

Replacement dwelling

at Garden Cottage, Pentre-Poeth Road, Rhiwderin, Newport NP10 8RT

Soft Landscape Outline Planting and Maintenance Schedule v1

For Planning Purposes

Client: David Williams Homes Ltd

BACKGROUND

- 1.1 The attached Soft Landscape Plan 24/1053/03 is provided to accompany a planning application to Newport City Council for a replacement at Garden Cottage, Pentre-Poeth Road, Rhiwderin, Newport NP10 8RT. The replacement dwelling is within the garden curtilage, with the existing highway access location remaining unchanged.
- 1.2 The red line boundary includes the existing Garden Cottage and associated parking and garden area. Neighbouring property overlooks the site and wider ownership boundary to the north-west (Holly House Farm) and north (4 The Hollies). The public facing boundary is defined by a stone wall, generally 1.2m in height and set back with a grass verge. Garden boundaries are defined onto a small open paddock by post and rail fencing, with the boundary onto Holly House Farm defined by estate railing. A short line of trees lie at the ownerships north-east boundary, the wider ownership boundaries to the west and south are fully tree lined.
- 1.3 A topographic survey is available and has been used as the base plan for the tree survey by Mackley Davies. A Green Infrastructure Statement by Mackley Davies includes further information on the site context and provides photos.
- 1.4 Planting objectives are to:
- Mitigate for the 1no tree loss.
 - Provide an attractive sense of place for existing and new users.
 - Provide a native planted buffer to soften views from Holly House Farm garden.
 - Provide a native planted buffer to contain the garden area onto the open paddock.
 - Mitigate for impacts and enhance ecological connectivity and diversity.
 - Enable long-term retention of site trees.

This will be achieved by:

- Shade loving native groundcover planting under tree group T1-T6 to prevent encroachment.
 - Evergreen ornamental hedge planting along the site frontage to soften views in and out above the 1.2m stone wall including flowering species for pollinators.
 - Mixed native hedge onto Holly House Farm and the open paddock.
 - Orchard trees on semi-vigorous rootstock to reduce light-spill and restore a historic feature.
- 1.5 Landscape proposals will result in the following habitat types:

Habitat type	Quantity
Native mixed hedgerow	45 linear meters
Species rich grass close mown	120 sqm
Orchard trees	17 no
Ornamental evergreen hedges	25 linear meters
Shade loving native ferns and bulbs	21 sqm

2.0 OUTLINE SPECIFICATION FOR SOFT LANDSCAPE WORKS

Refer to Soft Landscape Plan reference: 24/1053/03.

1.0 Work to be carried out in accordance with the following standards:

- British Standards:
 - BS 3882:2015 Specification for topsoil
 - BS 8601:2013 Specification for subsoil and requirements for use
 - BS 5837:2012 Trees in relation to design, demolition and construction
 - BS 8545:2014 Trees from nursery to independence in the landscape
 - BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces)
- National Plant Specification
- National Landscape Specification (NBS) latest revision
- Landscape Architects detailed specification (to be issued at tender stage)

2.0 Protection of site trees:

Before work commences, ensure protection of trees to be retained in accordance with BS 5837:2012 Trees in relation to design, demolition and construction as shown on the Tree Protection Plan by Mackley Davies.

3.0 Site clearance:

Remove any bramble, rubbish, concrete, metal, glass, decayed vegetation, contaminated substrate and stones with largest dimension exceeding 100mm. Contamination includes steel, concrete, rubble, fuel, lubricants or other substances injurious to plant growth.

4.0 Soil conditions:

Do not work in waterlogged conditions, when the ground is frozen or covered by snow, or when there are pools of water on the ground surface, or following sustained heavy rainfall eg >10mm in 24 hours.

Cultivate and plant into moist friable soil.

Provide adequate additional root protection and prevent planting pit sides and bases and backfill materials from freezing.

5.0 Climatic conditions:

Carry out the work while soil and weather conditions are suitable for the relevant operations. Do not plant during periods of frost or strong winds. Bare root planting to be restricted to the 'lifting' season, generally November to March.

6.0 Machines and tools:

Use only machinery and tools suitable for the site conditions and the work to be carried out.

7.0 Excavation:

Ensure the location of all services is known before any excavation operations.

Excavation is NOT to be carried out within the root protection areas of trees to be retained.

8.0 Soils:

At this site there will be no need to import topsoil.

