

5.0 Appendices

5.0 Appendices

5.1 Landscape

5.1.1 Design Update 29-06-2026

Design Update 29-06-2026



5.0 Appendices

5.1 Landscape

5.1.1 Design Update 29-06-2026

The Green Ring: Maximising Ecological Permeability



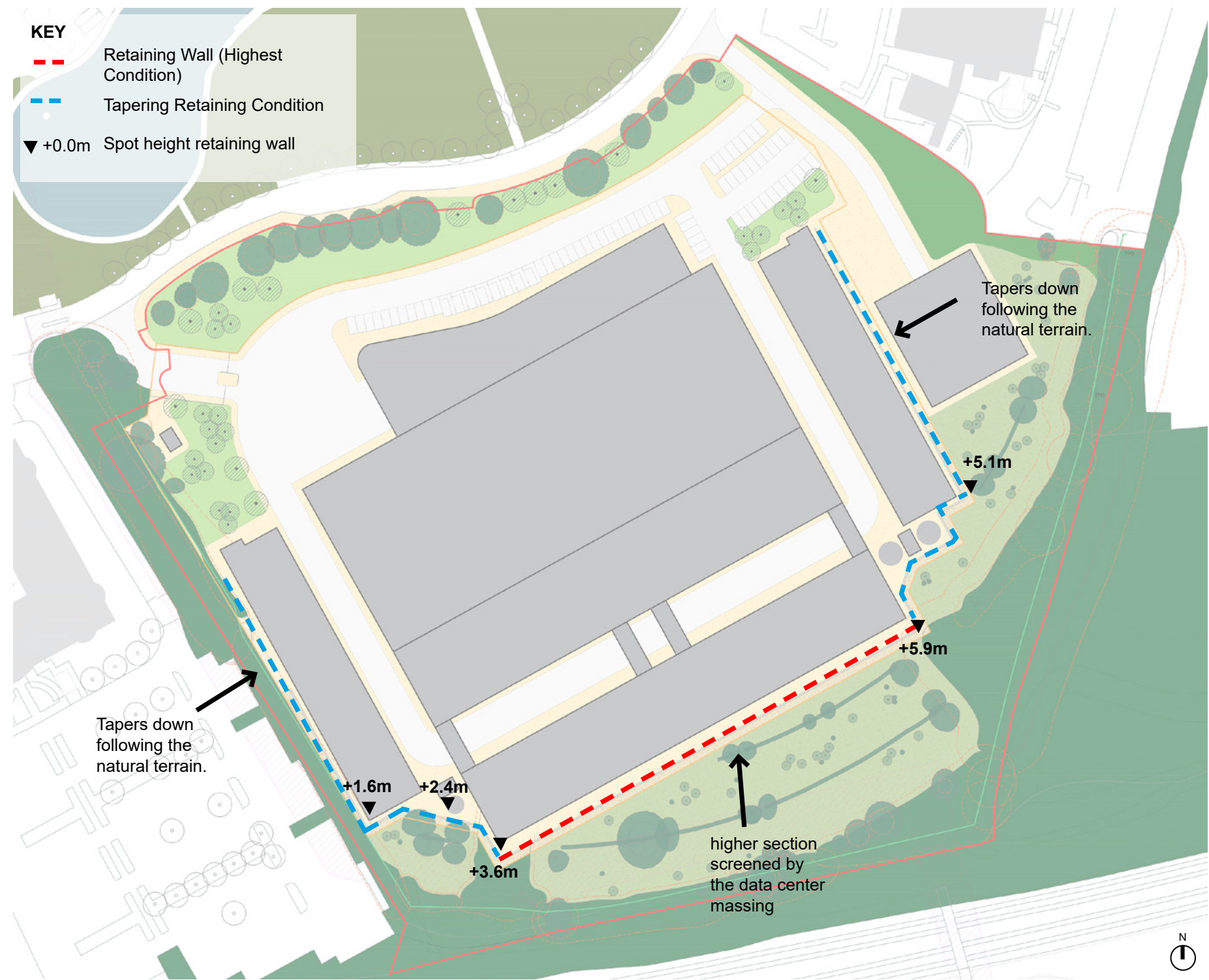
- **Maximising Ecological Connectivity:** The design intentionally uses the site perimeter to maximise ecological connectivity.
- **Strengthening Existing Green Infrastructure:** Proposals create links between the existing woodland by reinforcing existing planting and introducing new planting corridors, increasing ecological connectivity and creating a continuous green backdrop with the surrounding landscape.
- **Permeability:** The position of the proposed security fencing is kept as close to the buildings as possible, maximising ecological and habitat permeability across the site.
- **One Continuous Habitat:** By concentrating the building massing and screening close to the development footprint, and reinforcing and extending planting along the eastern and western boundaries, the proposals create continuous north-south habitat corridors, forming a permeable green ring around the data centre.

