

Outline Operational Land Management Strategy

Introduction

- 10.1. In any development scheme there should be a clear commitment to long-term management of the site's biodiversity and other green infrastructure assets, usually through the production and implementation of a Landscape & Ecological Management Plan. In this section we set out broad objectives and principles which the Operational Land Management Plan would be expected to include. Detailed management prescriptions are not provided at this stage.
- 10.2. The Operational Land Management Plan (OLMP) would set out the current status of the natural resources in the area to be managed, the desired future conditions, management practices to achieve those conditions and realistic time horizons for actions and achievement of objectives. Also and critical to its success, the full administrative structure and proposed funding of the plan in the long-term would be fully addressed.
- 10.3. All landscape planting and seeding would be covered by a rolling 5 year aftercare and defects liability period following the completion of the planting on a stage by stage basis, during which time appropriate maintenance aftercare would be carried out including herbicide application, grass cutting, and the removal of injurious weed species. All plant failures would be replaced and any remedial work undertaken on an annual basis.
- 10.4. The OLMP would be structured in three main sections:
 1. **Context:** this would set out a description of the site, the key ecological and landscape interest features and proposals, and address the separate stages of delivery and subsequent management required.
 2. **Objectives and prescriptions:** this section would set out broad objectives for each management compartment, with specific prescriptions for individual habitat areas and features. It would cover retained, created, enhanced and restored habitats and landscape areas.
 3. **Implementation and Governance:** this would set out the mechanisms for how management actions would be implemented, who would be responsible for undertaking those actions and how the management plan would be overseen, monitored and revised as required.
- 10.5. The OLMP will cover the maintenance of all habitats and features created or enhanced as a part of the mitigation or enhancement proposals set out in the Environmental Statement for the c. 60 year period of proposed quarrying operation. It will also include the maintenance of all additional habitats and features created as a part of the progressive restoration during the operational life of the quarry. Clear identification of all management areas and compartments would be detailed on a Land Management Map.

Updates and Life of the Plan

- 10.6. The OLMP would be a *'living'* document, to be amended as necessary, to take into account changing site conditions and particularly the adaptation and establishment of the habitats and landscape assets. The plan would be designed to be augmented regularly with records of actions undertaken, their effects as determined by monitoring, and any further annual corrective actions taken.
- 10.7. A review of the OLMP would be undertaken once every 5 years up until the end of quarry operation.
- 10.8. It is envisaged that the OLMP would be superseded at the end of the operational life of the quarry (i.e. in some 60 years after commencement) by a further Management Plan to encompass the final restoration scheme, the details of which would be prepared not less than 10 years before the anticipated cessation of quarrying.

Management Objectives

Strategic Management Objectives

10.9. The OLMP would include the following strategic objectives:

- To ensure the long term integration of the scheme into the sensitive landscape,
- To control and direct the management of new and retained habitats in the long term for the benefit of wildlife & recreational use commensurate with the construction and operational function of the quarry;
- To maintain enhanced habitats within the wider land ownership;
- To create a 'permeable', biodiverse landscape through the maintenance of the interconnected green infrastructure assets;
- To provide a clear executive structure and basis for the long-term input of necessary expertise and funding to ensure the proper and reliable execution and monitoring of all measures proposed; and
- To secure the greatest opportunities for long-term involvement of expert interest groups, and the general public.

Habitat & Landscape Specific Management Objectives

10.10. Although it is critical that the OLMP considers all of the site's habitat features and species at a landscape scale, it would also establish specific habitat management requirements and prescriptions. These objectives clearly must also take into account the requirements of target species. Broad habitat management objectives for the principle habitats to be created are set out below in Table 1.

Table 1: Habitat specific broad management objectives

Habitat	Broad Management Objectives and Actions	Key Target Species / Taxa
Woodlands	<ul style="list-style-type: none"> • Enhance biodiversity within conifer and mixed plantations by coppicing/thinning/pollarding to create rides and glades through targeted removal of conifers, whilst retaining sufficient canopy connection for dormice; • Establish and maintain varied age structure of woody vegetation with diverse understorey and shrub layers through coppicing, thinning and planting; • Control of vegetation during sapling establishment • Maintaining appropriate drainage; • Establish and maintain the complex shape of woodland edges, glades and rides; • Take action to reduce deer damage if necessary e.g. by installing protective dead hedging or brashing; • Encourage deadwood invertebrate fauna through creation of log-piles, dead hedging, maintenance of dead trees; • Enhance woodland for species of conservation value, in particular dormouse, bats and breeding birds; • Establish and maintain footpath network through trimming/crown lifting of trees and shrubs to ensure that a suitable clearance above pedestrian routes is maintained. • Assess biodiversity of woodland structure and flora indicators by monitoring. • Monitor the establishment of plant species to site specific conditions, and consider replacement/ 	<ul style="list-style-type: none"> • foraging, commuting and roosting bats • breeding birds • dormice • invertebrates

