justification for the proposed works before reaching its final decision.

Notwithstanding the significant amenity value of the trees and the considerable importance and weight this carries, the need to prevent further damage to property, coupled with the arguably disproportionate cost of paying compensation as a result of the foreseeable loss and damage that will result if consent is refused means that a refusal might not be justified, essentially for the same reasons as are explained in relation to the potential to underwrite the costs of alternative engineering solutions.

The trees are, however, located in third party property land, and regardless of any permission granted by the council, permission from the property owner will be required before their trees may lawfully be removed. Even if the Council decides that sufficient evidence has been presented to support the application to fell the trees and permission is granted by the Council, the tree owner is not legally obliged to carry out the work or permit its completion and could consider alternatives to minimising the influence of their trees on the subject property, in the interests of amenity.

9.0 Options

The payment of costs or the potential payment of compensation is not a decision that can be taken at officer level. As negotiations regarding costs have been reopened but no direction has yet been received by officers, officers are not able to make a recommendation on this element of the application. For this reason a recommendation is not given but possible the options are set out below.

1. Grant consent
 2. Grant consent subject to replacement planting conditions and an informative highlighting the value of the trees and recommending the use of alternative measures to stabilise 193 Sturton Street.
 3. Refuse consent
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Background Papers:

The following list contains links to the documents on the Council's website.

- [22/0271/TTPO 22/0271/TTPO | T1, T2 & T3: London Plane - Reduce height by ~5m and spread by ~4m balancing crown of all 3 trees. Prune on a triennial cycle to maintain broadly at reduced dimensions. | St Matthews Centre and St Matthews Piece Sturton Street Cambridge Cambridgeshire CB1 2QF \(greatercambridgeplanning.org\)](#)
- [23/0119/TTPO 23/0119/TTPO | T1 London Plane of the Crawford's Addendum Report - Arboricultural Recommendations Works: Remove \(fell\) to ground level and treat stumps to prevent regrowth. T2 London Plane of the Crawford's Addendum Report - Arboricultural Recommendations Works: Remove \(fell\) to ground level and treat stumps to prevent regrowth. T3 London Plane of the Crawford's Addendum Report - Arboricultural Recommendations Works: Remove \(fell\) to ground level and treat stumps to prevent regrowth. Reason: Clay shrinkage subsidence damage at 193 Sturton Street, CB1 2QH | St Matthews Centre Sturton Street Cambridge Cambridgeshire CB1 2QF \(greatercambridgeplanning.org\)](#)

Appendices:

- Appendix 1 Consultee Comments
- Appendix 2 Third Party Observations and Questions
- Appendix 3 Cllr Thornborrow Observations and Questions
- Appendix 4 Richard Buxton Solicitors Letter
- Appendix 5 Location Plan
- Appendix 6 TPO Plan

Appendix 1

Consultee Comments

Comment	Officer Response
<p>Mature trees are incredibly important for the health of the local ecosystem, for mental health, in capturing storm water, in absorbing carbon dioxide, in providing shelter for wildlife and shade during increasingly hot summers. These trees are especially important given their location in Petersfield which is a densely populated ward with limited public open space.</p>	<p>Agreed. The three subject trees make a significant contribution to amenity, the character of St Matthew's Piece and the surrounding street-scape.</p>
<p>193 Sturton St was constructed in 1995/1996 the foundations should have been designed and constructed to a standard which would have withstood any subsoil shrinkage associated with the long-established plane trees opposite and the applicant has no grounds for damaging a highly valued public amenity just 30 years later.</p>	<p>NHBC foundation depth calculation, considering mature height of trees, distance to property, soil volume change potential and water demand, is between 1m and 1.45m. The property foundations are at a depth of 1.45m and 2.1m.</p>
<p>TPO implies a presumption against removal</p>	<p>A TPO is served to prevent unjustified and harmful works to trees of value.</p>
<p>Felling the tree would breach Local Plan Policies 14, 23, 55, 56, 61, 67 and 71 and National Planning Policy Framework sections 91, 92 and 96. In December 2020 Cambridge Council signed up to the National Tree Charter for Trees, Woods and People (2017). Permitting this application would counter the council's commitment to the charter.</p>	<p>The Council is obliged to consider the merits of any tree work application in accordance with The Town and Country Planning Act 1990 and the 2012 Regulations (The Act)</p> <p>When assessing the impact of any tree work application consideration should be given to all relevant plans, policies and charters. Any plans, policies and charters do not however outweigh the responsibilities placed on councils under The Act. The council must therefore determine whether or not sufficient justification has been submitted to permit consent for works that will result in the loss of trees of value.</p>

<p>T1, T2 and T3 are an important part of the ecosystem of 24 mature trees surrounding St Matthew's Piece. The cutting down of these three trees impacts other trees in this urban forest ecosystem.</p>	<p>The removal of T1, T2 and T3 will have no material impact on the health of the remainder of the group.</p>
<p>The insurer's Technical Report from Aug 2019 did not detect any movement consistent with subsidence. As the trees have co-existed with the residences for decades the proposed removal is illogical.</p>	<p>Tree related subsidence can occur at any time. A lack of history of subsidence does not mean subsidence cannot occur.</p>
<p>Previous application was for a reduction what is justification now for removal.</p>	<p>Continued Level monitoring shows significant foundation movement continued following the removal of T4, from within the property boundary, through the summer and autumn of 2022, this can only be attributable to the influences of trees T1, T2 & T3.</p>
<p>The list of consultees is less than the neighbours and interested parties.</p>	<p>In addition to the standard consultation, notifications were sent out in February to all those who objected to 22/0271/TTPO. There are no legal requirements for a council to consult on tree work applications therefore the extent of consultation is not a reason for refusal.</p>
<p>The trees were there first and there seems to be little real evidence for the claim that damage has been caused by them.</p>	<p>Any justification for tree work is not outweighed by the age of a tree in relation to the age of any property affected. The evidence has been independently verified.</p>
<p>Changes in a Conservation area must show that public benefit outweighs public harm</p>	<p>The Council is obliged to consider the merits of any tree work application in accordance with The Town and Country Planning Act (as amended) Part VIII, Chapter I and the 2012 Regulations. In this context the benefits of retaining the trees may be outweighed by the nuisance associated with tree related subsidence.</p>
<p>Removing the trees in not proportionate to the damage alleged.</p> <p>Trees should be retained and property underpinned or root barrier installed. Cheapest option should not be automatically chosen without consideration of the value of the trees.</p>	<p>The subject trees are a significant asset. A preliminary assessment using CAVAT (Capital Asset Value for Amenity Trees) calculated their combined value to be in the region £200,000.</p> <p>There are options available, not exceeding the above cost, that would allow the retention of the trees and officers would welcome the use of</p>

