

PLANNING CONSULTATION BY EPPING FOREST DISTRICT COUNCIL

**OUTLINE APPLICATION FOR DEMOLITION OF EXISTING BUILDINGS,
FOLLOWED BY THE CONSTRUCTION OF 22NO. COMMERCIAL UNITS, 6NO.
FAMILY HOUSES, SUSTAINABLE DRAINAGE SYSTEMS, CAR PARKING
(INCLUDING ALTERATIONS TO EXISTING GREEN LANE ACCESS),
PEDESTRIAN AND CYCLE CONNECTION, REFUSE AREAS, CYCLE STORES,
TREE PLANTING, SOFT LANDSCAPING AND AMENITY SPACE.**

AT WILLOWBROOK, GREEN LANE, NAZEING, ESSEX, EN10 6RS

Presented by Head of Planning

SUMMARY

This is an outline application with all matters reserved except access, for new commercial floorspace together with the provision of 6 affordable houses on land adjacent to Green Lane known as the Willowbrook site. This application site is located within the Regional Park to the east of Green Lane in Nazeing. It is however being submitted in conjunction with an application for the redevelopment of another site for residential uses located well outside the Park known as Middlebrook Farm. This site is previously developed land, comprising two buildings in commercial, storage and residential uses. It is understood that the Willowbrook site will accommodate the 40% affordable housing required for the Middlebrook site plus the replacement commercial/employment use. The Biodiversity Net Gain (BNG) requirements for the Willowbrook site are to be offset via provision of habitat on the Middlebrook site.

Whilst the principle of redeveloping a designated employment site for commercial purposes is broadly acceptable there are concerns that the inclusion of the affordable housing and an additional quantum of commercial space will impact the Regional Park and as this is an outline application further information and details need to be considered. Specifically the Biodiversity Net Gain requirement should be met on site so that ecological enhancement and mitigation are delivered within the Park.

RECOMMENDATIONS

Members Approve:

- (1) that Epping Forest District Council be informed that the Authority has no objection in principle to the outline application component for commercial development, subject to:
 - (a) the delivery of the full Biodiversity Net Gain requirement on the Willowbrook application site to ensure the biodiversity mitigation and enhancements are achieved within the Regional Park; if necessary the affordable housing component should be provided on the conjoined application site at Middlebrook, and
 - (b) provision of further details for consideration in relation to:
 - (i) a revised site layout to ensure development is setback from the eastern boundary to protect the adjacent Local Wildlife Site, the woodland and boundary tree line; and
 - (ii) a site wide lighting strategy designed in accordance with the 'Institute of Lighting Professionals (2018) Bats and Artificial Lighting in the UK Guidance Note 08/18';
 - (c) a detailed Construction Environmental Management Plan to protect the offsite woodland during construction and to ensure there are no adverse impacts;
 - (d) measures to protect the off-site woodland habitat from littering and direct access from residents and pets which could harm wildlife - information about the Local Wildlife Site and its biodiversity should be included within the 'Welcome Packs' proposed by the applicant;
 - (e) measures to provide safe access for pedestrians and cyclists using Green Lane to visit the Regional Park, taking account of the increase in and nature of traffic movements that will be generated by the proposed commercial development;
 - (f) further information to demonstrate that the proposed culverting of the ditch alongside the application site can be achieved without harm to the ecology and physical habitats associated with the ditch, particularly in

relation to Otter and Water Vole activity;

- (g) additional habitat enhancements for Grass Snakes, for example the inclusion of some wetland habitat and an on-going management strategy for the site; and
- (2) that Epping Forest District Council be informed that the Authority would wish to be consulted on the above matters in due course.

BACKGROUND

1 Location

The application site is located in the Regional Park within the River Lee Country Park and occupies an area of circa. 1.38ha situated to the east of Green Lane, Nazeing. To the north and west the site is bounded by residential properties along Old Nazeing Rd and Green Lane. To the east lies an area of woodland beyond which lies the River Lee Flood Relief Channel and open areas of grassland all of which form part of the Lee Valley Central (EP5) Local Wildlife Site. To the south are some residential dwellings and commercial units. Further south at the end of Green Lane lies Holyfield Lake also designated as a Local Wildlife Site, Lee Valley Central (EP1). In the north the application site extends along a narrow track between the existing residential dwellings to link through onto Old Nazeing Road.

- 2 The application site is currently vacant and described as formerly in use as a haulage yard and residential. The northern portion of the site presents as an area of grassland but is known to contain remnants of a former glasshouse nursery. A residential property known as Willowbrook is situated in the middle of the site close to the western site boundary and to the east of this are garage repair facilities and several structures/sheds in various states of dis-repair. The southern portion consists largely of grassland and scrub vegetation. A small ditch, known as the Nazeing Drain, runs alongside the western boundary of the site adjacent to Green Lane and access into the site is via an existing bridge over the ditch. Please refer to the Plan at Appendix A to this report.
- 3 This application is being submitted in conjunction with an application for the redevelopment of another site located outside and some distance from the Park known as Middlebrook Farm. This site is previously developed land, comprising two buildings in commercial, storage and residential uses. It is understood the Middlebrook application is for a residential proposal of 16 dwellings with open space but that the Willowbrook site will accommodate the 40% affordable housing required for that site plus the replacement commercial/employment use. The biodiversity net gain (BNG) requirements for the Willowbrook site are to be offset via provision of habitat on the Middlebrook site. This is to be secured by a Section 106 Agreement.