The following hierarchy to be followed to reduce soil handling:

1. If soils are suitable and in the right location, protect during the construction period in-situ by adequate fencing
2. Otherwise, move to the prepared receptor site

3. Otherwise, strip, store, and re-use for backfill once the receptor site is ready

All in accordance with:

- BS 15176: 2019 Guidance on the characterization of excavated soil and other materials intended for reuse
- BS 3882:2015 Specification for topsoil
- BS 8601:2013 Specification for subsoil and requirements for use
- Defra Code of Practice for the Sustainable Use of Soils on Construction Sites

No spreading after sustained heavy rainfall over 10mm in 24 hours. Ensure topsoil is loose tipped in layers of 0.2m maximum, and not firmed, consolidated, or compacted when laying by tipping and grading to approximate levels in one operation with minimum trafficking by plant in line with Landscape National Building Specification.

Place sufficient depth to allow for topsoil settlement. Batter/feather in local levels to achieve smooth rounded profiles and ensure falls are positive to reduce the risk of water ponding.

Backfill to the following depths for subsoil (to BS8601:2013) and topsoil (to BS3882:2015):

	Subsoil depth mm	Topsoil depth mm
trees	600	300
hedging	300	300
grass	150	150

9.0 Tree Planting:

Refer to Tree Pit Sections on Soft Landscape Plan 24/1053/03. Mower guards to be provided for 2no ornamental trees in grass.

Backfill mix (including green compost, fertilizer, mycorrhizal supplement) for bare root stock, to accord with recommendations of topsoil survey. Backfill mix should not be required for rootballed and container trees at planting.

Plant trees as indicated on the Soft Landscape Plan. Contractor is to locate underground services before excavation. Outside tree protection areas, install a root barrier where trees will lie within 3m of an existing or proposed underground service route or highway kerb eg. Greenleaf Reroot or equivalent to full depth of topsoil to top of finished soil level with sides vertical.

10.0 Cultivation prior to planting:

If areas are weed infested, remove by hand or mechanical means. Re-growth (during the growing season) may need to be treated with an approved herbicide such as Glyphosate as advised by the CA.

No cultivation to take place within tree root protection areas.

No cultivation after sustained heavy rainfall over 10mm in 24 hours.

Cultivate topsoil by hand or machine to achieve a suitable loose, friable tilth, remove rubbish/stones/roots etc over 50mm for planting areas in line with BS 3882:2015 table A.1, and rake to even out levels.

11.0 Plant Supply:

Nursery Stock to BS 3936 Part 1 ‘Nursery stock specification for trees and shrubs’ and BS 8545:2014 Trees from nursery to independence in the landscape.

Name, forms, dimensions and other criteria as scheduled and defined in the National Plant Specification. If specified plants are unobtainable or known to be likely to be unobtainable at the time of ordering, obtain approval before making any substitution.

Plants should be:

- Materially undamaged, sturdy, healthy, vigorous, of good shape and without elongated shoots.
- Grown in suitable environment and hardened off.
- Free from pests diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants to be bottom worked unless otherwise specified or approved.
- UK grown.
- Produced in peat-free compost.

In addition, trees should have:

- Clearly defined and straight leader.
- Balanced branching framework with lateral branches subordinate to the leader.
- Clearly defined stem taper and proportionate, balanced height/stem girth ratio appropriate to the species.
- No crossing or co-dominant branches.
- Evenly spaced lateral roots with minimum four major laterals.
- Evenly spaced, well developed fibrous roots.
- An intact root-ball with the root-flare clearly visible.

12.0 Plant Handling:

Handling of plants to HTA National Plant Specification and the Committee for Plant Handling and Establishment Part 3 'Recommendations for Plant Handling from Delivery to Successful Establishment' and BS 8545:2014 Trees from nursery to independence in the landscape.

All plants delivered on racks. Boxed/pallet stacked plants are not acceptable.

Protect plants / trees from frost and from drying out.

Handle plants / trees with care. Protect from mechanical damage and do not subject to shock eg. by dropping from a vehicle.

All plant material is to be carefully lifted, adequately and carefully packed and protected for delivery to site. Plants should not be lifted and stored on the delivery vehicle overnight. Ideally plants should be lifted, delivered to the site and planted on the same day.

On delivery to site, bare-root or root-balled plants, should be stacked together, away from the effects of the drying winds, their roots being covered with sand or fine soil and watered to prevent drying out.

