



PROPOSED RESIDENTIAL DEVELOPMENT

**HARRAS MOOR WHITEHAVEN CA286SZ
TREE SURVEY REPORT**

GLEESON HOMES LTD

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Revision A 10.06.26

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1 INTRODUCTION

1.1 SCOPE OF REPORT

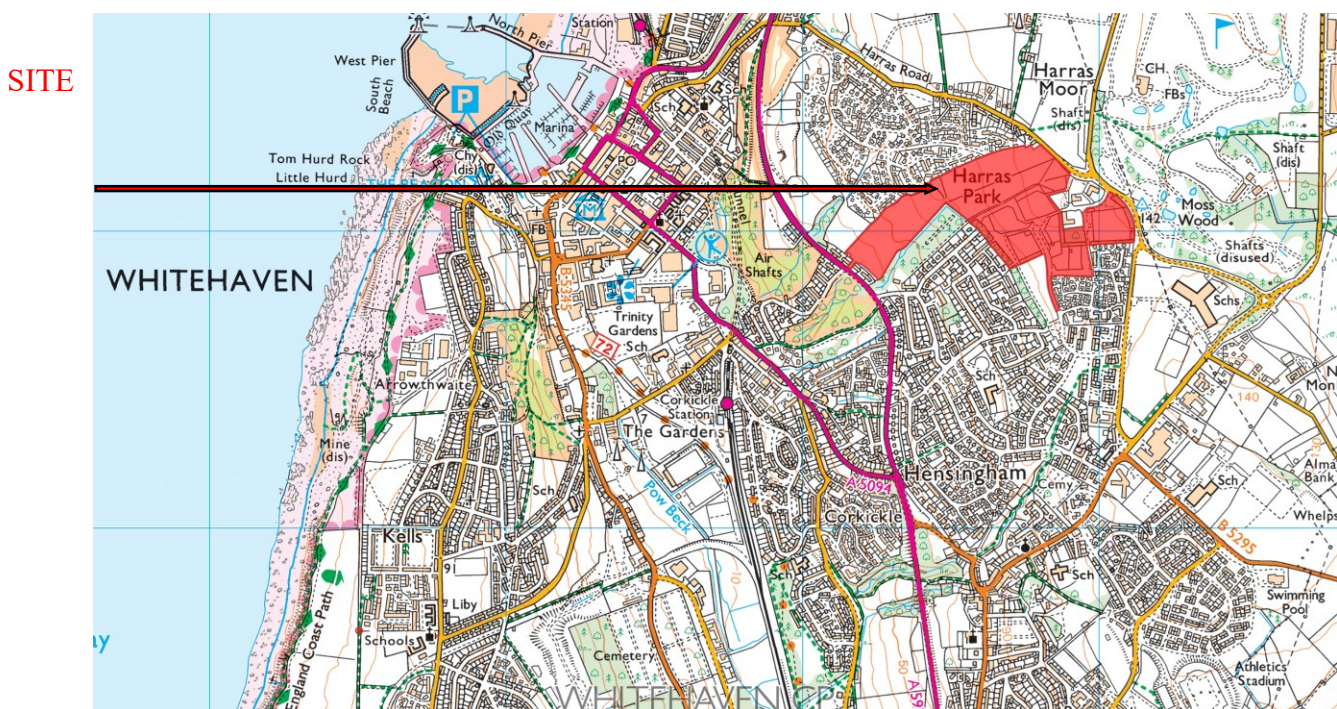
1.1.1 This report was commissioned to assess the arboriculture constraints of a proposed residential development on largely agricultural land with some former industrial and recreation area land at Harras Road Harras Moor, Whitehaven. Refer to the Site Location Plans below.

1.1.2 Westwood Landscape, Chartered Landscape Architects (with LANTRA Professional Tree Inspector Certification) were appointed in August 2025 by Gleeson Homes Ltd to carry out a survey and amenity value analysis of the trees on and adjacent to the proposed development site and appraise the potential impact of the development on retained trees.

1.1.3. The surveyors were Bruce Walker BSc (Hons) MPhil CMLI and James England NDF BSc(Hons) For Mic For and the survey work was carried out on 15th August 2025.

