

Camberwell New Cemetery - Area B

Sketch Scheme Options Report

Prepared by LUC August 2016



Project Title: Camberwell New Cemetery - Area B

Client: London Borough of Southwark, Parks & Leisure

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Introduction

This document sets out the sketch scheme design options for the Area B site at Camberwell New Cemetery. It responds to the feedback received from the consultation which ran between 21st June and 22nd July 2016. The main feedback consisted of the following:

- The majority of respondents oppose the use of Area B for burials and instead would prefer the site to be developed into a green open space for community use. As a result, few respondents commented on specific elements of the layout.
- Many respondents used this consultation as an opportunity to comment of the overarching Cemetery Strategy.
- Many respondents are concerned about the sustainability of inner city burial and the possibility of the council extending Camberwell New Cemetery into other local green spaces.
- There is some support for new footpaths as well as upgrades to existing footpaths and the car park. Some respondents would like a new footpath in Area B to link up to Honor Oak Park to provide an additional pedestrian access route through the area.
- A small number of respondents suggested that burials could be provided in Area B in ways which would allow Area B to develop into a natural green space that could also be used by the community. Smaller unobtrusive monuments and a more relaxed approach to managing grasses and plants in this area could be employed to create a meadow burial space. This option could be explored as a way to balance the needs of the borough with the views of local residents.
- There is a strong desire for Area B to be developed into some form of green natural open space.

This document is a response to the consultation feedback and consists of the following sketch options:

- 01 Previous design that was used for the basis of the consultation.
- 02 Revised 'traditional' style layout incorporating mown grass and headstones to match Area A.
- 03 Additional layout with a wildflower meadow surface treatment.
- 04 Additional layout with a woodland surface treatment.

Options 02, 03 & 04 are all based on the same general layout, which has been revised following comments received from the consultation.

01 - Consultation Layout

The landscape layout used for the basis of the consultation incorporated the following design considerations:

- Proposed burial site provides approximately 1,000 double-stacked burial plots (2,000 interment spaces).
- Designed on the premise that the existing contaminated fill is excavated and removed from site, replaced with 'clean' soil suitable for interments.
- Burial plots are to be arranged in a grass lawn using a 'raft' system for headstones, as has been carried out in Areas A and A1. Burial plots are to measure 1.22m (4ft) wide x 2.75m (9ft) length and incorporate two coffins per plot (double stacked). Memorial headstones will sit on a concrete raft measuring 900mm x 900mm, with drainage underneath.
- Footpaths will be macadam with precast concrete edgings, and measure 1.8m wide for pedestrian use, or 4.1m wide for those that require vehicular access.
- The existing car park and maintenance depot are to be retained in their existing locations using existing hardstanding areas, repaired where required.
- Proposed trees will be native species, and complement the existing species currently found on site.
- Existing vegetation and trees to the Honor Oak Park boundary retained.
- Hedges and proposed planting to boundaries will be mostly native species and provide year round interest.
- Swales would be approximately 1.5-2m wide, approx 300mm deep and be grass lined. Some would be planted with marginal planting to provide
- Paths over swales will be via a series of small bridges with a handrail and edging, material to be confirmed.
- Secondary vehicle entrance removed from Honor Oak Park.
- Proposed fencing and gates will be 1.8m high, material still to be
- Lighting and CCTV is not required and will not be incorporated into the design.



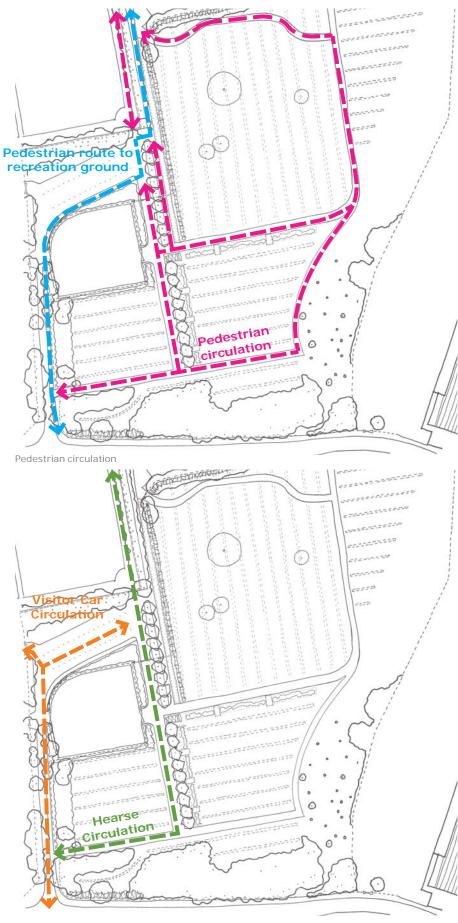
Lawn and 'raft' burial system



Burial vault system



Example of a planted swale



Vehicular circulation



Revised General Layout

The drawing opposite shows the revised general landscape layout, on to which either a traditional, wildflower meadow or woodland design option can be overlaid. The main features are as follows:

