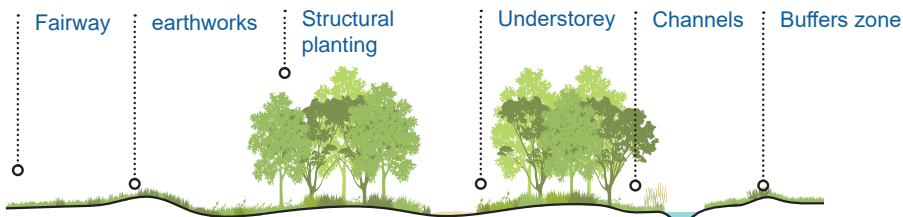
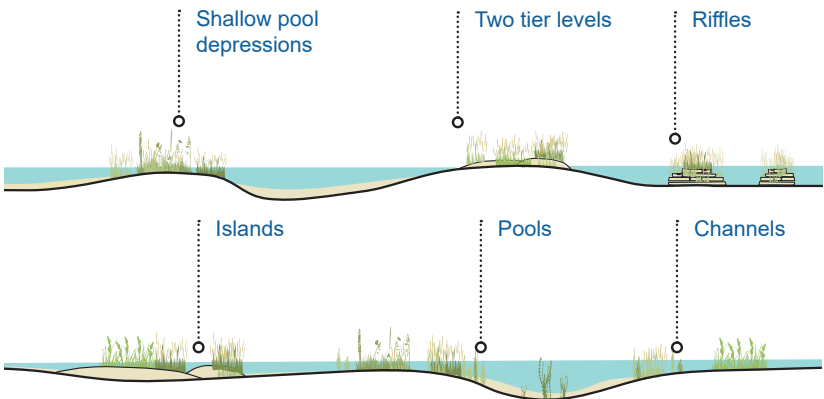


Woodland edge and hedgerow corridors



Damp grass passages and waterways



Rough grassland

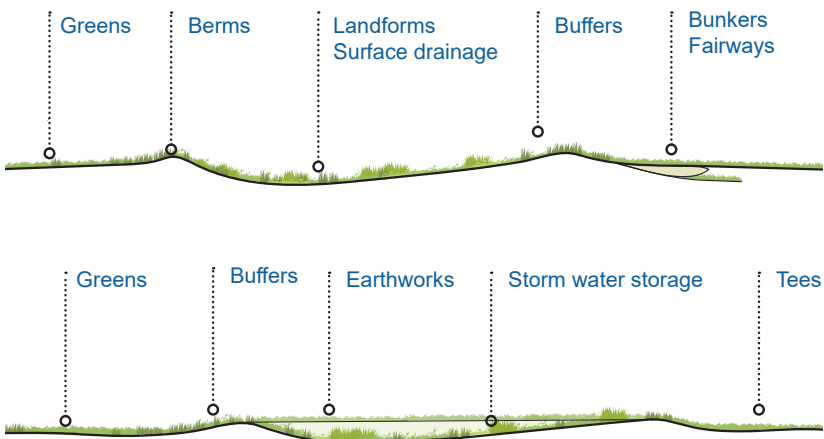


Figure 62 - View of habitat connection



### 4.4 Design proposals: Landscape & ecology (continued)

4.4.7 Trees and soft landscape form a fundamental part of the proposed design: enhancing a sense of place and local distinctiveness, offering seasonal character and promoting ecology and integration of biodiversity.

