

- Key:
- Proposed tree
 - Proposed woodland
 - Proposed shrub
 - Ornamental shrub / herbaceous
 - Marginal planting
 - Bulbs in amenity grass
 - Amenity grass
 - Proposed roadway
 - Exposed Rock Face
 - Proposed waterbody
 - Proposed lodge
 - Existing woodland to be retained and protected
 - Existing hedgerow to be retained and protected
 - Line of Heras + Newt/reptile fence to protect southern slopes
 - Proposed meadow grass
 - Location of proposed dedicated bus building with 5m buffer of native planting



16/05/22 V3 2no. lodges omitted, recreation area and informal path added JHA	
NOV 2021 V2 ecology review, additional ponds inserted layout JHA	
NICHOLSONS LOCKHART GARRATT <i>Leading solutions for the natural environment</i>	
Detailed Landscape Design Overview	
Penstrowed Quarry	
G F Grigg Ltd	
21-0763	
V3	
16/05/2022	1:250 @ A1
RF	JHA
<small>Prepared with the permission of The Controller of the Map(s) of the Secretary of State for the Environment, Food and Rural Affairs. The Controller's Office is located at 1/10 Whitehall, London SW1A 2BQ. The Controller's Office is not responsible for the accuracy of the information contained in this document.</small>	
<small>7 - 8 Marlborough House Cortyngham Business Park Wotton, Coty Northamptonshire NN17 5JG 01536 458040 www.nicholsonsgp.com</small>	<small>The Park North Aston Bristol Oxfordshire OX25 6HL 01869 340242 www.lockhart-garratt.co.uk</small>

Plant Schedule

Number	Species	Common Name	Girth	Height	Specification
25 -	Betula pendula	Common Silver Birch	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
23 -	Malus sylvestris 'Everest'		12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
30 -	Sorbus aucuparia	European mountain ash	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
28 -	Prunus avium	Geon or Wild Cherry	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
5 -	Tilia cordata	Littleleaf Linden	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
18 -	Quercus robur	Common Oak	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
7 -	Salix caprea	Goat willow	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
6 -	Salix alba	White willow	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
16 -	Acer campestre	Common Maple	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
3 -	Malus sylvestris	Common Crab Apple	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB
5 -	Alnus glutinosa	Common alder	12-14cm		3x :Clear Stem 175-200 :Heavy Standard :RB

Number	Species	Specification	Density	Percentage Contribution
177 -	Allium hollandicum 'Purple Sensation'	Grade 4/5	5/m ²	20%
134 -	Campanula persicifolia	2yrs :Containerised :Upright	5/m ²	15%
220 -	Helictotrichon sempervirens	3yrs :Containerised :Clump Forming	5/m ²	25%
90 -	Lupinus 'Gallery White'	2yrs :Containerised :Bushy	5/m ²	10%
134 -	Rudbeckia fulgida var sullivantii 'Goldsturm'	2yrs :Containerised :Clump Forming	5/m ²	15%
134 -	Salvia nemorosa 'East Friesland'	2yrs :Containerised :Clump Forming	5/m ²	15%
Total :889 -				

Number	Species	Specification	Density	Percentage Contribution
97 -	Acorus calamus	Plug: Well Rooted	5/m ²	10%
145 -	Carex acutiformis	PL	5/m ²	15%
97 -	Eupatorium cannabinum	Plug: Well Rooted	5/m ²	10%
192 -	Iris pseudacorus	Plug: Well Rooted	5/m ²	20%
192 -	Lythrum salicaria	Plug: Well Rooted	5/m ²	20%
145 -	Mentha aquatica	PL	5/m ²	15%
97 -	Stachys palustris	Plug: Well Rooted	5/m ²	10%
Total :965 -				

EM1 - WILD FLOWERS SEED MIX FOR GENERAL PURPOSE MEADOW MIX
by Emorsgate or similar to be approved: Sowing rate 4g/m ²

Number	Species	Specification	Density	Percentage Contribution
3101 -	Euonymus europaeus	2 yr : Containerised : C2 : Bushy	4/m ²	19%
2284 -	Frangula alnus	2 yr : Containerised : C2 : Bushy	4/m ²	14%
1632 -	Ilex aquifolium	2 yr : Containerised : C2 : Bushy	4/m ²	10%
981 -	Ligustrum vulgare	2 yr : Containerised : C2 : Bushy	4/m ²	6%
981 -	Lonicera periclymenum	2yr : C2 : Branched	4/m ²	6%
2612 -	Lonicera periclymenum	2yr : C2 : Branched	4/m ²	16%
1632 -	Prunus spinosa	2 yr : Containerised : C2 : Bushy	4/m ²	10%
1471 -	Rosa canina	2 yr : Containerised : C2 : Branched	4/m ²	9%
1632 -	Viburnum opulus	2 yr : Containerised : C2 : Bushy	4/m ²	10%
Total :16326 -				

Number	Species	Specification	Density	Percentage Contribution
1197 -	Acer campestre	1+1 Transplant; BR	5/m ²	7%
685 -	Acer campestre	Light Std; 2X; Clear Stem 150-175; BR; 3 Brks	5/m ²	4%
37 -	Acer campestre	1+1 Transplant; BR	2Ctr	7%
21 -	Acer campestre	Light Std; 2X; Clear Stem 150-175; BR; 3 Brks	2Ctr	4%
1367 -	Corylus avellana	1+1; Transplant; BR	5/m ²	8%
42 -	Corylus avellana	1+1; Transplant; BR	2Ctr	8%
1367 -	Crataegus monogyna	1+1; Transplant; BR	5/m ²	8%
42 -	Crataegus monogyna	1+1; Transplant; BR	2Ctr	8%
1709 -	Fagus sylvatica	1+1 transplant; BR	5/m ²	10%
53 -	Fagus sylvatica	1+1 transplant; BR	2Ctr	10%
855 -	Ilex aquifolium	1+1; Transplant; BR	5/m ²	5%
27 -	Ilex aquifolium	1+1; Transplant; BR	2Ctr	5%
1367 -	Pinus sylvestris	1+1; Transplant; BR	5/m ²	8%
42 -	Pinus sylvestris	1+1; Transplant; BR	2Ctr	8%
685 -	Prunus avium	Light Std; 2X; Clear Stem 150-175; BR; 3 Brks	5/m ²	4%
21 -	Prunus avium	Light Std; 2X; Clear Stem 150-175; BR; 3 Brks	2Ctr	4%
685 -	Prunus padus	1+1 Transplant; BR	5/m ²	4%
21 -	Prunus padus	1+1 Transplant; BR	2Ctr	4%
685 -	Quercus robur	Light Std; 2X; Clear Stem 150-175; BR; 3 Brks	5/m ²	4%
1367 -	Quercus robur	1+1 transplant; BR	5/m ²	8%
21 -	Quercus robur	Light Std; 2X; Clear Stem 150-175; BR; 3 Brks	2Ctr	4%
42 -	Quercus robur	1+1 transplant; BR	2Ctr	8%
1197 -	Salix alba	1+1 transplant; BR	5/m ²	7%
37 -	Salix alba	1+1 transplant; BR	2Ctr	7%
1027 -	Salix cinerea	1+1; Transplant; BR	5/m ²	6%
32 -	Salix cinerea	1+1; Transplant; BR	2Ctr	6%
1539 -	Sorbus aria	1+1 transplant; BR	5/m ²	9%
47 -	Sorbus aria	1+1 transplant; BR	2Ctr	9%
1367 -	Tilia europaea	1+1 :BR	5/m ²	8%
42 -	Tilia europaea	1+1 :BR	2Ctr	8%
Total :17626 -				

