

Landscape Maintenance & Management Plan

Tunstall Road
Biddulph

Proposed Aldi Development

FOR PLANNING

*(To satisfy Condition No 25 of the
planning conditions)*

Date: 20/04/2021
Job No: V2947
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vector
design concepts

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INTRODUCTION

The purpose of this document is to aid the efficient and effective management of the proposed landscaping following construction and provide the framework and necessary detail to guide operations relating to the maintenance of the landscape. This report schedules the maintenance activities required to ensure successful establishment and long term success of the proposed landscape for a **minimum period of 15 years** post completion of the development.

The document outlines the objectives, management responsibilities and maintenance schedules for all elements of the landscape and should be read in conjunction with the landscape plan (Vector drawing reference **V2947_L01 on Page 16 of this document**), which illustrates the landscape areas covered within this management plan.

The maintenance of the landscape will be the responsibility of the facilities management team and should be carried out in accordance with this document using the maintenance schedule as guidance to ensure all necessary procedures are followed.

It is important to emphasise that the maintenance of the site must be ongoing for **a minimum of 15 years** and once the initial important 5 year establishment phase is complete, the post 5 year establishment strategy as outlined on pages 9 – 10 of this document should be followed. Monitoring and reporting to the LPA in years 2, 5 and 15 is required by Condition No 25 of the planning conditions in order that habitats achieve target conditions as set out in the Biodiversity Net Gain Metric Calculation Revised December 2020 by CES Ecology.

5 YEAR LANDSCAPE ESTABLISHMENT PERIOD: MAINTENANCE SCHEDULE

The maintenance schedule below sets out the maintenance tasks, frequency, timing and year from implementation which they should be carried out. The amount of work required may not be finished in these initial 5 years, a schedule has been put in place to cover ongoing maintenance post the initial 5-year establishment period outlined below.

The schedule should be used as a guide for maintenance tasks and should be flexible if necessary.

To be read in conjunction with Vector Landscape Plan drawing ref **V2947-L01 on Page 16 of this document:**

Item	Action	Year					Frequency	Timing*
		1	2	3	4	5		
Litter & Debris removal	- Pick all litter from areas of hard and soft landscape and remove from site. - Empty litter bins	■	■	■	■	■	Weekly	All Year round
	Wash and clean bins with disinfectant	■	■	■	■	■	Once a month	All Year round
Leaf Fall	Sweep up leaf fall under trees and windblown in formal and hard landscape areas.	■	■	■	■	■	Weekly – Adjust frequency to reflect leaf fall at different times of year or in spells of windy or frosty weather.	All Year round
Detritus	Sweep all hard landscape areas to remove all dust and debris	■	■	■	■	■	Weekly	All Year round
Cleaning paved surfaces	Attend to spillages and other arisings efficiently, adopting current H&S procedures regarding warning signs etc. Any surface contamination caused by spillage should be removed using a neutral biodegradable detergent and thoroughly rinses afterwards (avoid run off into soft landscape areas).	■	■	■	■	■	As required	All Year round
Damage to paving areas	Inspect for any movement or deterioration and report defects to the Facilities Manager.	■	■	■	■	■	Weekly	All Year round
De-icing	Apply rock salt and or de-icing agents to all areas of pedestrian and vehicular traffic (avoid over spread / run off entering into soft landscape areas).	■	■	■	■	■	As Required	Nov - Mar