4.4.8 The proposed planting palette comprises of species chosen to;

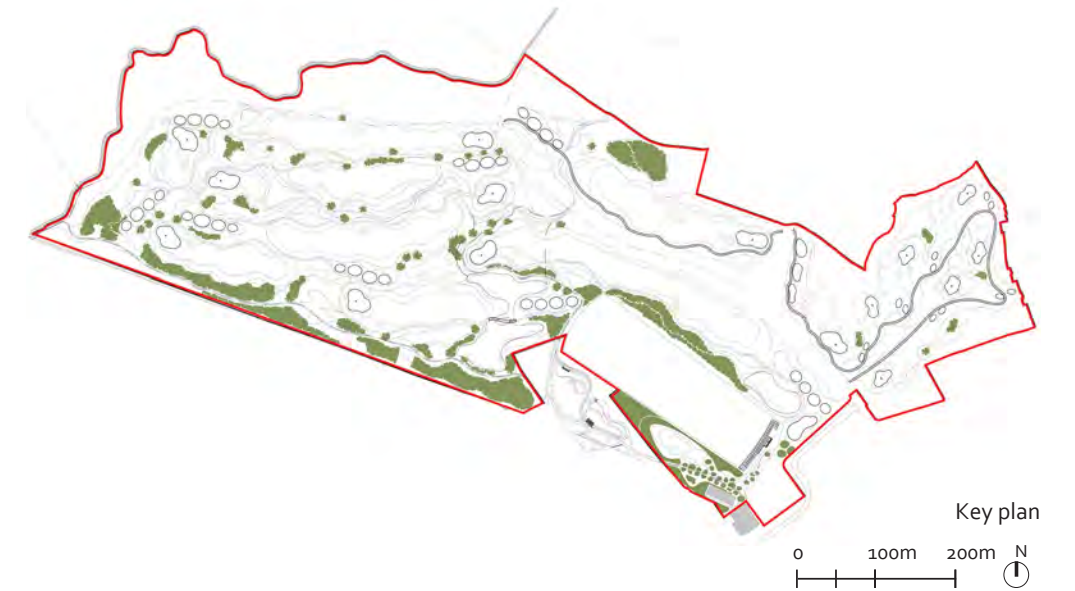
- enhance biodiversity and align with the proposed ecological corridors;
- reflect existing species on site and integrate with site character;
- align with future maintenance requirements; and
- be compatible with the playability of the golf course (for example, white flowering plants are restricted within play areas so as not to impede finding golf balls during play).

4.4.9 The following section illustrates the indicative selected planting for each of the key areas within the golf course.





