ECOLOGICAL MITIGATION PLAN (EMP)

NOVEMBER 2019

Old Mill Lane
Barnsley
S71 1LL

URBAN GREEN

QUALITY MANAGEMENT

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1 Introduction

1.1 Background to the Scheme

Aldi are proposing to develop land off Old Mill Lane, Barnsley (hereafter referred to as 'the site'). The proposals include the construction of a food store with associated car parking areas as well as hard and soft landscaping.

Urban Green have been appointed to complete an Ecological Mitigation Plan (EMP) to meet condition 12 of the Decision Notice (planning application no.: 2019/0711), which states:

'Prior to commencement of development full details of the mitigation measures identified in the Ecological Assessment by Urban Green Job No. 11177 submitted with planning permission reference 2016/1399, including a timetable for their implementation, shall be submitted to and approved in writing by the Local Planning Authority. The development shall be implemented in accordance with the approved details.'

With the reason to conserve and enhance biodiversity in accordance with Local Plan Policy BIO1.

1.2 Site Context

The site is located at National Grid Reference SE 35168 07329 and comprises a total area of approximately 0.6ha (see Figure 1).

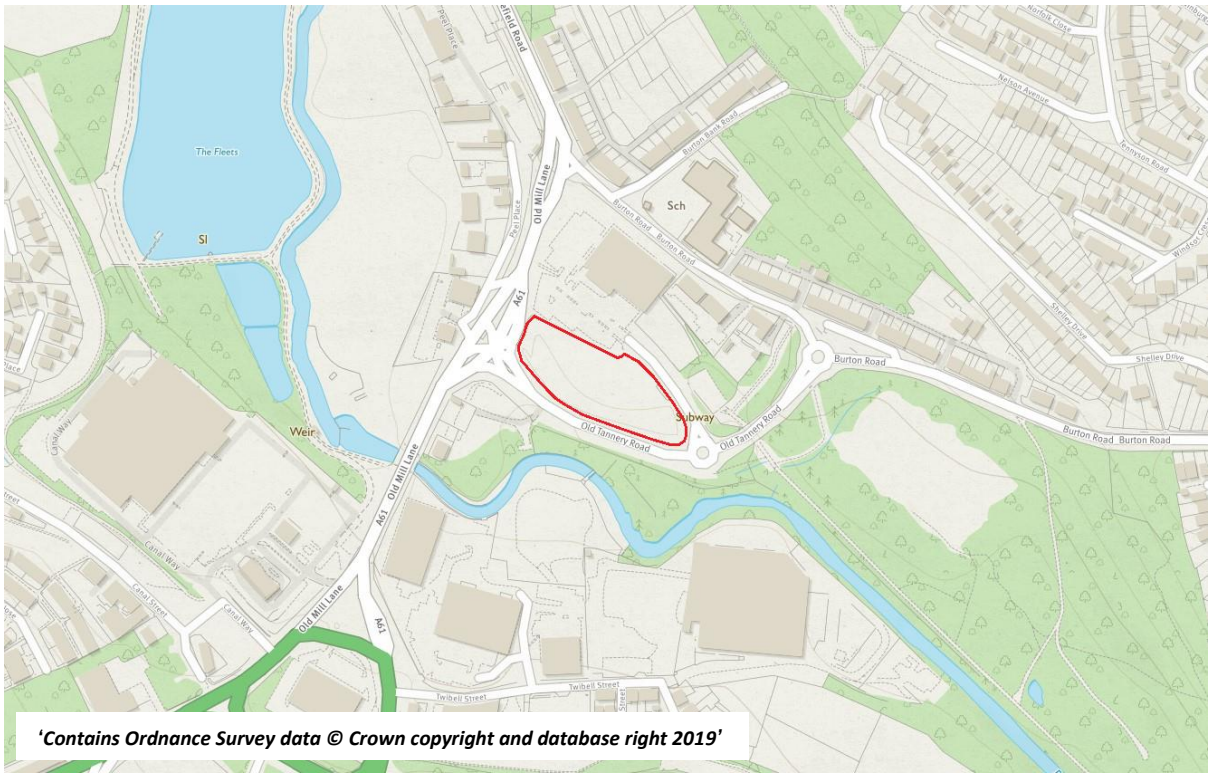


Figure 1 – Site Extent

The site is located in a fairly urban area approximately 1.2km north-east of Barnsley town centre and is bordered by Old Tannery Road to the south, Old Mill Lane the West, and a retail unit with associated car parking and entry road to the north. Large residential areas are located approximately 400m east and west of the site.