- Depot and car park retained in existing position.
- Hearse access is through the centre of site onto Honor Oak Park. All footpaths within Area B are 1.2m wide self-binding gravel paths with softwood timber edges.
- The secondary vehicular access drive from Honor Oak Park is retained and used as the primary pedestrian entrance.
- A series of drainage swales are positioned and all interconnected to capture the surface run-off water from the allotment slopes only, not the burial ground.
- A wildlife pond fed by the drainage swales and connected to the wider SUDS system is the focal point of Area B, and can be used as a central gathering point for ceremonies, pond dipping by schools and local wildlife groups or relaxation.
- Proposed trees to be native species, complementing those currently found on site.
- Existing vegetation and trees to the Honor Oak Park boundary retained.
- Proposed fencing and gates will be 1.8m high, material TBC.
- Lighting and CCTV is not required and will not be incorporated into the design.
- New footpath and cycle path connecting Honor Oak Park station with the recreation ground.



02 - Revised 'Traditional' Layout

The revised 'traditional' layout incorporate the following design considerations:

- Proposed burial site provides approximately 1,050 doublestacked burial plots (2,100 interment spaces).
- Designed on the premise that the existing contaminated fill is excavated and removed from site, replaced with 'clean' soil suitable for interments.
- Burial plots are to be arranged in a grass lawn using a 'raft' system for headstones, as has been carried out in Areas A and A1. Burial plots are to measure 1.22m (4ft) wide x 2.75m (9ft) length and incorporate two coffins per plot (double stacked). Memorial headstones will sit on a concrete raft measuring 900mm x 900mm, with drainage underneath.
- Footpaths will be macadam with softwood timber edgings, and measure 1.2m wide for pedestrian use.
- Swales would be approximately 1.5-2m wide, approx 300mm deep and be grass lined. Some would be planted with marginal planting to provide visual interest.
- A single tree line to the north boundary of Area B to help define the space and the separation from Area A.





03 - Meadow Grassland Option

- Proposed burial site provides approximately 1,950 interment spaces, assuming most are double stacked, except where some are single stacked under trees and scrub.
- The meadow grassland option enables the creation of a wildflower meadow, which would significantly enhance the ecological value of the site as well as creating a pleasant open environment for visitors to the Cemetery. Rather than mark out each individual interment with a memorial, the site is viewed as a whole, with each individual interment contributing to form the meadow. Memorial plaques are therefore grouped together in a dedicated space and the meadow itself is the memorial. Refer to page 22 for further details on the memorial avenue.
- In the first year the basic landscape layout is laid out and sown entirely with a wildflower meadow grass seed.
- All of the meadow grass areas are sub-divided into smaller blocks. The first block to be used for interments is mown and maintained with a short grass length. When the block is full, the grass surface is re-seeded with the meadow grass mix and allowed to grow long. The second block is then mown short and used for interments. The entire site is then slowly filled up block by block, resulting in only a small section of land ever kept as short mown grass. This method will help enhance biodiversity from the outset rather than waiting for whole site to fill up with interments. Blocks are accessed from main footpaths via mown grass paths.
- Burial plots are laid out in a grid formation, in plots measuring 2.75m x 1.25m. Footpaths are designed to run diagonally across the burial plots in a pattern that appears informal and reduces the loss of interment space as much as possible. interments are left unmarked but the locational coordinates are recorded.
- The meadow burial option allows the use of double stacked burial plots as the ground can easily be dug up again in the future.
- The site is predominantly maintained as a wildflower meadow, but does features areas of tree and shrub/ scrub planting to the boundary and in clumps to the centre, which would have interments underneath. This buffer planting is used to help better define the space and focus views out into the wider landscape. Areas of buffer planting are planted as each block of burial plots are filled up.
- Note: Burial re-use could be possible after 75 years in the areas maintained as meadow.