Shrub Pruning	Prune all shrubs to maintain a neat and tidy appearance in accordance with individual species pruning requirements.			■	■	■	Annually or as required	Autumn & Spring
	- Prune to remove any damaged shoots or branches. - Prune to remove all suckers	■	■	■	■	■	As required	All Year round
	Prune winter flowering shrubs			■	■	■	Annually or as required	Spring
	Prune shrubs which flower between period Mar – Jul.			■	■	■	Annually or as required	Immediately after flowering
Mulch Levels	Maintain full depth of mulch to planting areas by topping up / renewing mulch material to a depth of 75mm.	■	■	■	■	■	Monthly as required	All Year round
Irrigation	- Water ornamental shrub planting areas and trees to full depth of topsoil. - Inspect soil conditions to determine when watering is required.	■	■				Immediately after planting then as required until planting is established.	All Year round
Weed Control to shrub planting beds	Remove weeds within planting beds by hand weeding where appropriate.	■	■	■	■	■	Monthly	Apr - Oct
Fertiliser to Planting Areas	Apply slow release fertiliser to planting beds. Rate and application to manufacturer's specification.		■		■		Annually	Mar - Apr
Shrub Replacements	Note: <i>All trees and shrubs that, within a period of 5 years after planting, die or become seriously damaged or diseased, are to be replaced during the next planting season with replacement plants of the same size and species as originally approved, unless alternatives are agreed in writing with the Local Planning Authority.</i>							
	- Inspect all planting areas for dead or damaged plants. - Replace all dead / dying / vandalised shrubs with the same species and size as soon as possible.	■	■	■	■	■	Annually or as required	Nov
Specimen Trees - Standards	- Carryout inspection for general health - Cut back broken/diseased branches - Prune to remove branches to give a min clear stem height of 2m above footpaths. - Replace / re-secure loose or missing guy wires if required. Adjust to suit stem	■	■	■			Twice a year	Mar & Oct

	- growth and provide correct and uniform tension. - Re-firm ground around base if required.							
	- Carryout inspection for general health - Cut back broken/diseased branches - Prune to promote highest standard of growth & Form. - Adjust tree tie if required. - Remove tree tie and stakes if no longer required to support the tree.				■	■	Twice a year	Mar & Oct
Tree Replacements	- Inspect for dead or severely damaged trees at the end of the growing season. - Replace all dead / severely damaged / vandalised trees with same size, species and maturity as that originally planted.	■	■	■	■	■	Annually	Nov
Wildflower meadow planting	1st season cut: if sown in autumn cut to 70mm and remove arisings	■					Twice, once after flowering in autumn and once prior to flowering in spring	August-October & March - April
	1st season cut: if sown in spring cut to 40-70mm and remove arisings	■					Once after flowering in autumn	August-October
	2nd season cut: cut to 50-70mm in spring prior to flowering and then 50mm after flowering in autumn	■					Twice per year	March – April & September-October
	Ongoing maintenance: cut to 40mm in autumn after flowering		■	■	■	■	Once a year	September-October
Proposed native landscape buffer	- Keep weeded and topped up with mulch as above. - Review of buffer zone & selective thinning as required. - Thin buffer zone by 20% or as required (review to be taken prior to thinning) to ensure bed does not become unkempt and overgrown.	■	■	■	■	■	Monthly / as required. Once in Year 3. Once in Year 5 and then monitor annually going forward.	As above Mar or Oct Mar or Oct
Proposed native hedge	- In the spring after planting trim all lateral branches back by 50% (not holly) - Cut back broken/diseased branches. - Light trim every second year to maintain maximum 2.5 metre hedge height. - Maintain in a weed free condition as per rest of site.	■	■	■	■	■	Once after leaf fall. Annually after leaf fall. Bi-annually after leaf fall.	Mar Late Winter Late Winter
Bulb	Deadhead flowers when they wither	■	■	■	■	■	Annually	Late spring

planting	Cut back foliage when it yellows and withers and apply fertilizer.	■	■	■	■	■	Annually	Early to mid-summer
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POST 5 YEAR ESTABLISHMENT PERIOD: MAINTENANCE SCHEDULE

The sites landscape areas will continue to be maintained post the 5 year initial establishment period under an ongoing landscape maintenance contract with the maintenance operations and frequency required adjusted accordingly as the planting becomes established and trees reach maturity.