5.0 Appendices

5.1 Landscape

5.1.1 Design Update 29-06-2026

Retaining Strategy and Ecological Integration



- The retaining wall is not intended to act as a barrier to habitat connectivity, but as a carefully located intervention to minimise disruption to existing woodland and reduce impacts on Root Protection Areas (RPAs).
- As explored in Pre-Application 2 (see appendix), alternative terracing strategies were considered but ruled out in favour of a more restrained retaining approach.
- The retaining structure is highest along the southern edge, where it is screened from the public realm by the building, reducing visual impact.
- It then tapers along the eastern and western boundaries, reducing in height to a minimal condition and allowing a more natural ground transition.
- This approach limits ground disturbance, supports ecological continuity, and avoids extensive terracing within sensitive root zones.

• NOTE: Retaining wall height information taken from Architect's drawing 259904-SK-XX-0028.

5.0 Appendices

5.1 Landscape

5.1.1 Design Update 29-06-2026

Northern Boundary Strategy



- Supplementary Oaks will be planted to reinforce the structural tree canopy, enhancing visual screening and contributing to Biodiversity Net Gain (BNG)
- Unused entrances will be de-paved to connect existing planters, extending ornamental shrubbery continuously up to the security fence line.
- Because survey data indicates potential underground services beneath some of the existing roads, expanding planting over these de-paved areas requires careful coordination to confirm utility locations.
- All tree canopies will maintain a minimum clearance of 3 meters away from the security fence.



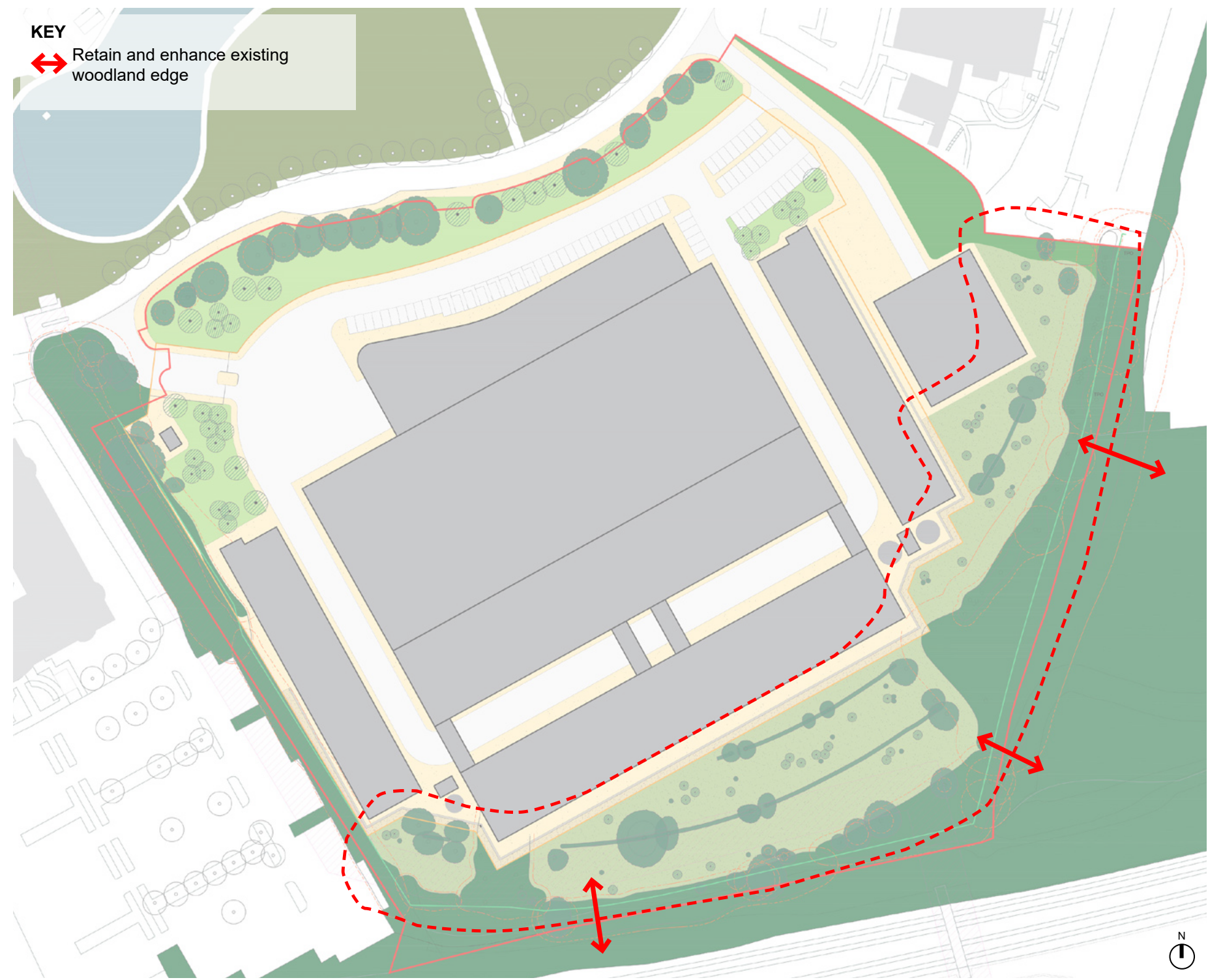
Site Photo: Existing Mature Tree and Hedge

