

Dear Councilors of Sheffield City Council, **Save Our Rustlings Trees** campaigners and all persons interested,

This document has been prepared and published (on 25th June, 2015) in support of the **Save Our Rustlings Trees (SORT)** campaign, as a hand-out, in preparation for debate at a meeting of the full Council of the city of Sheffield in the county of South Yorkshire, scheduled to take place on Wednesday 1st July, 2015.

Twelve street trees on Rustlings Road are scheduled to be felled. A petition with >8,000 signatures, against felling, in favour of tree retention, was presented to Sheffield City Council (SCC) on Monday 22nd June, 2015, at Sheffield Town Hall.

The intention of this document is to support the case for the safe, long-term retention of street trees and to help encourage informed debate, based on evidence and sound knowledge of current best practice. In particular, the following points of concern are raised:

- 1) **necessity for the recognition of the valuable contribution that street trees make**, by way of the range and magnitude of beneficial ecosystem services (and in some cases goods) they afford to communities and the built environment;
- 2) the importance of and **necessity to apply the precautionary principle**;
- 3) the importance of and **necessity for the Council to adopt a tree strategy as Council policy**, to help guide and inform policy and management decisions: thus helping ensure policy and persons responsible and most directly involved support, promote, and enhance responsible and sustainable management of the urban forest resource - in particular, street trees (with their medium and large crowns, they are a significant component of green infrastructure);
- 4) the **necessity to ensure that hazard and risk assessment and management is reasonable, balanced, proportionate** and takes in to account all the circumstances of each case: so as to comply with current arboricultural best practice; current guidance and recommendations of the Health and Safety Executive; the international forestry principles and criteria set out in *The UK Forestry Standard* and its *Guidelines*, and other international and national legislation and policy commitments;
- 5) the importance of and **necessity for competent arboriculturists** (defined by British Standards 5837 [2012] and 3998 [2010]);
- 6) current arboricultural best practice with regard to works in close proximity to street trees, and **solutions for the long-term safe retention of long-established trees**: at least to the safe, useful life expectancy of the species concerned (and possibly beyond);
- 7) the **necessity for an informed, strategic approach to the identification and assessment of hazards and risks by competent inspectors**: inspectors with education, training *and* experience relevant to the matter being addressed and an understanding of the requirements of the particular task.

Our Thoughts on Felling: a NEED for Appropriate Valuation and Tree Retention

*“Although concerns about public safety will always restrict the numbers of mature and overmature trees along roads and highways, **policies for routine removal of all large trees during the early phases of maturity and their replacement with smaller, ‘safer’ alternatives should be challenged.** The importance of mature and ancient trees in urban areas is undeniable and **local authorities responsible for their management must balance public safety against their responsibilities for protecting and enhancing the environment. Decisions should be based on reasonable and realistic risk assessments, with the initial presumption being for protection of the tree, rather than removal.**”*
(Britt, *et al.*, 2008, pp. 89-90)

*“As many impartial decisions are taken on public assets with regard to their **value, retention or replacement**, LAs [Local Authorities] **must** approach the retention or replacement of trees with the same open-minded approach.”*
(Britt, *et al.*, 2008, p. 230)

Local Authorities (LA's) have a **duty to have regard to the conservation of biodiversity** in exercising their functions, under **Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006** (Department for Environment, Food and Rural Affairs, 2007).

“Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”

The duty under the NERC Act also applies to all statutory undertakers (including those responsible for highways), and **the same duty is placed on Government and Ministers, by section 74 of the Countryside and Rights of Way Act 2000** (Department for Environment, Food and Rural Affairs, 2007, p. 6).

Street trees are a valuable asset to the city. They are a highly visible, significant component of green infrastructure and a significant component of the urban forest. The ecosystem services* they afford to the environment and its inhabitants amount to **millions of pounds** worth each year. Other cities, such as Edinburgh, Torbay, and London use *i-Tree* software to analyse data and assign a monetary value to these services (Sarajevs, 2011; United States Department of Agriculture (USDA) Forest Service; Davey; Arbor Day Foundation; Society of Municipal Arborists; International Society of Arboriculture; Casey Trees , n.d.).

In Sheffield, the value of ecosystem goods and services afforded by trees has not been assessed. **Trees with medium and large crowns, such as the trees on Rustlings Road, are of greatest benefit in terms of the provision of ecosystem goods and services.** Their broad crowns make a significant contribution to canopy cover. However, the majority of these are the very trees that *Amey* (the current PFI contractor) has **identified for felling during the first five years of their contract** (i.e. before 2018), as they often are identified as the cause of pavement “ridging” and the dislodgement of kerb stones.

* *“Ecosystem services can be thought of as **the link between ecosystems and human well-being**. They describe the processes by which natural ecosystems provide resources (used actively or passively) **that sustain and benefit people**.”*
(Forestry Commission, 2011, p. 9)

In 2000, the UN Convention on Biological Diversity adopted **the ecosystem approach**, described as:

*“...a strategy for the **integrated management** of land, water and living resources **that promotes conservation and sustainable use** in an equitable way’.” It “...has a broad scope that goes beyond ecosystems themselves **to encompass social, cultural and economic factors that are fully interdependent with biodiversity and ecosystem services**”
(Forestry Commission, 2011, p. 8)*

*“**Sound policy and management interventions** can often reverse ecosystem degradation and **enhance the contributions of ecosystems to human well-being...**”
(Alcamo, et al., 2003, p. 1).*

The Millennium Ecosystem Assessment (MA) has provided a conceptual and methodological approach that:

*“...should provide a suitable basis for governments, the private sector, and civil society to factor considerations of ecosystems and ecosystem services into their own planning and actions”
(Alcamo, et al., 2003, p. 1).*

*“**Better information cannot guarantee improved decisions, but it is a prerequisite for sound decision-making**”
(Alcamo, et al., 2003, p. 1).*

The felling of many trees with medium and large crowns will affect the shape, size and distribution of canopy cover and is highly likely to have serious, significant negative effects in terms of the magnitude and value of ecosystem services afforded by street trees to the built environment and its inhabitants, with negative impact on people's health (mental and physical) and well-being (See the references within the SORT petition). Any tree felling program is required, by international agreements, as well as by European and national legislation and policy commitments, to have regard for the benefits afforded by the provision of ecosystem goods and services, as **a material consideration**. Where it is not practicable to assess ecosystem goods and services, for instance due to inadequate resources, decision makers and policy makers are duty bound to **apply the precautionary principle**.

