

# 4 - Extraction Phase 3

|  |                             |  |                                    |  |                                      |  |   |  |                      |  |  |  |  |
|--|-----------------------------|--|------------------------------------|--|--------------------------------------|--|---|--|----------------------|--|--|--|--|
|  | Advanced Screen Earthworks  |  | Scrub / Woodland Edge (Schedule 2) |  | Reinstated Grass Mix (Schedule 1BC)  |  | Indicative Future Pathways (Public Rights of Way) |  | Existing Stone Walls |  | Extraction Area  |  | Overburden Backslopes Graded and Hydroseeded |
|  | Existing Scrub and Woodland |  | Restoration Woodland (Schedule 1)  |  | Areas where restoration is complete. |  | Existing Public Rights of Way                     |  | Proposed Stone Walls |  | Proposed Light Standard Trees within blocks as indicated |  |  |

|        |         |         |        |      |          |       |            |    |     |       |  |     |  |
|--------|---------|---------|--------|------|----------|-------|------------|----|-----|-------|--|-----|--|
| client | Suffles | Job no. | 16.102 | date | June. 16 | scale | 1:2000 @A1 | by | pjm | notes |  | Rev |  |
|--------|---------|---------|--------|------|----------|-------|------------|----|-----|-------|--|-----|--|

**EXTRACTION PHASE 3**  
**Introduction**  
 The design of the proposed extension site has been through numerous iterations and refinement in order to strike a balance between viable operation and appropriate integration into what is recognized as a sensitive landscape.  
 The unusually narrow footprint of the application area combined with phased extraction and progressive restoration presents the most compact commercially viable operation possible of this site. Various final restoration solutions have also been explored with submitted proposals currently committed to reinstatement of agricultural lands and ground levels as per existing.

**Extraction Phase 3**  
 With Phase 2 area extracted, stripping of soils and overburden can commence over the phase 3 area with materials deposited to the south west of Phase 1 & 2 continuing progressive restoration which will ultimately return the site to its existing condition and level.

Exposed western overburden faces to be graded, and temporarily hydroseeded to green up for the duration of Phase 3 mineral extraction.

**PLANT SCHEDULES - NOTE: MIX SUBJECT TO AUTHORITIES AGREEMENT**

**MAIN WOODLAND MIX (W1) (DRAFT)**

| %  | SPECIES | COMMON              | SIZE        | GROWN   | HEIGHT/TRANSPL | DENSITY                   |
|----|---------|---------------------|-------------|---------|----------------|---------------------------|
| Ac | 40      | Acer campestre      | Field Maple | 40-60cm | BR             | 1 + 1 Branched 0.5 per m2 |
| Fr | 10      | Fraxinus excelsior* | Ash*        | 40-60cm | BR             | 1 + 1 Branched 0.5 per m2 |
| Ms | 15      | Malus sylvestris    | Crabapple   | 40-60cm | BR             | 1 + 1 Branched 0.5 per m2 |
| Bp | 10      | Betula pubescens(w) | Downy Birch | 40-60cm | BR             | 1 + 1 Branched 0.5 per m2 |
| Ag | 10      | Alnus glutinosa (w) | Alder       | 40-60cm | BR             | 1 + 1 Branched 0.5 per m2 |
| Sa | 5       | Sorbus aucuparia    | Rowan       | 40-60cm | BR             | 1 + 1 Branched 0.5 per m2 |
| Ug | 5       | Ulmus glabra        | Wych Elm    | 40-60cm | BR             | 1 + 1 Branched 0.5 per m2 |

