



LAND OFF BERSHAM ROAD, BERSHAM, LL14 4HL

LANDSCAPE MANAGEMENT PLAN

The management plan is intended to discharge planning conditions for the development of 2no. detached dwellings on off land off Bersham Road, Bersham. The plan is to be handed to the building owner/ occupants/ management company/ contractor, or whoever is responsible for the grounds maintenance of the site.

The plan has been prepared and coordinated by Above Zero Landscape Architecture Ltd on behalf of Paul Woollam

Above Zero Reference:	SJ.BRB_Land off Bersham Road, Bersham_Landscape MP
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1.0 Introduction

Background and Purpose of Management Plan

- 1.1 The proposed scheme is for the development of a residential scheme on land off Bersham Road, Bersham, Wrexham. The purpose of this document is to provide a Management Plan (MP) for the management of soft landscape areas within the proposed development site for a period of 5 years. The MP sets out guiding principles, aims and objectives. This allows those responsible for the management and maintenance of the site (owner, tenant, management company, contractor) to understand the existing and proposed landscape features on the proposed development and implications for ongoing maintenance of the site.
- 1.2 This MP should be read in conjunction with information contained on the 'Replacement Tree and Hedge Planting Plan' Tree Solutions (drawing ref: 20/AIA/WRM/49/ 05A). Drawing shown in Section 3 below.
- 1.3 Maintenance schedules and a maintenance specification are provided in Sections 4 & 5 of this report. These sets out the detailed maintenance requirements for the existing and proposed soft landscape features. Maintenance of the site

must be carried out as per the requirements set out in the specification. Any discrepancies between this plan, the drawings and specification must be highlighted to site owners and overall management staff.

Planning Requirements

- 1.4 This management plan supports the application to discharge condition 9 of planning application decision reference P/2020/0391 as follows:

'Within three months of the commencement of development a landscaping management plan, including long term design objections, management responsibilities and maintenance schedules for all landscaped areas shall be submitted to and approved in writing by the Local Planning Authority. The Landscape shall be managed and maintained in strict accordance with these details as are approved.'

Reason: To ensure landscape features are properly considered and protected in accordance with Policies GDPI and PS2 of the Wrexham Unitary Development Plan.'

Monitoring and Review

- 1.5 The MP covers the two separate private gardens in private ownership there is no public or communal areas within the development.
- 1.6 Annual monitoring reports will be made against measurable targets such as the general appearance of the site, condition of planting, health of existing trees and also any complaints or comments from residents or third parties.

Content

- 1.7 The structure of this plan has been set out under the following headings:
 - Introduction
 - Baseline Information
 - Development Proposals
 - Site Management
 - Implementation of the Management Plan
 - Specification for Maintenance

Baseline Information

Site Location

- 2.1 The site is within the small village of Bersham, on the southern side of Bersham Road (B5099), opposite 2 sets of semi-detached houses on the opposite side of the road. Both new properties will be accessed directly off Bersham Road with a new and separate entrance created for each plot. There is an existing mature hedge along the site's north boundary with Bersham Road.

Site Description

- 2.2 The site area is roughly square in shape with a street frontage on Bersham Road of c. 370m, the site extends back (southward) c 400- 500m. The site slopes gently back from Bersham Road before sloping at a much greater gradient down toward a public right of way (track) and the Clywedog River Valley.
- 2.3 As discussed above the northern boundary consists of a near continuous hawthorn hedgerow (with some elderberry and sycamore). The western boundary is shared with a neighbouring dwelling and made up of dense gardenesque

shrubs and small trees principally offsite within the neighbouring property.

- 2.4 The eastern and southern boundaries have a more open aspect. A simple post and wire fence defines the eastern side. The southern boundary is currently undefined. There are a few large trees (poplar and ash) on or just outside the site boundary with large canopies overhanging the southern portion of the site area and proposed rear gardens.
- 2.5 Within the boundaries the site area is featureless with long grasses and ruderal vegetation..

Existing photographs of the site are shown below and on the following page. (Photographs taken July 2023)

Northern boundary (hedge/ Bersham Road)



Western boundary (post and wire fence)



Eastern boundary (boundary with domestic curtilage)



Southern boundary (large trees with canopies overhanging into the site)



View to site from public right of way to the south



3.0 Development Proposals

Landscape Proposals

- 3.1 Proposals are for the residential development of 2no. 2-3 storey detached dwellings, accessed from Bersham Road, car parking and turning areas and associated gardens. Proposals include the retention of the existing hedge along Bersham Road. Sections of the hedgerow will be removed to allow for access. The hedge will be trimmed to a neat shape and maintained no more than 900mm in height.
- 3.2 The east, west and southern boundaries of the site will be planted with a single species native hawthorn hedge.
- 3.3 A total of 9no new native and fruit trees will be planted within curtilages of the new properties. Species include: *Pyrus communis*, *Betula pendula*, *Alnus glutinosa* and *Sorbus aucuparia*.
- 3.4 A number of trees on or just outside the site boundary are proposed to be retained. Some of the larger trees have significant canopies that spread into the site area.

