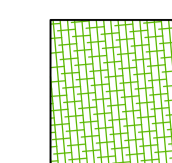


BIODIVERSE ROOF



Biodiverse Roof - Living Roof  
Wildflower Turf Ltd  
Wildflower Turf Roof Turf: \*WFT-Roof-34  
Soil-free wildflower turf system, mat of wildflower plants that retains 100% of its root system.  
SPECIFICATION - 20% grass / 80% flowers  
(Subject to seed availability)  
Total area approx. 380m<sup>2</sup>

Wildflower Turf Ltd Soil-less Substrate (WFT-Substrate)  
Inert, composted green waste based medium  
Substrate laid evenly at 110mm depth.

FLORA

- 1 Autumn Hawkbit (*Leontodon autumnalis*) P
- 2 Betony (*Stachys officinalis*) P
- 3 Bird's foot Trefoil (*Lotus corniculatus*) P
- 4 Black Medic (*Medicago lupulina*) A/P
- 5 Bladder Campion (*Silene vulgaris*) P
- 6 Cat's ear (*Hypochaeris radicata*) P
- 7 Common Knapweed (*Centaurea nigra*) P
- 8 Common Sorrel (*Rumex acetosa*) P
- 9 Common Toadflax (*Linaria vulgaris*) P
- 10 Common Vetch (*Vicia sativa*) P
- 11 Cowslip (*Primula veris*) P
- 12 Field Scabious (*Knautia arvensis*) P
- 13 Hoary Plantain (*Plantago media*) P
- 14 Lady's Bedstraw (*Galium verum*) P
- 15 Meadow Buttercup (*Ranunculus acris*) P
- 16 Meadow Cranesbill (*Geranium pratense*) P
- 17 Meadowsweet (*Filipendula ulmaria*) P
- 18 Musk Mallow (*Malva moschata*) P
- 19 Ox Eye Daisy (*Leucanthemum vulgare*) P
- 20 Perforate St John's Wort (*Hypericum perforatum*) P
- 21 Ragged Robin (*Lychnis flos-cuculi*) P
- 22 Red Campion (*Silene dioica*) P
- 23 Ribwort Plantain (*Plantago lanceolata*) P
- 24 Rough Hawkbit (*Leontodon hispidus*) P
- 25 Salad Burnet (*Sanguisorba minor*) P
- 26 Self-heal (*Prunella vulgaris*) P
- 27 Small Scabious (*Scabiosa columbaria*) P
- 28 Thrift (*Armeria maritima*) P
- 29 Tufted Vetch (*Vicia cracca*) P
- 30 Viper's Bugloss (*Echium vulgare*) B
- 31 White Campion (*Silene latifolia*) P
- 32 Wild Marjoram (*Origanum vulgare*) P
- 33 Wild Red Clover (*Trifolium pratense*) P
- 34 Yarrow (*Achillea millefolium*) P

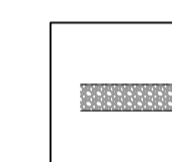
GRASSES

- 35 Sheep's Fescue (*Festuca ovina*) P

Key: P = Perennial; B = Biennial; A = Annual

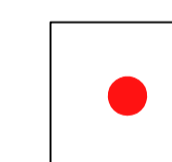


Permaloc type rounded aluminium edge to retain gravel, soil substrate + sub-base build-ups

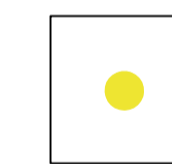


Ballast maintenance area and edge protection detail to Architects spec/detail, minimum 500mm width

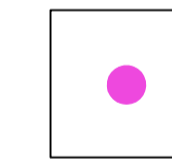
Biodiversity enhancements



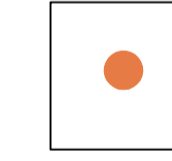
Additional habitats  
3no. Log pile



3no. Solitary bee house



6no. Bat boxes



6no. Sparrow terrace nest boxes



A	Living roofs updated	JB	03.04.20
REV.	DESCRIPTION	APP.	DATE

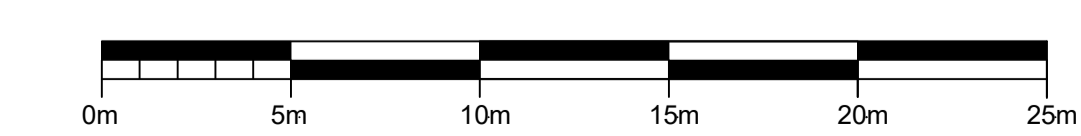
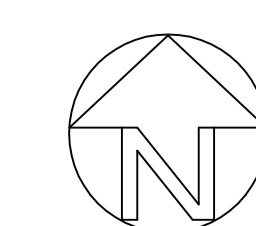
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Laundry Site Epping