5.0 Appendices

5.1 Landscape

5.1.1 Design Update 29-06-2026

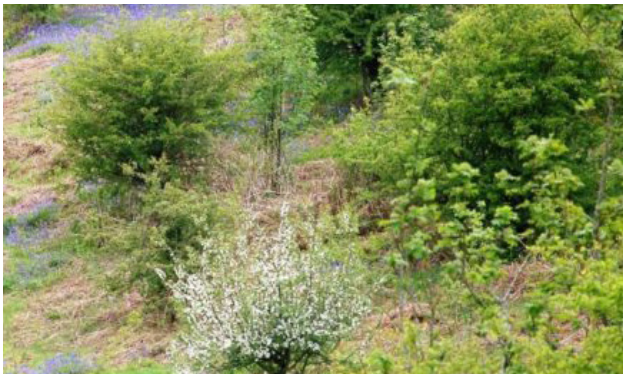
Southern Boundary Strategy



- The plan maximizes the retention of existing native woodland to safeguard trees under a Tree Preservation Order (TPO)
- The proposal will require the targeted removal of a section of Group 3 and a section of Group 10.
- Block-paver parking will be lifted and removed
- The cleared parking areas will be transformed into an Open Mosaic Habitat (OMH) on Previously Developed Land. This area will retain its existing vegetation and be planted with saplings to accelerate ecological establishment.
- The security fence has been moved to ensure any existing trees and hedges are kept and protected.



Site Photo: Natural Colonization and Early successional species breaching the existing paving blocks and boundaries at the rear of the site.



Reference image - Establishment of perimeter

5.0 Appendices

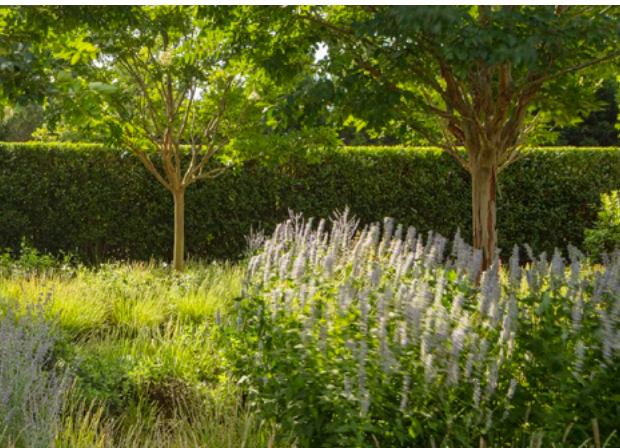
5.1 Landscape

5.1.1 Design Update 29-06-2026

Within the Security Fence



- Targeted pocket ornamental planting and trees have been integrated within the internal courtyard.



Reference image - Ornamental planting with

5.0 Appendices

5.1 Landscape

5.1.1 Design Update 29-06-2026

Eastern Boundary Strategy



- **Eastern Boundary:** Native woodland planting is proposed as an ecological buffer, strengthening connections to the existing woodland edge at the rear of the site.