	<p>underpinning or root barriers by the tree owners and/or applicant to avoid the need for removals. Nevertheless, as it may be disproportionate for the Council to underwrite the cost of such work or to be required to pay significant compensation as a result of refusing the application.</p>
<p>CCC have declared biodiversity and climate change emergency permitting removal would be a contradiction.</p>	<p>Granting permission in accordance with The Act would not be a contradiction. As living organisms trees decline and are lost naturally, they can fail structurally in extreme conditions and their removal can be justified for sound practical reasons. The removal of individuals from any population is inevitable and in any year new trees are planted, existing trees establish and grow and trees are lost. Key to the continuity of tree cover is limiting losses where possible and proving new and replacement trees where possible.</p>
<p>Insufficient information as requested in previous application.</p>	<p>Additional level monitoring was provided, a heave assessment undertaken and the possible installation of a root barrier explored. The heave assessment was updated following confirmation of the age of the building.</p>
<p>Removing the trees is not proportionate to the damage alleged. Level monitoring data is still patchy, incomplete and suggests the greatest movement in December 2022. Cracking is described as “slight” which is insufficient justification to remove the trees. Cracking is reported to have been worsening during summer 2022 but no evidence is presented. Heave assessment makes assumption trees are younger than the house</p>	<p>An independent structural engineer was provided with all application documents. It was concluded that;</p> <p>The technical site inspections are in accordance with current best practices and no further inspection methodologies would provide additional benefit to the technical assessment and conclusions.</p> <p>On balance there is a casual link between the trees, the underlying geology, and the damage to the building.</p> <p>The heave assessment methodologies are in accordance with current best practices in relation to tree related subsidence and The conclusion that the risk of heave is minimal is concurred with.</p>

Appendix 2

Third Party observations and questions with officer responses in italics.

Previous application 22/0271/TTPO, to severely prune the three TPO'd plane trees, was refused due to its damaging effects on

1. Tree health
2. Amenity contribution
3. The character & appearance of the area (within a Conservation Area)

The previous application was refused because insufficient evidence was submitted to allow works that would be detrimental to tree health and amenity contribution and therefore to the character and appearance of the area.

Does 23/0119/TTPO, to fell these TPO'd three plane trees have a less detrimental effect or a more detrimental effect on these three parameters?

Previous application 22/0271/TTPO, to severely prune the three TPO'd plane trees, was refused due to its deemed failure to have provided sufficient justification for its proposed works regarding:

1. level monitoring
2. a recent full assessment of damage to the house
3. alternative solutions e.g., root barrier
4. heave assessment

In view of the many questions raised in this document, how does the Case Officer persuasively demonstrate that the even more impactful 23/0119/TTPO, to fell these TPO'd three plane trees, has satisfactorily addressed each of these crucial issues?

The tree team is not intending to suggest that the removal of the trees as opposed to reduction work has been satisfactorily addressed.

The tree team is however satisfied that continued movement of foundations since the removal of the False Acacia indicates the significant influence of the London Plane trees. The application is for felling therefore the council is required to decide whether or not the evidence submitted is sufficient to approve.

What view does the Case Officer take of the level monitoring data supplied by the applicant for 23/0119/TTPO?

In replying response should be provided to all of the following issues:

1. The applicant's Level Monitoring data in 22/0271/TTPO was deemed by the

Planning Committee to have been “incomplete and patchy”, when the 22/0271/TTPO had 6 sets of level monitoring data (from 7/20–7/21, i.e., <12 mo)

2. However, 23/0119/TTPO had only 4 sets of data (1 incomplete!) from 8/21–12/22 (>17 mo) – does the case Officer agree this is even less complete and even more patchy?

3. What is the case Officer’s view of 23/0119/TTPO’s Monitoring Plus Report merging the 10 data sets (6 from 22/0271/TTPO + 4 from 23/0119/TTPO)? Does this conceal the paucity of new data?

(2 and 3) The additional level monitoring carried out continues from the previous data and together they provide a more complete picture.

4. What is the Case Officer’s view of the significance of the striking final data set from 23/0119/TTPO not always presented by the Applicant?

The Monitoring Plus report of December 2022 includes four sets of data from March 2022 to December 2022. The March to May data shows a slight upward movement, which is before the significant downward movement from May. The most significant drop occurred May to August but continued well into the autumn. The last four readings are taken April, May, August and December and show a downward trend without showing the exact monthly pattern. It is possible that a reading in October/November would have shown an increased downward movement before December or the relative lateness of the soil rewetting could be a result of seasonal lag. Either way and notwithstanding breaks in measurements, the level monitoring from May 2020 to December 2022 shows a cycle of seasonal movement that can only be explained by the influence of vegetation.

5. Unlike 22/0271/TTPO data (showing that 193 Sturton Street foundations moved **in synchrony** with the established annual cycles of soil drying), the greatest downward foundational movement in the 23/0119/TTPO data was shown in *December 2022*. What is the Case Officer’s view of the significance of this pattern being inverse to the applicant’s own prior data from 2021, as well as contradicting the pattern in Environment Agency data?

The penultimate reading was taken on 2nd August 2022. Continued moisture abstraction by trees after this date is common.

6. Why have the Applicant, the Structural Engineer, and the Case Officer been unanimous in passing wholly unchallenged every aspect of the quality, quantity and use of the Level Monitoring data, but only used it to assert that subsidence due to the presence of Plane trees has been demonstrated?

Tree team has obtained the opinion of a chartered structural engineer on request and while we have working knowledge of tree related subsidence the expert opinion of the chartered structural engineer has informed the team’s recommendation.

Dessication at depth can only be attributed to the influence of vegetation. With the removal of the false acacia, Planes are the only trees in influencing distance.