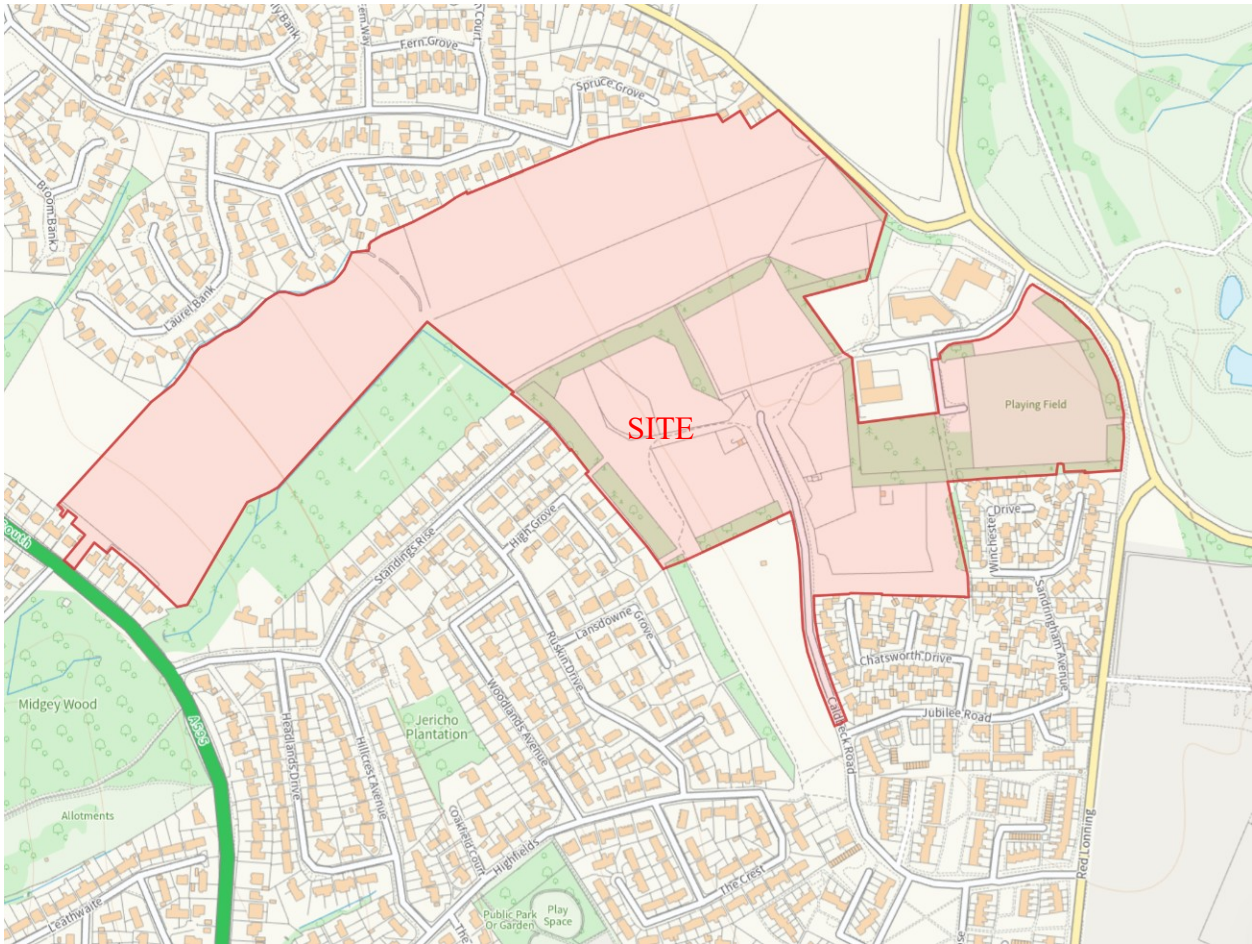
1.1.4. Revision A of this report dated 10.06.26 accommodates a revised layout which is shown in Appendix 1.

1.1.5. The proposed layout is indicated in Appendix 2.



Site location Plan showing the site in the context of Whitehaven and the adjacent residential areas.

Westwood Landscape Design Ltd Ordnance Survey Licence Number AC0000830021



OS Plan showing the context of the site in relation to the adjacent residential areas.
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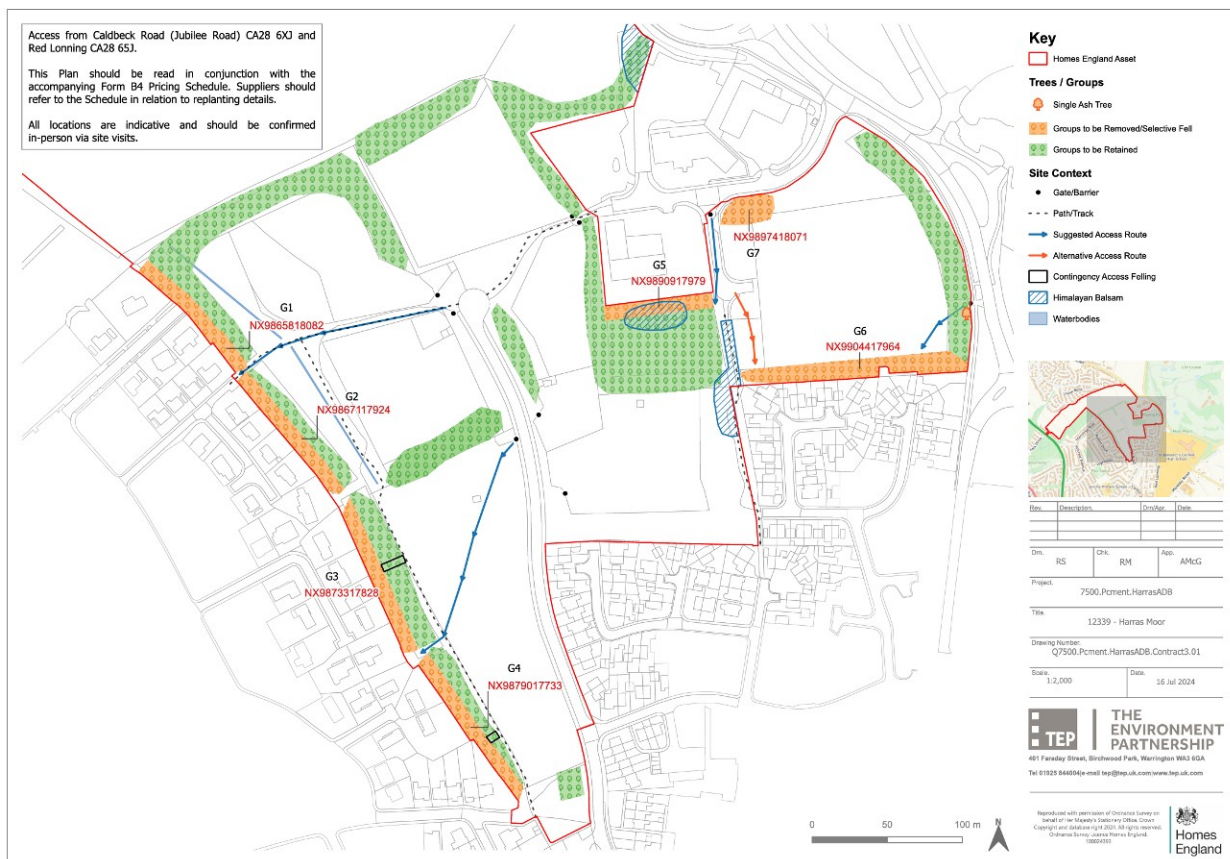


SITE

Aerial view showing the site in the context of the adjacent woodland, landscape and residential areas.