Reference image - Native Woodland Planting

5.0 Appendices

5.1 Landscape

5.1.1 Design Update 29-06-2026

Western Boundary Strategy



- **Western Boundary:** The proposal maximises the retention of the existing native woodland edge along the western side. A targeted removal of a section of Group 18 is required to facilitate the development.



Site Photo: Existing woodland edge on the

5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

Historical Imagery



Satellite imagery © Google Earth from 2003

The site has a long-standing industrial history, originating with the Earley Power Station.

Development of Thames Valley Park began in 1988, marking its transition from industrial land to a business park.

In the late 1990s, Microsoft moved into its purpose-built headquarters, establishing a major corporate presence on the site.



Satellite imagery © Google Earth from 2023

In the 2020s, Microsoft consolidated its operations into Buildings 1, 2, and 3, vacating Buildings 4 and 5.

Today, the site is evolving into a new phase focused on digital infrastructure, centred on data centre use.

5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

Existing Landscape Characteristics



The northern side (front) has a strong avenue character and contributes positively to the streetscape. The mature Pin Oak trees are mainly Category B, they are of moderate quality and suitable for retention. They provide good visual impact, contribute positively to the wider park setting, and offer effective screening.



The internal car park planting is primarily composed of ornamental specimen planting with limited longevity, together with hedge rows interspersed with a number of Oak and Cherry trees. Its central location within the site also represents a key constraint.



The internal islands (“green fingers”) are mainly planted with Flowering Cherry trees classified as Category C (low quality). Many have topped central leaders and old pruning wounds, which reduce their long-term arboricultural value and overall contribution to the wider landscape.



The edge perimeter (structural woodland) includes Group 2 (mixed species to the east and south), Group 18 (boundary planting), and Group 19 (offsite boundary trees). These all make a positive contribution, providing important visual screening and strengthening the surrounding landscape.



5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

Existing Landscape Characteristics



5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

Proposed Building Mass – Topographical Survey Underlay

LEGEND

- Site Boundary
- Proposed Fencing
- Root Protection Area
- Proposed Retaining Wall
- Indicative Terracing
- Building Mass
- Gas Mains
- Existing Hedge Row
- Existing Ground Cover
- Existing Trees
- Structural Edge Planting
- Identified possible clashes are subject to refinement
- Section Lines
- Existing Levels

The proposed building mass is overlaid on the topographical survey to illustrate its position and scale, and to identify potential clashes with existing ground levels, site constraints, and areas of planting, as identified in the Preliminary Ecological Appraisal (PEA and Tree survey report). On this basis, no significant constraints are anticipated at this stage.

C1: If removal occurs, there is potential to do so without adversely affecting the existing screening.

