

FEWCOTT ROAD, FRITWELL

SOFT LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN



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Revision	Date	Details	Revised

1.0 Objectives

- 1.1. To ensure the successful planting operations, establishment, and continued healthy growth through to maturity of the trees, shrubs, and grass.
- 1.2. To achieve a clean, tidy condition and appearance of all external areas.
- 1.3. To ensure that the development provides biodiversity enhancements, through measures outlined in the Ecological Enhancement Plan.

2.0 Background Information

2.1. The controlling authority is Cherwell District Council, which should be consulted on any matters relating to existing trees and the approved ACD detailed landscape proposals for the project.

Cherwell District Council

Bodicote House,

Bodicote,

Banbury

OX15 4AA

01295 227001

3.0 Preliminaries

- 3.1. Failures of Plants (Pre-practical Completion): The Contractor entirely at his own cost shall replace any trees, shrubs, or other plants other than those found to be missing or maliciously damaged.
- 3.2. Malicious Damage or Theft before Practical Completion: The Contractor at his own expense shall make all loss or damage arising from theft or malicious damage before practical completion of the entire project good.
- 3.3. Post Practical Completion: The Contractor will carry out the maintenance of trees, shrubs, and grasslands after the date of practical completion until the responsibility is transferred to the new owners or by the appointed Management Company.
- 3.4. Replacement of plants shall take place as many times as is necessary to maintain a complete cover of plants and to maintain the scheme as designed by the Architect, and within the correct season for the type of plant, tree, shrub, and grassland mix.

4.0 General Maintenance

- 4.1. Following installation and after transfer the landscape shall be the responsibility of and maintained in perpetuity by:
 - Domestic Owners,
 - CALA Homes and their appointed Management Companies (should these be contracted out),
- 4.2. The agreement for which shall be set up by the Developer, who shall confirm in writing to the Principal Planning Officer of Cherwell District Council when the maintenance agreement is completed and is operative.
- 4.3. Refer to ACD drawing CALA23708 -50 Landscape Maintenance Plan (Appendix 1) for an overview of the responsible parties for the landscaped areas.
- 4.4. This Landscape Management Plan relates to the Approved detailed landscape plans produced by Lockhart Garratt. The 8 sheets of the landscape scheme can be found in Appendix 2 of this report.
- 4.5. The Developer shall ensure that any landscape contractor employed by the developer shall carry out the periodic maintenance of all planted areas, other than any areas for which the appointed Management Company becomes responsible during the said Maintenance Period. Inspection checks shall be carried out at monthly intervals and the appropriate work carried out.
- 4.6. The Developer shall ensure that any landscape contractor employed by the developer shall carry out <u>in all areas</u> any shrub, tree, grass, and other plants replacements that may be necessary until the transfer of responsibility to the Management Company.

- 4.7. The Management Company shall be responsible for all periodic maintenance and replacement thereafter for all planted areas to which its management agreement relates and shall ensure that any landscape contractor employed by it carries out periodic maintenance of all such areas following the general horticultural schedules below. Either inspection checks shall be carried out by a competent person, a member of the British Association of Landscape Industries (BALI) or the Landscape Institute (LI), acting for the Management Company, at minimum monthly intervals and the appropriate work carried out.
- 4.8. No existing trees, shrubs, or grass shall be removed or cut without specific instructions from the Contract Administrator and written agreement of the Local Planning Authority Tree Officer. Existing trees are to be retained, protected, and undisturbed throughout the contract.
- 4.9. The Ecological Management Plan (EMP), produced by Ethos, outlines a number of ecological habitats recommended and incorporated as part of the approved landscape scheme. These can be found in the approved landscape plans in Appendix 2.
- 4.10. As part of the EMP, there are a number of bird and bat boxes and hedgehog holes proposed. Management of these will be limited to an annual monitoring and replacement as required, if damaged.
- 4.11. This management plan should be made available to the new owners to help outline the principles of the retained habitats and encourage the future management of these areas in perpetuity.

