hnw architects

Downlands School - Statement on tree and hedge removal

Section of H9 Hedge removal

Proposed hedge removal

The existing hedge suggested for removal is located between the existing MUGA and existing community garden. The species is a mature Fagus sylvatica (beech) hedge approximately 3m in height and 2.5m wide. The proposals suggest removing a section of the hedgerow (approximately 20m in length) for the following reasons:

- The arboricultural tree protection plan (TPP-A1V) indicates that the proposed modular building will
 encroach into the existing hedge, and due to the spatial requirements for the proposed building based
 on DfE criteria and the need to maintain daylighting to existing adjacent buildings as well as to the
 proposed building, encroachment of the proposed building into the existing hedge could not be
 avoided.
- The position of this section of hedge would provide logistical issues for the contractor in gaining construction access to the site of the new building to form the foundations, install drainage and incoming services, and also for safely craning and manoeuvering the modular building into place onto the foundations and installed drainage and services, particularly with the 1m change in level along this boundary and the need for a scaffold access platform during construction. Please refer to 'Removals and Construction Access Plan' drawing (Reference:2417-TFC-XX-XX-DR-1001).
- If the building is positioned with the existing section of hedge retained, substantial pruning of the hedge would be required (i.e. more than half the width of the existing hedge) in order to provide necessary maintenance access to the back of the modular building for cleaning windows, access to the roof and access to the air source heat pump, which itself is provided to minimise energy use and address climate change in line with WSCC's Climate Change Strategy. The substantial pruning required to facilitate this access may negatively impact the future health of the hedgerow.
- If the building is positioned with the existing section of hedge retained in situ, the width and height of the existing hedge would block light into the classroom windows to the northern side of the modular building, prevent the use of natural ventilation and installation of the air source heat pump, all adding to the need for artificial lighting, mechanical ventilation and an unsustainable space heating installation and further increasing the impact on climate change.
- The existing hedge is overgrown and presents maintenance issues, particularly as it is 2.5m wide which makes it difficult to access for maintenance outline of existing hedge in red dashed line below:



Proposed hedge mitigation

A replacement section of beech hedge is proposed to be planted in situ following the construction of the modular building and suggested to be maintained at a lower height and width to ensure maintenance access is provided, along with daylighting and natural cross ventilation through the classroom windows.



T38 - Acer campestre (Field Maple)

Proposed tree removal

The existing tree suggested for removal is located adjacent to the existing community garden. The tree is suggested to be removed for the following reasons:

- The arboricultural tree constraints plan (TCP-A1V) indicates that the tree canopy and root protection area encroach into the existing community garden area where the proposed modular building is to be located. Due to the spatial requirements for the proposed building based on DfE criteria and the need to maintain daylighting to existing adjacent buildings as well as to the proposed building, encroachment of the proposed building into the tree root protection area and tree canopy could not be avoided.
- If the tree is retained, excavation for the building foundations would be within the tree root protection area and any excavation could impact/damage the trees roots potentially impacting the tree's future health or worst-case destabilising the tree.
- The tree protection plan (TPP v2-A1) indicates that if the tree is retained, the tree canopy (shown in grey) would require substantial pruning that could be detrimental to the trees future health if retained.
- If the tree is retained in situ and pruned to facilitate the construction of the modular building, due to the tree species (Acer campestre can grow to 10m high and 7m wide in 25yrs), future re-growth of pruned branches could impact the new modular building and require further pruning.
- The arboricultural survey identifies the tree as a category C and of low arboricultural merit.

Proposed tree mitigation

• A replacement tree is proposed in situ of the removed tree (refer to terra firma drawing 1002 Landscape proposals plan and photo of the proposed species below). The proposed replacement tree is a Betula utilis var. 'Jacquemontii' (Himalayan Birch). This tree species is a small (8m high and 4m wide after 20yrs) ornamental variety of birch more suited to the limited space between the buildings once the modular building is in place.



• 3no. additional Acer campestre trees are proposed to be planted elsewhere on site (refer to terra firma drawing 1006 Additional tree planting plan).

