

TM206-R07 LANDSCAPE CONDITION DISCHARGE REPORT
UNION PARK MASTERPLAN

February 2017

INTRODUCTION

This report and associated drawings have been prepared to support the discharge of Condition 7, the following sections:
7.1a, 7.1b, 7.1c, 7.2e, 7.3a, 7.3b
which relate to design and management of the soft landscape, and the play area.

This report is to be read in conjunction with the following Turkington Martin landscape documents;

- TM206L05 - Soft Landscape Masterplan
- TM206L04 - Detailed Planting Plan
- TM206R08 - 5 Year Maintenance and Management Plan

Also to be read in conjunction with Arboriculturist’s recommendations submitted in relation to Condition 6, including;

- Tree Works Plan C124312-01 by MIdddlemarch Environmental

CONTENT

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APPENDICES

APPENDIX 1:	TM206L05 - Soft Landscape Masterplan
APPENDIX 2:	TM206L04 - Detailed Planting Plan
APPENDIX 3:	TM206R08 - 5 Year Maintenance and Management Plan



Landscape Masterplan

The key features of the landscape masterplan are identified as follows. The subsequent pages break the areas down into more detail with the regard to character, materials, planting and furniture.

- ① Widened towpath for incidental sitting area & interpretation
- ② Pedestrian connection from site to towpath
- ③ Doorstep play area and residential sitting area
- ④ Informal residential amenity path
- ⑤ Residential garden and link to the canal
- ⑥ New pedestrian accessible connection to canal towpath
- ⑦ Central courtyard defined by quality paving and rich planting
- ⑧ Potential pedestrian access to Sefton Way by agreement
- ⑨ Discrete service access to energy centre
- ⑩ Vehicular access to below ground parking
- ⑪ Boundary vegetation retained
- ⑫ Front gardens to ground floor units
- ⑬ Pedestrian comfort route defined within overall paving
- ⑭ Existing entrance retained

1.0 EXTRACT FROM ORIGINAL PLANNING APPLICATION OPPORTUNITIES



Opportunities

The existing trees and shrubs to the north, east and southern boundaries of the site provide an effective screen to views in and out of the site. The tree canopy will be retained and protected during the works to maintain privacy. To the eastern boundary there is the opportunity to supplement the existing trees with new planting. Selective thinning of the understorey would allow discreet visual and physical connections to the north side of the site.

A new pedestrian connection to the north east corner of the site, by agreement, would facilitate easier access to the retail facilities on High Road.

It is anticipated that the parking to the east and south of the site will be maintained in its current configuration.

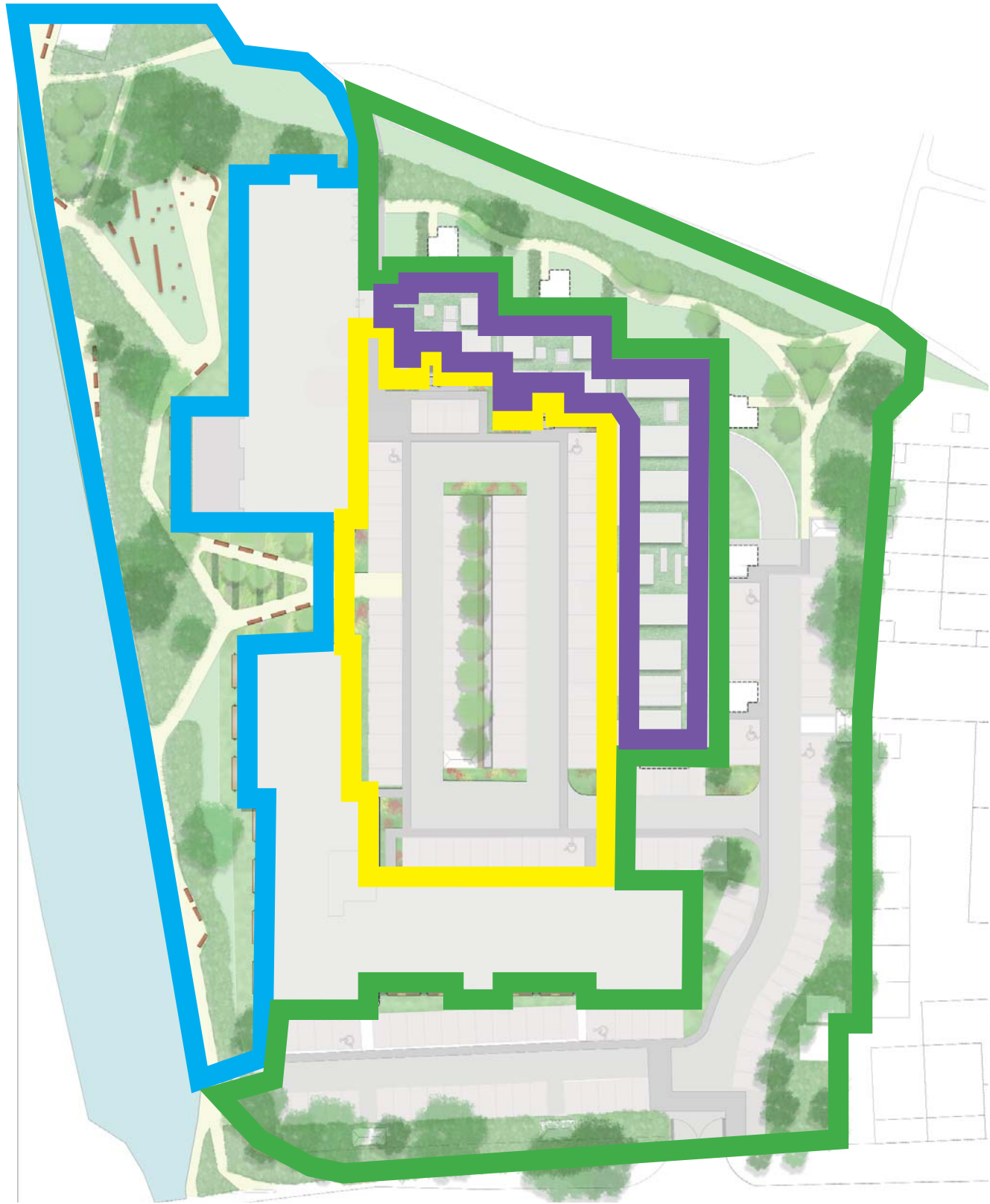
The Grand Union Canal and towpath is a tremendous asset to the development and there is the opportunity to thin out some of the dense vegetation that currently exists to benefit residents and towpath users.

The canal towpath is relatively narrow with encroaching overgrown vegetation along the length of the site. There is the opportunity to selectively thin the shrub layer and raise the canopy in places. In addition, there is potential to broaden out the towpath in places, where the change in level is less pronounced, for incidental seating and interpretation.