Current Burial

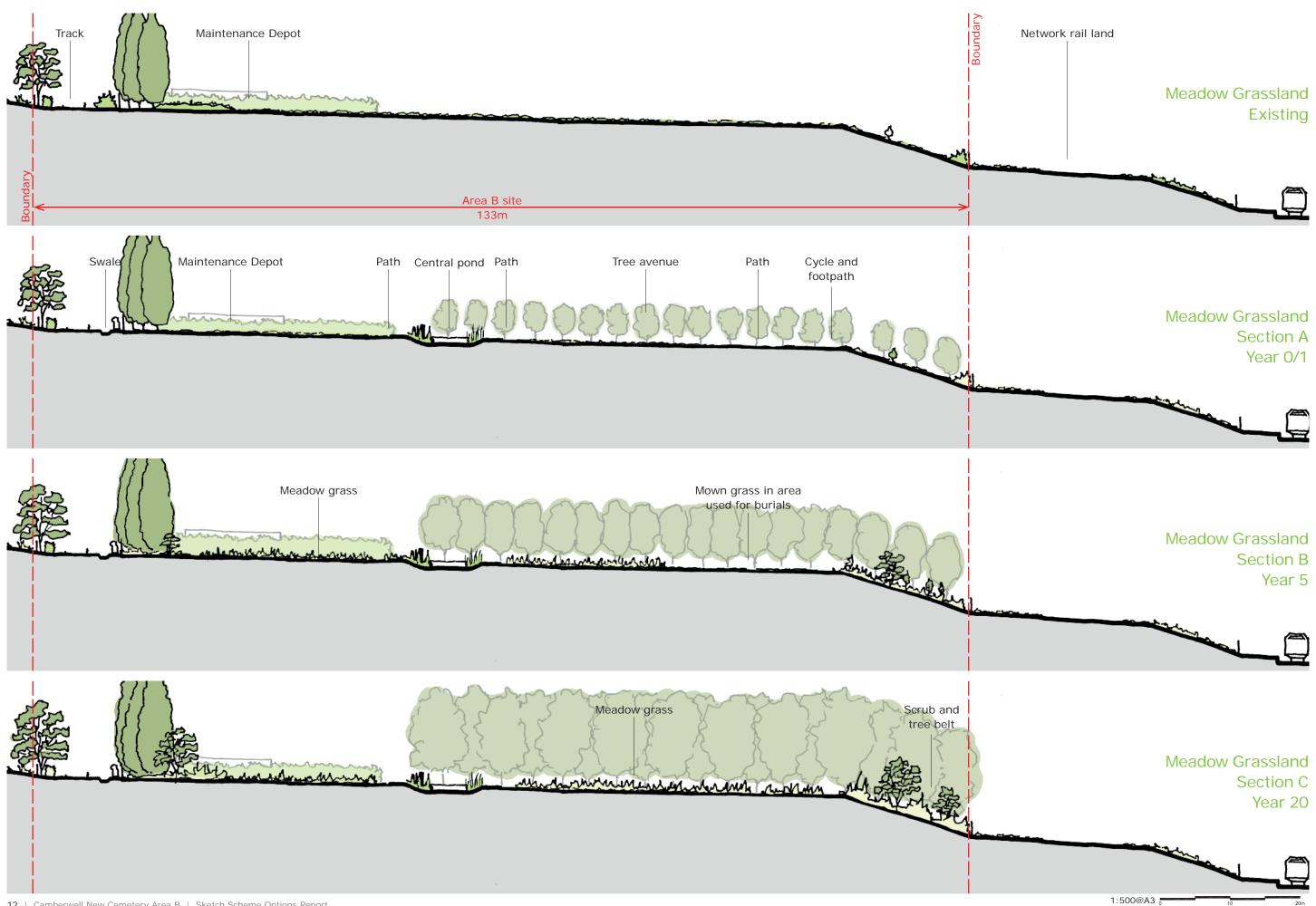
Meadow Grassland Year 1



Current Burial

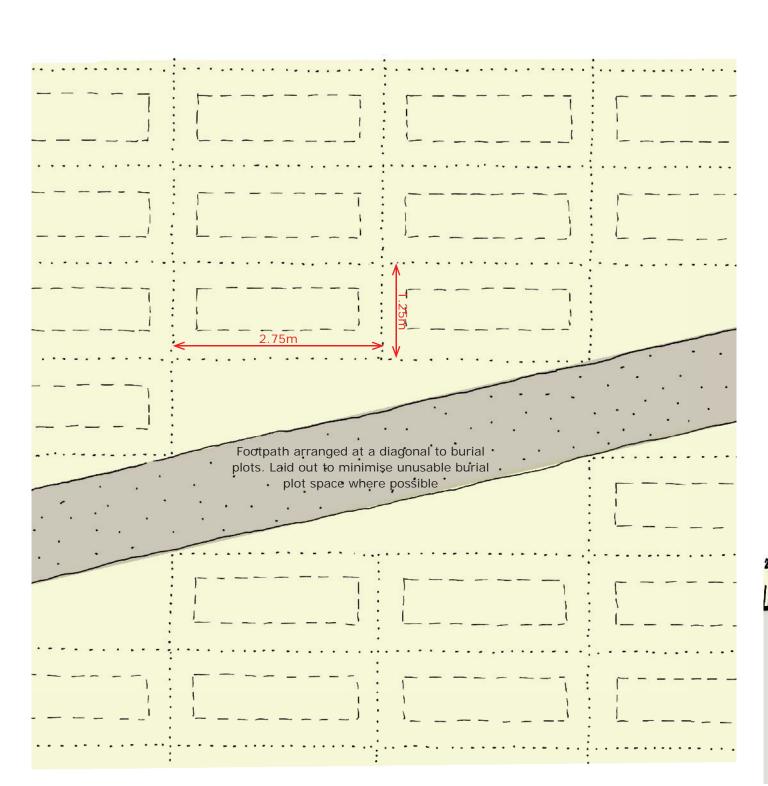
Meadow Grassland Year 20



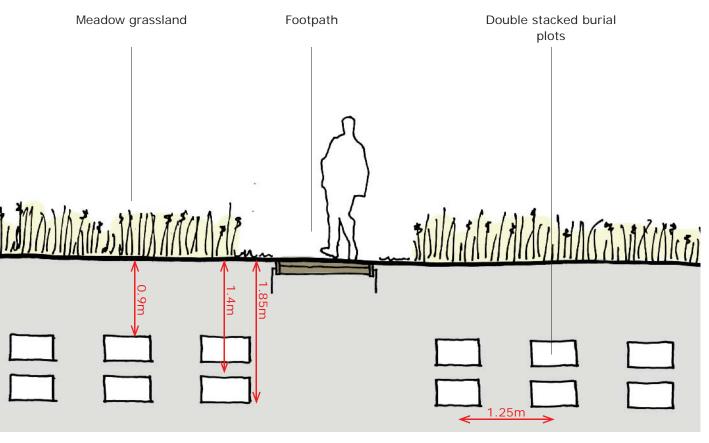


Detail Plan Arrangement of burial plots and paths

1:50@A3



Detail Section Arrangement of burial plots and paths



1:50@A3

04 - Woodland Option

- Proposed burial site provides approximately 1,050 interment spaces, assuming all are single stacked as they will be under trees and scrub.
- The woodland option enables the creation of a British native woodland, which would grow from whips and small feathered trees and significantly enhance the ecological value of the site as well as creating a pleasant natural environment for visitors to the Cemetery. Rather than mark out each individual interment with a memorial, the site is viewed as a whole, with each individual interment contributing to form the woodland. Memorial plaques are therefore grouped together in a dedicated space and the woodland itself is the memorial. Refer to page 22 for further details on the memorial avenue.
- In the first year the basic landscape layout is laid out and sown entirely with a wildflower meadow grass seed.
- All of the meadow grass areas are sub-divided into smaller blocks. The first block to be used for interments is mown and maintained with a short grass length. When the block is full, the grass surface is then planted with a palette of tree and shrub species. Rather than plant one tree per burial plot, each block is viewed as a whole and trees can be arranged to suit depending on each trees space requirements. Allowing one memorial tree per plot would result in a grid layout with the area becoming too dense, so the woodland should be a designed space that appears natural in layout and will enable it to mature into a successful and healthy environment.
- There is an option whereby individual memorial trees could be assigned on the steep slope adjacent to the Network Rail boundary.