Number	Species	Specification	Density	Percentage Contribution
1060 -	Galanthus nivalis	Grade 4/5	5/m ²	20%
796 -	Hyacinthoides non-scripta	Grade 6/7	5/m ²	15%
532 -	Hyacinthus orientalis (Blue)	Grade 6/7	5/m ²	10%
796 -	Narcissus 'Ice Follies'	Grade 4/5	5/m ²	15%
796 -	Narcissus 'Tete a Tete'	Grade 4/5	5/m ²	15%
796 -	Tulipa 'Apricot Beauty'	Grade 10/+	5/m ²	15%
532 -	Tulipa 'Negrita'	Grade 10/+	5/m ²	10%
Total :5308 -				

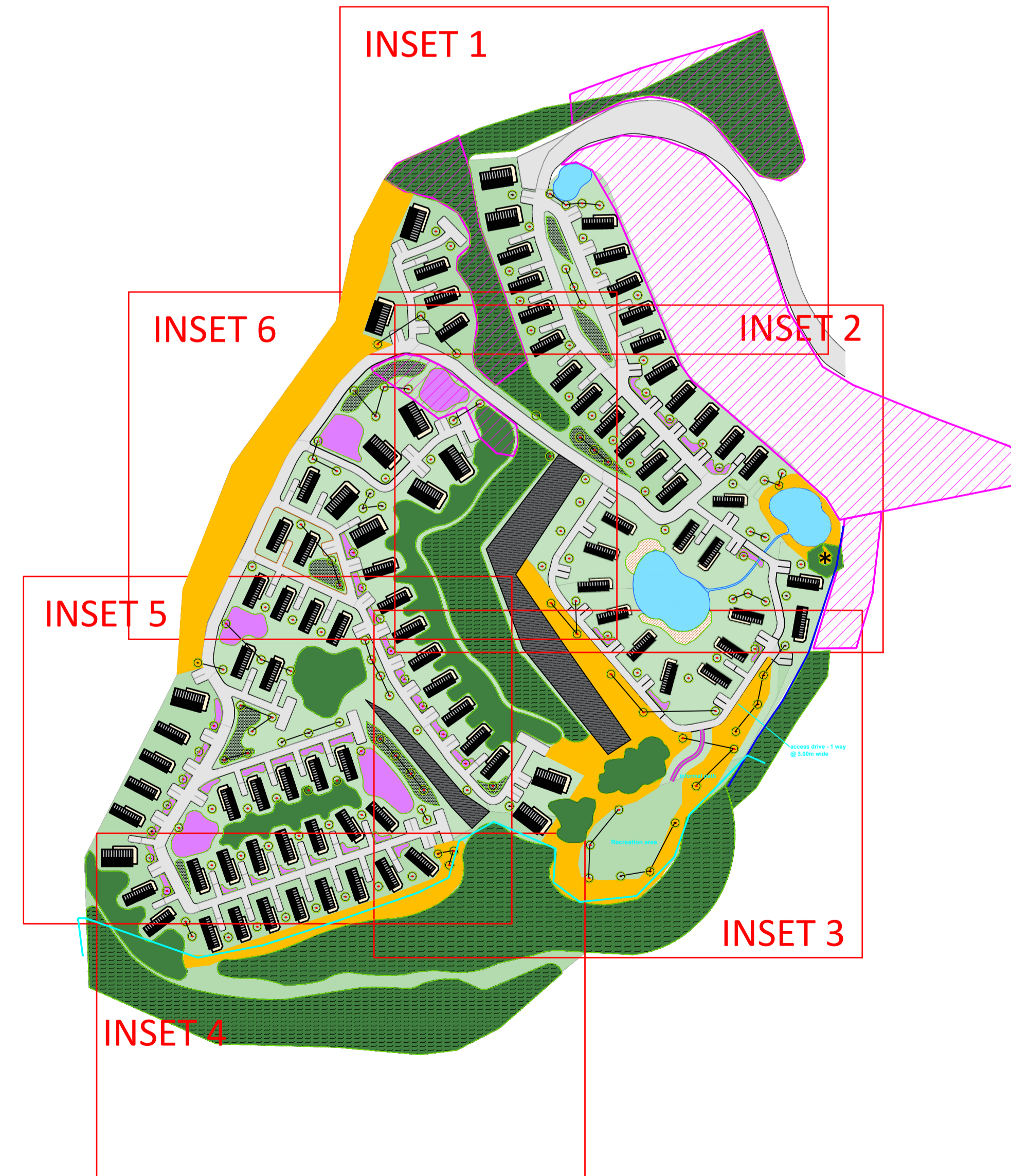
Number	Species	Specification	Density	Percentage Contribution
624 -	Achillea 'Coronation Gold'	2yrs :Containerised :Clump Forming	5/m ²	20%
779 -	Deschampsia cespitosa	2yrs :Containerised :Clump Forming	5/m ²	25%
313 -	Echinacea pallida	2yrs :Containerised :Clump Forming	5/m ²	10%
468 -	Echinacea paradoxa	2yrs :Containerised :Clump Forming	5/m ²	15%
313 -	Salvia nemorosa 'Caradonna'	2yrs :Containerised :Upright	5/m ²	10%
624 -	Sedum telephium 'Matrona'	2yrs :Containerised :Clump Forming	5/m ²	20%
Total :3121 -				

Number	Species	Specification	Density	Percentage Contribution
200 -	Alchemilla mollis	2yrs :Containerised :Clump Forming	4/m ²	10%
300 -	Allium hollandicum	Grade 4/5	4/m ²	15%
300 -	Astilbe 'Hyazinth'	2yrs :Containerised :Clump Forming	4/m ²	15%
100 -	Centranthus ruber coccineus	2yrs :Containerised :Clump Forming	4/m ²	5%
300 -	Echinacea purpurea 'Magnus'	2yrs :Containerised :Clump Forming	4/m ²	15%
399 -	Hakonechloa macra 'Aureola'	2yrs :Containerised :Clump Forming	4/m ²	20%
399 -	Hosta 'Royal Standard'	2yrs :Containerised :Clump Forming	4/m ²	20%
Total :1998 -				

