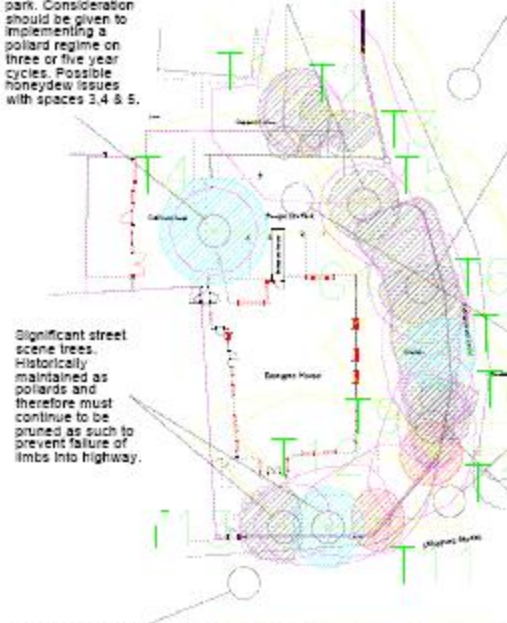


Tree Constraints Plan - Existing 1:200

Mature pollarded Lime providing interior scale and mass to the open space of the car park. Consideration should be given to implementing a pollard regime on three or five year cycles. Possible honeydew issues with spaces 3, 4 & 5.



Significant street scene trees. Historically maintained as pollards and therefore must continue to be prevented as such to prevent failure of limbs into highway.



Tree Survey Schedule

Tree ID	Species	DBH	Height	Health	Location	Notes	Priority	Comments
T1	Lime	150	12	Good	Car park	Mature pollarded	High	Implement pollard regime
T2	Lime	120	10	Good	Car park	Mature pollarded	High	Implement pollard regime
T3	Lime	100	8	Good	Car park	Mature pollarded	High	Implement pollard regime
T4	Lime	80	6	Good	Car park	Mature pollarded	High	Implement pollard regime
T5	Lime	180	15	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T6	Lime	160	13	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T7	Lime	140	11	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T8	Lime	120	9	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T9	Lime	100	7	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T10	Lime	80	5	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T11	Lime	60	4	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T12	Lime	100	8	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway
T13	Lime	80	6	Good	Frontage	Historically maintained as pollards	High	Prevent failure of limbs into highway

This adjacent area contains a number of mature significant landscape trees alongside the old town wall and the river. These form part of a green belt through the urban zone.

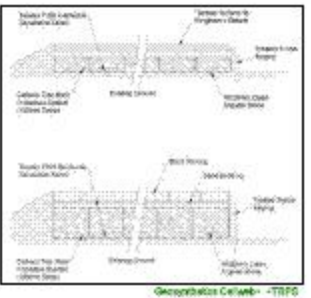
Frontage trees screen the site completely - depriving views on approach of the historic listed building. Although visually dominant within the street scene, the condition and longevity of the majority of the specimens within the belt is limited.



Root protection areas have been adjusted in shape but not in area as per the guidance in Section 5.2.4. This takes into account the likely rooting habit of the trees and any compacted, desiccated or impermeable surfaces and objects.

The realignment of the wall and the widening of the road will directly conflict with the position of T5 - T10. Where the stem position does not directly conflict the resulting loss of root system precludes retention.

These newly opened spaces are ideally suited for the establishment of enhancement planting to divide the visual space on approach between the rebuilt wall and the existing building. A detailed scheme should include one or more small final height trees such as Hawthorn (Crataegus monogyna) or Bird Cherry (Prunus padus).



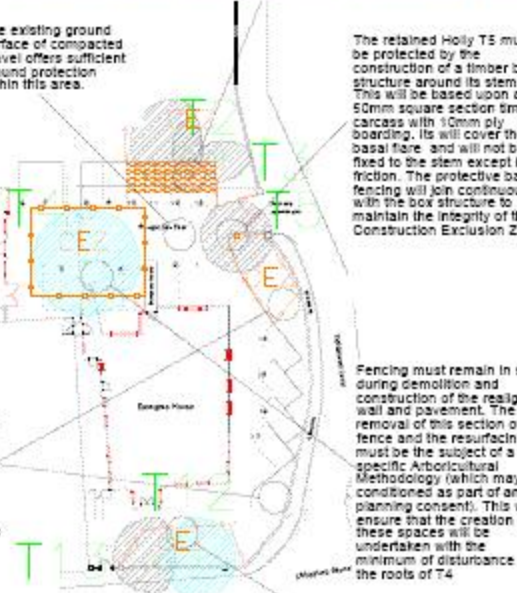
Adjacent Diagram - T5

To avoid causing mechanical damage to the root system the retained trees, a no dig system must be used to construct the final surface. The final detail of this surface will need to be agreed with an engineer and its implementation will need to be the subject of a specific methodology.

The adjacent diagram is an indicative specification showing the suggested construction of the surface within the designated area. There may need to be gradual level changes which must be described in detail within the methodology.



Tree Protection Plan - Proposed 1:200



The existing ground surface of compacted gravel offers sufficient ground protection within this area.

The retained Holly T5 must be protected by the construction of a timber box structure around its stem. This will be based upon a 50mm square section timber carcass with 10mm ply boarding, its will cover the basal flare and will not be fixed to the stem except by friction. The protective barrier fencing will join continuously with the box structure to maintain the integrity of the Construction Exclusion Zone.