Plants may require to be heeled-in, using prepared trenches, covered with soil (fine material) and watered thoroughly. Stored plants should be checked regularly to ensure their root systems are fully covered and that the soil (fine material) is kept moist.

If planting becomes delayed into April or later, then bare root plant material is to be stored in cold stores until required on site.

13.0 Planting:

Set out plants evenly to density and quantities shown, arranged to avoid straight lines and geometric patterns. Plant to the nursery soil depth, face up to present best side, and firm in.

For bare root stock, dip in a proprietary alginate prior to planting such as Alginure/Broadleaf P4 anti-desiccant gel before planting.

14.0 Immediate aftercare:

Immediately after planting cut back any damaged, dead or diseased branches and remove any weak, thin or malformed growth.

For tree species any immediate aftercare is to accord with BS3998:2010 and BS 8545:2014.

If tree leaders are damaged or have been removed, the stock should be replaced.

Water as necessary to ensure the establishment and continued thriving of all planting. Ensure the full depth of topsoil is thoroughly wetted. Use a fine rose where appropriate to avoid damaging or loosening plants.

For trees planted into tree pits, wet the root system before planting and saturate the tree pit after planting to field capacity. Allow for watering every week to every fortnight according to weather conditions, from April to October at 20-40L for all trees. Add mulch after watering in.

15.0 Mulch specification:

Generally an amenity grade is required. Spread evenly to a depth of 50mm for hedges and planting beds, increasing to 75mm for 1.2m radius around all trees including orchard trees. Ensure no plant foliage is covered by mulch, lift all ground cover foliage above.

16.0 Species Rich Grass Seeding:

Carry out the work while soil and weather conditions are suitable. Ideally carry out seeding during April-May or September. Cultivate and rake removing stones over 20mm and perennial weeds and to create smooth profile with existing levels ensuring areas are 25mm settled depth higher than adjacent hard surfaces to allow for easy grass cutting and 150mm below DPC of adjoining buildings.

Spread seed evenly at the specified rate(s) applied in two equal sowings in transverse directions. Lightly harrow or rake, roll and cross-roll after seeding using a lightweight roller. Stone and earth clod removal to 10mm size.

Seed mix to be:

- Germinal WFG20 Eco Species Rich Lawn (or equivalent if there are supply issues or as advised by the Ecologist), sown at 10g/sqm to achieve a close mown grass sward in line with advice from the supplier. A pre-seeding fertilizer should not be applied.
- The mix can be managed as a close mown grass sward suitable for a residential garden but can also be managed with a more relaxed regime at lawn edges.

17.0 Hedgerow Seeding:

Carry out the work while soil and weather conditions are suitable. Ideally carry out seeding during April-May or September. For all areas be aware of tree protection areas where cultivation by hand is required. Lightly cultivate, removing stones over 20mm and perennial weeds to ensure good contact between seed and soil. Mix seed with sand to ensure an even sowing rate. Lightly rake or trample down after seeding to ensure good contact with topsoil.

Seed mix to be:

- Emorsgate EH1 Hedgerow Mix under new native mixed hedges (or equivalent if there are supply issues) sown at 4g per sqm. A pre-seeding fertilizer should not be applied (in line with manufacturers recommendations for EH1) OR alternative as advised by Ecologist.

18.0 Immediate aftercare:

Immediately after planting cut back any damaged, dead or diseased, weak, thin or malformed growth.

Water as necessary to ensure the establishment and continued thriving of all planting. Ensure the full depth of topsoil is thoroughly wetted. Use a fine rose where appropriate to avoid damaging or loosening plants.

3.0 PLANTING SCHEDULE

Refer to Soft Landscape Plan 24/1053/03 for layout and detail of tree pits and hedge planting.

Trees	Species	Height (mm)	Description	Total (no.)
See plan for tree pit detail. Secured with a single stake. Good branching rather than height is key. 75mm mulch to 1.2 sqm. Spacing as shown on the Plan.				
	Amelanchier x grandiflora 'Ballerina'	2-3m	30L standard	2
	Apple, pear, plum varieties on semi-vigorous root stock	1.5-2m	Bare root standard	17