5.0 Existing Trees and Vegetation

- 5.1. All works should be undertaken following the British Standard BS3998:2010 Tree Work Recommendations, by recognised tree contracting companies from the Arboricultural Association's list of registered contractors. Proof of experience and insurance providers will be required. All work shall be undertaken at the appropriate time and with the consent of the Management Company and Local Planning Authority if necessary.
- 5.2. All operations should be carried out sensitively, taking care not to unnecessarily damage the trees that are being worked on or any other neighbouring vegetation. The practice of natural target pruning should be used to ensure that branches are not cut "flush" with the stem, and conversely, a "stub" is not left proud, as in both scenarios it is not possible for the tree to adequately react to the wounding and may lead to an area of decay developing.
- 5.3. All trees on site should be visually checked annually. These checks should be staggered so that the trees are inspected at different times in the year. If any tree displays signs of decline, distress or damage then a competent person should be instructed to carry out a tree inspection where necessary. A comprehensive inspection of all the trees on site should be carried out by a competent person at a maximum interval of every three years.
- 5.4. All arisings from any work carried out, including leaf material, branches, wood chip, and timber should be removed from the site, unless otherwise specified. The work site should be left clean and tidy as instructed.
- 5.5. If large branches or entire trees need to be dismantled it is recommended that a rigging system be used where possible to reduce the risk of damage to surrounding structures and also to reduce ground compaction and deterioration during works. It is preferable if contactors are certificated with NPTC Unit CS41 Dismantling and Rigging.
- 5.6. Heavy Ivy infestation is not recommended in development situations, where wind risk may be a concern. The form of the tree can also be affected and it is therefore

proposed to remove any dense infestation of Ivy if evident or to simply sever any ivy stems at the base of the tree during the maintenance period.

5.7. Existing hedgerow along eastern boundary will be cut on rotation once every three years on alternate sides (left/top/right) to ensure high fruit production. The hedgerow will be cut between January – February to avoid impacts on wildlife and to ensure high fruit production. Annual monitoring will inform the management regarding the rejuvenation of the hedgerow; this can include options such as hedge laying or coppicing.

6.0 Amenity Grass (Turf)

- 6.1. Grass shall be cut during the growing season (generally April-October) using a sharp cutter to leave about 30-35mm of growth and remove arisings from the site or take to composting area.
- 6.2. To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4 weeks). Mowing may be suspended earlier in the year to allow cowslips to flower.
- 6.3. Grass will be cut at intervals of not more than 10-14 days depending on growing conditions. Arisings shall be collected and removed from the site. A dressing of prepared fine fishmeal shall be applied at the rate of 60gms/m squared after the second mowing and the arisings of the cut following are to be allowed to fly.
- 6.4. The sward shall be maintained weed-free by an annual application of a selective weed-killer or other equal and approved as necessary. This is to be used by an appropriately trained and qualified individual.
- 6.5. Grassed edges to planted areas to be trimmed to maintain a clear smooth edge to planted beds; strim edges elsewhere but not against trees; spike annually in October.
- 6.6. Should bare patches of grass develop, the area is to be cultivated to 150mm and then seeded with amenity grass seed. To be cross-sown in two directions at right angles to each other,(half the seed is used in each direction) at the rate of 35 gm per square meter and the ground lightly raked over on a still dry day when the top 25mm of soil is dry. Use 'A22 Low maintenance' mix as supplied by Germinal Seeds Ltd, or similar and approved by Local Planning Authority. Germinal Seeds Ltd tel: 01522 868714.

7.0 Wildflower Grassland

- 7.1. Following the autumn sowing (Year 1), the wildflower grassland is to be cut in March to 4-7cm if there is sufficient material. It is then to be cut to 4-7cm in early May and to 4cm in September (following flowering).
- 7.2. During the following year (Year 2), the wildflower grassland is to be cut to 4-7cm in March/April (to remove excess grass) and to 4cm in September/October (following flowering).
- 7.3. Once established (Year 3 onwards), the grassland will be cut up to three times a year; first cut) in the spring (Feb-March to 4-7cm), second cut late summer (august-Sept to 4-7cm), and third cut as aftermath cut in the autumn (October to 4cm)
- 7.4. For the swales and attenuation basin, these should be managed to maintain good variation in structure by cutting sections on a two to three-year basis on rotation.
- 7.5. Works to swale and attenuation features must be undertaken between September and November to minimise the effects on wildlife such as amphibians or reptiles.
- 7.6. All arisings are to be removed from the site or to composting area.
- 7.7. Any hollows which appear shall be filled in with topsoil and allowed to re-seed naturally.