The River Dearne runs approximately 50m to the south of the site and is bordered by broadleaved deciduous woodland. A larger body of water named The Fleets, is located approximately 200m north-west of the site. Significant amounts of broadleaved deciduous woodland are located to the south and south-east of the site, stretching into Dearne Valley Park.

1.3 Walkover Survey

The site was revisited on 12/11/19 due to the time elapsed between the EA 11177 conducted by Urban Green in 2016 and this report. The walkover was undertaken to determine whether the site condition and habitats had significantly changed since the initial field survey.

1.3.1 Phase One Habitat Survey

It was found during the walkover that the site has undergone some succession since the initial EA was conducted. Much of the hardstanding is now considered to be ephemeral/sort perennial vegetation with scattered scrub (photograph 1). Species here comprised buddleia (*Buddleja davidii*), gorse (*Ulex europaeus*), brambles (*Rubus fructicosus* agg.), hawthorn (*Crataegus monogyna*), and dogwood (*Cornus* sp.) The central southern area of the site has developed into a small area of marshy grassland made up mainly of hard rush (*Juncus inflexus*) (photograph 3). Some bare ground with ephemeral/short perennial vegetation still exists, with species such as teasel (*Dipsacus* sp.), willowherb (*Epilobium* sp.). This develops into scrub through immature trees, mostly silver birch (*Betula pendula*) and alder (*Alnus glutinosa*) to the west of the site (photograph 2). Several goat willow (*Salix caprea*) and ash trees (*Fraxinus excelsior*) are present to the east of the small wall that exists centrally in the site (photograph 3).

Photographs 1, 2, 3: Ephemeral/short perennial and scrub east of site (upper left); scrub with ephemeral/short perennial and some bare ground on the west of the site (upper right); marshy grassland with noted willow trees in background in the central areas of the site (lower).

2 Avoidance Measures

2.1 Vegetation Clearance

The removal of this vegetation has the potential to disturb nesting birds, and small mammals such as hedgehogs, which my use such vegetation for refuge or hibernation purposes. Therefore, it is recommended that vegetation clearance is done outside the bird nesting season (between March to August inclusive). Any works done within the bird nesting season would require a check for nesting birds and sheltering hedgehogs no more than 48 hours of the scheduled works. This should be done by a suitably qualified ecologist. If nesting birds are found during these checks vegetation clearance must cease and the nest left *in situ* until chicks have fledged. Should any hedgehogs be found at this time they should be carefully moved with a gloved hand to suitable habitat off-site, such as the woodland to the south of the site.

2.2 Construction Considerations

2.2.1 Bat Roost Considerations

The data search completed during the EA indicates that an important maternity roost of Daubenton's bats (*Myotis daubentonii*) is located approximately 150m south of the site. It is considered that the distance of the site from the roost is sufficient that most works would not disturb the bats. However, excessive vibrations may lead to disturbance. Therefore, works likely to cause considerable ground vibrations, such as piling or drilling, will be avoided between May and August inclusive, to avoid the core bat maternity season.

2.2.2 Badger Sett Checks

Visible mammal holes were found in the woodland some 40m south of the site during the walkover visit, with the possibility of it being a badger sett. While it is unlikely that badgers will use the site itself, construction works has the potential of disturbing badgers within 30m. This includes parts of the woodland.

Therefore, a pre-construction check of badgers should be conducted no more than three months before works begin. If a sett is found at this time, it may be necessary to apply for a licence from Natural England. Works under this licence can only be conducted between July and November inclusive.

2.3 Artificial Lighting

Artificial lighting has the potential to cause disturbance to nocturnal species, including commuting bats. It is important that artificial lighting, both during the construction and post-development stages, are kept to minimal safe levels.

As highlighted in the previous Ecological Assessment, the nearby known roost of Daubenton's bats is considered sufficiently far enough away for construction lighting to not have a detrimental effect. The site itself has no hedgerows or tree lines, which are commonly used by commuting bats, though a tree line does exist opposite Old Tannery Road. This road has pre-existing street lighting, meaning the site is unlikely to further significantly affect commuting bats through artificial lighting. Despite this, no excessive lighting to the southern part of the site should be achieved to minimise further impacts on commuting and foraging bats. Additionally, upward spill of new lighting should be avoided throughout the site.