"The Precautionary Principle is one of the key elements for policy decisions concerning environmental protection and management. It is applied in the circumstances where there are reasonable grounds for concern that an activity is, or could, cause harm but where there is uncertainty about the probability of the risk and the degree of harm."

(Joint Nature Conservation Committee, 2007)

The Government has agreed to adopt and **apply the precautionary principle** in its agreement to Agenda 21 at the Earth Summit meeting at Rio, in 1992, which states:

"Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." (Principle 15)

A European Directive also requires use of the precautionary principle:

"Having regard to the Treaty establishing the European Community...

*...(1) Article 174 of the Treaty provides that Community policy on the environment is to contribute to, inter alia, the preservation, protection and improvement of the quality of the environment, the protection of human health and the prudent and **rational utilisation of natural resources and that it is to be based on the Precautionary principle.***

*Article 6 of the Treaty provides that environmental protection requirements are to be **integrated** into the definition of **Community policies and activities**, in particular with a view to promoting sustainable development."*

(European Parliament, Council of the European Union, 2001)

A range of documents detailing current arboricultural best practice guidance and recommendations also support this approach. For example (from the **National Tree Safety Group**: membership currently includes the Forestry Commission, Institute of Chartered Foresters [the *only* professional body in the UK specifically for forestry and arboriculture – to which Chartered Arboriculturists belong] and The Arboricultural Association, amongst many others):

*“The NTSG position statement argues that **it is reasonable to include societal value and benefit in the calculation of what is reasonable** where a landowner or manager is acting in the public interest.”*

(The National Tree Safety Group, 2011, p. 12)

Also, it is worth remembering that **professionals and experts are liable for the advice they give** (Mynors, 2002, p. 212) and that *“...**the duty of care** imposed on the surveyor or other professional is not to get it right every time, but **to exercise the care of a ‘reasonably skilled’ member of that profession**”* (Mynors, 2002, p. 214). This applies to all professionals, including Arboricultural Consultants & Health & Safety Inspectors. Therefore, if the acts or omissions of a professional are not in accordance with current best practice¹, and result in harm or damage, they can be sued (which is why they should have professional indemnity insurance) (Mynors, 2002).

It is our opinion that failures to apply the precautionary principle and act in accordance with best practice, with regard to the points addressed in this communication, could reasonably be considered as:

- a) damaging to public property (land), including highways (as roots decay and drains and sewers overflow due to increased run-off of rainfall), trees and the wider environment, and
- b) harmful to inhabitants of the urban environment (the health and well-being of people and wildlife); in particular (as a result of felling), due to the range and magnitude of negative impacts on ecosystem services afforded by medium and large crowned trees to the built environment and its inhabitants. Furthermore, there could be damage to private property as clay soils re-hydrate and swell, causing “heave” (Roberts, et al., 2006).

In our opinion, failure to address ALL points raised in this communication in an appropriate and adequate manner could be regarded as reckless and/or negligent.

*“**Good practice in policy making** comes from having access to **accurate information** on the elements that you want the policies to deal with.”*

(Britt, et al., 2008, p. 624)

*“...the majority of good practice tree management issues are directly or indirectly related to landscape **quality and amenity**. It is essential to have in place a **methodology for making transparent and consistent decisions in relationship to those values**.” (Britt, et al., 2008, p. 624)*

Sheffield City Council's “*City Profile Introduction*” (online) states that “*Sheffield has more trees per person than any other city in Europe*” (based on estimation). It should be remembered that this, presumably, takes account of the entire urban tree resource – the “urban forest”, including trees in >170 woodlands, 78 parks and 10 public gardens (Sheffield City Council, 2014).

*“**The term forest is used to describe land predominately covered in trees (defined as land under stands of trees with a canopy cover of at least 20%)***
(Forestry Commission, 2011, p. 4)

Street trees are a significant component of the urban forest. As such, SCC must be prepared to take steps to ensure that elected members, officers and contractors comply with **the principles and criteria of sustainable forest management** detailed within *The UK Forestry Standard (UKFS)* and its *Guidelines*.

*The UK Forestry Standard and its Guidelines “**apply...to all UK forest types and management systems, including the collective tree and woodland cover in urban areas.**”* (Forestry Commission, 2011, p. 4) They exist to implement forestry policy set by the international community. With reference to the series of *Guidelines*, the UKFS states: “*In assessing whether the Requirements have reasonably been met, **the overall balance of benefits or ecosystem services will be taken into account.***”
(Forestry Commission, 2011, p. 4)

*“**Sustainable forest management is ‘the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems’.** (MCPFE*, 1993, see Appendix 1)”*
(Forestry Commission, 2011, p. 7)

*A pan-European governmental process called the Ministerial Conference on the Protection of Forests in Europe (MCPFE), set up in 1990, now known as “FOREST EUROPE”.

In light of all the above, it is apparent that management of the urban forest in the 21st century requires a modern, arboricultural approach to policies and practices that affect trees; in particular, street trees. Indeed, to this end, the Office of the Deputy Prime Minister commissioned a lengthy, comprehensive report to: "*help shape central and local government policy on urban trees*" (Britt, *et al.*, 2008, p. 477) and: "*encourage the LAs [Local Authorities] to develop higher standards of management in order to deliver a more efficient and effective tree programme for their communities*" (Britt, *et al.*, 2008, p. 406): the **Trees in Towns II** report (TT2). One of the primary authors was the UK's leading authority on urban forest management, the Chartered Arboriculturist Dr Johnston MBE.