## Planting - Woodland canopy



*Quercus robur*  
Oak



*Carpinus betulus*  
Hornbeam



*Fagus sylvatica*  
Beech



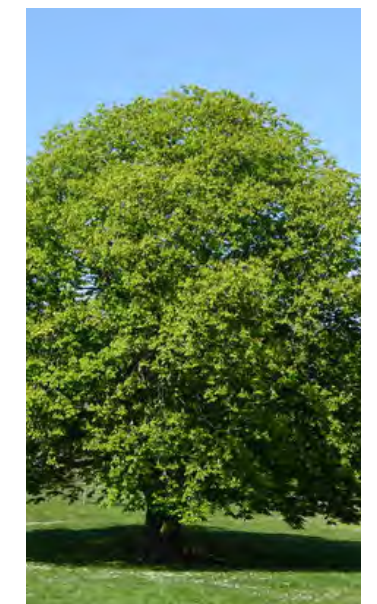
*Ulmus procera*  
English Elm



*Acer pseudoplatanus*  
Sycamore



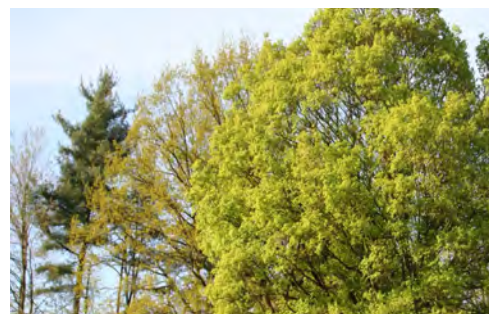
*Tilia x europaea*  
Common Lime



*Aesculus hippocastanum*  
Horse Chestnut



## Planting - Woodland understorey



*Acer campestre*  
'Queen Elizabeth' Field Maple



*Callitriche stagnalis*  
Hazel



*Ilex aquifolium*  
Holly



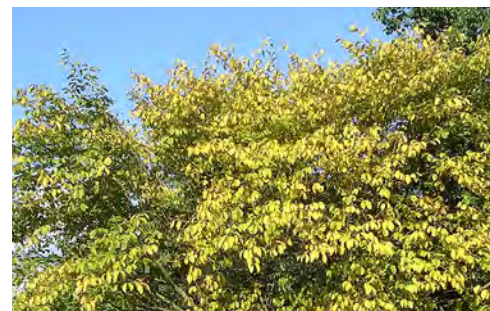
*Taxus baccata*  
Yew



*Lonicera periclymenum*  
Common Honeysuckle



*Sorbus aucuparia*  
Rowan



*Ulmus glabra*  
Wych Elm



*Euonymus europaeus*  
Spindle



*Cornus sanguinea*  
Common Dogwood



*Prunus spinosa*  
Blackthorn



Planting - Woodland ground cover



*Hyacinthoides non-scripta*  
Bluebell



*Geum urbanum*  
Wood Avens



*Alliaria petiolaris*  
Garlic Mustard



*Allium ursinum*  
Ramsons



*Silene dioica*  
Red Campion



*Salvia x sylvestris*  
Wood Sage



*Stachys officinalis*  
Betony



*Primula vulgaris*  
Primrose



*Digitalis purpurea*  
Foxglove



*Dryopteris filix-mas*  
Male Fern



*Dryopteris dilatata*  
Broad buckle fern



*Galium mollugo*  
Hedge Bedstraw



## Planting - Ecological linking habitat



*Festuca ovina*  
Sheep's Fescue



*Agrostis capillaris*  
Common bent



*Cynosurus cristatus*  
Crested Dog's-Tail



*Deschampsia flexuosa*  
Wavy Hair Grass



*Dactylis glomerata*  
Cock's-Foot



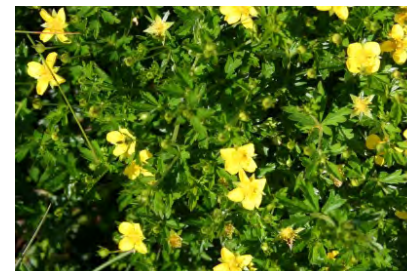
*Nardus stricta*  
Mat Grass



*Galium saxatile*  
Heath bedstraw



*Cerastium alpinum*  
Mouse-ear chickweed



*Potentilla erecta*  
Tormentil



*Rumex acetosa*  
Sheep's Sorrel



*Holcus mollis*  
Creeping Soft Grass



*Ulex europaeus*  
Gorse



*Cytisus scoparius*  
Broom



*Calluna vulgaris*  
Ling heather



*Betula pendula*  
Silver birch



*Sorbus aucuparia*  
Rowan



Planting - Stream corridor



*Glyceria fluitans*  
Floating Sweet Grass



*Callitriche stagnalis*  
Water Starwort



*Alisma plantago-aquatica*  
Water Plantain



*Iris pseudacorus*  
Yellow Flag



*Filipendula ulmaria*  
Meadowsweet



*Phalaris arundinacea*  
Reed Canary Grass



*Deschampsia cespitosa*  
Tufted Hair Grass



*Centaurea nigra*  
Common Knapweed



*Succisa pratensis*  
Devils Bit Scabious



*Sparganium emersum*  
Unbranched Bur-reed



*Carex lacustris*  
Hairy Sedge



*Pulicaria dysenterica*  
Common Fleabane



*Vicia cracca*  
Tufted Vetch



*Alnus glutinosa*  