Westwood Landscape Design Ltd Ordnance Survey Licence Number AC0000830021

1.1.5. It is noted that proposed felling works are planned to remove Ash trees affected by Ash Dieback disease in a programme for Homes England. In the plan below groups G3 and G4 have been completed and groups G1, G2, G5, G6 and G7 will be cleared before the end of 2025. Note that the group references do not correspond to the references in this report. The felled areas will be re-stocked as part of the landscape mitigation proposals.



1.2 METHODOLOGY

1.2.1. The survey data and tree constraints assessment were recorded in the standard schedule format required by the Local Planning Authority. Survey work is in accordance with BS5837 2012 Trees in Relation to Design, Demolition and Construction. Direct and indirect constraints on trees and hedges within and adjacent to the site will be assessed and both above and below ground impact considered.

1.2.2. Tree height was recorded with a Leica Disto D810 digital laser measure to record distance to the tree base and to automatically calculate height.

1.2.3. Crown height and spread was recorded with a Leica Disto D810 digital laser measure. Trunk circumference is measured by tape at 1.5m above ground level.

1.2.4. Below ground constraints are influenced by the RPA and are determined in line with the recommendations set out in section 4.6 of BS 5837:2012. The Root Protection Area (RPA) radius is calculated as stem diameter (d.b.h.) x 12. The RPA for multi-stemmed trees is calculated from the diameter of the individual stems rather than the circumference above the root flare (recent change in the April 2012 update to the BS). The combined stem diameter for trees with 2-5 stems is calculated using the formula 'square root of the sum of individual diameters squared'. For more than 5 stems a mean value is used. Trunk lean was measured with a clinometer and spirit level. Note that the RPA is recorded as a circle on the tree constraints plan in accordance with the BS but the actual spread of roots on site may vary significantly due to level changes, barriers and site conditions.

1.2.5. The walkover survey involved inspection and measurement of above ground parts of the trees only as required by the brief. No trial excavations, soil samples or tree testing was carried out. More detailed investigations may be required to appraise the potential arboricultural impact prior to the construction phase of the project.

1.2.4. The Tree Schedule records all the data required in British Standard BS5837: 2012 Trees in Relation to Construction. The criteria used is as follows:

Classification Criteria

Information on the trees is provided in the Tree Tabular Data as follows:

- Species Age Class:-

RP: Recently planted trees – up to approximately 5 years old.

Y: Young – established tree up to one third the expected ultimate height

EM: Early Mature (Semi-mature) – between one third and two-thirds the expected ultimate height. Growth rate still increasing.

YM: Young Mature (Semi-mature) – Growth rate stabilises, although tree has not obtained full potential stature.

M: Mature – full stature achieved, more or less full height, but still increasing in girth.

NOTE: The Young Mature and Mature period may account for approximately half the trees' life span.

LM: Late Mature (over mature) – Crown may begin to decline. Annual increment declines or slows down.

Intermediate classifications can be used where trees do not fall clearly within an age class.

- Diameter at Breast Height – (dbh. measured in centimetres at approx 1.5m)
- Height – (Approximate height measured in metres)
- Height of Main Fork – The height of top of main stem.
- Height of Crown – The height of the crown (to general lowest point above ground level) where appropriate.
- Condition - A general Classification of Condition: For example, Good; Fair; Poor; Dead; Dangerous, followed by information regarding condition or any other comments regarded as relevant.
- Recommendations - Action recommended in the interests of safety and in accordance with good arboricultural practice.
- Physiological Condition – Overall appraisal of the trees health / biological condition together with any relevant comments e.g. pests and diseases. Ratings: Good, Fair, Poor, Dead.
- Structural Condition – Overall appraisal of the trees structural condition together with any relevant comments e.g. dead, damaged branches. Ratings: Good, Fair, Poor, Dead. Action and Comments (in the context of proposed development).
- Recommendations – action required to facilitate the development, for safety or future health of the tree.

1.2.5. The tree quality assessment follows the following scale based on arboricultural qualities, landscape qualities and cultural values including conservation:

Trees unsuitable for retention

Category U

Trees in a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years and any existing value will be lost within that period. These trees should be removed for sound arboricultural reasons. Note Category U trees can have existing or potential conservation value which might be desirable to preserve if this does not impose an unacceptable risk. Habitat re-instatement or protection may be appropriate for species such as bats. E.g. installation of bat boxes, or leaving as a safe structure of no arboricultural value, but very good for invertebrates, owls, woodpeckers etc.

Examples of trees in this category include:

- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse. Includes those that will be exposed following removal of other category U trees, because their sudden exposure increases risk of failure.
- Trees that are dead or are showing signs of irreversible, immediate decline.
- Trees infected with pathogens that threaten the health or safety of other trees nearby.
- Very low value trees restricting the growth of specimens of better quality.

Trees to be considered for retention

Category A

Trees of high quality and value with an estimated remaining life expectancy and substantial contribution of at least 40 years. They be good examples of the species (rare or unusual) or essential components of groups, or of formal or semi-formal arboricultural features. Trees, groups or woodlands which provide a definite screening or softening effect to the locality (views into or out of the site), or those of particular visual importance and high amenity value. These may include trees, groups or woodlands of significant conservation, historical or cultural value.

