

This mix is predomir antly ryegrass which has the benefit of continued growth late into the sea son and is deep rooting giving winter ground cover whilst developing soil structure. The sward will be topped during spring and summer as required, to control weeds. Any severe weed infestation will be rectified by the topping of weed growth with the cutter bar set at 150mm 12 above ground level, local spot treatment as necessary with a suitable selective herbicide or a combination of the two AF techniques.

Following successful grassland establishment (first 2 - 3 seasons following earthworks), the land shall be sown with maize, winter wheat or barley for the next 2 seasons at least, in order to demonstrate that the structure and performance of the replaced soil is of sufficient quality for long term agricultural use. Soil samples will be taken and analysed at twelve monthly intervals and applications of inorganic fertilisers made to rectify any plant nutrient deficiencies shown in the results of the analysis. The application rates of fertilisers (and lime, if deemed necessary) will be adjusted to maintain the index for both phosphate and potassium at Index 2, taking into account the requirements of the crop.

# Meadow/Species Rich Grassland: Seeding and Maintenance Operations

These areas surrounding the lakes and water bodies would be developed and managed as more floristically rich grasslands in order to benefit nature conservation and help mitigate the effects of the mineral extraction works.

# Restoration Earthworks and Drainage

Soils will be loosely replaced in these areas using the same methodology as for the agricultural grassland areas, as above.However, no gravel-filled drainage trenches would be installed prior to final soiling operations. Soil would be cultivated as above in preparation for seeding operations. The land would be seeded by a combination of either hav spreading using locally sourced hay from a suitable species rich meadow and/or seeded with an appropriate seed mix, preferably following soil analysis post restoration earthworks A potentially suitable seed mix is as follows:

## Emorsgate EM2 Standard General Purpose Meadow Mixture

Wildflower Mix (20% of total):		Nurse Grass Species (80% of total):			
Achillea millefolium Yarrow	0.5	Agrostis capillaris Common Bent 8.0	%		
Centaurea nigra Common Knapweed	4.0%	Cynosurus cristatus Crested Dogstail 409			
Galium verum Lady's Bedstraw	2.5%	Festuca rubra Slender-creeping Red-fescue 28%			
Leucanthemum vulgare Oxeye Daisy	1.0%		4.0%		
Lotus corniculatus Birdsfoot Trefoil	0.5%	TOTAL 809	80%		
Plantago lanceolata Ribwort Plantain	2.0%	Areas would be seeded in early Spring			
Plantago media Hoary Plantain	0.5%				
Primula veris Cowslip	0.2%	at a rate of c. 5g/sq.m (50kg.ha). Se			
Prunella vulgaris Selfheal	2.0%	would be lightly covered by chain	.,		
Ranunculus acris Meadow Buttercup	4.2%	harrow and rolled in with a Cambridge			
Rhinanthus minor Yellow Rattle	1.5%	roller.			
Rumex acetosa Common Sorrel	1.0%				
Trifolium pratense Wild Red Clover	0.1%				
TOTAL	20%				

The meadow/species rich grassland areas are likely to produce a flush of annual weeds from the soil in the first growing season, which will be controlled by topping or mowing. A minimum of three cuts will be undertaken in the first year (when the crop exceeds c. 15cm) with the clippings removed or raked to the edge. This regime may also be required in the second or third year.

In the long term, grassland will be left un-cut from spring through to late July/early August to give the sown species an opportunity to flower and will avoid the bird nesting season. After flowering a cut will be undertaken to approx. 50mm sward height. The 'hay' must be left in situ to dry and shed seed for 1-7 days, depending on prevailing weather conditions, then collected and removed fro the site Re-growth during late summer/early autumn should be arrested by regular topping/mowing or via after-math grazing with an appropriate number of sheep. If species) and/or the targeted use of suitable herbicides for docks/thistles or other nvasive and undesirable species

# Proposed Marginal and Emergent Vegetation

selected marginal and emergent plants would be added in places to improve species diversity and variety. Species would be selected from the following broad randomly in groups of 3 - 5 and would be spaced at approx. 1.5m centres. pallete:

#### . Seasonally wet zone.

Lychnis flos - cuculi (Ragged robin), Juncus effusus (Soft rush), Cardamine pratensis (Ladv's smock)