In order to ensure successful management of the site, the landscape maintenance requirements will be reviewed annually at the end of October so that replacements, priorities and prescriptions can be modified and implemented for the forth coming planting season.

The following schedule outlines the long-term maintenance operations required. Implementation of these will ensure the site is maintained to a high standard for a minimum of 15 years post completion of the development. The schedule should be used as a guide for maintenance tasks and should be flexible if necessary.

Item	Action	Frequency	Timing*
Litter & Debris removal	- Pick all litter from areas of hard and soft landscape and remove from site. - Empty litter bins	Weekly	All Year round
	Wash and clean bins with disinfectant	Once a month	All Year round
Leaf Fall	Sweep up leaf fall under trees and windblown in formal and hard landscape areas.	Weekly – Adjust frequency to reflect leaf fall at different times of year or in spells of windy or frosty weather.	All Year round
Detritus	Sweep all hard landscape areas to remove all dust and debris	Weekly	All Year round
Cleaning paved surfaces	Attend to spillages and other arisings efficiently, adopting current H&S procedures regarding warning signs etc. Any surface contamination caused by spillage should be removed using a neutral biodegradable detergent and thoroughly rinses afterwards (avoid run off into soft landscape areas).	As required	All Year round
Damage to paving areas	Inspect for any movement or deterioration and report defects to the Facilities Manager.	Weekly	All Year round
De-Icing	Apply rock salt and or de-icing agents to all areas of pedestrian and vehicular traffic (avoid over spread / run off entering into soft landscape areas).	As Required	Nov - Mar
Shrub Pruning	Prune all shrubs to maintain a neat and tidy appearance in accordance with individual species pruning requirements.	Annually or as required	Autumn & Spring

	• Prune to remove any damaged shoots or branches. • Prune to remove all suckers	As required	All Year round
	• Prune winter flowering shrubs	Annually or as required	Spring
	• Prune shrubs which flower between period Mar – Jul.	Annually or as required	Immediately after flowering
Specimen Trees- Standards	• Carryout inspection for general health • Cut back broken/diseased branches • Prune to remove branches to give a min clear stem height of 2m above footpaths. • Replace / re-secure loose or missing guy wires if required. Adjust to suit stem growth and provide correct and uniform tension. • Re-firm ground around base if required.	Twice a year	Mar & Oct
	• Carryout inspection for general health • Cut back broken/diseased branches • Prune to promote highest standard of growth & Form. • Adjust tree tie if required. • Remove tree tie and stakes if no longer required to support the tree.	Twice a year	Mar & Oct
Weed control to shrub planting beds, hedges & meadow areas	• Remove weeds within planting beds and meadow areas by hand weeding where appropriate.	Monthly	Apr - Oct
Wildflower Meadow areas	• Cut to 40mm in autumn after flowering.	Once a year	September-October
Native Buffer mix	• Monitor the buffer mix and thin as required to ensure bed does not become unkempt and overgrown.	Annually	Mar or Oct
Native Hedge	• Maintenance pruning to maintain maximum 2.5 metre hedge height.	Annually	Mid – late summer
Bulb planting	• Deadhead flowers when they wither • Cut back foliage when it yellows and withers and apply fertilizer.	Annually Annually	Late spring Early to mid-summer

Note: Works that may affect habitats suitable for use by nesting birds will only be carried out between September and February inclusive (outside of breeding bird season) unless it is appropriately demonstrated that no active bird nests are present.

LANDSCAPE WORKS & MAINTENANCE SPECIFICATION

To be read in conjunction with Vector Landscape Plan drawing ref **V2947-L01 on Page 16 of this document:**

To ensure the success of tree and shrub planting, the landscape workmanship should adhere to the following:

- BS 3998 1989: Recommendations for tree work
- BS 4043 1989: Recommendations for transporting root balled trees
- BS 4428 1989: Code of practice for general Landscape Operations
- BS 7370 1993: Part 4, Grounds maintenance recommendations
- BS 3882 2015: Topsoil

Shrub Planting

All shrubs to be planted in accordance with the planting specification stated on the landscape plan and shall be defined and described in British Standard Specification No 3936 1992: Nursery Stock part 1 – Specification for Trees and Shrubs. All Shrubs to be true to name, vigorous, well grown specimens of their type, free from disease and insect pest.

