



# **Policy and guidance on trees causing structural damage to Council assets.**

**2021**

**Housing and Property Service**

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## 1. Introduction

- 1.1. There is little doubt that trees enhance the enjoyment of our District, as well as providing support for wildlife. However, in the modern built-up environment, there is fierce competition for space. As the tree or trees grow, encroaching roots and overhanging branches can extend beyond the legal boundary into neighboring property, causing inconvenience, damage or even injury. When the tree roots enter a shrinkable, clay soil, they can take up sufficient moisture to cause the clay to dry and shrink. As a result, any property foundation built upon the clay may move or subside.
- 1.2. The Council has a dual responsibility, to protect trees in the interests of public amenity, but also to try and ensure that no individual suffers undue loss, distress or damage resulting from Council owned and managed trees.
- 1.3. This Policy and guidance only refer to Council owned and managed trees. The responsibility for the maintenance and management of Council owned and managed trees falls to Arboricultural Officers in the Countryside and Landscape Service.
- 1.4. This Policy and guidance do not include trees situated on private land or trees situated on the highway as part of the street scene.

## 2. Objectives

- 2.1. The Policy and guidance are intended to be a detailed procedural document of the stages involved, in the decision-making process between retaining or the removal of high amenity value trees.
- 2.2. The Policy and guidance will set out the process which will enable the Responsible Person to make an informed decision between the two outcomes - a decision that will be based on the recommendations contained in Reports and surveys, carried out by independent specialists.
- 2.3. The Policy and guidance sets out the procedure which will enable the Responsible Person to make an informed decision, on the future of high amenity value trees, which are causing severe structural damage as defined by BRE Digest 251 Category of Damage to low rise Council and privately-owned properties.
- 2.4. The process of identifying land ownership and the liabilities that follow from tree root activity that is causing structural property damage is shown as a flowchart in Appendix 1. Land Ownership and Liabilities and will be referred to throughout this policy.
- 2.5. The Policy and guidance will set out the procedure and the detail required following any property investigation that is undertaken on Council or privately-owned properties, suffering from structural damage. This is shown as a flowchart in Appendix 2 Property Subsidence Investigation Process and will be referred to throughout this policy.
- 2.6. The Policy and guidance will set out the roles and responsibilities of the Key Personnel within the Council who are involved in the decision-making process.

## 3. Land Ownership

- 3.1. Establishing the owner of the land on which the tree or trees are planted is essential in apportioning responsibilities and liabilities, for tree root activity that is the causation of property damage.

- 3.2. The Policy and guidance will include a flowchart shown in Appendix 1. Land Ownership and Liabilities which establishes the landowner and the roles and responsibilities that follow between the various Council Service areas;
- Countryside and Landscape Services.
  - Corporate Services Insurance.
  - Estates and Land.
  - Development Management.
  - Legal Services; and
  - Property Assets.
- 3.3. As a tree owner the Council or other landowners are likely to be liable for the subsidence and structural damage caused to its neighbours' buildings, e.g. tree root damage to foundations. Where this can be proven the Council or other landowners failing mediation, could be compelled through court action to 'abate the nuisance', which may include removal of the tree or trees, the reinstatement of property and payment of compensation.

## **4. Types of Property Damage**

- 4.1. As the tree or trees grow, if they are not managed or sufficiently maintained they have the potential to cause direct and indirect damage to property.
- 4.2. Direct damage is when tree roots or branches come into direct contact with foundations or property structural elements such as walls or roofs. This is often addressed by simply pruning the offending part and cutting it back far enough to eliminate the risk of it occurring.
- 4.3. Where direct damage occurs from Council owned and managed trees, the tree will be added to the Council's Basic Tree Maintenance regime undertaken by Countryside and Landscape Services.
- 4.4. Indirect damage is when the roots are below the level of the property's foundations and are taking water out of the soil. This will only be an issue in shrinkable clay soils. It should be noted that the British Geological Survey indicates that the majority of the Epping Forest District is underlain by London Clay. London Clay is a highly shrinkable deposit that is susceptible to drying, shrinkage and subsidence, particularly associated with trees and tree root activity. The clay particles are very small and the removal of the water results in the soil contracting and the soil level under the foundation reducing. This occurs and is exacerbated during long periods of drought conditions.
- 4.5. This movement occurs all the time in shrinkable soils but is normally evenly spread across the property's foundation. It is only when trees or vegetation roots affect one section of a building's foundations, to a greater extent than the others that it becomes a problem, resulting in damage to the building. If this level reduction is significant enough, then the building or part of the building over the affected area may drop resulting in cracks and in extreme conditions partial structural wall failures.