Alder



*Crataegus monogyna*  
Hawthorn



## Planting - Pond margins



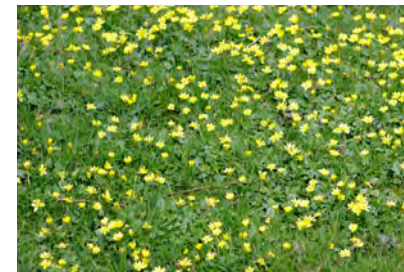
*Iris pseudacorus*  
Yellow Flag



*Filipendula ulmaria*  
Meadowsweet



*Angelica sylvestris*  
Wild Angelica



*Ranunculus repens*  
Creeping Buttercup



*Achillea ptarmica*  
Sneezewort



*Geum rivale*  
Water Aven



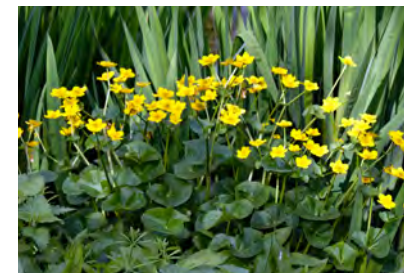
*Lotus pedunculatus*  
Greater Birdsfoot Trefoil



*Lychnis flos-cuculi*  
Ragged Robin



*Succisa pratensis*  
Devils Bit Scabious



*Caltha palustris*  
Marsh Marigold



*Eupatorium cannabinum*  
Hemp Agrimony



*Hypericum tetrapterum*  
Square-stalked St. John's-Wort



*Lycopodium europaeus*  
Gypsywort



*Lythrum salicaria*  
Purple Loosestrife



*Mentha aquatica*  
Water Mint



*Pulicaria dysenterica*  
Common Fleabane



*Scrophularia auriculata*  
Water Figwort



*Vicia cracca*  
Tufted Vetch



Planting - Rough grassland



*Cynosurus cristatus*  
Crested Dog's-Tail



*Agrostis tenuis*  
Common bent



*Festuca rubra*  
'Molate' Red Fescue



*Poa nemoralis*  
Wood Meadow Grass



*Lotus pedunculatus*  
Greater Birdsfoot Trefoil



*Galium verum*  
Lady's Bedstraw



*Anthoxanthum odoratum*  
Sweet vernal grass



*Brachypodium sylvaticum*  
False brome



*Briza media*  
Quaking grass



*Phleum bertolonii*  
Smaller Cat's-Tail



*Deschampsia cespitosa*  
Tufted Hair Grass



*Ranunculus acris*  
Meadow Buttercup



*Prunella vulgaris*  
Selfheal



Planting - Driving range peripheral



*Cynosurus cristatus*  
Crested Dog's-Tail



*Festuca ovina*  
Sheep's Fescue



*Festuca rubra*  
Red Fescue



*Galium verum*  
Lady's Bedstraw



*Leontodon hispidus*  
Rough Hawkbit



*Leucanthemum vulgare*  
Ox-eye Daisy, Marguerite



*Achillea millefolium*  
Wild arjoram



*Origanum vulgare*  
Wild Marjoram



*Primula veris*  
Cowslip



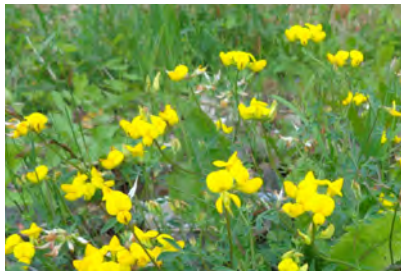
*Prunella vulgaris*  
Selfheal



*Ranunculus repens*  
Creeping Buttercup



*Sanguisorba minor*  
Salad Burnet



*Lotus pedunculatus*  
Big Trefoil



Planting - Tee, fairway, semi rough seed mix



*Festuca rubra subsp. commutata*  
Chewing's fescue



*Festuca rubra subsp. litoralis*  
Slender red fescue



*Poa pratensis* 'Explorer'  
Smooth-stalked meadowgrass



*Festuca rubra*  
Strong-creeping Red-fescue



*Festuca brevipila*  
Hard fescue

Planting - Green seed mix



*Festuca rubra subsp. commutata*  
Chewing's fescue



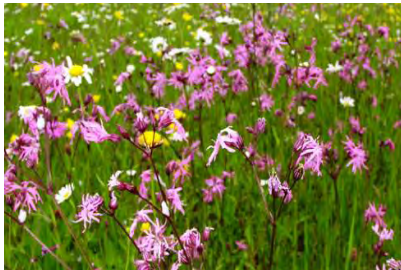
*Festuca rubra subsp. litoralis*  
Slender red fescue