London plane roots found.

Level monitoring shows foundation movement seasonally.

Foundations are sufficient to withstand soil movement in the absence of vegetation.

7. Significant errors in the Applicant's analysis of their Level Monitoring data were ignored by both the Structural Engineer and by the Case Officer. For example: the Applicant's 28/12/22 *Arboricultural Recommendations* asserted a 28mm downward foundational movement occurred "when the Plane trees' extraction of moisture would be at its peak", despite this movement having been recorded in **December 2022** – when the Plane Trees were leafless, dormant, and extracting minimal (not peak) moisture.

8. The error raised in the preceding point had been highlighted in detail in an Objection correctly uploaded to the portal before the consultation deadline – but was one of *many* significant observations unaddressed in the Case Officer's review of Third Party Representations – why?
Specific

Comments have been received from a large number of local residents, councillors, Cambridge Past, Present and Future and The Friends of St Matthew's Piece. Most of the pertinent comments are repeated numerous times in different ways. Objections were consolidated and summarised for the benefit of members.

What view does the Case Officer take of the information on recent assessment of damage in 23/0119/TTPO?

The Case Officer's response should address all of the following issues:

1. The Insurer's 7 August 2019 Technical Report (uploaded for both 22/0271/TTPO and 23/0119/TTPO) assessed the damage as being "Category 2" (i.e., "slight"; on a scale of 0–5). This is the only document for either of these two planning applications that includes any photographs of the (mainly hairline) cracks.

Even though slight, the technical report does show damage. The seasonal movement, which indicates an increase seasonally will only lead to progressing damage. Since and application was submitted originally the cost of repair has increased with increased damage.

2. No additional recent or current photographs or measurements have been provided by the applicant with 23/0119/TTPO.

This is correct but it is not required to determine the application. Since the original application was submitted the cost of repair has increased with increased damage.

3. The applicant's 28 December 2022 Addendum Report On A Subsidence Claim (in 23/0119/TTPO) asserts "damage worsening during summer 2022" while providing no pictorial or quantitative evidence to support this assertion.

Again, this is correct and was a piece of evidence that was previously requested however it is not required to determine the application based on the evidence that has been submitted.

4. The applicant's unchallenged simplistic approach is: the (undocumented) problems *cannot* be caused by the already felled Acacia, so fault must lie with the Plane Trees – wholly ignoring heave caused by the felling by the applicant of the Acacia (despite this heave being apparent in both the level monitoring data and visually, on site).

Datum points 4 and 5 closest to the False Acacia show a degree of recovery, however even though the tree is removed datum points also show continued downward movement which is not attributed to heave.

5. Neither the Structural Engineer, nor any of the applicant's Reports ever provided any **evidence** to challenge the statement from their own 2019 Technical Report : "The pattern and nature of cracking is indicative of thermal movement", or its conclusion that they "could not detect any movement consistent with subsidence (downward movement of foundations)".

They have provided technical reports showing shrinkable clay, desiccation, root presence and seasonal foundation movement. All reviewed as a whole by a chartered structural engineer.

What view does the Case Officer take of the information so far presented on the use of alternative measures, such as a root barrier, to resolve 23/0119/TTPO?

The Case Officer's response should address all of the following issues:

1. The Case Officer's Report to Committee notes options costing a small fraction of the Council's own preliminary CAVAT-value calculation of the values of these trees (~£200,000) – allowing their retention (a root barrier costs £79,571.40 + VAT, i.e., less than half).

The tree team supports the use of a root barrier.

2. This crucial CAVAT value clearly needs to be fully explained in a document available for scrutiny before 23/0119/TTPO can be fairly evaluated and determined.

The amenity value of the trees has not been contested. CAVAT is useful but not an essential tool to allow the determination of an application.

3. Is the Council's preliminary CAVAT-value calculation based only on the sum of T1 + T2 + T3 individually?

The sum in the report is based on individual calculations for T1 + T2 + T3.

4. Or did the Council's preliminary CAVAT-value calculation also take full account of the contribution of T1 + T2 + T3 to the overall treescape (cf the photographic evidence of this in Appendix 5, pp 40–44, of the February 2023 Objection from the Friends of St Matthew's Piece, on the Planning Portal)?

Yes. The assessment considers the contribution of the trees to the townscape.

5. Did the Council's preliminary CAVAT-value calculation also take full account of the collective importance of the complete group of trees of the northern half of St Matthew's Piece in mitigating the Urban Heat Island Effect (an issue raised in Appendix 6, p. 45, in the February 2023 Objection from the Friends of St Matthew's Piece, on the Planning Portal)?

The value of the group before and assumed after has not been assessed.

6. How is the answer to this question on Urban Heat Island Effect altered by the imminent proposals to redevelop and intensify both the nearby Grafton Centre and Beehive sites – which would heavily impact St Matthew's Piece, the **only** substantial public open space in Petersfield.

We are obliged to determine the application based on the justification presented and the impact on amenity.

7. All of these elements need to be fully and openly accounted for in determining a true CAVAT value for these three Plane Trees in their particular and unique context. Once this information is available, what is the process for re-examining the issue of Cambridge City Council underwriting the costs associated with refusing permission? This could pay for installing a root barrier and save the trees. It could be done with a view to recovering all (or some) of these funds via legal challenge directed at those who have been responsible for the design/ build /sale / purchase / rental / routine management and/or annual insurance (and re-insurance) of 193 Sturton Street. All of these have taken place in the obvious vicinity of this avenue of plane trees, planted 100 years before 193 Sturton Street was planned.

If the application is refused the council might receive a claim for compensation. This is separate from the council deciding to underwrite costs. As the council has to date not decided to fully underwrite the costs of underpinning or the installation of a root barrier we are obliged to determine the application on the evidence provided. The application determination does not preclude any decision the owner, applicant or council could make in the future regarding underwriting costs.

What view does the Case Officer take of the applicant's approach to credibly and accurately reporting e.g., the age of the property at 193 Sturton Street in 23/0119/TTPO?

The Case Officer's response should address all of the following issues:

1. The declaration signed 30/01/23 on the Application form for 23/0119/TTPO confirmed that "to the best of my/our knowledge, any facts stated are true and accurate".