Maintenance should be implemented for a minimum of fifteen years until the planting stands independently, is dominating surrounding vegetation and producing reasonable growth every year.

Shrub planting to be mulched and kept free of weeds and debris, watering is also paramount to ensure establishment. Watering should be carried out daily during periods of dry weather.

Shrubs to be pruned in accordance with British Standard 7370: Part 4, 1993: 3.6 and only by operatives knowledgeable and aware of the varieties of plant being treated and the reasons for pruning.

Setting Out and Planting Instructions

The landscape contractor shall carry out all planting in accordance with the landscape plan. All trees shall be planted in the positions and in numbers indicated on the drawing.

Standards of workmanship and materials used for planting and staking shall be as outlined in British Standard Specification No 4428 1989: Code of Practice for General Landscape Operations, Section 7 – Amenity tree planting, Section 8 – Woodland Planting, Section 9 – Planting of Shrubs, Herbaceous plants and bulbs.

The roots of all bare root shrubs and transplants are to be treated with alginure root dip prior to planting, using a mixture of, one part alginure to three parts water.

Timing of Planting

Planting of field grown plants should not commence before the 1 October and no later than the 31 March and shall also be suspended during periods of severe frost and where plant locations are waterlogged.

Establishment of New Planting

The soil in beds should be kept loose with gentle cambers and no hollows. Mulch depth should not be reduced however. Trees crowns should be sprayed when in leaf in the evening during warm weather.

Re-firming of Trees and Shrubs

Ground should be re-firmed around the base of plants by treading until they are firmly bedded after strong winds, frost heave and other disturbances. Any collars in soil at the base of tree stems, created by tree movement should be broken up by fork and backfilled with topsoil and re-firmed whilst avoiding damage to roots.

Tree Pruning

Excessive overhang of any growth encroaching onto paths, roads, signs, sightlines and road lighting luminaries should be carried out as required. All pruning operations should suit the type and timing of the plant species. No pruning should take place during the late winter / early spring sap flow period. Young trees up to 4 metres should be crown pruned by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader. Duplicated branches and potentially weak or tight forks should be removed by cutting back to live wood. Whips should not be pruned.

All pruning works should be carried out by an approved member of the Arboricultural Association or other approved specialist using approved methods.

Pruning Ornamental Shrubs

Shrubs should be pruned to encourage healthy and bushy growth and desirable ornamental features. All suckers should be removed by cutting back level with the source stem or root. Timing as follows: Winter flowering shrubs in Spring. Shrubs flowering between March and July immediately after flowering period. Shrubs flowering between July and October should be cut back to old wood in winter. No pruning or trimming of woody vegetation and climbers to be carried out during the bird nesting season of March to August.

Shrub Planting Replacement

Planting that has failed to show growth or development of full foliage during the first growing season after planting, should be replaced by the landscape contractor within the following planting season. All such replacement planting shall be at the landscape contractor's expense, who shall also be responsible for any preparatory and other work necessary to be properly carried out, including the removal and disposal of dead plant material. The replacement planting and pits should match the size of adjacent or nearby plants of same species or match original specification, whichever is greater. Reapply slow release fertilizer after new planting installed.

Following the initial 12 month establishment period the maintenance of the landscaping will be taken on by a professional commercial landscape maintenance contractor under a maintenance contract and the responsibility of shrub planting replacement as per the above will be down to them for a further 4 years (5 years total post completion of the development).

Fertilizer

Fertilize with Miracle Professional 'Enmag' or equal approved in March or April by spreading evenly throughout bed at the manufacturers recommended rate per m². Carefully lift and replace any mulch materials.