Lighting in the post-development stage should ideally not excessively illuminate the trees and other vegetation that is situated throughout the site. Any excessive lighting should be avoided, particularly near to the River Dearne. Illumination of bird and bat and bird boxes should also be avoided.

When lighting is required it should be restricted to a minimum and designed by a suitably qualified lighting professional, in accordance with the most recent guidance for considering the impact on bats when designing artificial lighting schemes, i.e. *Guidance Note 08/18 issued by the Bat Conservation Trust and Institute of Lighting Professionals* (*BCT/ILP, 2018*). Restrictions should include (but are not limited to):

- Use of LED luminaries only; luminaries with UV elements and metal halide, fluorescent sources should not be used.
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
- Luminaries should feature peak wavelengths higher than 550nm to avoid components of light most disturbing to bats.
- Only luminaries with an upward ratio of 0% and with good optical control should be used; mounting should always be horizontal, i.e. no upward tilt.
- If security lighting is required, they should be set on motion sensors and short (1min) timers.
- Guidance Note 08/18 should be consulted for full details.

3 Creation of New Ecological Features

3.1 Soft Landscaping

Appendix 1 provides details of the soft landscaping and plant species lists planned for the trees, shrubs, and wildflower mix to be planted throughout the site.

All landscape planting will be carried out during the first possible planting period following the completion of the building and car park construction and associated engineering works. Trees will be planted during dormant winter period: late October to late March. Bare root native transplants will be done during the dormant winter period late October to April. Container grown ornamental and specimen shrubs will be planted at any suitable time as allowed by favourable ground and weather conditions.

3.1.1 Tree Planting

No mature trees will be lost through the development, though several young trees will be lost. This will be offset through the provision of 15 new trees planned in the soft landscape proposals.

All trees planted within shrub beds will be planted in separate pits of 1000mm depth, including 150mm drainage layer of well washed gravel and backfilled with topsoil. All trees will be obtained from HTA-certified nurseries.

3.1.2 Shrubs

The creation of shrubs has the potential to enhance invertebrate populations and provide areas of refuge to small birds and mammals such as hedgehogs. This will offset the small amounts of scrub that will be lost through the development.

3.1.3 Wildflower Mix

The proposed wildflower seed mix will cover a small area to the east of the site. Promotion of flowering plants can enhance habitat of pollinating invertebrates, potentially benefitting populations of bees and other pollinating species that rely on flowering plants.

3.1.4 Species with Known Ecological Benefits

While all planting can provide refuge and shelter for species, particularly evergreen species which can greatly benefit birds and small mammals. Certain plant species that have been included in the soft landscaping proposal plan have known ecological benefits.

Bats: Plant species that benefit bats includes rowan (*Sorbus aucuparia*) supports bat prey species such as moth caterpillars, as well as variety of birds that forage on the fruits it produces, hazel (*Corylus avellana*), ivy (*Hedera helix*) (BCT, 2012).

Birds: Berry or seed producing plants that support birds are included such as: ivy, Oregon grape (*Mahonia aquifolium*), hazel, rowan, which supports important species such as bullfinch and song thrush, as well as popular garden birds including blackbirds (BTO, n.d.).

3.2 Nesting Opportunities

3.2.1 Birds

The site will be enhanced for nesting birds through the provision of increased vegetation including new trees and shrubs, which will provide nesting opportunities. The addition of bird boxes to the onsite trees will enhance this further.

Appendix 2 provides further details of suggested bird nest box including suggested locations.

A range of box types, including entrance hole sizes can enhance nesting for a greater range of species. Table 1 provides examples of suitable nest boxes sizes and what species they are suitable for. While important species such as kingfisher are locally present, it is more practical to provide nesting opportunities to birds that are known to inhabit urban areas such as blue tits (*Cyanistes caeruleus*), great tit (*Parus major*), house sparrows (*Passer domesticus*), and starlings (*Sturnus vulgaris*). The enhancement of nesting habitat of birds such as these may even have a beneficial effect for birds of prey.

