

FLOOD CHANNEL BUFFER ZONE SOFT LANDSCAPE MAINTENANCE AND MANAGEMENT SPECIFICATION

for

Island Road, West
Reading

Prepared on behalf of

Exton Estates Ltd



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1.0 MAINTENANCE AND MANAGEMENT STATEMENT

- 1.1 The establishment and future success of the external landscape is largely dependent on the standard and frequency of the subsequent maintenance and management it receives. Throughout the development period and thereafter a maintenance and management regime will be adopted with the following aims and objectives:-
- 1.2 This document deals with the maintenance and management of the proposed landscape elements of the project.
- 1.3 The proposed soft landscape will, for the initial 1 year after Practical Completion, be maintained by the Landscape Contractor responsible for implementation of the works. The contract will include a defects liability clause to ensure replacement planting is carried out and successful establishment achieved. Thereafter maintenance contracts will be organised by facilities management on an annual basis.
- 1.4 The maintenance and management matrix (Appendix A) provides information on the general techniques and methods to be adopted for the ongoing maintenance operations. These will be reviewed at regular intervals to respond to natural or man-made changes in the environment which affect the landscape types (e.g. tree disease).
- 1.5 The above approach will ensure that the quality of the landscape infrastructure created in the early years can be maintained for the benefit of staff and visitors to Island Road, West as well as providing a benefit to persons who live near and pass by the boundaries. In addition it will ensure that the landscape develops to maximise the ecological potential of the proposals.

2.0 MANAGEMENT AIMS AND OBJECTIVES

Aims

- 2.1 The principle aims of the Landscape Maintenance and Management Specification are to achieve a coherent strategic and integrated approach to the management of the landscape components and to ensure the successful overall integration into the surrounding area.

Objectives

- 2.2 The main objectives associated with the management of the landscape are as follows:
 - Manage retained woodland habitats to ensure long term maintenance of species composition and biodiversity value.
 - Manage proposed areas of native woodland/scrub by promoting appropriate management techniques, such as selective thinning, coppicing, replanting and seek to promote a varied and diverse woodland edge structure including understory and ground flora.
 - To secure a long term future for the existing trees and new tree and thicket planting with particular emphasis upon achieving enhancement of ecological potential, conservation and visual amenity.

- To achieve rapid establishment of the plant material with resultant total ground cover, thereby suppressing weed growth and reducing maintenance requirements.
- To retain the natural growth form and maximise the seasonal potential of individual species by the pruning methods adopted.
- Avoid disturbance to species such as nesting birds through appropriate timing of works to woodland, scrub and hedgerows.
- Manage ecological grassland to maintain structure and provide habitat for invertebrates and other species adopting varied cutting regimes appropriate to the intended function.
- Survey, control and eradication of Japanese knotweed and other invasive non-native species.
- To manage the landscape in a manner convivial with the safety of site users, such as maintaining visibility splays and the removal of dead, dying or diseased tree branches.
- Upkeep and maintenance of all boundary fences.

3.0 IMPLEMENTATION, MONITORING AND REVIEW

- 3.1 The new landscape will, for the initial 1 year after Practical Completion, be maintained by the Landscape Contractor responsible for implementation of the works. The contract will include a defects liability clause to ensure replacement planting is carried out and successful establishment achieved.
- 3.2 Thereafter contracts will be organised by the persons responsible for estate facilities management on an annual basis. The maintenance and management operations envisaged over the first 10 year period are set out as a matrix in Appendix A.
- 3.3 The maintenance and management works will be monitored and reviewed on a regular basis with advice provided as required by professional landscape design, ecological and arboricultural consultants to ensure the aims and objectives are being achieved. Adjustments will be made to the maintenance regimes as necessary to respond to natural or manmade changes in the environment which affect the landscape components (e.g. prevailing weather conditions, tree disease, vandalism, etc.).

APPENDIX A

Maintenance Schedule Matrix for initial 10 year period

APPENDIX A

SOFT LANDSCAPE 10 YEAR MANAGEMENT MATRIX

Island Road, West, Reading

Island Road, West, Reading

10 YEAR PERIOD LANDSCAPE MANAGEMENT SCHEDULE OF WORK MATRIX

ITEM OF WORK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
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GENERAL OPERATIONS FOR ALL AREAS