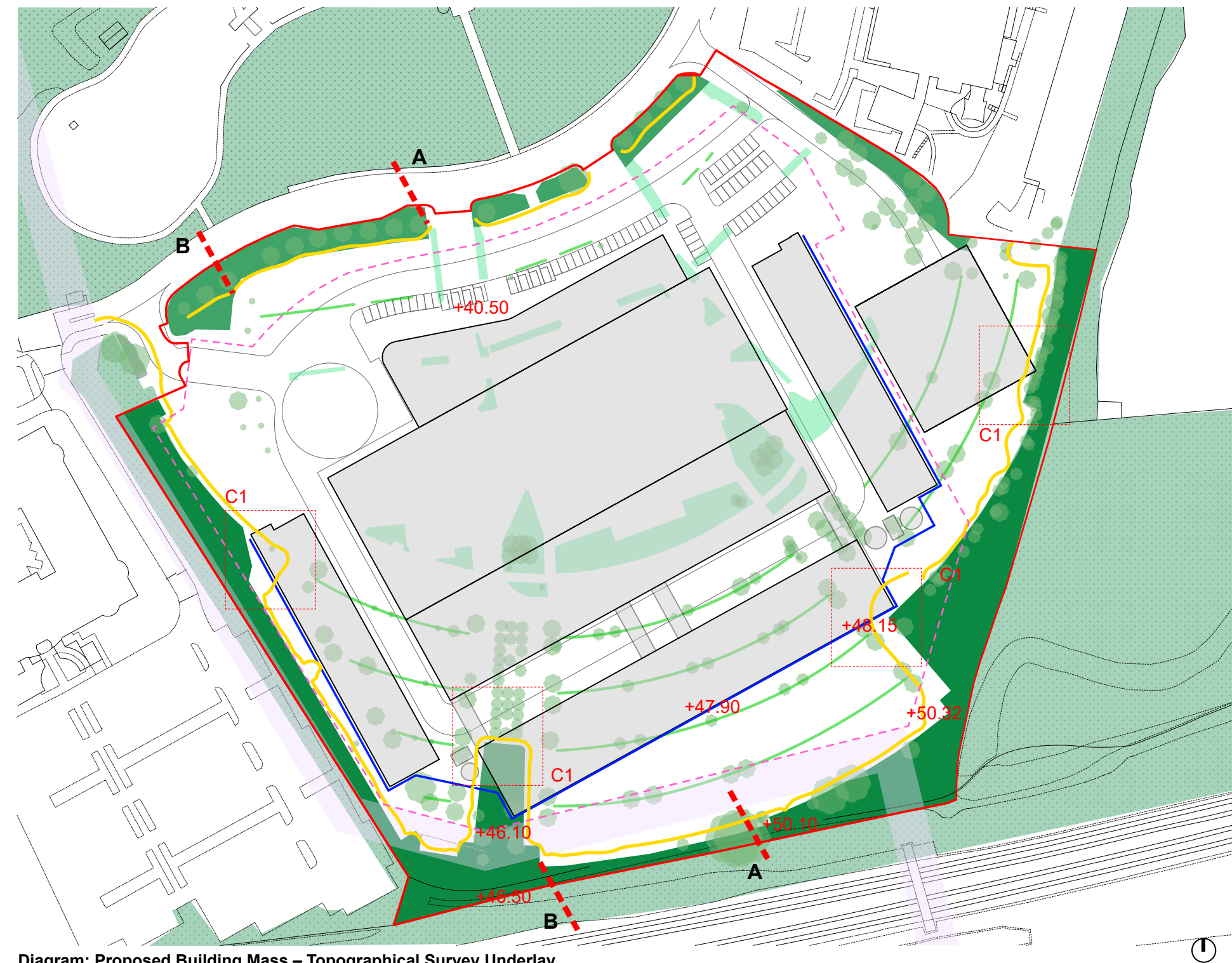


Diagram: Proposed Building Mass – Topographical Survey Underlay

5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

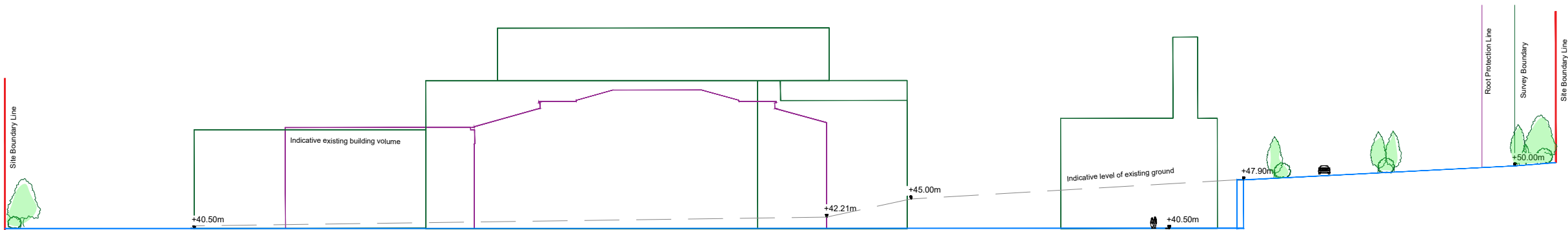
Existing & Proposed Terrain Profiles (Overlay)



Site Photo 1- 3 - Natural Colonization: Early successional species breaching the existing paving blocks and boundaries at the rear of the site.



Site Photo 4 - Mature Tree and Hedge planting at the front of the site.



Section A: Existing and Proposed Terrain Profile Overlay

Note: Existing building massing profile shown is indicative.

5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

Approach 1: Open Mosaic “The Green Ring”

LEGEND

-  Site Boundary
-  Proposed Fencing
-  Root Protection Area
-  Proposed Retaining Wall
-  Indicative Terracing
-  Building Mass
-  Gas Mains
-  Existing Hedge Row
-  Existing Ground Cover
-  Existing Trees
-  Structural Edge Planting
-  Identified possible clashes are subject to refinement
-  Section Lines
-  Existing Levels

Core Principles:

Employs a single, vertical 7-8m structural retaining wall to maintain the necessary building footprint while minimizing lateral ground disturbance.

