Brandhall ‘Eco Park’

Landscape Design Report

LDĀDESIGN

Contents

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Version date: 18th July 2025

Comment: Draft Report

This document has been prepared and checked in accordance with ISO 9001:2015

1.0 Introduction

An outline planning application for the development of the former Brandhall Golf Course was approved in October 2023. The consented masterplan proposes the creation of a new high-quality and sustainable community, delivering the first public park in Sandwell's 50-year history, a primary school to replace Causeway Green Primary School, and the provision of 190 new homes, 25% of which will be affordable.

The illustrative masterplan prepared by AECOM was subject to extensive community engagement which indicated a strong preference for the retention of the site as a natural area with community access.

The Council aims for this development to be the first sustainable and low carbon urban village development in the Borough, setting exemplar standards of development which make a positive contribution towards achieving the objectives in Vision 2030, and the aspirations in the Climate Change Strategy 2020-2041 including carbon neutrality by 2041.

The principal objectives of the project include the creation of:

- A high-quality park environment which promotes positive recreation and active travel whilst protecting and enhancing the natural habitat.
- Uniquely designed, low-carbon and energy-efficient homes utilising sustainable materials in construction.
- A new school built to the highest standards of energy efficiency and sustainable material usage and maximum carbon efficiency.
- Social value achieved through provision of apprenticeships/job opportunities, community involvement/engagement, local spend (including the local supply chain) and the environment.

LDA Design was appointed by Sandwell Metropolitan Borough Council (SMBC) in July 2023, to build previous engagement and to develop the outline masterplan, landscape design and delivery strategy, including potential phasing and associated costs of implementation. The scope of the commission also includes an assessment of potential additional capacity for ecological and environmental uplift on the site.

This design report outlines the landscape analysis, engagement, design evolution and detail of the masterplan. The proposals have been informed by AECOM's earlier masterplan work and developed through an iterative process with the design and client team, including community, school and youth engagement, and technical meetings with the Causeway Green School design team.

Since the planning decision, Council Members have expressed that they would like to see the park developed as an 'EcoPark' with a focus on the natural environment, rich ecological habitats, biodiversity and natural/adventure play.

2.0 The Site

The Brandhall Golf Course including the club house was closed in 2020 and is currently in the freehold ownership of SMBC. The site extends to 36 hectares in total.

The site benefits from a mature and attractive landscape character, with areas of broadleaved semi-natural woodland located between the fairways and along the site boundaries.

The presence of the M5 motorway is audible.

There are two watercourses and marshes.

The vision should seek to retain and enhance this character, whilst introducing new elements to improve accessibility, connectivity, and the spaces, so that they appeal to existing and new communities.

↑ AECOM's illustrative masterplan.

2.1 Analysis

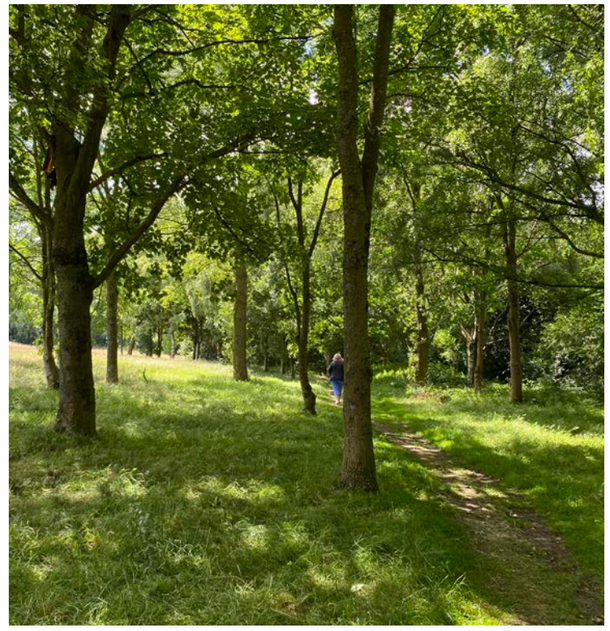
Detailed analysis was undertaken to inform the evolution of the masterplan and is overleaf under five key categories:

- **Connectivity:** Two Public Rights of Way exist across the park; one connecting the northern boundary to the south, and the other connecting the eastern boundary to the other PRoW, although the access point to the east-west PRoW has now been closed. Other informal mown paths exist from its previous use as a golf course.
- **Water:** Brandhall Brook runs south-north through the park, with a few ponds along its course. The watercourse sits within an area of high flood risk and will need careful consideration.
- **Levels:** The levels over the park generally fall from south to north with a difference of approximately 30m in total. The topography also falls from a higher edge to the west down towards the centre of the park.
- **Habitat:** The park is primarily modified grassland with groups of broadleaved and mixed woodland.
- **Access:** Access to the park is limited due to its previous use as a private golf course, and existing access points are unattractive and unsafe, and wayfinding is difficult.

Careful attention as been given to understanding the constraints along the western boundary with the M5 including, noise and pollution and the constraints of the power lines and associated easement.

This analysis helped to inform the initial design principles and the shaping of the park masterplan. Opportunities and constraints based off of this analysis are explored in the next section.

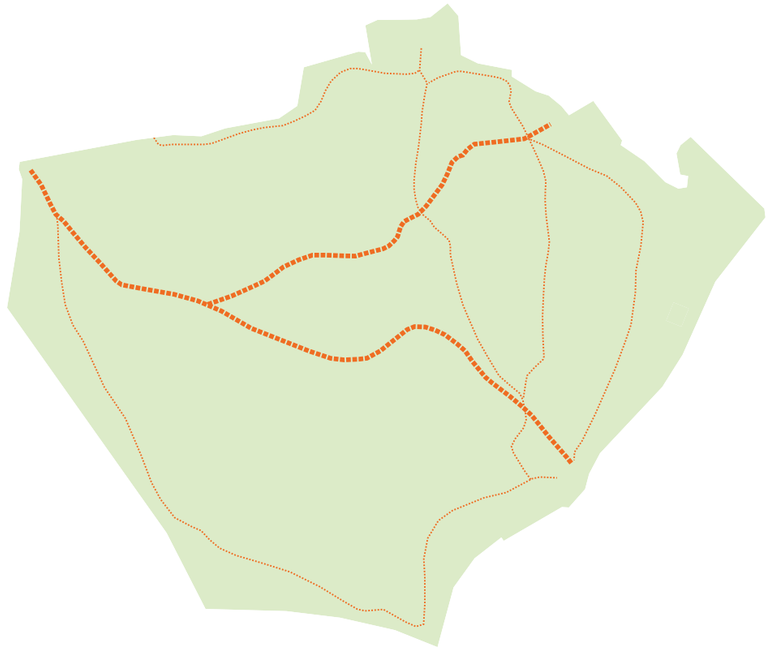
↑ Links and circulation.



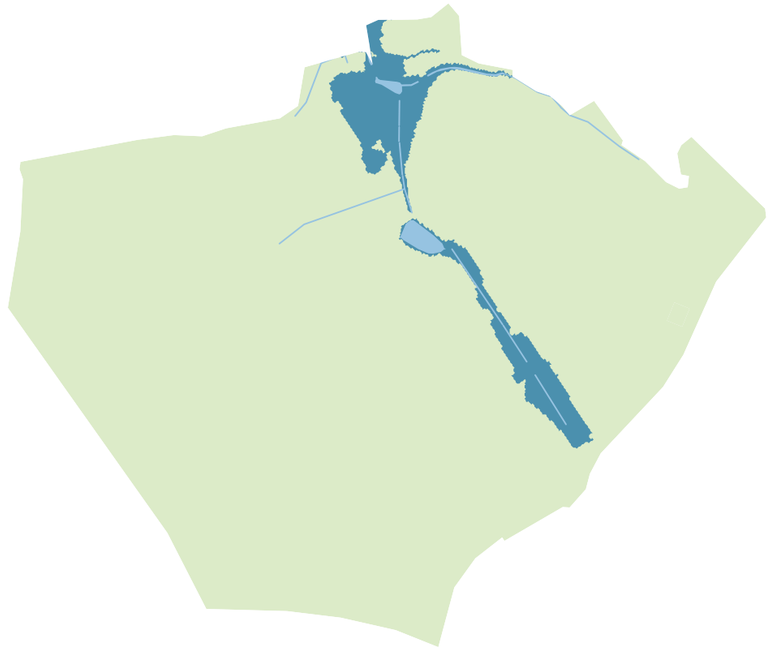
↑ Woodland paths and edges.

↑ Ponds and watercourses.

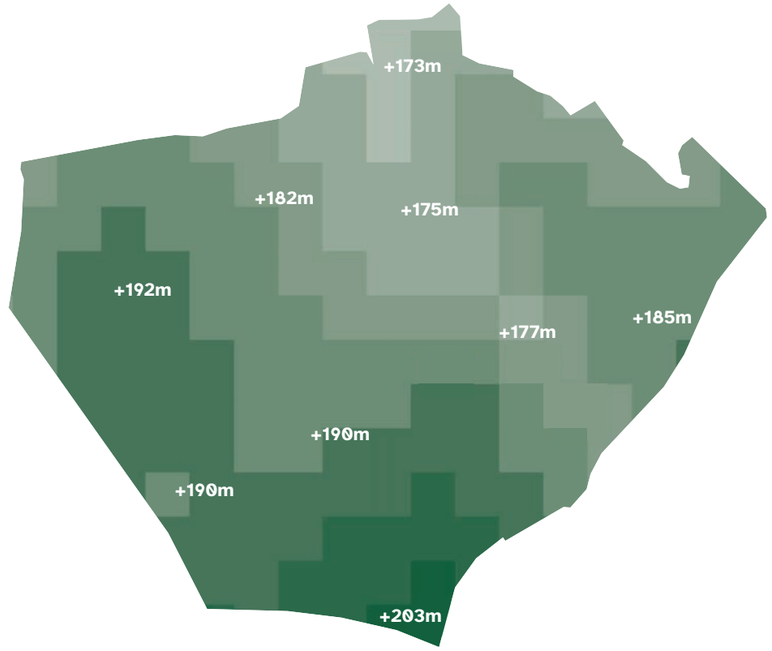
↑ Undulating topography.