Landscape master plan  
Roof Plan  
Biodiverse Roof

DATE	March 2020	DRAWN	ST
SCALE	1/200 @A1	CHECKED	NT
STATUS	Planning	APPROVED	NT
DWG. NO	00346_005 A		





- SOFTWORKS**
- Proposed specimen trees:**
- Ac Standard - 20cmg, 4m-4.5m height:
  - Ac Acer campestre 'Elsrijk'
  - Bp Betula pendula 'Zwisters Glory'
  - CbF Carpinus betulus 'Fastigiata'
  - SaM Sorbus aria 'Magnifica'
- Tree screen northern boundary**
- Tp Thuja plicata
  - 3.0m height, heavy standard 12-14cm girth
- Proposed multi-stem tree**
- Buj Betula utilis 'jacquemontii' 'Snow Queen'
  - 2.75-3.25m height
- Small low branching / multi stem tree**
- Cm Crataegus monogyna, min 2.5-3m height, av. 14-16 cmg
- Specimen shrubs - min 25L pots 1.2m ht**
- Ce Cercis Forest Pansy
  - Co Corylus avellana 'Contorta'
  - Ma Magnolia stellata
  - Ha Hamamelis mollis
- Climbers to boundary walls and fences (not named at this scale)
- Planted and trained onto horizontal line wires to 2.0m height, on eye bolt with turnbuckle tensioners.
- Ca Clematis armandii - 20%
  - Lg Lonicera per. Graham Thomas - 20%
  - TJ Trachelospermum jasminoides - 20%
  - Hp Hydrangea petiolaris - 20%
  - Vv Vitis vinifera - 20%
  - 25L, min. 2.0m ht, minimum 450mm BS 3882 topsoil
- Pleached pear tree
- Pyrus calleryana 'Chanticleer'
  - 1.8m clear stem and flat pleached frame of 2 metres square
- Grassed landscape and private gardens using species rich seed mix - Emorsgate EL1 flowering lawn seed mix
- Wildflower/grass meadow seed mix: using Emorsgate EM4 for heavy soils. Mow average 1.2 metre strip around all wildflower areas - adjacent to paths and buildings to give neat margin
- Buffer shrub planting - well formed bushy plants 3L pots at 4/m2
- Ef Euonymus fortunei 'Silver Queen' 10%
  - He Hebe Margaret - 10%
  - La Lavandula angustifolia 'Hidcote' 10%
  - Ma Mahonia aquifolium 'Apollo' - 20%
  - Pe Perovskia Blue Spire - 10%
  - Pt Pittosporum tobira nanum - 20%
  - Sa Sarcococca humilis - 10%
  - Sk Skimmia japonica 'Rubella' - 10%
- Herbaceous and fern planting**
- All 3L, bushy plants, density min. 6/m2
- Planted in groups of 5 and 7. min. 450mm topsoil to BS 3882
- Mulch all areas with fine composted bark to 50mm depth.
- Species to include:
- 5% Hakonechloa Macra
  - 15% Astrantia major 'Claret'
  - 10% Geranium macrorrhizum 'White Ness'
  - 10% Molinia Poul Peterson
  - 20% Luzula sylvatica
  - 10% Polystichum setiferum
  - 5% Arthrum filix femina (10/m2)
  - 5% Blechnum spicant
  - 10% Dryopteris affinis 'Cristata'
  - 5% Dryopteris filix-mas
  - 5% Hosta Halycon
- Ornamental native hedge approx. 5 plants per lin.m
- Carpinus betulus - 1m ht - 0.6m w
- Native mixed wildlife boundary hedging**
- Bare root 80-120cm, 2 Years (2+1) bushy, 5 plants per linear metre in double staggered row - 50cm between rows with spiral guards.
- 50% Crataegus monogyna (Hawthorn)
  - 30% Prunus spinosa (Blackthorn)
  - 5% Corylus avellana (Hazel)
  - 5% Cornus sanguinea (Common Dogwood)
  - 5% Acer campestre (Field Maple)
  - 5% Malus sylvestris (Crab Apple)

