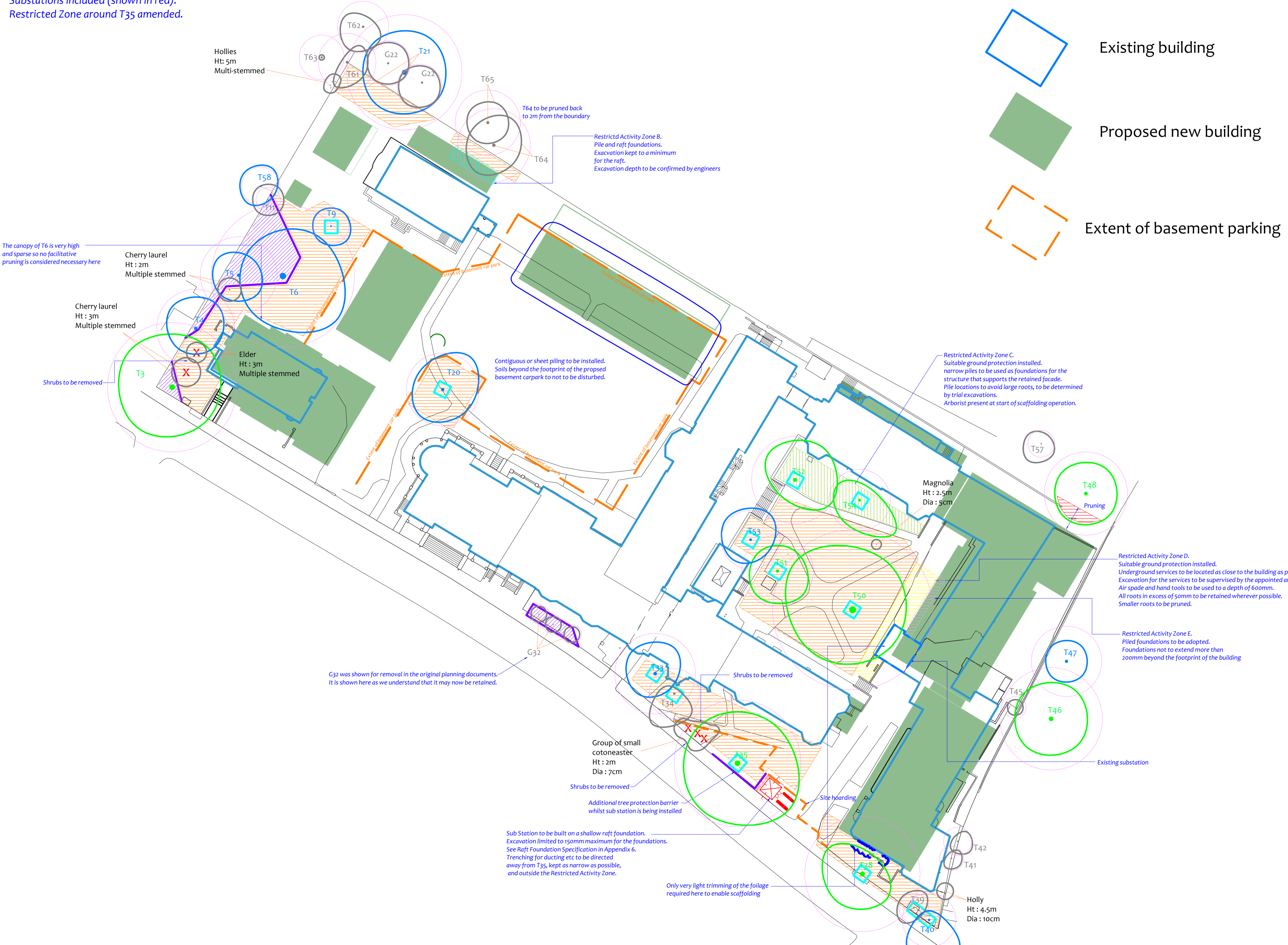


Section B: Restrictions on Activities – Specific Zones

- 2.6. Construction Exclusion Zones**
- 2.6.1. Within Construction Exclusion Zones (shaded purple on the Tree Protection Plan) the following restrictions shall apply:
- Tree Protection Barriers shall be erected and maintained throughout the entire project as indicated on the Tree Protection Plan and specified in Section 5 - Tree Protection Barriers.
 - No construction activity whatsoever shall occur.
 - No vehicles or plant machinery shall be driven or parked.
 - No tree works, other than those specified in this report shall be undertaken.
 - No alterations of ground levels or conditions.
 - No chemicals or cement washings permitted.
 - No excavation whatsoever shall occur.
 - No temporary structures.
 - No spoil shall be stored.
 - No fires shall be permitted.
 - All hazardous materials (including non-essential cement products) shall be forbidden.
- 2.6.2. Where hard surfaces are to be removed, this shall be done using hand tools or mechanical excavators operating from outside the Construction Exclusion Zone and marshalled by the appointed arborist.
- 2.6.3. Any structures shall be removed manually and without mechanical excavation.
- 2.7. All Restricted Activity Zones**
- 2.7.1. Within all of these zones (indicated on the Tree Protection Plan) the following restrictions apply:
- Only essential and specified works shall be permitted.
 - Operations within these zones shall be supervised as specified within the Inspection Schedule in Section 3.
 - All excavation and lifting of surfaces shall be undertaken using hand operated tools or a mechanical excavator operating from outside the Restricted Zone and carefully marshalled by the local authority tree officer or an appointed arborist.
 - No fires shall be permitted.
 - All hazardous materials (including non-essential cement products) shall be forbidden.
- 2.7.2. Further restrictions specific to each zone are specified below:
- 2.8. Restricted Activity Zone A**
- 2.8.1. Within these zones (indicated on the Tree Protection Plan) access will be required to facilitate construction. The following restrictions shall apply:
- No permanent or temporary structures shall be erected without written approval from the local authority.
 - Ground protection measures appropriate to the proposed activity shall be installed as specified in Section 6 - Ground Protection Measures. These shall remain in place throughout the entire demolition and construction phase. Note: where a pile driver needs to operate, it should operate entirely from outside the Restricted Activity Zone. If this is not possible, the ground protection measures may need to be strengthened in order to withstand the required loads. A reinforced concrete slab may be required. In such circumstances the ground protection measures shall be designed by engineers and shall be subject to approval by the local authority.
 - Existing ground levels shall be retained undisturbed.
 - Any resurfacing or installation of new hard surfaces shall be done in accordance with the Guidelines in Section 7 - new surfaces.
 - No excavation shall occur in this zone without consulting the appointed arborist and obtaining approval from the local authority.
 - If roots are encountered in excess of 25mm diameter, they shall be retained wherever possible and protected with damp sacking during times that they are unearthed. Any roots in excess of 100mm that need to be severed shall be pruned with secateurs.
 - No machinery in excess of 3m tall shall pass through or operate in this zone unless carefully marshalled in order to avoid damage to branches.
- 2.9. Restricted Activity Zone B**
- 2.9.1. Within this zone (indicated on the Tree Protection Plan) it is proposed to install building foundations adjacent to T64. The following restrictions shall apply:
- Concrete strip foundations shall not be installed in this area.