DESCRIPTION OF THE APPLICATION PROPOSALS

- 4 The outline application proposes the demolition of all the existing buildings on site and the construction of a new employment hub providing 22 flexible commercial units (4070sqm), each provided with a bay for servicing and designated parking plus visitor parking (62 spaces in total, together with 36 cycle parking spaces). These units will be located within the employment

- allocation on the southern part of the site. A Parameter Plan has been submitted specifying the scale of development as 2 storey flat roofed units. The 6 affordable housing units (a requirement for the conjoined application at the Middlebrook site) will be located on the northern part of the site arranged as two short terraces of three properties each; a mix of 2 and 3 bedroomed units. They will face south across a residential parking area (20 spaces total). To the east and west of the properties areas of public open space are proposed inclusive of a sustainable urban drainage feature and new tree and shrub planting. The southern and northern parts of the site are to be separated by an acoustic fence. Please refer to the illustrative masterplan reproduced as Appendix B.
- 5 The existing vehicular access point from Green Lane is to be retained but upgraded, to include the culverting of the existing ditch, classified as a Main River, and the addition of footways on both sides. The main dedicated pedestrian and cycle access for the site is to be provided via the existing north east access track through to Old Nazeing Road which will be resurfaced accordingly. The Transport Assessment submitted with the application indicates a net increase of 34 two-way vehicle trips generated in the AM peak hour and a net increase of 27 two-way vehicle trips in the PM peak hour. This equates to circa 1 additional two-way vehicle trip on the highway network every 2 minutes and as such would not be considered to have a "severe impact on the highway network". It finds that the visibility splays for the proposed site access from Green Lane meets the required standards and that car and cycle parking are to be provided in accordance with current parking standards.
 - 6 **Flood Risk**
The application is accompanied by a Flood Risk Assessment and Drainage Strategy. This indicates that all proposed sustainable urban drainage and residential housing is located outside flood zone 3 and that compensatory flood storage can be provided on site as required including via under floor voids for commercial units.
 - 7 **Landscape**
A Landscape and Visual Assessment has also be provided together with a tree survey. These indicate that the layout of the proposed development in particular the development off-sets, largely retain boundary vegetation including trees and that this will provide a mature landscape backdrop assisting with the integration of the proposals within their local landscape setting. The application proposes a significant number of new native trees, hedge and shrub planting to the frontage with Green Lane and around the new open spaces in the northern portion of the site. These details are submitted as an illustrative landscape masterplan. Please refer to Appendix C to this report.
 - 8 **Ecology**
A Preliminary Ecological Assessment (PEA) has been carried out as part of this submission and the recommended follow up survey work for bats and reptiles completed. The PEA notes the importance of the Lee Valley Local Wildlife Site located directly to the east of the application site which includes the area of woodland on the sites eastern boundary. The report notes that this area could be vulnerable to construction-related activities and pollution and that the implementation of a Construction Environmental Management Plan (CEMP) including best practice pollution prevention controls is likely to be required.
 - 9 The Bat surveys of buildings and trees have found the site to have negligible suitability to support roosting bats. However, the Ecological Impact Assessment

recommends retaining the linear habitats as dark buffers, and protecting the offsite woodland habitat to the east from light spill to retain this as a dark corridor especially as this has connectivity with habitats in the wider area including the River Lea, several lakes and Nazeing Marsh, as well as Lea Valley to south. A sensitive lighting scheme will need to be developed by a lighting professional with input from an ecologist.

- 10 Recommendations are also included for the ditch, classified as a Main River, adjacent to the site including the provision of an 8m buffer along its length and management of the ditch's aquatic and bankside vegetation and floristic diversity. It is hydrologically linked to the Lee Valley SPA and will need to be protected during construction and covered in the CEMP.
- 11 The Biodiversity Net Gain Assessment completed for the site indicates a net biodiversity loss of -0.91 habitat units (-18.89%), with a net biodiversity gain of 0.72 hedgerow units (+6.03%). The applicant has committed to offsetting the loss via the provision of an offset site as part of the conjoined planning application at Middlebrook Farm, Hoe Lane, Nazeing.

POLICY CONTEXT

12 Local Plan

The application site falls within the settlement of Nazeing in the recently adopted Epping Forest Local Plan. The Local Plan allocates the southern half of the application site as part of an existing Employment Site, NAZE.E1 'The Old Waterworks'. The Council's Local Plan policy E1 Employment Sites seeks to retain and enhance existing authorised employment uses and encourage renewal, intensification or extension of existing employment sites.