## **5. Property Subsidence Investigation**

- 5.1. Where it is suspected that trees and vegetation are causing severe structural damage the Council will carry out a Property Subsidence Investigation shown in Appendix 2.

The flowchart establishes the process and is consistent with Essex County Council's Subsidence Investigation Flowchart.

- 5.2. The Property Subsidence Investigation eliminates other causes of building movement such as settlement under load, underground water movement or leaking drains washing clay particles away, collapsing sinkholes and poor construction techniques. All these other causes of building movement can occur at any time of the year.
- 5.3. For the damage to be tree or vegetation root activity related the movement must be seasonal, so part of the building dropping in prolonged periods of drought, only to rise again in the wetter months of the year as the soil rehydrates. This seasonal movement can be determined by crack or level and vertical monitoring over a minimum 12-month period.
- 5.4. The level of detail required will vary depending on the property and the severity of structural damage. However, before undertaking a Key Evidence Review as a minimum the Property Subsidence Investigation will require the following property information.
  - Crack monitoring (over a minimum 12-month period).
    - BRE Digest 251 Categories 4 and 5.
  - Level and vertical monitoring (over a minimum 12-month period).
  - Soil type.
  - Desiccation level.
  - Movement type.
  - Foundation depth.
  - Root identification.
  - The species present.
  - Zone of influence.
  - Drought year information; and
  - Confirmation of land ownership.

## 6. Key Evidence Review and Tree Report

- 6.1. The extent of property information required to carry out a Key Evidence Review to support a subsidence-related tree work and decide on the most appropriate course of action will need to consider.
  - the age of the property and any extensions.
  - the ownership of the tree(s).
  - the nature of the problem and details of any historical defect monitoring.
  - the type and depth of the existing foundations.
  - the details of soil type and composition to a depth of approximately 3m.
  - the evidence of tree root presence below foundation level.
  - the evidence that any roots found belong to the suspected trees.
  - the measurement of subsoil shrinkage potential at and below foundation level.
  - a plan showing accurate locations of relevant site features including buildings, drains and trees on, or adjacent to, the site.

- a plan showing the borehole sampling locations; and
  - where relevant a heave assessment.
- 6.2. To support the Key Evidence, Review where it determines that the high value amenity trees on the balance of probabilities are the causation of property damage Property Assets will commission an independent Tree Report on the tree or trees.
  - 6.3. The main elements to consider when commissioning a Tree Report are the tree species, vitality, growth potential, water demand, distance to the buildings, land topography and previous tree management undertaken. The tree species is closely linked to the water demand, with oaks, willows and poplars having a much higher potential water demand and therefore tree root activity is more likely to impact on buildings.
  - 6.4. The Tree Report must establish if any of the trees are protected by a Tree Preservation Order (TPO) or have Conservation Area status. Generally, Council owned, and managed trees are not subject to a TPO, however if the tree has any protected status Development Management would need to be consulted. A formal notification would need to be submitted to [contacttrees@eppingforestdc.gov.uk](mailto:contacttrees@eppingforestdc.gov.uk) prior to the Evidence Presentation.
  - 6.5. The Tree Report must also include guidance from the Woodland Trust and the Ancient Tree Forum on protecting ancient, veteran and other trees of special interest, which are a nationally significant category of tree that are given notable planning status in the National Planning Policy Framework.
  - 6.6. The Tree Report should also provide an independent calculation for the amenity value of the tree or trees in question to enable a full cost-benefit analysis to be undertaken at the Evidence Presentation.