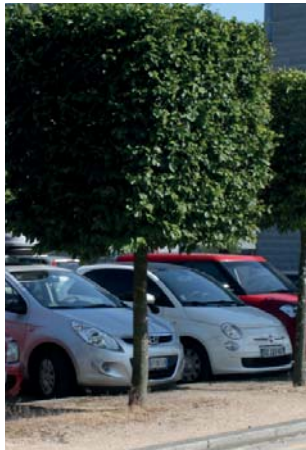
The opportunity exists to physically connect the site to the canal towpath. This would be an asset to the development but also provide alternative routes for those using the towpath and a greater feeling of safety.

Access to the canal from Packet Boat Lane could be enhanced with the addition of a new ramped structure, providing easier wheeled access for buggies, wheelchairs and cycles.

1.0 EXTRACT FROM ORIGINAL PLANNING APPLICATION
CHARACTER AREAS



The canal edge & frontage



Central parking court



Perimeter boundary edge



Bio-diverse green roofs

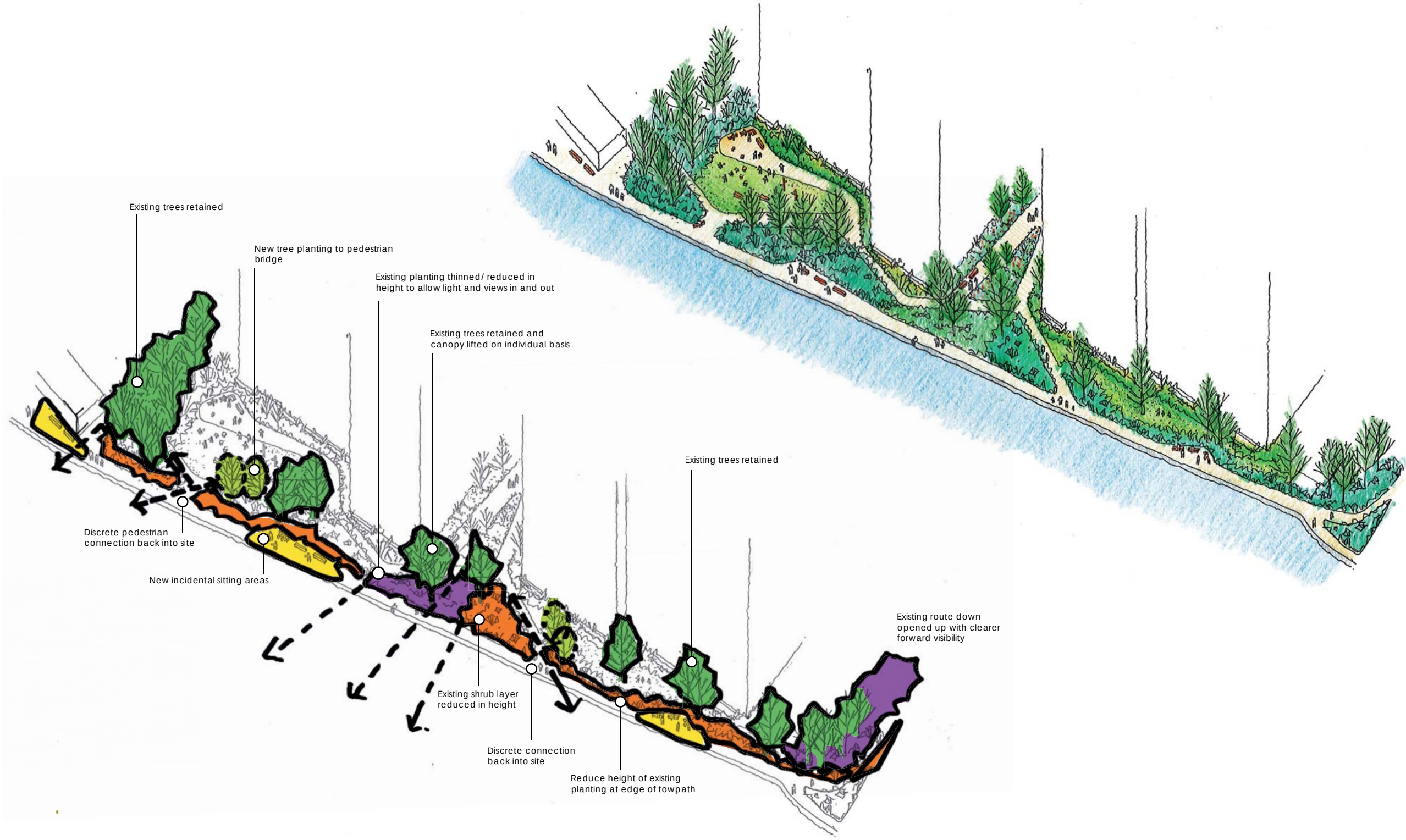
Character Areas

The landscape approach is to develop four character areas that will enhance the sense of place, provide interest and usable space for residents and nature conservation value.

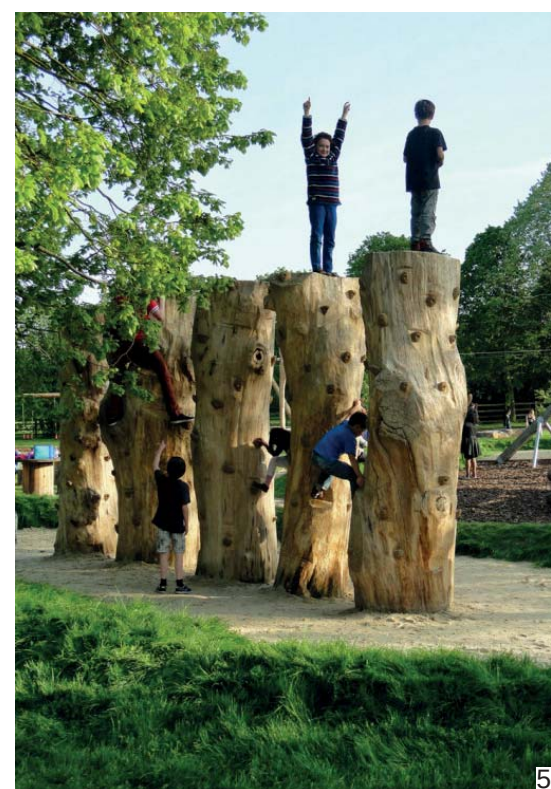
The areas comprise the canal edge, the central planting court, the perimeter planted edge and finally the roofs to the new build element of the development.

The following pages explain in more detail the elements that come together to create these particular character areas.

1.0 EXTRACT FROM ORIGINAL PLANNING APPLICATION
CANAL SIDE STRATEGY



1.0 EXTRACT FROM ORIGINAL PLANNING APPLICATION PLAY AREA



Canal edge & frontage: Play

Play for younger children is provided to the north west corner of the site, where there is space to gently terrace the ground, which in turn can contribute towards the play experience.

The play structure is based around exploratory and discovery play, where natural features and materials are assembled to encourage adventure and interpretation.

