



15 Year Soft Landscape Maintenance, Ecological Enhancement and Overall Management Plan for the Main SRFI Site

February 2018

PREPARED FOR

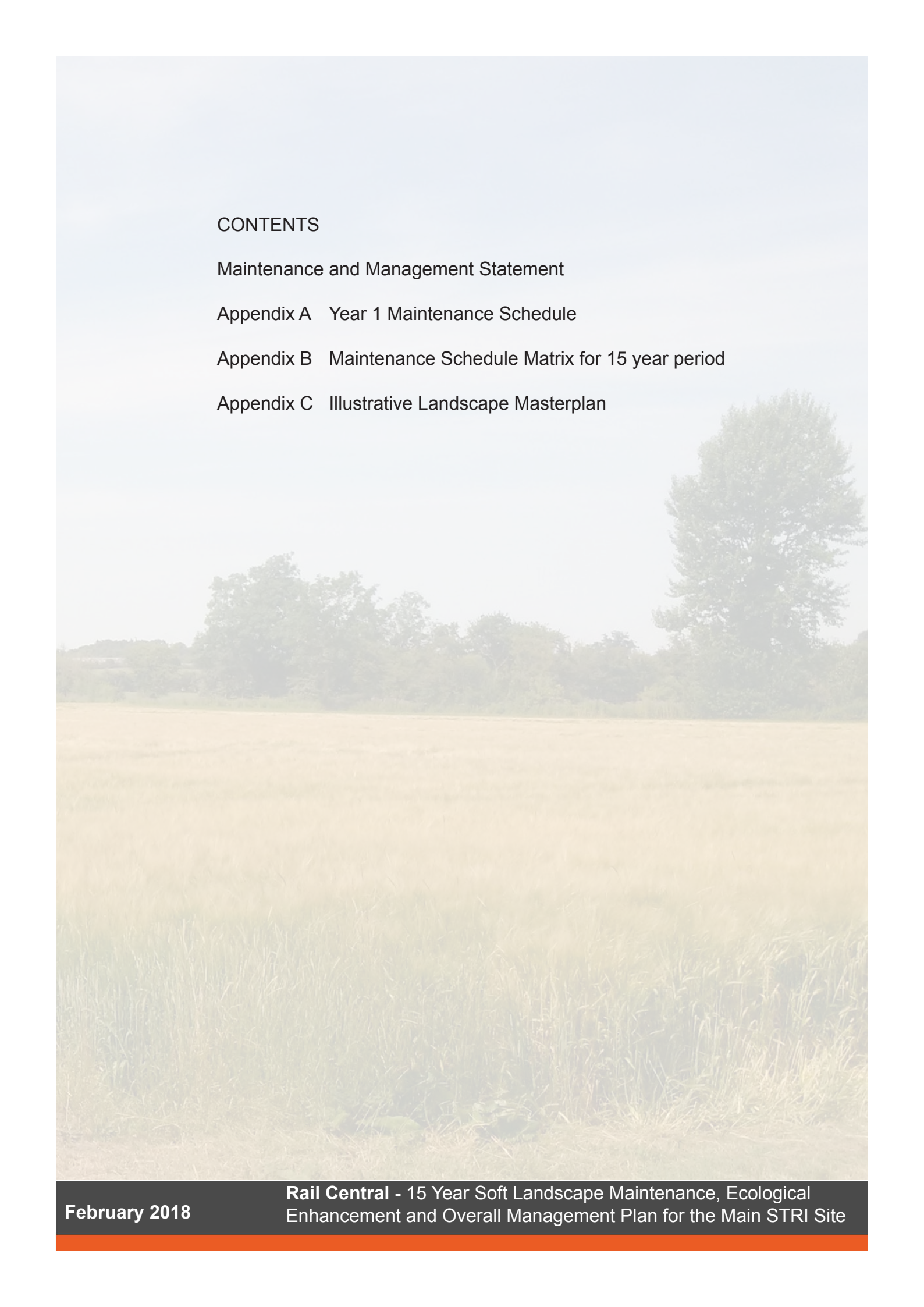
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AND GAZELEY GLP NORTHAMPTON S.À.R.L**

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MAINTENANCE AND MANAGEMENT STATEMENT

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.