Replacement Tree and Hedge Planting Plan (20/AIA/WRM/49/ 05A)



3.5 A maintenance specification has been provided within section 6 of this plan which sets out the detailed landscape maintenance requirements for the establishment and continued maintenance of new habitat areas across the site.

4.0 Site Management

Aims, Objectives and Targets for Management

4.1 The landscape scheme and ecological mitigation have been designed to reflect the local landscape context in order to integrate the development into the landscape and provide a naturalistic environment for people to enjoy.. There are 3 strategic design objectives for the scheme:

1. Retain and protect the sites valued landscape features and provide new landscape features that will sympathetically integrate into the wider environment and mature to create an attractive setting.
2. Maintain and enhance existing and proposed habitats to ensure they develop naturally and thrive.
3. Provide a tidy, safe and well-maintained environment for residents and people passing the site to enjoy.

Management Objectives

4.2 There are various landscape features proposed for the site which have varying management requirements. The landscape elements/habitats are presented at Table 1 and are listed below with the management objectives and tasks described on the following pages.

Existing Landscape Features

1. Standalone Trees (on site boundaries)
2. Established Hedgerows.

Proposed Landscape Features

3. New Hedgerows
4. New Trees
5. Amenity grass

Landscape Feature 1: Existing Trees

Objective

W1 Allow trees to continue to develop naturally, selectively prune for visual amenity and safety.

W2 Retention of deadwood or small, low brash piles as habitat features

W3 Monitor trees for condition and safety. If trees are thought to be diseased, take action to prevent disease spreading.

*NOTE: Obtain correct permissions from Wrexham CBC prior to any work on protected trees or trees with conservation areas.

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspection of trees by a trained arboriculturalist for hazards, tree safety and disease (Objective W3)		Every 2 years.												
Carry out selective pruning as required to main visual amenity and remove any crossing, damaged or diseased limbs. Carry out any recommendations contained in tree condition reports. (Objective W1 & W3)	1	1 to 5												
Carry out tree works as required. Leave some dead wood within small, low brash piles in appropriate locations to provide habitat (Objectives W2)	As required	1 to 5												
Carry out selective pruning as required to ensure tree crown clearance from the ground is maintained at a minimum of 2m. Selective removal of limbs and branches. (Objective W1)	As required	1 to 5												
Check any bird and bat boxes are secure. Reposition if they are continually not in use.	1	Every 5 years												

Landscape Feature 2: Established Hedgerow

Objective

H1 Hedgerow to be managed proactively to maintain structure to provide bird nesting habitat.

H2. Introduction of native species to increase diversity of plants.

H3 Manage hedgerow to prevent conflicts with people, built environment.

H4. Manage hedgerow and maintain visibility (not more than 900mm in height).

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Remove litter and detritus from within hedgerows as part of monthly site cleanse (Objectives H1 and H3)	52	1 to 5												
Trim/face up hedgerows twice annually to maintain form and encourage bushy growth avoiding bird nesting season (March to August). Trim/ face and top to maintain clear visibility splays on highway and road junctions and ensure footpaths and roads are not obstructed. (Objectives H3 and H4)	2	1 to 5												
Gap up existing hedgerow with new planting stock where there are existing gaps or to replace thick stemmed or 'woody' species such as sycamore with young stock. (H1 & H2)	1	1 to 5												
Remove any ivy from hedgerows by cutting at the base and carefully removing stems (Objective H3)	2	1 to 5												

Landscape Feature 3: New Hedgerows

Objective

H1 Hedgerow to be managed proactively to maintain structure to provide bird nesting habitat.

H2 Manage hedgerow to prevent conflicts with people, built environment and maintain visibility.

H3. Ensure newly planted hedgerows establish and thrive.