Bird boxes are most effective when positioned on north-east to north-west facing aspects, to prevent overheating during the summer nesting season. They should be affixed to vertical surfaces, with a minimum height of 3m, while ensuring they are not angled in a way that allows rain to enter the box,

Maintenance: Woodcrete boxes are considered more durable than traditional wooden boxes and require less maintenance and are longer lasting as a result.

Regular annual checks should be conducted between October and February to ensure the boxes are maintained and clean. Bird boxes will be opened and cleaned only outside the bird nesting season (March to August inclusive).

- Unhatched eggs may be removed legally between September and January and must then be disposed of.
- Disused nests will be removed, and boiling water can be used to clean the boxes and remove parasites. Boxes should be left to dry before replacing the lid. Insecticides and flea powders must not be used.
- Damaged boxes must be replaced like for like at the expense of the developer.

Table 1: Bird Nest Box Hole Sizes and Associated Species

Box entrance hole size	Associated species
25mm	Blue, coal, and marsh tits
28mm	Great tits, tree sparrows, pied flycatchers
32mm	House sparrows and nuthatches
45mm	Starlings
60mm (open fronted)	Spotted flycatcher
100mm (open fronted)	Robins and pied wagtails
140mm (open fronted)	Wrens

4 Habitat Maintenance and Management

4.1 Vegetation

The soft landscaping proposals include the plans for planting and maintenance of the vegetation (Appendix 1). All planting will be maintained for 5 years after the practical completion, with monthly site visits to identify plant losses and defects whereby replacement plants of similar sizes will be substituted. The landscape plans specify that weeds are to be managed by hand pulling and appropriate herbicides. Hand pulling methods are preferred due to potential ecological damage that can be caused using herbicides. Note many native weeds can have ecological benefits to invertebrates and biodiversity and their removal is usually for aesthetic purposes. Similarly avoiding being overly tidy provides ecological benefits. Leaving leaf litter and dead flowerheads can significantly enhance invertebrate habitats, which in turn benefits birds and mammals.

4.1.1 Proposed Tree Planting

Tree inspections and assessments: Trees should be regularly inspected to ensure they are free of signs of disease, including rotten wood, fungal or other infections. Any identified issues should require the immediate attention of a qualified arboriculturist. Arboricultural assessments of trees should be undertaken every three years, or as required where there are concerns to public safety or damage to property.

Timeframes and specialist advice: All tree-related works should be completed at an appropriate time of year and in accordance with relevant EU and UK wildlife legislation. Where possible works should be undertaken outside of the bird nesting season (i.e. between September through to March). Any urgent works needed within the bird nesting season may require an assessment by a qualified ecologist to assess that nesting birds are likely absent beforehand.

Tree works: All tree works should be carried out by a skilled, qualified and approved arboricultural contractor in accordance with BS3998: 2010 'Tree Work – Recommendations'. All brushwood and logs that result from surgery and felling of trees on site shall be removed off site. Brushwood may be chipped on site, but all wood chippings resulting from these operations shall be raked up, bagged and removed.

4.1.2 Proposed Shrub Planting

Shrubs are to be planted as specified on the soft landscaping plan (Appendix 1), this includes both location and density of planting. Planting holes are to be 150mm wider than the root spread, and the ground is to be thoroughly broken up before planting and backfilled with compost.

4.1.3 Proposed Wildflower Planting

The wildflower mix specified as 'Flowering Meadow Mix WFG2 mix and WF17 mix' is to be planted directly onto cultivated subsoil as per the manufacturer's recommendations. Appropriate herbicide will be used and appropriate time to elapse prior to planting. Fertilisers, composts, and mulch should not be used to maintain appropriate levels of low nutrients.

First season cutting: If sown in Autumn, cut in March/April. If sown in Spring, cut in September/October after flowering.

Second season cutting: Cut to 40-70mm in March/April and the to 40mm in September/October, after flowering.

All cuttings must be removed from the bed to maintain reduced soil nutrient levels.

5 Timings of Works

5.1 Pre-Construction

Pre-construction works	J	F	M	A	M	J	J	A	S	O	N	D
Vegetation clearance			Avoid bird nesting season: March to August									

5.2 Construction

During construction works	J	F	M	A	M	J	J	A	S	O	N	D
Erect bird boxes	Any time											
Heavy construction e.g. drilling and piling					Avoid May – August due to sensitive bat breeding time							
Badger licence works (if applicable)							Jul – Nov If badgers are found 30m within the site and a NE licence is required.					

