SOFT LANDSCAPE WORKS MAINTENANCE AND MANAGEMENT PROPOSALS – 10 YEARS

PLOT 1, HOYLAND WEST

Hoyland

Barry Chinn Associated Limited
Harbury Road, Deppers Bridge
Southam, Warwickshire, CV47 2SZ

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2044/20-02	Tree Pit, Staking and Planting Proposals	P1
2044/20-05	Landscape Proposals Drawing 05	P6
2044/20-07	Landscape Proposals Drawing 07	P5
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Revisions made in response to Edward Jowett Tree Officer comments of 24/02/2021 shown in red.

MAINTENANCE AND MANAGEMENT STATEMENT

(Refer to Appendix C for landscape proposals drawings)

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 (with the responsibility placed with the Landscape Contractor to determine frequency of specific operations to achieve successful establishment where 'as necessary' stated).

The aims and objectives of the landscape maintenance and management will be:

1. To ensure the successful establishment and continued growth through to maturity of the Soft Landscape scheme shown on landscape proposals drawing
2. To ensure that the structural landscape develops in a manner commensurate with the original design intentions.
3. To ensure that the maintenance and management of the soft landscape areas is commensurate with and achieves the aims and objectives of the Ecological Management Plan prepared by FPCR Ecology.
4. To ensure the successful establishment and retention of effective landscape buffer planting, particularly along the boundaries of the site.
5. 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.
6. To achieve rapid establishment of the plant material with resultant total ground cover, thereby suppressing weed growth and reducing maintenance requirements.
7. To retain the natural growth form and maximise the seasonal potential of individual species by the pruning methods adopted.
8. 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.
9. To ensure the successful establishment and continual enhancement of the landscape areas in accordance with ecologist's recommendations to increase the overall bio-diversity of the site.

The 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. Refer to Appendix A for the schedule of maintenance for year 1. Thereafter maintenance contracts will be organised by facilities management on an annual basis.

The maintenance and management matrix (Appendix B) provides information 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 (eg. tree disease).

The above approach will ensure that the quality of the landscape infrastructure created in the early years can be maintained for the benefit of visitors to the development at Hoyland 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.

APPENDIX A

YEAR 1 MAINTENANCE SCHEDULE

	YEAR 1 LANDSCAPE MAINTENANCE SCHEDULE	FREQUENCY
	DESCRIPTION	
	During the initial twelve month period after Practical Completion.	
	Note: Allow for twenty-two maintenance visits (18 during the growing season, 4 during the dormant season). A visit shall be defined as the period of time required by the Contractor to carry out all maintenance items specified in the Schedule of work below.	
A	**GENERAL**	
A.1	Tidy up areas removing rubbish, litter, etc., from planted and grassed areas.	At each visit
A.2	Check that the plant material is firmly planted and firm in where required.	6 times
A.3	Treat pests and diseases by agreement with the Contract Administrator.	As necessary
A.4	Prune woodland transplants / shrubs as necessary to avoid conflict with footpaths, grass mowing, etc.	As necessary
B	**TREE PLANTING**	
B.1	To extra heavy standard/heavy standard trees: Check, adjust and replace stakes and ties as necessary. Prune, water and feed where/ as required.	As necessary
B.2	Check spiral guards and replace when required.	Four times
C	**WOODLAND / THICKET / NATIVE HEDGE PLANTED AREAS**	
C.1	Keep areas clear of weed growth by spot herbicide treatment as appropriate from mid April to late September.	Four times
C.2	Check shelter guards and refirm / replace when required. Remove weed growth from within.	Four times
D	**ORNAMENTAL/FORMAL CLIPPED HEDGEROW**	
D.1	Keep areas clear of weed growth by hand weeding and spot herbicide as appropriate from mid April to late September in accordance with ecologist's recommendations..	Four times
D.2	Check shelter / spiral guards and refirm/replace when required. Remove weed growth from within if necessary.	Four times