Shallo<u>w (Marginal) Zone (c. 0 - 0.2m)</u>. Alisma plantago-aquatica (Water plantain), Caltha palustric (Marsh marigold), Filipendula ulmaria (Meadowsweet), Hippuris vulgaris (Mars's tail), Iris pseudacorus (Yellow flag iris), Lemna minor (Duckweed), Lythrum salicaria (Purple loosestrife), Mentha aquatica (Water mint), Myosotis scorpioides (Water forget-me-not), Oenanthe fistulosa (Tubular water-dropwort), Potamogeton participate (Carsel Illoseadurate). Scriptoles (Fenel like pondweed), Potentilla palustris (Marsh cinquefoil), Ranunculus lingua (Greater spearwort), Ranunculus trichophyllus (Thread-leaved water-crowfoot), (Greater spearwort)Sagittaria sagittifolia (Arrowhead), Veronica beccabunga (Brooklime)

 $\diamond$ 

# Hydrocharis morsus-ranae (Frogbit), Polygonum amphibium (Amphibious bistort), Ranunculus aquatilis (Water crowfoot)

Deep Zone (c. 0.4 - 0.6m) Collitriche stagnalis (Common water starwort), Ceratophyllum demersum (Common hornwort), Fontinalis antipyretica (Willow moss), Myriophyllum spicatum (Spiked water-milfoil), Nymphaea alba (White waterlily), Phalaris arundinacea (Reed canary grass), Phragmites australis (Common reed), Potamogeton crispus (Curled pondweed), Stratiotes aloides (Water soldier)

# Woodland and Hedgerow Planting Operations

All planting and landscape operations to comply with 'Recommendations for General Landscape Operations' BS:4428 (1989)

# Woodland Blocks (P1 to P17) - Plant Species, Spacing and Pattern

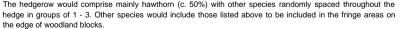
For woodland areas, trees & shrubs will be planted in two plant mixes, as follows: 1) Main mix comprising the central part of each bloc, randomly planted at spacings of between 3m centres and 2m centres which would be consistent with an average of 2.5m centres but which would allow for some variety and avoids the development of a strict planting 'grid'. Plants will be planted in random groups of 3 - 7 of each species. Species would include a selection of the following, as per the Schedules of Plant Material above:

Common alder - Alnus glutinosa, Silver birch - Betula pendula, Blackthorn - Prunus spinosa, Wild cherry Prunus avium, Dogwood - Cornus sanguinea, Elder - Sambucus nigra, Field Maple (Acer campester), - Crataegus monogyna, Hazel - Corylus avellana, Holly - Ilex aquifolium, English oak - Quercus robur, Scots pine (Pinus sylvestris), Spindle - Euonymus europaeus, Wayfaring tree - Viburnum lantana, Crack willow - Salix ragilis, Goat willow - Salix caprea

The existing and proposed water bodies have some areas of naturally regenerated 2) Fringe (ecotone) planting on the edge of the woodland blocks, acting as an interface between reed growth around their edges and it is considered that such vegetation will colonise the edges of all the water bodies over time. However, if deemed necessary, and 4 metres, and would have a scalloped edge. Shrubby species to be planted within this area would include Hawthorn, Blackthorn, Hazel, Field Maple and Dogwood. Plants would be planted

### Hedgerow Planting (H1 to H11) - Plant Species, Spacing and Pattern

New hedgerows will be planted at approximately 4 plants per metre in two staggered rows along the intended route. There will be 300mm between rows and 500mm between plants in each row.



All 40 - 60cm transplants (except Hawthorn) will be protected by 60cm Tubex shelters supported by 90cm x 32mm x 32mm treated softwood or cleft chestnut stakes.Hawthorn would be protected by 60cm clear spirals supported by 90cm bamboo canes.

x 32mm treated softwood or cleft chestnut stakes. All supports will be well secured in the ground and left upright and wind-firm on completion.

### Woodland and Hedgerow Aftercare Operations (Duration 5 Years) Weed Control

All grass and weeds in a minimum 80cm diameter spot around each plant would be controlled by two applications of glyphosate herbicide (eg. Roundup) during early/mid spring and again during mid/late summer for the first three seasons and then as deemed necessary thereafter.