5.3 Post-construction

5.3.1 Bird Box maintenance

Habitat box maintenance	Year 1	Year 2	Year 3	Year 4
Bird box checks to see if boxes are in good condition and in working appropriately		Sept - Feb		Sept - Feb
Bird box cleaning		Sept - Feb		Sept - Feb

5.3.2 Vegetation management

Vegetation maintenance	J	F	M	A	M	J	J	A	S	O	N	D
Tree planting	Oct – Apr									Oct – Apr		
Bare root native transplants	Oct - Apr									Oct Apr		
Ornamental and specimen shrubs	Anytime with favourable ground and weather conditions											
Tree pruning and work			Avoid bird nesting season: March - August									

Vegetation maintenance	J	F	M	A	M	J	J	A	S	O	N	D
1st season Wildflower cutting			Cut Mar/Apr if sown in Autumn					Cut in Aug – Oct if sown in Spring after flowering				
2nd season Wildflower cutting			Cut Mar/Arp to 40-70mm						Cut in Sept – Oct to 40mm after flowering			

	Recommended times and times when work can be conducted
	Times to avoid relevant work either through recommendation or under licence

6 References

Bat Conservation Trust. (2012). Landscape and urban design for bats and biodiversity. Available: https://www.bats.org.uk/resources/guidance-for-professionals/landscape-and-urban-design-for-bats-and-biodiversity. Last accessed 11/11/19.

British Trust for Ornithology. (n.d.). Plants for fruits and seeds. Available: https://www.bto.org/our-science/projects/gbw/gardens-wildlife/gardening/plants-fruit-seeds. Last accessed 11/11/19.

Appendix 1 – Soft Landscaping Proposals

NOTE:
SURROUNDING CONTEXTUAL BUILDINGS AND INFORMATION ARE BASED ON RECEIVED ORDINANCE SURVEY DRAWINGS AND ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. ASSUMED SITE BOUNDARY IS SUBJECT TO CONFIRMATION

NORTH

Landscape Key:

Proposed trees in soft landscape
Refer to schedule for species and specification

Proposed specimen shrubs
Refer to schedule for species and specification

Proposed ornamental shrub planting
Refer to schedule for species and specification

Proposed buffer mix planting
Refer to schedule for species and specification

Proposed wildflower seed mix
British Seed Houses Flowering Meadow Mix WFG2 with added Rhinanthus minor (2%) sown at 4g/m2 AND WF17 sown at 1g/m2. WFG2 mix and WF17 mix to be mixed together prior to application at a rate of 1 kilo WF17 to 4 kilo of WFG2. Refer to specification for sowing and maintenance requirements.

LANDSCAPE SPECIFICATION

NOTE: All soft landscape works to be carried out in accordance with BS4428:1989.

SUBSOIL
Subsoil should be broken up to relieve compaction and aid drainage prior to topsoiling to the following depths:
- For light and non cohesive subsoils: 300mm
- For stiff clay and cohesive subsoils: 450mm
Immediately before spreading topsoil, remove stones larger than 50mm.

TOPSOIL
To be supplied and spread by the main contractor to the approval of the Landscape contractor, in accordance with BS 3882 :2007. To be a natural sandy loam, of medium texture, with a pH between 5.5 and 7.8, not more than slightly stony and free of pernicious weeds and peat free. Subsoil to be well broken up prior to top-soiling to relieve compaction. Topsoil depths should be:
Areas for Ornamental Shrub Planting: minimum 450mm
Areas for Native Shrub Planting: 300mm

CULTIVATION
Weeds to be prevented from seeding or becoming established by applying a suitable herbicide and allowing the correct time to elapse, as directed by the manufacturer. Compacted soil to be broken up to a depth of 100mm, with any stones, grass tufts or rubbish larger than 50mm in any direction to be removed, leaving a regular and even surface. Suitable slow release fertiliser to be supplied and spread @ 50g/m2 to all planted areas.

CLIMATIC CONDITIONS
Topsoiling should be carried out in the driest conditions possible – cultivation to be carried out when the soil is moist, friable and not waterlogged or frozen. Topsoil should not be handled during or after heavy raintall or when it is wetter than the plastic limit as defined by BS 3882. Planting should not take place in waterlogged conditions or when the ground is frozen.