New Shrub, Hedge and Tree Planting 8.0

- The Management Company will maintain all shrubs and trees beyond the 8.1. boundaries of domestic ownership in perpetuity.
- 8.2. Formative tree pruning is to be undertaken until a permanent structurally sound scaffold system of branches typical of the species and appropriate to the site circumstances is produced.
- 8.3. Post-planting management and maintenance of trees shall be following BS8545:2014 section 11 Trees: from nursery to independence in the landscaperecommendations.
- 8.4. A formal assessment of young tree health and development shall be undertaken annually. This assessment shall include foliar appearance, leaf size and leaf canopy density, extension growth, and incremental girth development. Trees shall also be assessed continually throughout the year on an ad hoc basis. Wherever practicable the performance of young trees shall be assessed by testing leaf fluorescence and leaf chlorophyll content.
- 8.5. The density of planting will require that all weeding is carried out by hand, using the appropriate tools. All resultant material should be removed from the site.
- 8.6. The Management Company is responsible for litter picking in those areas that it manages.
- 8.7. All plants shall be inspected monthly for wind firmness and firmed as necessary at the same time. Stakes shall likewise be checked for firmness and all tree and plant ties inspected and made good if required.
- 8.8. All stakes and ties shall be removed as soon as the developing root system is strong enough to support the tree, this is usually after two full growing seasons.
- 8.9. Wires or straps used in underground guying systems that could cause damage to the growing stem or structural roots shall be cut as soon as the tree is selfsupporting.

- 8.10. All grilles, grids, guards, and other protective furniture shall be inspected annually and removed as soon as it is no longer needed to protect the tree or where it is causing damage to the tree.
- 8.11. The soil around newly planted trees shall be regularly inspected for soil capping or compaction and remedial action is taken if needed.
- 8.12. All trees shall be checked regularly for mammal, human, or other external damage, and remedial action is taken where necessary.
- 8.13. Minor pruning of dead or damaged wood shall be carried out annually. All wounds must <u>not</u> be treated with a sealant as per BS3998:2010 Tree Works Recommendations. On substantial trees, the Local Planning Authorities Tree Officer must be consulted for any necessary approvals.
- 8.14. Watering: All plants are to be well watered immediately after planting operations. To be wet to the full depth of topsoil or wet to field capacity using either potable mains water, recycled or treated greywater. If there is any surface compaction the soil is to be loosened to direct water to the root zone, taking care not to damage or loosen plants. Watering operations are to be undertaken as many times as necessary to ensure the continued thriving of all planting materials. Any failures due to drought shall be replaced by the Management Company at their own cost.
- 8.15. Water restrictions: If the water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

- 8.16. All planted areas shall be given an application of an approved top dressing at the rate of 40g/m² in May. This should be in the slow-release form e.g. Enmag or similar. This should be worked lightly into the soil, without disturbing the roots, before the bark mulch is re-spread. Unless specific nutritional deficiencies are identified, no fertiliser shall be applied to newly planted trees in the first season. If visual inspection points to nutrient deficiency further investigation of causes will be necessary. Remedial action may include additional fertiliser application, pH testing, assessment of organic content, and levels of compaction.
- 8.17. Shrubs shall be maintained in a balanced shape and shall be annually pruned to allow for this. Any growth which will obscure windows, signs, or sight-lines shall be removed. Once established, any support canes shall be removed from the shrubs. Trailing and climbing material shall be assisted in its growth by securing growing leaders where necessary.
- 8.18. Groundcover planting species have been specified so as not to exceed 600mm in height. However, should planting exceed expectations, this should be carefully cut down to below 600mm in height to avoid interference with visibility.
- 8.19. The bark mulch should be maintained at an even spread, 75mm deep, of consistent thickness, to ensure that it is effective as a weed suppressant and moisture conserver. Following any maintenance operations and on a bi-annual basis, the mulch shall be supplemented to allow for any material which may have been lost.
- 8.20. No plant substitutions to be made without the prior written agreement of the Local Authority Landscape Section.