"The UK government has signed up to the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Århus Convention). Article 7 states:

*'Each Party shall make **appropriate practical and/or other provisions for the public to participate** during the preparation of plans and programmes relating to the environment, **within a transparent and fair framework, having provided the necessary information to the public.**'"*

(Department for Communities and Local Government, 2008, p. 11)

The TT2 report gave some key guidance which we feel has been ignored. We feel that if it had been followed, we would not be so alienated from the decision making process by both Sheffield City Council (SCC) and the PFI contractor Amey...

*"**Those LAs that have not got an existing tree strategy** and are not in the process of developing one, **need to make this an immediate priority...**"*

(Britt, *et al.*, 2008, p. 192)

*"**A comprehensive tree strategy is the starting point** for a modern, planned approach to tree management. That tree strategy must also be integrated and embedded into the LA's Local Plan and other relevant policies."*

(Britt, *et al.*, 2008, p. 400)

*"It is also important to have **a comprehensive tree strategy** across all areas of LA tree management activity or potential activity. This should include practical tree planting and maintenance, **community involvement**, risk management, pest and disease control, planning issues in relation to trees, and **treescape design**.*

***The strategy should guide all aspects of the LA's tree-related work.**" (Author's emphasis on the word **all**)*

(Britt, *et al.*, 2008, p. 544)

*“...the introduction of **Community Strategies** has already begun to focus attention on the **need for the Tree and Woodland Strategy to have policies that allow decision making to be transparent and consistent.**”*

(Britt, et al., 2008, p. 626)

The *Trees in Towns II* report makes ten “Key Recommendations” to those responsible for commissioning and draughting a tree strategy. They are listed here, in their entirety:

- 1) *The tree strategy **should be based on a good knowledge** of the existing urban forest and the conditions in which it grows.*
- 2) *Try to **ensure that the process** of strategy preparation **has political and community support.***
- 3) *The strategy should be **linked** to other aspects of the urban environment and other relevant strategies.*
- 4) *The strategy should **cover all aspects** of the LA’s tree programme and the urban forest, including both public and privately owned trees and woodlands.*
- 5) ***Ensure widespread and effective consultation** on the draft strategy document.*
- 6) *The strategy document should be **written in plain English** and any technical terms should be explained.*
- 7) *The strategy should not just include policies towards trees but also an **action plan to ensure implementation.***
- 8) *The action plan should include SMART targets, preferably costed.*
- 9) ***The strategy should be adopted as LA policy.***
- 10) ***Ensure regular monitoring and review of the strategy.***

(Britt, et al., 2008, p. 543)

Further guidance can be found within the report, and in British Standard 8545:2014 *Trees: from nursery to independence in the landscape – Recommendations*.

*“Tree strategies seek to demonstrate good value by including, **as far as possible**, data on the **estimated economic value** of and return on investment from trees included in a strategy, **with particular reference to ecosystem services and associated direct and indirect benefits.**”*

(The British Standards Institution, 2014, p. 27)

There is a current commitment by SCC, within “*Sheffield’s Great Outdoors: Green and Open Space Strategy 2010-2030*” policy document, to produce a “*Trees & Woodland Strategy*” (Sheffield City Council: Parks and Countryside, 2010, p. 15).

We request that the current Cabinet Member for Environment and Transport (at the time of writing, this is Cllr Fox) **put a stop on tree planting and on all tree felling** operations that do not include works to trees that represent an **immediate and reasonably foreseeable danger of serious harm or damage in the near future. We request that these stoppages remain in place until a "Tree Strategy" has been commissioned, draughted** in accordance with current arboricultural best practice advice, guidance and recommendations, as recommended in a range of best practice documents, not least of all the *Trees in Towns II* report (Britt, *et al.*, 2008; The National Tree Safety Group, 2011; Trees and Design Action Group, 2012; The British Standards Institution, 2014), and has been **completed, adopted as Council policy, and is ready for implementation.**

*"Immediate risk of serious harm is a **risk of such immediacy and consequence that urgent action is required.**"* (The National Tree Safety Group, 2011, p. 52)

We believe this is would represent a reasonable and prudent approach to tree management; one that accords with the principles and criteria of responsible and sustainable urban forest management; the precautionary principle; The National Tree Safety Group (NTSG) guidance, and current arboricultural best practice. **To date, SCC has failed to adopt a tree strategy as Council policy.**

It is worth remembering the following advice:

*"In many respects, the existence of a relevant strategy document is **the most significant indicator** of a planned approach to management..."*
(Britt, *et al.*, 2008, p. 158)

*..."Even the existence of a specific tree strategy does not always imply that this is an appropriate document to drive the LA's tree programme. How the strategy was developed and what **detailed policies and plans** it contains will determine this."*
(Britt, *et al.*, 2008, p. 192)

*"Any increase in funding for the tree programme has to be viewed in the context of its **contribution to a range of service areas.** This not only **requires a strategic approach** to budgeting and planning, **it also requires recognition that the urban forest has a key contribution to make in achieving a range of strategic policy objectives**, for example, in Community Strategic Guidelines (CSG) and neighbourhood and city agendas."*
(Britt, *et al.*, 2008, p. 400)

Our Thoughts on Hazard and Risk Management

*“People enjoy what they perceive to be “natural” or “unmanaged” environments and **value** trees that have received minimal or no intervention. **People are prepared to accept a degree of risk because of the value of the trees**, and the pleasure they derive from visiting or participating in leisure activities in treed environments. **Therefore, it is acceptable that tree management does not seek to eliminate all risk of minor and easily-healed injuries.**” “...However, it may on occasions be unavoidable that tree management exposes people to the **very low risk of serious injury or even death.**”*

(The National Tree Safety Group, 2011, p. 81)