Logs, boulders, timber balancing beams are carefully placed and integrated with the landform as part of a play journey around the site.

- 1,2. Natural features as play elements
- 3. Logs for sitting & play
- 4. Boulders for sitting & climbing
- 5. Natural or sawn timber for climbing

2.0 CONDITION DISCHARGE

The below information has been prepared to support the relevant sections of Condition 7, relating to design and management of the soft landscape, and the play area.

The information is not concerned with any of the crossed out text below. Information relating to the discharge of those sections is being provided by others.

Condition wording below:

A landscape scheme shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include: -

1. Details of Soft Landscaping

- 1.a All ornamental and ecological planting (at not less than a scale of 1:100),*
- 1.b Written specification of planting and cultivation works to be undertaken,*
- 1.c Schedule of plants giving species, plant sizes, and proposed numbers/densities where appropriate*

~~*2. Details of Hard Landscaping*~~

- ~~*2.a Refuse Storage area*~~
- ~~*2.b Means of enclosure/boundary treatments, including details of the screening required for the defensive space at the front and rear of flats as to ensure the privacy of these residents.*~~

~~*2.c Hard Surfacing Materials*~~

- ~~*2.d Other structures (such as the access ramp from Packet Boat Lane)*~~
- 2.e Details of the children's play area and boundary treatment, to ensure the provision of a secure play area is provided on site.*

3. Details of Landscape Maintenance

- 3.a Landscape Maintenance Schedule for a minimum period of 5 years.*
- 3.b Proposals for the replacement of any tree, shrub, or area of surfing/seeding within the landscaping scheme which dies or in the opinion of the Local Planning Authority becomes seriously damaged or diseased.*

~~*4. Schedule for Implementation*~~

~~*5. Other*~~

- ~~*5.a Existing and proposed functional services above and below ground*~~

~~*5.b Proposed finishing levels or contours*~~

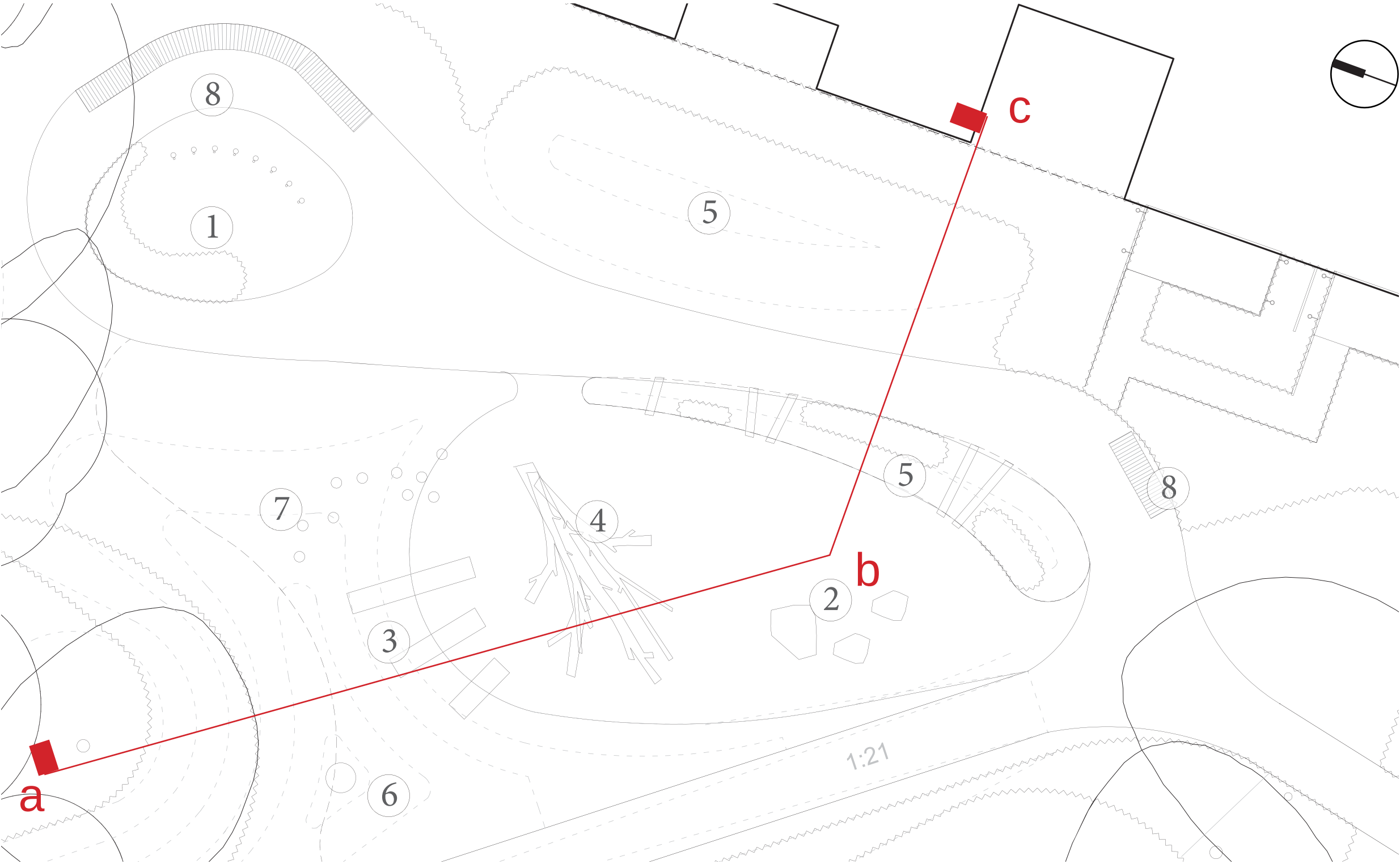
All hard and soft landscaping shall be carried out in accordance with the approved landscaping scheme and shall be completed within the first planting and seeding seasons following the completion of the development or the occupation of the buildings, whichever is the earlier period. Thereafter, the areas of hard and soft landscaping shall be permanently retained.

Any tree, shrub or area of turfing or seeding shown on the approved landscaping scheme which within a period of 5 years from the completion of development dies, is removed or in the opinion of the Local Planning Authority becomes seriously damaged or diseased shall be replaced in the same place or, if planting in the same place would leave the new tree, hedge or shrub susceptible to disease, then the planting should be in a position to be first agreed in writing with the Local Planning Authority in the next planting season with another such tree, shrub or area of turfing or seeding of similar size and species unless the Local Planning Authority first gives written consent to any variation.