Category B

Trees of moderate quality and value with an estimated remaining life expectancy and substantial contribution of at least 20 years. They may not achieve Category A rating due to impaired condition from which they may recover. The tree condition, arboricultural, ecological habitat, landscape and amenity value will be lower than Category A trees but higher than Category C trees.

Category C

Trees of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. Trees in a suitable condition to be retained until they mature or improve (if damaged, diseased, misshapen, etc) or until other trees are established. The tree condition, arboricultural, ecological habitat, landscape and amenity value will be lower than Category A and B trees. Removal of Category C trees to accommodate a development is often considered acceptable as replacements trees can achieve the same level of landscape and amenity value quite quickly. Small trees below 150cm girth could be re-located.

2.0 SURVEY RESULTS

2.1. LEGISLATIVE PROTECTION

- 2.1.1. The Town and Country Planning (Tree Preservation England) Regulations 2012 set out the scope of tree preservation orders and also the scope of the protection afforded to trees in Conservation Areas.
- 2.1.2. There are no Tree Preservation Orders affecting the study area which is not within a Conservation Area. However the site adjoins Midgey Wood (W1 on the Tree Constraints Plan L02) part of which is designated as an Ancient Woodland. Crowpark Wood which lies 100m to the west of the site is also an Ancient Woodland. This recognises the high quality and landscape value of the woodland and their sensitivity to development change.
- 2.1.3. Statutory wildlife obligations must be considered including: The Wildlife and Countryside Act 1981 as amended, the Countryside and rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017. These regulations protect all wild birds and make it an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird. Bats are protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 making it an offence to damage or destroy a roost site even if unoccupied.

2.2. SPECIES COMPOSITION AND CONDITION

- 2.2.1 The survey area was restricted to the trees which could potentially be affected by the Construction and Operational phases of the proposed development. The species surveyed were Ash, Oak, Hawthorn, Alder, Willow, Sycamore Cherry, Scots Pine, Aspen, Elm, Crab Apple, Beech and Blackthorn. These are common species and well represented in the area.
- 2.2.2. There were no unique species or specimens recorded. No special characteristics or protected or rare species were noted in the shrub or ground flora although no detailed botanical survey was carried out.

2.3. DIRECT IMPACT

- 2.3.1. Based on the design layout in Appendix 2 the potential direct impact on the trees as a result of the proposed development will include:
 - G1: Minor cutting back of encroaching western edge trees to accommodate the proposed cul-de-sac and shared drive. The proposed road impedes within the RPA of the retained trees which may have unstable trees at the retained margin vulnerable to windthrow. There is also a proposed footpath connection to the east which will require tree clearance from group G1.
 - G2: Minor cutting back of encroaching southern edge trees (20 sq.m.) to accommodate the proposed play area. The proposed play area surfacing impedes within the RPA of the retained trees.

- G3: Removal of the north-west section to accommodate the proposed access road and housing. The proposed road impedes within the RPA of the retained trees.
- G4: Removal of the north-east section to accommodate the proposed access road and SUDS basin. The proposed road and SUDS impede within the RPA of the retained trees.
- G5: Removal of sections to accommodate the proposed footpath and access road. The proposed road and footpath impede within the RPA of the retained trees.
- G6: Removal of areas for the proposed access road, footpath and SUDS. The proposed road and footpath impede within the RPA of the retained trees.
- G7: Complete removal of this small group to accommodate the proposed POS and roads.
- G8: Complete removal of this small group to accommodate the proposed POS, housing and roads.
- G9: Removal of most of the group to accommodate the proposed houses and gardens at plots 268-275 leaving any trees beyond the boundary in suitable condition.
- G10: Removal of part of the group to accommodate the proposed house and garden at plot 267 leaving any trees beyond the boundary in suitable condition. The retained trees are outside the site boundary but may be affected by regrading to achieve the required levels.
- Woodland W1 will be unaffected as this is beyond the application site boundary and the adjacent site area will not include any earthworks or ground level changes.
- Tree T1 is a dead Ash tree to be removed.
- Trees T2-T5 are all Category 'C' Hawthorn beyond the Application boundary and will be unaffected.

3. LANDSCAPE AND AMENITY VALUE

3.1 The trees surveyed are collectively of moderate to high landscape and amenity value as they are landscape elements which contribute to the landscape character and setting at the urban fringe. Individually the trees are of low to moderate landscape and amenity value and tree groups from moderate to high value. They comprise mostly native species and are of moderate to high ecological value.

3.2. Woodland W1 Midgey Wood is of notable high value recognised by the designation of Ancient Woodland to the southern section. It is in reasonable condition except for the diseased Ash trees.

3.3. The presence of the dead and dying diseased Ash trees reduces the landscape and amenity value of the woodland and tree groups.

3.4. The survey noted some sections of remnant hedges to the west boundary adjacent to the proposed large POS area which are predominantly Hawthorn in poor condition with many gaps and of low landscape and amenity value. These hedge remnants are well away from the construction zone and are therefore not formally recorded in the survey schedule. The development offers an opportunity to restore these hedgerows and increase the landscape and amenity value and ecological benefit.

3.5. Refer to the Tree Schedule in Appendix 1 for further detailed comments.

4.0 ARBORICULTURE METHOD STATEMENT FOR PROTECTION OF TREES

Refer to Appendices.

4.1 Refer to Tree Mitigation Plan L03 for location of trees to be retained and extent of Root Protection Areas (RPA's) which form a Construction Exclusion Zone (CEZ).

4.2 Protective fencing to be erected prior to the commencement of any other work to ensure that the trees and hedges are protected in accordance with British Standard 5837:2012 Trees in Relation to Construction. Such measures shall be retained for the duration of any approved works. Refer to detailed fencing drawing below in the Appendix.