Connectivity

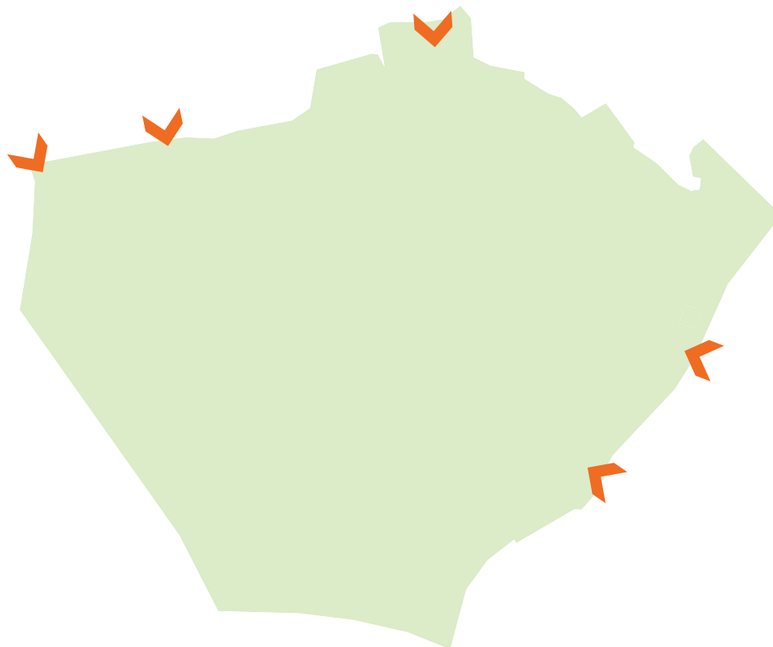


Water



Levels

Habitat



Access

↑ Site analysis diagrams.

3.0 Project Appreciation

The park is an oasis set within a heavily urbanised area, providing relief to the community surrounding it. It's a haven for local wildlife, benefitting from groups of mature trees and established vegetation, primarily along the site boundaries. A narrow brook runs through the centre of the site and offers potential to provide a more significant wetland habitat feature. With its undulating topography, there are stunning views across and through the park, creating an impressive setting.

> **The overall objective is to deliver a high-quality park environment which promotes positive recreation and active travel whilst protecting and enhancing the natural habitat.**

From our analysis, site visit, and previous consultation event feedback, we developed the following key principles for the park:

- **Connection to nature:** bringing people closer to nature.
- **Protect and enhance:** retaining existing trees, vegetation, and character.
- **Sensitive integration:** ensuring the developments on site sit well within the landscape and feel part of the park.
- **Access and inclusivity:** providing access to all through accessible routes and entrances.
- **Maintain wilderness:** protect wildlife and biodiversity through maintaining 'wild' areas.

Opportunities and Constraints

The location of the park offers opportunities for connection with the community through linking with local schools and other green spaces to offer activities currently unavailable in other areas.

There are many opportunities to retain and enhance the existing trees and vegetation, as well as exploring the enhancement of Brandhall Brook.

Landscape analysis including opportunities and constraints underpinning the masterplan are illustrated on the diagram opposite.

Key Principles

Connection to nature

Protect and enhance

Sensitive integration

Access and inclusivity

Maintain wilderness

↑ Opportunities and constraints diagram.

4.0 Design Development

Following the development of initial principles for the project, we explored distilling these into character zones across the park.

These zones focussed on creating different habitats that had their own unique characters, whilst also creating opportunities for a variety of activities and uses to take place.

Initial ideas explored include:

- Flexible open spaces that allowed for a variety of activities, such as, dog walking, yoga, picnics etc.
- Performance and gathering spaces that created space for the community to come together.
- Woodland play to encourage children to explore and be adventurous.
- A series of paths and routes that allowed all users to be able to use the park in a way that they wanted, including, cycling, dog walking, connecting to nature etc.
- Creating opportunities to connect to water through engagement with the Brandhall Brook running through the park.
- Boardwalks and explorative paths to connect with nature and habitats from a different perspective.

↑ Character zones diagram.

↑ Character zones icons.

Design Principles

From our initial ideas, we developed some design principles that we believe to be key for the park. These include:

- **Connectivity:** enhancing and creating entrances to improve visibility and wayfinding, and connect the park to the surrounding community on all sides. Linking these entrances would be a series of paths with three route types to allow for different paces, users, and activities. These include:
  - Direct routes
  - Active routes
  - Explorative routes
- **Creating 'wild' areas** which may have paths through or alongside, but are inaccessible for public use to protect wildlife and preserve biodiversity.
- **Retaining and enhancing existing trees and vegetation** to ensure that the character and history of the park are not lost, and to retain as much habitat as possible.
- **Integrating the residential and school developments** to create positive frontages along the interfaces with the park.
- **Water management:** enhancing and widening the Brandhall Brook and existing ponds to incorporate sustainable drainage solutions from the developments, as well as providing opportunities for the community to connect with the water.

We took these design principles to an engagement day where we discussed if these reflected what was important to the community before progressing with the next design stage of the masterplan.

↑ Initial design principles diagram.

4.1 Engagement

Community Engagement Day

The next step in our design process was to run an engagement day with the local community to gather their thoughts, concerns, and priorities for the masterplan.

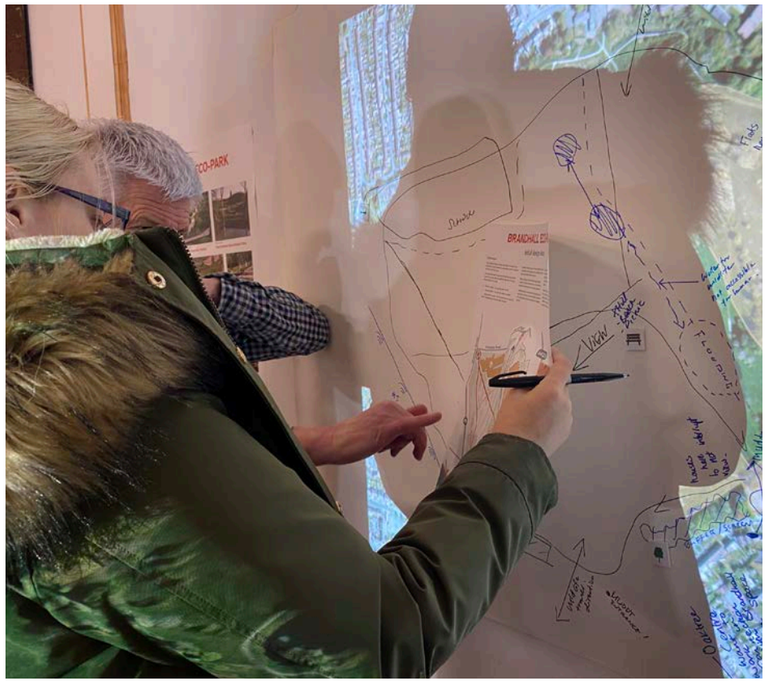
We prepared presentation boards that described the journey so far and outlined our key principles that we were following. The boards allowed the community to walk around, read, and form questions, which helped us gather ideas to shape the masterplan.

We set up three question boards that encouraged the community to reflect on their experiences of local green spaces, including the park, and provide us with feedback on their priorities and opinions for us to include within the masterplan design.

After the question boards, we provided an interactive masterplan exercise projected on to a wall to allow the community to discuss their ideas with us through drawing, writing, and highlighting key areas.

The last activity was a planting exercise which created a connection to place through encouraging the planting of acorns and a mixture of native cuttings which can then be planted back in the park as part of a future engagement/community event.

↑ Community Engagement Day set up at the Oak Tree Centre.



↑ Interactive projected masterplan exercise.

↑ Planting activity at the engagement day.

Feedback

From conversations with the community, the post-it note questions, and the interactive masterplan exercise, we gathered a range of feedback.

Common priorities for the community include:

- Wildlife and habitats
- Social spaces
- Safety
- Accessibility

Wildlife and habitats

Concerns were raised around retaining as much of the existing habitat as possible, including the existing woodland buffers to the residential areas. There were suggestions of new habitats to enhance the existing and increase the biodiversity in the park.

Social spaces

The community are keen to introduce natural play and flexible open spaces for a variety of activities to take place. Picnic areas and space for performance/events were also mentioned for bringing people together.