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

- a) To ensure the successful establishment and continued growth through to maturity of the Soft Landscape scheme shown on drawing no. 1627-15-25 – Illustrative Landscape Masterplan.
- b) To ensure that the infrastructure landscape at Rail Central develops in a manner commensurate with the original design intentions.
- c) To ensure that the maintenance and management of the soft landscape areas is commensurate with and achieves the aims and objectives of sound ecological management and enhancement.
- d) To ensure the successful establishment and retention of an effective landscape buffer around the periphery of the site. In particular along the northern boundary of the main site where it borders the village of Milton Malsor.
- e) To secure a long term future for the existing trees and new trees, thicket and hedgerow planting with particular emphasis upon achieving enhancement of ecological potential, conservation and visual amenity.
- f) To achieve rapid establishment of the plant material with resultant total ground cover, thereby suppressing weed growth and reducing maintenance requirements.
- g) To retain the natural growth form and maximise the seasonal potential of individual species by the pruning methods adopted.
- h) 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.
- i) To ensure the successful establishment and continual enhancement of the whole site in accordance with ecological principles to increase the overall biodiversity of the site.
- j) To enhance the ecological value of the site above and beyond its current value and provide habitats for a range of protected species known to occur within the vicinity.

The soft landscape for each phase 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.

Appendix A details the proposed maintenance and management works over the first 5 year period. Work undertaken and scheme progress will need to be assessed annually, with a major assessment after the fourth year to allow revision to the existing maintenance and management regime to reflect findings. This assessment will be carried out in conjunction with the Ecological Consultant with the opportunity provided for local stakeholders to input into the long term aims and objectives and to raise any concerns on issues that may have arisen. This approach will ensure that the requirements for habitat creation and the successful establishment of robust structural planting belts are met. Maintenance for the following years is to be reviewed at 3 year intervals using the same method to ensure appropriateness of regime.

An indicative management strategy for woodland and thicket planted areas is outlined but this may need to be fine-tuned in response to circumstances and opportunities arising, stakeholder comments etc. The management of species rich grassland and wildflower areas will also be reviewed and modified as necessary following the outcomes from seed-sowing, natural colonisation etc. to allow for the re-introduction of targeted wild flower species into the established grassland sward through plug planting.

Appendix B represents this regime in the form of a matrix identifying the work over an extended 15 year period.

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) and also to allow for potential adaptations to meet the changing requirements of the local community.

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 Site as well as providing a benefit to persons who live near and pass through the re-routed footpaths within the structural landscape. In addition it will ensure that the landscape develops to maximise the ecological potential of the proposals.

At the end of this initial 15 year period a full review of the management approach will be undertaken. Revisions and amendments will be included to form the basis of an amended plan to ensure that the landscape continues to develop its ecological potential and to maintain the benefits of the enhancements provided.

A summary of the proposed habitat enhancements for protected species is provided below:

Amphibians (including Great Crested Newt):

- The creation of attenuation features in the north of the site to provide a series of interconnected ponds with permanent standing water.
- The inclusion of interconnected ditch lines along compensatory planted hedgerows along internal corridors within the site.
- Ensuring strong links into the surrounding hedgerows, scrub and grasslands to provide habitat with potential for foraging animals and for the creation of refuge and hibernation sites, e.g. habitat piles, as described in the Environmental Statement.

Reptile:

- Providing shelter through the creation of structurally diverse habitats with drainage swales, grassland, scrub and woodland. Any calcareous grassland creation may especially benefit reptiles.
- Creation of hibernaculum within potential reptile habitat, as described in the Environmental Statement.
- Creation of interlinking areas of potential reptile habitat to allow passage through the site.
- Additional detail of ecological provision in potential reptile habitat is described in the Environmental Statement, eg the creation of south facing banks for basking and the creation of hibernacula in the form of deadwood habitat piles; such provision will be addressed in the Habitat Management Plan.