The applicant was requested to reassess the application submissions on the basis of the incorrect assumption of the age of the property. The outcome remains the same.

2. Yet a Soil Risk Analysis dated 22/11/22 was submitted by the applicant in the documents for 23/0119/TTPO. Page 5 of this document stated that its analysis relies on the assumption of the tree under consideration being “younger than the house”.

See above

3. Further, the applicant’s Revised Arboricultural Appraisal Report of 15/12/2021 provides a property description (cf. its p. 2) as an “end terrace 2 storey house built circa 1900, a substantive and highly significant error that is repeated again three times in the same document, incorrectly claiming the age of the trees (documented as having been planted in 1898) to be “similar” to the property.

See above

4. Yet documentation provided in an Objection to 23/0119/TTPO unequivocally demonstrated that – while the trees of St Matthew’s Piece do date from 1898 – the property at 193 Sturton Street (with its unambiguously modern foundations and brickwork) was built after 1995, or about 100 years later.

See above

5. That evidence for this comprised: extracts from Ordinance Survey maps of 1886, 1901, 1925, 1938 & 1965; material from Planning documents of 1935, 1981, 1986, 1995 & 2006; Kelly’s Directory listings from 1967 & 1975; Cambridge Commons Committee records from 1897 & 1898; an article from the *Cambridge Independent Press* of 12 July 1907.

6. Does the Case Officer believe that the insurer of the property, 4 years into the process of addressing problems at 193 Sturton Street, genuinely had not found out that this property was 100 years younger than the Plane Trees opposite? Or was it too inconvenient to the arguments being made by the applicant to admit that the house was so much younger than the trees?

Whether or not the applicant had an ulterior motive does not alter the data submitted, which supports the claim.

7. Why did the Structural Engineer or the Case Officer not challenge the repeated absurdity in the Applicant’s assertions regarding the ostensible age of the property, when the Applicant’s papers had been formally declared to contain only “true and accurate” facts? .

The tree team highlighted the inaccuracy and requested a reassessment, this reassessment was made available to the chartered structural engineer to inform his opinion.

8. Does this indicate that an even greater degree of caution and scrutiny needs to be applied in evaluating other information from this applicant, – e.g., their level monitoring data?

Errors and incorrect assumptions are found in expert reports on occasion, officers do not automatically assume a lack of professionalism simply because an error was

made. The application has been made by professionals and experts with relevant experience in their respective fields.

9. If not, why not?

See above

10. Does the **exact same** uncertainty apply also to the value and credibility of the Structural Engineer, who allowed all of these many issues pass by, wholly unchallenged?

The independent assessment of the application submissions was carried out by a chartered structural engineer and technical director of a well established company and we have no reason to doubt their professionalism and/or competence.

11. If not, why not?

See above

Further information is needed on the Case Officer views on the identification of pertinent Public Open Space, in forming a balanced view on 23/0119/TTPO

The Case Officer's response here should address each of the following issues:

1. In her Report to Committee the Case Officer states that ""St Matthews Piece, one of two important public open spaces in the Mill Road Conservation Area." Can the Case Officer clarify which is the second of the two important "public open spaces" that she has in mind? Is it Mill Road Cemetery?

It is Mill Road Cemetery

2. What is the Case Officer's response to the significance of these five listed points, drawn from a document already on the Planning Portal (in an unmentioned but highly relevant part of Planning history, i.e., 20/04514/FUL, and specifically Appendix IV of the Objection by the Friends of St Matthew's Piece):

1. Open Space is defined in Section 336 of the Town and Country Planning Act 1990: "open space" and *can* include land that is a disused burial ground.
2. Mill Road Cemetery is **not**, however, a disused burial ground. Reverend M. Widdess, Chair of the Parochial Burial Grounds Management Committee, has written to FoSMP to confirm that Mill Road Cemetery "remains consecrated" despite being a "closed cemetery", due to having "become full to the extent that no new burials can be accommodated". Nevertheless, "burials of coffins and cremated remains can still be carried out where there is room in existing family graves. Such burials and graveside visits by bereaved friends and family members do occur".
3. According to a 2020 document by the Trustees for Methodist Church Purposes, the legislation relevant to "disused burial grounds" is the Disused Burial Grounds (Amendment) Act 1981. Section 5 of this 1981 Act states explicitly that it "shall not apply to any consecrated land".
4. Mill Road Cemetery being consecrated, therefore cannot be considered a 'Disused Burial Ground' as it is not affected by the provisions of the Act. A still-active cemetery in consecrated grounds, Mill Road Cemetery therefore cannot meet the

definition of Public Open Space, due to it not being laid out for – or of a nature suitable to – sport, recreation or play.

5. Furthermore, its gates are locked to the public 1 day per year, to prevent the establishment even of a public right of way through it.

The intention of references to open spaces was to highlight the importance of both trees at St Matthew's Piece, and those in the adjacent private land that contribute to the open space, and the very significant amenity value they have.

Further information is needed to establish a balanced view on 23/0119/TTPO on the Case Officer views on the significance of St Matthew's Piece and T1 T2 & T3 in the context of their importance to a unique Public Open Space.

The Case Officer's response here should address each of the following issues:

1) Is there an enhanced significance of the trees of St Matthew's Piece in the St Matthew's area of Petersfield, bearing in mind that The Environment 'Domain' of the latest iteration of the government's Index of Multiple Deprivation reveals that the area around St Matthew's Piece falls into the 2nd most deprived of 10 deciles nationally, with regard to this parameter?

This information would not alter the tree team's assessment of the trees, which is that they have significant amenity value. The information does not alter the tree team's position, which is based on the trees' significant amenity value, the evidenced presented with and during the application and the expert opinion of an independent chartered structural engineer.

5. 2) Is this enhanced significance reflected in the Council's initial CAVAT calculations?

No

3) If not, why not?

Not a CAVAT criterion

4) At the time of construction of 193 Sturton Street, T1, T2 & T3 were already shielded by both section 211 of the Town and Country Planning Act 1990, and Cambridge's Mill Road Conservation Area (since 1993). Would it be reasonable to conclude that the additional individual Tree Preservation Orders in No. 4/2005 were issued because T1, T2 & T3 (and all the trees of the northern half of St Matthew's Piece) needed protection as much – or more – than any trees in Cambridge.