## 7. Arboricultural Report

- 7.1. Property Assets should in all circumstances commission an Arboriculture Association Registered Consultant to produce an independent arboriculturally Report on the causation of the property damage which should include options on remedial actions available and provide fully costed recommendations on the remedial actions.
- 7.2. The arboriculture Report should also include the amenity value of the tree which can be established through industry recognised valuation protocols. There are software programme's such as the Helliwell system and CAVAT-Capital Asset Value for Amenity Trees which are designed to be a strategic tool to aid decision-making in relation to tree stock or to individual trees, where the value of the tree needs to be expressed in monetary terms. It should be noted that the Helliwell system and CAVAT should only be used by arboriculturists who have received relevant training, and who have the relevant skills and experience.
- 7.3. This information will be required and included in the full cost benefit analysis made to the Director Housing and Property during the final stage of Evidence Presentation.
- 7.4. All the stages that need to be completed prior to the final Evidence Presentation stage are shown in Appendix 1 Land Ownership and Liabilities.

## 8. Evidence Presentation

- 8.1. Property Assets should consult with the arboriculture Officer - Countryside and Landscape Services to develop a mitigating landscaping plan for replacement tree planting where the removal of a tree or trees is the preferred option. The mitigating

landscaping plan should be fully costed with funding for the plan included in the structural repairs budget or in any insurance claim and based on a minimum of two-replacement trees for every tree removed.

- 8.2. The Council's arboriculture Officer - Countryside and Landscape Services should advise on the replacement tree species, size, maintenance, location and take future maintenance requirements into consideration.
- 8.3. The mitigating landscaping plan and the planting location will ideally be in the same area of any tree or trees removed.
- 8.4. At the Evidence Presentation the information that will be required to enable the Director Housing and Property to consider fully the future liabilities on Council assets should include.
  - a full cost benefit analysis on all the arboriculture Report recommendations.
  - a mitigating landscaping plan for replacement tree planting agreed with the Council's arboriculture Officer - Countryside and Landscape Services.
  - the Helliwell system or CAVAT Report with the value of the tree expressed in monetary terms.
  - any future liability for property damage caused by Council owned trees to Council or privately-owned properties.

## **9. Key Personnel**

### **9.1. Duty Holder – Chief Executive**

- 9.1.1. Overall day-to-day responsibility for health and safety matters at Epping Forest District Council and the implementation of this Policy and guidance.
- 9.1.2. Ensure that Responsible and Nominated Persons understand the aims and objectives of the Council's Policy and guidance.

### **9.2. Responsible Person – Chief Operating Officer**

- 9.2.1. Responsible for ensuring the objectives outlined within the Policy and guidance are understood and acted upon at all levels within the Organisation.
- 9.2.2. Ensure that planning, budgets, and resources are available to enable strategic and operational objectives to be accomplished, as far as reasonably practicable.
- 9.2.3. Ensure that all the Council's properties that are identified as suffering severe structural damage do not constitute an undue risk to the health, safety and welfare of the occupiers, visitors, or the public at large.
- 9.2.4. Ensure that adequate resources are allocated to the structural repairs budget for undertaking structural, level and monitoring, remedial structural Capital works and suitable and sufficient landscaping on and around properties where a tree or trees are removed. The resources shall include but are not limited to:
  - Financial budget.
  - Competent personnel.
  - Sufficient allocation of time for monitoring, maintenance etc.