- The woodland comprises a mixture of species that are British native, responsive to the sites geographic location and collectively will form a well-structured and healthy woodland. The basic planting palette is based on the W10 Quercus robur - Pteridium aquilinum - Rubus fruticosus woodland community description from the National Vegetation Classification (NVC) and comprises of the following species:
 - Principal tree species: Oak (Quercus robur)
 - Secondary tree species: Birch (Betula pendula)
 - Minor tree species: Hornbeam (Carpinus betulus, Horse Chestnut (Aesculus

- hippocastanum), Lime (Tilia cordata), Field Maple (Acer campestre) & Rowan (Sorbus aucuparia)
- Principal shrub species: Hazel (Corylus avellana), Hawthorn (Crataegus monogyna)
- Secondary shrub species: Sloe (Prunus spinosa), Guelder Rose (Viburnum opulus), Holly (Ilex aquifolium)
- Understory planting: Blackberry (Rubus fruiticosus), Eagle Fern (Pteridium aquilinum), Honeysuckle (Lonicera periclymenum), Tufted Hair Grass (Deschampsia cespitosa), Creeping Soft Grass (Holcus mollis)
- · The palette of species would also form a mixture of plant sizes in order to create a varied appearance from the outset, rather than something that looks like a plant nursery. Tree sizes would vary between 600mm high whips to 3.5m height feathered trees.
- Burial plots are laid out in a grid formation, in plots measuring 2.75m x 1.25m. Footpaths are designed to run diagonally across the burial plots in a pattern that appears informal and reduces the loss of interment space as much as possible. Interments are left unmarked but the locational coordinates are recorded. There could be an option of marking individual burial plots with a small softwood timber memorial plaque, which in time would decompose.
- Trees are not planted on top of coffins, but in a random arrangement in the spaces surrounding them. However, the woodland burial option only allows the use of single stacked burial plots as the ground can't be easily dug up in the future without interfering with tree roots.
- Tree planting would have to be limited throughout the year, and only carried out between October -March.