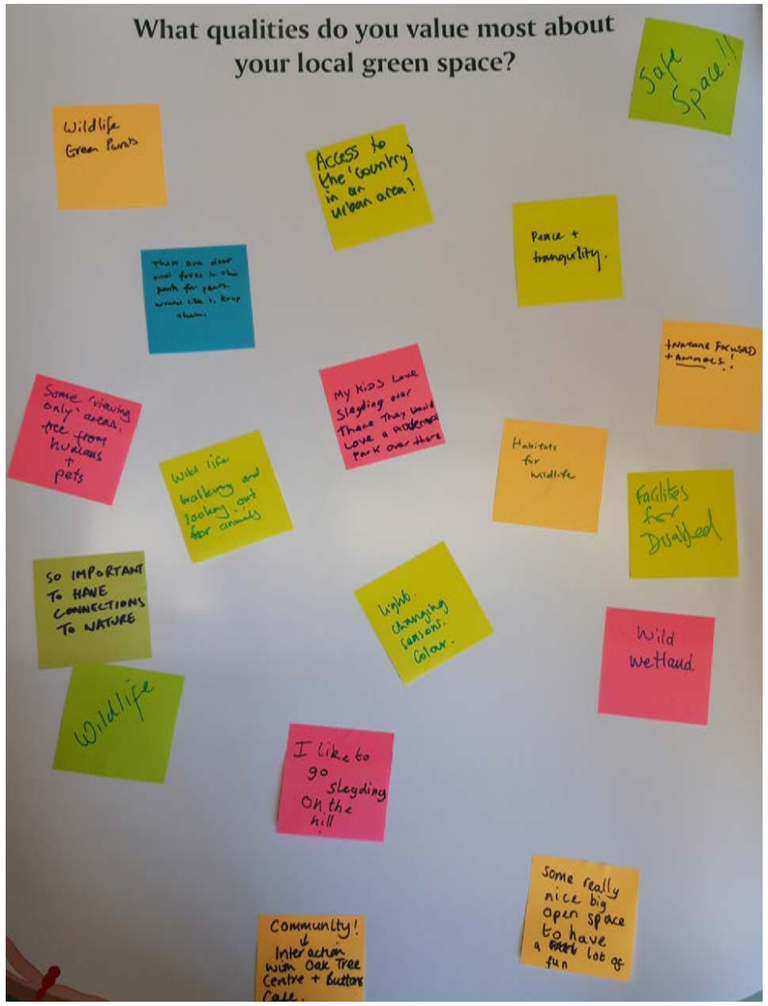
Safety

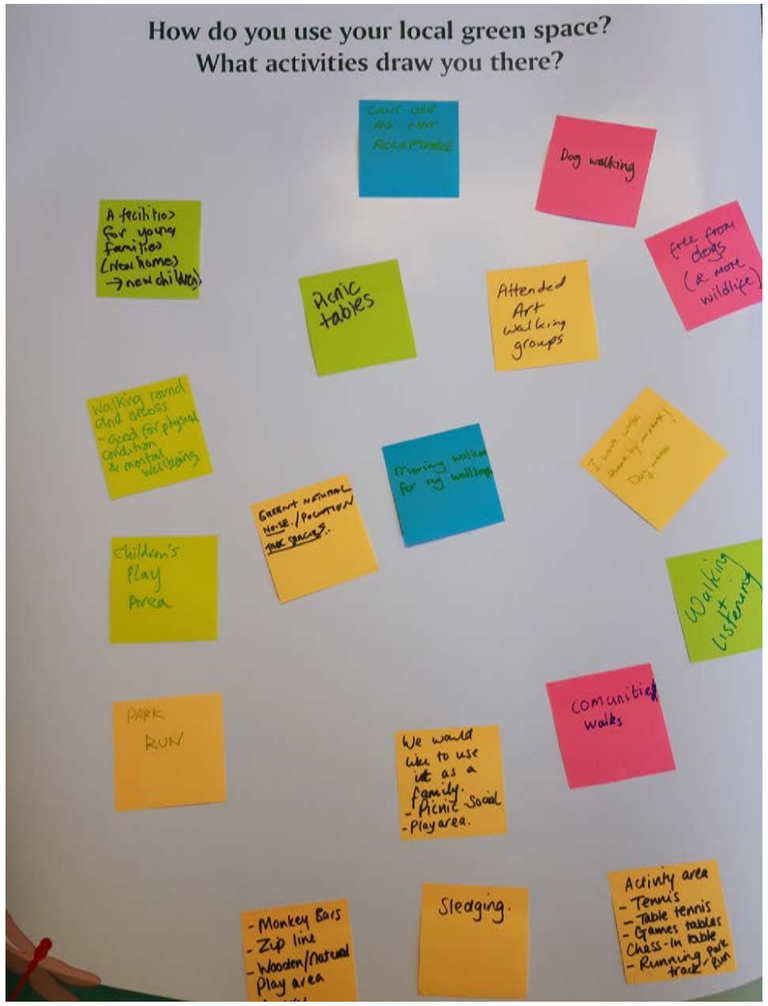
Safety was a common theme across the feedback, including provisions for lighting and clear wayfinding, visible and inviting entrances, and deterrents to anti-social behaviour (graffiti, littering, off-road bikes etc.)

Accessibility

Making the park accessible to all is important to the community. Comments include: path surfacing for wheelchair and scooter users, clear wayfinding using circular paths, and wider entrances to create room for buggies, mobility scooters, and wheelchairs.

↓ Feedback from the post-it note question boards.





Youth Engagement

During our engagement day, MATT+FIONA (M+F), a social enterprise that works with young people to shape their built environment and empowers them to bring that vision to life, led two workshops with local schools. The children took part in creating models of woodland play spaces that they would like to see in the park. M+F also held a workshop with an older cohort on a separate occasion to explore their ideas on social areas and spaces to gather. The workshops took place as below:

- **Workshop 1:** 29/11/2024, 10:00-12:30 - Causeway Green Primary School, 60 pupils, age 11.
- **Workshop 2:** 29/11/2024, 13:30-14:45 - Oak Tree Centre, 20 pupils, age 9-11.
- **Workshop 3:** 05/12/2024, 18:30-20:00, Bleak House Library, 6 pupils, age 13-16.

Across all three workshops there was an emphasis on integrating features within the natural landscape, whether that be places to play or places to sit. All three groups also mentioned how places for playing could be for both people and wild animals.

The younger cohort (Workshops 1 & 2) looked at creating adventurous play high up within the woodland, looking at specific pieces of equipment like zip wires and monkey bars through the trees. Integrating water within the play or creating structures to bridge the water also cropped up within the designs.

The older cohort (Workshop 3) focused more on cross-generational socialising within the park, with several of the pupils creating structures that provided natural shelter. Another theme was spaces to perform or gather that resembled a kind of amphitheatre-like form. Finally, the group thought about how we could ensure that sports facilities could be used (basketball courts/football pitches) but were still integrated within the landscape, through use of natural colours and materials.

↑ Workshop 1 at Causeway Green Primary School.

↑ Workshop 2 at the community engagement event.

↑ Pupils getting stuck into creating their models at the engagement day event.

Feedback

Workshop 1

- Zip wires/monkey bars/adventurous play through the trees.
- Performance spaces
- Bridges over water/through trees
- Water play/boats
- Tree houses, slides from them or imaginative ways of getting up/down
- Fortresses/castles/spaces to encourage imaginative play
- Spaces for adults to sit while children play
- Spaces to enjoy picnics
- Balance beams/stepping stones/playful ways of moving through space (parkour)
- Climbing frames integrated into the trees
- Tent-like structures/small spaces just for children
- Sandpits
- Rope swings hanging from trees
- Hamster wheels
- Structures you can build yourselves (stick houses/tents etc)

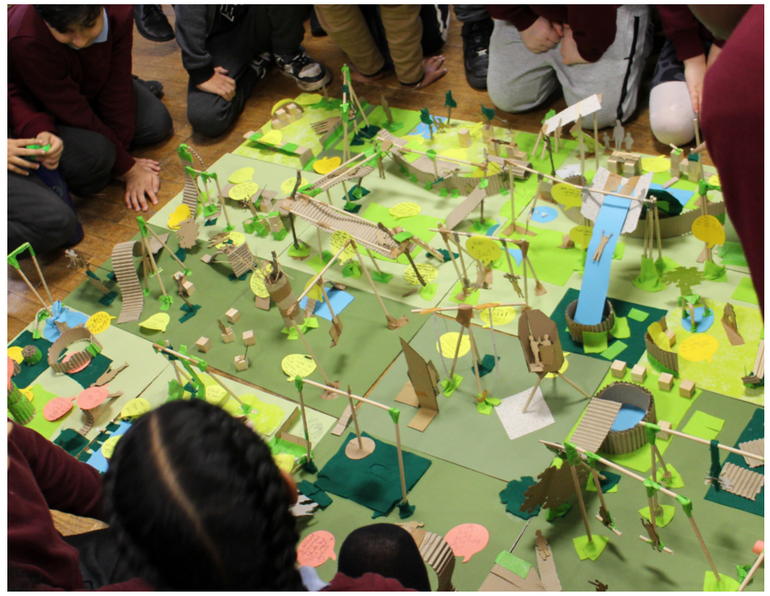
Workshop 2

- Rope swings through the trees
- Slides into pools of water
- Bridges and ropes above ground through the trees
- Toddler friendly
- Spaces for adults to sit and watch their children/toddlers
- Zip lines
- A shelter for playing in the rain/shade from the sun
- Café space
- Dog/animal friendly
- Lots of net swings (always a queue for the net swing!)
- Fish pond and fishing with free fishing rods
- Stick houses
- Tree house/assault course
- Slip and slide/water play

Workshop 3

- Performance space
- Memory garden/space for reflection with privacy screen for peace
- Better lit basketball court (with lights) integrated within the trees using natural materials and space for bike parking
- Table tennis table, sheltered from the wind
- Structure with stairs going up to second floor, for teenagers, swing outside for children
- Football pitch with family stand and main stand
- Star gazing area
- Bird watching eco tunnel
- Sheltered monkey bars to play in the heat/rain

↑ Models of woodland play elements created by the children.



↑ Discussions of the children's ideas and inspiration for play.

5.0 Masterplan

The masterplan combines our analysis, feedback from the community, and the design principles in to a scheme focussed on people and nature.

The park benefits from existing mature trees, vegetation, and habitat and the masterplan seeks to retain, enhance, and manage as much of this as possible, as well as supporting this with new areas of habitat without compromising the character and openness of the park. Details of the character and habitat areas for the masterplan can be found in section 5.5 Character and Habitat Areas.

Connectivity across the park will be improved through the introduction of three types of route, allowing users to experience the park in different ways. Crucially, the majority of routes will be accessible to allow all to experience the park. More details can be found in section 5.3 Connectivity.

Proposed areas of intervention bring play, education, and connection with nature into the park, explored in detail in the next section.