Number	Species	Specification	Density	Percentage Contribution
138 -	Artemisia lactiflora	2yrs :Container Grown :Clump Forming	5/m ²	15%
94 -	Astilbe 'Stand and Deliver'	2yrs :Container Grown :Clump Forming	5/m ²	10%
138 -	Lupinus 'Gallery Yellow'	2yrs :Container Grown :Clump Forming	5/m ²	15%
226 -	Miscanthus sinensis 'Morning Light'	3yrs :Container Grown :Full Pot :Clump Forming	5/m ²	25%
138 -	Monarda 'Kardinal'	2yrs :Container Grown :Clump Forming	5/m ²	15%
182 -	Phorium 'Amazing Red'	3yrs :Container Grown :Full Pot :Clump Forming	5/m ²	20%
Total :916 -				

Number	Species	Specification	Density	Percentage Contribution
97 -	Actaea racemosa	2yrs :Container Grown :Bushy	5/m ²	10%
144 -	Aruncus 'Chantilly Lace'	2yrs :Container Grown :Bushy	5/m ²	15%
144 -	Astrantia major 'Hadspen Blood'	2yrs :Container Grown :Bushy	5/m ²	15%
191 -	Carex morrowii variegata	3yrs :Container Grown :Full Pot :Clump Forming	5/m ²	20%
97 -	Dryopteris affinis 'Crispa'	3yrs :Container Grown :Full Pot :Clump Forming	5/m ²	10%
191 -	Hakonechloa macra 'Aureola'	3yrs :Container Grown :Full Pot :Clump Forming	5/m ²	20%
97 -	Hosta 'Gay Blade'	2yrs :Container Grown :Clump Forming	5/m ²	10%
Total :961 -				

Number	Species	Specification	Density	Percentage Contribution
119 -	Crocsmia 'Lucifer'	Grade 7/8	5/m ²	15%
160 -	Festuca glauca 'Intense Blue'	3yrs :Containerised :Clump Forming	5/m ²	20%
81 -	Geranium 'Rozanne'	2yrs :Containerised :Spreading	5/m ²	10%
196 -	Hosta 'Patriot'	2yrs :Containerised :Clump Forming	5/m ²	25%
119 -	Santolina chamaecyparissus	2yrs :Containerised :Bushy	5/m ²	15%
119 -	Stachys byzantina	2yrs :Containerised :Mat Forming	5/m ²	15%
Total :794 -				



General Guidance

Timing

Ground preparation to be undertaken in advance of all planting and seeding. No soil handling to be undertaken when the soil is wet to the extent that loss of structure would occur. Planting to be carried out in the first planting season following completion of the development (between December and March inclusive) unless by prior agreement with the Local Planning Authority. Seeding of grassed areas to be undertaken in autumn.

Best practice

All soil handling and storage to be undertaken in accordance with the following British Standard Specifications and Code of practice:

- BS 1377: 1990 Soils for Civil Engineering Purposes
- BS 8601: 2013 Specification for Subsoil and Requirements for Use
- BS 3882: 2015 Specification for Topsoil
- Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (DEFRA)

 All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

- BS 3936:1992 Part 1 Nursery Stock - Specification for trees and shrubs;
- BS 3936:1981 Part 10 Nursery Stock - Specification for ground cover plants;
- BS 3936:1998 Part 9: Nursery Stock - Specification for Bulbs, Corms, and Tubers;
- BS 4428:1989 - Code of Practice for General Landscaping Operations (excluding hard surfaces);
- BS 8545: 2014 Trees from nursery to independence in the landscape; and
- The Code of Practice for Plant Handling 2002 (Horticultural Trades Association).

Planted Stock quality

General
All stock must comply with the Lockhart Garratt Biosecurity Statement. **Standard Trees**
Tree form and overall condition, including root condition, to be in accordance with BS 8545: 2014 Trees from nursery to independence in the landscape. All trees are to be inspected prior to planting by a suitably qualified third party.

Plants and Shrubs
Plant stock to be supplied in accordance with the size and description specified on the plant schedule. Plants to be healthy, vigorous, free from pests and diseases, suitably hardened off for the proposed situation of planting, and lifted at a time in accordance with good nursery practice. Stock shall have a well-formed fibrous root system and be free from perennial weeds.

Bulbs
Bulbs to be true to name, free of pests and pathogens, and of the correct approved size for the species.

The following information must be made available upon request:

- The botanical name, genus, species and cultivar, and, if appropriate, the colour or the designation 'mixed';
- The number of bulbs/plants;
- The size class;
- Any preparatory treatment that has been carried out (for example, pre-treatment for Christmas flowering);
- Any recommendation regarding appropriate planting periods and any requirements for special conditions.

Ground preparation

Compliance:

- Topsoil to comply with BS 3882.
- Subsoil to comply with BS 8601.
- Operations to comply with Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (DEFRA).

Soil Handling

Topsoil and subsoil to be handled and stored separately. Avoid compaction through mishandling or poor storage. Stripped and stored soil to be loose-tipped in heaps not exceeding 2m in height. Replacement of soil must be carried out in appropriate dry weather conditions. Topsoil to be spread evenly in layers not exceeding 150 mm thick. Finished depth (following firming) to be informed by intended vegetation cover, as follows:

- Amenity grass areas: 100mm to 150mm, according to use;
- Shrub beds/hedges: 200-300mm;
- Standard tree planting (1.5m radius of the main stem): 300mm maximum.

 After spreading, the topsoil is to be cultivated to a condition suitable for blade grading. Large and unwanted material (75 mm and over) to be picked off and removed. Areas to be passed with a light roller to firm surface without compaction. **Cultivation of Grassed Areas**
Topsoil to be cultivated to a fine tilth, and be free from weeds, contaminants, stones over 50mm, and any other debris. Levels to be graded to form agreed finished levels and be free of local mounds and depressions. **Cultivation of Shrub Beds and Tree Pits**
When shrub beds and tree pits occur in large grass areas, formation levels should be prepared at the specified depth for grass over the whole area. Further excavation should be subsequently carried out to the additional depth for shrub and tree planting. In all cases, the soil profile is to be maintained when replacing.