4.3. Protective fencing must remain intact and in place, and protection procedures must be adhered to throughout the construction period. Removal of protective fencing should be the last job carried out on completion of the project.

4.4. No mechanical traffic should be allowed above a tree's root zone as this could cause compaction and damage roots. No excavations of any kind to take place within the root zone area of protected trees. No materials should be stored within the RPA or any ground level increase. No re-fuelling or any other activity which may lead to chemical spillage should be carried out within or close to the RPA. No fires to be lit within the RPA.

4.5. In certain circumstances it is possible to accommodate construction activities within the RPA distances recommended by the B.S. 5837:2012 calculation. This may be unavoidable for the proposed works but this will not necessarily lead to tree damage if this methodology is carefully followed. Intrusive work within the RPA should be restricted to one side of the tree and the protection zone extended on the other sides to compensate.

4.6. Pre-construction Stage

4.6.1. Prestart site meeting involving Architect, Contractor and potentially client and LPA representative if requested. Timing and implementation of the agreed Tree Works and installation of Tree protection measures.

4.6.2. Clearance of the required tree groups and completion of the diseased Ash tree removal programme by Homes England.

4.6.3. Tree protection fence installed and LPA informed and given opportunity to inspect.

4.7. Development Stage

4.7.1. Contractors RAMS assessed by Architect and Landscape Architect/ Arboriculture Consultant.

4.7.2. Minimal dig construction method to be followed where work is unavoidable within the RPA of retained trees at the margins of the tree groups. This applies within an area 2m from the tree canopy line.

- For the permanent surface solution within the RPA's a cellular confinement system of gravel-filled rigid cells or simply gravel of total construction depth of 150mm should be used to ensure unimpeded water and air penetration to the tree roots. These can be edged with treated timber (32 x 200mm), supported in place with 50mm x 50mm treated wooden pegs driven into firm ground rather than a concrete kerb requiring excavation for strip foundation which could sever roots. These requirements must be verified by the Engineer following appropriate CBR tests and design. Alternative surface solutions are feasible provide they are permeable.
- Any existing vegetation over the area of the construction should be treated with a proprietary translocated Glyphosate based herbicide such as 'Roundup' and cut down to ground level. Remove vegetation to 25mm maximum depth.
- Excavation of the topsoil to a maximum depth of 150mm and no greater than 100mm beyond the proposed timber edges should be carried out carefully by hand or with an air spade within the RPA's. Any exposed tree roots should be re-covered with excavated topsoil as soon as possible or wrapped in hessian if they remain exposed. This will prevent root damage from drying out or sudden changes in temperature. The wraps should be removed before backfilling. Roots smaller than 25mm in diameter which are obstructing the work can be pruned with bypass secateurs or a handsaw except where they occur in clumps when the Arboricultural consultant must be consulted. Trial excavations using an air spade or careful hand excavation prior to detailed design will inform the position of any large roots which require protection. The depth and position of the proposed drainage plant may need to be adjusted to accommodate retained tree roots.
- Following excavation the timber edges will be installed followed by a Terram 1000 or a similar weed suppressant membrane laid over the whole RPA area to receive 5-40mm Type 3 sub-base aggregate to ensure water and gaseous exchange is maximised. Lightly compact the base to prepare for the gravel-filled geogrid or similar permeable surfacing.
- Once the final surfacing is installed topsoil should be spread to infill the void adjacent to the timber edges and to finish the ground level to a smooth profile. Any minor irregularities, lumps or hollows in the ground level will be evened out or filled in with topsoil using hand tools.
- Where construction traffic within the RPA of retained trees is unavoidable a temporary protective track should be formed with interlocking panels (I-track system or similar) over a compressible layer of 200mm bark mulch or chipped wood. A more lightweight solution of timber boards will be suitable for pedestrian only routes. The boards must be suitable to spread the anticipated load such as heavy-duty scaffold boards.

4.7.3. Site inspections by the Landscape Architect/ Arboricultural Consultant is advisable as required during the works, especially if tree roots are encountered. If large tree roots are encountered the methodology will be adapted to ensure protection.

4.7.4. Removal of Protective Fencing once the main construction work is completed to allow re-surfacing and planting work within the CEZ.

Contacts:

Client: Gleeson Homes Ltd

Contact: To be confirmed

Landscape Architect/ Arboriculture Consultant:

Contact: Bruce Walker, Westwood Landscape Design Ltd, Carlisle Tel. Mobile 07736 364337

5.0 TREE MANAGEMENT WORK

Refer to Tree Schedule in Appendix 1

5.1. Removal of the tree groups identified.

5.2. Completion of the diseased Ash tree removal by Homes England.

5.3. Eradicate Himalayan Balsam (eg margins to tree group G4)

5.4. Management of the retained trees in accordance with the Tree Schedule.

6. PROPOSED PLANTING

6.1 The Landscape Plan L01A (Appendix 2) incorporates a planting strategy for a robust landscaping scheme which will fully compensate for the loss of the tree groups. There are opportunities to enhance the local biodiversity through tree and hedge planting. Mostly native species of trees and hedges will be selected.

6.2. The Ancient Woodland at Midgley Wood will be protected and enhanced with proposed native woodland planting at the margin to buffer and extend the habitat. Similar planting of native trees and shrubs are proposed to the retained tree group margins throughout the proposed POS areas. The proposed woodland planting areas greatly exceed the area of proposed woodland clearance. The design objective is to maintain the woodland margin landscape character of the area.

6.3. Other biodiversity enhancement measures include areas of shrubs, wildflower grass and native marginals to the SUDS basins.