SOIL AMELIORANT
Peat-free compost to be spread over ornamental shrub beds @ minimum 50mm depth prior to cultivation.

TREES
All trees within shrub beds to be planted in separate pits in accordance with tree planting details.
Tree pit to be 1000mm depth including minimum 150mm thick drainage layer of well washed gravel with a geotextile layer separating growing medium from drainage layer. Pit bottom to be broken up to minimum depth of 250mm and sides to be scarified.
Trees to be backfilled with topsoil : tree planting compost 1:6 by volume. All plant material to comply with BS 3936 Part 1 :1992, be obtained from a nursery certified by the HTA and transported to site in accordance with the HTA Plant Handling Guide: 1996. All trees to be planted to the original root collar and the following methods should be implemented to secure them: All trees to be Platypus underground guying system or equal approved.

SHRUB PLANTING
All shrubs to be positioned as shown on the drawing and to the density and specification listed in the plant schedule. Planting holes to be 150mm wider than the root spread, have the base ground thoroughly broken up before planting and backfilled with compost.

TIMES OF YEAR FOR PLANTING
Landscape works to be carried out during the first possible planting periods following completion of the building and associated engineering works / car park areas in accordance with the following:
Native and ornamental trees: During dormant winter period - Late October to late March
Bare root native transplants: During dormant winter period - Late October to April
Container grown ornamental and specimen shrubs: At any time if ground and weather conditions are favourable.

MULCH
75mm depth of 8-35mm ornamental bark mulch (peat-free) to be supplied and spread to all planting areas. Finished mulch level to be installed and maintained at 25mm below any adjacent kerbs or paving surfaces. Mulch to be peat free.

WILDFLOWER PLANTING
Wildflower mix to be planted directly into **cultivated subsoil** in accordance with manufacturers recommendations at rate of 5g/m2 (see key for species mixture).
Preparation: Cultivate subsoil, apply a suitable herbicide and allow the correct time to elapse, as directed by the manufacturer, and seed the bed. No fertiliser, compost or mulch are to be applied to the wildflower bed.
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 twice a year from then on as per above.
***NOTE** - At time of each cut all arisings to be removed from the bed to maintain reduced soil productivity.

SUBSTITUTIONS
Upon submission of evidence that certain materials, including plant materials, are not available at the time of the landscape contract, the Landscape Contractor may be permitted to substitute other materials and plants in exceptional circumstances during the contract with an agreed adjustment of prices.
All substitutions shall be of nearest equivalent species and variety to the original specified but shall be subject to approval by the Landscape Architect before any change is made.

MAINTENANCE
All planting areas to be maintained to a high standard for 5 years after practical completion, to ensure the landscape scheme is successful, and discourage decline of the area. The site is to be visited at minimum once per month. Any defects or plant losses occurring within the 5 years period to be replaced with planting of similar size and species to that originally specified unless agreed otherwise. All planting beds to be re-firmed and kept weed free through hand weeding and application of approved herbicide where appropriate. The specified thickness of mulch is to be maintained. The condition of all trees is to be regularly checked, with ties and stakes adjusted or replaced as necessary. Shrubs to be pruned at appropriate times of year to promote healthy growth and desirable ornamental features. All arisings to be removed. Watering should take place as necessary to ensure establishment and continued success of all planting.

PLANTING SCHEDULES:

Name	Abb.	Form	Age	Girth	Height (cm)	Clear stem	Root	Breaks	Density	Total No
Trees										
Betula utilis 'Jacquemontii'	BuJ	Standard extra heavy	3x	18-20	min 450	min 200	RB	/	Item	6
Pyrus calleryana 'Chanticleer'	PcC	Standard extra heavy	3x	18-20	min 450	min 200	RB	/	Item	2
Sorbus aucuparia	Sa	Standard extra heavy	3x	16-18	min 450	min 200	RB	/	Item	3
Tilia cordata 'Rancho'	TcR	Standard extra heavy	3x	18-20	min 450	min 200	RB	/	Item	4

Name	Abb.	Height	Root	Container	Habit	Breaks	Density	Total No
Specimen Shrubs								
Amelanchier lamarckii	Al	250-300	RB	/	Multi Stem, 3x	3	Item	5
Phormium cookianum Tenax	PcT	100-150	C	15L	Triple Crown	/	Item	6
Phormium Apricot Queen	PAQ	/	C	15L	Triple Crown	/	Item	9