 - Instead a pile and raft or pile and beam foundation shall be utilised.
 - Excavation for the ground beam/raft shall be undertaken using hand tools or a carefully marshalled mechanical excavator operating from outside the Root Protection Area. Excavation depth to be agreed and approved by the local authority after consultation with engineers and contractors.
 - Roots in excess of 25mm which are located close to the extent of the excavation are to be retained intact if possible; otherwise they shall be pruned with a sharp saw or secateurs.
 - No auger or piling rig in excess of 4m shall be used beneath any tree canopy without being carefully marshalled by the appointed arborist.
- 2.10. Restricted Activity Zone C**
- 2.10.1. Within this zone (indicated on the Tree Protection Plan) it is proposed to install a scaffold structure designed to support the existing building facade whilst the rest of the building is demolished and rebuilt. The following restrictions shall apply:
- Ground protection measures appropriate to the proposed activity shall be installed as specified in Section 6 - Ground Protection Measures. Note: where a pile driver needs to operate, it should operate entirely from outside the Restricted Activity Zone. If this is not possible, the ground protection measures may need to be strengthened in order to withstand the required loads. A reinforced concrete slab may be required. In such circumstances the ground protection measures shall be designed by engineers and shall be subject to approval by the local authority.
 - The scaffold structure shall be founded on piled foundations.
 - Trial pits shall be excavated to determine the location of the piles. Trial pits shall be 300mm x 300mm and excavated using hand tools to a depth of 600mm below that of the ground beam. Excavation shall be undertaken in the presence of the local authority tree officer or the appointed arborist. Soil shall first be loosened with a garden fork to ascertain if large roots are present before the loosened soil is removed with a spade. If roots in excess of 25mm are encountered, they shall be retained intact wherever possible and the pile shall be relocated. Roots in excess of 100mm shall be pruned using sharp secateurs. Beyond this depth, piles may be installed using an auger or piling rig. Pile diameter shall not exceed 300mm unless agreed otherwise with the local authority.
 - No further excavation shall take place.
- 2.11. Restricted Activity Zone D**
- 2.11.1. Within this zone (indicated on the Tree Protection Plan) it is proposed to install underground services. In order to ensure no significant impact on the root system of adjacent tree(s) a watching brief is proposed during all excavation in this area. The following restrictions shall apply:
- Excavation shall be overseen by an appointed arborist. The local authority tree officer shall be invited to attend.
 - Hand tools and an air-spade shall be used during the excavation to a depth of 0.6m. Below this depth, a mechanical excavator may be used.
 - All roots in excess of 50mm shall be retained wherever possible.
 - Roots in excess of 25mm shall be retained wherever practicable.
 - Any roots that need to be cut shall be pruned with secateurs.
- 2.12. Restricted Activity Zone E**
- 2.12.1. Within this zone (indicated on the Tree Protection Plan) it is proposed to install building foundations adjacent to where roots of the large London Plane, T50, are anticipated. The following restrictions shall apply:
- Concrete strip foundations shall not be installed in this area.
 - Instead a piled foundations shall be utilised.
 - The piles or any part of the foundation shall not extend more than 200mm beyond the footprint of the building.
 - No auger or piling rig in excess of 3m shall be used beneath tree canopy without being carefully marshalled by the appointed arborist.
 - Suitable ground protection measures shall be installed if the piling rig is to operate outside of the building footprint.