5) If not, why not?

We do not have the site-specific reasons for making the trees the subject of a TPO in 2005. However, it is reasonable to conclude their amenity value was considered to be significant, their loss would be detrimental to amenity and that there was at the time a potential threat to their healthy retention.

Further information is needed to establish a balanced view on 23/0119/TTPO on the Case Officer views on the degree to which 193 Sturton Street has complied with National House-Building Council (NHBC) requirements for construction in shrinkable soils, as in force at the time of its design and construction.

The quality of the construction of 193 Sturton Street would only be pertinent to the determination of the application submitted if the building was so poorly constructed that its structural integrity was so compromised to necessitate proactive structural works irrespective of continued influence from trees. In which case, if the building were to be underpinned anyway, the trees might be accommodated.

The Case Officer's response here should address each of the following issues:

1) How well did 193 Sturton Street comply with National House-Building Council (NHBC) requirements (see Section 4.2.7 'Foundations in shrinkable soils')?

2) Bearing in mind that London Plane Trees (like the robust and healthy T1, T2 & T3) should have been reasonably expected to grow to height and girth very much greater than was the case when C/95/0638/FP was approved in 1995, were these NHBC Requirements met:

(1 and 2) NHBC foundation depth calculation, considering mature height of trees, distance to property, soil volume change potential and water demand, is between 1m and 1.45m. The property foundations are at a depth of 1.45m and 2.1m.

"Foundations shall be capable of accommodating the effects of trees, shrubs and hedgerows on shrinkable soils without excessive movement. Items to be taken into account include:

a) foundation type

b) distance between tree and foundation

c) method of assessment of foundation depths

d) foundation depths related to the zone of influence of new tree planting

e) foundation depths related to new shrub planting."

3) What is the Case Officer's view of the relevance to a fair determination of 23/0119/TTPO of: BS5837:2012, which replaced BS 5837:2005 which had, in turn, superseded BS 5837:1991, which these address British Standards recommendations with regard to "trees in relation to design, demolition and construction"?

BS 5837 is not pertinent to the determination of 23/0119/TTPO. BS 5837 is a British Standards Publication that gives recommendations and guidance on the relationship between trees and design, demolition and construction processes.

4) In the context of an existing 100-year old avenue of Plane Trees within the Conservation Area in the late 1990s:

- what evidence has the Applicant provided that the late 1990s foundations for 193 Sturton Street were not under-designed?

None

- what evidence has the Applicant provided that there were no relevant structural flaws in the construction of 193 Sturton Street?

None

- despite the relevant Building Regulations, have heave effects following the 2021 felling of T4 nevertheless caused damage? (These heave effects appear in documents published for 23/0119/TTPO in (a) the Applicant's submitted Level Monitoring data, and (b) a photograph in the February 2023 Objection from the Friends of St Matthew's Piece).

- what evidence has the Applicant provided that this recorded damage from heave effects following the felling of T4 is not being mis-attributed to effects of the 3 Plane Trees?

Level monitoring shows a continuing seasonal downward trend, which is not indicative of heave.

What are the Case Officer views on the implications for 23/0119/TTPO of the Greater Cambridge Biodiversity Supplementary Planning Document 2022? This outlines current pertinent legislation, including Town and Country Planning (Tree Preservation) (England) Regulations 2012, noting (in its ¶2.1.7) that Tree Preservation Orders can be made for trees or groups of trees because of their nature conservation value, as well as for their amenity value. This has been cited in the March 2023 Supplementary Objection from the Friends of St Matthew's Piece (on the Planning Portal), but has not been addressed in the Case Officer's Report to Planning for 23/0119/TTPO.

The Town and Country Planning Act does not define amenity, but Government advises that local authorities develop ways of assessing the amenity value of trees in a structured way. When referring to amenity the tree team is not simply referencing visual significance. Policy P2 of the Cambridge City Council City Wide Tree Strategy sets out the criteria against which trees in Cambridge will be assessed. The criteria are visual, impact, atmospheric, climate change, biodiversity, historic or cultural and botanical. Against a number of these criteria alone the trees would be considered suitable for TPO. The trees are already protected by TPO however and the suitability of the TPO is not disputed by any party.

What are the Case Officer views on the implications for 23/0119/TTPO of the the Environment Act 2021? This legislation was cited in the 7 January 2023 Planning Appeal Court ruling to dismiss an appeal against the refusal of 21/01437/FUL. The full text of the

Appeal decision was uploaded to the planning portal on 16 February 2023, and has been cited in the March 2023 Supplementary Objection from the Friends of St Matthew's Piece (also on the Planning Portal), but has not been addressed in the Case Officer's Report to Planning for 23/0119/TTPO.

21/01437/FUL is a planning application not a tree work application. The application was for permission to erect two dwellings following the demolition of 18 Adams Road. 23/0119/TTPO applies for permission to remove trees due to alleged tree related subsidence. As a planning application Biodiversity Net Gain is a material consideration. As a tree work application the impact on biodiversity is considered through our amenity assessment. The significant loss of amenity that would result from approval is not contested.

What are the Case Officer views on the implications for 23/0119/TTPO of the following specific quoted provisions of the Environment Act 2021, all of which that came into force on January 1 2023 (and all raised in the March 2023 Supplementary Objection from the Friends of St Matthew's Piece, but not yet addressed in the Case Officer's Report to Planning for 23/0119/TTPO?

1) "Section 102 makes amendments to section 40 of the Natural Environment and Rural Communities Act 2006 (c. 16). Section 40 places a duty on public authorities to have regard to the conservation of biodiversity when delivering their functions. **The revisions to section 40 strengthen the requirement for public authorities, to assess how they can take action to conserve and enhance biodiversity, and then take these actions.**"

2) "Section 103 inserts a new section 40A to the Natural Environment and Rural Communities Act 2006, which requires local authorities and local planning authorities, excluding parish councils, **to produce biodiversity reports detailing the action they have taken under the biodiversity objective set out in section 102.** It defines, at a high level, the content of the biodiversity reports and their frequency. Additionally, it creates a power for the Secretary of State to designate other public authorities that are required to report, and to specify quantitative data to be included in the reports."