Name	Abb	Height	Root	Container	Habit	Breaks	Density
Ornamental Planting							
Ceanothus thyrsiflorus 'Repens'	CtR	30-40D	C	3L	Bushy	5	5/m²
Choisya ternata 'Sundance'	CtS	30-40	C	3L	Bushy	4	5/m²
Epimedium perralderianum	Ep	/	C	3-4L	V	/	5/m²
Euonymous fortunei 'Emerald 'n' Gold'	EfEG	20-30D	C	3L	Bushy	7	5/m²
Euonymous fortunei 'Harlequin'	EfH	20-30D	C	3L	Bushy	7	5/m²
Hedera helix 'Glacier'	HhG	60-80	C	3L	Sev. Shoots	4	5/m²
Heuchera villosa 'Palace Purple'	HvPP	/	C	3-4L	S or V	/	5/m²
Lonicera nitida 'Baggesens Gold'	LnBG	30-40	C	3L	Bushy	3	4/m²
Mahonia aquifolium 'Appollo'	MaA	30-40	C	3L	Branched	3	4/m²
Pachysandra terminalis	Pt	15-20D	C	3L	Several shoots	9	5/m²
Photinia x fraseri 'Little Red Robin'	PfLRR	30-40	C	3L	Branched	6	4/m²
Prunus laurocerasus 'Otto Luyken'	PlOL	30-40	C	3L	Bushy	3	4/m²
Viburnum x davidii	Vd	20-30	C	3L	Bushy	3	5/m²

Name	Abb	Age	Height	Root	Container	Habit	Breaks	Density	% in Mix
Buffer Mix Planting									
Cornus sanguinea	Cs	1+1 or 1/1	40-60	B	/	Branched	2	2/m²	15%
Cornus sanguinea 'Midwinter Fire'	CsMF	1+1 or 1/1	40-60	B	/	Branched	2	2/m²	15%
Cornus stolonifera 'Flaviramea'	CsF	1+1 or 1/1	40-60	B	/	Branched	2	2/m²	15%
Corylus avellana	Ca	1+1 or 1/1	40-60	B	/	Branched	2	2/m²	10%
Elaeagnus ebbingei 'Limelight'	EeL	/	30-40	C	2L	Branched	3	2/m²	15%
Photinia x fraseri 'Red Robin'	PfRR	/	20-30	C	2L	Branched	3	2/m²	15%
Prunus laurocerasus 'Rotundifolia'	PlR	0/2	60-80	B	/	Bushy	3	2/m²	15%
*Buffer planting mix to be planted in random groups of between 5, 7, 9, 11, 13 or 15 of a single species at a rate per m² as specified above.									

0 2 4 6 8 10 20 50m

Scale: 1:250 @ A1

Revisions	Description	Drawn	Check
28-05-19 D	Updated to co-ordinate with architect latest layout	FW	AS
09-01-17 C	Cotoneaster spp. omitted at planners request.	DW	DW
06-01-17 B	1 No tree added in lieu of specimen shrub adjacent Old Mill Lane.	DW	DW
28-04-16 A	Wildflower meadow added as per ecologists comments.	DW	DW

Project Title	Proposed Foodstore Development Old Mill Lane Barnsley
Drawing Title	Proposed Landscape Plan
Job-Dwg No	V1210 L01 Rev D
Client	ALDI STORES LTD
Status	PLANNING
Scale	1:250
Drawing Size	A1
Drawn By	DW
Checked By	AS
Date	04/16

vector design concepts
LANDSCAPE DESIGNERS
4 ST JOHNS NORTH, WAKEFIELD, WF1 3QA. TEL 01924 332056
web: www.vectordc.com email: andys@vectordc.com

CAD file reference V:\Aldi Projects\ALDI YORKSHIRE REGION\1210 SDAR Old Mill Lane, Barnsley\04 Landscaping