- Rain garden and bog garden**
- Species to include:
- Aster spp.
  - Rudbeckia hirta
  - Helleborus foetidus
  - Campanula glomerata
  - Crocsmia 'Lucifer'
  - Ajuga reptans
  - Eupatorium cannabinum
  - Campanula glomerata
  - Geranium Rozanne = 'Gerwat' (PBR)
- Helenium sp
  - Lobelia cardinalis
  - Vinca minor
  - Iris pseudocorus
  - Iris sibirica
  - Allium spp.
  - Juncus effusus
  - Calamagrostis brachytricha
  - Carex pendula
  - Miscanthus sinensis
  - Panicum virgatum

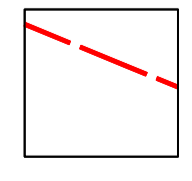
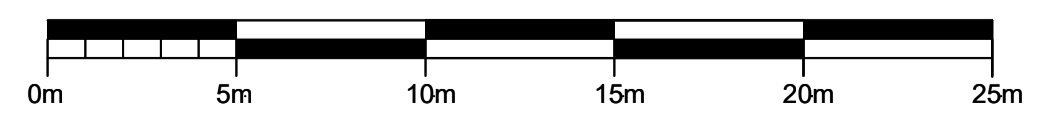
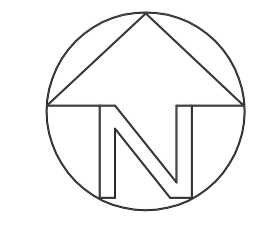
A Boundary screen updated JB 03.04.20  
 REV. DESCRIPTION APP. DATE

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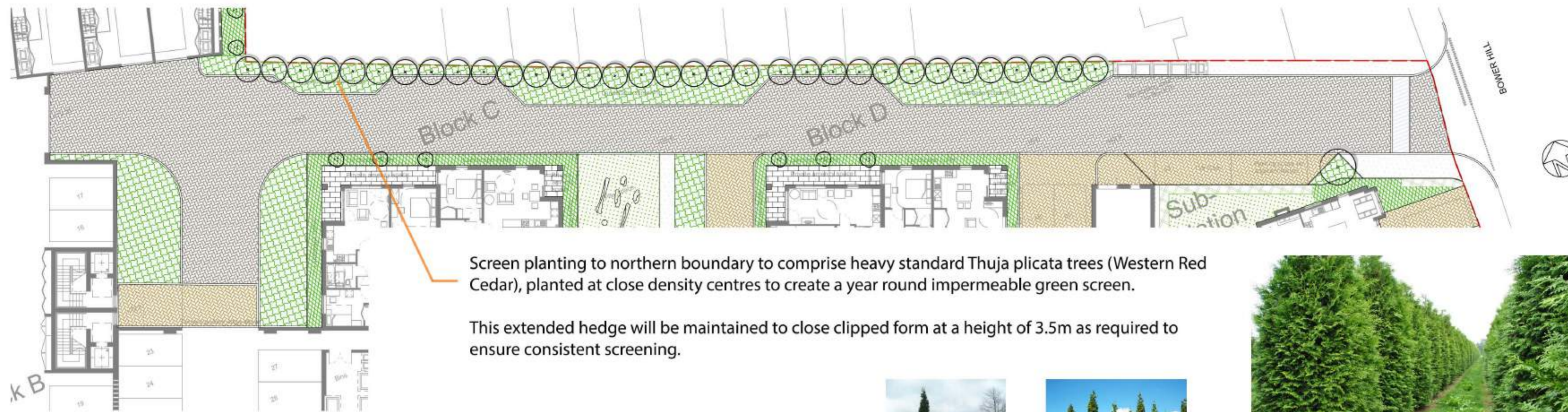
Laundry Site Epping

Landscape proposal  
 Softworks

DATE March 2020 DRAWN JB  
 SCALE 1/200 @A1 CHECKED NT  
 STATUS Planning APPROVED NT  
 DWG. NO D0346\_004 A



No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only.