Badger:

- The native tree and shrub planting will provide suitable habitat for badgers to build setts
- The habitat mosaic of native tree and scrub planting, grassland, hedgerows and wetland areas will provide a varied foraging resource for badgers.
- Connectivity between the different habitat areas within the site will be provided, and the possibility of improving links to green infrastructure outside of the site will be explored.

Breeding Birds

- The creation of woodland, scrub, hedgerow, grassland, field boundary and wetland habitats will offer valuable breeding opportunities for a variety of bird species.
- The creation of a mosaic of habitats will provide an increased and more varied food source for birds.
- The installation of nesting boxes to retained trees and woodland areas will provide additional nesting habitat.

Bats

- The proposed native tree and shrub planting, hedgerow creation and aquatic habitat creation will provide a foraging habitat for bats within the site and will provide new flight lines across the site to replace the loss of field edge vegetation and hedgerows.
- Bat boxes will be installed within retained and new vegetation to provide roosting opportunities for bats.
- Light sources along sensitive boundaries, and along the canal at Junction 15a, will be carefully managed to create dark corridors for bat activity.

Invertebrates

- Arisings from pruned or coppiced plants will be stacked neatly in piles on site to create hibernaculae and provide a decomposing food source.
- Deadwood and newly cut limbs will be affixed to living tree branches as described in the Environmental Statement to provide habitat for saproxylic invertebrates
- Species selection within species rich grassland areas will provide a wide range of species for pollinating insects.
- The landscape strategy will look to create a wide range of different interconnected habitats in a mosaic across the green space within the site.

APPENDIX A - SOFT LANDSCAPE MANAGEMENT DETAILED REGIME YEAR 1 TO YEAR 5

1.0 GENERAL	TIMING
Tidy up areas removing rubbish, litter, etc., from planted and grassed areas. Repeat at each maintenance visit.	Monthly
Treat pests and diseases	As necessary
Water all plant material and grass as necessary to maintain healthy growth	As necessary
Check plant material is firmly planted and firm in where required.	Years 1 – 3 Years 1 - 2 4 times/ year Year 3 2 times
Check shelter guards / rabbit protection and refirm / replace as required including removing weed growth from within. Once the plants have reached suitable maturity removal of guards shall be carried out. The need for removal will be monitored from Year 4 onwards; on a plant by plant basis.	Years 1 – 5 Years 1 – 3 4 times/ year Year 4 - 5 2 times/ year
Removal of diseased or dead plants with replacements as appropriate	Years 1 - 5
Replacement of missing plants. Any replacement planting shall be of the same species and size as originally specified, unless otherwise agreed by the Planning Authority	Years 1 - 5
Prune out dead and dying matter from trees and shrubs. Tasks involving the thinning, pruning and coppicing of trees, hedges and scrub will be timed to avoid the bird nesting season which runs from mid-February to September inclusive.	As necessary. October – mid-February
Herbicide application should be avoided where practicable. Where it is needed its use should be minimised by ensuring application is directed onto desired areas only and spray drift avoided. Spot treatment and weed wipe methods should be used where appropriate.	As necessary
Only non-residual herbicides should be used which are known to have limited effects on wildlife.	
Herbicides should not be used within 5m of watercourses or flood attenuation areas without prior permission from the Environment Agency.	

APPENDIX A - SOFT LANDSCAPE MANAGEMENT DETAILED REGIME YEAR 1 TO YEAR 5

2.0 TREE PLANTING

Check, adjust, replace stakes and ties as necessary. Once the trees have reached suitable maturity the stakes and ties shall be removed. The need for the removal of stakes and ties will be monitored from Year 3 onwards; on a tree by tree basis. 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. As necessary.

3.0 EXISTING TREES

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. Consult ecologist where features likely to support bats present. Locations of bat boxes will be noted prior to any works which might affect them or their immediate setting. Pruned material may be used to create habitat piles for hibernating reptiles and other animals. As necessary.