Handling stock

All standard trees to be lifted, labelled, handled, transported, and temporarily stored in accordance with the procedures and methods illustrated in chapter 9 of BS 8545: 2014 **Shrubs and smaller nursery stock**
All plant stock to be lifted, bundled, labelled, packaged, transported, stored and planted in accordance with the procedures and methods illustrated in "Plant Handling" (Horticultural Trades Association). **Bare root stock**
All plant stock to be lifted, bundled, labelled, packaged, transported, temporarily stored and planted in accordance with the procedures and methods illustrated in chapter 9 of BS 8545: 2014. Plants to be delivered to site in quantities that can be planted the same day. Any unplanted stock is to be stored overnight in a covered location within nursery bags, or heeled in trenches, and is to be well watered. Deciduous root systems will not be accepted.

Nicholson Lockhart Garratt Biosecurity Statement

Nicholson Lockhart Garratt Ltd ensures it is fully aware of and understands the current and future risks relating to threats from pests and diseases, and how they affect both native and non-native trees and plants. We follow the most up to date guidance from the Landscape Institute, DEFRA and Forestry Commission, and keep regular contact with the horticultural industry.

We will inform, update, and advise our clients and contractors on all relevant biosecurity information. Our staff will adhere to current biosecurity good practice when on site, and will monitor contractor practice when administering contracts.

We insist that all native species stock as specified is of UK provenance. Where possible we expect ornamental planted stock to be sourced from UK nurseries. Any and all imported stock must be accompanied with a Plant Passport, and high risk species must hold a phytosanitary certificate.

This certification must be provided to Nicholson Lockhart Garratt Ltd before planting is to commence.

Nicholson Lockhart Garratt Ltd accepts no responsibility for any planted stock that fails due to improper handling, planting, or aftercare. We expect contractors to adhere to our stated methodology, in line with current best practice guidance, and ensure that all stock meets the above criteria.

If any planted stock shows signs of disease or illness from an unknown cause, it must be reported immediately to the project landscape architect.

Planting operations

General

Planting to be undertaken between December and March inclusive during suitable weather conditions. All planted stock to be watered on same day to field capacity. **Standard Trees**
Pits to be excavated to twice the diameter of the root system, container, or root ball, deep enough to accommodate the full root system to the base of the main stem following settlement. Trees not to be planted too deep. Sides of pit to be scarified by 200mm. Base to be punctured without breaking up soil.

Tree to be centrally located and stem placed in an upright position. Back-fill with excavated material, maintaining the original soil profile unless specifically stated otherwise. Trees up to 12-14cm to be supported with single 75mm stake to the prevailing windward side, and anchored with a single supersoft adjustable tree tie. Saw stakes to leave 500mm above soil level. Fix adjustable tree ties to the top 75mm of the stake. Trees between 14cm and 20cm to be supported with two 75mm stakes, positioned on opposite sides of the main stem, and anchored to the tree with two supersoft adjustable tree ties. Saw stakes to leave 750mm above soil level. Fix adjustable tree ties to the top 75mm of each stake. Trees over 20cm, 100 litre container size, or incorporating a supported hard surface into the tree pit, are to be planted in line with the relevant Planting Pit Specification (attached if applicable). All trees to be watered to field capacity on day of planting. All works shall be carried out to the minimum standard according to BS 8545: 2014. **Planting Beds - General**
Planting to be undertaken in appropriate weather conditions, avoiding prolonged periods of drought, and preferably preceding predicted precipitation. **Planting Beds - Containerised Shrubs**
Pits to be excavated to at least one third larger than the root system. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level. **Planting Beds - Bare root stock up to 60cm high**
Roots to be dipped in rooting hormone prior to planting. Notch plant at specified density using 'I' or 'L' notches, or pit planting if the root system is too large to accommodate this method. Firm in upright, protect with specified mammal guards and support with 22-24lb/100 bamboo canes with tapered end uppermost. **Planting Beds - Bare root stock over 60cm high**
Planting to be undertaken in appropriate weather conditions, avoiding prolonged periods of drought, and preferably preceding predicted precipitation. Pits to be excavated to at least one third larger than the root system. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level. Protect with suitable mammal guards and support with 22-24lb/100 bamboo canes with tapered end uppermost.

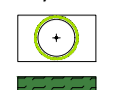

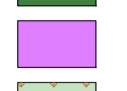




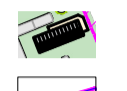
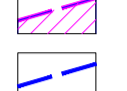







Hedgerows - Bare root stock up to 60cm high
Hedge line is to be cultivated to a depth of 150mm prior to planting unless specifically indicated otherwise. Stock to be notch-planted at 5 plants per metre in double staggered rows using 'I' or 'L' notches. Rows to be 40 - 45cm apart and follow the line as shown on the Detailed Landscape Design. Protect with clear, non-perforated spiral guards and support with 22-24lb/100 bamboo canes with tapered end uppermost. **Hedgerows - Bare root stock over 60cm high**
Hedgerow stock to be trench planted at 5 plants per linear metre in double staggered rows. Rows to be 40-45cm apart and follow the line as shown on the Detailed Landscape Design. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level.

Hedgerows - Containerised Stock
Pits to be excavated to at least one third larger than the root system. Backfill material to incorporate 30% organic matter and slow release fertiliser at 3g/m². Firm plants upright, ensuring root flare sits at soil level. Fit with appropriate canes or stakes as appropriate, and fit mammal guards if there is a risk of predation.

Mulching
General
Mulch to be locally sourced where possible, to be medium grade, organic, free from fines, weeds, disease and contaminants. **Standard Trees**
Trees planted within grass area to be mulched to a 500mm radius from the main stem to a settled depth of 100mm.

Planting Beds
Spread with bark mulch to a settled depth of 100mm. **Hedges**
Hedge lines to be spread with bark mulch to a depth of 100

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-  Amenity grass
-  Proposed roadway
-  Exposed Rock Face
-  Proposed waterbody
-  Proposed lodge
-  Existing woodland to be retained and protected
-  Existing hedgerow to be retained and protected
-  Line of Heras + Newt/reptile fence to protect southern slopes
-  Proposed meadow grass
-  Location of proposed dedicated bus building with 5m buffer of native planting