REASON

To ensure that the proposed development will preserve and enhance the visual amenity of the locality and contributes to a number of objectives in compliance with 'saved' policies BE13 and BE38 of the Unitary Development

2.1 PLAYGROUND: TM206-SKP21 PLAYGROUND LAYOUT



scale: 1:100

2.1 PLAYGROUND: PLAY FEATURES AND FURNITURE



Eco-chimes, Jupiter Play



Play boulders



Balancing beams



Tree trunks



Swale

2.1 PLAYGROUND: PLAY FEATURES AND FURNITURE



Playful landforms



Streetlife Rough&Ready bench, to communal garden area



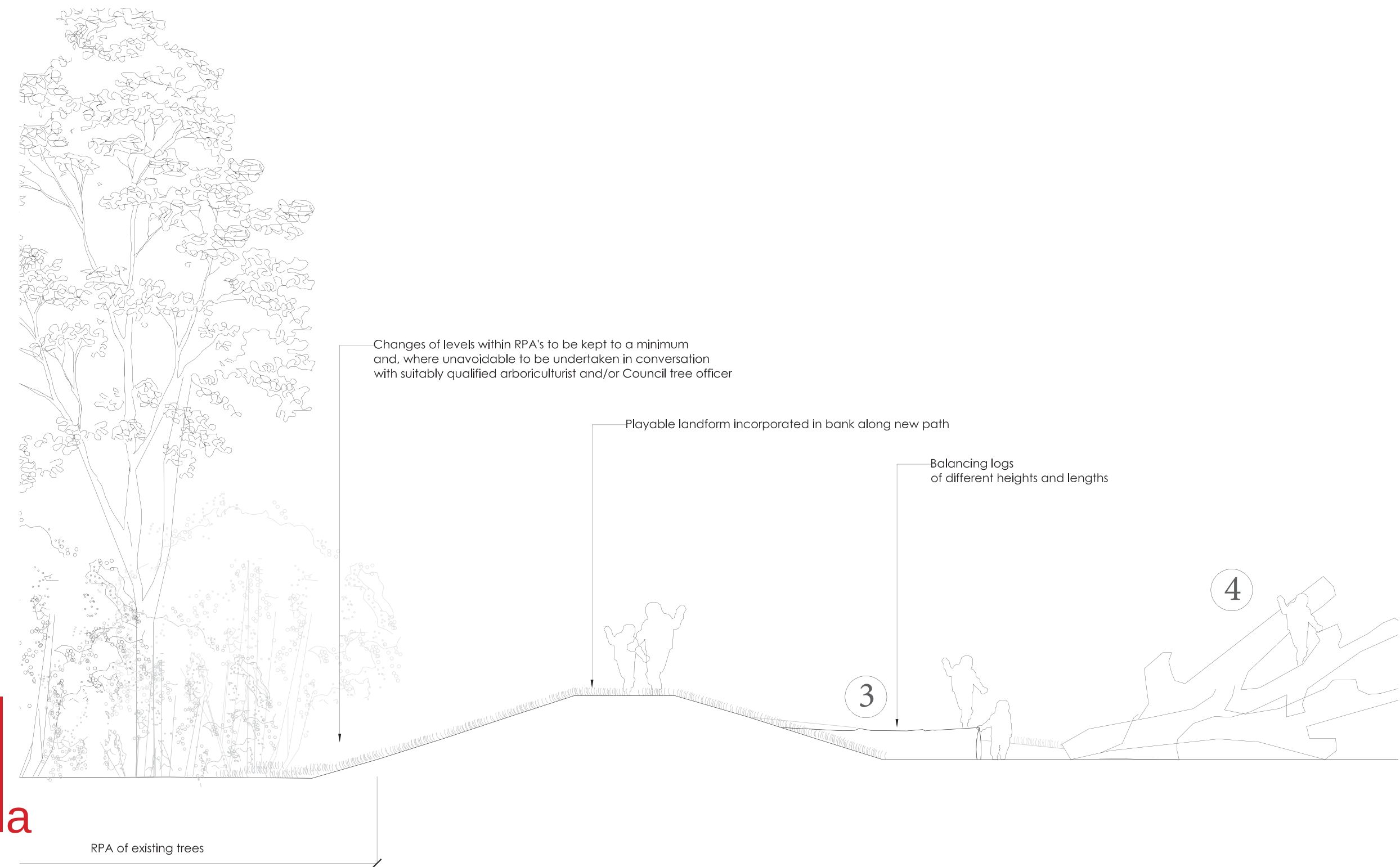
Balancing logs incorporated into slopes



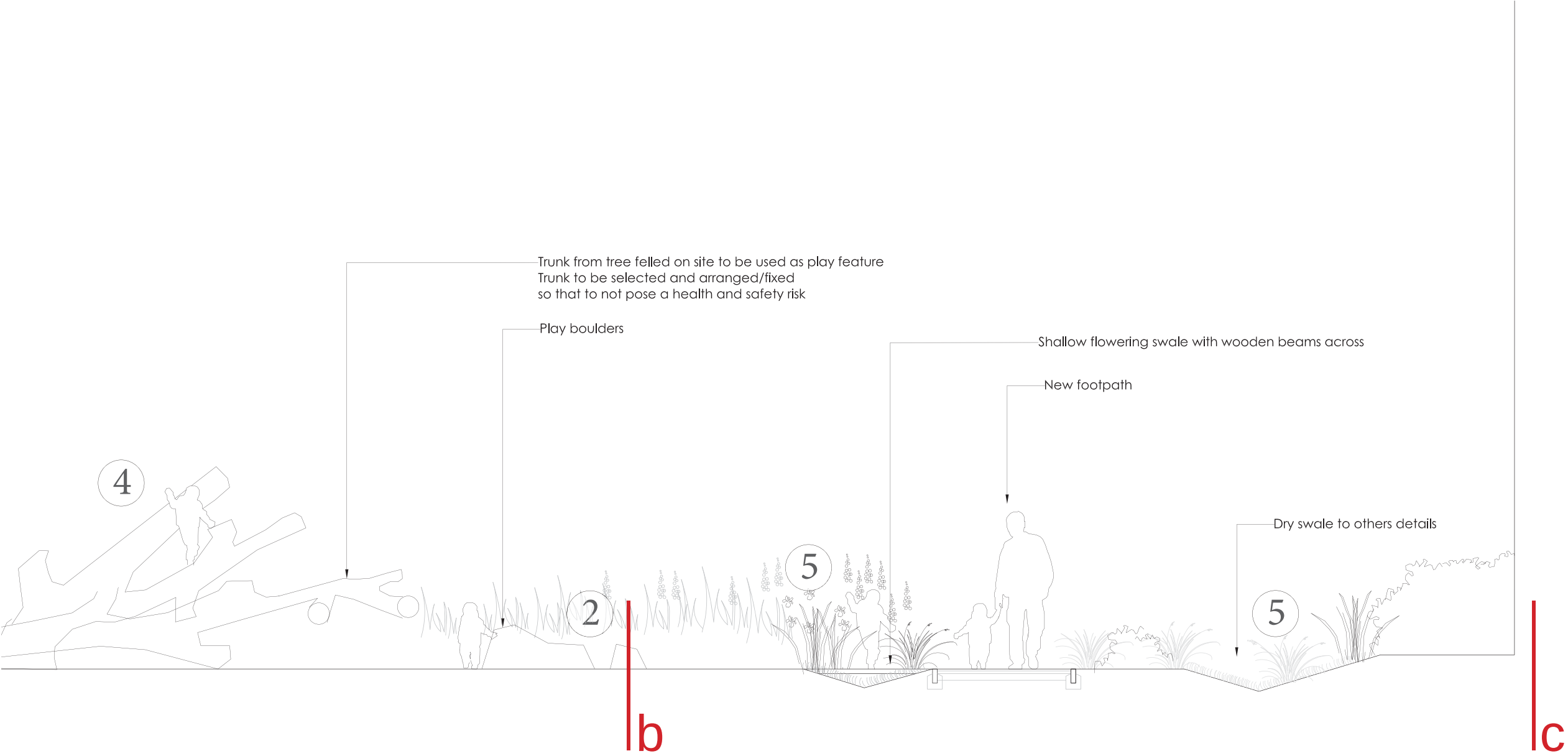
Streetlife Crosswise bench, to playground