### **9.3. Responsible Person – Director Housing and Property**

- 9.3.1. The Responsible Person will review all the information presented during the Evidence Presentation and consider the current and future liabilities on the Council's and privately-owned assets.
- 9.3.2. To decide based on the Evidence Presentation to either.
- Remove the tree or trees.
  - Keep the tree or trees.
    - Undertake tree management.
  - Undertake an engineering solution.
    - Root barrier.
    - Foundation strengthening.
  - Undertake full repair to the property.
  - Dispose of the property.
  - Demolish and redevelop the area.
- 9.3.3. Instruct Legal Services to serve Notice on private landowners whose tree or trees are causing damage to Council owned or managed property.

#### **9.4. Responsible Person – Head of Assets and Facilities**

- 9.4.1. The Responsible Person shall present the Evidence Presentation and provide advice on the recommendations contained in the.
- arboriculture Report.
  - Landscaping plan for replacement tree planting.
  - Helliwell system or CAVAT Report (Capital Asset Value for Amenity Trees); and
  - Property Subsidence Investigation.
- 9.4.2. Consult with Countryside and Landscape Services - arboriculture Officer and develop a mitigating landscaping plan for replacement tree planting and obtain consent for the works.
- 9.4.3. Undertake an appeal if consent for the removal of any high value tree or trees is refused, this may include broadening the mitigating landscape proposals or considering alternative recommendations contained in the arboriculture or CAVAT Reports.
- 9.4.4. Informally consult with Legal Services on the option to serve Notice on private landowners whose tree or trees are causing damage to Council owned or managed properties.
- 9.4.5. Appoint an appropriate Responsible Person to oversee, control and coordinate the structural monitoring of properties identified as suffering from structural damage.

#### **9.5. Responsible Person - Team Manager Property Assets**

- 9.5.1. The Responsible Person shall collate and prepare the information necessary for the Evidence Presentation which should include.
- arboriculture Report.
  - Landscaping plan for replacement tree planting.
  - Helliwell system or CAVAT Report (Capital Asset Value for Amenity Trees); and

- Property Subsidence Investigation.

9.5.2. Ensure that the Nominated persons are competent (training, knowledge, experience) to carry out the prescribed tasks.

## **9.6. Nominated Person – Housing Officer (Contracts)**

9.6.1. The Nominated Person is authorised and competent to identify and diagnose the causation of structural building damage.

9.6.2. To arrange, commission and carry out the required surveys to complete a Property Subsidence Investigation and evidence the elimination all the other causes of building movement such as.

- settlement under load,
- underground water movement or leaking drains washing clay particles away.
- collapsing sinkholes; and
- poor construction techniques.

9.6.3. To arrange and commission approved consultants to undertake.

- Crack monitoring (over a minimum 12-months).
- Level and vertical monitoring (over a minimum 12-months).
- Soil type.
- Desiccation level.
- Movement type.
- Foundation depth.
- Root identification.
- The species present.
- Zone of influence.
- A heave assessment where relevant.
- Drought year; and
- Confirmation of land ownership.

## **9.7. Nominated Person – Arboricultural Officer**

9.7.1. The Nominated Person is authorised and competent to advise on British Standards 5837: and.

- visual amenity of existing tree or trees.
  - Low – an inconsequential landscape feature.
  - Moderate – of some note within the immediate vicinity, but not significant in the wider context.
  - High – an item of high visual importance.
- replacement tree species and size.
- replacement tree maintenance.
  - watering.
  - stakes and ties.

- weed control.
- formative pruning.
- feeding.
- failure replacement warranties.
- landscaping.
- tree planting location; and
- future tree maintenance requirements.

9.7.2. To ensure ARB Approved Tree Surgeons are appointed to undertake any tree work.

## 10. Review and monitoring

- 10.1. The training and responsibilities of Key Personnel will be monitored by the Council through its management and appraisal processes.
- 10.2. A formal review of the Policy and guidance will be undertaken in consultation with the Cabinet annually.