*“**Eliminating trees to remove all risk is undesirable and disproportionate in the light of all the wide range of benefits they provide.**”*

(The National Tree Safety Group, 2011, p. 56)

“This chapter outlines **the HSE’s decision-making framework**, known as the **tolerability of risk (ToR) framework**. It describes three levels: whether a risk is unacceptable, tolerable or broadly acceptable. **There is an expectation that:**

- both **the level of individual risks and the societal concerns** engendered by the activity or process **must be taken into account** when deciding whether a risk is unacceptable, tolerable or broadly acceptable
- a **suitable and sufficient** risk assessment must be undertaken to determine the measures needed to ensure that risks from the hazard are **adequately controlled**
- there is a **need to guard against disproportionate activity to control risk that provides diminishing returns on investment in risk reduction.**”

(The National Tree Safety Group, 2011, p. 20)

*“...the ‘tolerable region’ is where risks are managed as low as **reasonably practicable** (**ALARP**).”* (The National Tree Safety Group, 2011, p. 21)

*“Tree management or the lack of it should not expose people to **significant likelihood** of death, permanent disability or life-threatening injuries. Accidents are on occasions unavoidable. **Such risk is tolerable** only in the following conditions:*

- *the **likelihood** is extremely low*
- *the **hazards are clear** to users*
- *there are **obvious benefits***
- *further **reducing the risks would remove the benefits***
- ***there are no reasonably practicable ways to manage the risks.**”*

(The National Tree Safety Group, 2011, p. 26)

*“With inadequate understanding... unless the risk of harm arising from a hazard is **properly** taken account of, **management can be seriously misinformed, potentially leading to costly and unnecessary intervention.**”*

(The National Tree Safety Group, 2011, p. 44)

*“Very simply, a hazard is something that can cause harm...” “Risk is characterised by reference to potential events and consequences, or a combination of the two. It is often **expressed as a combination of an event’s consequences and the likelihood of it occurring.** In this case, a potential consequence is death or serious injury. **The important part of the assessment is the likelihood of either occurring.**”*

(The National Tree Safety Group, 2011, p. 20)

Amey have claimed that one of the primary reasons for felling is “ridging” of the pavement: a phenomenon caused as a result of soil displacement as tree roots thicken during growth. It is our understanding that both SCC and Amey are of the opinion that, “ridging” of the pavement represents a hazard with an unmanageable and intolerable level of risk to the public: one likely to result in reasonably foreseeable, serious harm in the near future, followed by litigation.

To date, the only reference to any “evidence” – and we use that term very loosely - to support the opinion of SCC and Amey has been that published in a column in Sheffield’s *The Star* newspaper. The publication claims that: “A *Streets Ahead* Spokesman said **three complaints had been made in two years**” (*Streets Ahead*: the £2bn highways maintenance project that started in August 2012) (Beardmore, 2015b). A little further on in the column, the same spokesman is reported to have stated:

“...Included in these is someone who fractured a bone after tripping on the pavement near a tree we have noticed to be removed and a broken wrist, again attributed to the uneven pavements.”

(Beardmore, 2015b, p. 4)

It is our opinion that “ridging” of the pavement does not represent a hazard with an unmanageable and intolerable level of risk to the public, and that felling on this basis represents an unreasonable, unbalanced, disproportionate response that fails to take in to account all the circumstances and does not accord with current arboricultural best practice; current guidance and recommendations of the Health and Safety Executive, or the international forestry principles and criteria set out in *The UK Forestry Standard* and its *Guidelines*. Furthermore, crucially, it represents failure to apply the precautionary principle, as required to comply with European legislation and International policy commitments: see page 4, above.

We are concerned that decisions with regard to current policy, management and practice are not informed by the results of any current, recognized, appropriate, widely accepted method/s of hazard and risk assessment and analysis. *All* our requests for information with regard to these matters – particularly requests for evidence and evidence of a strategic approach - have been ignored. It is apparent that neither SCC or Amey have adopted a strategy as policy to address these matters and guide and inform policy and decisions. It is worth taking a moment to put all this in context and consider a reasonable approach to hazard and risk management.

Common law places a *common duty of care* on those responsible for the maintenance of highways (Mynors, 2002). The duty of care is a duty not to injure your neighbour (persons closely and reasonably likely to be directly affected by your acts or omissions²). It requires that you must “take **reasonable care** to avoid acts or omissions which you can **reasonably foresee** would be **likely** to injure your neighbour”². You must do that required to ensure that your neighbour is **reasonably safe**³. **The extent or level of care reasonable is dependent on all the circumstances of the case** (Mynors, 2002).

NTSG Guidance:

“...seeks to put forward a credible and defensible approach to tree risk management.”

(The National Tree Safety Group, 2011, p. 12)

*“The pressures on tree owners to follow a risk-averse approach have never been greater. **Publishing a tree strategy which clearly indicates how these management decisions are taken and by whom allows a local authority to temper a risk-averse outlook.** As the House of Lords Select Committee on Economics has put it:*

‘...the most important thing government can do is to ensure that its own policy decisions are soundly based on available evidence and not unduly influenced by transitory or exaggerated opinions, whether formed by the media or vested interests.’ ”

(The National Tree Safety Group, 2011, p. 25)

It is our opinion that **current** best practice advice has not been followed, by SCC or Amey, as no evidence has been provided that it has, even though such has been requested, repeatedly.