9.0 Hedgerows

- 9.1. Hedge maintenance operations are to be carried out in line with general principles as outlined in the previous section, including clauses detailing litter removal, weeding, trimming, removal of dead plants, and reinstatement of plant materials.
- 9.2. Around free standing hedges a 3 strand galvanised wire and tanalised softwood timber post fence, to BS1722 Part 3:1986 Fences, specification for strained wire fences, is to be erected to run through the centre of the proposed hedgerow. This is to prevent access through the site by pedestrians until the hedges are fully established. After five years, the hedges have been fully established. The temporary fences are to be removed from the site.

Mixed Native Hedgerows

- 9.3. The hedgerows will be maintained with high basal density this will be achieved by allowing bramble and other scrub species to grow at the base of the hedgerows. 'Neat' hedgerows will be avoided. This will provide foraging and nesting habitat for birds, hedgehogs, and invertebrates.
- 9.4. Infrequent cutting of hedgerows to allow fruit and nut production which will benefit a wide range of faunal species.
- 9.5. Cutting will be undertaken on a three-year rotation.
- 9.6. The hedgerow will be cut between January February to avoid impacts on wildlife and to ensure high fruit production.

Other hedgerows

9.7. Hedges are to be trimmed to a minimum until the hedge is close to the desired height of 1m and width of 1m. This is to enable the plants to put on as much growth as possible. The hedgerow will then 'fill out' naturally. Pruning operations are to be undertaken in August or September and in the winter (January – Feb) to ensure fruit production and the base of the hedgerow will be mulched on a regular basis.

10.0 Maintenance Schedules

Every week

 All plants shall be watered following 10 days without rain. Then weekly until natural rainfall during June – August.

Every two weeks

- Amenity Grass to be cut every 10-14 days
- There should be a minimum fortnightly litter pick over the entire site within areas covered by the Management Company/ies.

Every month

- Weed control shall be allowed at monthly intervals. All areas to be weeded by hand.
- All plants shall be inspected monthly for wind firmness and firmed as necessary at the same time. Stakes shall likewise be checked for firmness and tree ties checked.

Every six months

- The bark mulch should be topped up bi-annually
- Grass cutting to Wildflower areas cut in line with the guidance given in section 7.0
- Hedges to be managed cut in line with the guidance given in section 9.0