- 13 Policy SP1 Spatial Development Strategy 2011-2033 states under bullet point G that within the period 2011-2033 the Local Plan will maximise opportunities for jobs growth, with the aim of achieving a minimum of 10,800 new jobs in the District up to 2033. This includes making provision for: "*(i) retaining and enhancing existing employment sites and premises where appropriate;*". It should be noted that the northern part of the site has been removed from the Green Belt following the Green Belt review carried out as part of the Local Plan process.
- 14 Epping Forest District Council recognise that the Local Plan will be an important document in terms of the protection, enhancement, development and management of the LVRP and the public enjoyment of its leisure, ecological, heritage, and sporting resources. The Local Plan 2023 recognises and supports the Regional Park, its vision and remit, as a key asset for the District, and component of the region's green and blue infrastructure (para 2.23). It also recognises the Park Development Framework (PDF).
- 15 Policy DM1 'Habitat Protection and Improving Biodiversity' states under bullet A that "*All development should seek to deliver net biodiversity gain in addition to protecting existing habitats and species. Development proposals should seek to integrate biodiversity through their design and layout, including, where appropriate, through the provision of connections between physical and functional networks.*" The first part of Policy DM2 'Epping Forest SAC and the Lee Valley SPA' sets out the Council's position that all relevant development proposals should assist in the conservation and enhancement of the biodiversity, character, appearance and landscape setting of Epping Forest and

the Lee Valley.

16 Park Development Framework

PDF Area Proposals River Lee Country Park under 6.A.4 Biodiversity seek to *“Protect, enhance and manage the mosaic of open water, scrapes, meadows, floodplain grassland and farmland habitats within the River Lee Country Park to improve its ecological value and species diversity.”* Landscape and Visitor Proposals identify the importance of investing in landscape improvements at key entrances to the Park to maintain and enhance access into the Park and the need to improve the quality of access routes for pedestrians and cyclists into the Park from the north for example along Green Lane and Old Nazeing Road.

- 17 In the Lee Valley Regional Park Landscape Strategy the application site lies within character area LCA A4 (the RLCP) where the overall approach is to conserve and enhance the secluded rural character and high ecological value as well as provide for informal access and recreation. Development within and immediately surrounding the area is generally limited to localised areas and the Strategy considers large scale development to be unsuitable due to the scale and coherent character which dominates.

PLANNING APPRAISAL OF PROPOSED DEVELOPMENT

18 Principle of Development

This outline application consists of two components. The development of the proposed new commercial units within a designated employment area is in accordance with the Local Plan policy and although within the Regional Park would see the redevelopment of an area previously in employment use. Whilst in principle this can be considered acceptable the impact of the development on the Park in terms of its scale, layout and operation needs to be considered, and as an outline application the detail of these matters, apart from access, are not yet certain although parameter plans and indicative masterplans/drawings provide an indication of what could be developed on site. This is discussed further below from paragraph 21.

19 Residential Component

The outline residential component is proposed on previously developed land, outside the Green Belt, close to an established residential area, albeit that this part of the site presents as an area of open grassland. Whilst the redevelopment of previously developed land for residential use might be considered acceptable this proposal is more complicated in terms of its impacts on the Park. The proposed 6 dwellings represent the affordable housing requirement for the residential redevelopment of the Middlebrook site. It is not clear in planning terms why the affordable units relating to another development need to be located on this site within the Park. The requirement for an acoustic barrier suggests that this location is not satisfactory for the co-location of a residential use with commercial units. The affordable housing requirement for the Middlebrook development should be provided on the Middlebrook site.

- 20 It is also the case that the BNG requirement for the outline Willowbrook application is to be provided off-site on the Middlebrook site, thereby reducing the ecological value and habitat connectivity of land within the Park. Officers would wish to see the BNG requirements provided on site within the Park where connectivity of habitats could be enhanced, particularly links with the existing local wildlife site (LWS). It is therefore proposed that the BNG requirements and mitigation is provided on the Willowbrook site. This may require the Middlebrook

site to accommodate the 6 affordable housing units in order to free up space within the Willowbrook site for the BNG requirement. These biodiversity enhancements could be incorporated into a site wide ecological landscape scheme which would also benefit the commercial tenants, residents and visitors to the Park.

21 Employment Component

The proposal for 22 units would deliver an intensive development on a site positioned well within the Regional Park. The number of commercial units originally proposed was reduced as a result of the pre-app process but it is understood that the quantum of employment space provided at Willowbrook still exceeds the policy provision allocation in NAZE.E1 in order to accommodate the existing employment space at the Middlebrook site.

22 This has implications for the Park, its landscape and ecology in that the site layout positions a number of the units immediately adjacent to the Local Wildlife Site and established woodland on the eastern boundary of the site. Given the proximity of the units this area is likely to be impacted during the construction phase and in operation mode by light and noise pollution. It is also significant that the Tree Protection Plan has noted that off-site trees along this eastern boundary will need to be cut back to the boundary. It is recommended therefore that the applicant be asked to revisit the site layout should the application progress to detailed planning stage and that a setback of development from the eastern boundary be incorporated into the scheme to provide some protection to the woodland and the boundary tree line.

23 This would be in accordance with mitigation discussed in the PEA which has highlighted the importance of the offsite woodland habitat and the need to protect this from light spill and retain it as part of a dark corridor for wildlife given its connectivity with habitats in the wider area. Officers endorse the recommendations that a sensitive lighting scheme is developed and included as part of the detailed planning stage and that boundary tree lines are retained and protected with suitable root protection areas (RPAs). The applicant should also provide a Construction Environmental Management Plan to protect the offsite woodland during construction and to ensure there are no adverse impacts.

24 The PEA also proposes that the off-site woodland area, part of the LWS should be fenced off during occupation to protect the habitat from littering and direct access from residents and pets which could harm wildlife. Officers would support this measure and also suggest that information about the LWS and its biodiversity is included within the 'Welcome Packs' proposed by the applicant. These matters will need to be covered by appropriate conditions should the Council be minded to approve the outline application.