Weed Control & Mulching

Keep planting beds clear of weeds by hand weeding and maintaining full thickness of mulch (to be 75mm thick Melcourt Amenity bark mulch by Melcourt Industries Ltd or equal approved). Mulch top ups should take place on a regular basis as required to ensure the 75mm thickness is retained at all times and should continue until close cover of vegetation is achieved. A weed free area should be maintained around each tree and shrub to a minimum diameter the larger of 1 metre or the surface of the original planting pit. Weed control should be carried out monthly from April to September for all planting areas.

Watering

All planting to be subject to a watering regime with trees watered in accordance with BS8545 2014 Trees from Nursery to Independence. This is absolutely essential to ensure the continued success of the scheme, particularly in the key first 12 to 18 month establishment period. The frequency should be as necessary to ensure the continued thriving of all planting. During dry periods minimum weekly visits should be made to site to ensure the soil is not too dry and to water if necessary. The soil should be checked for dryness using either a soil moisture sensor or pushing a spade into the top 300mm of soil and seeing how the soil looks. If it is moist there is no need to water but if it is bone dry then water immediately. Supply should be from potable mains water or an approved alternative. The full depth of topsoil should be wet without loosening or damaging plants. Any compacted soil should be loosened or scooped out to direct water to the rootzone. Trees should be watered via their irrigation pipes, in accordance with the manufacturer's instructions, to ensure the water reaches the rootball of the tree.

Wildflower seeding

Wildflower seeding shall be carried out in accordance with British Standard 4428, 1989 – Code of practice for General Landscape Operations; Section 5.3. No seeding shall take place until preparatory work has been undertaken and approved. The finished subsoil level should be 25mm above adjoining paths, kerbs and man holes. Sowing of the seed should commence in fine weather conditions and should be sowed at the rate/m² specified by the manufacturer.

Wildflower seeding shall be planted into cultivated subsoil rather than topsoil. Once the subsoil has been cultivated, a suitable herbicide should be applied and the correct time should be allowed to elapse, as directed by the manufacturer, and seed the bed. No fertiliser, compost or mulch are to be applied to the wildflower bed.

Wildflower Grass Mowing

Prior to cutting, wildflower areas are to be inspected and all litter / debris is to be removed in accordance with the procedures described in the general site cleanliness section below.

All mowing operations are to be carried out by suitably trained personnel using well maintained machinery appropriate to the task and site conditions, cylinder, rotary or mulch mowers and only when weather and ground conditions are suitable. Operations shall be suspended where ground conditions prevent the use of machine without damage to the ground surface. Where operations are suspended additional maintenance visits may be required in order to maintain the sward within acceptable growth limits.

The precise timing of cutting may vary slightly from year to year in response to growth rates and weather conditions and should be assessed with the maintenance schedule adjusted as necessary. As a general rule, cutting is required either prior to flowering in spring or subsequent to flowering in autumn, either once or twice a year as per the schedule above.

The wildflower meadow should be cut to a height of between 40-70mm dependent on the schedule above.

All cuttings are to be collected and removed from site by the contractor to maintain reduced subsoil productivity. Following cutting, all clippings shall be swept from adjacent hard landscape areas and removed from site to an authorised disposal facility (preferably recycling).

Edges of wildflower areas adjacent to fences, walls, kerbs, paths, trees and other boundaries or obstacles shall be cut using equipment suitable to the task. Strimmers shall not be used around the base of trees.

The sward shall be kept substantially free of broad leaved weeds by spot weeding with the use of a suitable selective herbicide applied twice a year in strict accordance with the manufacturer's instructions.