Woodland Year 1





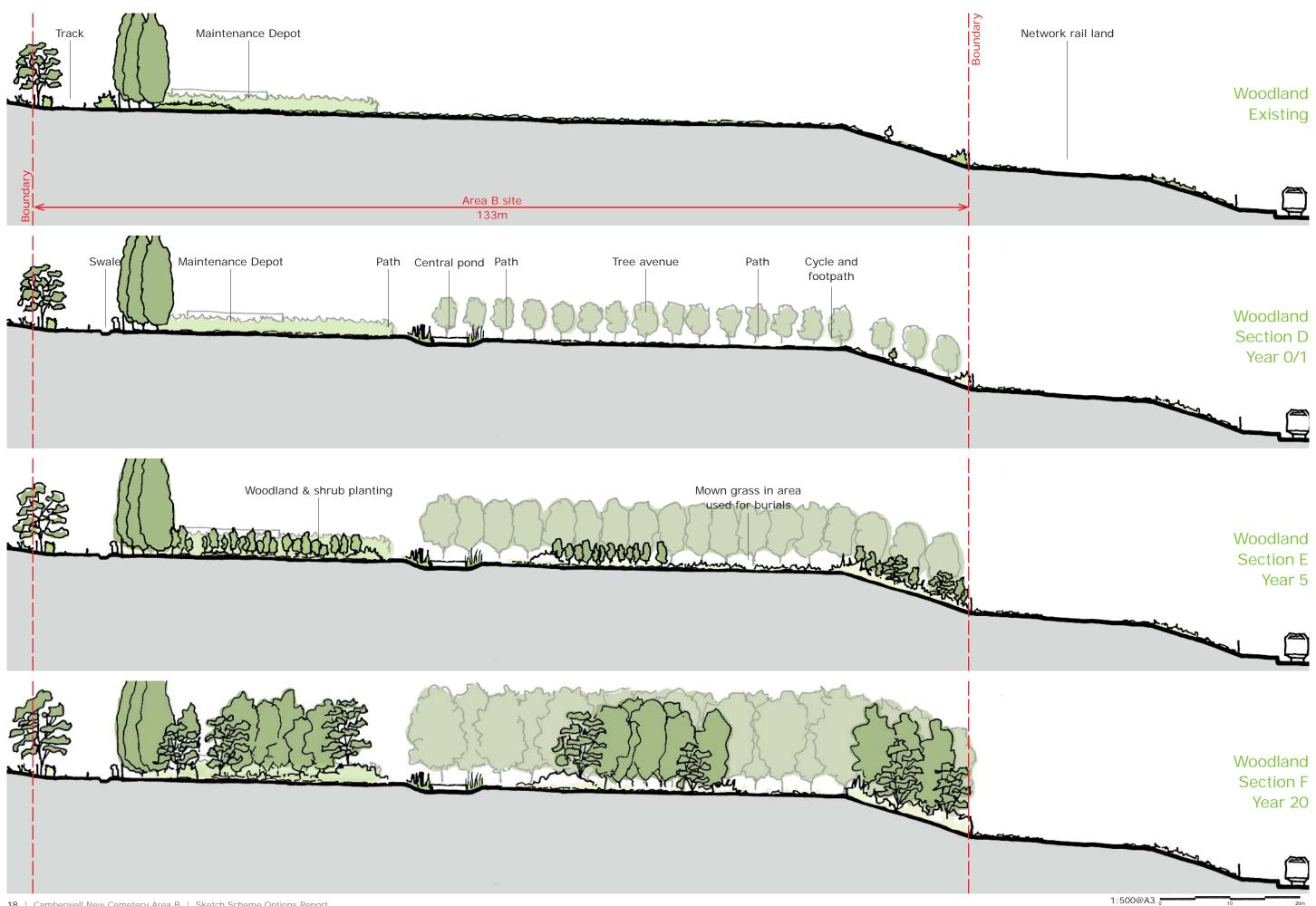
Woodland Year 5



Woodland Year 20

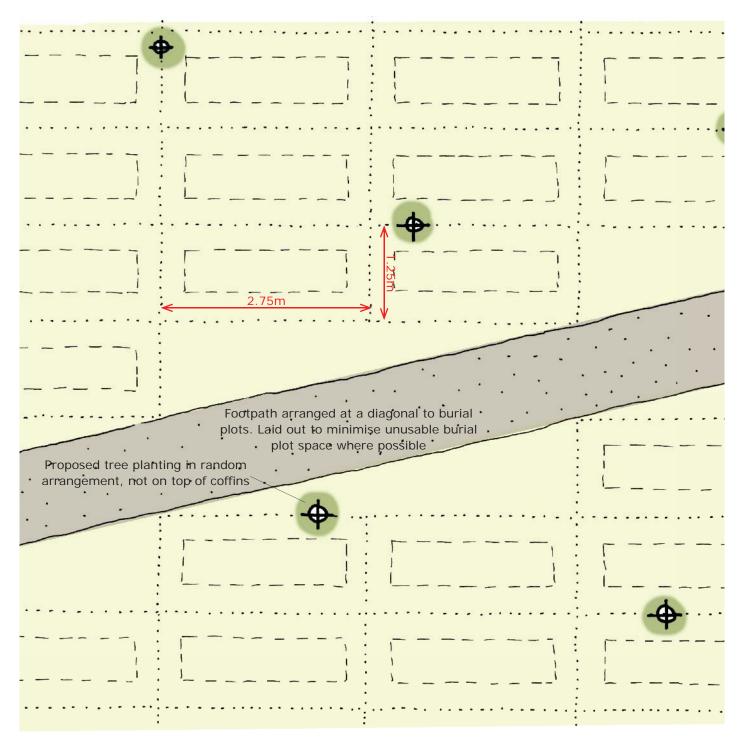