Tidy up areas removing rubbish, litter, etc., from planted and grassed areas.	22 times	22 times	22 times	22 times	22 times	22 times	22 times	22 times	22 times	22 times
Vegetation, which suppresses or otherwise inhibits the development of planted species and proper management of habitats shall be restricted and / or removed. Twice per year.	2 times	2 times	2 times	2 times	2 times	2 times	2 times	2 times	2 times	2 times
Any species, which colonise the site and are incongruous with the planting scheme and / or with the surrounding context, shall be removed as necessary. Note: All herbicides will be systemic, biodegradable, and non-residual, and only used where necessary and appropriate.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check that the plant material is firmly planted and firm in where required. Four times per year during initial 3 year establishment period.	4 times	4 times	4 times	4 times	4 times	4 times	4 times	4 times	4 times	4 times
Treat pests and diseases as necessary by agreement with the Contract Administrator.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Prune woodland transplants / shrubs as necessary to avoid conflict with footpaths, grass mowing, car parking etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
All legally notifiable weed species shall be controlled i.e. Japanese Knotweed as necessary.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

APPENDIX A

SOFT LANDSCAPE 10 YEAR MANAGEMENT MATRIX

Island Road, West, Reading

EXISTING VEGETATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
<i>Native Scrub and Woodland Planting</i> (the rear buffer zone is subject to a Woodland Tree Preservation Order and permission should be sought from the LPA for any works within this area). The following should be read in conjunction with the Woodland Management Plan.										
Selective pruning and any other required arboricultural works to be carried out on any dead and dangerous trees / branches, particularly within falling distance of buildings and footpaths as necessary. Arising's to be relocated locally to a suitable location and formed into deadwood piles for use by species living on dead and decaying wood. Excessive arising's to be removed from the site.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Larger growing individual tree species within areas of scrub to be assessed and where appropriate remedial pruning carried out. Trees deemed inappropriate due to their potential size and structure to be removed in favour of other more appropriate species. Once annually between September and February.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Selective coppicing 30-40% of scrub species on a rotational cycle every 5 years as necessary between September and February. Arising's to be processed through a brushwood chipper and broadcast or mulched and left in situ.	✓				✓					✓

NOTE:

For newly planted areas the number of years for each maintenance operation to be carried out is to be based on time of planting. The matrix below shows all planting carried out at year 1. Therefore if planting is carried out in year 3 and the maintenance operation scheduled is for 5 years then the operation should run through to year 8.

APPENDIX A

SOFT LANDSCAPE 10 YEAR MANAGEMENT MATRIX

Island Road, West, Reading

TREE PLANTING	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
To extra heavy standard and feathered trees: Check, adjust and replace stakes and ties as necessary. Trees to be inspected during each site visit. Target removal of stakes and ties after year 5, subject to review	22 times	22 times	22 times	22 times	22 times					
To extra heavy standard and feathered trees: Water and feed as necessary to maintain healthy growth. Should prolonged periods of hot, dry weather be experienced (in excess of 2 weeks) additional watering visits may be required. Trees to be inspected during each site visit.	22 times	22 times	22 times	22 times	22 times	22 times	22 times	22 times	22 times	22 times
To extra heavy standard and feathered trees: Prune dead and damaged wood as necessary particularly trees within close proximity of roads/car parks, buildings and footpaths.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check rabbit guards and re-firm / replace when required. Four times per year. Target removal of rabbit guards after 5 years subject to review.	4 times	4 times	4 times	4 times	4 times Review					
Weeds to be suppressed with 3 no. applications of a translocated herbicide during each growing season in 1m diameter circles around each tree.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Any vandalised, unhealthy and dead trees and shrubs will be replaced each year at the next available planting season and any underlying causes remedied.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown lifting for mature trees: Remove branch systems to give clearance height of 2.5 m above footpaths. Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sub lateral buds or branches. Do not leave stumps. Once annually between September and February. Chip and broadcast all arising's up to 150mm diameter. Larger timber to be formed into deadwood piles.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

APPENDIX A

SOFT LANDSCAPE 10 YEAR MANAGEMENT MATRIX

Island Road, West, Reading

Excessive arising's to be removed from the site.										
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WOODLAND EDGE THICKET

YEAR 1 YEAR 2 YEAR 3 YEAR 4 YEAR 5 YEAR 6 YEAR 7 YEAR 8 YEAR 9 YEAR 10

Keep areas clear of weed growth by spot herbicide treatment as necessary from mid-April to late September. 4 times reducing after year 4 subject to review.	4 times	4 times	4 times	4 times Review	2 times	2 times	2 times	Once	Once	Once
Check rabbit guards and re-firm / replace when required. Four times per year. Remove weed growth from within. Target removal of rabbit guards after 5 years subject to review.	4 times	4 times	4 times	4 times	4 times Review					
Any vandalised, unhealthy and dead shrubs will be replaced each year at the next available planting season and any underlying causes remedied.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