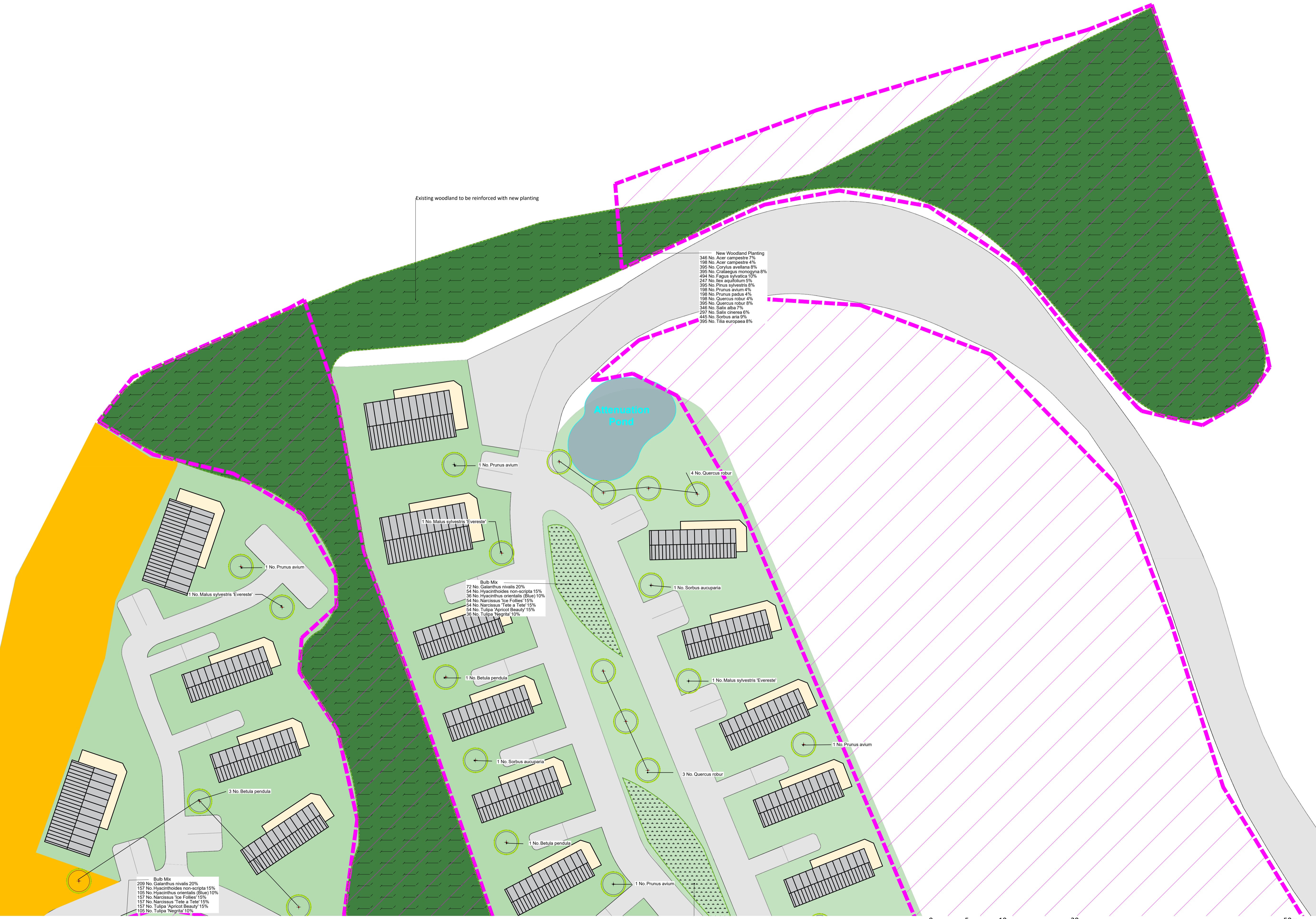
Existing woodland to be reinforced with new planting

- New Woodland Planting**
- 346 No. Acer campestre 7%
 - 198 No. Acer campestre 4%
 - 395 No. Corylus avellana 8%
 - 392 No. Crataegus monogyna 8%
 - 494 No. Fagus sylvatica 10%
 - 247 No. Ilex aquifolium 5%
 - 395 No. Pinus sylvestris 8%
 - 198 No. Prunus avium 4%
 - 198 No. Prunus padus 4%
 - 198 No. Quercus robur 4%
 - 395 No. Quercus robur 8%
 - 346 No. Salix alba 7%
 - 297 No. Salix cinerea 5%
 - 445 No. Sorbus aria 9%
 - 395 No. Tilia europaea 8%

- Bulb Mix**
- 72 No. Galanthus nivalis 20%
 - 54 No. Hyacinthoides non-scripta 15%
 - 36 No. Hyacinthoides orientalis (Blue) 10%
 - 54 No. Narcissus 'Ice Follies' 15%
 - 54 No. Narcissus 'Tete a Tete' 15%
 - 54 No. Tulipa 'Apricot Beauty' 15%
 - 36 No. Tulipa 'Negrita' 10%

- Bulb Mix**
- 209 No. Galanthus nivalis 20%
 - 157 No. Hyacinthoides non-scripta 15%
 - 105 No. Hyacinthoides orientalis (Blue) 10%
 - 157 No. Narcissus 'Ice Follies' 15%
 - 157 No. Narcissus 'Tete a Tete' 15%
 - 105 No. Tulipa 'Negrita' 10%