25 Access and Ditch

The traffic generated by the reactivation of the employment site is likely to have an impact on visitors to the Park using Green Lane and this does not appear to have been considered. Green Lane is a private road, and an important access into the Regional Park, although not a public right of way. PDF Area Proposals recognise the need to improve the quality of this route for pedestrians and cyclists as an access point into the Park. The Transport Statement has found the increase in traffic movements acceptable in highway terms and that the upgraded entrance into the site (with footways on both sides) meets the required standards. However there is only a narrow pavement on the western side of Green Lane and it is not clear whether an additional footway/cycle route is

proposed along the length of the eastern side of Green Lane to link with the new entrance footways and to assist in providing a safe through route along Green Lane for the safety of people visiting the Park. It is noted that the main pedestrian and cycle access into the site will be from the existing private drive to the north-east of the site and that this will be a dedicated walking and cycle path that will bring people to and from the site via Old Nazeing Road. A similar dedicated route for visitors to the Park should be considered.

- 26 Officers are also concerned about the proposal to culvert the ditch to enable a suitable bridge to be provided as part of the upgraded access into the site. Otters and Water Vole are known to use this ditch which runs alongside the application site and Green Lane. The installation of a culvert may impede the movement of both Otter and Water Vole and indeed other species. The Environment Agency (EA) have raised this as a concern in their response to the application. Officers endorse their request for further information to be supplied on this matter to demonstrate that the risk to ecology and physical habitats has been sufficiently assessed. This information should also inform the enhancements to the ditch habitat included in the Ecological reports.

27 Other Impacts

The additional habitat enhancements for biodiversity are noted and measures such as integrated bat boxes, bird boxes, and bee bricks into the development are welcome. Grass Snakes have been recorded on site – additional habitat enhancements on site should also target this species (a hibernaculum has been suggested) perhaps by the inclusion of some wetland habitat and on-going management strategy for the site.

28 Conclusion

The principle of redeveloping a designated employment site for commercial purposes is broadly acceptable but there are concerns that the inclusion of the affordable housing and the need to accommodate an additional quantum of commercial space intensifies development on site. This has potentially compromised biodiversity within the Park in that the layout of part of the commercial development abuts the LWS and woodland habitat and the biodiversity net gain requirements have been moved off site. As an outline application further details are also required in respect of safeguarding the ditch habitat and providing safe access for visitors to the Regional Park who wish to use Green Lane.

ENVIRONMENTAL IMPLICATIONS

- 29 These are addressed in the body of the report.

FINANCIAL IMPLICATIONS

- 30 There are no financial implications arising directly from the recommendations in this report.

LEGAL IMPLICATIONS

- 31 Planning applications referred to this Authority are submitted under the consultative arrangements of Section 14 (4-7) of the Lee Valley Regional Park Act 1966. The Act requires a local planning authority to consult with the Authority on any planning application for development, whether within the designated area of the Park or not, which might affect any part of the Park.

- 32 The Park Act enables the Authority to make representations to the local planning authority which they shall take into account when determining the planning application.

RISK MANAGEMENT IMPLICATIONS

- 33 There are no risk management implications arising directly from the recommendations in this report.

EQUALITY IMPLICATIONS

- 34 There are no equality implications arising directly from the recommendations in this report.