*Agrostis capillaris*  
Brown top



Great crested newt habitat



*Lychnis flos-cuculi*  
Ragged-Robin



*Cardamine pratensis*  
Cuckoo Flower



*Filipendula ulmaria*  
Meadowsweet



*Epilobium hirsutum*  
Great hairy willowherb



*Myosotis scorpioides*  
Water Forget-Me-Not



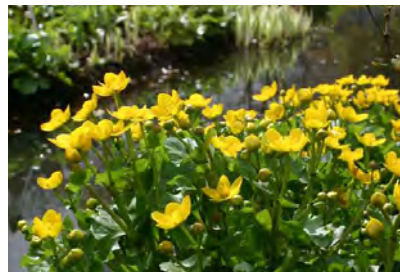
*Ranunculus lingua*  
Greater spearwort



## Great crested newt pond margins



*Juncus effusus*  
Soft rush



*Caltha palustris*  
Marsh marigold



*Iris pseudacorus*  
Yellow flag



*Lythrum salicaria*  
Purple loosestrife



*Mentha aquatica*  
Water Mint



*Lemna minor*  
Common Duckweed



*Glyceria fluitans*  
Flote/sweet grass

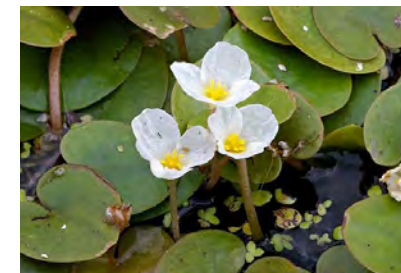
## Great crested newt pond planting



*Hippuris vulgaris*  
Mares Tail



*Potamogeton pectinatus*  
Fennel pondweed



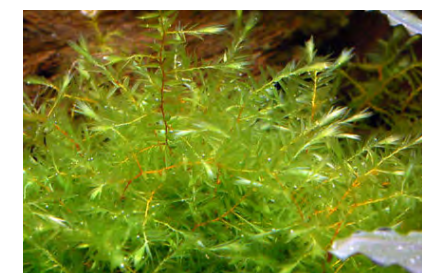
*Hydrocharis morsus-ranae*  
Frogbit bareroot



*Ranunculus aquatilis*  
White water-crowfoot



*Stratiotes aloides*  
Water soldiers



*Fontinalis antipyretica*  
Willow moss



### 4.5 Design proposals: Waterways, waterbodies & drainage

- 4.5.1 In response to the design principles set out for landscape and water, the design proposal have realigned the Ickenham stream to respond to the site topography and enable it to function as an ecological swale feature for the golf course.
- 4.5.2 The new watercourse will meander through the golf course and include a number of ponds and wetland areas, connected together with a serpentine ditch/stream, meandering through holes 1, 2, 3, 5, 6, 7 and 8.
- 4.5.3 The drainage system for the golf course is connected into this new feature. This incorporates a surface drainage system for the new fairways and out of play areas, with runoff collected by gullies along the perimeter of the playable areas and discharging into gravity drain pipes. A subsurface drainage system for the greens, tees, bunkers and driving range area, comprising perforated pipes, will also discharge to these drain pipes.
- 4.5.4 Due to its lower levels, the northern part of the site (hole 5 fairway and green and the tees of hole 6 and hole 8) does not drain to the water storage system but directly to the River Pinn through existing channels and projected swales.
- 4.5.5 No changes are proposed to the drainage network of the car park area and the club house, however, an outlet pipe connecting the car park with the drainage network is proposed.
- 4.5.6 Filter drains will intercept surface runoff and, additionally, oil separators will be installed at the car park and green keepers' compound. These measures will ensure that contaminants are not discharged to the drainage network or, in the case of the green keepers' compound, the sewer system, thus ultimately enhancing the quality of the water discharged into the River Pinn.
- 4.5.7 A water harvesting system has been incorporated into the design to collect and store water on the application site, including provision of three ponds and three tanks to store water, together with flow control outlets. The pumping station is located in a structure attached to tank 1.
- 4.5.8 The water storage system is formed of three sub-systems, each incorporating independent inlets, which may be operated independently through a valve system located at the pumping station. Additional valves may be used to connect the three sub-systems.