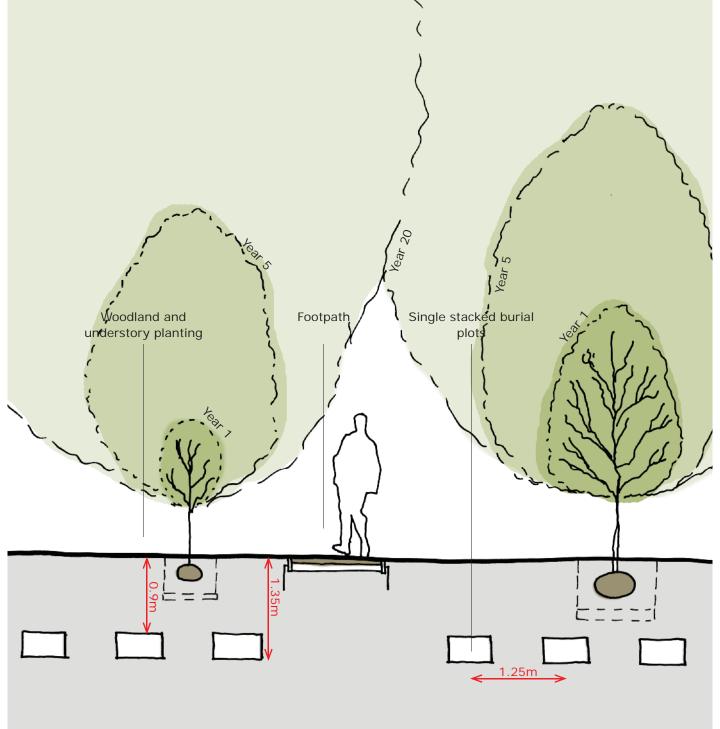




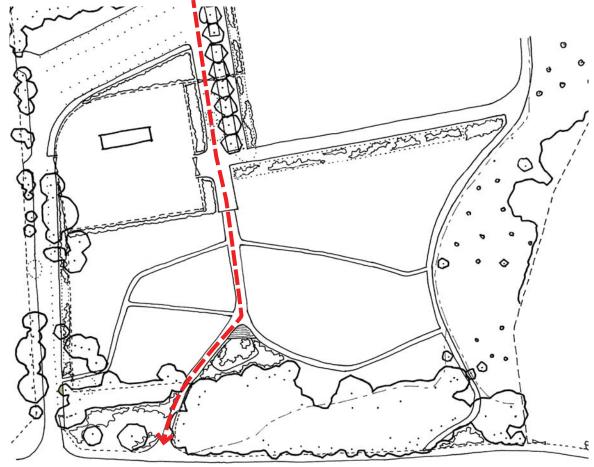
Detail Plan Arrangement of burial plots and paths