Fencing must remain in situ during demolition and construction of the realigned wall and pavement. The removal of this section of fence and the resurfacing must be the subject of a specific Arboricultural Methodology (which may be conditioned as part of any planning consent). This will ensure that the creation of these spaces will be undertaken with the minimum of disturbance to the roots of T4.

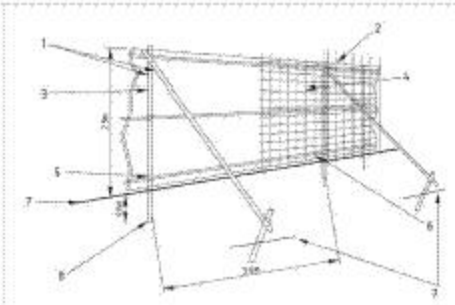


Figure 2 - Protective barrier

Trees will be protected by the implementation of Construction Exclusion Zones (CEZs). These will be demarcated by the erection of barriers constructed using well mesh panels on a framework of scaffolding or similarly sturdy material driven into the ground to a suitable depth to ensure its stability and compliance with BS5837:2005 Figure 2 (adjacent). Weatherproof notices must be attached to the tree barriers stating: Construction Exclusion Zone - Keep Out, and including the contact details of the appointed Consulting Arborist and the LPA Tree Officer.

Arboricultural Implications

- Site Synopsis**
 - The site lies within the centre of Kings Lynn on the junction of Littleport Street and Kettlewell Lane, adjacent to the historic town wall and the Gaywood River.
 - The existing site layout comprises a large listed 18th Century dwelling within a walled courtyard. As noted in the 2003 Norfolk Street Conservation Area Character Statement, the modern development obscures many of the original structures and architecture. The Statement also notes the importance of the groups of trees within this area and mentions their density.
 - The proposed development includes the widening of Kettlewell Lane and the construction of a footpath - this necessitates the demolition and rebuilding of the boundary wall. A reconfiguration of the internal parking arrangements is also proposed.
- Trees**
 - The existing trees on site are mainly positioned along the boundary with Kettlewell Lane. The majority of these are BS5837:2005 category C on account of their limited individual prominence and longevity. The larger individuals such as the Leyland Cypress T7 have been included within category B because of their greater presence.
 - On the other side of the existing car park is the category B Lime, T4 which provides a soft subdivision between the current uses. The original heritage plantings T10 - T12 add a screen of foliage to the end of Littleport Street, creating a reveal of the buildings behind them upon approach from the west.
 - Currently, the existing building is completely obscured from view by the density of the belt.
- Tree Implications and Constraints**
 - The proposal is acceptable in arboricultural design terms and does not detract or diminish the presence of trees within the site. In addition, no part of the proposal is considered to be in such proximity that users of the spaces may feel apprehension or concern regarding the relationship of the space and trees.
 - The position the revised boundary directly conflicts with a number of trees and the required excavations would compromise the root systems of further trees. Four of these assets, trees T6 - T10 are to be removed. T11 is a category R tree because of its decayed structure.
 - Despite these removals, there remains the potential for the movement of vehicles and materials to cause impact damage to the above ground parts such as stems or overhanging branches of the trees. This will necessitate the implementation of tree protection.
 - Parking areas are shown within RPAs. The construction and use of these areas has the potential to cause compaction of the soil and subsequent damage to the root system of the retained trees.
- Tree Protection**
 - To prevent the potential damage identified in Section 2 occurring during the development, the specified protective barriers and structures must be installed as shown. No tree protection measures must be moved without the written consent of the LPA Tree Officer. Specific methodologies will be needed for the construction of the car parking areas within the RPAs. This includes the designated No Dig Areas.
 - Facilitation pruning works must be specified by a competent Arborist once the maximum vehicle size is known. These works will be undertaken to BS3998:1989.
 - The developer must appoint a consulting arborist to oversee the project who will monitor, record and confirm the implementation and maintenance of tree protection measures as set out in any conditions of the planning permission, this also allows any unforeseen tree related issues which may arise during the development period to be suitably and speedily addressed.
 - Post - development, the Consulting Arborist must be instructed to return to site to re inspect the retained trees, to ensure they remain in a safe condition and to assess if any additional remedial works are implemented prior to the hand over of the site to ensure all tree related conditions are discharged.
- Conclusion**
 - The current Local Plan of King's Lynn and West Norfolk District Council includes Policy 417 which requires that natural landscape features including trees are to be protected wherever appropriate. It is considered that the development fulfils part of these policies by conducting this assessment on the implications of the proposals to the relevant trees and by subsequently complying with its recommendations.
 - The Local Plan also includes Policies 412 and 414 which require that proposals have regard for the landscaping and final appearance within the Conservation Area as well as the impact that the development will have on views into it. It is considered that the removal of the trees will be of net benefit to the visual amenity and character of the area. Although by seeking and mass of the group provided a green backdrop to views from the east, the imposing, inappropriate form of the Leyland Cypress detracted from both the original character of the building and the other nearby mature trees. Their removal along with the other trees provides an ideal opportunity to implement enhancement planting.

KEY
 Besigate House, 17 Littleport St, Kings Lynn

T13
 Tree Constraints, Implications and Protection Plan

SCALE
 1:200 @ A0

DATE
 18.05.2010

BY
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