- 4.5.9 The drainage network will provide a storage capacity of approximately 14,400m<sup>3</sup>, sufficient to irrigate the Golf Course for 100 days without precipitation.
- 4.5.10 The runoff from the golf course surface will be attenuated in two basins. These comprise depressed areas, connected to the water storage systems by overflow pipes. The outfalls of the attenuation areas are controlled by flow control outlets. Overflow elements, including pipes and weirs, will be provided to release excess water to these attenuation basins.
- 4.5.11 Slopes and banks have been designed to be safely maintained by ride-on mowing machines.



Figure 64 - Aerial view of proposed pond



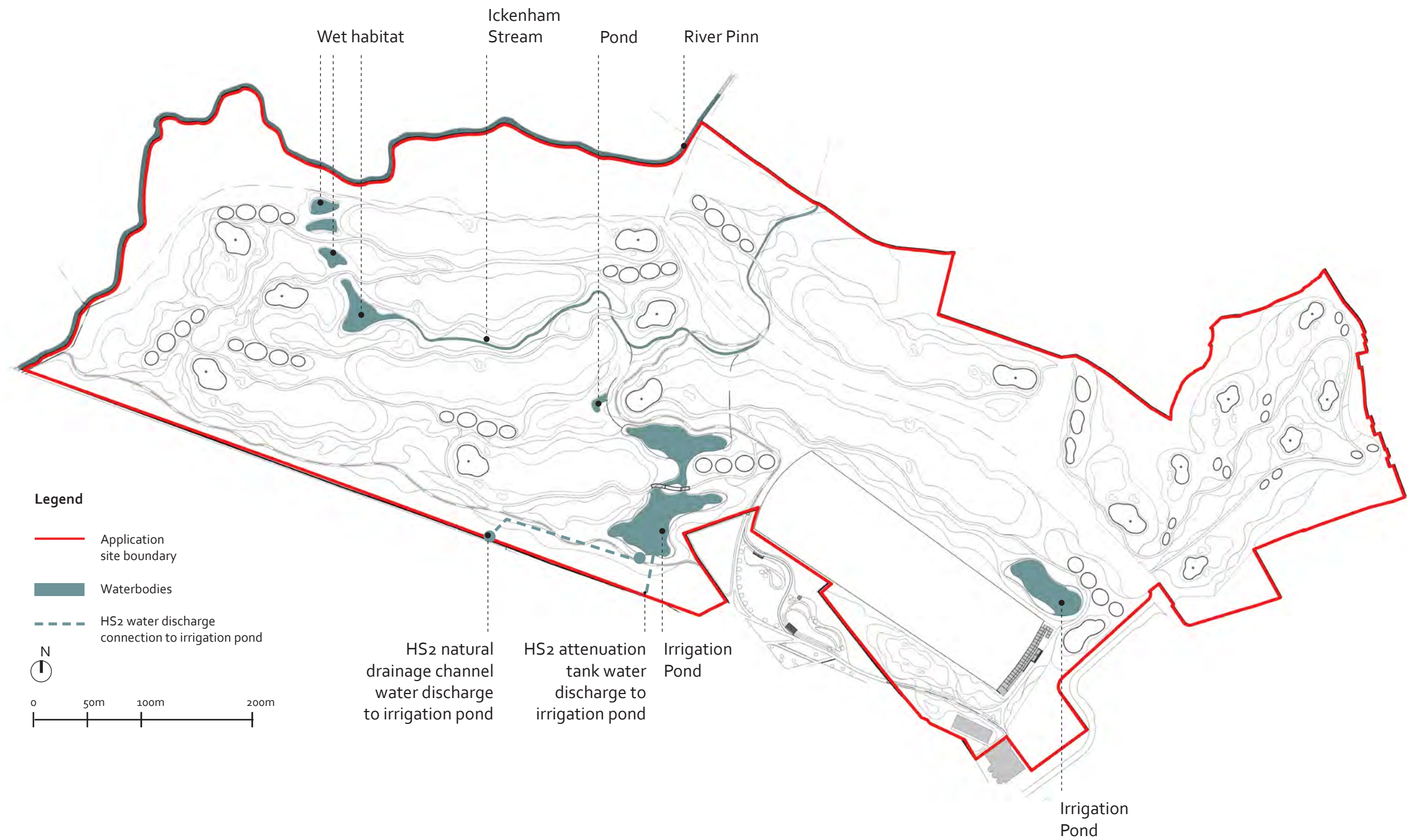


Figure 65 - Waterbodies and wet habitat plan



### 4.6 Design proposals: Public footpaths and access

- 4.6.1 The design of the footpaths will align with *Accessible Hillingdon Supplementary Planning Document* (May 2013) which states that access to parks, open spaces and countryside should ensure:
- physical access for everyone, free from barriers e.g. stiles, including wheelchair users;
  - appropriate surfaces and gradients;
  - adequate seating along extended walking routes;
  - facilities such as toilets, picnic tables and observation hides are accessible;
  - signs are located to be visible, appropriate (not used excessively) and easily understood; and
  - good information using clear print guidelines and as appropriate, available in alternative formats.
- 4.6.2 Several public footpaths cross the application site. The Celandine Route runs roughly around the western and northern edge of the course along the River Pinn. This route is not affected by this application.
- 4.6.3 The Hillingdon Trail (U81) currently runs in a north-south direction across the centre of the golf course, crossing the Chiltern Mainline tracks via a tunnel to the south. As part of the HS2 works a new route for the Hillingdon Trail is proposed. The realigned route is located partially within this application boundary and partially within the limits of the HS2 Act.