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BACKGROUND REPORTS

Consultation by Epping Forest District Council

May 2023

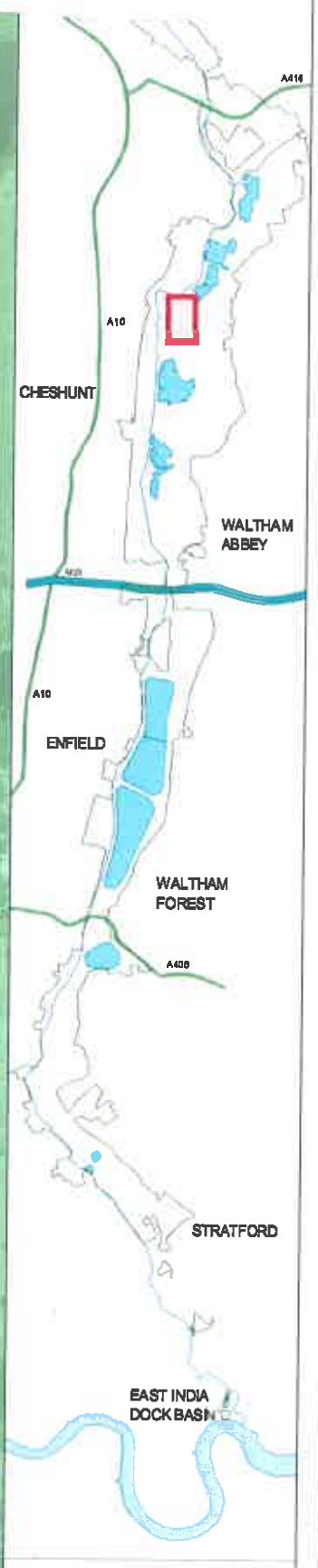
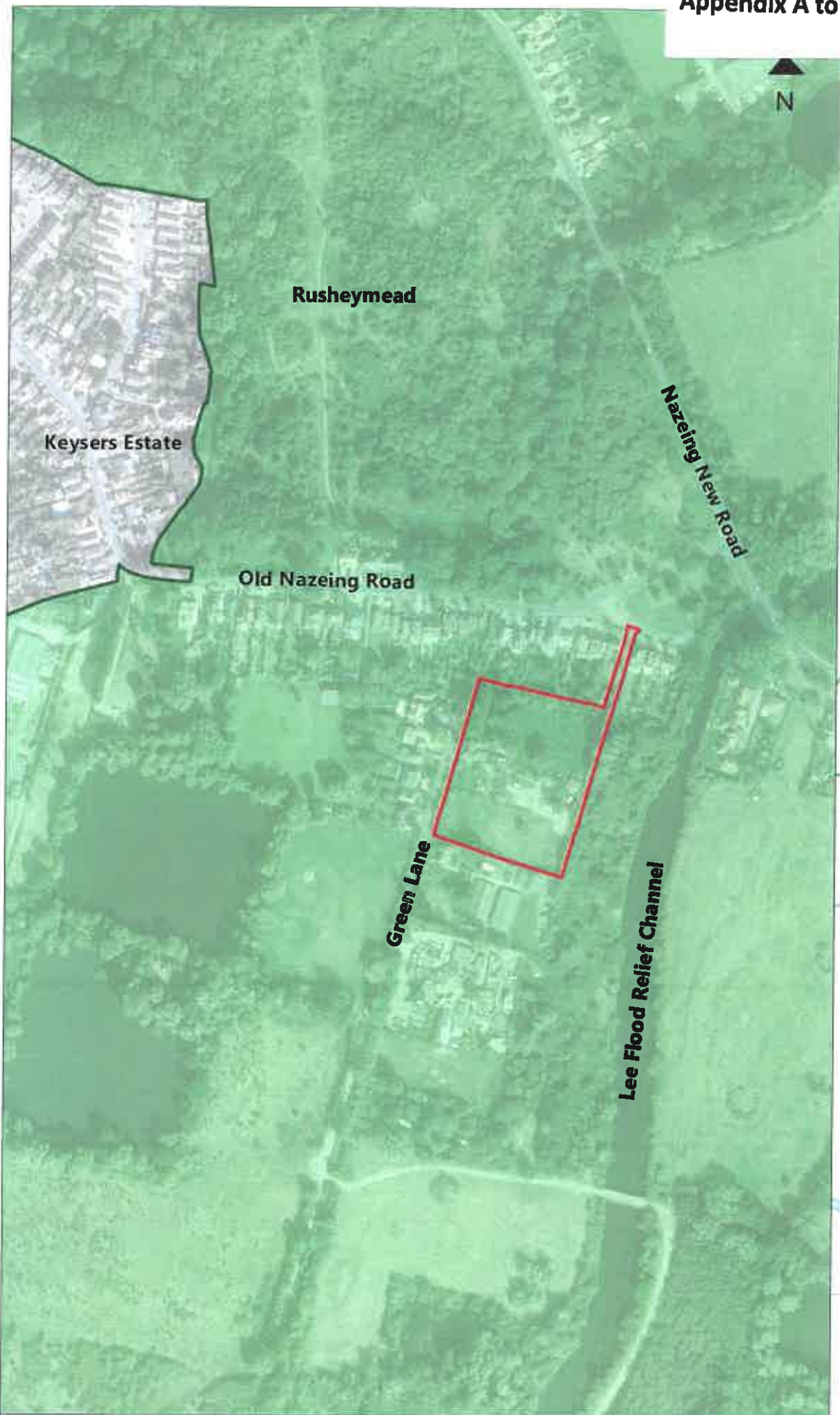
APPENDICES ATTACHED

Appendix A	Plan of the application site
Appendix B	Proposed Illustrative Masterplan
Appendix C	Illustrative Landscape Masterplan

LIST OF ABBREVIATIONS

BNG	Biodiversity Net Gain
PEA	Preliminary Ecological Assessment
CEMP	Construction Environmental Management Plan
SPA	Special Protection Area
PDF	Park Development Framework
LVRP	Lee Valley Regional Park
LWS	Local Wildlife Sites
RPA	Root Protection Area

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- Park Boundary
- Application Site

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NOTES

PROPOSED VOLUMES AND AREAS:

Footprint of proposed buildings: 3666 m²
 Volume of proposed buildings: 11079 m³

3 x 3 bedroom affordable dwellings
 3 x 2 bedroom affordable dwellings

Commercial units
 22 x 185 sqm (G1) — 4070 sqm

Local Plan Allocation (MUSE1)

Acoustic fence

150	2	25
1100	2	5
1200	4	10
1500	16	20

Revision: Approved
 Date: 18/07/2023
 Drawn by: [Name]
 Checked by: [Name]