Native Mixed hedge – 45 linear meters	
Plant a staggered row [450mm between rows, 400mm along rows] at 5 plants/lin m , bare root transplants 1+1, 600-900mm, 2L for Holly. Mulch hedge width to 50mm depth. Maintain on an annual cut ideally in February before bird nesting to provide source of nuts and berries overwinter, cut to a height of 1.5-1.8m for the north-west boundary hedge, 1.2m for the west boundary hedge.	
Hawthorn [Crataegus monogyna] 50%	110
Holly [Ilex aquifolium] 10%	25
Hazel [Corylus avellana] 30%	70
Cornus sanguinea [Dogwood] 10%	20
Honeysuckle [Lonicera periclymenum] at 4m centres	10

Ornamental hedging shrubs – 25 linm	
Plant a straight row at 3 plants/lin m as a hedge . Mulch full hedge width of 800mm to 50mm depth. Maintain to height of around 1.5-1.8m.	
Prunus laurocerasus (laurel) or Prunus lusitanica (Portuguese laurel) 5L – 16linm	48
Mixed evergreen flowering hedge within rear garden for pollinators:	
Choisya dewitteana White Dazzler 5L – 3linm	9
Ceanothus Italian Skies 5L – 3linm	9
Escallonia Apple Blossom 5L – 3linm	9

Native shade loving species - planted in groups of 3 or 5 no. Mulch to 50mm depth			
Polystichum munitum (sword fern) E	2L	5/sqm	35
Blechnum spicant E	2L	5/sqm	35
Harts Tongue fern E	2L	5/sqm	35
Primroses across 25%	0.5L	8/sqm	40

Bulbs within fern planting		
250 no snowdrop at 50/sqm	Plant in informal drifts in species groups centres/depths as per suppliers recommendation	5 sqm
100 no native bluebell at 20/sqm		5sqm

4.0 PRESCRIPTIONS FOR MANAGEMENT ACTIONS

For new planting and seeding areas undertake maintenance visits in April, May, July, and September.

During the 5 year establishment phase carry out maintenance of the planted areas as follows:

4.1 For new native mixed hedges:

- New native mixed hedges to be maintained as stated on the Soft Landscape Plan.
- When cutting on an annual basis aim to provide a food and shelter resource by leaving overwinter berries and cutting in February.

4.2 For new planting:

- Maintain weed free planted areas by use of HAND WEEDING (not by using glyphosate due to the risk of plant damage from herbicide drift onto new and existing vegetation).
- Water as necessary to prevent plants wilting.
- Maintenance operations shall be carried out only during suitable weather conditions.
- Every visit check condition of plants, including for any rabbit damage.
- Re-firm plants as required without compacting topsoil.
- Prune at appropriate times to remove dead or dying and diseased vegetation to promote healthy growth and natural shape and in accordance with good horticultural practice.
- All operations to be carried out by hand.
- Top up mulch to 50mm to the original specification.

4.3 For new tree planting:

- Maintain a weed free area around each tree, minimum diameter 1.0m ideally by use of HAND WEEDING (not by using glyphosate due to the risk of plant damage from herbicide drift).
- Watering trees: for the first growing year allow for watering every week to every fortnight according to weather conditions, from April to October. Allow 20-40L for trees. Watering in year 2 is also likely to be required.
- Top up mulch to maintain full depth of 75mm.
- Every month check condition of stakes, ties. Adjust if necessary to allow for growth and prevent rubbing of bark. Cut back any damaged bark.
- At year 2-3 remove all tree stakes.
- Re-firm new trees as required without compacting topsoil.
- Only prune at appropriate times to remove dead or dying and diseased wood and suckers to promote healthy growth and natural shape and in accordance with good horticultural practice.
- Undertake formative pruning in accordance with BS3998:2010 and ongoing aftercare in accordance with BS 8545:2014. Prune trees to favour a single central leading shoot.

4.4 For species rich mix grass areas:

- **All grass areas to be seeded with Germinal WFG20 Eco Species Rich Lawn**, this is a mix of grasses and wildflowers. **For first year management**, regular mowing of all areas by cutting to a height of 40-60mm and removal of cuttings if dense will gradually help develop a good sward structure, maintaining a balance between faster growing grasses and slower developing wild flowers, and control annual weeds Perennial residual weeds such as dock should be dug out.
- Once established the mix can be mown regularly as a lawn. A more varied mowing regime can be used by allowing some areas to the rear to flower with mowing after late July, arisings to be removed. The regime can be varied annually.

4.5 For hedgerow seed mix:

- Once bark mulch has degraded, the mix will develop and become rough and “tussocky” in character. If cutting back is required, undertake no more frequently than every 2-3 years between October and February and ideally on a rotational basis so that no more than half the area is cut in any one year leaving part as an undisturbed refuge.

