

IDO/ROMP planning

Existing vegetation

Proposed planting

Rough wildflower

grassland

Agricultural grassland

boundary

RESTORATION STRATEGY AND LAND USES:

- Final water levels determined by spring outfall in Tytherington village at approx. 66m aod
- Water levels will be in balance between the 3 lakes though underground fissures or flow through open tunnel.
- Dry land will be achieved above final water level through tipping of quarry waste and soils on the first available bench below water level, see attached typical sections
- Hanson has no formal interest in North Face Quarry, restoration proposals for this void are to be provided by WRG.
- Restoration land uses (in addition to open water bodies) will comprise:
- Agricultural grassland on areas left un-excavated but temporarily utilised for soil and overburden storage during the life of the quarry
- flower-rich rough grassland and short calcareous grassland, on areas of placed quarry waste and shallow soils on benches and dip slopes above final water level
- extensive blocks of native broadleaved woodland (with proportion of conifer nurse crop in existing screen plantations) on perimeter screen banks, gently sloping areas of dip-slope and wide backfilled benches; smaller clumps and groups of trees and shrubs on narrower areas of bench restoration; and natural regeneration of scrub woodland on inaccessible areas of bench and steeper dip-slopes

TIMETABLE AND PHASING:

- Upper benches above final water levels will be restored by placement of quarry waste and soils as soon as upper faces have been taken back to final face positions
- Trial over-tipping of areas of steep dip-slope within Woodleaze will be undertaken in the first available season following approval of plan
- General sequence of restoration progress anticipated to be initial completion of Woodleaze, then finally Grovesend, at end of site's life
- Restoration of soil store fields will only be possible at very end of site life since material will need to stay in store until demolition of all office and hardstanding is completed

LANDFORMING AND GROUND PREPARATION:

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- All structures and buildings will be demolished
- Sufficient hard-surfaced access tracks will be retained where shown, to allow future management access for subsequent aftercare and afteruses, though gates and entrances to be reduced in width to standard widths appropriate for agricultural estate management activities, of max. double 12ft field gates
- All other remaining areas of hardstanding will be broken up by pecker to allow free drainage, or taken off site for recycling where possible, then dressed with overburden and soil cover materials
- Benches will be tipped with overburden, quarry waste and soils as necessary to achieve dry land at or above water level
- Typical soil profiles and substrates for the various types of restoration land use will be as follows:
- Agricultural grassland on soil store fields will comprise 300mm topsoil from store, replaced by excavator or LGP bulldozer over in situ undisturbed subsoils, following cross-ripping to min 450mm depth in 2 directions, all in accordance with MAFF Soil Handling Best Practice guidance sheets
- Tree planting areas on accessible sections of Grovesend dip-slopes will comprise additional placement of overburden to a depth of 1.2m loose-placed by excavator or LGP bulldozer, following clearance of advance natural regeneration of Buddleia/scrub as necessary. Surface cover of 300mm topsoil from store will then be spread by excavator or LGP bulldozer
- Tree planting areas on backfilled benches and areas of former hardstanding/office will comprise min. 1.2m depth of quarry waste or overburden, loose-placed by excavator, with dressing of 300mm topsoil from store also loose-placed by excavator onto de-compacted quarry waste
- Wildflower grassland on wide benches within Grovesend will comprise shallow dressing of 150mm topsoil from store over quarry waste or overburden backfill, with surface formation layer of waste left well compacted and tracked in as necessary, to minimise extent of future tree and scrub encroachment
- Wildflower grassland on narrow benches and former hardstanding will comprise shallow dressing of 150mm topsoil placed direct onto bed-rock or heavily trafficed and compacted formation layer, to minimise future scrub encroachment
- Edge protection bump banks along all benches to comprise scalpings or quarry waste with sporadic dressing of shallow soil cover
- Steep and inaccessible dip-slopes in Woodleaze and Grovesend will be too steep to successfully dress off with soil cover, however end- tipping of topsoil from store will be attempted in places with soil likely to collect on rough ledges and allow varied natural regeneration of both wildflowers and scrub. Trial areas will be initiated within upper levels of Woodleaze to assess feasibility and landscape/ecological benefits

CULTIVATION AND SEEDING:

- Agricultural restoration areas will be ripped by agricultural subsoiling tines at 1m centres to 450mm depth, then cultivated by discs and spring-tine harrows to form fine, firm seedbed, the seeded with grass/clover permanent pasture mix (eg. CGS 6) at 35 kg/ha, then rolled with Cambridge roller
- All rough grassland and calcareous grassland areas will be hand-seeded with grass/wildflower mix of UK provenance suitable for NVC MG5 and CG2 grassland respectively, applied at 3g/sqare metre
- All tree planting areas will be hand seeded with amenity grass/clover verge mixture at 10g/square metre

PLANTING AND MAINTENANCE:

- All plant material to be locally native stock from F.C. Provenance Zone 404
- Planting blocks to be planted in random mixture of tree and shrub species at 2m centres.
- All stock to be protected by individual guards as per schedule, with spiral guards supported by 90cm x 12/14lb bamboo canes, short Tubex by 75cmx25mmx25mm treated softwood tree stakes, and tall Tubex by 1.35mx 32mmx32mm treated softwood stakes.
- All weeds in min. 90cm diameter spot around all trees will be controlled by applications of Roundup for at least the first 3 years.
- Tall grass and weeds to be strimmed as necessary in late summer prior to noxious weeds setting seed.
- All losses will be replaced like for like for the first 2 seasons, then any further losses will be replaced with only those species that appear to be thriving on site, sufficient to achieve min. 90% overall stocking after 5 years.

WATERBODIES:

At time of terminal restoration when the site ceases to operate there
is potential for waterbodies to become Ark sites for White-clawed
crayfish (Austropotamobius pallipes). The site has been identified
as having high potential as a future Ark site for White-clawed
crayfish conservation. Further site assessments will be necessary
and some habitat creation may be of benefit, for example creation
of artificial refuges using piles of stone or other broken rock on the
bed. Contact organisation: Buglife – The Invertebrate Conservation
Trust www.buglife.org.uk.

REVISION B:North area greyed out and text amended.

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