Any hollows which appear within the wildflower grass areas due to settlement or other causes, which are hazardous, shall be top dressed in early spring with topsoil and seeded with a grass mix to the original proposed specification. Wildflower seeding shall be carried out in accordance with British Standard 4428, 1989 – Code of practice for General Landscape Operations; Section 5.3. No seeding shall take place

until preparatory work has been undertaken and approved. The finished subsoil level should be 25mm above adjoining paths, kerbs and man hole covers. The sowing of the seed should commence in fine weather conditions and should be sown at the rate per m² as in the original landscape proposals.

General mowing regimes for the wildflower meadow shall be as below:

- Cutting first season: Time of first cut - if sown in Autumn cut in March/April, if sown in Spring cut in August - October after flowering.
- Height of first cut - 70mm. If sown in Autumn it should also be cut in September/October after flowering.
- Cutting second season: March/April - cut to 40-70mm then September/October - cut to 40mm after flowering.
- To be cut annually once a year to 40mm in September / October.

Proposed Native Landscape Buffer

The proposed native whip buffer planting around the side and rear of the store will be subject to the same weeding, mulching, fertilizing and watering regime as the rest of the proposed planting above, however, going forward it will need maintaining slightly differently to the ornamental beds which will be more maintained and pruned on a species by species basis.

By year three the native mix planting will have filled out and started to form a much denser buffer. At this point a review should be taken of the overall form and structure of the zone and, if required, selective thinning should take place to ensure that there is room for the individual shrubs to grow and thicken out over the next few years.

By year five the buffer zone should have formed a very dense and compact structure and may be in danger of becoming overgrown. At this point another review should be taken of the overall form of the zone and if deemed necessary up to 20% of the shrubs within the buffer should be removed. This will prevent the planting from becoming unkempt and will allow the individual shrubs more space to establish as individual specimens.

Going forward from here an annual review should then take place to monitor the buffer zone and to carry out any pruning / thinning operations that are deemed necessary for the future success and growth of the native buffer.

Proposed Native Hedge

In the first spring after planting trim all lateral branches back by 50% (not Holly). Prune damaged, diseased or dead wood immediately after first leaf break. Follow with a light trim every second or third year, allowing the hedge to increase in size each time.

Replace dead, dying or damaged stock with the same species as soon as practicable in the first planting season following failure.

Check regularly that the shrub guards are sound and secure, and replace as necessary.

Maintain a metre wide strip in a weed free condition for at least three years, to reduce competition from grass and weeds for moisture and nutrients.

Bulb Planting

Plant the bulbs in October using a trowel or bulb planter to pull up a plug of soil through the grass lawn area and plant the bulbs flattest side down two to three times their own depth and at a rate of 30/m². Water as necessary to maintain a good moist soil.

Deadhead the flowers once they have bloomed and have begun to wither to promote nutrient uptake. Similarly cut back the foliage by hand 6-8 weeks later once that begins to yellow and wither. At this time well after flowering, fertilize the bulbs using an appropriate compost.

Tree Guy Wires

Inspect and maintain every 3 months and replace / re-secure loose or missing guy wires if required. Adjust to suit stem growth and provide correct and uniform tension. When the tree is established enough to stand on its own guy wires should be removed.

Site Cleanliness

The site area shall be kept clean and free of litter and dog fouling in accordance with the Department for Environment, Food & Rural Affairs PART1; Code of Practice on Litter and Refuse issued under section 89 of the Environment Protection Act 1990.

The site shall attain grade A standard at least once every day and not be allowed to fall below grade B at any time.

Litter Bins

Litterbins will not be allowed to overflow at any time and should be emptied at least once per day.

The litterbins should be cleaned out at least once per week and kept free from graffiti.

Landscape Furniture

All furniture to be kept clean and free from graffiti, checks should be made on a daily basis.

Paths, Car Parks and Hard Surfaced Areas

All surfaces should be kept free of moss and weeds and the removal of leaves is paramount to all walking areas.

Main routes and car parks shall be kept free of slippery frost and snow before trading hours begin, this should be carried out daily and more frequently if adverse conditions persist.





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