*“In its position statement, the NTSG argues **that it is reasonable that sufficiently large organisations that own or manage trees develop a management strategy** (in line with practice in other sectors). This strategy may strike **a balance between risks present and benefits accrued**. **The balance should be based on a risk assessment involving a risk/benefit trade-off between safety and other goals**, which should be spelled out in the strategy. Organisations that publish and maintain a **tree strategy** or management plan, part of which includes information on their risk management plan for the trees they own, are **much better placed to demonstrate they have fulfilled their duty of care.**”*
(The National Tree Safety Group, 2011, pp. 26-27)

*“**Non-commercial trees frequently have social and environmental value as well, and are important to human health and wellbeing. The NTSG’s position is that, wherever possible, the presumption should be that such trees be retained** and allowed to complete their life cycle with minimal management interventions. **Such a reasonable strategy, articulating the benefits of trees, should, in the view of the NTSG, carry as much weight in protecting the tree owner against litigation following an incident as any factory’s reasonable risk management policy.**”*
(The National Tree Safety Group, 2011, p. 27)

In light of the content of this communication, it is our opinion that trees that are causing damage to highways and public property, but not causing damage that represents an **immediate and reasonably foreseeable danger of serious harm or damage in the near future**, must be retained, as risks associated with any such damage are tolerable (The National Tree Safety Group, 2011) and felling on health and safety grounds (Beardmore, 2015b) cannot be reasonably justified.

If SCC or Amey lack the finances or expertise to commission and implement appropriate strategies, policies and specifications, or lack other necessary resources to do so, they have a **duty to act in accordance with the precautionary principle. We believe that doing so would represent a reasonable, balanced and proportionate approach to risk** that is in accordance with current best practice, and national and international policy commitments and legislation.

Even if there is risk of serious harm in the near future,

*“**Risk of serious harm in the near future is non-immediate and can be reasonably managed at an acceptable level by a planned, cost-effective response.**”*
(The National Tree Safety Group, 2011, p. 52)

“Good tree safety management does not seek to eliminate risk, but to reduce it to a reasonable level.

(The National Tree Safety Group, 2011, p. 80)

We believe that it would be prudent for both SCC and Amey to also keep in mind the following advice, when assessing risks and considering risk management options:

“How many incidents a year do there have to be before a risk moves from tolerable to unacceptable?” “...based on its experience, the HSE has proposed guidelines for where these thresholds lie.”

(The National Tree Safety Group, 2011, p. 22)

“...the HSE has identified that an individual risk of death of one in one million per year for both workers and the public corresponds to a very low level of risk, and this should be used as a guideline for the threshold between the broadly acceptable and tolerable regions. It points out that this level of risk is extremely small when compared with the general background level of risk which people face and engage with voluntarily.”

(The National Tree Safety Group, 2011, p. 22)

“Even if all the advice and guidance contained in this document is followed, there will always be a residual risk.” “... Owners are advised to have insurance appropriate to their circumstances and to ensure that anyone who advises them, or does work to trees, is also appropriately and adequately insured.”

(The National Tree Safety Group, 2011, p. 56)

“In some situations, people exposed to risks from trees are expected to make reasonable decisions about their own interaction with trees, particularly during extreme weather.”

(The National Tree Safety Group, 2011, p. 80)

Our thoughts on Highways Engineering Specifications

Amey – the PFI contractor responsible for the £2 billion contract for highways maintenance - has also justified felling on the basis that kerb stones are being dislodged. Both SCC and Amey have claimed that felling is a last resort, only selected as an option when no other solutions are available.

We have noticed that sensitive, engineering solutions to both pavement irregularities (i.e. any “ridging” that actually does represent an “**abrupt level difference in footway or kerb exceeding 20mm**” [Roads Liaison Group, 2013, p. 284]) and kerbing defects (kerbing dislodged [$\geq 50\text{mm}$ horizontally], rocking [$\geq 15\text{mm}$ vertically] or missing [Roads Liaison Group, 2013, p. 282]) are available for the safe, long-term retention of long established highway trees that are perceived to be associated with such damage (Roberts, et al., 2006; Patch & Holding, 2007; Stockholm Stad, 2009; Trees and Design Action Group, 2014, p. 112; Stockholm Stad, 2014). In light of this, we have repeatedly requested that new sensitive, flexible highways engineering specifications be draughted, with the cooperation of a **competent arboriculturist**, as defined by British Standard 5837 (2012).

“3.3 arboriculturist

*person who has, through **relevant education, training and experience**, gained expertise in the field of **trees in relation to construction***

3.4 competent person

*person who **has training and experience relevant** to the matter being addressed **and an understanding of the requirements of the particular task being approached***

*NOTE A competent person is expected to be able to advise on the **best** means by which the recommendations of this British Standard may be implemented.”*

(The British Standards Institution, 2012, p. 3)

Furthermore, to help ensure that the arboriculturist/s selected for the task fit the above definitions, we have advised that they should have the status of **Chartered Arboriculturist** (Chartered by the Institute of Chartered Foresters – the only *professional* body for arboriculture) or **Registered Arboricultural Consultant** (Registered with the Arboricultural Association – a trade association). We have also advised that the competent arboriculturists selected should not stand to benefit from subsequent works in any way, other than by remuneration for consultancy, so as to minimise the likelihood of conflict of interests/corruption. **We consider our advice to be prudent, reasonable, practicable, and in accordance with current best practice.**

To date, there is no evidence to suggest that *Amey* or SCC have more than one highways engineering specification for pavements and kerbs – the standard specification/s they use for all streets, regardless of whether trees are present or not!

During the “street-walk” (on May 27th 2015) – the name given to the on-site “*notification meeting*” between campaigners and representatives from *Amey*, **Darren Butt - Account Director and Operations Manager for Amey** – stated that the works were necessary to meet contractual agreements; that it was not up to him to change specifications in order to be more sympathetic to trees, and that his job – *Amey’s* job - is to reinstate the kerb line. These comments indicate that the proposed works are necessary to comply with current highways engineering specifications.

Amey’s **Jeremy Willis - Operations Manager for Grounds and Arboriculture** - is also reported to have said:

“The Highway has to meet Highways standards according to the Highways Act and so for us to get them up to standard, there are trees causing that damage that need to be removed.”

“There is a reason there. We can’t not do anything about it – we have a legal responsibility.”