↑ Existing photo - stunning views of undulating landform and mature vegetation and trees.

1. Existing woodland and trees retained and managed
2. Existing areas of vegetation retained and managed
3. Existing ponds retained, with ponds widened to create wetland habitat and to provide attenuation for school site and residential parcels
4. New ponds along brook to provide attenuation and to create new areas of wetland habitat
5. Existing grassland managed as meadow
6. Proposed native tree planting along the edges of existing woodland blocks to strengthen woodland edges and create resilience
7. Proposed groups of mixed native trees
8. Proposed dense native tree planting mix along the edge of existing woodland to strengthen boundary to M5, increase biodiversity value, and assist with improving air quality
9. Enhanced grassland with native plug/bulb planted species mix 1
10. Enhanced grassland with native plug/bulb planted species mix 2
11. Enhanced grassland with plug/bulb planted species mix 3
12. Proposed primary pedestrian footpath, 2.5m wide
13. Proposed 2km perimeter active route, 2m wide
14. Proposed exploration routes across park and through habitats (1-2m wide)
15. Existing timber bridges over brook retained
16. Proposed areas of intervention, including play, interpretation, habitat, wildlife features, seating - locations linked with the previous golf course layout
17. Proposed amphitheatre with terraced seating and a community performance stage for social events and providing a park focal point
18. Proposed park entrances, widened with hard surfacing, lighting and signage to create welcoming entrances into the park
19. Existing MUGA
20. Existing buildings to be removed or relocated
21. Proposed low level lighting to key footpaths/routes
22. Proposed future residential development plots, layout to be confirmed
23. Proposed Causeway Green Primary School, layout to be confirmed
24. Proposed relocation of maintenance building
25. Pylon and power line easement
26. Main maintenance access route, 2.5m wide with 0.5m reinforced grass edges for maintenance access
27. Existing hedge and vegetation managed to create better visibility

Heron Road

Ferndale Road

Wolverhampton Road

Grafton Road

M5

Queensway

Worcester Road

Tame Road

Landscape Masterplan

0 60m

North

5.1 Interventions

The park's previous use as a golf course became inspiration for our design strategy for interventions across the park. Using an overlay of the golf course holes, we've used the locations and numbers as reference points for different elements of the masterplan, creating an exciting map of play, social areas, and connection to nature.

It is envisaged that ideas generated from the community engagement, particularly the school engagement workshops and the models created by the school children will be used to inspire the design of these elements. Opportunities to further develop and prototype these ideas should be explored at the next stage of the project.

The interventions fit within the following four themes:

- **Natural and adventure play:** creating exciting, challenging, and adventurous play spaces for all ages to enjoy.
- **Community spaces:** bringing people together in different ways through the use of event spaces, picnic areas, and forest schools.
- **Connection to nature and water:** providing opportunities to observe, admire, and interact with nature in various ways across the park, including learning and education through information boards and hides.
- **Health and wellbeing:** options for activity and exercise across the park, including a 2km active loop and fitness equipment, as well as opportunities to slow down and be present.

↑ Natural play elements.

↑ Opportunities to connect with nature and water.

1. Information board – exercise/2km track
2. Information board
3. Information board – woodland benefits and wildlife
4. Outdoor classroom/performance space/picnic area
5. Information board – wildlife in the park
6. Outdoor gym equipment/parkour play
7. Woodland low-level natural play
8. Outdoor gym equipment/parkour play
9. Amphitheatre performance/picnic space
10. Seating/picnic area
11. Treehouse and high-level wildlife hide/play
12. Woodland low-level natural play
13. Treehouse structure/hide/viewing platform
14. Outdoor classroom/forest school area
15. Information board – history of golf course/park
16. Seating/picnic area
17. Natural play with slides and swings
18. Information board – wetland benefits and wildlife

Heron Road

Ferndale Road

Wolverhampton Road

Grafton Road

M5

Queensway

Tame Road

1
2
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18

↑ Intervention Layout

0 60m

Natural and adventure play

From feedback at our engagement event and youth workshops, natural and adventure play was a common theme across all conversations and outputs. Play spaces of varying sizes will be dotted around the park along key pedestrian routes. The type of play to be included is yet to be decided and will be explored more in the detailed design stage. However, current ideas include:

- Low-level stepping stones and balance beams
- Rope swings, nets, and tunnels
- Timber trail equipment
- Slides and climbing structures
- Treehouses and high-level play

Our play strategy will include equipment for all ages to ensure that there is suitable options for different levels of play. For example, dedicated areas for young children and more challenging play equipment that can be used by anyone from late teens.

Community spaces

Social and picnic areas for the community to come together was another theme that was raised in conversations at our engagement event. The proposals incorporate different sized areas across the park, including:

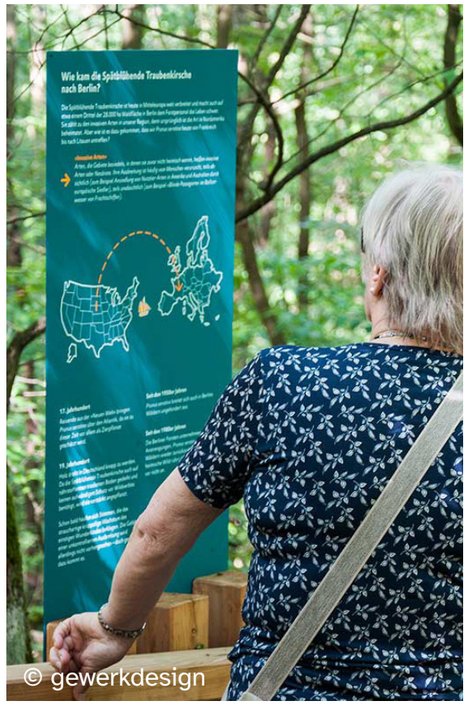
- Amphitheatre space - large stepped seating area with a stage for hosting events, performances, or for informal use at any time of year.
- Picnic areas - dotted around the park, these spaces provide opportunity for families and friends to gather and socialise. They could be used for picnic lunches, coffee catch-ups, or as a work spot.
- Performance and forest school areas - flexible circular seating arrangements for groups to gather for small events, performances, and education purposes.

Connection to nature and water

The park benefits from many mature trees, important habitat, and stunning views across undulating landform. We heard from the community how much they value the existing habitat and biodiversity in the park, and we therefore want to retain and enhance as much of this as possible.

Our proposals to connect with nature and water include:

- Educational areas - information boards that cover the benefits of woodland, meadows, and wetlands, and the wildlife that you might find in these areas. These boards could be interactive with tasks to find certain species, or trails and paths to take.
- Hides and viewing areas - treehouses and spaces to view wildlife in protected areas that are inaccessible to the public but can be admired from dedicated areas.
- Decked areas by the water - areas for the community to get close to the water for activities such as pond dipping.

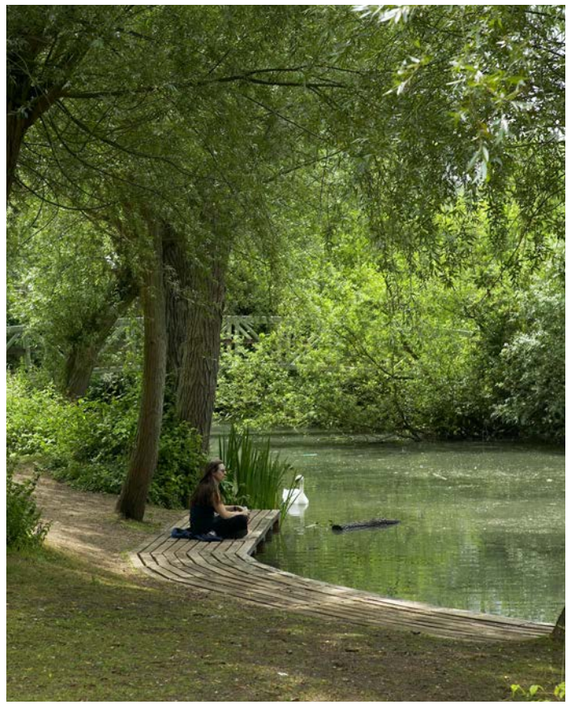


Health and wellbeing

Feedback from the community highlighted that many use the park for daily walks, taking the dog out, or for taking time for themselves surrounded by nature. The park was used by locals during the COVID pandemic as part of their exercise routine and getting out of the house, contributing to their health and wellbeing in a difficult time for all.

We want the community to be able to use the park for a variety of activities for their health and wellbeing, including:

- Dedicated active route - a 2km path around the park for walking, running, and cycling provides an easy to navigate, accessible route for all users to use for exercise.
- Natural parkour/fitness equipment - dotted around the park and near the residential developments, these areas would have dedicated equipment for workouts and exercise.
- Places to slow down - seating and decked areas in quieter spots for contemplation and relaxation.