Attenuation Pond



16/05/22 V3 2no. lodges omitted, recreation area and informal path added JHA

NOV 2021 V2 ecology review, additional ponds, revised layout JHA

NICHOLSONS
LOCKHART GARRATT
Leading solutions for the natural environment

Detailed Landscape Design
Inset 1

Penstrowed Quarry

G F Grigg Ltd

21-0763

V3

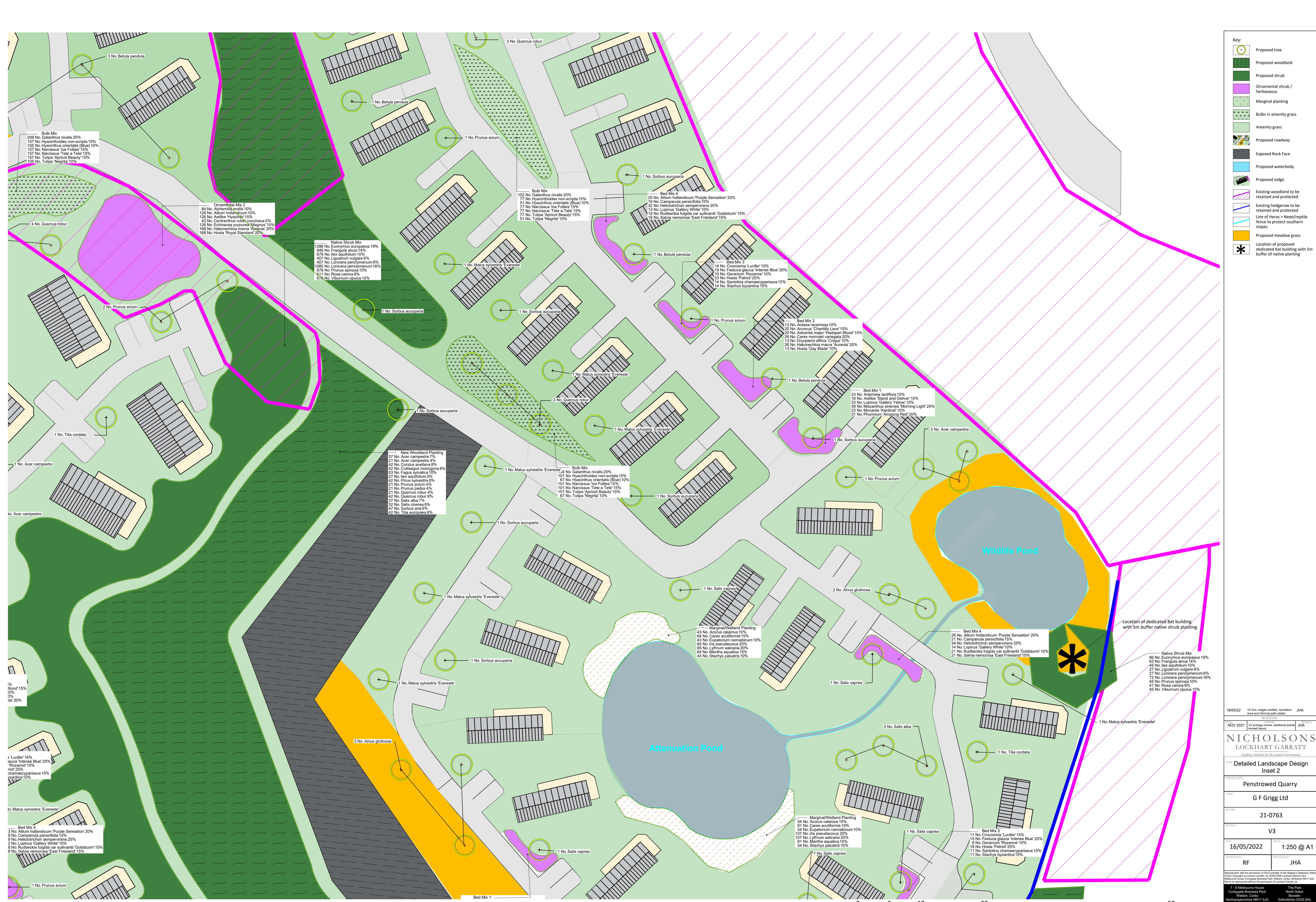
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RF JHA

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- Exposed Rock Face
- Proposed waterbody
- Proposed lodge
- Existing woodland to be retained and protected
- Existing hedgerow to be retained and protected
- Line of Heras + New/reptile fence to protect southern slopes
- Proposed meadow grass
- Location of proposed dedicated bat building with 5m buffer of native planting

16/05/22 V3 3no. lodges omitted, recreation area and informal path added JHA

NOV 2021 V2 ecology review, additional ponds, revised layout JHA

NICHOLSONS LOCKHART GARRATT
Landscape Architecture & Environmental Consultancy

Detailed Landscape Design
Inset 2

Penstrowed Quarry

G F Grigg Ltd

21-0763

V3

16/05/2022 1:250 @ A1

RF JHA

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Penstrowed Quarry, 11.0km north of Northampton, Northants, NN17 5JG.
Measurements taken, Corbridge Business Park, Wetherby, Leeds, West Yorkshire LS17 5JG.
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Northamptonshire NN17 5JG
01604 456940 www.nicholsonsgp.com

The Park
Northampton
Bedfordshire
Oxfordshire OX26 6HL
01605 340042 www.lockhart-garratt.co.uk





- Key:**
- Proposed tree
 - Proposed woodland
 - Proposed shrub
 - Ornamental shrub / herbaceous
 - Marginal planting
 - Bulbs in amenity grass
 - Amenity grass
 - Proposed roadway
 - Exposed Rock Face
 - Proposed waterbody
 - Proposed lodge
 - Existing woodland to be retained and protected
 - Existing hedgerow to be retained and protected
 - Line of Heras + New/rep/le fence to protect southern slopes
 - Proposed meadow grass
 - Location of proposed dedicated bus building with 5m buffer of native planting

access drive - 1 @ 3.00m wide

informal path

Recreation area

Existing woodland to be reinforced with new planting

16/05/22 V3 2nd lodges omitted, recreation area and informal path added JHA

NOV 2021 V2 ecology review, additional ponds, revised layout JHA

NICHOLSONS LOCKHART GARRATT
Leading solutions for the natural environment

Detailed Landscape Design Inset 3

Penstrowed Quarry

G F Garrig Ltd

21-0763

V3

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7 - 8 Malborough House, North Aston, Warwick, CV3 9EF
 01827 340342
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- Key:**
- Proposed tree
 - Proposed woodland
 - Proposed shrub
 - Ornamental shrub / herbaceous
 - Marginal planting
 - Bulbs in amenity grass
 - Amenity grass
 - Proposed roadway
 - Exposed Rock Face
 - Proposed waterbody
 - Proposed lodge
 - Existing woodland to be retained and protected
 - Existing hedgerow to be retained and protected
 - Line of Heras + New/rep/tille fence to protect southern slopes
 - Proposed meadow grass
 - Location of proposed dedicated bus building with 5m buffer of native planting

- New Woodland Planting**
- 325 No. Acer campestre 7%
 - 188 No. Acer campestre 4%
 - 371 No. Corylus avellana 8%
 - 371 No. Crataegus monogyna 8%
 - 464 No. Fagus sylvatica 10%
 - 232 No. Ilex aquifolium 5%
 - 371 No. Pinus sylvestris 8%
 - 188 No. Prunus avium 4%
 - 188 No. Prunus padus 4%
 - 188 No. Quercus robur 4%
 - 371 No. Quercus robur 8%
 - 325 No. Salix alba 7%
 - 279 No. Salix cinerea 6%
 - 418 No. Sorbus aria 9%
 - 371 No. Tilia europaea 8%

Existing woodland to be reinforced with new planting
 NOTE: No development works, storage of equipment or materials to be undertaken in this area.

16/05/22 V3 2nd lodges omitted, resection area and informal path added JHA

NOV 2021 V2 ecology review, additional ponds, revised layout JHA

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Leading solutions for the natural environment