Annual

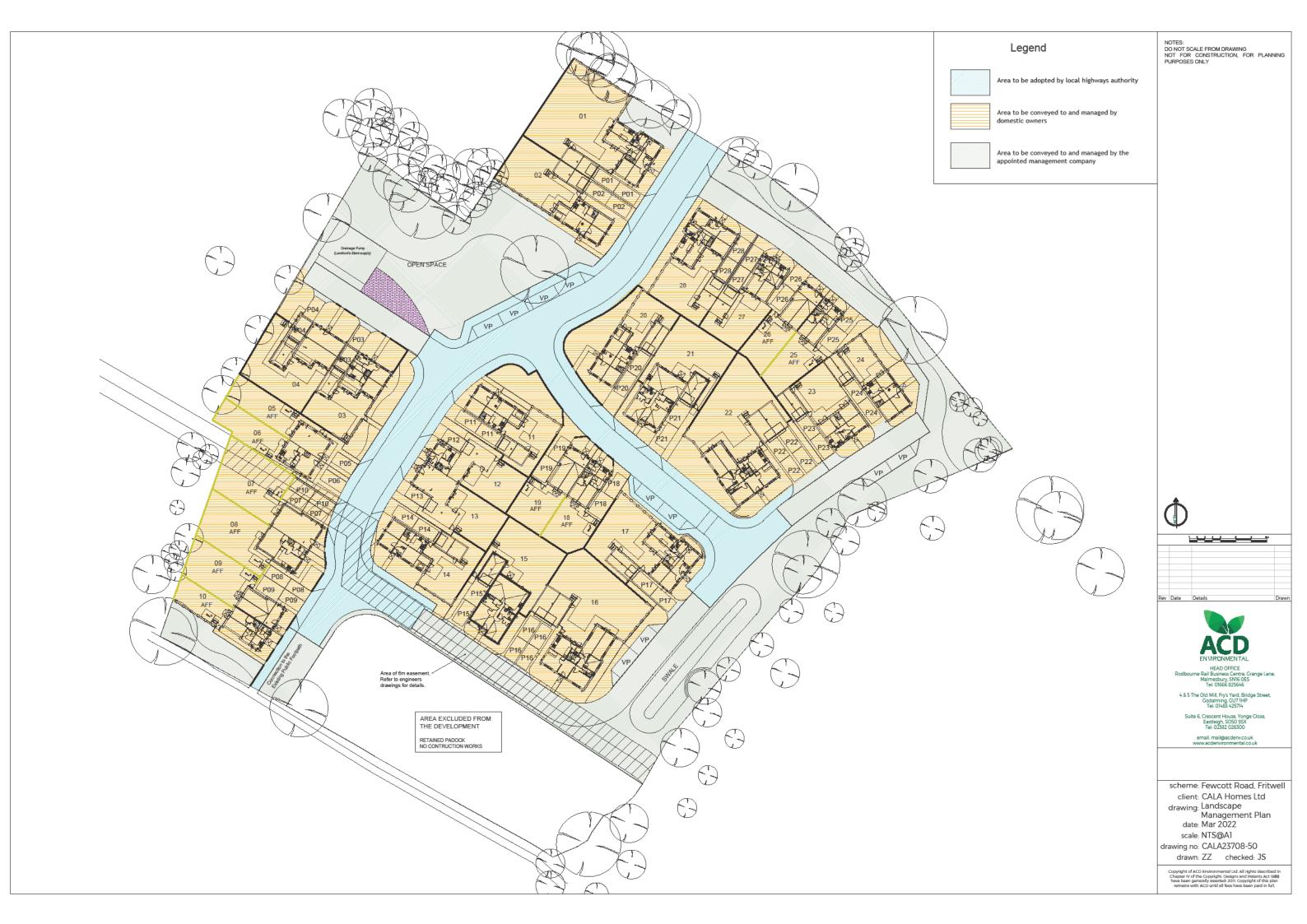
- Replacement of any failed trees or shrubs will be allowed annually to ensure that the planting areas are fully stocked at all times.
- Any hollows which appear due to the settlement shall be top dressed annually, early in the growing season.
- Minor pruning of dead or damaged wood shall be allowed annually.
- All planted areas and trees shall be given an application of an approved top dressing in May. Not in Wildflower areas.
- Shrubs shall be maintained in a balanced shape and prevented from obscuring signs, windows, and encroaching on paths.
- Cut and monitor existing eastern hedgerow.
- Check for invasive species as mentioned earlier and remove them from the site.
- Undertake a formal assessment of young tree health and development.
- Tree grilles, grids, and guards shall be inspected and if necessary removed.
- Monitoring of artificial ecological enhancements and replace if necessary.

Any amendments to the landscape management plan required to ensure a good planting scheme should be submitted to the LPA for approval. The LPA may draw the managing company's attention to defects in the maintenance or failure to comply with the landscape management plan and require that the Management Company rectify these defects or apply for a variation to the landscape management plan.