PLANNING

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Client: LW DEVELOPMENTS

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Title: MIX USE DEVELOPMENT

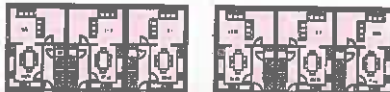
Scale: 1:500 @ A3

Project No.: 21_453

GREEN LANE

Pedestrian and cycle path

01 02 03 04 05 06



20 car spaces

Bins

18 cycles

62 car spaces

07 08 09 10 11 12

Bins

01 02 03 04 05 06

18 cycles

13 14 15 16 17 18 19 20 21 22

13 14 15 16 17 18 19 20 21 22

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Lynbrook



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- KEY**
- Soft Landscaping**
- Existing Trees/Vegetation Retained
 - Proposed Tree Planting
 - Proposed Mixed Native Substrata Planting
 - Proposed Grass Planting
 - Proposed Assembly and Plant Garden Grass - Herby Harvesting Lawn Mix EL1
 - Proposed Grassland - Ec2 Wild Scab Meadow Mixdare
 - Proposed Plant With Marginal Planting - Marginal planters above and below water line
- Hard Landscaping**
- Proposed Asphalt - Same as standard section percent concrete curb edging
 - Proposed Parking Deck - Maximum 200mm x 100mm x 60mm Permeable Black Paving 200mm x 100mm x 60mm with standard section percent concrete curb edging
- Boundary Treatments**
- Proposed 1.8m Close Board Fence
 - Proposed Asphalt Fence
 - Existing Boundary Retained





KEY

Soil Landscaping

Image	Category
	Existing Trees/Vegetation Retained
	Proposed Tree Planting
	Proposed Mixed Native Scrub/Grassland Planting
	Proposed Shrub Planting
	Proposed Armaty and River Garden Grasses - Newly Planted Lawn Mix EL1
	Proposed Grassland - ESM Wet Soils Meadow Mixture
	Proposed Fertilized Marginal Planting - Marginal planted above and below water line

Plant Landscaping

Image	Category
	Proposed Access - Pavement with standard section present appropriate back edging
	Proposed Parking Strip - Materials Driveway Phase Permeable Block Paving 200mm x 100mm x 50mm with standard section present concrete base edging
	Proposed Litter Clean Street Fence
	Proposed Access Fence
	Existing Boundary Retained

Microclimate Ash

Image	Category
	Cherry
	Alder
	Oak
	Birch
	Gymnosperms

Boundary Treatments

Image	Category
	Proposed Litter Clean Street Fence
	Proposed Access Fence
	Existing Boundary Retained

Tree Planting

Image	Category
	Cherry
	Alder
	Oak
	Birch
	Gymnosperms

Microclimate Ash

Image	Category
	Cherry
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	Birch
	Gymnosperms

Boundary Treatments

Image	Category
	Proposed Litter Clean Street Fence
	Proposed Access Fence
	Existing Boundary Retained

Tree Planting

Image	Category
	Cherry
	Alder
	Oak
	Birch
	Gymnosperms

Microclimate Ash

Image	Category
	Cherry
	Alder
	Oak
	Birch
	Gymnosperms

Vegetation 100 Metres Within the 100 Metres of Aqueduct

- Species**
- 1. Larkspur
 - 2. Agrostis capillaris
 - 3. Agrostis peruviana
 - 4. Agrostis alba
 - 5. Agrostis hyemalis
 - 6. Agrostis ssp.
 - 7. Agrostis ssp.
 - 8. Agrostis ssp.
 - 9. Agrostis ssp.
 - 10. Agrostis ssp.
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 - 18. Agrostis ssp.
 - 19. Agrostis ssp.
 - 20. Agrostis ssp.

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 - 19. Agrostis ssp.
 - 20. Agrostis ssp.



1. GENERAL

- 1.1 Existing trees on or adjacent to site are to be retained shall be protected in accordance with BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations from commencement to completion of all works on site.
- 1.2 All excavated areas to be backfilled with imported subsoil to BS 8601:2013 Specification for subsoil and requirements for use (imported subsoil to be laid on site's existing subsoil profiles) and overlaid with topsoil to BS 3882:2015 Specification for topsoil BS 3882 – General purpose grade. All topsoiled areas to be clear of rocks and rubble larger than 50mm diameter and any other debris that may interfere with the establishment of plants. Shrub areas to have a minimum depth of 400 mm topsoil. Grassed area to have a minimum depth of 150mm. Tree pit soil depth/volume in accordance with BS 8545:2014 Trees: from nursery to independence in the landscape. Recommendations.
- 1.3 All plants are to be supplied in accordance with Horticultural Trade Association's National Plant Specification and from a HTA certified nursery. Delivery and backfilling of all plant material to be in accordance with BS4428/JCLI/CPSE Code of Practice for 'Handling and Establishing Landscape Plants, Parts I, II and III.
- 1.4 All specimen and ground cover shrubs to be planted in accordance with BS 3936: - Specification for Nursery Stock. Part 1 Trees and shrubs (1992) and Part 10 Ground cover plants (1989)
- 1.5 All trees shall be planted in accordance with BS: 8545:2014.
- 1.6 All planting and grass establishment / maintenance operations to be in accordance with BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces). Trees are to be established / maintained in accordance with BS8545.
- 1.7 Planting will not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds.
- 1.8 All bare-root planting stock will be kept covered until actually planted in order to minimise water-loss and prevent the roots from drying out.
- 1.9 All bare-root planting stock will be root dipped in an approved water-retaining polymer.

- 1.10 If the formation level is compacted it should be ripped through before topsoiling. Recommended topsoil depths are 450mm for shrubs and 150mm for grass.