5.0 IMPLEMENTATION PROGRAMME






Soft landscape works will take place in the *first available season following completion of the building and surfacing works* dependent on the usual planting seasonal constraints as follows:

- Bare root planting to be undertaken in the planting season November to March.
- Container grown planting can be undertaken year round, but ideally in the planting season November to March.
- Seeding should ideally take place in Spring or Autumn (ensuring sufficient development before first frost) but can be sown at other times of the year if there is sufficient warmth and moisture.
- Bulb planting will be undertaken when bulbs are commercially available, generally autumn for the spring flowering bulbs.

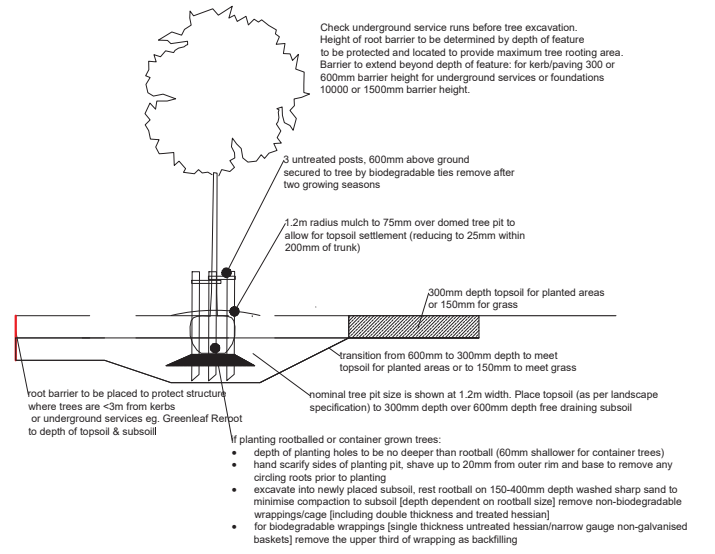
6.0 MONITORING AND REMEDIAL MEASURES

- 6.1 An annual walkover will be undertaken by the applicant to monitor establishment success, with any plants or areas that fail to thrive during the **5 year establishment phase** to be replaced in the next suitable planting season. Replacements will match the size of adjacent or nearby plants of the same species or should match the original specification, whichever is the greater.

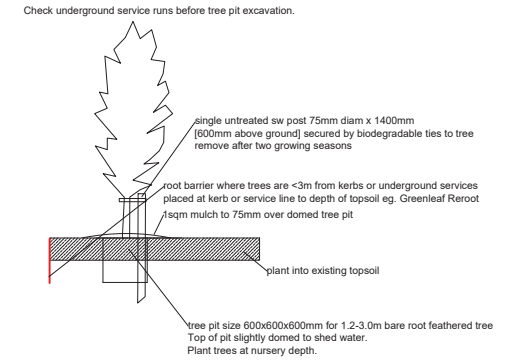
Notes

-  proposed trees
-  proposed native mixed hedges underseeded with Emorsgate EH1 Hedgerow Mix
-  proposed evergreen ornamental hedges
-  proposed low native ferns and bulb planting
-  species rich seed mix close mown eg Germinal WFG20 at 10g/sqm can also be maintained on a less regular basis by strimming