(1 and 2) The tree team recognises the importance of trees to the city, which is why a condition requiring replacement planting has been recommended, in line with the council's tree strategy and how it manages its own tree stock. The council has been undertaking a lot of work to increase the tree stock in the city, including through the Cambridge Canopy Project, which recently ended. During the four years that the project ran we planted over 2,300 trees in public open spaces and gave away over 1,200 trees through our schemes designed to get residents engaged in planting more trees. We are also partnered up with Trees For Streets, which makes it easier for residents and community groups to get trees planted across the city.

Trees support biodiversity, help create better places for people to live and work and help the city adapt to a changing climate. Our Tree Strategy and complimentary Biodiversity Strategy are just some of the ways we are tackling the climate and biodiversity emergencies. As part of our wider aims to help tackle climate changes, the council is supporting, promoting and facilitating sustainable travel, decarbonising our buildings, encouraging and supporting residents to retrofit their homes and reduce their emissions and building new sustainable homes.

3) "Section 114 introduces Schedule 16, which makes amendments to Part 2 of the Forestry Act 1967 (c. 10) strengthening enforcement in relation to controlling the felling of trees. These amendments enable the Commissioners to create a local land charge, where illegal felling has taken place or a felling licence has not been complied with, to give a further enforcement notice on the land where the land ownership has changed during the enforcement period, and amends the provisions in relation to the service of documents as to who can be served with a document and who can be required to provide information. In addition, the amendments enable the court to make a restocking order upon conviction for a section 24 offence (non-compliance with an Enforcement Notice) and **to impose an unlimited fine for the offence committed in England under section 17 for felling without a licence.**"

Section 114 does not remove a council's obligation to assess tree work applications on their merits and approve applications that are evidently supported. As living organisms, the loss of individuals from any tree population is inevitable. Key to the continuity of tree cover and the benefits associated is limiting losses where possible and providing new and replacement trees where possible.

The Case Officer's Report to Planning for 23/0119/TTPO includes the following statement": "the tree team is satisfied that the evidence provided supports the claim that trees are a causal factor in damage to the subject property and that the work proposed will remove the trees' influence on soil moisture beneath the subject property's foundations allowing the property to stabilise and superstructure repairs to be carried out with the estimated cost of £16,000. Officers also accept that the risk of heave associated with the trees' removal is minimal." Section 8.3 of this report refers to whether "it is determined that sufficient evidence has been presented to support the application to fell the trees". In view of the many detailed questions to which answers are now being sought, does the Case Officer wish to reconsider the recommendation to approve the felling of T1, T2 and T3, as initially provided on 25 July to the Planning Committee?

With reference to the answers provided, and in particular the independent expert opinion that the evidence supports the proposal, officers are satisfied that unless an engineering solution can be utilised to stabilise the building, the removal of the trees is necessary to avoid continued movement. However as the question of whether or not there is opportunity for the council to contribute to costs associated with alternatives to tree felling, the tree team has insufficient authority to confirm the recommendation made in the officer report to planning on 25th July, which was based on the understanding the council was not minded to accept the full costs associated with compensation or engineering solutions.

Appendix 3

Cllr Thornborrow observations and questions with offers responses in italics.

On what basis does the Case Officer consider that the Applicant has justified the removal of the trees?

How has the applicant demonstrated the merit of the request in terms of demonstrable and evidenced actual damaged to 193 Sturton Street?

Damage in the form of cracking was recorded in 2019.

Foundations are bearing on a clay subsoil with a Low to High potential for volumetric change relating to changes in soil moisture.

Roots from London Plane trees were recovered from samples in TP/BH3. The subject trees are located to the east of the property.

Level monitoring has recorded a pattern of seasonal soil drying below the property foundations which has continued following the removal of the False acacia.

An independent chartered structural engineer has reviewed the data and confirmed the causal link.

How has the Applicant quantified the value of any objective damage at 193 Sturton Street vs possible damage by heave to St Matthew's Centre?

An assessment of this nature has not been provided and is not necessary to allow determination of 23/0119/TTPO.

How has the Applicant quantified the value of any objective damage at 193 Sturton Street vs the loss of public amenity in a Conservation Area?

The applicant is not required to provide a quantitative comparative assessment of this type and has not. The merits of retaining the trees is considered in the assement set out in this report.

Our decision on the application should be based on the merits of the case, in the public interest.

Has an adequate history of the site been provided and considered?

The pertinent history is 22/0271/TTPO

The 3 trees are on the site of St Matthew's Centre. Why is the site history not referred to?

One example of relevant previous site history not addressed.

Previous refusal on site for 20/04514/FUL

Reason 4 - Overall, the scale and height of the proposed building is deemed to be excessive and would not respect the existing trees which significantly contribute to the visual amenity of the site and local area. The removal of two trees along the New Street frontage, as well as the anticipated harm brought upon the surrounding trees would result in significant harm upon these trees and therefore the proposal is not in accordance with policy 71 of the Cambridge Local Plan (2018).

This relates to a planning application not a tree work application. Furthermore the importance of the trees is not disputed.

Is actual damage to 193 Sturton Street is proven?

The Technical Report on a Suspected Subsidence Claim, by Crawford & Company, dated 07-08-2019, states that damage was first noticed on 02-07-2019.

The 2019 document concludes that the damage is ‘slight’ and indicative of thermal movement and explains “We could *not* detect any movement consistent with subsidence (downward movement of foundations). The pattern and nature of cracking is indicative of thermal movement. Masonry expands and contracts with changes in temperature” and goes on to say “In subsequent years, there can be further cyclical and reversible movement which causes minor cracks to develop.”

Further investigations show that movement is consistence with subsidence damage.

The MWA Report refers to the damage listed in this report.

As earlier tree application on site, reference 22/0271/TTPO was refused on 25-07-2022. One of the reasons for refusal was “A recent full assessment of the damage to the house has not been submitted”.

Does the case officer accept that the applicant continues to have provided precisely no evidence that the damage in the form of internal cracks to the property is ongoing, improving, deteriorating or vanished entirely?

No visual evidence of the extent of increased damage has been submitted. However, the downward movement of the foundations has increased along with the superstructure repair estimate.