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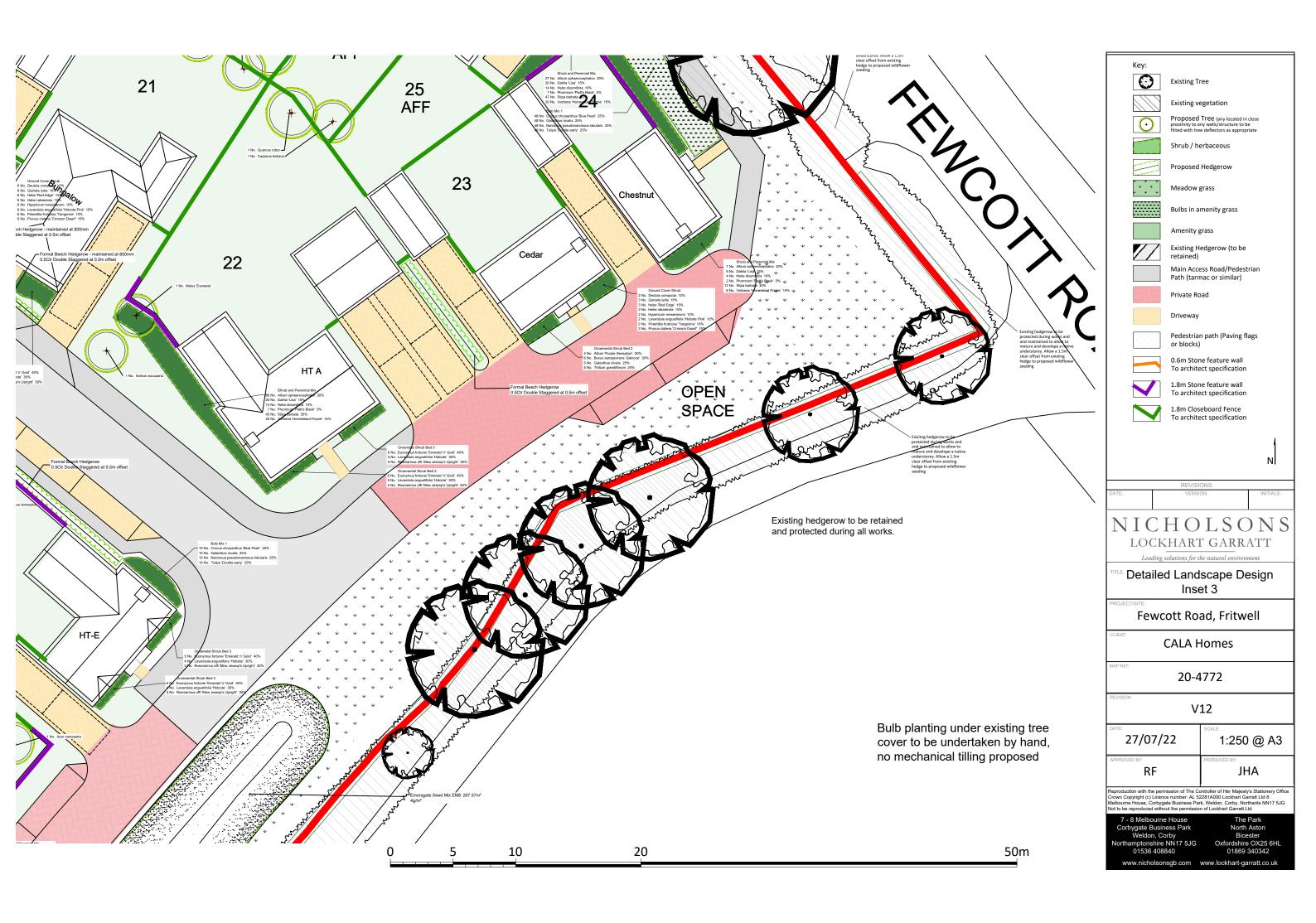
Appendix 1: Management Area Plan