STANDARD TREE PIT DETAIL

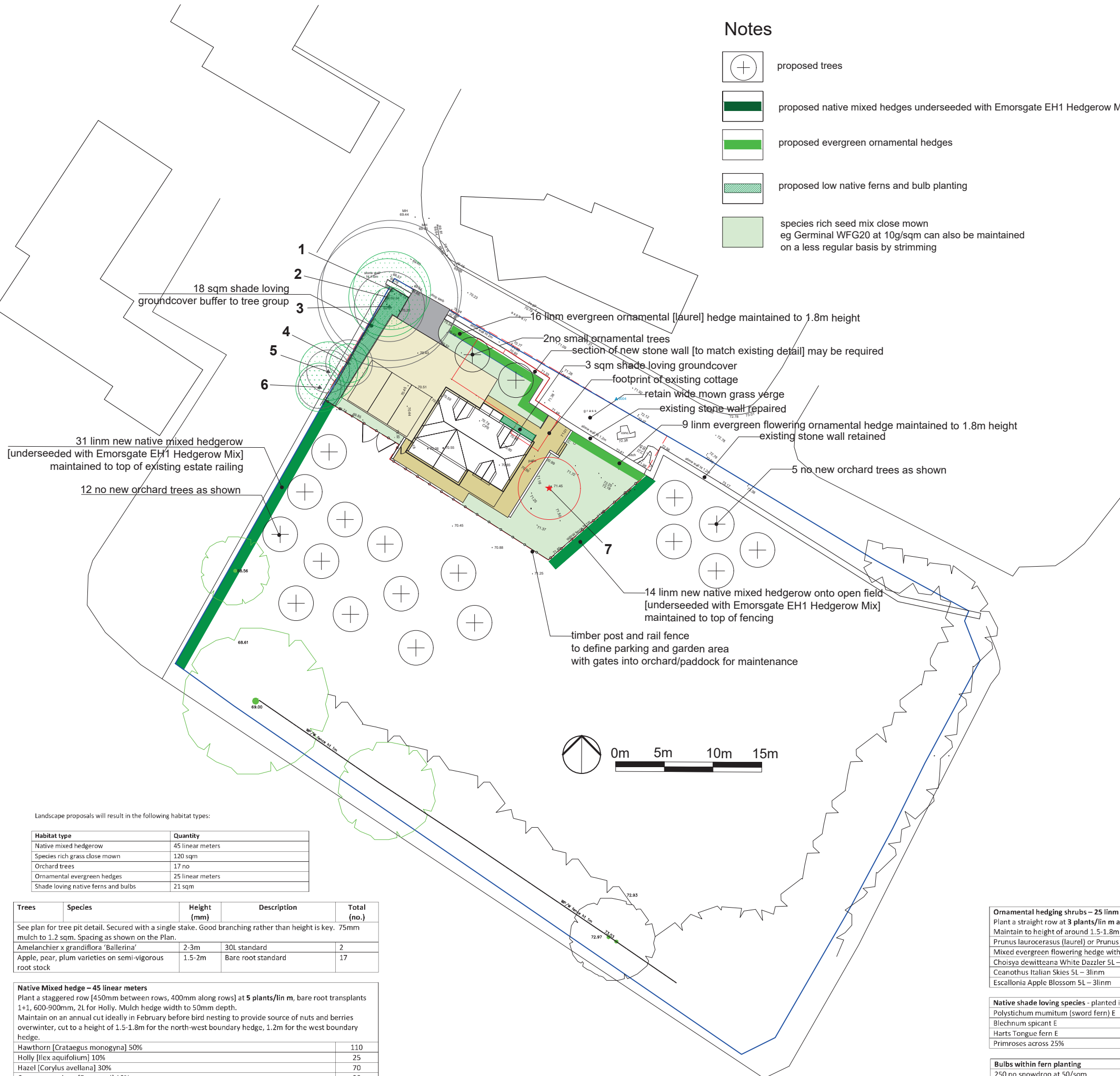
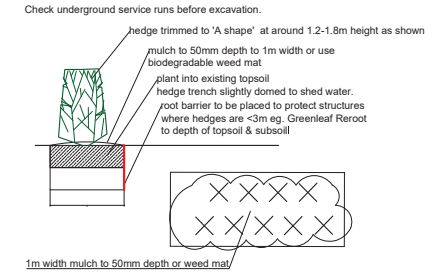


ORCHARD TREE PIT DETAIL



NATIVE MIXED HEDGE PLANTING DETAIL

For all native mixes 5 plants per linear meter. Plant in a staggered row 450mm between rows, 400mm along rows. Plant into existing topsoil. Cover hedge area with bark mulch to 50mm depth x 1m width or weed mat.



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100 no native bluebell at 20/sqm	centres/depths as per suppliers recommendation	5sqm

All dimensions must be checked on site and not scaled from this drawing.

This drawing is for the purposes of PLANNING. Based on Ordnance Survey data. OS Licence 100043966

Refer to Planting and Maintenance Schedule by Mackley Davies Assoc Ltd.

Refer to Tree Survey by Mackley Davies Assoc Ltd.

MACKLEY DAVIES ASSOCIATES LTD
Ffynnon yr Eirin . Crickhowell Road. Gilwern
Abergavenny . NP7 0EH . 01873 831796 .
gill@mackleydaves.co.uk

Garden Cottage, Rhiwderin NP10 8RT

David Williams Homes Ltd

DRAWING TITLE

Soft Landscape Plan

1:250 @ A1	Job No.	24/1053/03
August 2024	REVISION No.	