Screen planting to northern boundary to comprise heavy standard Thuja plicata trees (Western Red Cedar), planted at close density centres to create a year round impermeable green screen.

This extended hedge will be maintained to close clipped form at a height of 3.5m as required to ensure consistent screening.



1 PLAN - GROUND FLOOR  
SCALE 1:200

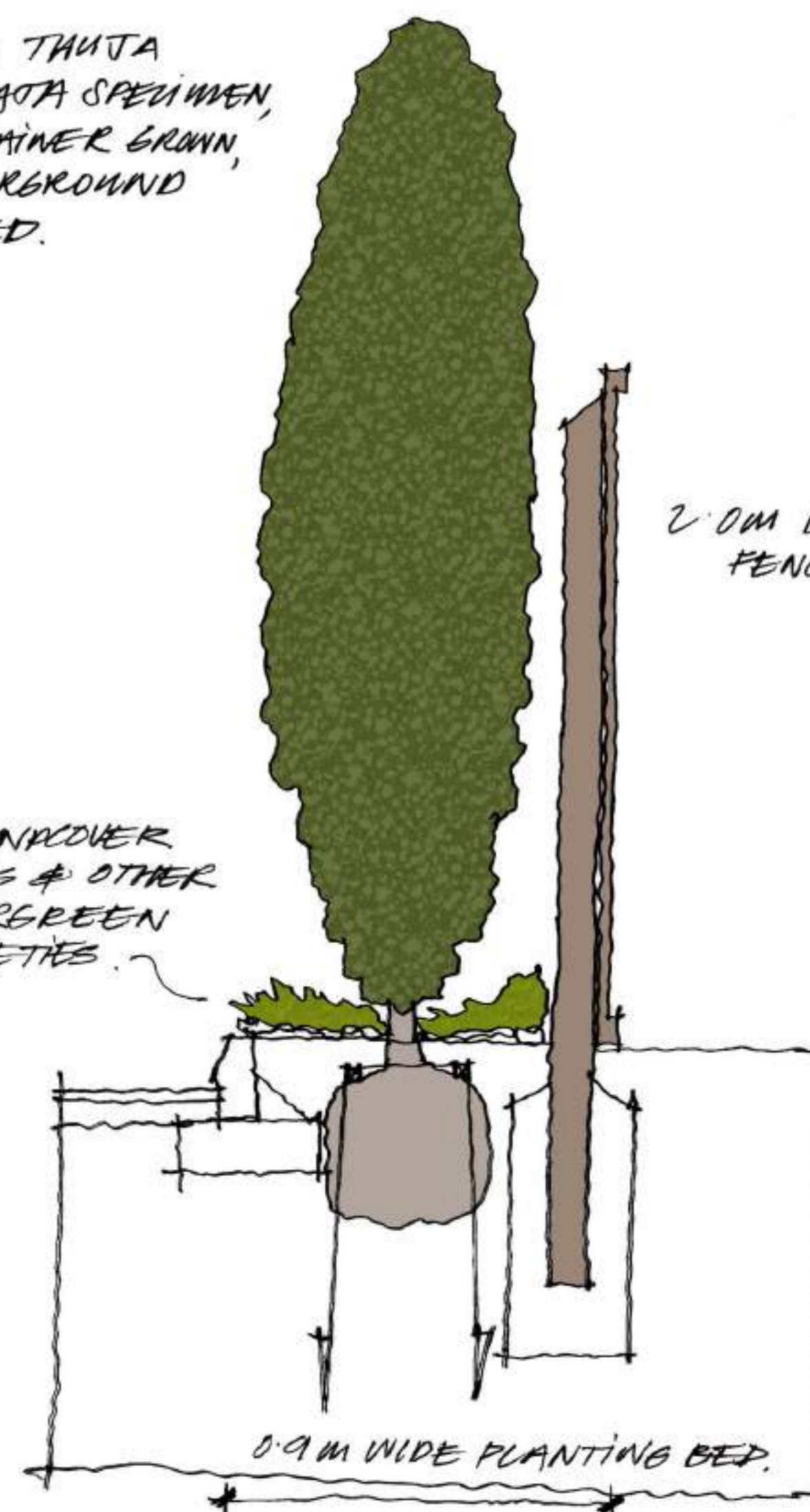
Section through northern boundary showing wide and narrow verges with screen planting of Thuja plicata trees (Western Red Cedar). Trees to be planted at large specimen size and maintained to form high hedge (3-3.5M)