Herbicide would be applied along the length of each new hedge in a c. 1m wide band. Herbicide to be applied only by gualified personnel in accordance with manufacturers recommendations

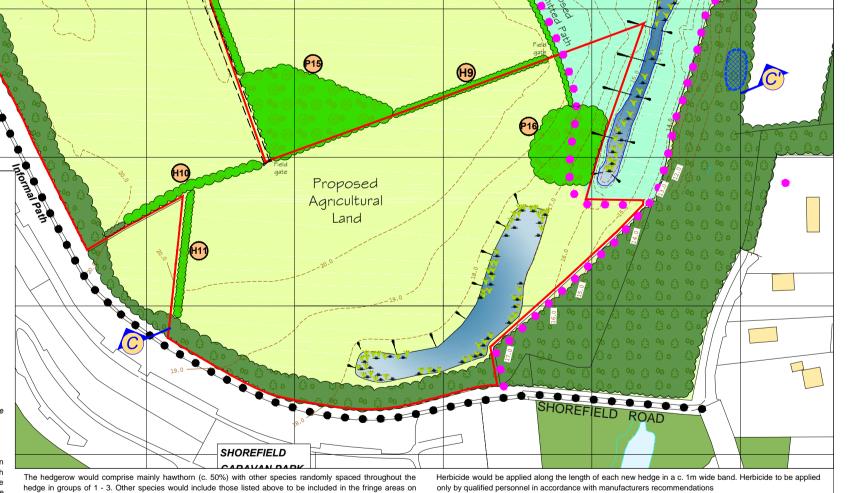
### Replacement of Losses and Shelter Adjusment

Losses would be replaced like for like for the first three seasons after planting, and thereafter only with those species which appear to be thriving on site, to achieve minimum 90% stocking after five years. All natural regeneration of desirable species arising within planting areas would be accepted to boost stocking density. Shelters and stakes which become loose, over-tight or broken would be re-firmed and adjusted annually.

If deemed necessary, and in addition to herbicide application as above, planting areas would be strimmed in early/mid spring and/or mid/late summer to manage the encroachment of undesirable weeds and to keep the grass areas between the plants tidy.

Annual Aftercare Report and Meeting: An annual aftercare report will be submitted to the LPA in autumn/winter which summarises the previous years' aftercare operations and proposals for the forthcoming vear. An aftercare meeting (consisting of the operator, the landowner (or agent), the LPA and tenant farmer) will be held the following spring to inspect the land, discuss the report and agree on actions.

KEY			0 10 20 30 40 50 60 70 80 90 100 METRES	Client NEW MILTON SAND & BALLAST CO.
APPLICATION BOUNDARY	PROPOSED TRACK	EXISTING WET FLUSHES	SCALE 1:2500	Site DOWNTON MANOR FARM QUARRY
EXISTING SURROUNDING CONTOURS	EXISTING WOODLAND/HEDGEROWS	INDICATIVE CROSS SECTIONS (Refer to Drawing Nos: 26G-01-16 to 18Rev.A)	Note: The site drainage system and its management/maintenance is detailed in the following report: 'Technical Note: Post Restoration Site Drainage - Provision of Additional Information to Hampshire County Council' dated February 2018 by BCL Consultant Hydrologists Limited.	Project PLANNING APPLICATION Drawing Title
PROPOSED RESTORATION CONTOURS	PROPOSED WOODLAND/HEDGEROWS	REFERENCE FOR PLANTING BLOCK           OR HEDGEROW AS PER THE           SCHEDULES OF PLANT MATERIAL	Council dated i ebidary 2010 by BOL Consultant Hydrologists Linned.	REVISED RESTORATION PLAN
EXISTING INFORMAL PATH	AREAS RESTORED TO AGRICULTURAL USE			Date         FEBRUARY 2018         Drawing No.           Scale         1:2,500 @ A2         26G-01-15RevB
PROPOSED PERMISSIVE PATH	PROPOSED MEADOW/SPECIES RICH GRASSLAND SURROUNDING WATER BODIES			File Ref. 1802_006.026_26G-01-15RevB Revision B 29 DALE LODGE ROAD SUNNINGDALE
PROPOSED SHOREFIELD PARK CARAVAN TRANSPORT ACCESS ROAD	PROPOSED WATER BODY WITH REEDS/MARGINAL AQUATIC PLANTS		RevA: Changes to lakes to more closely reflect existing situation, consequent changes to woodland planting RevB: Changes to route of proposed public Footpath, addition of seeding and planting notes including Schedules, addition of wet flushes	BERKSURE SL5 OLY T: 01344 624 709 M: 07736 083 883 david@dbic.co.uk www.dbic.co.uk



The hedgerow would comprise mainly hawthorn (c. 50%) with other species randomly spaced throughout the

#### tection from Rabbits

All containerised plants (Holly) will be protected from rabbits by 60m Netlon guards supported by 90cm x 32mm

Strimming (Provisional)