Revision 2b. Dated 21st April 2016

Substations included (shown in red).
Restricted Zone around T35 amended.



Revision 2b. Dated 21st April 2016

Substations included (shown in red).
Restricted Zone around T35 amended.

Drawing No: CCL 09166/C / TPP Rev: 5
 Title: Tree Protection Plan (Existing Layout with Proposals Overlaid)
 Site: Kings College Halls NW3 7ST
 Scale: 1:400
 Paper Size: A1

Tree Retention Categories	
	Category A tree
	Category B tree
	Category C tree
	Category U tree

Trees of high quality with an estimated life expectancy of 40+ years. Usually large trees with significant presence or smaller trees with excellent form. Retention of these trees is highly desirable.

Trees of moderate quality with a life expectancy of 20+ years. Usually maturing trees, or younger trees with good form. Retention of these trees is desirable though less than Category A trees.

Unremarkable trees of low quality and merit. Individual specimens are not considered to be a material planning consideration.

Trees unsuitable for retention due to their very poor condition.

Tree Protection Plan

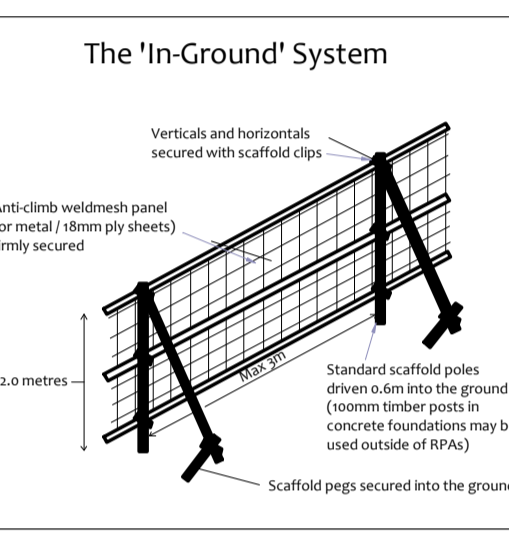
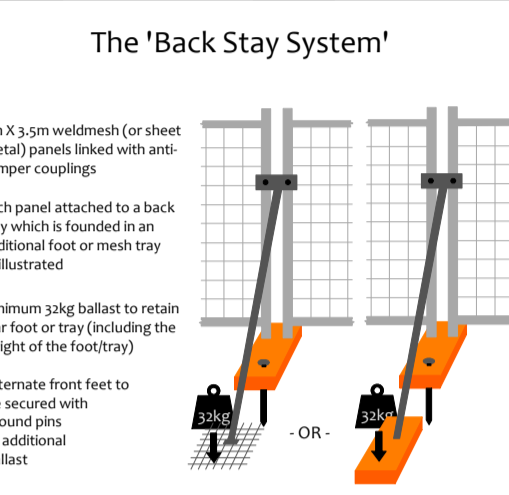
	B5 s837 Root Protection Area (radius = 1xstem diameter)
	Root Protection Area needing amendment due to site conditions, e.g. presence of existing road or building.
	Root Protection Area having been amended to account for site conditions
T1 = Tree No 1	G2 = Group No 2
H3 = Hedge No 3	

MN = Measured North:
 Canopy spreads are sometimes measured to an approximate N defined by site features. Often more accurate, especially where rows of trees are not aligned N/S or E/W.

Revision 2a. Dated 19th April 2016
 Substations included (shown in red).
 Restricted Zone around T35 amended.

Tree Protection Plan

Tree Protection Barriers:	
	Fixed protective barrier: The 'In-Ground System' or the 'Backstay System'. To remain in place for all construction activity
	Construction Exclusion Zone
	Stem protected to a height of 2.5m with thick cloth & wire
	Tree Protection Boxing 1.2 x 1.2 x 2.4m high 25mm plywood



Construction Exclusion Zone	
	Within this area the following restrictions shall apply:
	No excavation or land regrading whatsoever.
	No storage of materials, rubble, soil or spoil.
	No fire within the exclusion zone or within 5m of any tree canopy.
	No site cabins or other temporary structures.
	No discharge of polluted water, cement or chemicals of any kind.
	No use of any machinery, or passage or parking of vehicles.
	No tree works without consent.

Restricted Activity Zones	
	Restricted Zone A
	Restricted Zone B
	Restricted Zone C
	Restricted Zone D
	Restricted Zone E