4.0 WOODLAND / WOODLAND EDGE THICKET / NATIVE HEDGE PLANTED AREAS

Keep areas clear of weed growth by hand and, if necessary, by herbicide treatment, as appropriate, in accordance with the Ecologist's recommendations. Years 1 - 4: 4 times/year
After year 4: 2 times/year
To be carried out in Mid-April to late September

Keep young native hedgerows (adjacent to car parks/ public spaces) clear of weed growth by hand and, if necessary, herbicide treatment, as appropriate. Years 1 - 3: 12 times/year
After year 3: 10 times/year
After year 5: 6 times/year

The strategy is principally intended to be implemented between years 5 and 10. Management regimes may require adapting to suit ground conditions / growing rates and habitat development etc. Advice and recommendations should be provided by the scheme ecologist, and detail will be included in the Habitat Management Plan

APPENDIX A - SOFT LANDSCAPE MANAGEMENT DETAILED REGIME YEAR 1 TO YEAR 5

4.0	A gradual development of a diverse age structure within newly planted	From year 5
Cont	and existing thicket should be established over a period of time by the use of a regime of selective thinning, pruning and coppicing. This will ultimately achieve a tree canopy with understory and aid Woodland Edge to achieve age diversity.	onwards:
	Selected plants will be coppiced under a cyclical regime. Coppicing is to be carried on the same basis as outlined above. Coppice stools will be cut 15cm above ground and will be weathered to the south. Cuts will be clean with no separation of the bark from the wood.	1/3 of thicket to be treated every 3 years (subject to annual review)
		To be carried out in January/February
	Plants will be pruned or coppiced with all arisings being stacked neatly in piles on site. Any pruning, removal or coppicing shall be restricted to that which is beneficial to the successful establishment and retention of a continuous screen or buffer.	When appropriate, carried out in January/February
	Remove branches that overhang footpaths or prevent access for grass cutting. Ensure no nesting birds will be affected by this activity prior to removal during the nesting season (March –August inclusive).	As necessary.
	Except where regular cutting is required for sight-lines or amenity purposes, native hedges should be cut on a three year rotation to allow diversity of structure and development of fruiting. Some hedges around retained arable areas to be kept shorter to benefit birds of open farmland landscapes. Prune native hedges to maintain a tidy appearance (approx. timing September-October) as required depending on establishment. Allow native hedges to achieve natural form as appropriate. Cut tops, ends and sides facing footpaths, ornamental planting, mown grass areas (not thicket or woodland) to straight and true lines.	As necessary.
	Tree species within the thicket planting will be thinned in year 10 (to approximately 50% of total number subject to review findings). Exact timing of thinning works will be dependent on speed of establishment and growth of thicket planting.	Year 10 To be carried out in November
	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.	As necessary.

APPENDIX A - SOFT LANDSCAPE MANAGEMENT DETAILED REGIME YEAR 1 TO YEAR 5

5.0 EXISTING WOODLAND AREAS

Woodland planting to be managed to ultimately achieve a tree canopy with understory and 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.

Selective thinning to maximize variety size and species to be treated every 3 years, (subject to annual review) To be carried out in January/February

Remove branches that overhang footpaths or prevent access for grass cutting. Ensure no nesting birds will be affected by this activity prior to removal during the nesting season (March –August inclusive).

As necessary.

Except where regular cutting is required for sight-lines or amenity purposes, native hedges should be cut on a three year rotation to allow diversity of structure and development of fruiting. Some hedges around retained arable areas to be kept shorter to benefit birds of open farmland landscapes. Prune native hedges to maintain a tidy appearance (approx. timing September-October) as required depending on establishment. Allow native hedges to achieve natural form as appropriate.

As necessary.

6.0

SHRUB PLANTED AREAS

Keep ornamental shrub areas clear of weed growth by hand weeding or spot herbicide treatment.

Years 1 - 3: 12 times/year
After year 3: 10 times/year
After year 5: 6 times/year

Prune shrubs to prevent invasive species smothering less aggressive species and to prevent shrubs overhanging footpaths and other areas of hard paving, and to remove dead, dying or diseased plant material. Ensure no nesting birds will be affected by this activity prior to removal during the nesting season (March –August inclusive).