2. TREE PLANTING

Ground Preparation and Tree Pit Excavation

- 2.1 If the formation level is compacted it will be ripped through before topsoiling.
- 2.2 Where necessary existing weeds will be treated with a suitable glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- 2.3 Tree pits will be excavated to at least twice the diameter of the root spread and to be planted in accordance with BS 4428 (1989). The bottom and sides shall be forked to break up the subsoil. All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter in any dimension will be removed from site.

Planting

- 2.4 Trees are to be placed into the pits and backfilled with local topsoil previously stripped from the site. A general-purpose slow-release fertiliser (at the rate of 75gm/m²) and Tree Planting and Mulching Compost (at the rate of 20litres/m²) are to be incorporated into the top 150mm of topsoil during backfilling. Where tree pits are more than 300mm deep, backfilled material shall be consolidated/firmed in 150mm layers.
- 2.5 Trees shall be well firmed-in and secured with stakes, proprietary rubber tree ties and spacers as below.
- 2.6 All newly planted trees over 1.5m high will be held so that movement at the root collar is minimised until new roots have developed to anchor the tree. Therefore low staking (75mm dia x 1.5m length) will be used and attached to the tree at approximately 600mm above ground level. Stakes will be driven 300mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables. The trees will be staked using proprietary rubber ties and must be firmly fixed with a spacing device used to prevent chafing against the tree.
- 2.7 Trees shall be double staked. Composted bark mulch will be spread to a depth of 75mm across in a 1.0m diameter circle around all individual trees, ensuring that desirable groundcover plants (where present) are not buried.

- 2.8 All trees and shrubs shall be watered in at the end of each day of planting. Tree moisture levels are to be monitored in accordance with BS8545 11.3 Irrigation.
- 2.9 Shrubs and hedges are to be set out as shown on the drawing and pit planted into the prepared soil at the specified centres with minimal disturbance to the rootball and well firmed in. Spread ornamental pine bark mulch to a depth of 75mm across all new planting areas, ensuring groundcover plants are not buried.

Maintenance during first growing season

- 2.10 All dead, dying or diseased trees will be replaced with trees of similar size and species. If the failure of the tree is due to disease and the disease is considered likely to re-occur then an alternative species may be used as replacement if agreed with the LPA.
- 2.11 The site is to be visited as required throughout the year to undertake the following operations:
- 2.12 Weed clearance: All planting areas will be kept weed free by hand weeding or herbicide treatment.
- 2.13 Checking trees: All tree ties and stakes will be checked and adjusted if too loose, too tight or if chafing is occurring. Any broken stakes will be replaced.
- 2.14 Formative pruning: Any damaged shoots/branches will be pruned back to healthy wood. Plants will be pruned in accordance with good horticultural practice to maintain healthy well-shaped specimens.

Watering during first growing season

- 2.15 The requirement for watering of newly planted trees will generally be dependent on weather conditions during the first growing season following planting. In a dry season watering may be required on a fortnightly basis from immediately after planting until the end of the growing season, but in a wet season watering may not be required at all. Therefore, trees shall be monitored regularly by test digging down to root level to assess the water content of the soil, with watering undertaken as required to ensure that the soil is at field capacity 2-3 days after watering.

3. NATIVE SCRUB/STRUCTURE/HEDGE PLANTING

Ground Preparation

- 3.1 Where necessary existing weeds will be treated with a glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- 3.2 All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter will be removed from site to a registered waste disposal facility.

Planting

- 3.3 Bare-root hedge plants shall be notch planted at 1m centres for scrub/structure planting areas and at 5 per linear metre, in a double staggered row, rows 500m m apart for hedge planting (using L-, T-, H-shaped or straight notches) using spades of a design suitable for this purpose. The notches must be vertical and deep enough for the roots to hang freely, with the transplant being planted so that the root collar is exactly level with the ground surface. The notch must then be closed and the soil will be well firmed round the roots in line with the guidelines as set out in BS 4428 (1989).
- 3.4 Container-grown hedge plants will be planted into a pit dug 1.5x the diameter of the root mass, with the bottom and sides of the planting pit broken up to aid root expansion. The plants will be planted so that the root collar is exactly level with the ground surface.
- 3.5 All bare-root hedge planting stock will be protected from rabbit damage using approved proprietary 600mm clear plastic spiral guards, supported with 0.9m 12/14lb canes as advised by the manufacturer.
- 3.6 All container-grown shrubs will be protected from rabbit damage using approved proprietary 600mm plastic shrub shelters, supported with 0.9m x 32 mm x 32mm softwood stakes as advised by the manufacturer.

Maintenance during first growing season

- 3.7 All dead, dying or diseased hedge plants will be replaced with plants of similar size and species. If the failure of the plant is due to disease and the disease is considered likely to re-occur then an alternative species may be used as replacement if agreed with the LPA.

- 3.8 The planting area will be kept weed free throughout the maintenance period using approved herbicides in April, June and August.

4. GRASS

Preparation

- 4.1 The area to be seeded will be cultivated to a depth of 100mm removing all weeds, debris and stones over 25mm diameter. The surface will be raked to smooth flowing contours with a fine tilth, incorporating pre-seeding fertiliser at 70 g/m².