2.1 PLAYGROUND: TM206SKS07 ILLUSTRATIVE SECTION PLAYGROUND

scale: 1:50

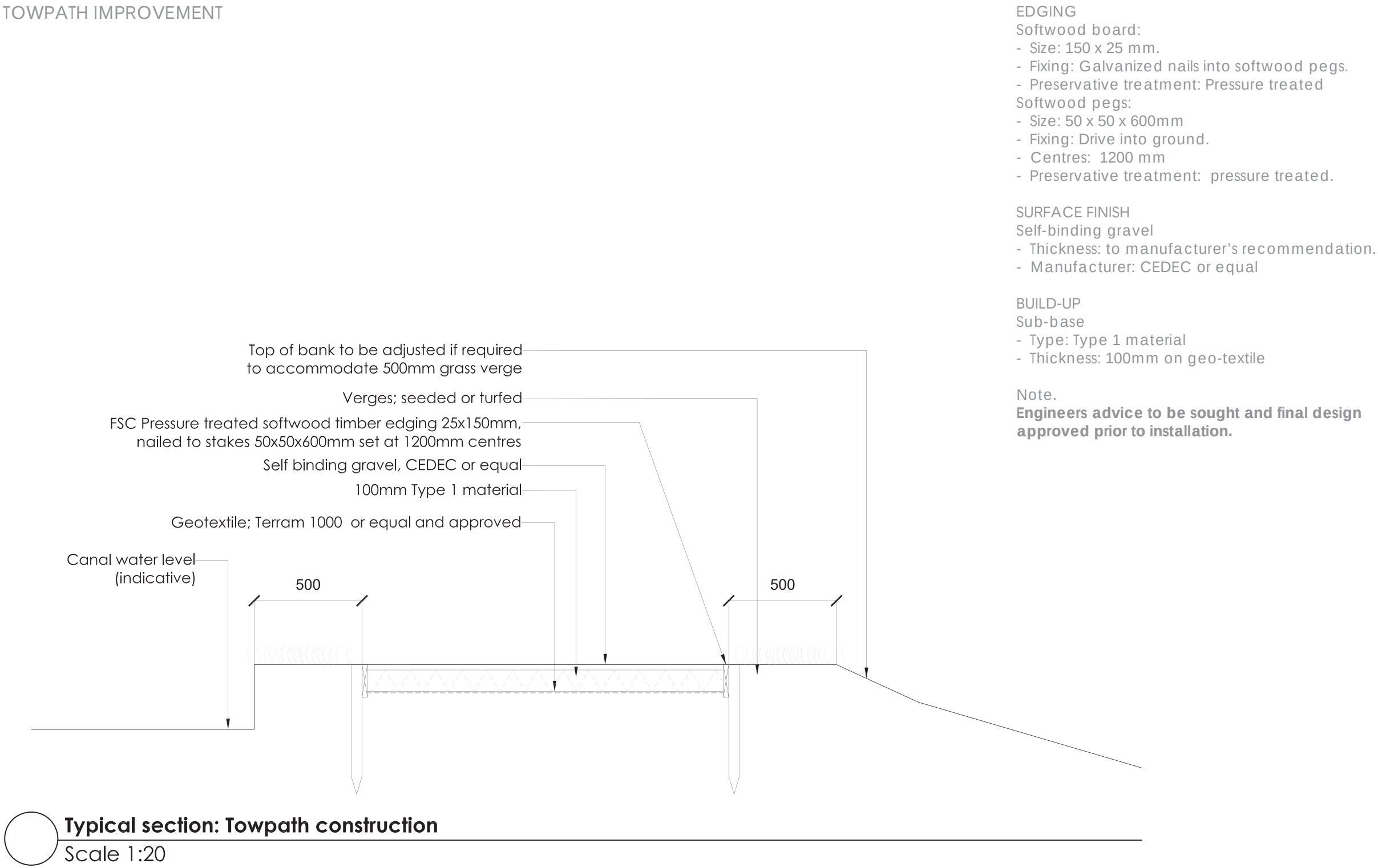


2.1 PLAYGROUND: TM206SKS07 ILLUSTRATIVE SECTION PLAYGROUND
scale: 1:50