## 11. Key Personnel and Emergency Contacts

- 11.1. The Council has appointed the following Key Personnel to ensure compliance with the Policy and guidance responsibilities:
- Duty Holder - Chief Executive
  - Responsible Person - Chief Operating Officer
  - Responsible Person - Director Housing and Property
  - Responsible Person - Head of Assets and Facilities
  - Responsible Person - Team Manager Property Assets
  - Nominated Person - Housing Officer (Contracts)
  - Nominated Person - Arboricultural Officer

- 11.2. On occasion emergencies may arise at properties that are suffering structural damage. If you become aware of a property that you believe has become a Dangerous Structure immediately report the details to the Council's Building Control Services Team who can be contacted on.

Building Control Services  
 Civic Offices, High Street, Epping CM16 4BZ  
 Phone: 01992 564000  
[www.eppingforestdc.gov.uk/housing](http://www.eppingforestdc.gov.uk/housing)

- 11.3. If an incident or emergency occurs to properties that are undergoing structural repairs outside of normal office hours immediately seek advice from Repairs Qualis Management, the Council's out of hours emergency service who can be contacted on.

Qualis Management  
 Oakwood Hill Industrial Estate, Loughton, Essex IG10 3TZ  
 Phone: 0333 230 3464 (24-hour contact number)  
 Email: [repairs@qualismanagement.co.uk](mailto:repairs@qualismanagement.co.uk)

- 11.4. If an incident or emergency occurs to properties that are undergoing structural repairs during normal office hours immediately seek advice from Property Assets who can be contacted on.

Property Assets Services Team  
Epping Forest District Council  
Civic Offices, High Street, Epping CM16 4BZ  
Phone: 01992 564166 extension 2727  
Email: [propertyassets@eppingforestdc.gov.uk](mailto:propertyassets@eppingforestdc.gov.uk)

- 11.5. For all other enquiries you can contact Epping Forest District Council on.

Epping Forest District Council  
Civic Offices, High Street, Epping CM16 4BZ  
Phone: 01992 564000  
[www.eppingforestdc.gov.uk/housing](http://www.eppingforestdc.gov.uk/housing)

#### Bibliography.

BRE Digest 251 Category of Damage to low rise dwellings.  
<https://www.brebookshop.com/details.jsp?id=139150>

The British Standards 5837:2005: <https://www.rbkc.gov.uk/idoxWAM/doc/Other-1592559.pdf?extension=.pdf&id=1592559&location=Volume2&contentType=application/pdf&pageCount=1>