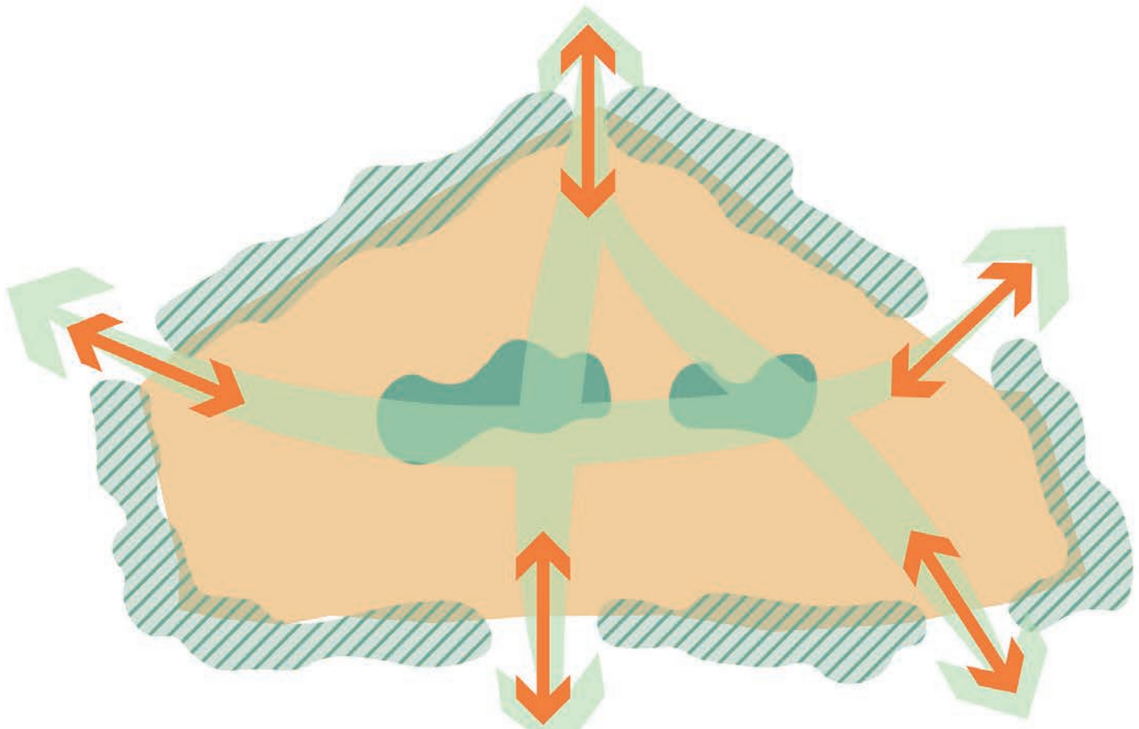


5.2 Development Sites

As part of the outline planning application, two residential development plots were approved for 190 homes.

The layout of these areas is currently in abeyance with future plans to develop the design. We believe that the following principles should be considered for the design and layout of the residential developments:

- **Integration:** sensitive integration of the developments into the park could be achieved through considering the treatment of the edges with new tree planting and sustainable drainage to help the sites sensitively within the surrounding landscape character.
- **Retention:** retaining as much of the existing trees and vegetation within the residential boundary as possible to maximise habitat retention and biodiversity.
- **Permeability:** Creating visual and physical green links from the park through into the development.
- **Connection:** creating opportunities to connect to the wider park from the developments by connecting to pedestrian links and providing views into and out of the plots.



↑ Housing development integrated with sustainable drainage features.

↑ Frontages on to green space with mature tree planting.

Case study: Lovedon Fields

Client: Wetland Wildlife Trust
Location: Kings Worthy, Hampshire
Landscape Architect: BD landscape architects
Architect: John Pardey Architects

Lovedon Fields is a 50-home residential scheme that forms a new edge to the village of Kings Worthy in Hampshire. This project combines architecture, landscape, and, ecology into a successful scheme.

The design has clearly been thought about with the community in mind; frontages face onto green space on all edges, including spaces integrated into the centre of the scheme to enable connection with nature from all angles.

Edge treatment has been considered through the use of native tree and hedgerow planting to create strong, green corridor boundaries to the development, helping the architecture sit within the landscape comfortably.

The landscape isn't only confined to the edges, but weaves its way through the scheme in the form of community spaces and sustainable drainage. The drainage strategy has been considered holistically to create a natural-looking system that is neatly integrated into spaces such as car parking spaces.

Opportunities for play, recreation, and community connection are dotted through the scheme, including options to connect with the surrounding landscape through a series of paths.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© BD landscape architects


© BD landscape architects


© Jim Stephenson

5.3 Connectivity

We have categorised connectivity through and around the park into the three route types discussed as part of our design principles:

- Direct routes
- Active routes
- Explorative routes

These routes allow for different levels of pace, users, and activities, creating opportunities for the park to be used in different ways.

Direct routes

The direct routes are propopsed to be 2.5m wide connecting north to south. They are designed to be open, safe, and lit paths that people feel comfortable using no matter the weather conditions, time of day, or time of year. These routes would be surfaced in a all-weather tarmac-based surface finish. The exact alignment and finish will be subject to more detailed design and analysis.

Active routes

The active route is 2m wide and 2km in distance, creating an ‘active loop’ around the park for those who wish to do a dedicated route and experience all habitat types. This route can be used for different activities: walking, dog walking, running, cycling. These routes would be surfaced in a robust surface finish that ensures the route is accessible throughout the year.

Explorative routes

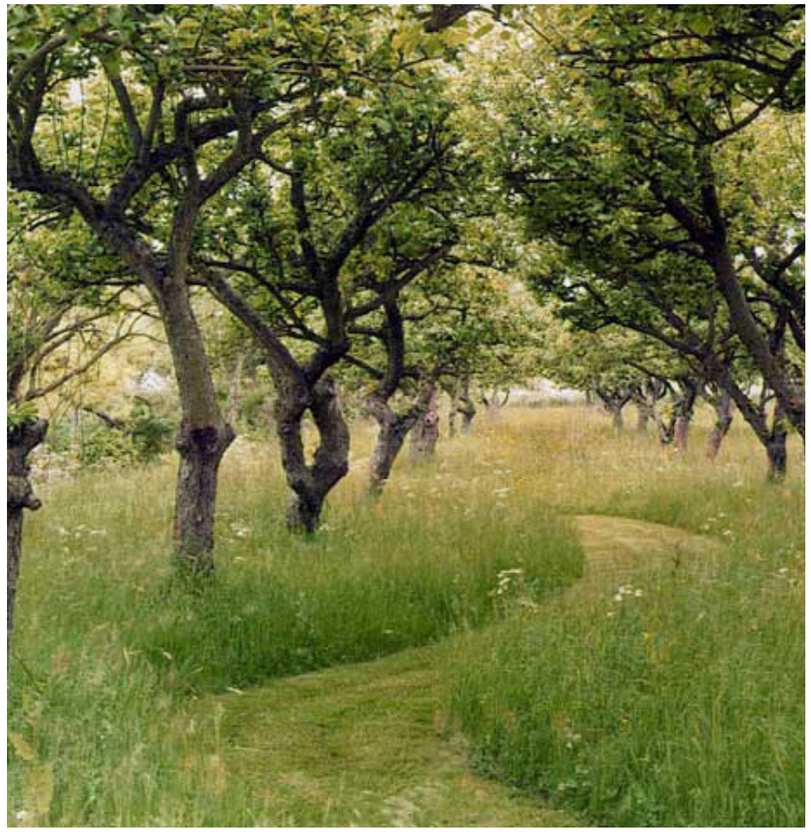
The explorative routes are 1.5m wide and are intended to go deeper into habitats, involving more sinuous routes to spark adventure and inspiration. These routes would include mown paths, small sections of boardwalks and/or sections of a compacted MOT type 2 surface with no edging to ensure they have a more natural characher and feel.

Access and Inclusivity

From our engagement event, it was clear from the feedback that accessibility to and around the park was important to the community.

We have designed the direct and active routes to be surfaced to enable wheelchair and scooter users, as well as users with buggies and pushchairs, to use the park. These routes will be between 2-2.5m wide, allowing adequate space for accessibility. During the detailed design stage careful attention will be given to gradients and alignment to sure they are accessible to all.

↑ Illustrative diagram indicating the three routes concept.



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5.4 Water Management

A key design principle in the proposals is the enhancement of Brandhall Brook to make it a central feature through the park.

With the addition of a school and two residential development sites, there will be increased surface water run-off that requires appropriate drainage. Our proposals integrate this drainage into a widened and enhanced Brandhall Brook, with the addition of ponds along its length to create a wetland corridor.

Although serving as the park's surface water drainage system, these areas will provide opportunity for the public to engage with the water environment through different paths and bridge crossings and timber decked areas to reach the water's edge.

1. Existing ponds
2. Extension to existing ponds
3. Creation of new ponds
4. Existing streams and ditches to be widened up
5. Open waterfront/wetland
6. Earthworks for pond creation

↑ Water management diagram.


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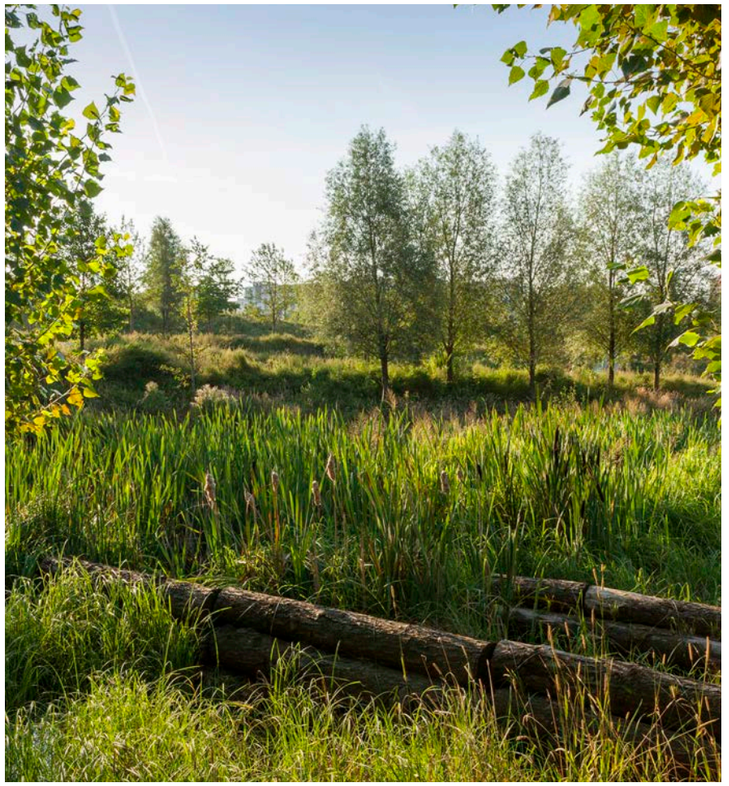


5.5 Character and Habitat Areas

The masterplan comprises a range of new and enhanced habitats, linked to character, site context and intended use, these habitats are summarised on the following pages as:

- Wetland corridor
- Species rich meadow/woodland understorey
- Semi-open woodland/tree rows
- Dense woodland to site boundary with understorey planting
- Open grassland
- Open tree glades

1 Wetland corridor

2 Species rich meadow/woodland understorey

3 Semi-open woodland/tree rows

4 Dense woodland to site boundary with understorey planting

5 Open grassland

6 Open tree glades

↑ Character and habitat diagram.