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Remove litter and detritus from within hedgerows as part of fortnightly site cleanse (Objectives H1 and H2)	26	1 to 5												
Replant/ gap up hedgerow where plants have not established or have died. Ensure species are as per the original specification. (Objective H3).	1	1 to 2												
Keep area weed free through regular hand weeding (Objectives H1 and H3)	12	1 to 5												
Watering as required during establishment particularly during times of prolonged drought. (Objective N1)	As required	1 to 2												
Keep area beneath new hedgerow mulched with c. 75mm depth bark, until hedge thickens and becomes established	1	1 to 2												
Trim/face up hedgerows annually to maintain form and encourage bushy growth avoiding bird nesting season (March to August). Maintain clear visibility splays from junctions (Objectives H1)	1	3-5												
Fertiliser application in spring and autumn as required (Objective H2)	2	1 to 3												
Manage ivy from hedgerows by cutting at the base and carefully removing stems (Objective H2 & H3)	1	1 to 5												

Landscape Feature 4: New Trees

Objective
T1 To allow trees to successfully establish to provide an attractive setting to development and garden features.
T2 Management to provide conditions where a healthy tree root system and canopy will develop.
T3 Monitor trees for signs of disease and take action to prevent the spread through the site.

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspect guys, stakes and ties regularly for firmness and support. Adjust ties twice annually. Remove ties and supporting posts once trees have established. Straighten leaning trees or refirm trees as required (Objectives T1 and T2)	12	1 to 5			*						*			
Maintain loose mulch around base of trees (Objectives T1 and T2)	2	1 to 5												
New trees to be watered as required to ensure successful establishment of trees. Programmed fortnightly during the growing season and more during prolonged periods of drought. Watering not to take place if rootball already looks saturated (Objectives T1 and T2)	As required	1 to 5												
Carry out hand weeding to vegetation within 0.5m of base of tree (Objectives T1 and T2)	Monthly	1 to 5												
Fertilise and aerate trees which are not thriving (Objectives T1 and T2)	2	1 to 3												
Replacement of failed tree planting in the next available planting season (Objective T1)	As required	1 to 3												
Formative pruning to maintain health and vigour. Annual crown lifting, pruning, thinning and shaping of trees as required. (Objective T2)	1	5												

Undertake safety inspections by an arboriculturalist to check for damage and diseases. Carry out remedial works as required. Also check roots are not causing damage to roads, pavements or buildings. (Objective T3)		Every 2 years.													
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Landscape Feature 5: Amenity Grassland

Objective

G1 To maintain a tidy appearance and ensure safe private usage

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
First cut of grass to be to 50mm height. Arisings removed from site (Objective G1)	1	1												
Fortnightly cut during the growing season to maintain a height of 40mm. Spread arising evenly over grass areas. (Objective G1)	18	1 to 5												
Cultivate and re-seed as required (Objective G1)	As required	1 to 5												
Spring and autumn slow release fertiliser application (Objective G1)	2	1 to 5												
Carry out weed control as required including spot treatment using selective herbicide on noxious weeds such as ragwort, nettles, thistles, dock and willowherb. (Objective G1)	As required	1 to 5												

5.0 Implementation of the Management Plan

Responsibilities

- 5.1. The management responsibility of landscape features and habitats across the site will fall to the owners, tenants or managing landlord of the two individual properties. This might be different for each property and change over the plan period.
- 5.2. This MP plan sets a standard for this maintenance to ensure establish of natural landscape features.
- 5.3. It is the owners, tenants or managing landlord's responsibility to ensure the management plan is updated and passed to the relevant person or organisation throughout the plan period.
- 5.4. The owners, tenants or managing landlord's may employ other organisations to carry out landscape maintenance operations on their behalf. The management company must ensure the third parties have the relevant experience and certificates of competence to carry out the management operations.
- 5.5. Owners, tenants or managing landlord's (and/or third party and maintenance companies) will be responsible for ensuring that maintenance operations are in accordance with this MP. The site will be managed to comply with all relevant health and safety legislation, approved codes of practice (ACOP's) and Health and Safety Executive guidance.
- 5.6. Owners, tenants or managing landlord's and third parties will be responsible for preparing risk assessments for all elements of work as required under the Management of Health and Safety at Work Regulations 1999 and for carrying out monitoring and review. The Health and Safety Procedures for the site will follow the guidelines within the HSE publications including HSG65 'Managing for Health and Safety' and HSG268 'How to Control Risks at Work'. The managing company will need to comply with the relevant legislation including:
 - Health and Safety: Health and Safety and Work Act (1974);
 - The Wildlife and Countryside Act 1985 as amended;

- Environmental Protection Act 1990;
- Control of Pollution Act (1974) / Pesticides Act (1998);
- Building Regulations Approved Documents;
- BS3936:1989 Part 1 Nursery Stock, Trees & Shrubs;
- BS5837:2012 Trees in Relation to Construction;
- BS3998:2010 Recommendations for Tree Work;
- BS7370-4:1993 Grounds Maintenance. Recommendations for Maintenance of Soft Landscape;
- The Control of Pesticides Regulations 1986;
- The Code of Practice for the Use of Approved Pesticides in Amenity Areas 1988;
- The Code of Practice of Plant Handling 1980;
- National Plant Specification Section 10.2 'Handling & Establishing Landscape Plants'; and
- CPSE Recommended Form of Tender for the Supply & Delivery of Plants.