	YEAR 1 LANDSCAPE MAINTENANCE SCHEDULE	FREQUENCY
D	**ORNAMENTAL/FORMAL CLIPPED HEDGEROW (CONTINUED)**	
D.3	Prune hedges as necessary to achieve/ maintain desired height of 1.5-1.8m.	As necessary
E	**SHRUB PLANTED AREAS**	
E.1	Water ornamental shrub beds to maintain healthy growth.	As necessary
E.2	Prune shrubs as required to achieve desired form and prevent invasive species smothering less aggressive species.	As necessary
E.3	Prune dead, dying or diseased wood from plant material.	As necessary
E.4	Keep shrub areas clear of weed growth by hand weeding and spot herbicide treatment as appropriate.	12 times
E.5	Apply a slow release fertilizer, Enmag CRF or similar approved, composition NPK 11 + 22 + 9 + 6.0% Mg, to shrub areas at a rate of 30 gms / m^2 (timing to be agreed with Contract Administrator).	Once only
E.6	Edge up planted areas to maintain soil level 25mm below adjacent hard surfaces and kerbs. Any soil washed onto hard surfaces to be cleaned off. Repeat at each maintenance visit.	At each visit
E.7	Lightly cultivate all shrub beds, breaking up soil evenly. Once only. Timing to be agreed with the Contract Administrator.	Once only
F	**MAINTENANCE OF GRASS AREAS (CLOSE MOWN)**	
F.1	Grass will be mown as required . Litter will be collected immediately prior to mowing. Note: at each cut excessive arisings shall be removed from site.	12-18 times/year dependent on location & season
F.2	Fertilizer will be applied.	As necessary
F.3	PROVISIONAL Supply and apply a selective herbicide in accordance with manufacturer's recommendations.	As necessary
F.4	Water grass as necessary to achieve establishment and maintain healthy growth.	As necessary
F.5	Shape grass edge with half moon spade. Timing to be agreed with Contract Administrator.	Two times

	YEAR 1 LANDSCAPE MAINTENANCE SCHEDULE	FREQUENCY
	MAINTENANCE OF GRASS AREAS (CONTINUED)	
F.6	Worn areas will be re-seeded.	May or September
G	**MAINTENANCE OF SPECIES RICH GRASSLAND AREAS**	
G.1	If autumn sown the sward shall be cut 3no. times in first year, once in March, oncein May and once in September. If Spring sown then sward shall be cut once after six weeks (if sufficient material) and then twice more, once in May and once in September. Maintenance thereafter to be cut twice per annum, once in March/ April and once in September / October. All cuts to be to a length of 40-70mm and to the recommendations of the seed supplier. Note: at each cut excessive arisings shall be removed from site.	When appropriate to maximize seed dispersal.
G.2	No pesticides or fertilizer will be used.	

APPENDIX B

MAINTENANCE AND MANAGEMENT SCHEDULE MATRIX FOR 10 YEAR PERIOD

Note: Allow for twenty-two maintenance visits anually (18 during the growing season, 4 during the dormant season). A visit shall be defined as the period of time required by the Contractor to carry out all maintenance items specified (with the responsibility placed with the Landscape Contractor to determine frequency of specific operations to achieve requirements where ‘as necessary’ is stated).

MAINTENANCE AND MANAGEMENT SCHEDULE MATRIX FOR 10 YEAR PERIOD										
ITEM OF WORK	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**YR 6**	**YR 7**	**YR 8**	**YR 9**	**YR 10**
GENERAL										
Tidy up areas removing rubbish, litter, etc, from planted and grass areas	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Treat pests and disease as necessary	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Water all plant material and grass as necessary to maintain healthy growth	✓	✓	✓							
Check plant material is firmly planted and firm in where required.	✓	✓	✓							
Dead, dying or diseased wood to be pruned out	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check shelter guards / rabbit protection and refirm / replace as required including removing weed growth from within. Consider removal at years 4 to 5 (or when plants outgrow girth of guards).	✓	4 x	4 x	2 x	2 x	✓	✓	✓	✓	✓
Removal of diseased or dead plants with replacements planted as appropriate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TREE PLANTING										
Check, adjust, replace stakes and ties as necessary. Remove stakes after approximately 3 years if appropriate. Prune, water and feed as necessary.	✓	✓	✓	✓	✓					
Remedial tree surgery as necessary to remove any dead, dying or diseased branches and to allow the tree to achieve full stature. All works to be carried out by an Arboricultural Association approved contractor in accordance with BS3998: Recommendations for Tree Work. Clear stem of 1.8-2.1m to be maintained adjacent to footpaths or vehicle accesses.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