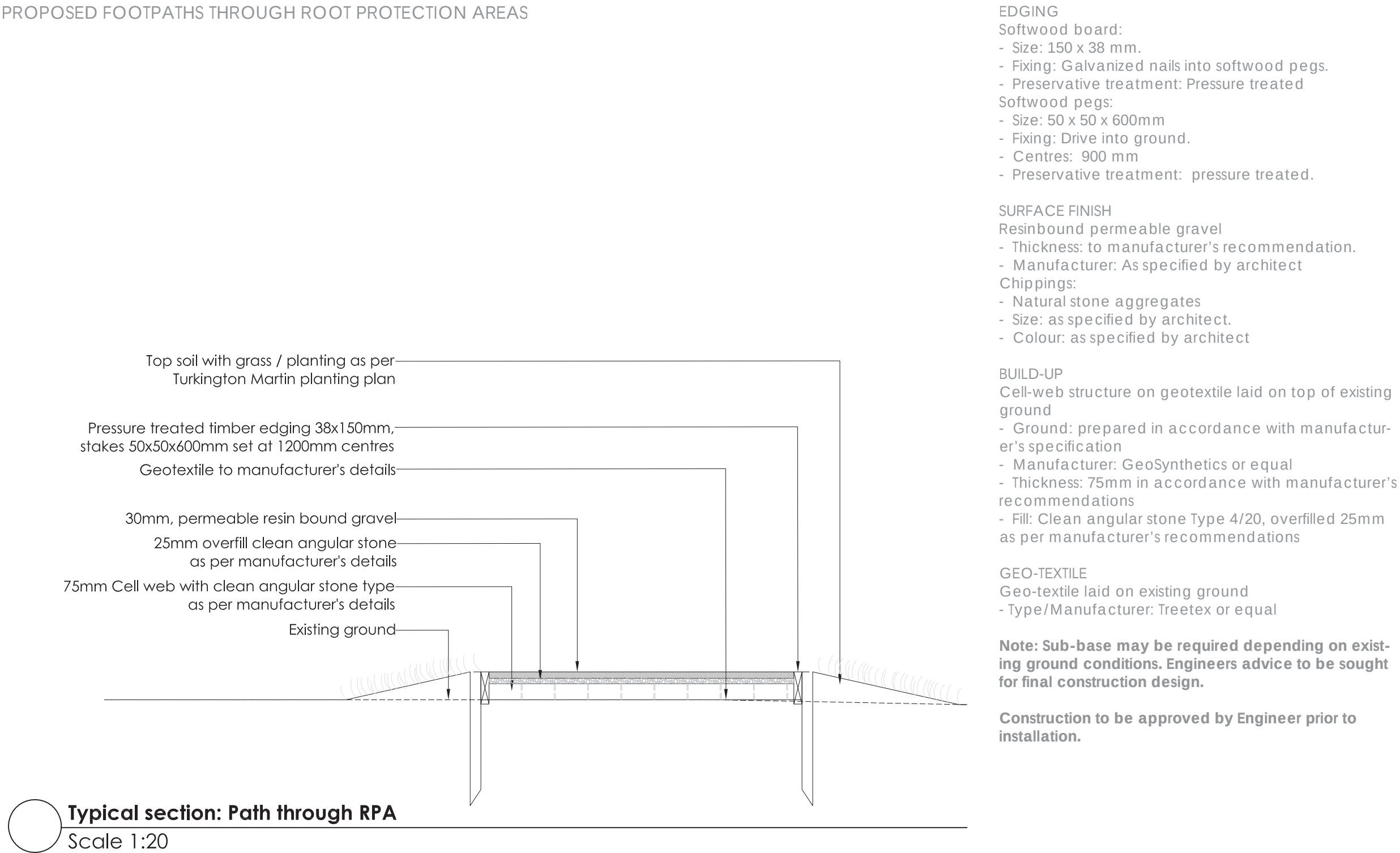
2.2 SECTIONS: TM206SKS10 TYPICAL PAVING SECTION

TOWPATH IMPROVEMENT

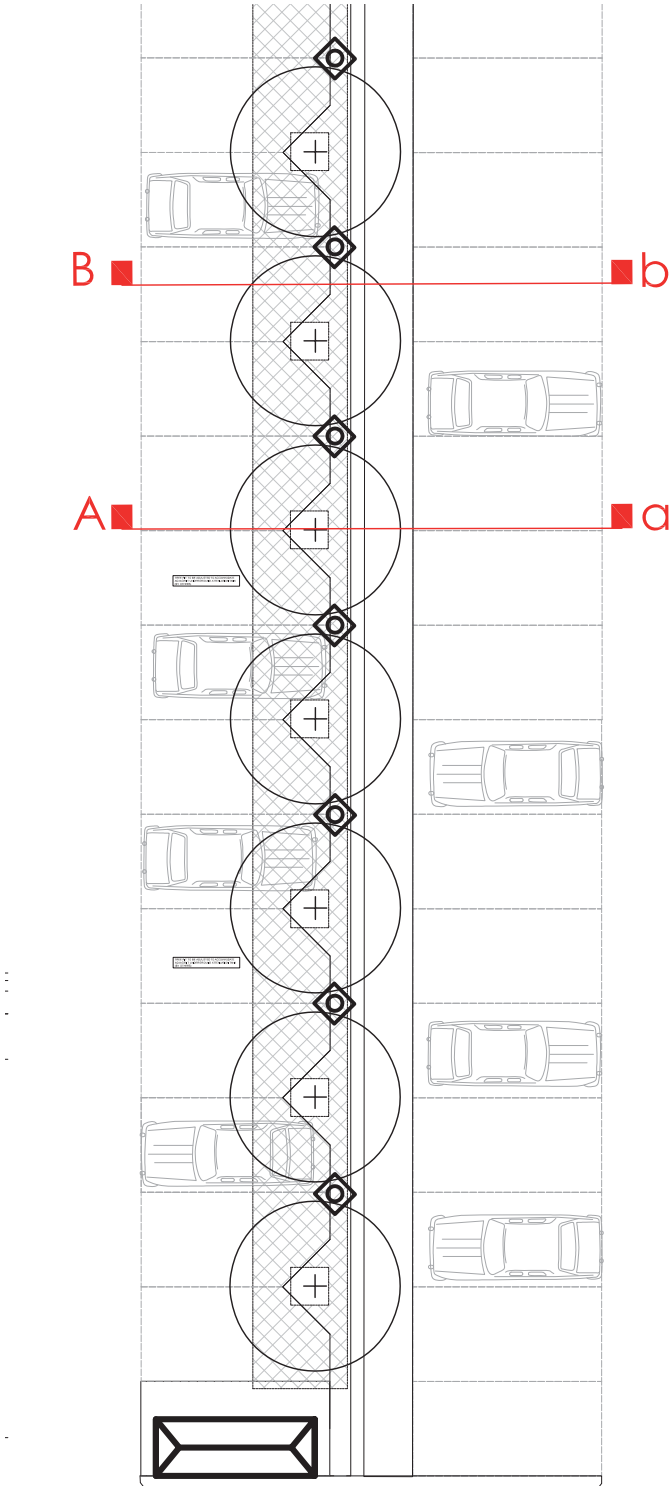


2.2 SECTIONS: TM206SKS11 TYPICAL PAVING SECTION