Arboricultural Impact: By restricting excavation to a single vertical plane, this approach has the lowest impact on the Root Protection Areas (RPAs) of the high-value Category B perimeter woodland (Groups 2, 18, and 19) .

Ecological Value: Focuses on habitat rarity through an “assisted regeneration” strategy. This utilizes site-won crushed aggregate to create nutrient-poor conditions required for Open Mosaic habitats, supporting BNG targets with a lower carbon footprint.

Visual Mitigation: The 7-8m wall is entirely screened from the public realm by the mass of the data centre building sitting which is sitting at the lower site level.



Diagram: Extending the perimeter woodland and retaining existing trees

5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

Approach 1: Open Mosaic “The Green Ring”

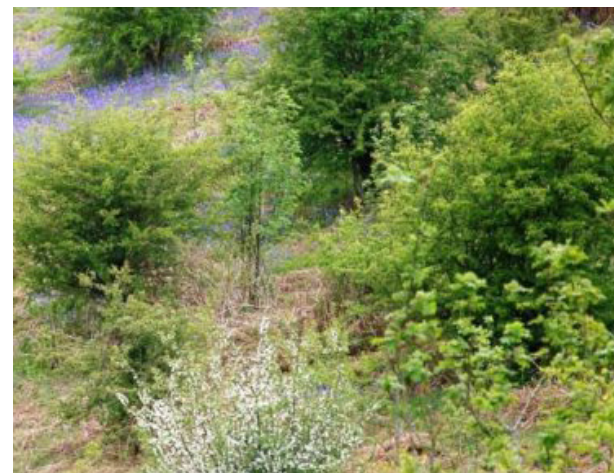
- Low-carbon, circular approach
- Retains and integrates existing trees and hedge rows on the upper part of the slope
- Reduces imported materials and soil
- Improves long-term habitat connectivity
- Requires ongoing management (to avoid Amenity Planting colonisation)
- Early stages may appear unfinished (however, the area is located to the rear of the site and is not publicly accessible)



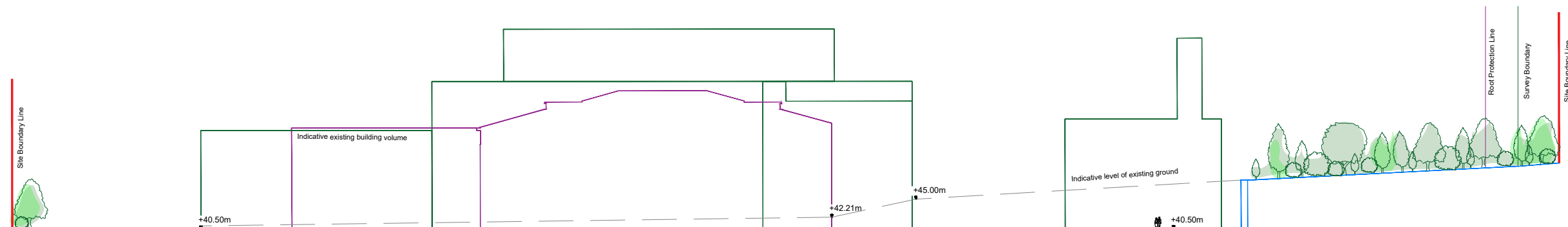
Reference image - Existing condition: Disturbed brownfield car park surface with limited ecological value.



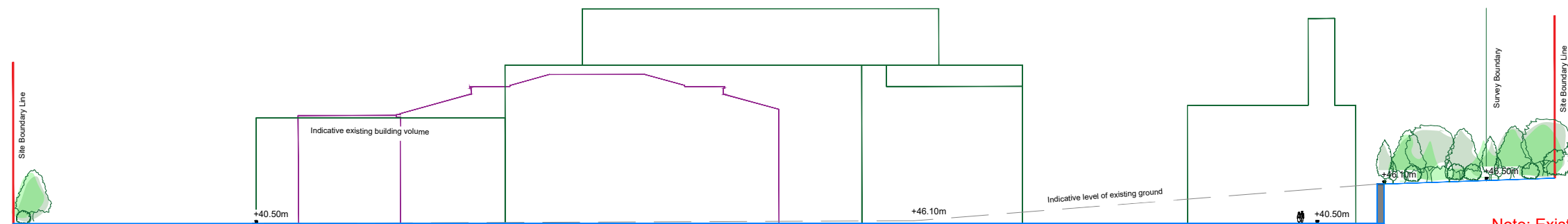
Reference image - Early stage: Open mosaic habitat forms, with diverse pioneer vegetation establishing.



