



Figure A: Hibernaculum construction

INDICATIVE PLANT SCHEDULE							
Native Woodland Mix - to be planted randomly at 1.5m spacing. Maximum 5% of fruiting species.							
Species	Common name	Height	Girth	Root/Age	% of mix	Density	Form
Acer campestre	Field Maple	175-200cm	n/a	B 2x	10	1.5m	Feather
Alnus glutinosa	Alder	175-200cm	n/a	B 2x	5	1.5m	Feather
Betula pendula	Birch	175-200cm	n/a	B 2x	10	1.5m	Feather
Corylus avellana	Hazel	80-100cm	n/a	B 1+2	40	1.5m	Transplant (root collar diameter 10-12mm)
Crataegus monogyna	Hawthorn (fruiting)	80-100cm	n/a	B 1+2	2.5	1.5m	Transplant (root collar diameter 10-12mm)
Frangula alnus	Buckthorn (fruiting)	80-100cm	n/a	B 1+2	2.5	1.5m	Transplant (root collar diameter 10-12mm)
Populus tremula	Aspen	175-200cm	n/a	B 2x	10	1.5m	Feather
Salix caprea	Grey Willow	80-100cm	n/a	B 1+2	10	1.5m	Transplant (root collar diameter 10-12mm)
Salix cinerea	Goat Willow	80-100cm	n/a	B 1+2	5	1.5m	Transplant (root collar diameter 10-12mm)
Salix fragilis	Crack Willow	175-200cm	n/a	B 2x	5	1.5m	Feather
Grass Mix							
Wetland grass mix (attenuation pond)							
British Seed Houses WFG9							
Wetland and Pond Areas sown at 5g/m ² (or similar)							
British Seed Houses RE2							
lowland meadow mix sown at 5g/m ² (or similar)							
Native Shrub Mix							
Species	Common name	%	Height	Density			
Corylus avellana	Hazel	30	45-60cm	1m			
Crataegus monogyna	Hawthorn (fruiting)	30	45-60cm	1m			
Ilex aquifolium	Holly	20	30-45cm	1m			
Viburnum opulus	Guelder Rose	20	45-60cm	1m			

- KEY:**
- Site boundary
 - Existing trees
 - Existing woodland areas
 - Native woodland mix (max 5% fruiting species)
 - Wetland wildflower and grass mix
 - Species rich meadow grass mix
 - Native shrub mix
 - Hibernaculum
 - Log pile
 - Tree with bat potential
 - Bat box locations

LANDSCAPE STRATEGY

Proposed native woodland
To be planted to form buffers to boundaries, new copses and to connect existing broadleaf woodland areas. No more than 5% of species are to be fruiting/berrying species in accordance with the requirements set out by Southampton Airport. Tree species are selected to be of low density in form and small to medium in height, to ensure that breeding and roosting habitats for species such as pigeons and corvids is not created. A high proportion of Hazel shrubs is to be included to reflect the existing woodland structure (see schedule) and glades created within the woodland.

Existing woodland
Generally to have minimal management measures. Selective cutting to be carried out to remove overhanging branches around the pond to increase light. The introduction of rotational coppicing to be carried out to the Hazel by coppicing selected blocks every 6-8 years with a maximum of a third of the total number of Hazel coppiced in any one rotation.

Proposed species rich grass - Attenuation Pond
A wetland grass and wildflower mix to be sown around the attenuation pond, including species suitable for aquatic habitats and damp low lying sites and pond edge (see schedule). To be managed with one annual cut in autumn.

Proposed species rich grass - newly planted woodland areas and re-instated construction areas
A lowland meadow grass mix to be sown to all areas disturbed by construction, to cleared ground within the woodland and around the solar panels. Not to include areas immediately adjacent to the buildings. To include species suitable for open woodland and reclaimed land (see schedule). To be managed with two cuts per year, one in summer and one in autumn.

Proposed native shrub planting
Planting of native shrub species to the area east of the new road junction to be carried out (see schedule). Generally to have minimal management measures. To be cut back once a year and trimmed to avoid branches overhanging the footway.

BIODIVERSITY ENHANCEMENT MEASURES

Hibernacula (see Figure A)
Two artificial hibernaculum constructed to provide to enhance opportunities for reptiles near the existing pond and the railway embankment. The construction to follow best practice guidelines (English Nature, 2001): approximately 2000mm in length and 1000mm in height. A bed of coarse gravel at 150mm deep should be spread over the bottom of the hibernacula to aid drainage. On top of this, layers of rubble including stone, brick, short sections of untreated timber and logs (which could be sourced from the trunks and large branches of any trees previously felled on Site), interspersed with untreated wood chippings. The rubble piles should be built up to a height of 500mm.

Sections of 50-70mm diameter plastic hose (to be removed following completion of hibernacula) should also be placed horizontally at heights of 200-400mm leading into the rubble piles whilst they are being covered with subsoil (to also be seeded) to maintain access points into the hibernacula. At least four access points should be made into each hibernacula.

Log piles
A number of log piles to be created along the proposed access track, attenuation pond and railway embankment, using trunks and large branches of any previously felled or selectively pruned trees on Site. These would provide basking and refuge opportunities for reptiles, which could also be placed within those areas on Site of greatest value to reptiles as indicated on the plan. Arisings from grass cutting could also be placed in piles around these areas to provide potential breeding opportunities.

Any other tree trunks and large branches could also be retained on Site, where possible, within remaining areas of semi-natural broad-leaved woodland and left as dead wood which will be of benefit to invertebrates.

Bat boxes
Six bat boxes to be positioned in pairs on large mature trees as indicated on plan. Bat boxes should comprise those which afford roosting opportunities for those species recorded on Site: 2nr Schwegler 2F, 2nr Schwegler 2FN, 1nr Schwegler 1FF and 1nr Schwegler 1FD or similar. These boxes should be erected on mature trees, placed at a height of 3m or greater and sheltered from prevailing wind, rain and direct sunlight.

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