Habitat	Broad Management Objectives and Actions	Key Target Species / Taxa
	<p>successive reduction in species less suited to site specific conditions,</p> <ul style="list-style-type: none"> • Crown lifting woodland plot edges as necessary to maintain sightlines to roadside areas and junctions, 	
Hedgerows	<ul style="list-style-type: none"> • To maintain and enhance a network of woody species and their associated flora and fauna, linking to existing and new woodlands. • Maintain dense and continuous hedgerow structure through regular cutting at an appropriate frequency (c. 3 year cycles) to meet visual screening requirements and allow flowering & fruiting of hedgerow shrubs. • Cut hedgerows on a 2-4 year cyclical basis such that not all hedges are cut in any one year (except where required for maintenance of roads and footpaths) • Where appropriate, permit growth of individual hedgerow trees as standards, • Allow for infilling of gappy sections of hedgerows with new saplings as required, 	<ul style="list-style-type: none"> • foraging and commuting bats • breeding birds • dormice
Wildflower grassland	<ul style="list-style-type: none"> • Maintain and enhance species-rich grassland diversity by cutting and removal of arisings to steadily reduce soil fertility and promote fine grasses and less competitive herbs, thereby enhancing diversity. Where management units are sufficiently large, management through grazing by sheep or cattle where appropriate would be undertaken; • Create and manage zones of tussocky less frequently managed grassland (mown every three years or so) to encourage small mammal abundance thereby providing good hunting conditions for predatory species. • Create and manage habitat for invertebrate species of conservation value, which may include actions to establish varied sward densities, patches of bare substrates, promotion of larval food plants and permitting areas of scattered scrub within grassland; • Maintain areas of habitat suitability for Deptford Pink through appropriate timing of sward cutting (mid-September to mid-April), maintaining areas of bare ground and scrub control • Assess biodiversity of grassland flora and performance indicators by monitoring. 	<ul style="list-style-type: none"> • foraging bats • breeding birds • reptiles • invertebrates • Deptford Pink
Open Water (Alston Ponds and Waye Pond)	<ul style="list-style-type: none"> • Maintain emergent and marginal vegetation around open water areas; • Undertake supplementary planting if natural colonisation and establishment is poor; Undertake vegetation removal at an appropriate time of year if open water becomes excessively colonised by emergent vegetation; • Routine monitoring will check for the presence of any non-native plant species which require removal / treatment; • Ensure fencing is preventing excessive stock poaching. 	<ul style="list-style-type: none"> • Breeding birds • Invertebrates • Foraging bats

Habitat	Broad Management Objectives and Actions	Key Target Species / Taxa
Running Water (Brownswell Stream)	<ul style="list-style-type: none"> • Undertake vegetation removal at an appropriate time of year if stream corridor becomes excessively shaded along its whole length • Maintain stock fencing 	<ul style="list-style-type: none"> • Aquatic invertebrates • Foraging bats • Breeding birds

10.11. A detailed landscape and biodiversity monitoring programme would be set out in the OLMP. The purpose of monitoring is to understand natural population fluctuations, landscape planting establishment and changes resulting from habitat succession, and also to serve as an *'early warning system'* to detect threats to biodiversity and natural processes, thereby informing any necessary changes in management.

Governance and Implementation

10.12. All retained or created landscapes/habitats would be managed by E & JW Glendinning Ltd. or their agents, for the construction and operational life of the proposed extension, following the prescriptions set out in the OLMP.

10.13. A Steering Group would be established to input to the review and modification of the management methods and prescriptions in order to respond to changing conditions, priorities or effectiveness of management being conducted. At this stage, it is envisaged that the Steering Group would include individuals from:

- E & JW Glendinning Ltd. or their agents
- Dartmoor National Park Authority
- Natural England

10.14. After cessation of operation, ownership and overall responsibility of the site would remain with E & JW Glendinning (or successive owners in the event of disposal) together with a Community Trust established for governance of the site and the public access. Ongoing funding for the long-term management would be provided through contributions from any commercial activity the Community Trust operates (e.g. visitor facilities, café, car parking charges) and income from commercial activities that may be conducted on retained industrial land.