Does the case officer agree that there is no evidence as to when the minor damage listed in the 2019 report occurred (as distinct from when the cracks were first reported)? Is there proof that the minor cracks had not arisen in earlier years, perhaps even dating back to when this new build house was constructed?

The technical report states that damage was first noticed in July 2019 and was reported to the insurer a few days later. The tree team has no reason to dispute this record.

Is it proven that there are roots from the three Plane trees under the foundations of 193 Sturton Street and that these (and only these) are causing clay-shrinkage subsidence and foundational movement?

The Site Investigation Technical Report cites root from Plane tree to a depth of 3m

The Site Investigation Factual Report, by CET dated 22-06-2020 shows that the trial pit closest to the front of the house was abandoned at 1200mm deep. The bottom of the foundation had not been reached.

The adjacent trial pit 3 showed that the bottom of the foundation was at 2100mm. The *Revised Arboricultural Appraisal Report* by MWA Arboriculture Ltd, dated 15-12-2021 states that were roots from *Leguminosae spp.* (which includes the false acacia family) under the foundations at 2100mm, but that it is not until the lower level of 3000mm is reached that there are any roots of *Platanus spp.* (which include Plane trees) found, so there is a gap of 900mm from the bottom of the foundations and any Plane tree roots.

The results are point samples from a large volume of soil, a gap of 900mm does not indicate a lack of plane roots above. Furthermore, soil shrinkage at a lower level can still impact on foundations above.

On page 4 of his recently submitted "Responses to Questions", the Structural Engineer writes "The Council's refusal of consent for the trees to be reduced in August 2022 meant that downward foundation movement continued to **January 2023**". The Structural Engineer provides a graph that shows level monitoring data through December 2022. These latest data show a shocking -30mm downward vertical movement at the sample sites nearest the three Plane Trees. Note that the December 2022 data shows downward vertical movement about **twice as great** as the Applicant reported in the summers of 2020 and 2022. (Note: zero data on foundational movement were collected by the applicant between June 2021 and April 2022.)

During the unusually snowy and cold weather of December 2022 the three Plane Trees were entirely leafless, quiescent, inert. They would neither be transpiring water nor drawing intensively via their roots on water from anywhere – including from under 193 Sturton Street.

The Monitoring Plus report of December 2022 includes four sets of data from March 2022 to December 2022. The March to May data shows a slight upward movement, which is before the significant downward movement from May. The most significant drop occurred May to July but continued well into the autumn. The last four readings are taken April, May, August and December and show a downward trend without showing the exact monthly pattern. It is possible that a reading in October/November would have shown an increased downward movement before December or the relative lateness of the soil rewetting could be a result of seasonal lag. Either way

and notwithstanding breaks in measurements, the level monitoring from May 2020 to December 2022 shows a cycle of seasonal movement that can only be explained by the influence of vegetation

Can the Case Officer explain how this severe and dramatically deteriorating mid-winter downward foundational movement, recorded by the Applicant, can have been caused by tree-related clay soil shrinkage?

See Above

The downward movement recorded in December includes movement post September. The cyclical/seasonal movement can only be attributed to the influence of trees.

The penultimate reading was taken on 2nd August 2022. Continued moisture abstraction by trees after this date is common.

In trail pit 2, at the rear of the property (to the rear of the property) it is shown that the foundations go to a level of 1500mm but there are no roots, even though the monitoring levels chart does show movement, of -18mm to +5mm.

Has the Applicant explained what other than the Plane Trees is causing this foundational movement?

No, but the lack of roots in a single point sample does not disprove that other parts of the building are moving as a result of tree related moisture loss.

Could the tree T4 False Acacia cause the above ground foundation movement?

21/0089/TTCA Notice gives consent, on 12-03-2021, to the removal of T4 False Acacia, with the reason: Clay shrinkage subsidence damage at subject property.

Further reports, provided about the adjacent site, states that T4 was removed in June 2021.

T4 was felled but the stump was not removed, and it is still growing.

Should post-felling heave effects really be discounted?

21/0089/TTCA Notice gives consent, on 12-03-2021, to the removal of T4 False Acacia, with the reason: Clay shrinkage subsidence damage at subject property.

The Applicant reports that T4 was removed in June 2021, although the stumps were not removed, and the tree continues to grow.

Please consider both

- a) The graph previously mentioned, from page 4 of the Structural Engineer's recently submitted "Responses to Questions" (with level monitoring data to December 2022) and also
- b) And also the truncated version of this graph on p.3 of the Applicant's 'Statement Of Work', (that also provides Level monitoring Results, but only to summer 2022)

Both of these graphs clearly trace the foundation level at Sample Point 4 (the data points represented by green triangles), which is the sample point farthest to the north east. This is the Sample Point closest to the Acacia that had been felled in June 2021.

Data from Sample Point 4 after June 2021 shows **upward** vertical movement. This seems to be post-felling heave. But neither the Structural Engineer nor the Case Officer have commented on this.

In the wall immediately adjacent to the 2 acacia tree stumps, significant cracks recorded in February 2023 photograph, already uploaded to the 23/0119/TTPO portal (p. 10 in the Objection from Friends of St Matthew's Piece (FoSMP), uploaded 20 Feb 2023).

Is the Case Officer confident that these wall cracks are not due to heave effects following the 2021 felling of the young acacia?

Yes, the cracks to the boundary wall are indicative of direct damage caused by physical pressure from the false acacia and not as a result of soil movement associated with subsidence or heave.

Is the Case Officer still of the opinion, along with that of the Applicant's Structural Engineer, that there will be no significant heave effects after the felling of the three very much older and very much larger Plane Trees?

The tree team accepts the results of the heave assessment, confirmed by the chartered structural engineer, that the risk of heave minimal.

Have the possible heave affects been considered in relation to the Old Howard Mallet building, which is directly adjacent to trees T1, T2 and T3?

No

If demonstrable evidence of heave effects are already clear both visually and within the Applicant's own data following the 2021 felling the small acacia, how much greater would it be reasonable to expect the 360° heave effects from the felling of three 28m tall, mature Plane Trees?