Detail Section
Arrangement of burial plots and paths

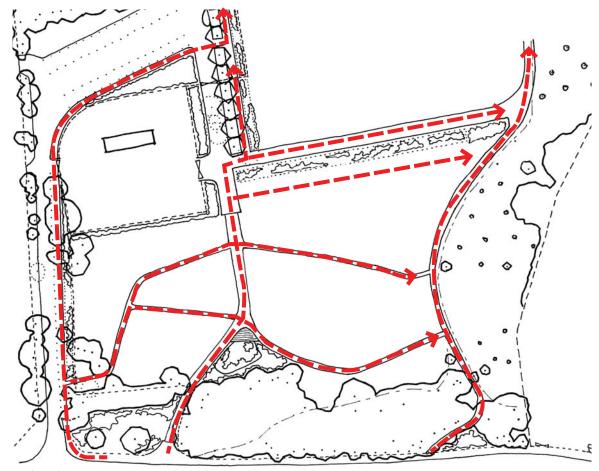




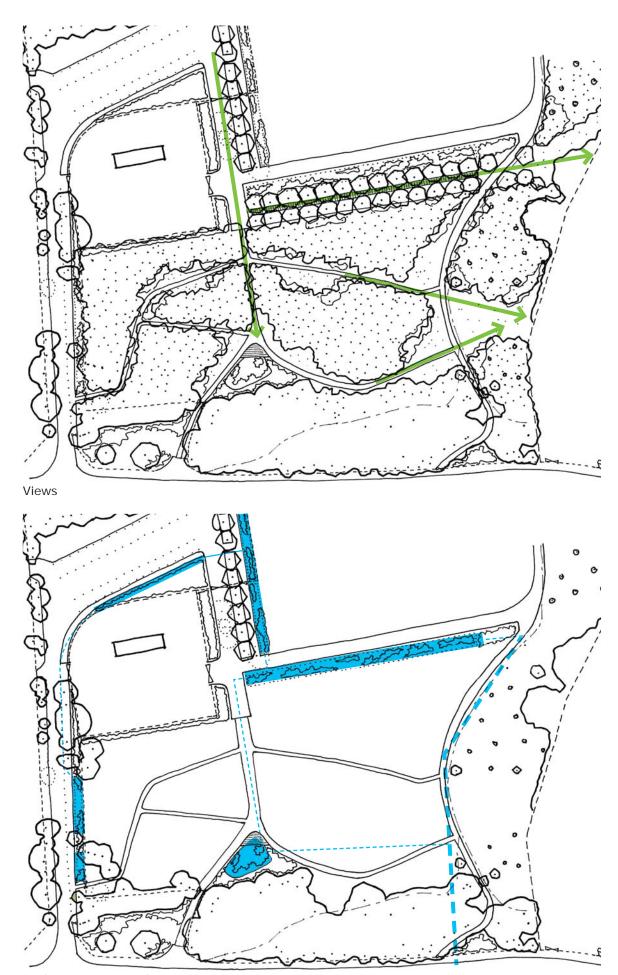
Note: Tree roots extend radially in every direction to a distance equal to at least the height of the tree (assuming no physical barriers) and grow predominantly near the soil surface. Typically 90% of all roots, and virtually all the large structural supporting roots, are in the upper 0.6m of the soil.



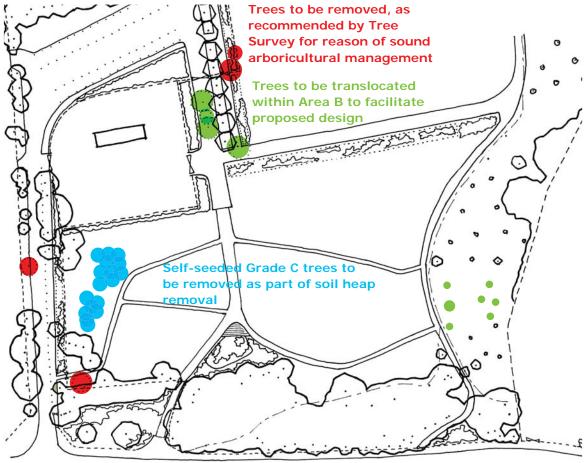
Hearse access



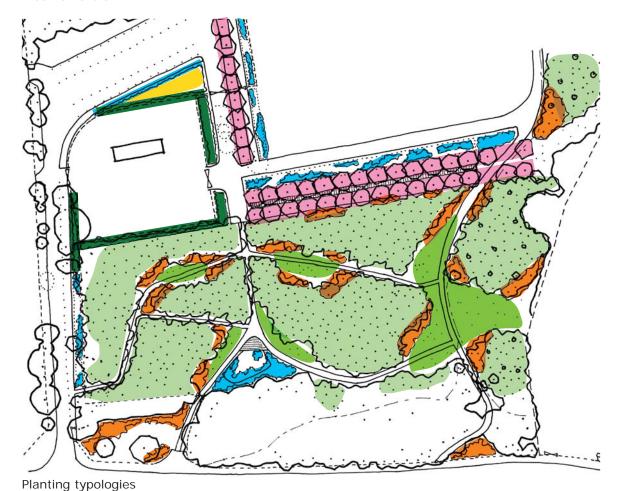
Pedestrian access



Drainage & Attenuation







Infill woodland 'Memorial Tree' planting

Formal avenue large tree planting

Shrub understory layer planting

Open meadow grassland 'Glade'

Hedge screen planting

Marginal and aquatic planting to swales and pond

Ornamental shrub and herbaceous planting



Ecology

Common reptiles are protected under national wildlife legislation (the Wildlife & Countryside Act, 1981, as amended) from intentional killing or injury and are also listed as National BAP priority species. Site clearance, construction and / or development works within the areas where reptiles have been found to be present and other suitable reptile habitats across the site, without mitigation, could result in the intentional killing and injury of reptiles.

The reptile mitigation strategy would be prepared in accordance with English Nature's (2004) guidelines, with a view to achieving the twin objectives of:

- · Protecting reptiles from any harm that may arise during the development activities; and,
- Ensuring that sufficient quality, quantity and connectivity of habitat is provided to accommodate the reptile populations with no net loss of local reptile conservation status.

The design incorporates some areas to remain as grassland, whereas other areas will gradually be planted with small trees. Over time the area will slowly turn into scrub and woodland allowing any reptiles in the area to move to the adjacent grassland areas.