MAINTENANCE AND MANAGEMENT SCHEDULE MATRIX FOR 10 YEAR PERIOD (CONTINUED)										
ITEM OF WORK	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**YR 6**	**YR 7**	**YR 8**	**YR 9**	**YR 10**
WOODLAND / THICKET / NATIVE HEDGE PLANTED AREAS										
Keep areas clear of weed growth by herbicide treatment as appropriate from mid April to late September.	4 x	4 x	4 x	4 x	2 x	2 x	2 x	Once	Once	Once
Woodland mix planting to be managed to ultimately achieve a tree canopy with understorey. Woodland Edge mix to achieve age diversity. A gradual development of a diverse age structure should be established over a period of time by the use of a regime of selective thinning, pruning and coppicing.					1/3 of thicket plants			1/3 of thicket plants		
Remove branches that overhang footpaths or prevent access for grass cutting. Allow native hedges to achieve natural form with only lower branches removed.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Prune native hedges to achieve/ maintain heights 1.5-1.8m (approx. timing September) as required depending on establishment. Cut sides, tops and ends to straight and true lines.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SHRUB AND FORMAL HEDGE PLANTED AREAS										
Keep ornamental shrub and formal hedge areas clear of weed growth by hand weeding or spot herbicide treatment.	12 x	12 x	12 x	10 x	10 x	6 x	6 x	6 x	6 x	6 x
Prune shrubs as necessary to prevent invasive species smothering less aggressive species and to prevent shrubs overhanging footpaths and other areas of hard paving.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slow release fertilizer application as appropriate to ensure establishment of planting.	✓	✓	✓							

MAINTENANCE AND MANAGEMENT SCHEDULE MATRIX FOR 10 YEAR PERIOD (CONTINUED)										
ITEM OF WORK	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**YR 6**	**YR 7**	**YR 8**	**YR 9**	**YR 10**
SHRUB AND FORMAL HEDGE PLANTED AREAS (CONTINUED)										
Prune formal hedges to achieve/ maintain heights 1.5-1.8m (approx. timing May and September). Cut sides, tops and ends to straight and true lines.	✓	2 x	2 x	2 x	2 x	2 x	2 x	2 x	2 x	2 x
Lightly cultivate all planted areas, breaking up soil evenly. Once only.	✓	✓								
Edge up planted areas to maintain soil level 25mm below adjacent hard surfaces and kerbs. Any soil wash onto hard surfaces to be cleaned off.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CLOSE MOWN GRASS AREAS										
Grass cutting with edge trim (where required). Frequency of grass cutting operations to be commensurate with location and visual importance of grass area: Up to 18no. cuts per year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shape grass edge as necessary with half moon spade. 2 times per year.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Application of fertilizer and selective weedkillller as appropriate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Re-seeding of worn areas	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

MAINTENANCE AND MANAGEMENT SCHEDULE MATRIX FOR 10 YEAR PERIOD (CONTINUED)										
ITEM OF WORK	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**YR 6**	**YR 7**	**YR 8**	**YR 9**	**YR 10**
SPECIES RICH GRASSLAND/ WILDFLOWER AREAS										
Grass cutting. 1no. cut per year When appropriate to maximize seed dispersal following recommendation from an ecologist.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Treat and remove pernicious weed growth where it may be detrimental to establishment of wildflower sward.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AQUATIC AREAS										
Aquatic areas shall be maintained to achieve the original design objectives. Where necessary aggressive or pernicious weeds or woody plants shall be removed.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FLOOD ATTENUATION AREAS										
Willow and other native shrub species planted within areas of flood attenuation shall be coppiced to ground level on a cyclical basis. Selected trees shall be allowed to grow on to mature size. Excessive feathered growths at base of plants shall be removed if they would significantly reduce flood attenuation capacity.			1/3rd of plants		1/3rd of plants every 2nd year		1/3rd of plants every 2nd year		1/3rd of plants every 2nd year	

APPENDIX C

DRAWINGS

Drawing No.	Drawing Title	Rev
2044/20-01	Landscape Species Schedule	P5
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