Wetland corridor

The development of a series of ponds, wetlands and wet grassland/meadow habitat along the course of the Brandhall Brook offers the potential to create a stunning multi-functional habitat focused on nature and people, and will assist with positively managing flood water, whilst providing attenuation for the school and residential sites.

These areas will include shallow areas, ponds, and channels. Designed with gentle slopes for water entry and exit, and allowing for varied water depths (from 1.5m to 6 cms) to support different species. The edges will be irregular designed to follow the natural profile of the landscape.

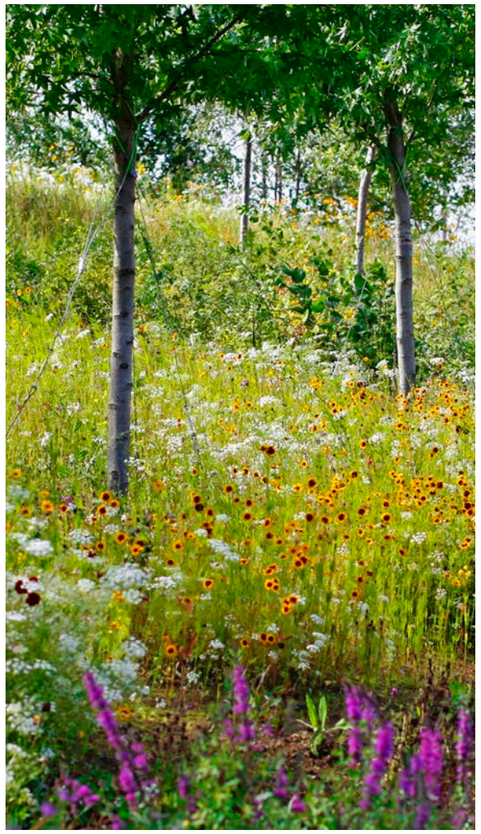
A selection of native wetland plants will be selected that will thrive in the environment, such as cattails, bulrushes, sedges, and wetland grasses, including a mix of emergent, floating, and submerged plants. At least 60% of the water surface will be unshaded. Edges will comprise a wet grassland/meadow mix, broken up with boardwalks and mown paths to allow access and engagement with the water's edge.

↑ Character and habitat diagram - open water front/wetland.

© Robin Forster

Species rich meadow/woodland understorey

Existing fairways between woodland blocks will be enhanced through over seeding and/or plug planting to create a more diverse sward, with a striking seasonally display and greater biodiversity value. Some areas may be subject to light cultivation or scraping to assist with establishment of wildflower species. Detailed seed/plug mixes should be developed based on soil properties and will be subject to an agreed mowing regime.



↑ Character and habitat diagram - meadow/understorey planting.

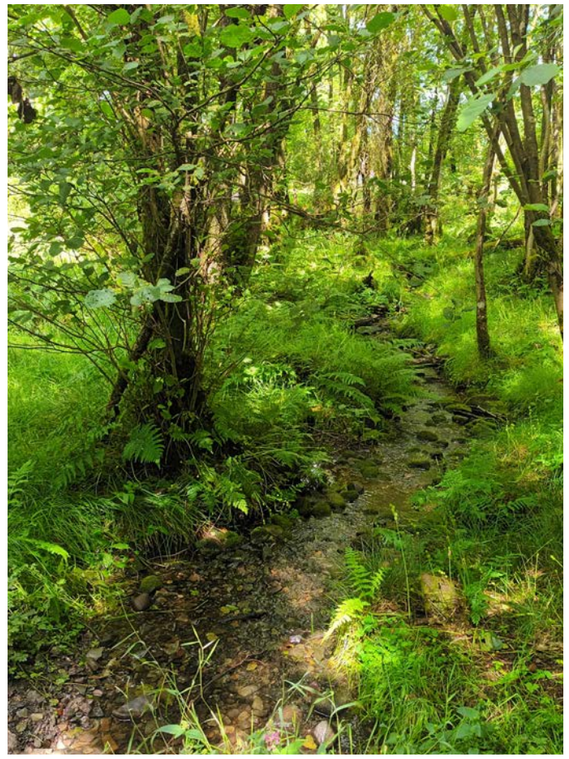
Semi-open woodland

These areas comprise areas of existing woodland and new areas of woodland between and to the edges of the retained woodland blocks.

The existing woodland will be managed to ensure the health and long terms success of the woodland blocks. Where possible succession trees will be planted within these blocks. The woodland block should be monitoring to ensure that tree stock is healthy and vigorous.

New areas of tree planting will be planted at random centres between 1 and 3 metres spacing. 55-60 % of the semi open areas will be open space glades with no tree presence. All stock will be sourced as native provenance, species will include Oak, Beech, Birch, Rowan, Hawthorn, Field Maple, Hazel, Hornbeam and Lime.

↑ Character and habitat diagram - semi-open woodland.



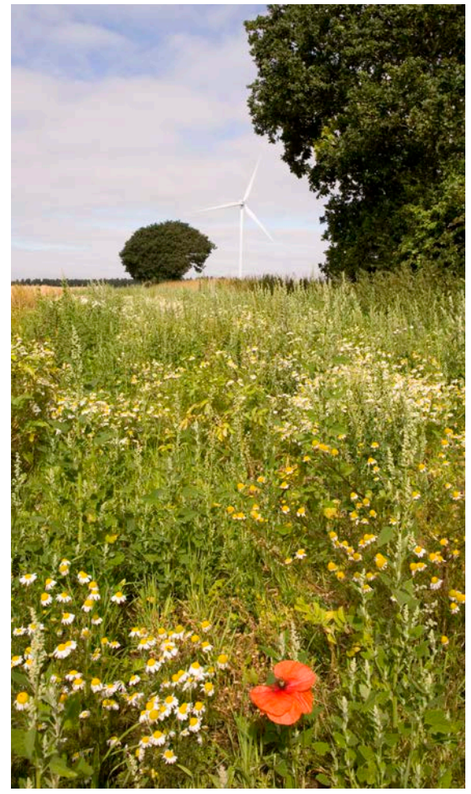
Dense woodland to site boundary with understorey planting and reinforced planting edges

Areas of dense woodland planting is proposed along the western boundary with the M5 with the intention of attenuation noise from the road and to assist with improving air quality. These dense blocks of woodland would also assist with carbon sequestration. These areas will be planted as dense blocks of native tress and understorey shrubs linked to landform with the intention of creating closed canopy that is largely inaccessible. Species will include Oak, Beech, Birch, Rowan, Hawthorn, Field Maple, Hazel, Hornbeam.

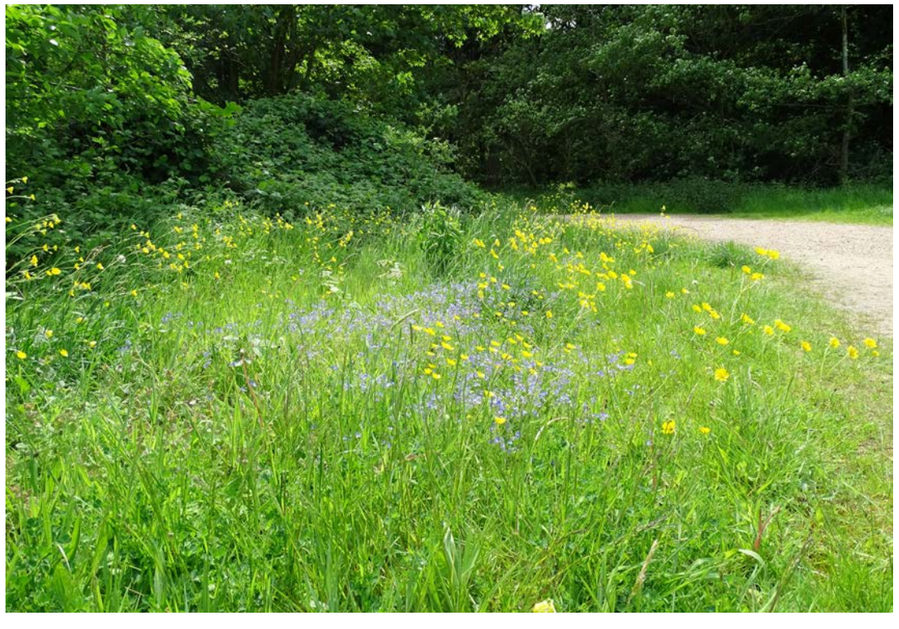
↑ Character and habitat diagram - dense woodland.