- 4.6.4 The realigned route for the Hillingdon Trail is being determined by HS2. The realigned route will either enter the application site from Ickenham Road close to the club house or from the southern boundary close to the existing entry point. The proposed realignment within this application is compatible with both options. Should the realignment enter the application site close to the club house it would travel in a westerly direction to the south of the rifle range where it would leave the application site and cross an area within the limits of the HS2 Act. It would reenter the application site at the western edge of the driving range from where it continues in a generally northern direction before connecting to Clacks Lane. Should the route enter the application on the southern boundary, it would do so close to the western edge of the driving range and follow the same alignment from here.
- 4.6.5 The proposed route does not directly cross a fairway to improve safety. The Hillingdon Trail will be resurfaced with self-binding gravel (see figure 67), or similar, and wayfinding improved. Wayfinding will be provided in accordance with LB Hillingdon's Wayfinding Strategy.

- 4.6.6 A new public footpath is also proposed along the southern boundary of the application site. Where the Hillingdon Trail turns to the north at the western edge of the driving range, the new footpath will continue westwards until it meets the Celandine Route in the south-west corner of the application site.
- 4.6.7 A footpath connecting all holes is also provided for golfers.
- 4.6.8 Seating will also be provided at strategic points along the new footpath and realigned Hillingdon Trail (see figure 69 for precedent image).