6.0 Specification for Maintenance

General

- 6.1. Trees and shrubs planted shall comply with BS.3936 (Specification of Nursery Stock) and shall be planted in accordance with BS.4428 (General Landscape Operations) and BS8545:2014 'Trees from nursery to dependence in the Landscape'. Planting also to be in accordance with accompanying NBS specification.
- 6.2. Any damage or disturbance to the soil structure, planting area, grass, fencing, hard landscaping, structures or buildings during planting operations should be restored to their original condition.
- 6.3. Watering should be carried out as necessary to ensure the continued thriving of all planting. Ideally water using rain harvested water or mains water if not available. Wet the full depth of topsoil. Care should be taken to avoid damage or loosening of plants. Any compacted soil should be loosened by lightly forking.
- 6.4. Unless specified otherwise, dispose of all arisings to a licensed recycling centre or composted on site.
- 6.5. Any chipping operations undertaken on site should be chipped into a pile and either stored on site or removed to licensed recycling centre.
- 6.6. All rubbish on site should be collected and removed from site to a licensed tip.
- 6.7. Care should be taken to protect all areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly onto grassed areas.
- 6.8. Soil and arisings: should be removed from hard surfaces, car parking and footpaths around the building. Works should be left in a clean and tidy condition at completion and after any maintenance operations.
- 6.9. Apply a suitable foliar acting or residual herbicide to all hard surfaces and allow time for it to take effect before clearing arisings. Remove litter, leaves and debris from hard surfacing and remove arisings from site.

Grassed Areas

- 6.10. Standard: To BS 7370-3. Carry out maintenance appropriate to each category of turf, as follows:
- Objectives: To BS 7370-3, table 6.
 - Programme: To BS 7370-3, clause 11.
 - Mowing methods: To BS 7370-3, table 3.
- 6.11. Prior to grass cutting, remove all litter and debris from grassed areas.
- 6.12. Amenity grassed areas should be cut 12-14 times per season, between mid March and late September, on a fortnightly basis to maintain the grass at a height of 40mm. An initial cut should be made at 75mm height in mid-March prior to fortnightly cutting commencing.
- 6.13. Grass should be maintained as a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt. Prevent compaction from maintenance operations and maintain reasonably free from moss, excessive thatch, noxious weeds, frost heave, worm casts and mole hills.
- 6.14. Any damage such as trampling, abrasion or scalping caused by mowing should be repaired immediately. Edges should be neat and well defined, in clean straight lines or smooth flowing curves. Litter and fallen leaves should be removed fortnightly to maintain a neat appearance.
- 6.15. After cutting the grass should be neat and even, without surface rutting, compaction or damage to grass and edges should be neat and well defined. Neatly trim around obstructions. Arisings should be removed and all footpaths and hard surfacing kept free from grass cuttings.
- 6.16. Do not use mowing machinery closer than 100mm to tree stems. Use nylon filament rotary cutters and other hand held mechanical tools carefully to avoid damage to bark.
- 6.17. The area of bulbs within grassland should not be cut until 6 to 8 weeks after the plants have finished flowering. There after cutting should be as paragraph 6.12.

6.18. Collect fallen leaves as part of the fortnightly cleansing operations by hand raking and remove from site or shred and use as mulch around the base of trees.

6.19. Spring, autumn and winter fertiliser application to use organic products and the application rate to be as per manufacturers instructions. Submit proposals before using.

Reinstatement of damaged or failed grass

6.20. Worn or damaged areas: Make good by returfing or reseeding:

- Returfing standard: To BS 7370-3, Clause 12.2.
- Reseeding standard: To BS 7370-3, Clause 12.6.

6.21. Remove to a depth of 40mm and cultivate the ground to a fine tilth. Contractors choice for reinstatement via seeding or re-turfing but quality and appearance must match existing amenity grass areas.