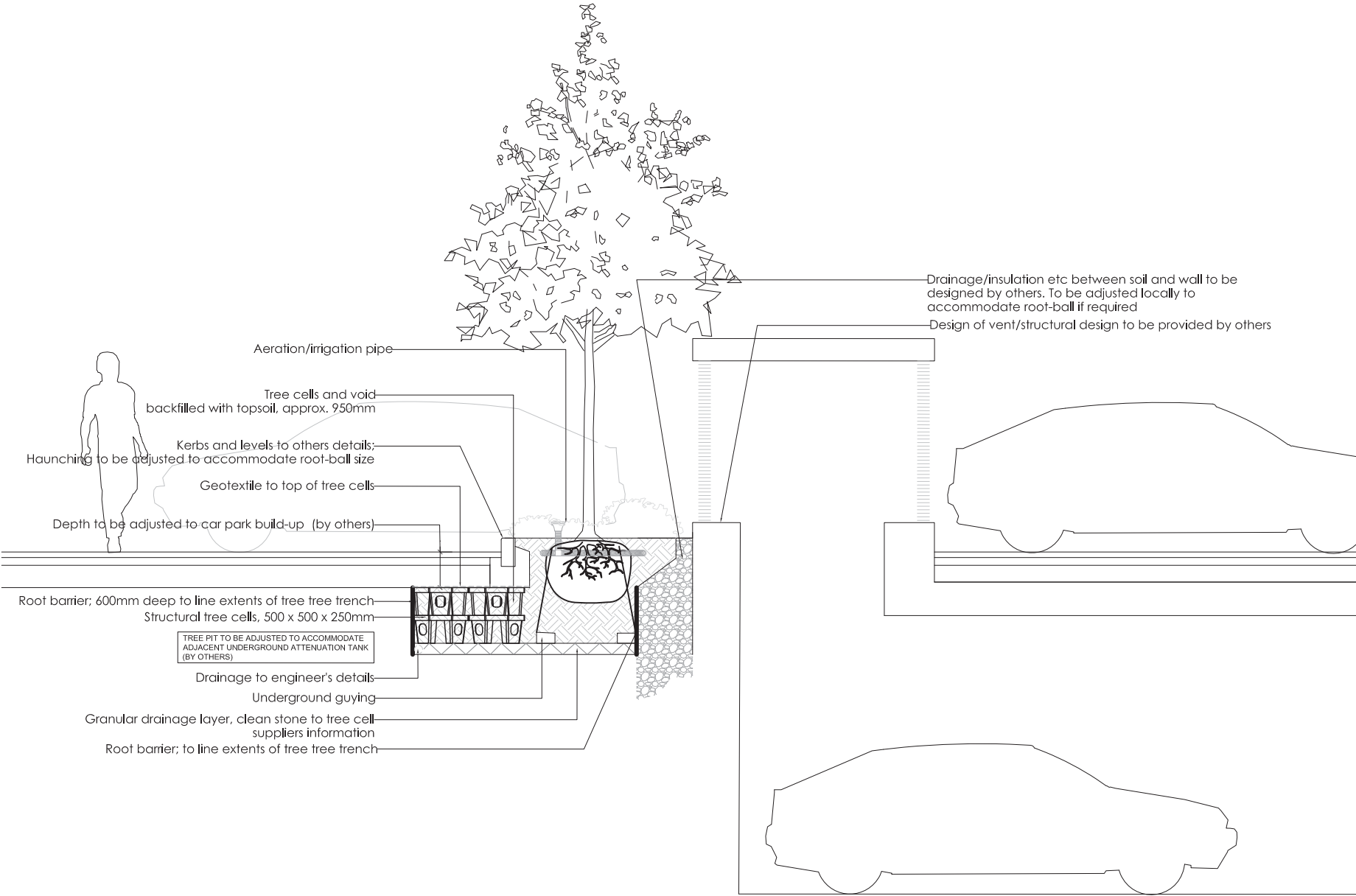
PROPOSED FOOTPATHS THROUGH ROOT PROTECTION AREAS



2.2 SECTIONS: TM206SKS12 TREE PIT IN CENTRAL CAR PARK

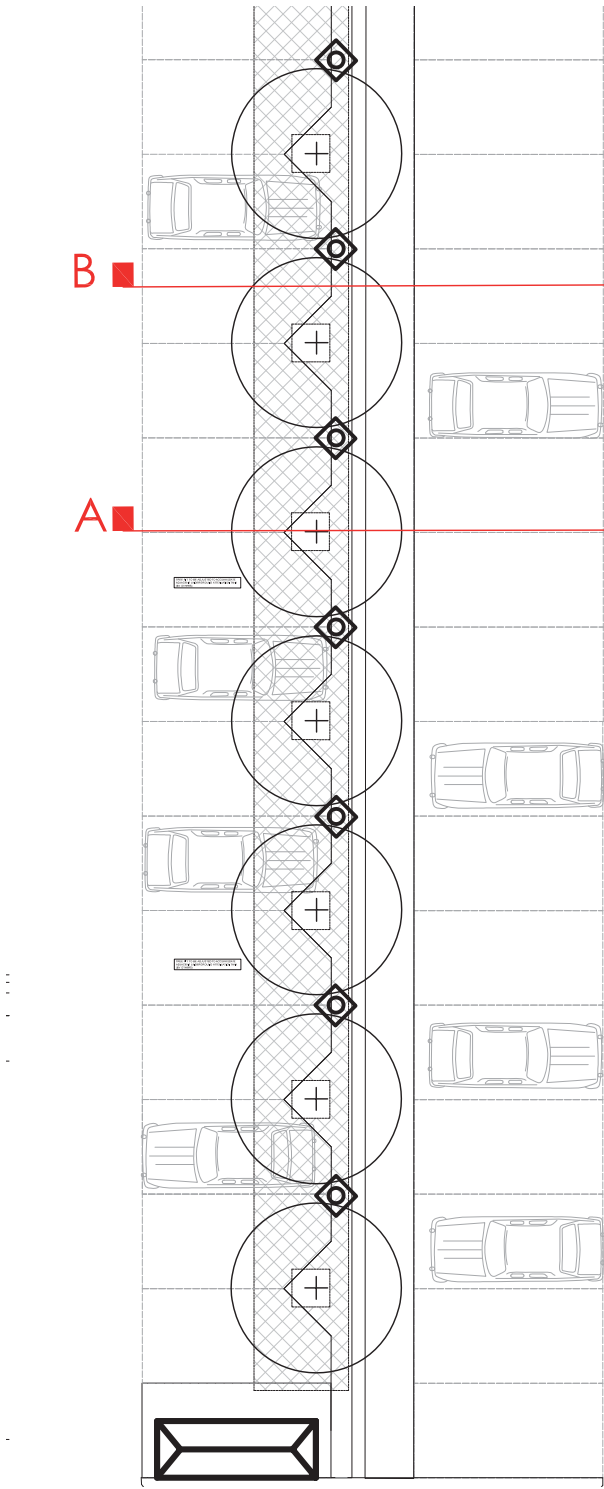


LAYOUT
scale: 1:200