Figure 66 - View of realigned Hillingdon Trail



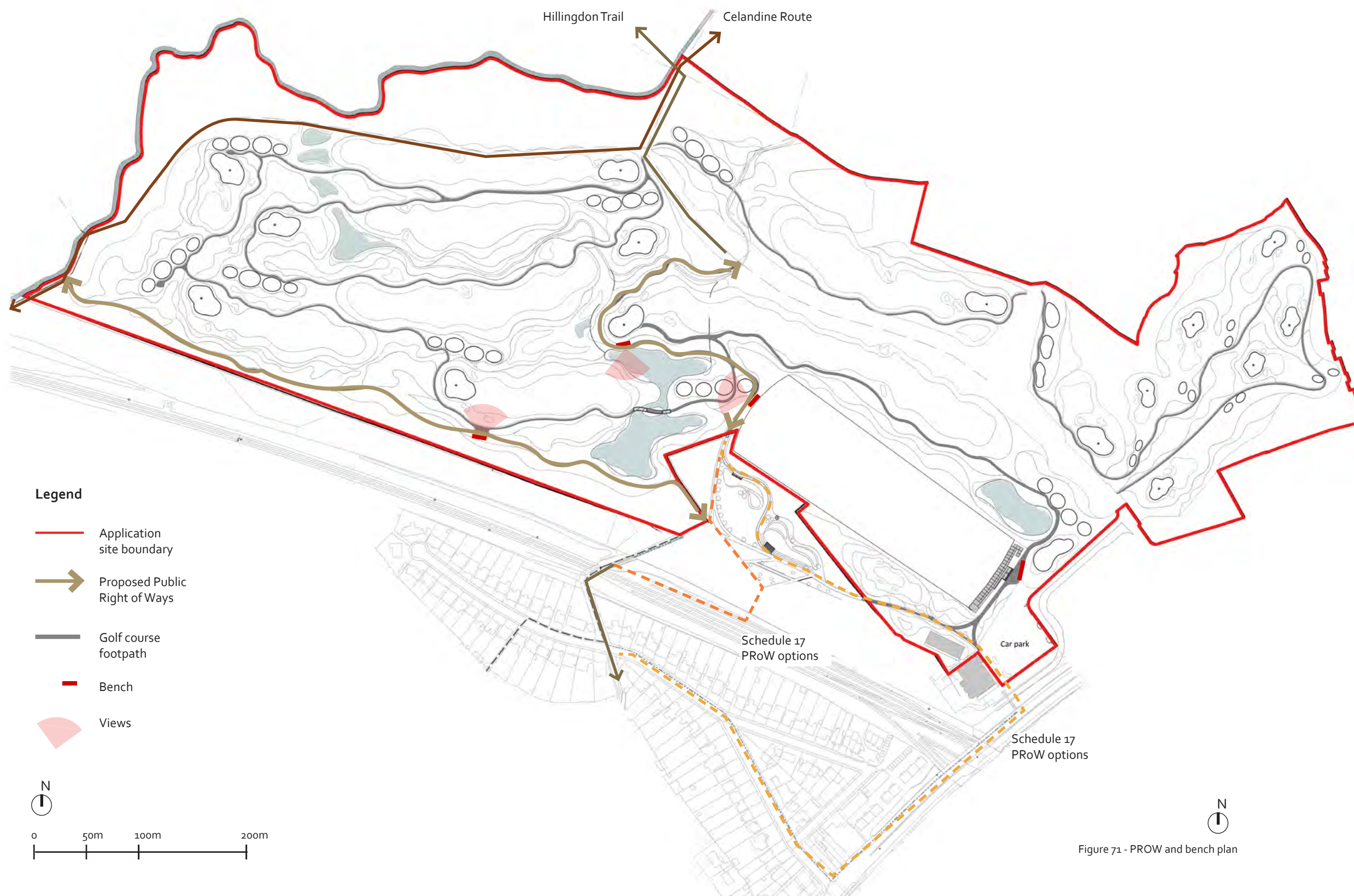


Figure 67 - Self-binding gravel path



Figure 68 - timber edging to footpaths



Figure 69 - Recycled timber benches



Figure 70 - Raised timber walkway footbridge over water course