(Beardmore, 2015a, p. 9)

Actually, *Amey* and SCC have a number of legal responsibilities, as outlined previously in this communication. It is our opinion that **all responsibilities should be recognised and accommodated**, preferably within a comprehensive *Tree Strategy* document – adopted as Council policy – to guide and inform decisions. Furthermore, It should be noted that:

*“In England, since 2008, **there are no statutory indicators for the condition of footways.**”*

(Roads Liaison Group, 2013, p. 146)

“...the term ‘footway’ is used for segregated surfaced facilities used by pedestrians”.

(Roads Liaison Group, 2013, p. 34)

The **Highways Act (1980)** outlines duties, but **does not set standards** for highway engineering or maintenance specifications.

<http://www.legislation.gov.uk/ukpga/1980/66/contents>

We are not requesting that *Amey* does not fulfil its statutory duties and contractual obligations. **We are requesting that the acts and omissions of their professionals, and those of Council Cabinet members and all Council employees, are such that they are in accordance with the legal requirement to exercise the care expected of ‘reasonably skilled’ members of their respective professions** (Mynors, 2002). Furthermore, we are not persuaded that all pavement ridding represents an “**abrupt level difference**”, as any difference in level is usually gradual; i.e. not a step, as you would get if a paving slab or cobble was pushed out of alignment.

On 8th of June, a meeting took place between the Save Our Rustlings Trees campaigners and **Cllr Terry Fox (Cabinet Member for Environment and Transport)**. Prior to the meeting, in an e-mail to one of our lead campaigners, dated 4th June 2015, with reference to the forthcoming meeting (this meeting), Cllr Fox stated:

*“I have to make it clear that to change the decisions **we need real, viable and feasible solutions**, I say this because I feel I must manage every bodies expectations.”*

At the meeting, we requested that independent, **competent** arboricultural consultants be commissioned to present sensitive, flexible highways engineering solutions for pavements and kerbs that would permit the safe retention of existing highway trees, thereby preserving the range of valuable ecosystem services they afford to the built environment and its inhabitants (including us!). **Cllr Fox made it clear that he was not prepared to hire consultants** when SCC and *Amey* have their own arboriculturists and highways engineers.

The same day, following a *Freedom of Information* request by *BBC Look North*, news broke that, over the last three years, SCC has spent **>£190,000**, in an attempt to persuade HS2 Ltd to build the proposed station for its high speed rail network closer to the centre of the city, rather than at Meadowhall shopping centre, near the M1. The cost included **£6,000** spent on a “**Business breakfast consultation event**”, arranged by a PR firm.

<http://www.bbc.co.uk/news/uk-england-south-yorkshire-33027791>

On BBC Radio Sheffield’s *Toby Foster Breakfast Show* (on 8/6/2015), the **Cllr Leigh Bramall** (Deputy Leader of the Council and Cabinet Member for Business, Skills & Development) justified the aforementioned expenses by saying the choice of location “**has the potential to change the face of the city**”; that they needed the “**best possible people to advise**”; that “**decisions to be made need to be made on evidence and facts**” and that it is a “**once in a lifetime opportunity**”, the “**implications are massive**”.

<http://www.bbc.co.uk/programmes/p02snqr9#auto>

All the same reasons used to justify the spend on consultancy to make the case for an alternative location for the proposed HS2 station can be applied to justify the expenses involved with **necessary commissioning of competent chartered or registered arboricultural consultants** to ensure the responsible and sustainable management of **Sheffield's street trees: a significant component of the urban forest and green infrastructure.**

Policies and decisions that affect the urban forest, particularly its street trees, have significant effects of the health and well-being of its inhabitants, particularly the most vulnerable in society, with the elderly being particularly susceptible to heart and breathing problems associated with increased airborne particulate matter as a result of felling (Tiway, *et al.*, 2009).

There was a "closed" **Council meeting on 10th June 2015**, between Councillors representing the interests of campaigners - Cllr Roger Davison and Cllr Shaffaq Mohammed - and selected interested persons:

Cllr Terry Fox;

Cllr Tony Downing;

Cllr Clifford Woodcraft;

Cllr Niki Bond;

Simon Green (SCC Executive Director of Place Management Team);

David Wain (SCC Environmental Technical Officer);

Steve Robinson (SCC Head of Highway Maintenance) and

Anita Dell (SCC/Amey Communications Officer).

At this meeting, Cllr Fox suggested that campaigners find and commission their own competent independent consultants to produce the sensitive, flexible highways engineering specifications that they - we - believe to be practicable. **The implication was that campaigners should pay costs out of their own pockets.**

In our opinion, it is wholly unacceptable and inappropriate - especially without any offer of guidance, recommendations, advice, or cooperation - for SCC to suggest or request that citizens find and fund their own consultants to ensure that the Council's green infrastructure is managed in a responsible and sustainable manner, in compliance with current best practice, national and international policies, commitments and legislation.

Many citizens of Sheffield lack the time, money or opportunity to launch campaigns to encourage the adoption of sound policies, specifications and practices for the responsible and sustainable management of the urban forest resource.

“...over 30% of Sheffield’s population live in areas that fall within 20% most deprived in the country...”

(Sheffield City Council: Development and Regeneration Services, 2014, pp. 1-2).

Cabinet members and other councillors should remember that **Amey are employed to do such work and to make such commissions as necessary to ensure that the acts and omissions of their professionals are such that they are in accordance with the legal requirement to exercise the care expected of ‘reasonably skilled’ members of their respective professions.** Also, it should be remembered that *Amey* stand to benefit financially from any such addition to their body of knowledge (BoK), as it will help them act in a responsible and sustainable manner, thereby increasing their green credentials, helping to secure future contracts. It should be remembered that *Amey* is a massive business and does similar work in other large cities, including our second largest city – Birmingham.

According to Cllr Davison’s notes from the meeting on 10th June 2015, with reference to comments made at the meeting, he noted:

“They argued that putting further covering of pathways would damage the roots as it wouldn’t be permeable”.