Appendix 2: Approved landscape plans



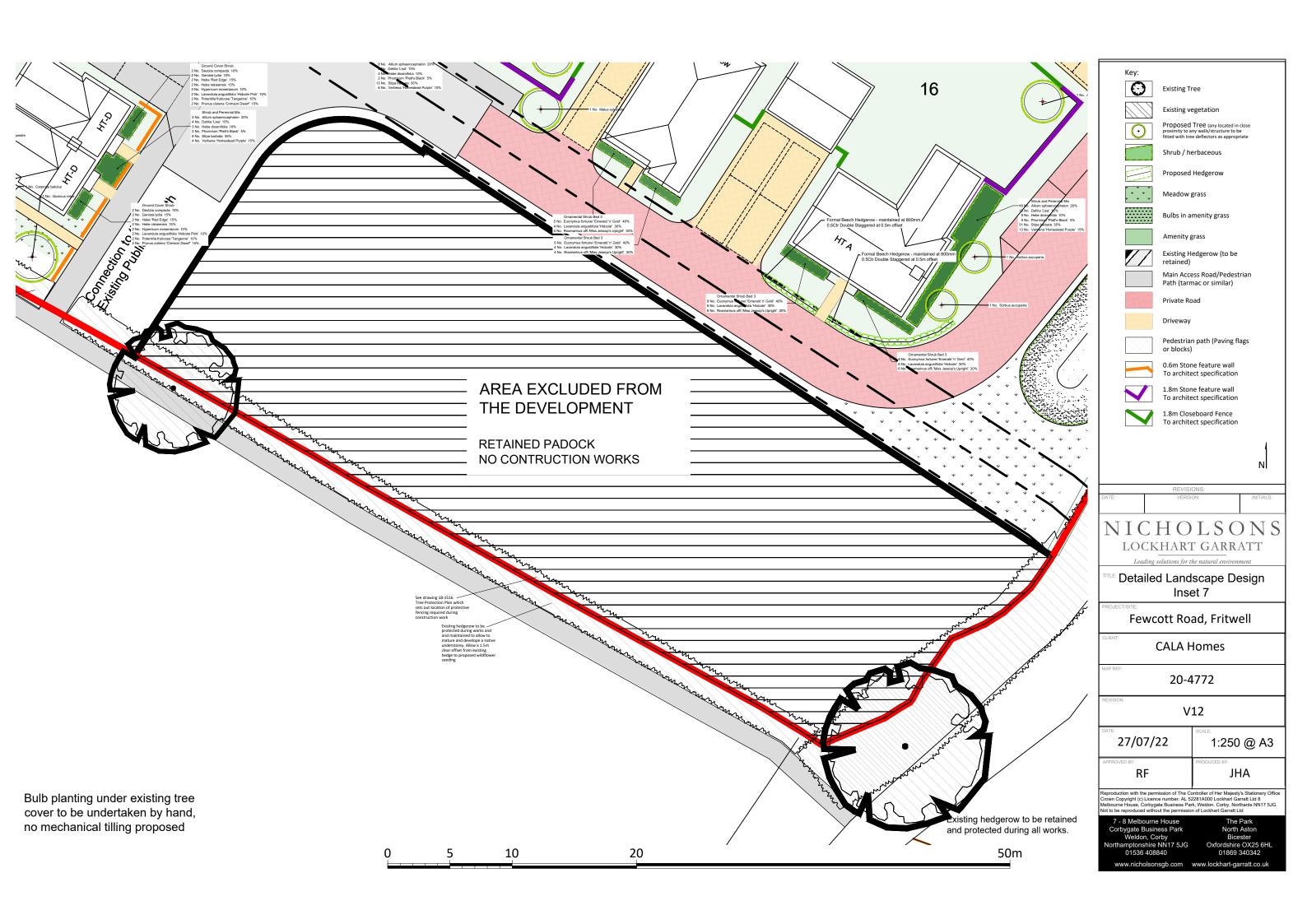












Appendix 3: Drainage Management and Maintenance Requirements

This Drainage Management and Maintenance Plan Appendix provides details of the plan proposed for maintenance and management of the drainage scheme associated with the proposed development. This includes items of landscaping as listed in the tables below. This is in addition to the items listed elsewhere in this document.

On occupation of the development, it is recommended that each element of the as-built drainage system is maintained in accordance with the regime set out in the tables below.