Reference image - Establishment of perimeter woodland: Saplings establish, developing structure and progressing succession toward woodland.



Section A: Existing and Proposed Terrain Profile with Retaining Wall and Successional Vegetation to Rear of Site



Section B: Existing and Proposed Terrain Profile with Retaining Wall and Successional Vegetation to Rear of Site

Note: Existing building massing profile shown is indicative.

5.0 Appendices

5.1 Landscape

5.1.2 Pre-App 2 Presentation

Approach 2: The Tiered Landscape

LEGEND

- Site Boundary
- Proposed Fencing
- Root Protection Area
- Proposed Retaining Wall
- Indicative Terracing
- Building Massing
- Gas Mains
- Existing Hedge Row
- Existing Ground Cover
- Existing Trees
- Structural Edge Planting
- Identified possible clashes are subject to refinement
- Section Lines
- Existing Levels

Core Principles:

- Redesigns the 7-8m level change into a series of stepped gabion terraces to provide a natural, permeable finish.
- Arboricultural Impact:** The terracing forces excavation deeper into the slope, potentially encroaching on the upper-slope RPAs of the site's most valuable Category B trees.
- Ecological Value:** Offers a "clean sheet" approach to BNG. This allows for intentional species selection, enabling the design team to hand-pick high-value plants to maximize biodiversity points and ecological connectivity.
- Visual Mitigation:** The stepped gabion retaining walls are entirely screened from the public realm by the mass of the data centre building sitting which is sitting at the lower site level.