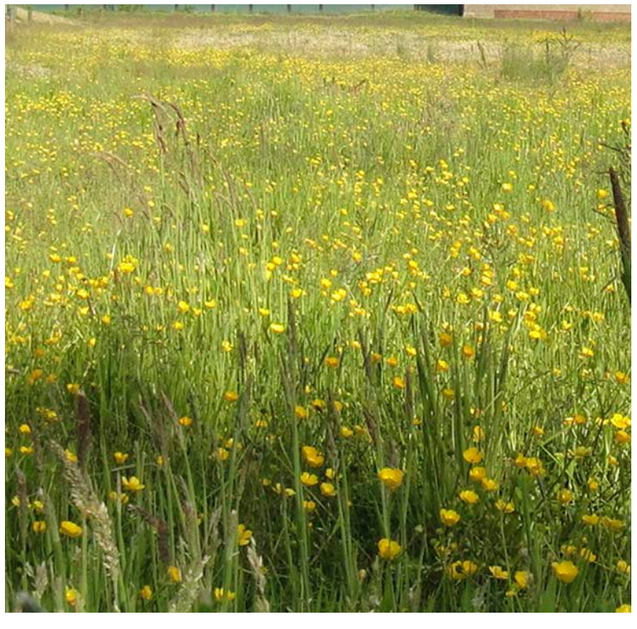
Open grassland

These areas will continue to be managed as informal grassland and will include mown paths and open areas. The mowing regime should be reviewed to ensure is maximises the diversity of grass species.



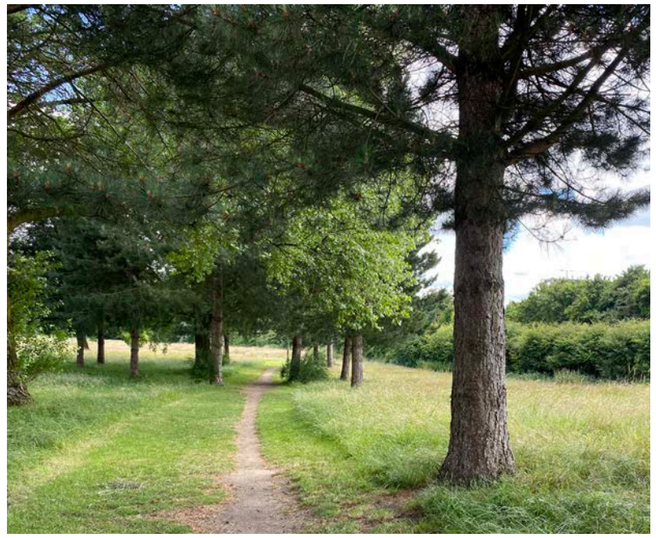
↑ Character and habitat diagram - open grassland.

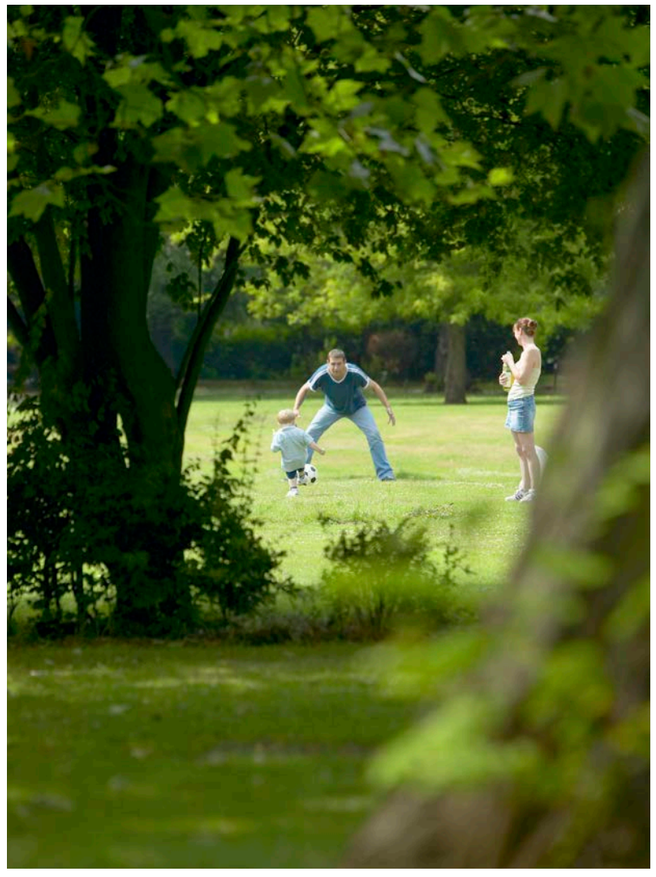




Open tree glades

Individual trees across the site will be retained and managed through regular monitoring of health and condition. These trees will be interspersed with other specimen trees to ensure the woodland character is retained in the long term and to maximise resilience.





↑ Character and habitat diagram - open tree glades.

5.6 Biodiversity Net Gain

BSG Ecology have produced a preliminary Biodiversity Net Gain (BNG) assessment of the proposed masterplan informed by the baseline site walkover survey carried out by BSG ecology in August 2024. The conclusions of the assessment are summarised below. Reference should be made to the supporting BNG report.

Proposed habitat information is based on the current proposed Masterplan (9602_Illustrative_Masterplan_RevA).

The assessment covers the greenspace areas only. Three proposed development plots within the site (a school and two residential areas) were excluded from this assessment as there is limited information available at present to assess. These development plots will require separate BNG assessment. Ongoing management, particularly for grassland, would be needed to achieve the assumed BNG targets. Soil nutrient testing across the site is recommended to confirm appropriate target habitat types and conditions.

Baseline habitat summary

The grassland (mainly 'Modified' grassland) and woodland (mainly 'Other' woodland; broadleaved) which currently dominate the site have limited structural and species diversity, and are considered to be in poor ecological condition. The watercourse which passes through the site is currently in 'fairly poor' condition, due to the artificial banks in many areas and the over deepened channel. These habitats have considerable potential for ecological enhancement through introducing higher species and structural diversity, and through appropriate on-going management to maintain and further develop this.

Proposed habitat summary

The key proposed habitat creation and restoration at the site is: enhancement of existing woodland through the addition of native canopy, understorey and ground flora planting, and deadwood habitat provision; enhancement of existing grassland through overseeding with native wildflowers following a regime of intensive cutting and harrowing to reduce soil fertility and open up the ground for newly seeded species establish; and naturalistic wetland to including ponds, shallow stream banks that develop natural feature, marginal vegetation and fluctuating wetlands, created around the existing watercourse. The proposed habitats across the site are illustrated on the plan opposite. Watercourse and wetland design and works will require specialist hydrological and geomorphological input to ensure they will promote appropriate river function and to assess flood risks.

Results

The baseline and proposed value of habitats, and the anticipated change in value using the Defra Statutory Biodiversity Metric are presented in the table below. These preliminary results show that if the watercourse condition can be enhanced to 'Fairly good' condition, the proposed masterplan can achieve the required 10% Biodiversity Net Gain.

Unit Type	Baseline	Proposed	Change	Percentage
Area Habitats	82.12	134.14	52.02	63.35%
Hedgerows	4.22	4.70	0.48	11.36%
Watercourses (target of 'Moderate' condition)	7.13	7.53	0.40	5.59%
Watercourses (target of 'Fairly good' condition)	7.13	7.93	0.80	11.21%

↑ Biodiversity Net Gain results table by BSG Ecology.

Conclusion

This preliminary BNG assessment indicates that ecological enhancements at the site can achieve Biodiversity Net Gains of over 10% for (1) area habitats, (2) watercourses, and (3) hedgerows. Ongoing management, particularly for grassland, would be needed to achieve the assumed BNG targets. Soil nutrient testing across the site is recommended to confirm appropriate target habitat types and conditions. Design input from a hydrologist and geomorphologist is recommended to provide further detail on suitable watercourse enhancements, and to confirm the achievability of 'Fairly good' watercourse habitat condition. Changes to the design will result in changes to the BNG score for the site.

Legend

- Site boundary
- Native Hedgerow (h2NE5)
- Native Species Rich Hedgerow with trees (h2NE1)
- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Other woodland; broadleaved
- Ponds (Priority Habitat)
- Culvert
- Ditches
- Other Rivers and Streams

BSG | ecology

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JOB REF: P24-384

PROJECT TITLE

BRANDHALL ECOPARK

DRAWING TITLE

Figure 2: Proposed habitats

DATE: 20/03/2025 CHECKED: CM SCALE: 1:2,800

DRAWN: BH APPROVED: TF VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 10219

5.7 Management

This section sets out the overarching management and maintenance prescriptions for the range of habitats across the parkland, to ensure the landscape is managed to the standards expected by the Local Authority, ensuring successful establishment, biodiversity enhancement and after-care of the implemented works.

The setting out and maintenance of landscape features including areas of retained woodland and the implementation of landscape schemes should be regularly and professional monitored by a relevant competent person or team.

The management prescriptions for the different habitats are set out and illustrated on the plan opposite.

MN1 **Target Note 1:** Wetland and watercourses

MN2 **Target Note 2:** Existing woodland

MN3 **Target Note 3:** Proposed woodland

MN4 **Target Note 4:** Proposed woodland - densely planted

MN5 **Target Note 5:** Existing hedgerow

MN6 **Target Note 6:** Existing grassland

MN7 **Target Note 7:** Proposed meadow

→ Management plan.

MN1: Wetland and watercourses

Remove excessive scrub and undesirable species along the watercourse to maintain high levels of light and the overall habitat intent.

Ponds to be maintained by periodic removal of vegetation and accumulated material as required, to maintain open water. Such management to be rotated around the site, not all carried out in any one year.

Boardwalks and decking to be inspected regularly and any damages boards replaced.

MN2: Existing woodland

Prune and manage understorey as required to maintain visibility (Avoid Bird nesting season – March-August).

Inspect condition and health of all existing trees on an annual basis or following severe storms / gales. Inspections 1 Visit to be undertaken by a qualified arborist and any tree work required recorded and undertaken accordingly.

Remedial tree surgery to be carried out as necessary to remove any dead, dying or diseased branches. Create wood piles within landscape using removed wood.

MN3: Proposed woodland

Following establishment, water area of new planting and trees as required to ensure continued growth and establishment.

Following completion of the planting, carry out regular inspections of the woodland and remove any self seeded pernicious plants that have established within the woodland area including docks, thistles, broom and bramble. Remove by hand.