Detailed Landscape Design Inset 4

Penstrowed Quarry

G F Grigg Ltd

21-0763

V3

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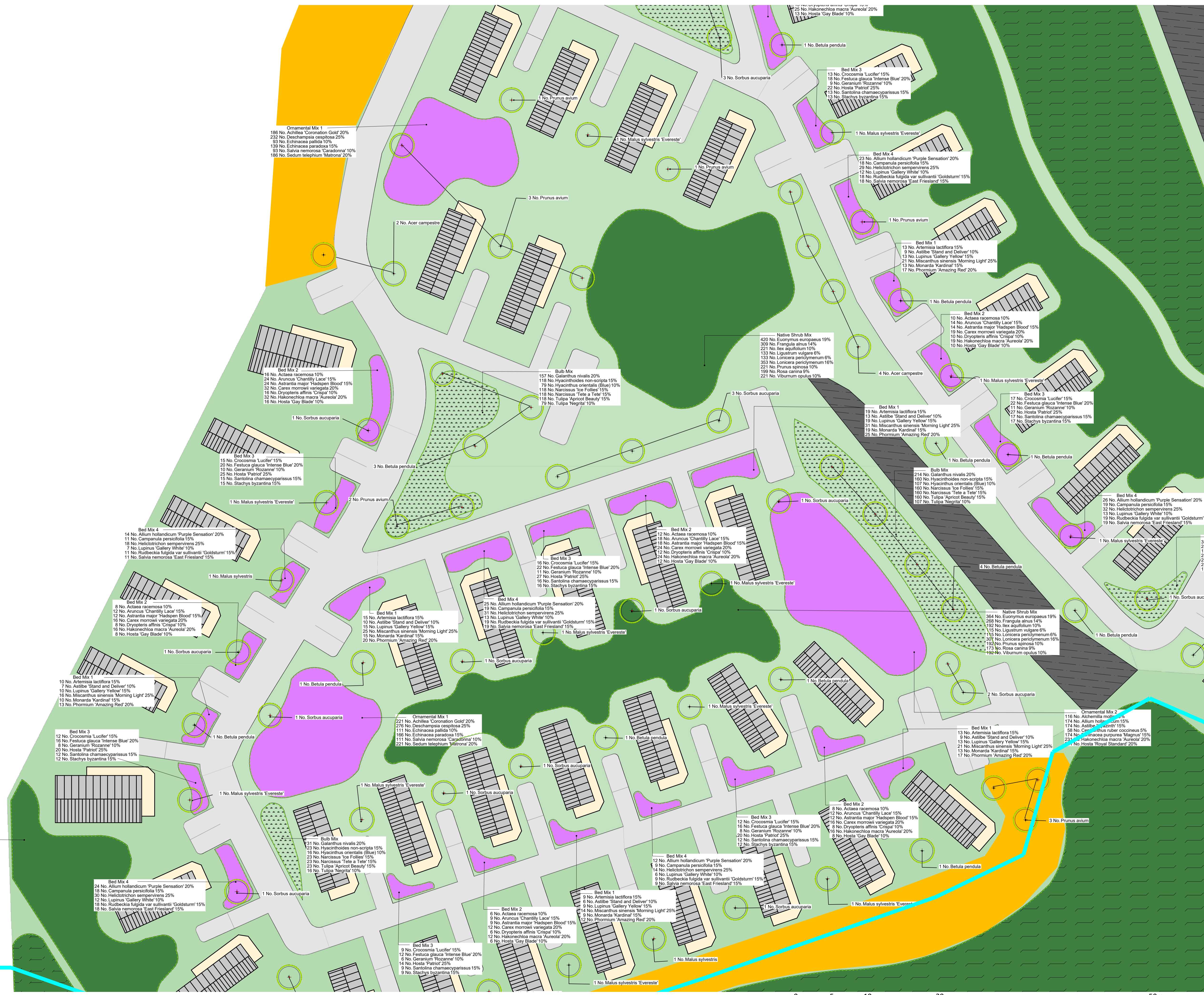
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- Key:**
- Proposed tree
 - Proposed woodland
 - Proposed shrub
 - Ornamental shrub / herbaceous
 - Marginal planting
 - Bulbs in amenity grass
 - Amenity grass
 - Proposed roadway
 - Exposed Rock Face
 - Proposed waterbody
 - Proposed lodge
 - Existing woodland to be retained and protected
 - Existing hedgerow to be retained and protected
 - Line of Heras + New/reptile fence to protect southern slopes
 - Proposed meadow grass
 - Location of proposed dedicated bat building with 5m buffer of native planting

16/05/22 V3.0 Lodges omitted, recreation area and informal path added JHA

NOV 2021 V2 ecology review, additional ponds, revised layout JHA

NICHOLSONS LOCKHART GARRATT
 Landscape Architects and Environmental Planners

Detailed Landscape Design Inset 5

Penstrowed Quarry

G F Garr Ltd

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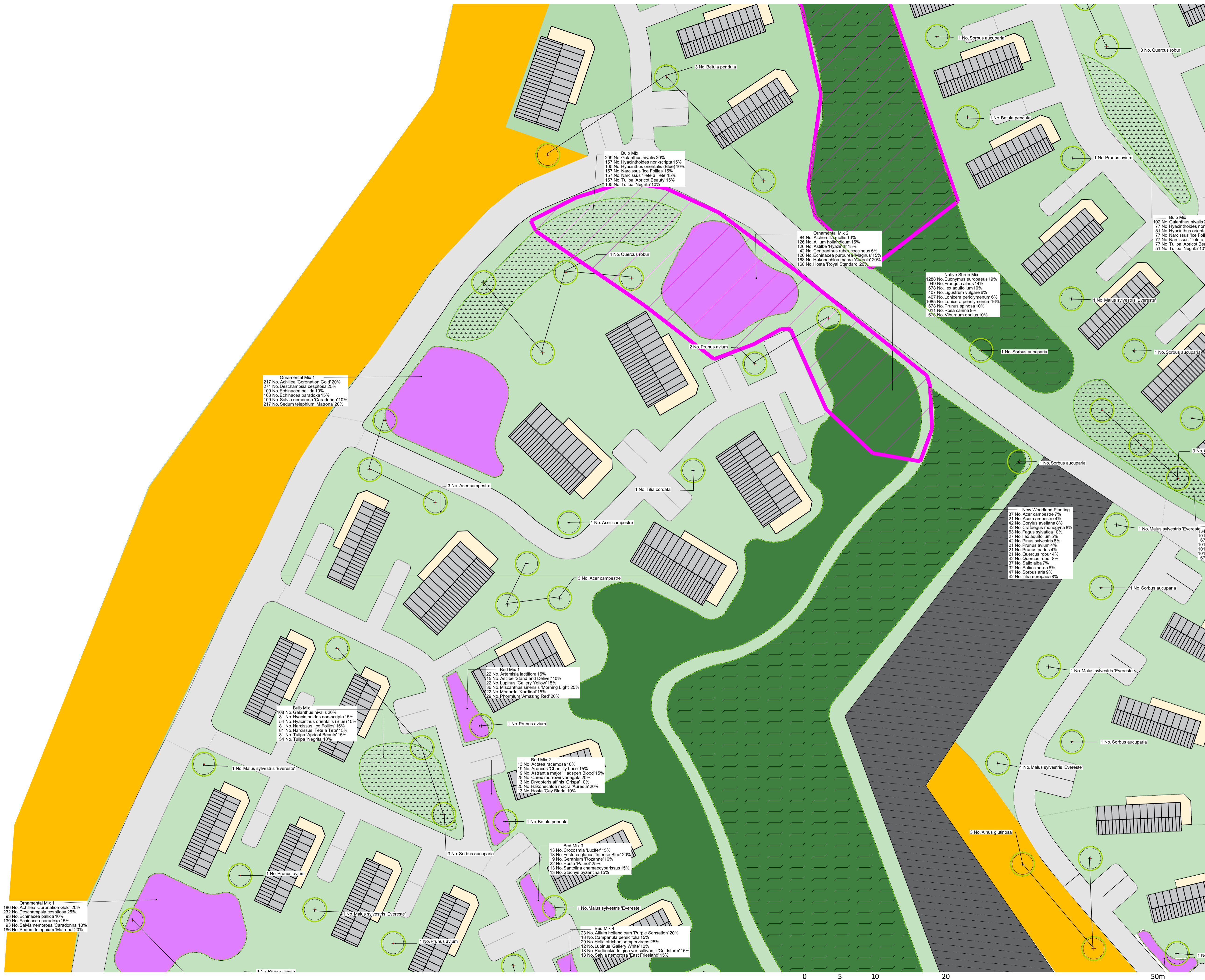
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- Key:**
- Proposed tree
 - Proposed woodland
 - Proposed shrub
 - Ornamental shrub / herbaceous
 - Marginal planting
 - Bulbs in amenity grass
 - Amenity grass
 - Proposed roadway
 - Exposed Rock Face
 - Proposed waterbody
 - Proposed lodge
 - Existing woodland to be retained and protected
 - Existing hedgerow to be retained and protected
 - Line of Heras + New/reptile fence to protect southern slopes
 - Proposed meadow grass
 - Location of proposed dedicated bus building with 5m buffer of native planting