ECOLOGICAL GRASSLAND AREAS

YEAR 1 YEAR 2 YEAR 3 YEAR 4 YEAR 5 YEAR 6 YEAR 7 YEAR 8 YEAR 9 YEAR 10

Mowing regime: Annual cut late (August/September) to allow flowers to set seed, height not <15cm. All arising's should be removed with the general objectives of preventing scrub encroachment and providing appropriate conditions for meadow grassland flora and fauna.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Control excessive weed growth with spot spray or weed wipe of an appropriate approved translocated herbicide, as required between June to September.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

ARTIFICIAL HABITAT

YEAR 1 YEAR 2 YEAR 3 YEAR 4 YEAR 5 YEAR 6 YEAR 7 YEAR 8 YEAR 9 YEAR 10

Supplement or replace log piles as necessary to ensure continued provision of habitat.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clean out nesting material within bird boxes, to be carried out annually in winter.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

APPENDIX A

SOFT LANDSCAPE 10 YEAR MANAGEMENT MATRIX

Island Road, West, Reading

HARD LANDSCAPE FEATURES

YEAR 1 YEAR 2 YEAR 3 YEAR 4 YEAR 5 YEAR 6 YEAR 7 YEAR 8 YEAR 9 YEAR 10

Check timber post and rail fences on a monthly basis for signs of damage/wear and tear. Any repairs and general maintenance to be undertaken as required.	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times
Check boundary fences on a monthly basis for signs of damage/wear and tear. Any repairs and general maintenance to be undertaken as required	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times	12 times

APPENDIX B

Site Layout Drawings

03 Landscape Concept Plan - River Buffer Zone

NOTES



KEY

EXISTING TREES TO BE RETAINED WITHIN THE RIVER BUFFER ZONE
(Refer to the Pre Development Tree Survey for detail)



EXISTING TREES TO BE REMOVED
(Refer to the Pre Development Tree Survey for detail)



EXTRA HEAVY STANDARD TREES
(Tree pit size: 1000x1000x750mm)
Refer to BCA drawing 05 for details
14-16cm girth
4.25-6m height
1.8-2.1m clear stem

Ac Acer campestre
Sc Salix caprea



FEATHERED TREES
2.1-2.4m height
6-8cm stem girth
Well furnished with lateral shoots to the base
Refer to BCA drawing 06 for details

Bp Betula pendula



PROPOSED THICKET MIX PLANTING
(300mm depth of topsoil)
Where thicket is planted next to a hard surface/kerb/fence, it should be positioned 1m from the edge.

Transplants planted in groups of 7-15 of the same species on a 1.0m grid.

%	Species	Common Name	Supply Size
20%	Acer campestre +	Field Maple	400-600mm 1+1 OG
30%	Corylus avellana #	Hazel	400-600mm 1+1 OG
5%	Crataegus monogyna #	Hawthorn	400-600mm 1+1 OG
10%	Ligustrum vulgare #	Privet	400-600mm 1+1 OG
5%	Prunus spinosa #	Blackthorn	400-600mm 1+1 OG
10%	Rhamnus cathartica #	Buckthorn	400-600mm 1+1 OG
10%	Salix cinerea #	Grey Willow	400-600mm 1+1 OG
5%	Sorbus aria +	Rowan	400-600mm 1+1 OG
5%	Ulex europeus #	Gorse	400-600mm 1+1 OG



PROPOSED ECOLOGICAL GRASSLAND AREAS
To be either Emorsgate EP1 Pond Edge Mixture for water course banks
(150mm depth of topsoil)



EXISTING AREA OF SCRUB TO BE RETAINED AND MANAGED



PROPOSED TIMBER POST AND 3 RAIL FENCE



PROPOSED RETAINING STRUCTURES AND BATTERS
All to Engineers details



PROPOSED SECURITY FENCE
All to Architects details



PROTECTIVE BARRIER: The retained existing trees and flood channel buffer zone shall be protected by protective barrier erected in accordance with the specification figure 2 of BS5837:2012. Barrier to be erected on the edge of the root protection area for each tree to be protected or along the top of the river easement bank. To be erected prior to the commencement of any construction works on site.



SITE BOUNDARY



8m RIVER EASEMENT

REV A - Amended protective barrier alignment.
REV NOTE 24-11-17 JP
DATE AUTH



BARRY CHINN
associates
Landscape Architects

CLIENT EXTON ESTATES LTD			
PROJECT ISLAND ROAD, WEST READING			
DRAWING LANDSCAPE CONCEPT PLAN - RIVER BUFFER ZONE			
CONTRACT	1738/17	DRG NO.	03
DATE	Oct 2017	DRAWN	
ISSUE	Planning	CHECKED	REV
SCALE	1:500	ORIG SHEET	
CAD FILE	1736-17-03.dwg	A	

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