Actually, **permeable surfacing could be used** (Trees and Design Action Group, 2014; The British Standards Institution, 2012). However, **impermeable surfacing** close to the primary stem (trunk) of medium and large crowned trees is **not likely to cause damage** that would have negative impact on the safe, long-term retention of such trees, **provided the following criteria are met:**

- 1) engineering and works specifications are appropriate and adequate;
- 2) such specifications are in accordance with current arboricultural best practice;
- 3) adequate on-site supervision by a competent arboriculturist is provided at all times, for the duration of all such works;
- 4) compliance with all specifications and current arboricultural best practice is enforced.

Engineering and works specifications need to ensure that accidental damage to the roots of trees that could/are to be retained is minimised, so far as is reasonably practicable, to ensure that retained trees remain healthy in the long term, by acting in accordance with current arboricultural best practice when doing any works near trees (Patch & Holding, 2007; National Joint Utilities Group, 2007b; National Joint Utilities Group, 2007a; The British Standards Institution, 2010; The British Standards Institution, 2012; Trees and Design Action Group, 2014).

Note: The *Type 1 Roadstone* recommended by Patch & Holding, (2007) must be *Type 1 Roadstone* **without fines**, or *MoT No.2* **without fines**. Also, please note that there are now alternatives to *Geogrid*. In any case, the openings in *Geogrid* are too small to be fit for purpose – **Geo-web** or **Geo-block** are more appropriate (other products exist).

In BS 5837 (2012), the root area within “*the area equivalent to a circle with a radius 12 times the stem diameter*”^{*} is termed the Root Protection Area (RPA). Fine feeder roots occur far beyond the stem, and those **under the pavement**, many meters from the stem, are not likely to account for more than 20% of the RPA.

20% is the threshold beyond which **significant damage** is likely to be caused. Provided the aforementioned criteria are met with regard to works close to the primary stem (trunk) of trees, around major “structural” roots, there is not reasonable to suspect that more than 20% of the RPA will be affected in a negative manner.

^{*}This is Diameter at Breast Height (DBH), measured 1.5m from the ground, perpendicular to the axis of the stem. On sloping ground, DBH is measured on the up-slope side of the tree (The British Standards Institution, 2012).

It should be remembered that there are a range of alternative permeable surfacing solutions (The British Standards Institution, 2012; Trees and Design Action Group, 2014) and that not all hard surfacing is tarmac. Alternative surfacing solutions can sustain heavy, frequent and consistent flows of pedestrian traffic on a daily basis!

*“Trees make places work, look and feel better
As well as playing a role in climate proofing our
neighbourhoods and supporting human health
and environmental well-being, **trees can also
help to create conditions for economic success.***

*This guide takes a 21st century approach to
urban trees, **providing decisions makers with
the principles and references they need to fully
realise this potential.**”*

(Trees and Design Action Group, 2012, p. 2)

In a letter to our lead campaigner, dated 23rd March 2015, **David Wain, leader of SCC’s Environmental Maintenance Technical Team** (within the Highways Maintenance Division), stated:

*“ <http://www.tdag.org.uk> is a useful resource for learning more about sustainable and sensible tree design and planting selection, and **one of the arboriculturalists working on the Sheffield Streets Ahead project was actually involved in authoring much of the content, so we do agree strongly with the principles outlined within the documentation.**”*

The Trees and Design Action Group (TDAG) have presented 12 *Plan principles*.

*“The starting point for success is understanding where you are and where you want to go. The Plan principles will help you work with others, including councillors, planners and key officers leading on sustainability, housing, highways, green space and trees, together with community volunteers, businesses and residents, to establish these **solid foundations for your tree strategy.**”*
(Trees and Design Action Group, 2012, p. 8)

The second of these principles is:

“Have a Comprehensive Tree Strategy”

“Objective

Produce, adopt and implement a collaborative strategy for protecting, developing and managing a thriving, benefit-generating urban forest **which is in tune with local needs and aspirations.**

“Benefits

- *Provides the most effective mechanism to achieve a good general tree coverage.*
- *Helps **ensure that evidence-based and consensus-driven decisions** are made, thereby limiting the scope for ad-hoc resource allocation which might favour the most vocal and articulate.*
- ***Creates accountability*** within defined timeframes.
- *Provides **a basis for shaping robust planning policy** in relation to trees.”*

(Trees and Design Action Group, 2012, p. 15)

All possibilities should be considered for the safe, long-term retention of trees with medium and large crowns. By long-term, we mean at least the safe, useful life expectancy of the species concerned, and possibly beyond. Solutions could include other approaches, such as making a road one way, broadening the roadside and narrowing the carriageway (either locally, or along its full length), using bollards, signage, or the installation of handrails; the installation of pedestrian crossings, and/or line painting, to prevent vehicles stopping close to trees.

Our Thoughts on The Current Approach to Trees That Are Dead, Diseased, Damaged or Likely To Cause Danger

In an e-mail to the leader of the SORT campaign, dated 15 May 2015, from **Anita Dell** (SCC Communications Officer: Communications and Performance Team), SCC stated:

“I would like to reassure you that the Streets Ahead team do not remove healthy trees across the city and each tree that has to be removed is either dead, dying, diseased, damaging the pavements or roads or causes an obstruction for those with disabilities, wheelchair users or people with prams.”

*“...some are affected by diseases such as *Armillaria mellea* as well as safety issues such as crown dieback and decay.”*

In an e-mail to one of the SORT campaigners (reference number 101001969806), dated 1st May 2015, Streets Ahead Customer Services stated:

*“We have checked our records... The remaining tree opposite Ranby Road is displaying symptoms consistent with being infected by *Armillaria sp* (Honey Fungus). As a result the tree will gradually succumb to the infection, weaken and thus pose a safety risk long term.”*

Initially, it was claimed that only one of the trees on Rustlings Road was scheduled for felling due to disease. *Armillaria mellea* is one of the most serious plant pathogens and arguably the most damaging of the “honey fungi”. However, we have had a look at the Lime tree on Rustlings Rd, opposite Ranby Rd, and it certainly cannot be described as dead, dying, diseased, or dangerous. We could not find any symptom of ill health, pathogenic infection, pest infestation, die-back or structural weakness. No toadstools have been spotted and the characteristic white mycelia that usually indicate infection by *A.mellea* (usually present beneath dead bark) appear to be absent.