3.0M THUJA Plicata SPECIMEN, CONTAINER GROWN, UNDERGROUND GUYED.

2.0M BOUNDARY FENCE.

GROUNDCOVER IVIES & OTHER EVERGREEN VARIETIES.



Trough planter with irrigation to support climbing plants trained onto a timber and steel wire trellis frame



2 PLAN - FIRST FLOOR  
SCALE 1:200



B	Boundary screen updated	JB	03.04.20
A	Minor amendments	JB	27.03.20
REV	DESCRIPTION	APP	DATE
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Laundry Site Epping

Tree Screening Details

DATE	March 2020	DRAWN	JB
SCALE	1/200 @A1	CHECKED	NT
STATUS	Planning	APPROVED	NT
DWG. NO	D0346_003 B		



- Legend**
- HARDWORKS**
- Cropped Silver Grey Granite sett trims to cross over entrance area 100mm cubes with nom. 10mm joints.
  - Shared surface in block paving Charcoal Grey colour - Mistral or similar, with BN 2 125mm kerbs Paving 80mm thick, laid mainly in 90 deg.herringbone pattern - 240 x 160mm.
  - Shared Parking surface in block paving Harvest Buff colour - Mistral or similar, with BN2 125 kerbs Paving 80mm thick, laid mainly in 45deg.herringbone pattern - 240 x 160mm.
  - Tarmac surfacing to shared surface and footpaths as shown to C.E spec
  - Exposed aggregate paving flags (450 x 450 x 70mm), with BN2 pcc 125 kerbs and edgings, laid half lap bond, silver grey colour
  - Resident's Open Space with sculptural + natural timber/stone play items
- SOFTWORKS**
- For plant mixes, densities and sizes refer to Softworks drawing D0346\_004
- Proposed specimen standard native type trees - Birch, Rowan, Carpinus Boundary screen trees - Thuja plicata
  - Proposed small multi-stem specimen trees e.g. Amelanchier, Cercis, Magnolia
  - Proposed pleached pear trees to frame small residential open LAP type space
  - Lawns - flowering species rich mix grass seeded areas - Emorsgate EL1 osap
  - Deciduous native type hedging to car parking and boundaries - Hornbeam or similar species maintained to 1 metre height
  - Native eco value type hedging to railway boundaries - Hazel, Hornbeam, Holly, Rose and Hawthorn or similar species
  - Ornamental shade tolerant herbaceous, shrub and climbers, mainly evergreen low planting, native and wildlife friendly species
  - Ornamental robust buffer planting

- BIODIVERSITY ENHANCEMENTS**
- Bee box
  - Insect hotel
  - Food and water for birds Water bath and bird feeders
  - Compost bin
  - Water butt
  - Rain garden and bog garden
  - Wildflower turf

REV	DESCRIPTION	APP	DATE
F	Boundary screen updated	JB	03.04.20
E	Wildlife garden added, layout updated	JB	18.03.20
D	Boundary line screening added	JB	11.03.20
C	Layout updated.	KK	05.03.19
B	Layout updated.	KK	22.11.18
A	Layout updated. Roof plans moved to new drawing.	KK	21.11.18