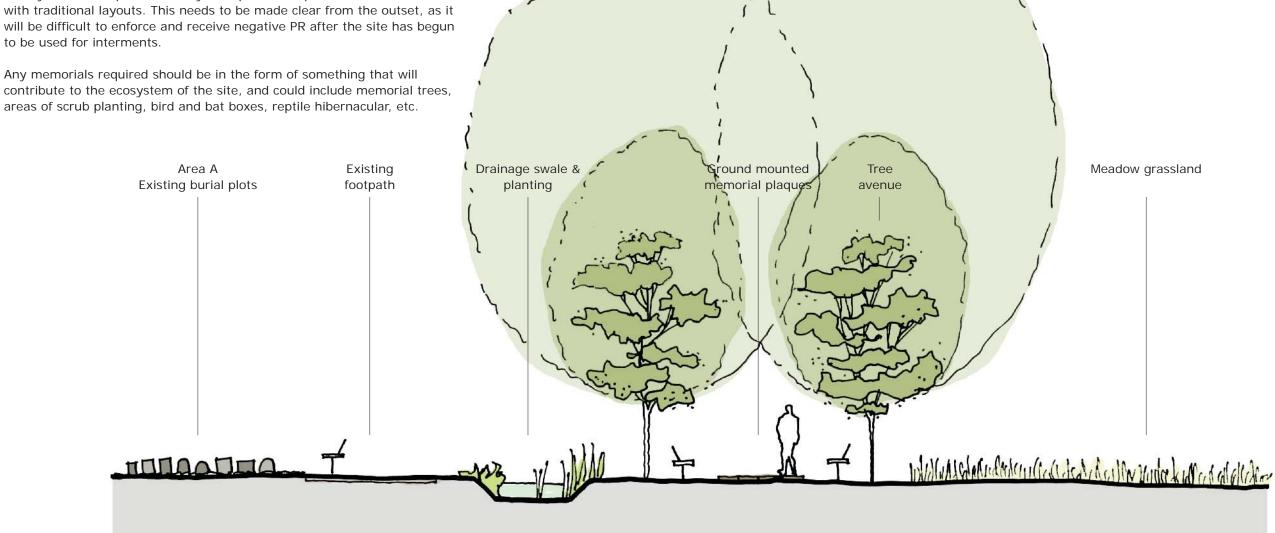
The site has also been identified as being a foraging area for birds and bats, but not containing any areas for roosting potential. The landscape proposals enhance the opportunities for foraging as well as providing future potential roosting opportunities.

Memorial Avenue

The memorial avenue would be a centrally located space solely for the laying of memorial plaques. A wide concrete slab would be cast flush with the ground level on to which A4 sized stone plaques can be gradually added as interments take place. The plaques will eventually form a walkway, set between an avenue of trees and encompassing benches to facilitate contemplation and views of the burial ground beyond.

In order to be successful, the meadow and woodland burial options require a change in site management and clear interpretation to the families and friends of the bereaved who wish to bury their loved ones here. In order for the site to function as a healthy ecosystem there can't be any memorials placed directly on top of burial plots which is common with traditional layouts. This needs to be made clear from the outset, as it will be difficult to enforce and receive negative PR after the site has begun to be used for interments.

Any memorials required should be in the form of something that will contribute to the ecosystem of the site, and could include memorial trees,



1:100@A3 🚦

Grave Records

The premise for meadow and woodland burial sites is that individual grave plots are not memorialised. There are no markers at ground level, so that the overall impression of the site is that of a meadow or woodland. Even small plaques will encourage the bereaved to leave a variety of objects on top of the grave, which can vary from wind chimes, ornaments, plastic flowers, cards in plastic envelopes, Christmas decorations, benches, kerb sets and headstones, additional inappropriate planting, etc. We recommend that no markers are left on graves, and that the OS coordinate corner points of each plot only are recorded at the time of interment. Other natural burial sites offer a range of technological tools to enable plots to be easily identified, but the advice that we have received is that they are gimmicks and not always accurate or reliable. These include:

- GPS coordinates, which is dependent on four satellites being overhead at the right time, but can be inaccurate by up to 10m.
- Differential GPS involves enhancing the GPS signal by having a receiver on site, which can improve accuracy to within centimetres. Although this may need to be located in a prominent position.
- GPS trackers, i.e. a small chip placed inside coffins would not work because they would be too far underground.
- RFID (Radio-Frequency Identification) tracker, again involving a small chip inside the coffin which can be identified with a handheld receiver.

The advice we have received is that none of the above should be relied on until the technology improves, and that a system of fixed station points, triangulation and measuring is still the most reliable way of recording and finding burial plots.









Cost Summary

The outline cost estimate per option is detailed below. Please refer to Pick Everard's report for further details.

	Option 01 Previous consultation scheme	Option 02 Revised layout - Traditional	Option 03 Revised layout - Meadow	Option 04 Revised layout - Woodland
Number of Plots	1000	1,050	1,050	1,050
Number of Interments	2000	2,100	1,950	1,050
Works cost estimate	£1,282,000	£1,246,000	£1,206,000	£1,075,000
Risk allowance for below ground obstructions	£100,000	£100,000	£100,000	£100,000
Risk allowance estimate	£128,000	£124,000	£120,000	£108,000
Inflation estimate	£30,000	£29,000	£28,000	£25,000
Total Cost	£1,540,000	£1,499,000	£1,454,000	£1,308,000
Construction Cost per Plot	£1,540	£1,428	£1,385	£1,246
Construction Cost per Interment	£770	£714	£746	£1,246