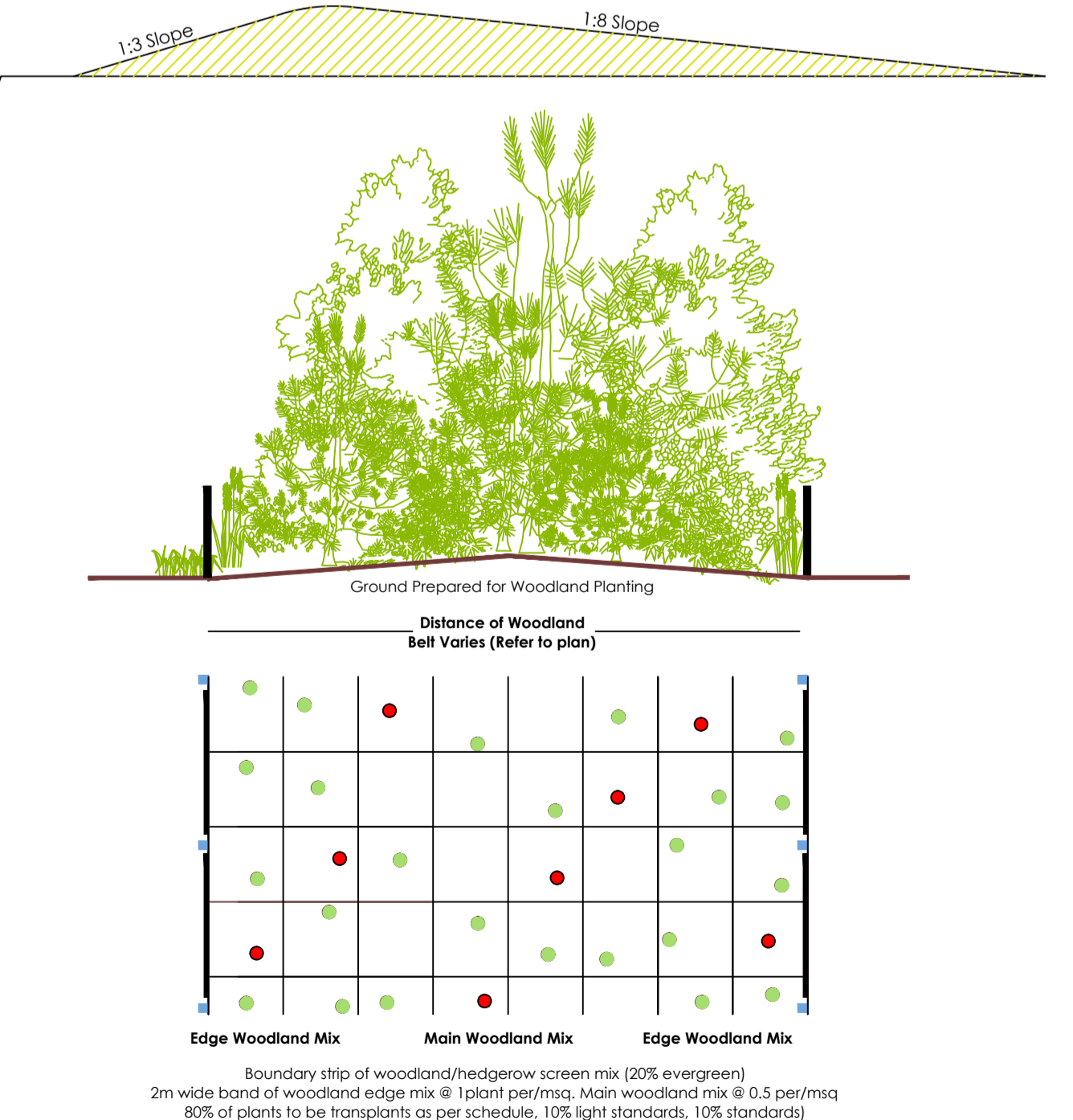
**WOODLAND EDGE MIX (W2) (DRAFT)**

| %  | SPECIES | COMMON             | SIZE         | GROWN   | HEIGHT/TRANSPL | DENSITY                   |
|----|---------|--------------------|--------------|---------|----------------|---------------------------|
| Ca | 40      | Coryllus avellana  | Hazel        | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |
| Cm | 15      | Crataegus monogyna | Hawthorn     | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |
| Ps | 10      | Prunus spinosa     | Blackthorn   | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |
| Ia | 15      | Ilex aquifolium    | Holly        | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |
| Ql | 5       | Cornus sanguinea   | Dogwood      | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |
| Ue | 5       | Viburnum opulus    | Guelder Rose | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |
| Ag | 5       | Salix caprea (w)   | Goat Willow  | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |
| Sa | 5       | Salix cinerea (w)  | Grey Willow  | 40-60cm | BR             | 1 + 1 Branched 1.5 per m2 |

\*All - Due to Chert surface, alternative species to be agreed with local authority  
 (w) - To be planted in localized areas of wet ground

**Broadleaf and Scrub woodlands**  
 Once extraction is complete, where woodland or scrub planting is proposed, the ground will be crossrippled, topsoiled and prepared, finally a quarter of all areas illustrating scrub habitat will be planted to provide a 'kick-start' to the process of succession. Whilst natural succession should eventually result in establishment of native species woodland, the aim in this reinstatement is to speed up the process of establishment by providing a seedbase and starting point for regeneration. Tree and shrub species will be planted directly into previously prepared pits incorporating 30gms of approved slow release fertiliser per planting station. Transplant material of height range 300-600 mm, either cell grown or bare root stock as per schedule. Shrub and hedgerow planting would be protected by rabbit-proof guards and staked appropriately.  
 No fertiliser or soil improver will be used in the scrub or grassland areas. The proposed plant species will consist of native species of local provenance, where possible, but as a minimum, of Irish provenance.  
 This habitat will be allowed to grow to maturity with minimal maintenance and intervention.

**Indicative Section Through Temporary Northern Boundary Earthwork (c.3-4m High)**  
 Graded Berm with shallow external c.1:8 slope allowing continued grazing and agriculture use - Grazing etc.  
 The purpose of a wide shallow external profile is to create a screen landform which will appear as a natural roll in topography whilst screening operations beyond therefore minimizing visual disruption from the operation.  
 Note: This earthwork would be graded back to existing levels post extraction.



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