7.0 ARBORICULTURAL IMPLICATION ASSESSMENT AND MITIGATION DESIGN

7.1 The Arboricultural Implication Assessment considers how a proposed development and its associated trees and hedges will co-exist and interact in the present and future. An AIA is a document required by Planning Authorities to enable them to satisfy themselves that factors such as root protection, changes in levels, installation of

services, material storage, etc have been duly considered during the development layout and that these items will not prove detrimental to the retained trees and hedges. It will address the combined effect of potential multiple site operations and will assess future issues such as the long- term effects of changing a surface level or the future requirement to prune or remove trees and hedges because they cast excessive shade or encroach upon property. The AIA considers constraints posed above and below ground and makes recommendations to mitigate impacts associated with development sites and retained trees.

7.2. The following factors were broadly assessed based on the initial site appraisal but not a provisional design layout:

7.2.1. Levels: Changes to ground levels within the RPA of the retained trees should be avoided. The proposed house at plot 160 will impede the RPA of retained trees in group G6 and the sensitive methodology for excavation described in this report should be adopted when excavation for the house foundations.

7.2.2. Services: There was no detailed service information available for assessment but the routes for the proposed pipes and cables should be sensitively designed to avoid tree root damage. No impact on the retained trees is anticipated.

7.2.3. Water demand: The proposals are not likely to significantly alter the supply to or requirement of the existing trees.

7.2.4. Light: The retained trees will impede light to the proposed houses in close proximity to the tree group margins. However this will not be overbearing, and the woodland setting is part of the established landscape character.

7.2.5. Canopy obstruction: Some pruning to the tree group margins will be required to avoid obstruction and damage in the Construction Phase. Refer to the clearance areas indicated on the Tree Mitigation Plan L03A.

7.2.6. Compaction of tree and hedge RPA: Provided the root protection fence is installed as recommended root damage from compaction within the RPA's will be avoided.

7.2.7. Storage of materials/ Compound: No material or temporary compound activities will be within the fenced off Construction Exclusion Zones. This will avoid compression or spillage damage to tree roots.

APPENDIX 1

Tree Schedule

Tree ID	Common Name	Botanical Name	Height (m)	Calc. / Actual Stem Dia. (mm)	Crown spread (m)				Height (m) & Orientation of First Significant Branch	Avg. Canopy Height (m)	Life Stage	General Observations	Preliminary Recommendations	Estimated Remaining Contribution (Years)	BS5837: 2012 Category
					N	E	S	W							
T1	Ash	<i>Fraxinus excelsior</i>	3m	95	1	1	1	1	N/A	N/A	Dead	Dead tree.	Fell	Dead	U
T2	Hawthorn	<i>Crataegus monogyna</i>	2m	250	2.5	2.5	2.5	2.5	N/A	N/A	Middle aged	Multi stem, field grown tree with some minor stem damage from livestock. Some minor dieback.	No work required	10 - 20	C
T3	Hawthorn	<i>Crataegus monogyna</i>	2m	300	2.5	2.5	2.5	2.5	N/A	N/A	Middle aged	Multi stem, field grown tree with some minor stem damage from livestock.	No work required	10 - 20	C
T4	Hawthorn	<i>Crataegus monogyna</i>	1.8m	250	2	2	3	2	N/A	N/A	Middle aged	Multi stem, field grown tree with some minor stem damage from livestock.	No work required	10 - 20	C
T5	Hawthorn	<i>Crataegus monogyna</i>	2.5m	300	3	3	3	3	N/A	N/A	Middle aged	Multi stem, field grown tree with some minor stem damage from livestock.	No work required	10 - 20	C
Group ID	Common Names	Est. No. of Trees	Average Height (m)	Calc. / Actual Stem Dia. (mm)	Crown spread (m)				Life Stage	General Observations	Preliminary Recommendations	Estimated Remaining Contribution (Years)	BS5837: 2012 Category		
					N	E	S	W							
G1	Ash, black thorn, alder, hawthorn, silver birch, goat willow, cherry, crab apple	150	16m	250					Middle aged	Roadside shelterbelt group with a diverse species mix. Large proportion of ash which is largely dead or dying from ash dieback. Ash dieback is noted throughout the locality. To the north where the group borders the footpath there is low branching over it.	Thin dead / dying ash out. Prune low branches over the footpath.	10 - 20	C		
G2	Alder, ash, Scots pine, Oak, Elder	30	15m	300					Middle aged	Small block of woodland in poor unmanaged condition, borders public road of industrial estate. Some dying ash trees have been previously paint marked. Many dead trees within incorporates a hedge to the east.	Thin dead ash trees prune back over the pavement.	10 - 20	C		
G3	Ash, sycamore, cherry, Scots pine, silver birch, elm	100	16m	250					Middle aged	Tree group borders existing housing at Winchester Drive. Has a large amount of dead /dying ash trees. Long term tree safety needs to be factored in with many trees overhanging the adjacent properties gardens. Himalayan balsam noted on western edge.	As a priority fell dead / dying ash trees. Clear groups and replant.	10 - 20	C		
G4	Sycamore , beech, oak, hawthorn, aspen, alder, elder, elm	150	16m	350					Middle aged	Tree group bordering Sunbelt Rentals depot. Some good quality trees within as well as some unmanaged. Some clearance has taken place as there are some open areas. Himalayan balsam noted. A few dead /dying ash trees. Would benefit from thinning. Den/shelter noted.	Remove dead ash trees and carry out selective thinning. Note there is a transformer at norther end.	20 - 40	B		