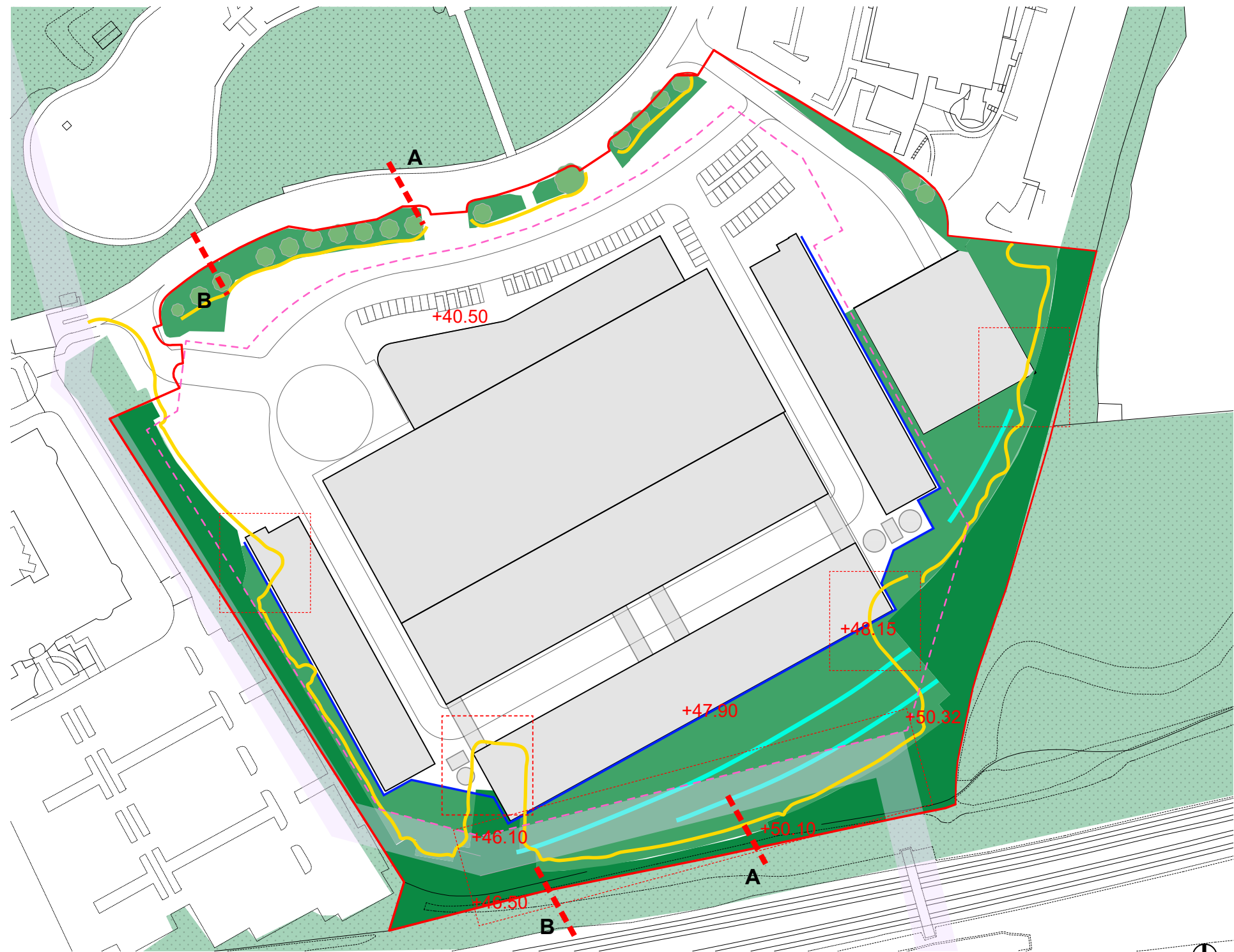


Diagram: Extending the perimeter woodland and retaining existing trees

5.0 Appendices

5.1 Landscape

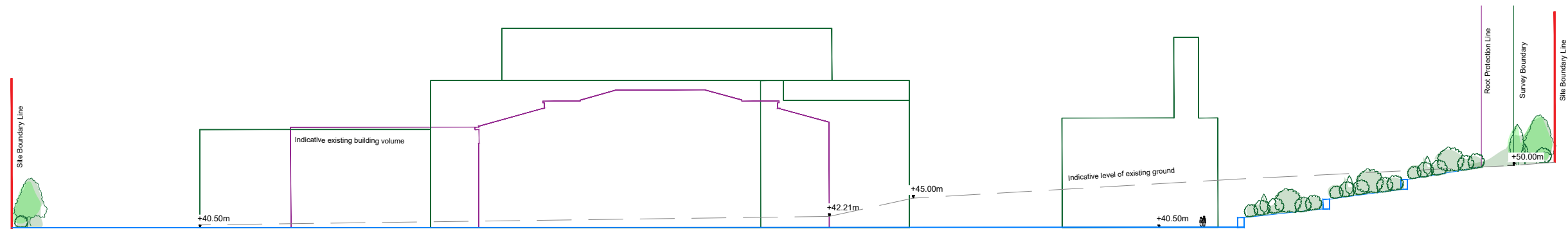
51.2 Pre-App 2 Presentation

Approach 2: The Tiered Landscape

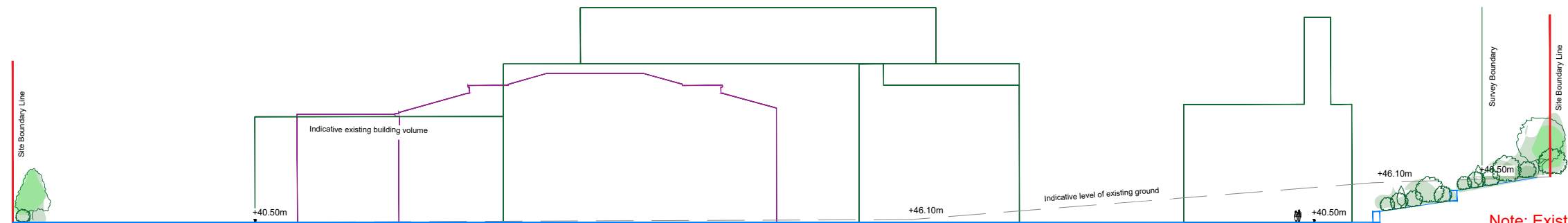
- Higher BNG potential through varied topography
- Higher earthworks and construction impact
- Potential RPA impacts from upper slope interventions
- Utility constraints (gas main) limiting formation depth



Reference Images: Gabion wall system illustrating how stone-filled baskets create a natural, permeable finish and support terraced planting.



Section A: Existing and Proposed Terrain Profile with Tiered Landscape to Rear of Site



Section B: Existing and Proposed Terrain Profile with Tiered Landscape to Rear of Site

Note: Existing building massing profile shown is indicative.



Twelve Architects & Masterplanners

136 - 148 Tooley Street, London, SE12TU

www.twelvearchitects.com

020 7846 2012