Bulb Mix
 209 No. Galanthus nivalis 20%
 157 No. Hyacinthoides non-scripta 15%
 105 No. Hyacinthus orientalis (Blue) 10%
 157 No. Narcissus 'Ice Follies' 15%
 157 No. Tulipa 'Apricot Beauty' 15%
 105 No. Tulipa 'Negrita' 10%

Ornamental Mix 2
 84 No. Alchemilla pedata 10%
 126 No. Allium hollandicum 15%
 126 No. Astilbe 'Hyacinth' 15%
 42 No. Centranthus ruber 'Coccineus' 5%
 126 No. Echinacea purpurea 'Magnus' 15%
 168 No. Hakonechloa macra 'Aureola' 20%
 168 No. Hosta 'Royal Standard' 20%

Native Shrub Mix
 1268 No. Euonymus europaeus 19%
 949 No. Fraxinus alnus 14%
 676 No. Ilex aquifolium 10%
 407 No. Ligustrum vulgare 6%
 407 No. Lonicera periclymenum 6%
 1085 No. Lonicera periclymenum 16%
 676 No. Prunus spinosa 10%
 511 No. Rosa canina 5%
 676 No. Viburnum opulus 10%

Bulb Mix
 102 No. Galanthus nivalis 20%
 51 No. Hyacinthoides non-s 15%
 77 No. Hyacinthus orientalis 10%
 77 No. Narcissus 'Ice Follies' 15%
 77 No. Tulipa 'Apricot Beauty' 15%
 51 No. Tulipa 'Negrita' 10%

Ornamental Mix 1
 217 No. Achillea 'Coronation Gold' 20%
 271 No. Deschampsia cespitosa 25%
 109 No. Echinacea pallida 10%
 153 No. Echinacea paradoxa 15%
 109 No. Salvia nemorosa 'Caradonna' 10%
 217 No. Sedum telephium 'Matrona' 20%

New Woodland Planting
 37 No. Acer campestre 7%
 21 No. Acer campestre 4%
 42 No. Corylus avellana 8%
 42 No. Crataegus monogyna 8%
 53 No. Fagus sylvatica 10%
 27 No. Ilex aquifolium 5%
 42 No. Pinus sylvestris 8%
 21 No. Prunus avium 4%
 21 No. Prunus padus 4%
 21 No. Quercus robur 4%
 42 No. Quercus robur 8%
 37 No. Salix alba 7%
 32 No. Salix cinerea 6%
 47 No. Sorbus aria 9%
 42 No. Tilia europaea 8%

Bed Mix 1
 22 No. Artemisia lactiflora 15%
 15 No. Astilbe 'Stand and Deliver' 10%
 22 No. Lupinus 'Gallery Yellow' 10%
 36 No. Miscanthus sinensis 'Morning Light' 25%
 22 No. Monarda 'Kardinal' 15%
 29 No. Phlox 'Amazing Red' 20%

Bulb Mix
 108 No. Galanthus nivalis 20%
 81 No. Hyacinthoides non-scripta 15%
 54 No. Hyacinthus orientalis (Blue) 10%
 81 No. Narcissus 'Ice Follies' 15%
 81 No. Tulipa 'Apricot Beauty' 15%
 54 No. Tulipa 'Negrita' 10%

Bed Mix 2
 13 No. Actaea racemosa 10%
 19 No. Anemone 'Charity Lace' 15%
 19 No. Astrantia major 'Hatspen Blood' 15%
 25 No. Carex morrowii variegata 20%
 13 No. Dryopteris affinis 'Crispa' 10%
 25 No. Hakonechloa macra 'Aureola' 20%
 13 No. Hosta 'Gay Blade' 10%

Bed Mix 3
 13 No. Crocosmia 'Lucifer' 15%
 18 No. Festuca glauca 'Intense Blue' 20%
 9 No. Geranium 'Rozanne' 10%
 22 No. Hosta 'Patrol' 25%
 13 No. Santolina chamaecyparissus 15%
 15 No. Stachys byzantina 15%

Ornamental Mix 1
 186 No. Achillea 'Coronation Gold' 20%
 232 No. Deschampsia cespitosa 25%
 83 No. Echinacea pallida 10%
 159 No. Echinacea paradoxa 15%
 83 No. Salvia nemorosa 'Caradonna' 10%
 186 No. Sedum telephium 'Matrona' 20%

Bed Mix 4
 23 No. Allium hollandicum 'Purple Sensation' 20%
 18 No. Campanula persicifolia 15%
 29 No. Helicobolus sempervirens 25%
 12 No. Lupinus 'Gallery White' 10%
 18 No. Rudbeckia fulgida var 'sulfurita' 'Goldsturm' 15%
 18 No. Salvia nemorosa 'East Friesland' 15%

16/05/22 V3 2no. lodges omitted, recreation area and informal path added JHA

NOV 2021 V2 ecology review, additional ponds, revised layout JHA

NICHOLSONS LOCKHART GARRATT
Leading, holistic for the natural environment

Detailed Landscape Design Inset 6

Penstrowed Quarry

G F Garr Ltd

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