As necessary.

Slow release fertilizer to be applied sparingly to ensure establishment of planting.

First 3 years: March - April.

Lightly cultivate all planted areas, breaking up soil evenly.

Years 1 – 2
Once per year.

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.

As necessary.

APPENDIX A - SOFT LANDSCAPE MANAGEMENT DETAILED REGIME YEAR 1 TO YEAR 5

7.0 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. Litter will be collected immediately prior to mowing.	Every year. 18 cuts/ year.
Shape grass edge as necessary with half-moon spade.	Every year. 2 treatments/ year.
Application of fertilizer and selective weedkiller as appropriate	As appropriate.
Re-seeding of worn areas	As appropriate.

8.0 ROUGH 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. Litter will be collected immediately prior to mowing.	Every year. 2-8 cuts/ year.
Treat and remove pernicious weed growth where it may be detrimental to establishment of wildflower sward.	As necessary.

9.0 WILDFLOWER AREAS

To be carried out in accordance with good horticultural practice and recommendations of an ecologist.	
In Year 1 the sward will be cut and arisings removed every six weeks during the growing season	Approx. 6 cuts/ year between March and November
Wildflower grassland areas for ground-nesting birds should be cut and arisings removed in early March and late August / September	2 cut/ year. In March & August/ September
Remaining wildflower areas to be cut on a three-year rotation with two thirds cut each year in late May or early June and one third during August / September and arisings removed	1/cut year 2/3 in late May / Early June and 1/3 in August / September
Treat and remove pernicious weed growth where it may be detrimental to establishment of wildflower sward. Weeds to be hand pulled or if necessary spot treated with a non-residual herbicide.	As necessary.

APPENDIX A - SOFT LANDSCAPE MANAGEMENT DETAILED REGIME YEAR 1 TO YEAR 5

9.0

Cont

In year 3 plug-plant desirable broad-leaved herbs or augment populations of species establishing unsuccessfully from seed mixes. No pesticides will be used.

As necessary

10.0 No fertilizer will be used.

FLOOD ATTENUATION AREAS, WATERCOURSES, MARGINAL and AQUATIC AREAS

All areas shall be maintained to achieve the original design objectives and achieve maximum biodiversity in accordance with Ecologists recommendations.

As necessary.

NB. No fertilisers or pesticides to be use in, near or adjacent to bodies of water. Works are to be carried out in accordance with good horticultural practice and recommendations of an ecologist and as recommended by hydrologist.

Aggressive or pernicious weeds or woody plants shall be removed

As necessary.

Algal blooms to be controlled primarily by the use of oat straw bales, or by use of chemical agents if agreed with the scheme ecologist.

As necessary.

Allow for removing vegetation and other debris to maintain areas of clear water and flow, as required. Vegetation removal will generally be undertaken during winter months to minimize effects on any amphibians likely to be utilizing the features.

As necessary.

Although planting of trees and scrub species has been included within areas also used for flood attenuation it is important that planting is not spread to such an extent that it reduces capacity beyond the minimum required. Care will be exercised relating to potential bird nesting, or in later years, where trees may have developed cavities and fissures which may be used by bats. The views of the scheme ecologist would then be sought prior to any clearance work being undertaken.

When appropriate

Plants adjacent to the Flood Attenuation features are to be coppiced on a three yearly cycle in blocks reducing growth to ground level. Excessive feathered growth at base of plants within 1 metre from ground shall be removed.

From year 5 onwards subject to annual review
January/
February

APPENDIX A - SOFT LANDSCAPE MANAGEMENT DETAILED REGIME YEAR 1 TO YEAR 5

11.0 ECOLOGICAL MITIGATION AND ENHANCEMENTS

Checks of all bat boxes erected on site. Use by bats should be recorded to determine whether or not they are using the site. Annual checks should ideally be continued for 10 years. This is something that the local bat group may be interested in doing if an agreement with them can be reached, and they are closely supervised by the site Ecology Manager. They will likely want some remuneration for this as they will see as associated with development. Any boxes in poor condition should be replaced.	Twice annually in May and September
Bat monitoring may be required in mitigation areas and along the canal after completion of the works but this is discussed further in the Habitat Management Plan.	Twice Annually
Checks of any buildings dedicated as bat roosts (i.e. the field barns once and if we get a commitment to renovate them) will be required in accordance with the relevant Natural England licence.	Annually

APPENDIX B - 15 YR GRID

YEAR

1.0 GENERAL

Tidy up areas removing rubbish, litter, etc., from planted and grassed areas. Repeat at each maintenance visit.