Table 1: Below Ground Drainage System - Operation and Maintenance Requirements

Maintenance schedule	Required action	Frequency
Regular maintenance	Remove all litter and debris from external hard landscaped areas and adjacent landscaping, which may pose a risk to the performance of the system.	Monthly.
	Remove build-up of sediment / silt in catch-pits and dispose of oils / petrol residues using safe standard practices.	
	Stabilise and mow adjacent landscaped areas and remove weeds.	
Remedial actions	Repair or rehabilitate inlet and outlets to ensure they are in good condition and operating as designed.	As required.
	Remediate any landscaping, which has raised to within 50mm of the level of adjacent hard landscaping.	
Monitoring	Check of all inlets / outlets for blockages or evidence of physical damage with any necessary remedial action or clearance carried out if required.	On a monthly basis for the first 3 months of operation, thereafter every 6 months & following severe rainfall events.
	Inspect all surfaces for ponding, or silt accumulation. Record areas where water is ponding for more than 48 hours and carry out any remedial work deemed necessary.	After severe storms.

Table 2: Porous Surfacing - Operation and Maintenance Requirements

Maintenance schedule	Required action	Frequency
	Remove all litter and debris from drained surfaces areas and adjacent hard / soft landscaping, which may pose a risk to the performance of the system.	Monthly.
Regular maintenance	Sweep permeable paved areas. If necessary, use jet wash or suction sweeper. Any jointing aggregate lost from the joints must be replaced as necessary with 2/6.3mm single sized aggregate, brushed into joints.	Three times a year at end of winter, mid-summer, after autumn leaf fall, or as required based on site-specific observations of clogging.
	Stabilise and mow adjacent landscaped areas and remove weeds.	
Remedial actions	Remediate any landscaping, which has raised to within 50mm of the level of adjacent hard landscaping.	
	Carry out remedial work to any depressions, rutting and cracked or broken paving blocks within the permeable paved areas that are considered detrimental to the structural performance or a hazard to users.	As required.
	Carry out repair / rehabilitation works to inlets, outlets, overflows and vents.	
Monitoring	Inspect silt accumulation rates within the permeable paved areas and establish appropriate brushing frequencies.	Annually.
	Check of all inlets, outlets, overflows and vents for blockages or evidence of physical damage with any necessary remedial action or clearance carried out if required.	On a monthly basis for the first 3 months of operation, thereafter every 6 months & following severe rainfall events.
	Inspect and identify any areas that are not operating correctly	On a monthly basis for the first 3 months of operation, thereafter every 6 months & following severe rainfall events.

Table 3: Swale - Operation and Maintenance Requirements

Maintenance schedule	Required action	Frequency	
	Litter and debris removal.	Monthly or as required.	
Regular maintenance	Grass cutting – to retain grass height within specified design range.	Refer to sections 6 and 7 in main document.	
	Manage other vegetation and remove nuisance plants.	Monthly at start, then as required.	
Occasional	Check for poor vegetation growth due to lack of sunlight or dropping of leaf litter and cut back adjacent vegetation where possible.	Annually.	
Occasional Maintenance	Re-seed areas of poor vegetation growth. Alter plant types to better suit conditions, if required.	Annually, or if bare soil is exposed over 10 % or more of the swale treatment area.	
	Repair erosion or other damage by re-turfing or reseeding.		
	Re-level uneven surfaces and reinstate design levels.		
Remedial actions	Scarify and spike topsoil layer to improve infiltration performance, break up silt deposits and prevent compaction of the soil surface.	As required.	
actions	Remove build up of sediment on upstream gravel trench, flow spreader or at top of filter strip.		
	Remove and dispose of oils or petrol residues using safe standard practices.		
	Inspect inlets, outlets and overflows for blockages, and clear if required.	Monthly.	
Monitoring	Inspect infiltration surfaces for ponding, compaction, silt accumulation. Record areas where water is ponding for > 48 hours.	Monthly, or when required.	
	Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies.	Half yearly.	



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