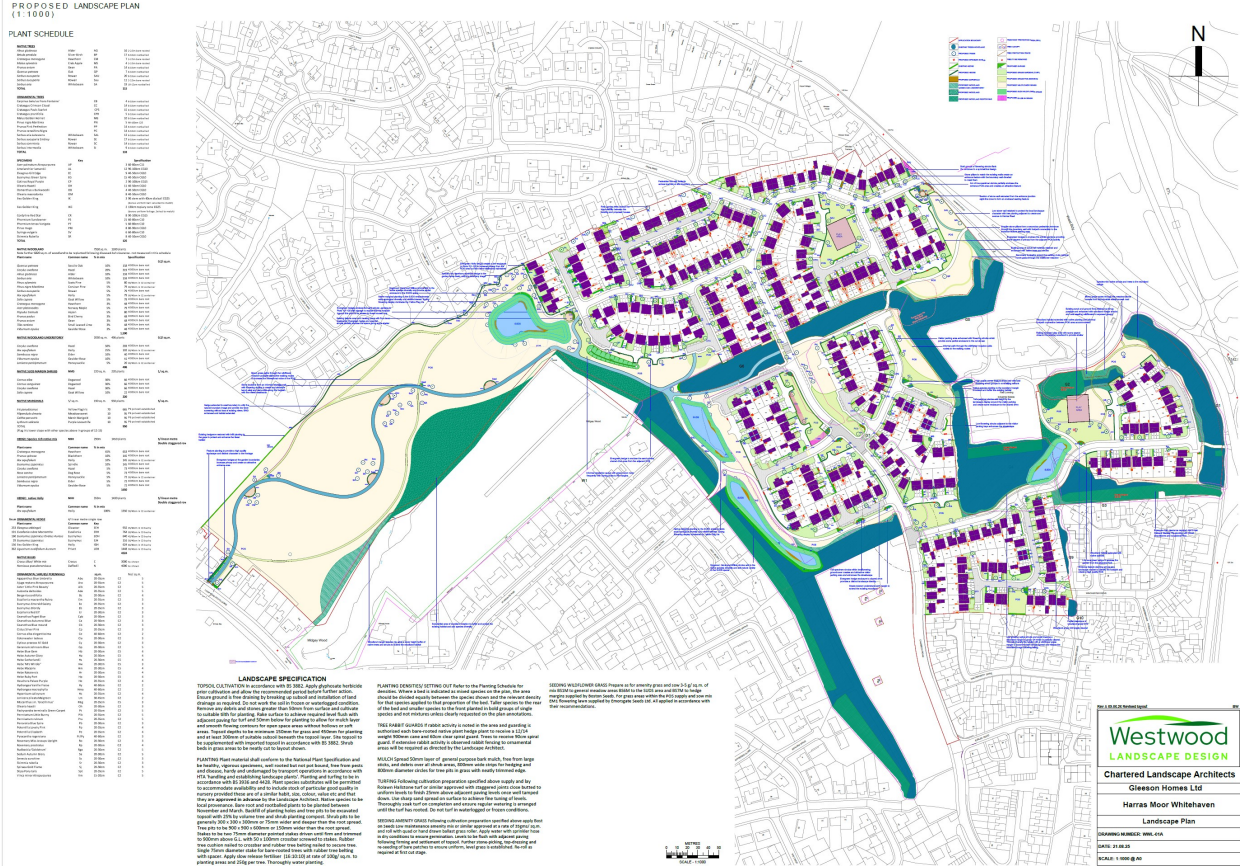
Group ID	Common Names	Est. No. of Trees	Average Height (m)	Calc. / Actual Stem Dia. (mm)	Crown spread (m)				Life Stage	General Observations	Preliminary Recommendations	Estimated Remaining Contribution (Years)	BS5837: 2012 Category
					N	E	S	W					
G5	Sycamore, ash, oak, hawthorn, beech, elder, poplar	100	15m	250					Middle aged	Poor unmanaged tree group, lots of dead / dying ash within. Ash dieback prevalent. Tree group borders a storage compound.	Remove dead ash trees and replant.	10 - 20	C
G6	Ash, alder, oak, hawthorn, sycamore , aspen , Scots pine, holly, elder	400	16m	350					Middle aged	Ash dieback throughout which needs removing and replanting. Some good trees within and provides excellent screen / wildlife corridor. Well used footpath through the block. Western side borders existing housing so tree safety needs to be considered. Himalayan balsam noted. Note: 10x tree felled, unskilled felling so likely to be unauthorised I would expect. Near High Grove see photos.	Remove large number of dead ash trees and replant.	20 - 40	B
G7	Hawthorn,	6	2.5m	200					Middle aged	Small group of scattered hawthorn. Surrounding vegetation are just tall weeds.	No work required.	10 - 20	C
G8	Blackthorn, rowan, cherry, goat willow, ash, elder, hawthorn	40	10m	100					Young	Dense, unmanaged roadside shelterbelt. Power line running through it.	No work required.	10 - 20	C
Group ID	Common Names	Est. No. of Trees	Average Height (m)	Calc. / Actual Stem Dia. (mm)	Crown spread (m)				Life Stage	General Observations	Preliminary Recommendations	Estimated Remaining Contribution (Years)	BS5837: 2012 Category
					N	E	S	W					
G9	Goat willow, hawthorn, silver birch	8	3m	100					Middle aged	Poor condition trees largely self-established. Large swath of Himalayan balsam noted.	No work required.	10 - 20	C
G10	Crack willow	10	3m	40					Middle aged	Spreading group of willows near to houses. Poor condition. Recently cut badly presumably by a neighbour see photos.	Remove to facilitate the development.	10 - 20	C
W1	Oak, sycamore, holly, alder, ash, Silver birch	400	18m	450					Mature	Good quality woodland classed as ancient semi natural woodland so an important habitat. Good mix of species and generally good condition except for the ash trees. W1 is cut with the site ownership. High quality woodland but has some dead ash trees within. Some rhododendron noted likely to take over if left.	Protect during development. Dead/ dying ash trees could be removed. Remove rhododendron.	40+	A