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.

Check shelter guards / rabbit protection and refirm / replace as required including removing weed growth from within. Once the plants have reached suitable maturity removal of guards shall be carried out. The need for removal will be monitored from Year 4 onwards; on a plant by plant basis.

Removal of diseased or dead plants with replacements as appropriate

Replacement of missing plants

Prune out dead and dying matter from trees and shrubs.

Review of Habitat Management Plan with project landscape architect, project ecologist and appointed local stakeholders

2.0 TREE PLANTING

Check, adjust, replace stakes and ties as necessary. Once the trees have reached suitable maturity the stakes and ties shall be removed. The need for the removal of stakes and ties will be monitored from Year 3 onwards; on a tree by tree basis. 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.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tidy up areas removing rubbish, litter, etc., from planted and grassed areas. Repeat at each maintenance visit.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Treat pests and disease as necessary	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Water all plant material and grass as necessary to maintain healthy growth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Check plant material is firmly planted and firm in where required.	Y	x4	x2												
Check shelter guards / rabbit protection and refirm / replace as required including removing weed growth from within. Once the plants have reached suitable maturity removal of guards shall be carried out. The need for removal will be monitored from Year 4 onwards; on a plant by plant basis.	Y	x4	x4	x2	x2										
Removal of diseased or dead plants with replacements as appropriate	Y	Y	Y	Y	Y										
Replacement of missing plants	Y	Y	Y	Y	Y										
Prune out dead and dying matter from trees and shrubs.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Review of Habitat Management Plan with project landscape architect, project ecologist and appointed local stakeholders				Y			Y			Y			Y		
2.0 TREE PLANTING															
Check, adjust, replace stakes and ties as necessary. Once the trees have reached suitable maturity the stakes and ties shall be removed. The need for the removal of stakes and ties will be monitored from Year 3 onwards; on a tree by tree basis. Prune, water and feed as necessary	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y					
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.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	New tree planting to be subject to same management clause as existing tree planting below from year 11 onwards				

APPENDIX B - 15 YR GRID

YEAR

3.0 EXISTING TREES

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. Consult scheme ecologist where features likely to support bats present. Locations of bat boxes will be noted prior to any works which might affect them or their immediate setting.

4.0 WOODLAND / WOODLAND EDGE THICKET / NATIVE HEDGE PLANTED AREAS

Keep areas clear of weed growth by hand and herbicide treatment as appropriate from mid-April to late September; in accordance with the Ecologist's recommendations.

Keep young native hedgerows (adjacent to car parks/ public spaces) clear of weed growth by herbicide treatment, as appropriate.

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.

With exception to planting adjacent to the Flood Attenuation area (See Section10.0).

Remove branches that overhang footpaths or prevent access for grass cutting.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
x4	x4	x4	x4	x2	x2	x2	x2	x2	x2	x2	x2	x2	x2	x2
x 12	x 12	x 12	x 10	x 10	x6	x6	x6	x6	x6	x6	x6	x6	x6	x6
				1/3 of thicket plants			1/3 of thicket plants			Selective thinning to maximise diversity			Selective thinning to maximise diversity	
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

APPENDIX B - 15 YR GRID

YEAR

4.0 Cont.

Except where regular cutting is required for sight-lines or amenity purposes, native hedges should be cut on a three year rotation. Some hedges around retained arable areas to be kept shorter to benefit birds of open farmland landscapes. Prune native hedges to maintain a tidy appearance (approx. timing September-October) as required depending on establishment. Allow native hedges to achieve natural form as appropriate. Cut tops, ends and sides facing footpaths, ornamental planting, mown grass areas (not thicket or woodland) to straight and true lines.