It is worth remembering that risk of harm or damage should be ***imminent***, or at least reasonably foreseeable in the ***near*** future to justify intervention such as felling (The National Tree Safety Group, 2011).

Furthermore, unless a tree shows signs of continued, severe decline over several growing seasons, without any evidence of resistance to infection, compensation for loss, or recovery, in our opinion, it would be unreasonable to claim a tree is dying (Lonsdale, 1999).

In many cases, trees with die-back or decay can be retained and managed. The presence of decay does not necessarily indicate structural weakness, terminal decline, death, strong likelihood of structural failure, or reasonably foreseeable and likely structural failure in the near future (Mattheck & Breloer, 1994; The National Tree Safety Group, 2011). Arboricultural management options are available for the safe retention of valuable trees which show signs of decay (Lonsdale, 1999).

“WHAT IS A DEFECT?”

*The term “defect” can be misleading, as the significance of structural deformities in trees (variations from a perceived norm) can be extremely variable. Indeed, **deformities can be a response to internal hollowing or decay, compensating for loss of wood strength and providing mechanical advantage, allowing the tree to adapt to wind and gravitational forces. With inadequate understanding, so-called defects may be erroneously confused with hazards and, furthermore, hazards with risk – so unless the risk of harm arising from a hazard is properly taken account of, management can be seriously misinformed, potentially leading to costly and unnecessary intervention.***

NTSG Definition: ‘a defect in the context of the growing environment of a tree is a structural, health or environmental condition that could predispose a tree to failure’.”

(The National Tree Safety Group, 2011, p. 44)

"OBVIOUS FEATURES THAT MAY INDICATE STRUCTURAL FAILURE

***It is inappropriate to react to tree defects as though they are all immediately hazardous.** Growth deformities and other defects do not necessarily indicate structural weakness. When noting features that might indicate a **likelihood** of weakness or collapse, **it is important that concern for risk of failure is restricted to events likely in the near future.** Trees exhibit a wide range of such features, and the scope for interpreting their significance is complex, particularly when considering the likelihood of non-immediate failure. For example, anomalies in tree growth may indicate internal decay and hollowing; but **anomalies in form may be attributable to the tree having compensated for the decay, by mechanically adapting to natural processes.**"*

(The National Tree Safety Group, 2011, p. 53)

The above information should be taken in to account when assessing trees with wounds, decay, cavities (hollows) or strange bulges (Mattheck & Breloer, 1994; Lonsdale, 1999). It should have been considered when assessing the Melbourne Road veteran Oak in Stocksbridge, before the decision was taken to fell it in 2014, on the basis that it was infected with *Laetiporus sulphureus* (AKA chicken-of-the-woods fungus).

There are many different types of work in arboriculture. Many arboriculturists specialise in one type of work and may have little knowledge, education, training or experience in other types of work (urban and community forestry, valuation, risk assessment, and planning & development are all good examples of specialist aspects of arboriculture). We are not convinced that measures exist to ensure that qualified arboricultural inspectors are competent arboriculturists, as defined within British Standard **3998** (2010). There should be measures in place to ensure that qualified inspectors keep abreast of developments in best practice and have relevant and recognised expertise, by way of education, training and experience, through a programme of continued professional development.

“This British Standard takes the form of guidance and recommendations.

It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

It has been assumed in the preparation of this British Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people, for whose use it has been produced.”

(The British Standards Institution, 2012, p. III)

Trees reduce health costs, as they help filter pollutants from the air, removing microscopic **particulate matter** that comes from road traffic, industry and power production, thereby helping reduce morbidity and mortality (Tiway, *et al.*, 2009). Tiway *et al.* (2009) noted that, nationally, **health costs associated with such pollution** are “*estimated to range between £9.1 and 21.4 billion per annum*”, quoting an *Air Quality Strategy* document published by DEFRA in 2007. They referenced a range of research that indicates such pollution causes alveolar inflammation, respiratory-tract infection (specifically pneumonia), and acute cardiovascular disorders, with the elderly being particularly vulnerable.

Filtration of atmospheric pollutants and the interception and soaking up of rainfall - aiding flood prevention (as a component of a sustainable urban drainage system) - are just a couple of services in a range of ecosystem services that trees afford the built environment and its inhabitants (see references within the petition and references therein, for further detail). Failure to manage green infrastructure, which includes the urban forest with its street trees, in a responsible and sustainable manner constitutes a failure to accord with principles and criteria of sustainable forest management set out in *The UK Forestry Standard: the governments’ approach to sustainable forest management*, and its *Guidelines*.

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¹ *Beaton v. Nationwide Anglia Building Society* (formerly Nationwide Building Society) [1991] 2 E.G.L.R. 145; [1991] 38 E.G. 218; The Times, October 8, 1990.

¹ *Daisley v. B.S. Hall & Co.* [1972] 225 e.g. 1553; E.G. March 3, 1973.

² *Donoghue v. Stevenson* [1932] A.C. 562, H.L., per Lord Atkin at p. 580.

³ *Phillis v. Daley* (1988) 15 N.S.L.R. 65.

³ *Unger v City of Ottawa* (1989) D.L.R. (4th) 98.

Further useful information can be found online at **Stocksbridge Community Forum**:
<https://www.stocksbridgecommunity.org/news/contribute-website>

We hope that all who read this communication in its entirety now have a much better, clearer understanding of the importance of and necessity for our campaign and that readers will feel much more comfortable in actively supporting the campaign.

Yours faithfully,

The **Save Our Rustlings Trees** campaigners
(>10,000 citizens)