**Decision Key.**

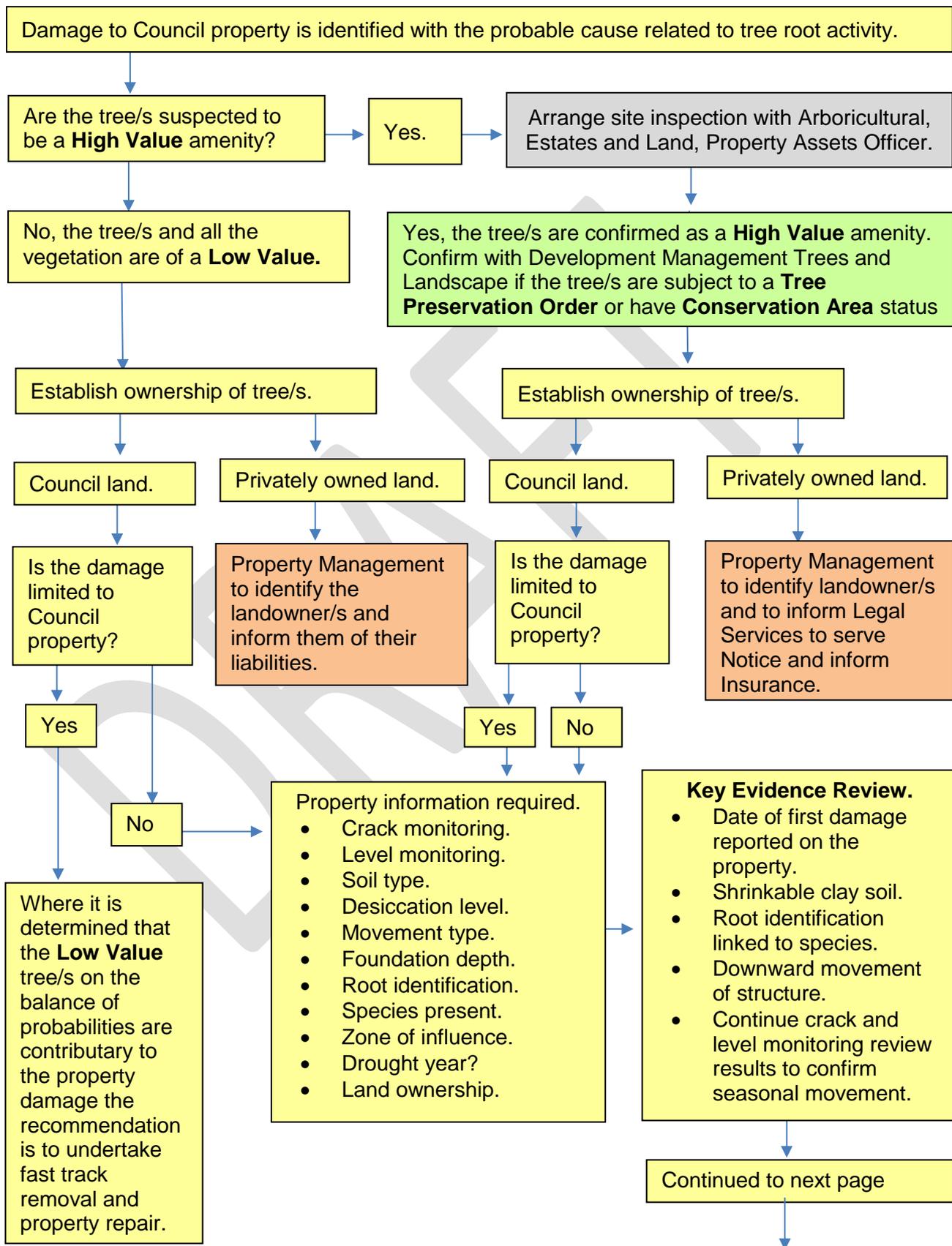
Countryside and Landscape

Property Assets

Estate and Land

Group

**APPENDIX 1: LAND OWNERSHIP AND LIABILITIES.**



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Where the Key Evidence Review determines that the **High Value** tree/s on the balance of probabilities are the causation of property damage obtain an independent **Tree Report** on them.

Obtain an independent **Arboricultural Opinion** on the Key Evidence Review and if necessary, undertake further site investigations and consultation with other key stakeholders.

If the tree/s are subject to a **Tree Preservation Order** or **Conservation Area** status submit a Formal Notice to Development Management Trees and Landscape to obtain consent for the works.

Commission an independent **Arboricultural Report** on causation, undertake a full industry recognised tree evaluation protocol on the tree/s and review all the recommendations.

- Remove tree/s.
- Severe crown reduction and future pruning.
- Root pruning and root barrier installation.
- Engineering solution.

Formal Appeal to the Planning Inspectorate if consent for the works are refused.

Consult with Countryside and Landscape Services – Arboricultural Officer and develop a mitigating landscaping plan for replacement tree planting and obtain consent for the works.