Tree species within the thicket planting will be thinned in year 10 (to approximately 50% of total number subject to review findings). Exact timing of thinning works will be dependent on speed of establishment and growth of thicket planting.

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.

5.0 EXISTING WOODLAND AREAS

Woodland planting to be managed to ultimately achieve a tree canopy with understorey and 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.

Remove branches that overhang footpaths or prevent access for grass cutting.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
									Y				Selective thinning to maximise diversity	
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Selective thinning to maximise diversity			Selective thinning to maximise diversity			Selective thinning to maximise diversity			Selective thinning to maximise diversity			Selective thinning to maximise diversity		
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

APPENDIX B - 15 YR GRID

YEAR

5.0 Cont.

Except where regular cutting is required for sight-lines or amenity purposes, native hedges should be cut on a three year rotation to allow diversity of structure and development of fruiting. Some hedges around retained arable areas to be kept shorter to benefit birds of open farmland landscapes. Prune native hedges to maintain a tidy appearance (approx. timing September-October) as required depending on establishment. Allow native hedges to achieve natural form as appropriate.

6.0 SHRUB PLANTED AREAS

Keep ornamental shrub areas clear of weed growth by hand weeding or spot herbicide treatment.

Prune shrubs as necessary to prevent invasive species smothering less aggressive species and to prevent shrubs overhanging footpaths and other areas of hard paving, and to remove dead, dying or diseased plant material.

Slow release fertilizer application, as appropriate, to ensure establishment of planting. To be carried out in March – April.

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.

7.0 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.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12	X 12
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	Y	Y												
Y	Y													
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

APPENDIX B - 15 YR GRID

YEAR

7.0 Cont.

Application of fertilizer and selective weedkillers as appropriate

Re-seeding of worn areas

8.0 ROUGH 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 8 no. cuts per year

Treat and remove pernicious weed growth where it may be detrimental to establishment of wildflower sward.

9.0 WILDFLOWER AREAS

Grass cutting. 1no. cut per year (except year 1, when cuts will be made every 6 weeks and arisings removed). Areas for ground nesting birds to be cut and arisings removed twice a year, once in March and once in August / September. Selected areas adjacent to woodland to be cut on a 5 year rotation to prevent encroachment of scrub and to enable establishment and structural diversity, following recommendation from an ecologist.

Treat and remove pernicious weed growth where it may be detrimental to establishment of wildflower sward.

10.0 FLOOD ATTENUATION AREAS, WATERCOURSES, MARGINAL and AQUATIC AREAS

All areas shall be maintained to achieve the original design objectives and achieve maximum biodiversity in accordance with scheme ecologist's recommendations.

Where necessary aggressive or pernicious weeds or woody plants shall be removed

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
x6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

APPENDIX B - 15 YR GRID

YEAR

10.0 Cont.

Algal blooms to be controlled.

Allow for removing vegetation to maintain areas of clear water and flow, as required.

Watercourses will be managed sympathetically to encourage diversity of flora and cover habitats for wildlife while ensuring free drainage.

The water quality will be monitored to encourage development of a rich diversity of flora and fauna. Scheme ecologist to implement monitoring if reductions in water quality suspected.

Plants adjacent to the Flood Attenuation ponds are to be coppiced on a three yearly cycle in blocks reducing growth to ground level. Excessive feathered growth at base of plants within 1 metre from ground shall be removed. Carried out in January/ February. To be reviewed annually.

11.0 ECOLOGICAL MITIGATION AND ENHANCEMENTS

Checks of all bat boxes and barn owl erected on site and annual checks of any dedicated buildings and appropriate monitoring surveys of areas of site set aside as green infrastructure or dark corridors.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
										Y	Y	Y	Y	Y
x2	x2	x2	x2	x2	x2	x2	x2	x2	x2					

APPENDIX C - ILLUSTRATIVE LANDSCAPE MASTERPLAN