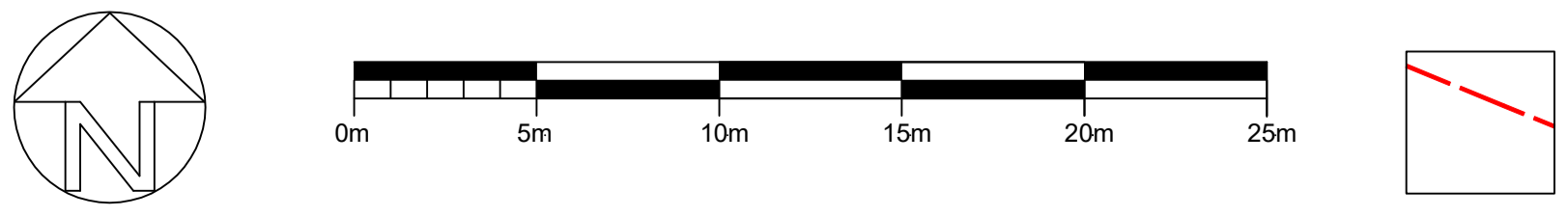
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Laundry Site Epping

Landscape master plan

DATE Nov 2018 DRAWN ST  
SCALE 1/200 @A1 CHECKED NT  
STATUS Planning APPROVED NT  
DWG. NO D0346\_001 F



No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only.



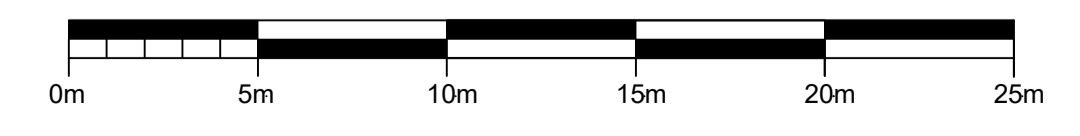
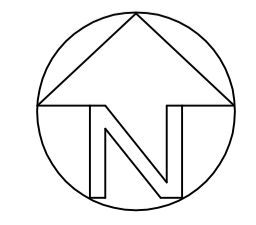
- Legend**
- HARDWORKS**
- Exposed aggregate paving flags (450 x 450 x 70mm), laid half lap bond, silver grey colour
  - Ballast maintenance area and edge protection detail to Architects spec/detail, minimum 500mm width
  - Permaloc type rounded aluminium edge to retain gravel, soil substrate + sub-base build-ups
  - Hardwood FSC naturally durable timber benches by C. Nangle osap
  - Planters: Bespoke metal fabricated planter units, galvanised, powder coated finish colour to match metalwork on building
  - Trough planter with irrigation to support climbing plants trained onto a timber and steel wire trellis frame.
- SOFTWORKS**
- Proposed multi-stem tree**  
Buj Betula utilis jacquemontii 'Snow Queen' 2.75-3.25m height  
Ac Amelanchier canadensis, min 2.5-3m height, av. 14-16 cmg
  - Specimen shrubs** - min 25L pots 1.2m ht  
Ce Cercis Forest Pansy  
Co Corylus avellana 'Contorta'  
Ma Magnolia stellata  
Ha Hamamelis mollis
  - Low Ornamental Hedges to private terraces**  
Bushy plants, 60/80 10L pot, 2-3 per metre  
Euonymus fortunei 'Emerald Gaiety' Hedge  
Euonymus fortunei 'Emerald n' Gold' Hedge  
Hebe 'Mrs Winder'  
Prunus laurocerasus 'Otto Luyken'  
Potentilla fruticosa 'Pink Beauty'
  - Climbers trained on trellis system  
Pre-grown screen min 1.2 m height  
Trachelospermum jasminoides
  - Biodiverse Roof - Living Roof**  
For details refer to D0346\_005
  - Site boundary

Bower Hill

G	Terrace green screening added to Block C and D	JB	03.04.20
F	Minor amendments, Softworks key added	JB	18.03.20
E	Terrace green screening added to Block A	JB	11.03.20
D	Roof terrace Block C and D updated	JB	13.03.19
C	Roof terrace at Block C updated.	KK	08.03.19
B	Layout updated.	KK	05.03.19
A	Layout updated.	KK	22.11.18
REV.	DESCRIPTION	APP.	DATE

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Laundry Site Epping  
Landscape master plan  
Roof Plan



DATE	Nov 2018	DRAWN	ST
SCALE	1/200 @A1	CHECKED	NT
STATUS	Planning	APPROVED	NT
DWG. NO	D0346_002 G		

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