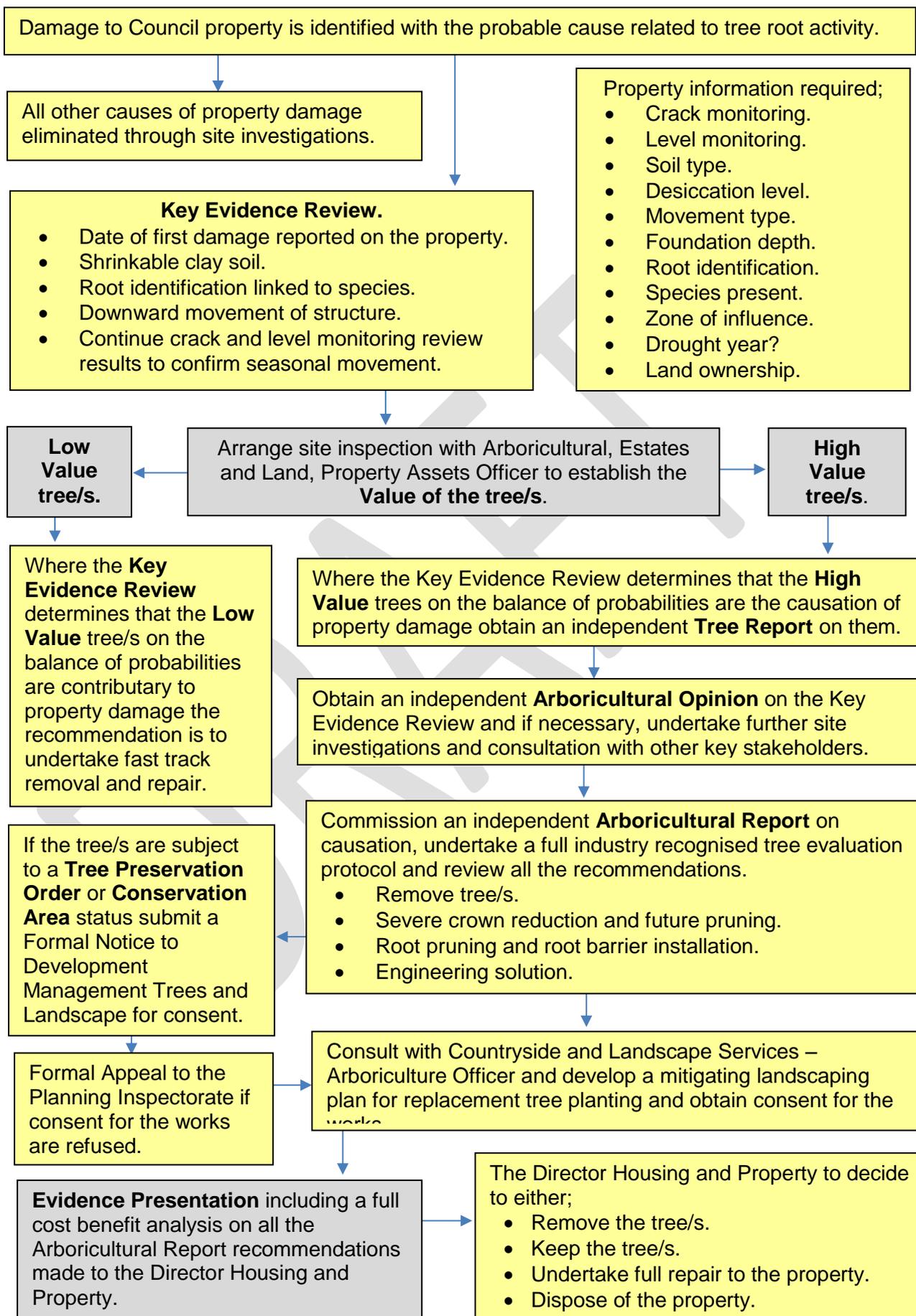
**Evidence Presentation** including a full cost benefit analysis on all the Arboricultural Report recommendations made to the Director Housing and Property.

The Director Housing and Property to decide to either;

- Remove the tree/s.
- Keep the tree/s.
- Undertake full repair to the property.
- Dispose of the property.
- Demolish and redevelop.

Instruct Legal Services to serve Notice on private landowners whose tree/s are causing damage to Council owned or managed property.

**APPENDIX 2: PROPERTY SUBSIDENCE INVESTIGATION PROCESS.**



**Version Control**

DRAFT

<b>Version no.</b>	<b>Date</b>	<b>Details of changes included in update</b>	<b>Author</b>
0.1	May 2021	Draft	Team Manager – Property Assets.

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