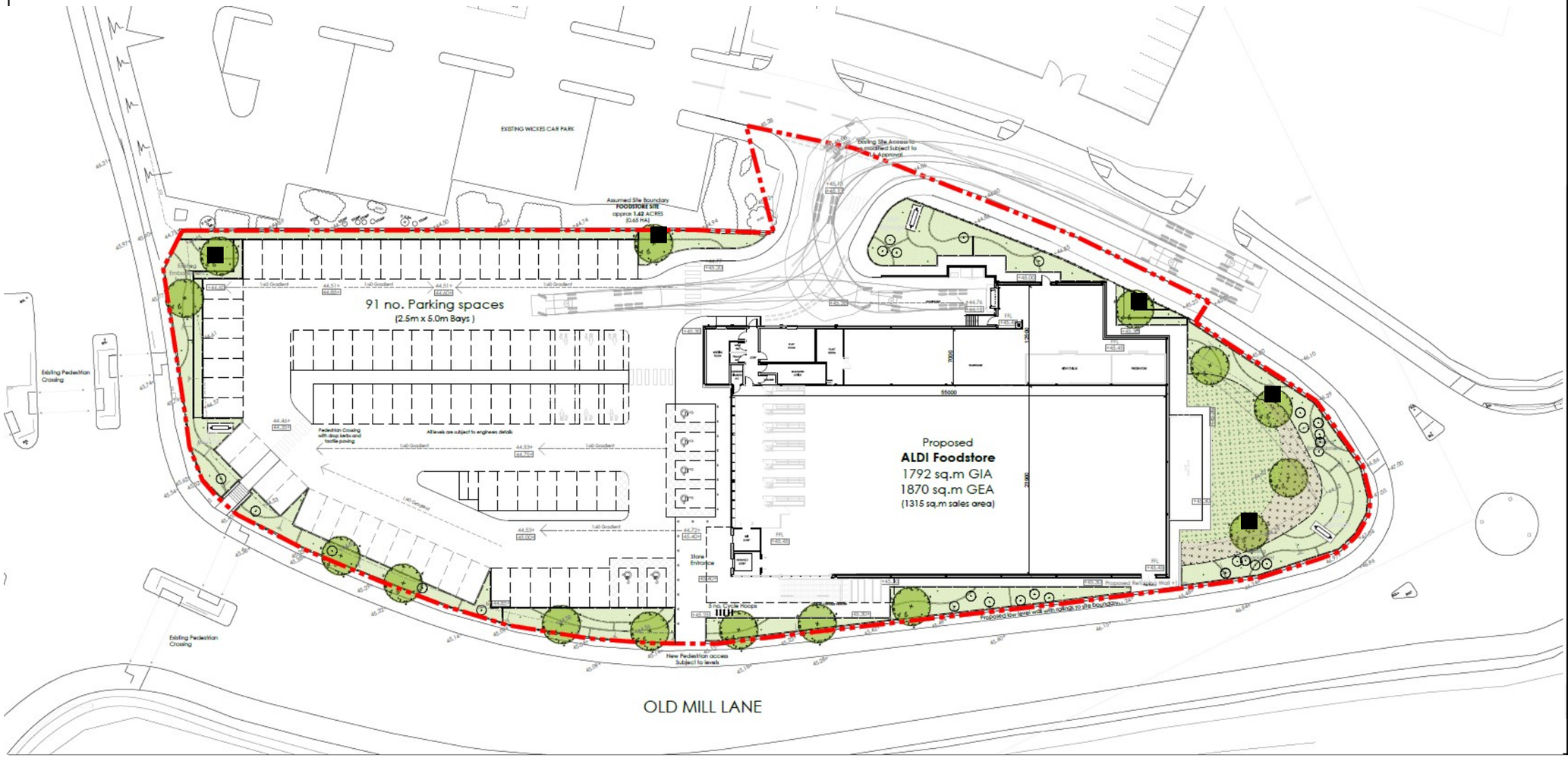
Appendix 2 -Bird Box Plan

Bird boxes should be affixed to trees vertically to protect from rain, at a minimum height of 3m, on a northeast to north-west facing aspect to avoid overheating.

Examples provided here with a variety of entrance hole sizes, catering for a variety of bird species.

Provisions for species such as starlings, and house sparrows is preferable. See Section 3.2.1 for further details.

Refer to nhbs.com for selection of bird boxes



■ Bird box locations

URBAN GREEN

A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client: **Aldi**

Project: **Old Mill Lane, Barnsley**

Title: **Bat and Bird Box Plan**

Issue: **PLANNING**

Drawn:	Checked:	Approved:
JM	JF	JF
Project:	**Scale @ A3:**	**Date:**
UG358	NTS	14/11/2019
Dwg No:		**Revision:**
UG_358_ECO_BBP_02		02