1. Main issue is ash dieback which is noted throughout the locality. Recommend removal of ash for safety as it looks poor throughout the site with the vast majority of ash trees either dead or dying. Didn't see any healthy ash trees. Recommend clearing ash trees in areas and replant with native species. Worst area G1, G3, G5 and G6.
2. The ash clearance may provide area for access roads to be adjusted, instead of clearing new areas.
3. Some of the individual hawthorn and alder trees fall below the size threshold of BS5837 and would in any case be Category C.
4. Within G4 it might be possible to use open areas once ash has been removed to put access road in these areas. Woodland is good quality.
5. Tree protection measures will need to be adequately set out and managed during construction.
6. Himalayan balsam noted in several areas and control measures need to prevent further spread. Advise that areas are hand pulled in areas where development may take place in advance.
7. G4 – has a large well used den constructed within see photos.
8. G6 – has some sycamore trees recently felled - assumed for firewood.,
9. G10 – Crack willow have been cut badly.
10. Tree safety – annually survey needed as several areas border housing.

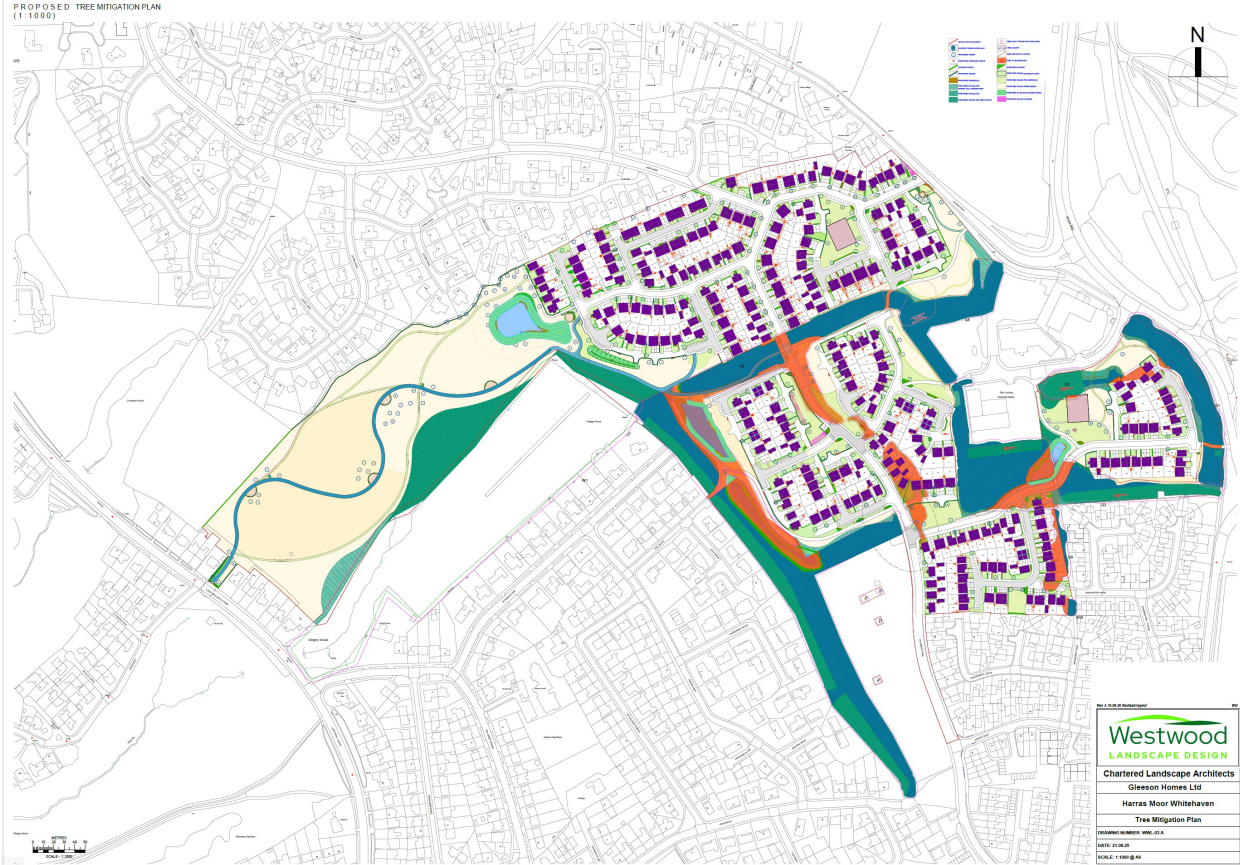
APPENDIX 2 Tree Constraints Plan L02



Tree and Hedge Mitigation Plan L03A



Landscape Plan L01A



APPENDIX 3
Photographs



1 Group 1



2 Group 1 showing extensive diseased Ash



3 Group 1 from the roadside Harras Road



4 Group 2 to the south-east of the industrial estate.



5 Group G3 at the southern boundary of the east section of the site.



6 Group G4 to the south boundary of the industrial estate.



7 Himalayan Balsam to be controlled.



8 Groups G5 (right) and G6.



9 Group G6 bordering houses.



10. Group G6



11 Group G6 dying Ash trees.



12 Group G6



13 Group G6



14 Groups G7 (left and G8 (right)



15 Group G9



16 Group G9



17 Group G10



18 Midgey Wood W1 part of which is an Ancient Woodland.



19 Midgey Wood W1



20 Tree T1 dead Ash



21 Trees T2-T5 scattered Hawthorn



22 Trees T2-T5 Hawthorn.

APPENDIX 4

Tree Protection Fence Detail