6.22. If reseeding fill with a fine topsoil to BS3882 and reseed with a seed mix to match the existing grass sward. Provide necessary watering and protection to ensure successful germination and establishment.

6.23. Reseeding to be carried out between April and mid October.

Maintaining Trees and Hedges

6.24. Planting beds should be kept free from weeds by hand-weeding. A minimum diameter of 1m around each tree and all of each ornamental planting bed should be maintained weed free. Weed cover to be less than 5% across planting areas and no weed to be greater than 100mm in height.

6.25. Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch. Mulch should be maintained to 75mm depth.

6.26. Fertiliser should be applied to areas of new planting annually in March or April using an organic product. It should be spread evenly after carefully lifting mulch. Mulch to be replaced on completion of the operation and maintained for 2-3 years or when the hedge has thickened and established.

- 6.27. Soil aeration to be carried out to all compacted surfaces to aerate the soil of roots areas and break surface crust. Reduce soil to crumbs and level off. Adjacent planted are not to be damaged during operations.
- 6.28. Tree stakes and ties should be inspected monthly and adjusted twice annually. Loose, broken or decayed stakes should be replaced to original specification. If the stake is longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
- 6.29. Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing at each inspection as required. If chafing has occurred, reposition or replace ties to prevent further chafing.
- 6.30. All trees and shrubs should be refirmed after strong winds, frost heave and other disturbances. Tread around the base until plant is firmly bedded.
- 6.31. Any collars in soil at base of tree stems, created by tree movement should be broken up by fork, avoiding damage to roots. Backfill with topsoil and refirm.
- 6.32. Pruning shall be carried out annually in accordance with good horticultural and arboricultural practice to BS 7370-4. When removing branches do not damage or tear the stem.
- 6.33. Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
- 6.34. Larger branches prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
- 6.35. Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance. Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
- 6.36. At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or

damaged branches and stems from site. Retain seed heads on herbaceous perennials during the winter

- 6.37. Do not use growth retardants, fungicide or pruning sealant unless instructed.
- 6.38. Watering to be carried out as required during prolonged drought in the growing season to ensure the healthy establishment and growth of plants.. Watering points to be confirmed on site, if none available water supply to be via bauser. If water supply is likely to be restricted by emergency legislation, submit proposals ad await instructions before carrying out operations.

Pruning trees, shrubs and hedges

- 6.39. Prune trees and shrubs to BS 7370-4
- 6.40. Pruning to take place once annually on young trees above 4m in height.
- 6.41. Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader. Remove duplicated branches and

potentially weak or tight forks. When undertaking pruning operations ensure the branches are cut back to live wood.

- 6.42. Do not prune whips or feathered trees.
- 6.43. Extensive pruning of young trees and any surgery to larger trees must be carried out by an approved member of the Arboricultural Association or other approved specialist.
- 6.44. Cavities in trees to be investigated. Remove rubbish and rotten wood and probe the cavity to determine the extent of any decay and give notice. Waterfilled cavities are not to be drained. Sound wood inside cavities is not to be removed and cavity openings not to be covered.
- 6.45. Trim hedgerows twice annually in June and September to encourage bushy growth down to ground level. This should be undertaken after the plants have been established for three full growing season. All hedgerow to reach disered dimensions only by gradual degrees, depending on the growth rate and habit of each species. Trim annually once hedge has reached desired height.

Weeding

- 6.46. Hand weeding should be carried out monthly between April and September.
- 6.47. Remove weeds entirely, including roots and ensure that the minimum quantity of soil is removed to minimise disturbance to plant, bulb and mulched surfaces. On completion of hand weeding rake planting area to a neat, clean condition and reinstate mulch to original depth.
- 6.48. In areas of persistent or aggressive weed establishment treat with a suitable foliar acting herbicide to kill regrowth. Allow recommended period for herbicide to take effect before clearing arisings and disposing off site.

Reinstatement of planting

- 6.49. Remove dead or diseased plants as soon as possible and replace in the next available planting season.
- Deciduous trees and shrubs: Late October to late March.
 - Conifers and evergreens: September/ October or April/ May.

- Herbaceous plants (including marginal): September/ October or March/ April.
 - Container grown plants: At any time if ground and weather conditions are favourable.
 - Dried bulbs, corms and tubers: September/ October.
- 6.50. Carefully move mulch to one side and dig over the soil leaving it fit for replanting. Do not disturb the roots of adjacent plants. Use plants to the original specification or to match the size of adjacent plants. Include a slow release fertiliser in each planting pit as per manufacturers recommendations.