Seeding

- 4.2 Grass seed will be sown in accordance with BS 4428 (1989), and will be sown from April to May or from September to October, during calm weather and not when the ground is frost bound or waterlogged. Seed will be sown in two equal sowings in transverse directions at 5g/m² for EG8 Mix, and 4g/m² for EL1 mix. After sowing the seed will be lightly raked to create intimate contact with the soil.

Grass/Wildflower Mix Cutting

EL1 Mix

First year management

- 4.3 The wild flower and grass species in this mix are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This annual weed growth is easily controlled by repeated mowing.
- 4.4 Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds.
- 4.5 Dig out any residual perennial weeds such as docks.

Management once established

- 4.6 Mow regularly as a lawn but not too short (25-40mm).
- 4.7 To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4-8 weeks). Mowing may be suspended earlier in the

year to allow cowslips to flower. Heavy quantities of cuttings should be collected and removed from site.

EGS Mix

First year management

- 4.8 Growth and establishment of wild grasses may be slow initially, especially at low sowing rates (2-5g/m²). There will often be a flush of annual weeds from the soil in the first growing season. This weed growth is easily controlled by topping or mowing.
- 4.9 Mow all plant growth (sown grasses and weeds) regularly to 40-60mm throughout the first growing season to prevent weeds smothering the slower-growing grasses. Remove cuttings if dense, more frequent and regular topping will minimise the number of topplings produced each time so they can be left to disperse.

Management once established

- 4.10 In the second and subsequent years grass sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland.
- 4.11 Regular mowing will produce a short turf or lawn.
- 4.12 The sowing can be managed as a meadow allowing the grasses to grow tall, flower and seed from May through to July/August. The grass meadow should be cut back and mowing resumed in late summer.
- 4.13 Grassland which is not cut each year will eventually become coarse and tussocky in character.

5. WATERING

Trees

- 5.1 Watering is one of the prime keys to successful establishment after planting a tree.
- 5.2 Use a watering can with a rose attachment on the end to water, a hose pipe or other such method that will administer water slowly and at a low pressure, mimicking rainfall.

- 5.3 Water should be applied to the base of the trees, evenly distributed over the entirety of the root-ball to encourage even root development.

Immediately after planting

- 5.4 In spring and summer, water newly planted trees immediately (known as 'watering in').
- 5.5 In autumn and winter, it depends how wet the ground is, or if rain is due. At this time of year, it's only really necessary to water in if we are experiencing a dry spell, to make sure the roots don't dry out.
- 5.6 A newly planted tree should be watered in when planted, and at the point of bud burst in the spring and should be continued throughout the spring and summer until the leaves have fallen in autumn (for deciduous trees).

In the first year after planting

- 5.7 From mid-March until the end of September, water trees two to three times a week. Increase this regime if we have a particularly hot and dry spell, and vice versa, reduce if the weather is very wet. Bear in mind that rain doesn't necessarily get to where it's needed, if the leaf canopy creates a 'rain shadow'. Dig down a little into the soil if you want to check how moist it is under the surface. During the height of summer, water should be applied at a rate of 2 domestic buckets full (or 20 litres of water) every other day. This figure is the aim to reach during the height of summer and can be gradually increased to this in the spring and decreased before ceasing watering in the autumn.
- 5.8 It's best not to water every day, but to let the ground dry out a little bit, encouraging roots to spread out in search of water. If a drought is on the horizon, however, consider beginning to water before things get dry.
- 5.9 In autumn and winter, watering isn't generally necessary, unless we have an unseasonally warm and dry period.
- 5.10 Watering is advised for the first 2 summers after planting, further to this the tree should be able to access water from the surrounding soil.
- 5.11 Use bark mulch at the base of the tree to help retain water, prevent weed growth and also give you an indication of where you need to water.

- 5.12 Be mindful that newly planted trees do need watering, even if it has been raining! Rain is useful in slowing up the volume of water needed by a newly planted tree, as it is often cooler during such periods, however it is the root-ball of the tree that needs watering and often rainfall will not fall this close to the base of the tree, due to the width of the canopy
- 5.13 Ensure that water is draining well away after 10 minutes of application of water.

2-3 years after planting

- 5.14 After the first year, enough roots may have grown into the soil to allow the plant to drink up enough to support itself, but as a precautionary measure carry on watering during dry spells. Monitor the plants to help you decide whether to water. If they begin to look at all floppy, drench them. Yellowing, dropping leaves, on the other hand, can indicate over watering (but not always).
- 5.15 You can water further away from the stem during this time, as the root zone will have widened out. Watering further away will also encourage roots to spread out.

Native Scrub/Structure/Hedge Planting

- 5.16 Do not let the soil dry out at all in the first 12 months. Even if the plants appear dormant, the roots will be starting to grow under the ground. It is better to soak the soil twice a week than it is to sprinkle it with water every day. The water needs to sink as far as possible into the ground to encourage deep rooting. To make life easier, consider an automated irrigation system.
- 5.17 New planting areas need to be kept well-watered if the weather is dry. As a guide, a new scrub/hedge planting areas will need at least 5-10 litres per metre, twice a week but larger rootball plants will need substantially more.

Peak watering times

- 5.18 Plants need most water when they are in active growth. Deciduous trees which lose their leaves in autumn, are in this state in spring and summer.
- 5.19 It's important that trees don't dry out completely, at any time of year.
- 5.20 Watering in the early morning or in the evening is most efficient.