Remedial tree surgery to be carried out as necessary to remove any dead, dying or diseased branches. Tree works to be carried out by an arboricultural association approved contractor.

Inspect newly planted trees 4 times per year. Remove tree stakes, shelters and ties in year 5.

MN4: Proposed woodland - densely planted

Following establishment, water area of new planting and trees as required to ensure continued growth and establishment.

Carry out regular inspections of the woodland and remove any self seeded pernicious plants that have established within the woodland area including. Docks, thistles, broom and bramble. Remove by hand.

Remedial tree surgery to be carried out as necessary to remove any dead, dying or diseased branches. Tree works to be carried out by an arboricultural association approved contractor.

Inspect newly planted trees 4 times per year. Remove tree stakes, shelters and ties in year 5.

MN5: Existing hedgerow

To be topped and sided annually to maintain form and structure.

MN6: Existing grassland

Removal of pernicious weeds that have naturally colonised, e.g. thistles and docks.

Mow regularly in accordance with existing maintenance regime to maintain grassland meadow character. Mown paths to be cut to height of (40-50mm)

MN7: Proposed meadow

Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt and reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills. Repair trampling, abrasion or scalping as necessary.

Do not use mowing machinery closer than 100 mm to tree stems. Use nylon filament rotary cutters and other hand held mechanical tools carefully to avoid damage to bark.

Watering after establishment. Bowser spray irrigation from late March to October to assist with establishment in the first year. adjusted to suit climatic conditions.

Removal of pernicious weeds that have naturally colonised, e.g. thistles and docks.

Year 1: Mow regularly (every 6-8 Weeks) during growing season) throughout the first year. Cut to a height of 100mm, removing cuttings.

Year 2: After flowering in late July/August take a ‘hay cut’: cut back with a strimmer or tractor mower to c50mm. Leave the ‘hay’ to dry and shed seed for 1-7 days then remove from site.

Short Mown Grass Areas (Mown Paths): Cut with the mower as needed aiming to keep the grass short (typically 50mm high). Continue mowing regularly as needed to maintain short grass sward.

5.8 Phasing

The delivery of the park masterplan proposals will take place over years and therefore it is anticipated that the masterplan will be delivered in phases. The following plans illustrate our thoughts on the phasing strategy.

Phase 1A

- Implementing Brandhall Brook improvements in the northern section.
- Widening the existing ponds to capture drainage from the school site.
- Enhancement and management of existing trees and vegetation around the school site.
- School development works.

1. Enhanced grassland with native plug/ bulb planted species mix 1
2. Existing pond retained and widened to create wetland habitat and to provide attenuation for school site and residential parcels
3. New pond to link with existing pond retained to widen existing pond to create wetland habitat and to provide attenuation for school site and residential parcels
4. Existing brook retained and widened up with marginal planting mix
5. Boundary vegetation to be retained and enhanced with new native planting blocks
6. New vehicular entrance to school
7. Existing woodland and trees retained and managed

Phase 1B

- Creation of proposed entrances, and widening of existing entrances.
- Demolition of existing clubhouse.
- Enhancement and management of existing vegetation to the M5.
- Planting of proposed dense woodland to the M5.
- Implementation of direct routes and lighting across the site.

1. Existing areas of vegetation retained and managed
2. Proposed dense native tree planting mix along the edge of existing woodland to strengthen boundary to M5, increase biodiversity value and assist with improving air quality
3. Existing club house building to be demolished
4. Proposed carpark entrance, widened with hard surfacing, lighting and signage to create welcoming entrances into the park
5. Proposed community garden space for flexible use
6. Existing pedestrian entrances to be widened up
7. Proposed primary pedestrian footpath, 2m wide with 0.5m reinforced grass edges for maintenance access
8. Proposed low level lighting to key footpaths/routes

Phase 2A

- Proposed entrances surfaced, and lighting and signage installed.
- Residential development works.
- Implementing Brandhall Brook improvements along the rest of the length.
- Pond creation along Brandhall Brook to capture drainage from residential developments.

1. Proposed future residential development plots, layout to be confirmed
2. Existing pond retained and widened to create wetland habitat and to provide attenuation for school site and residential parcels
3. New ponds along brook to provide attenuation and to create new areas of wetland habitat
4. Existing brook retained and widened up with marginal planting mix
5. Proposed park entrances, widened with hard surfacing, lighting and signage to create welcoming entrances into the park.

Phase 2B

- Perimeter active route implemented.
- Proposed groups of trees planted around residential developments.

1. Proposed groups of mixed native trees to park boundary to strengthen the woodland edge
2. Proposed perimeter active route
3. Proposed native tree planting along the edges of existing woodland blocks to strengthen woodland edges and create resilience
4. Existing MUGA retained
5. Existing woodland and trees retained and managed

Phase 3A

- Meadow/grassland planting.
- Exploration routes implemented.
- Proposed decking installed at locations along the water's edge.

1. Enhanced grassland with native plug/bulb planted species mix 1
2. Enhanced grassland with native plug/bulb planted species mix 2
3. Enhanced grassland with plug/bulb planted species mix 3
4. Proposed native tree planting along the edges of existing woodland blocks to strengthen woodland edges and create resilience
5. Proposed exploration routes
6. Proposed decking to waterside for public access to water
7. Existing timber bridges over brook retained

Phase 3B

- Installation of interventions across the park.

1. Proposed amphitheatre terraced seating
2. Proposed community performance stage for social events and providing a park focal point
3. Proposed areas of intervention, including play, interpretation, habitat, wildlife features, seating - locations linked with the previous golf course layout

6.0 Cost Plan

A Stage 2 cost plan has been prepared in conjunction with the masterplan and is based on the level of design resolution reached.

The cost plan opposite sets out the outline costs for the proposed masterplan based on the redline boundary shown and excludes the Causeway Green School, residential parcels and works to the former club house site. The cost plan will be subject to further development and refinement in conjunction with the technical design stages.

Assumptions/Exclusions

The following surveys and information are currently outstanding, and costs in relation to these items will require firming up when the relevant information is available, including dedicated design proposal drawings and specifications:

- Confirmation that the exposed substrate will meet the required conditions for new surfaces and requires minimal remedial work and will not need to be replaced.
- Detailed attenuation and drainage strategy including connections, outfall/inlet detail.
- Lighting technical design.
- Exploration, removal, or treatment of contaminated material if relevant.
- Works in connection with obstructions or deleterious materials discovered during the works.
- Costs in association with new statutory incoming services.
- Ecological , soil or arboriculturally surveys.
- Future changes to statutory requirements or fees associated with legal, BREEAM / Building with Nature application costs etc.
- Cost exclude design fees covering the technical design
- Costs exclude Value Added Tax (VAT), inflation, preliminaries and overheads and profit.

Ref	Description	Quant	Unit	Rate (£)	Total (£)
1.00	**Groundworks**				
1.01	Breaking up and disposal of surfaces to form new entrances		item		3,000.00
1.02	Allowance for habitat scrapes/harrowing (To Fairways)		item		2,500.00
1.03	Attenuation/pond creation (including access provision)	2,850	m²	10.00	28,500.00
1.04	Earthworks to existing wetland areas inc enlargement	3,500	m²	8.00	28,000.00
1.05	Landform creation to western boundary	6,700	m³	8.00	53,600.00
1.06	Reinforced grass surface to footpath edges	900	m²	25.00	22,500.00
1.07	Formation of amphitheatre		item		5,000.00
2.00	**Hardworks and Furniture**				
2.01	Lighting to footpaths	20	nr	400.00	8,000.00
2.02	Signage and wayfinding		item		5,500.00
2.03	Post and wire fencing and shelters (to aid establishment)		item		10,000.00
2.04	Stone seating pads to amphitheatre	50	item	120.00	6,000.00
2.05	Park benches	10	item	800.00	8,000.00
2.06	Park structures (Wildlife hides, play, seating , signage, etc)		item		120,000.00
2.07	Pond/wetland decks	85	m²	60.00	5,100.00
2.08	Wetland boardwalks	120	m²	75.00	9,000.00
2.09	Allowance for electrical works, including cabling		item		5,000.00
2.10	New footpath creation	5,500	m	65.00	357,500.00
2.11	Paving + edges to create new park entrances		item		8,000.00
3.00	**Softworks**				
3.01	Overseeding to fairways (Green Hay and New seed)	15,200	m²	3.00	45,600.00
3.02	Woodland planting Category 1	17,000	m²	20.00	340,000.00
3.03	Woodland planting Category 2	4,900	m²	20.00	98,000.00
3.04	Specimen tree planting	200	item	400.00	80,000.00
3.05	Native hedge / shrub planting	150	m	35.00	5,250.00
3.06	Wetland meadow seeding and preparation	11,500	m²	6.00	69,000.00
	Subtotal:				**1,323,050.00**
4.00	**Allowance for Contingency**				
4.01	- project contingency	5.0	%		66,152.50
5.00	**Allowance for Surveys (Arbo, ecology , soil and topo)**	3.0	%		39,691.50
	Subtotal:				**105,844.00**
	Estimated Total Project Cost:				**1,428,894.00**

7.0 Next Steps

Following completion of the masterplan we have set out below our thoughts on the next steps of the project.

- Follow up engagement event to share the masterplan and conclusions and overall vision.
- Design of attenuation ponds, ponds and wetland ponds linked to the school site attenuation strategy, allowing for consultation with the EA and other key bodies.
- Technical design of park elements including, entrances, footpaths, planting, and interventions – seating, play, lighting signage etc.
- Design coordination with school site team to ensure that the proposals fully integrate with the park Masterplan
- Additional school engagement to progress thinking for interventions – possibly consider developing elements as meanwhile designs involving school children in the delivery.

↑ Illustrative visual through wetland corridor.

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