There is an extensive, lower level of the Howard Mallett Centre building. This cellar level extends much farther west and south than does the upper level of the building. See the 2006 map, already uploaded to the 23/0119/TTPO portal (p. 11 in the Objection from FoSMP, uploaded 20 Feb 2023). That map is reproduced here to shows how close the three plane trees (the green dots) are to the cellar level of the old Howard Mallett Centre building on St Matthew's Piece:

The effects of heave on the old Howard Mallett Centre building, which is much closer to the three Plane Trees than is 193 Sturton Street, could be substantial – and potentially very dangerous indeed. This building is now used as an educational establishment for young adult students, with a sitting tenant.

Has this been considered by the Structural Engineer or the Case Officer, and is the Case Officer confident that these matters have been adequately considered.

This is not pertinent to the determination of the application. This is a consideration for owners of HMC.

Appendix 4

Richard Buxton Letter with offer responses in italics.

The writer is a Cambridge resident well familiar with the area in question so with an interest in this matter. However, we believe it may help the committee to write reflecting some professional background in the issue now before it.

We frequently come across these tree issues where insurers or their agents (such as Crawfords here) seemingly single-mindedly seek felling of trees as a quick and easy solution to alleged tree-root damage). In our experience these issues need looking at far more carefully. As the Courts recognise when we have sought injunctions to stop felling trees, that is an irrevocable step, presently here prevented by the TPOs in place.

Surprisingly, the application does not state who the owner of the trees is. It is redacted on the application form, but the Land Registry reveals it to be trustees known as Metro Property Unit Trust and BNP Paribas Depositary Services (Jersey) Limited. We are aware that there may be a complex history to this, but given the location and environmental circumstances, and indeed reference to a covenant, the Council should be in a position fully to illuminate the position. We suspect that in fact it may be somewhat more than simply the TPO authority.

The Council must also recognise that Crawfords are making this application apparently on their own (or their insurer principals') behalf. There is no indication that they have the permission of the owner of No 193 Sturton Street.

Overall, it is essential that there is transparency in the matter. What is the position of the respective owners of the trees and property allegedly affected? What do they actually want?

Anyone can make an application to carry out work to trees. One does not need to be the tree owner. If an application is made by persons with no legal interest in land on which the subject trees stand and if the application was approved, the applicant would then need to seek the permission of the landowner before works could lawfully commence.

As to the substance, we note the committee report states (p.215):

The subject trees are a significant asset. A preliminary assessment using CAVAT (Capital Asset Value for Amenity Trees) calculated their combined value to be in the region £200,000.

There are options available, not exceeding the above cost, that would allow the retention of the trees and officers would welcome the use of underpinning or root barriers by the tree owners and/or applicant to avoid the need for removals.

The courts have held that nuisance must be actionable in law, where it is causing, or there is an immediate risk of it causing actual damage. However when deciding what is necessary to prevent or abate a nuisance consideration should be given to steps other than tree work.

Then in Observations and Implications (p.218) the analysis starts to go wrong. ... superstructure repairs to be carried out with the estimated cost of £16,000. ... There are two alternatives to tree work, underpinning the property to allow for future changes in soil volume without additional damage to the building or the installation of a root barrier to restrict root growth in the vicinity of the property foundations. Both these solutions could have financial implications for Cambridge City Council and/or the property owners if permission for tree removal is not granted. The trees make a significant contribution to amenity, sufficient that consideration should be given to underwriting the cost of alternatives to removal. The cost of underpinning has been estimated at £120,000 and the cost of installing a root barrier has been quoted at £79,571.40 + VAT. CCC is not minded to underwrite the cost of underpinning or the full costs of installing a root barrier. ...

First, as a matter of fact, the Crawfords estimate for underpinning “over £80,000”. Where is the £120,000 figure from?

At the time of the application Crawfords stated that should consent not be granted partial underpinning of the property will be required to arrest the movement, should the planes remain, with cost rising over £80,000. However a later and more detailed submission set the superstructure repair reserve at £16,000, the quote to install a root barrier at £79,571.40 +VAT and an increased estimate to approximately £120,00 to effectively underpin. The increased costs being attributed to increased movement.

In any event this is similar to the stated costs of a root barrier. However, the Council does not appear to have taken any steps itself to ascertain whether either of these figures are correct.

This is correct, the applicant is required to provide the evidence and other supporting information to justify their proposal.

Also, if the Council paid it presumably could recover VAT.

But importantly, there is a complete disconnect in the officer's analysis as to the CAVAT value of the trees (stated as above to be c. £200,000) and the Council stating it is not minded to underwrite the costs of underpinning or a root barrier. It is irrational not to weigh one up against the other, and indeed for the Council to have considered the position with the owners of the land or its own insurers. Also, it is surely a matter for the committee not officers as to what the Council is “minded” to do.

When the application was received, officers sought confirmation as to whether or not the council would consider underwriting any costs associated with retaining the trees from the then leader. Whether or not the council would be minded to underwrite costs is not a planning committee decision but it is pertinent to the decision making process put before planning committee as is the potential claim for compensation and the amenity value of the trees. All of this information was included in the previous committee report to allow each to be weighed up against the other.

We also note that the alleged damage to 193 Sturton Street would only cost £16,000 to repair. The tree owner/insurers may turn out not to be fully responsible even for that. Surely contemplating the loss of trees valued at £200,000 is in context disproportionate?

Superstructure repairs are estimated at £16,000, double the cost estimated when the application was made. The applicant might seek to recover the difference. However, if the application is refused an engineering solution will be implemented to stabilise the property. It is the cost of the chosen solution that the applicant would most likely seek to recover.

Overall, this application is (at least) premature and as put forward not rational for the reason mentioned. Careful consideration must be given to exact costs or possible underpinning, root barriers, funding thereof, and all in the context of CAVAT and similar valuation.

The value attributed to trees using CAVAT is a very useful tool however the funds might not be available to underwrite the costs associated with keeping the high value (£200,000) assets irrespective of the differing values. Officers consider this point to be pertinent to the decision making process.

We have seen other correspondence which sets out factual matters in more detail and also clearly indicating the need to investigate carefully further. Our observations are mainly based on obvious difficulties in the report with other matters taken at face value.

We trust this will assist the committee's determination of the matter, which should be either to refuse the application or to defer it pending provision of further information.