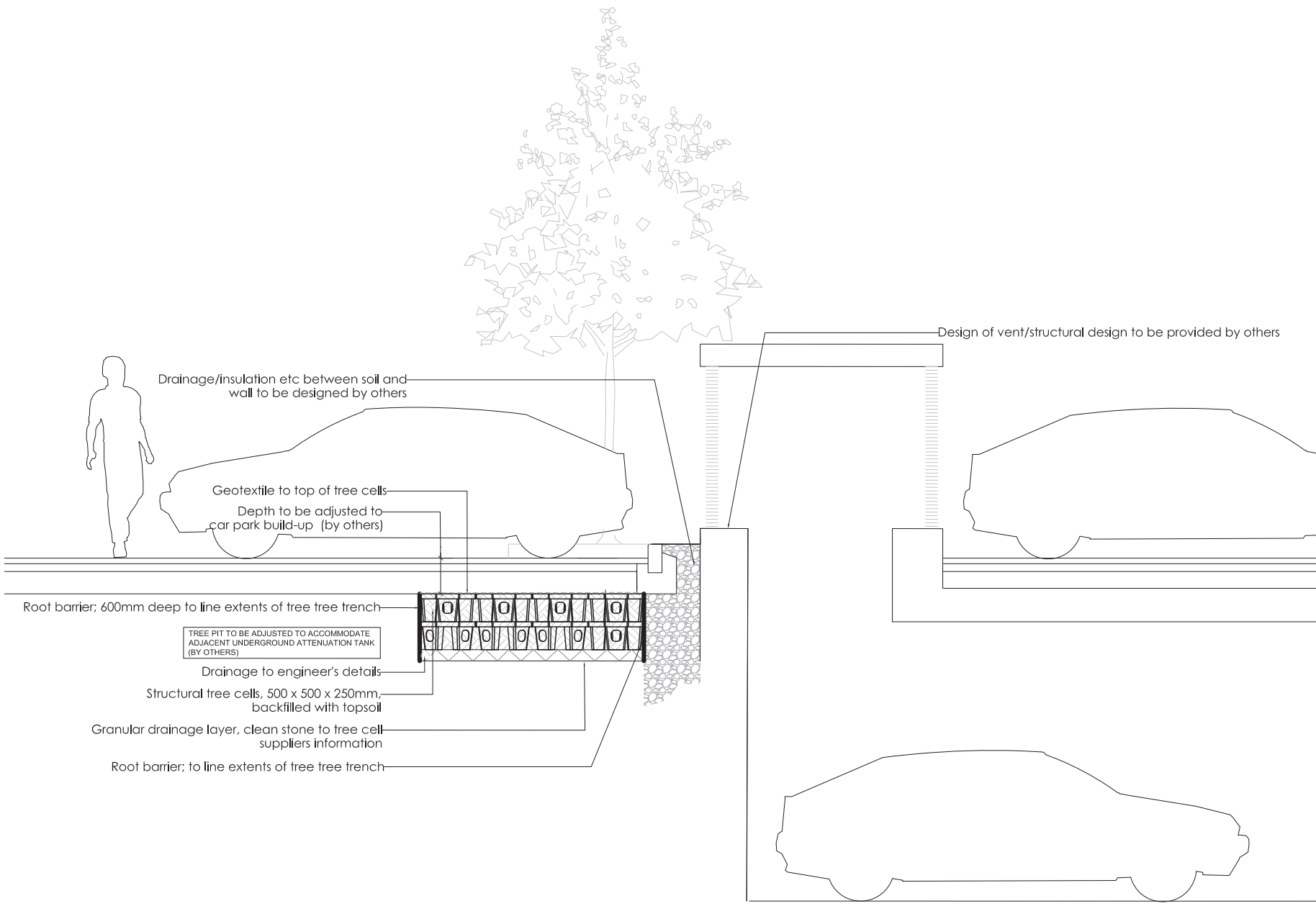


Aa Coordination section Aa
Scale 1:50

2.2 SECTIONS: TM206SKS08 TREE PIT IN CENTRAL CAR PARK

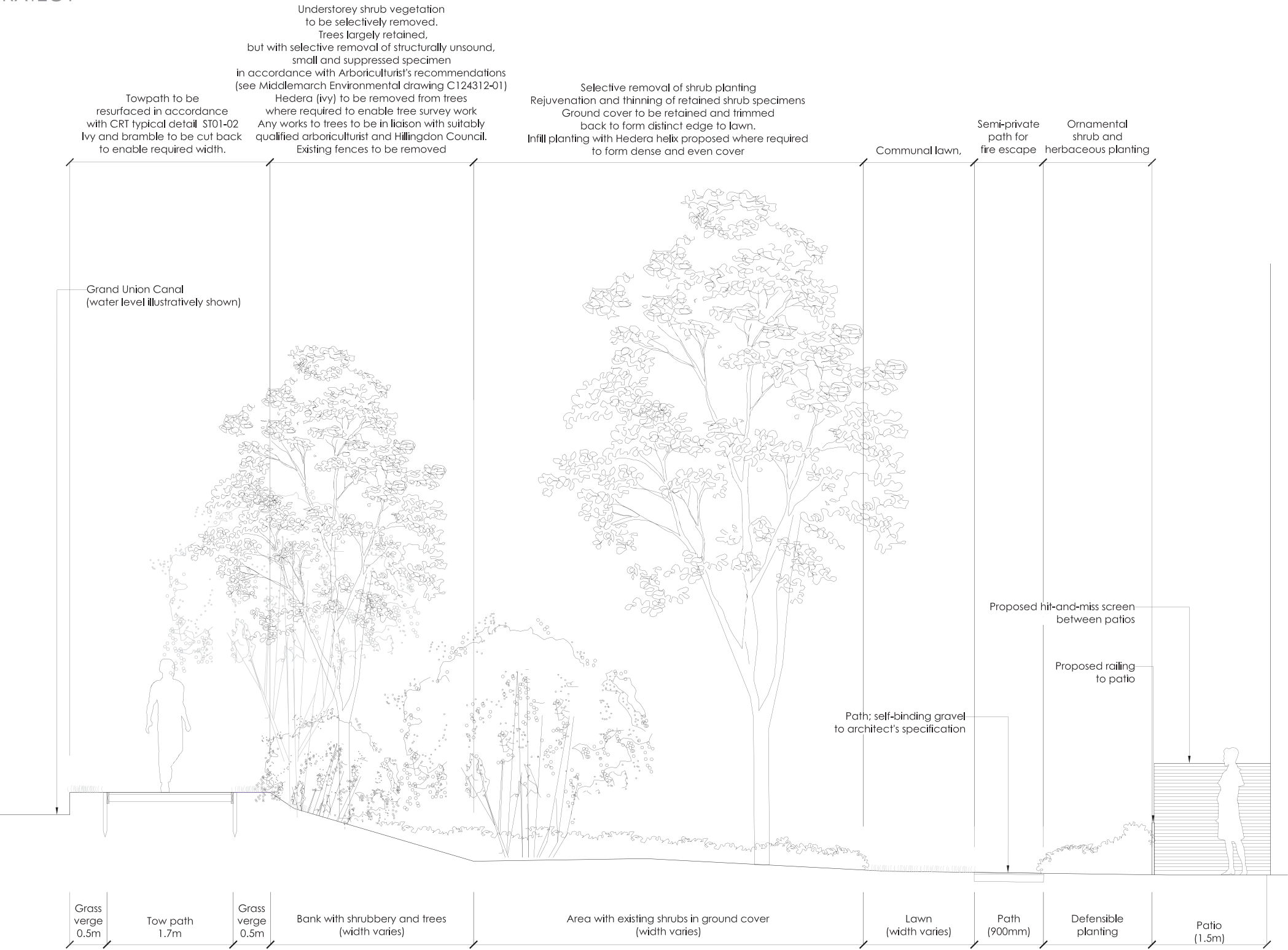


LAYOUT
scale: 1:200

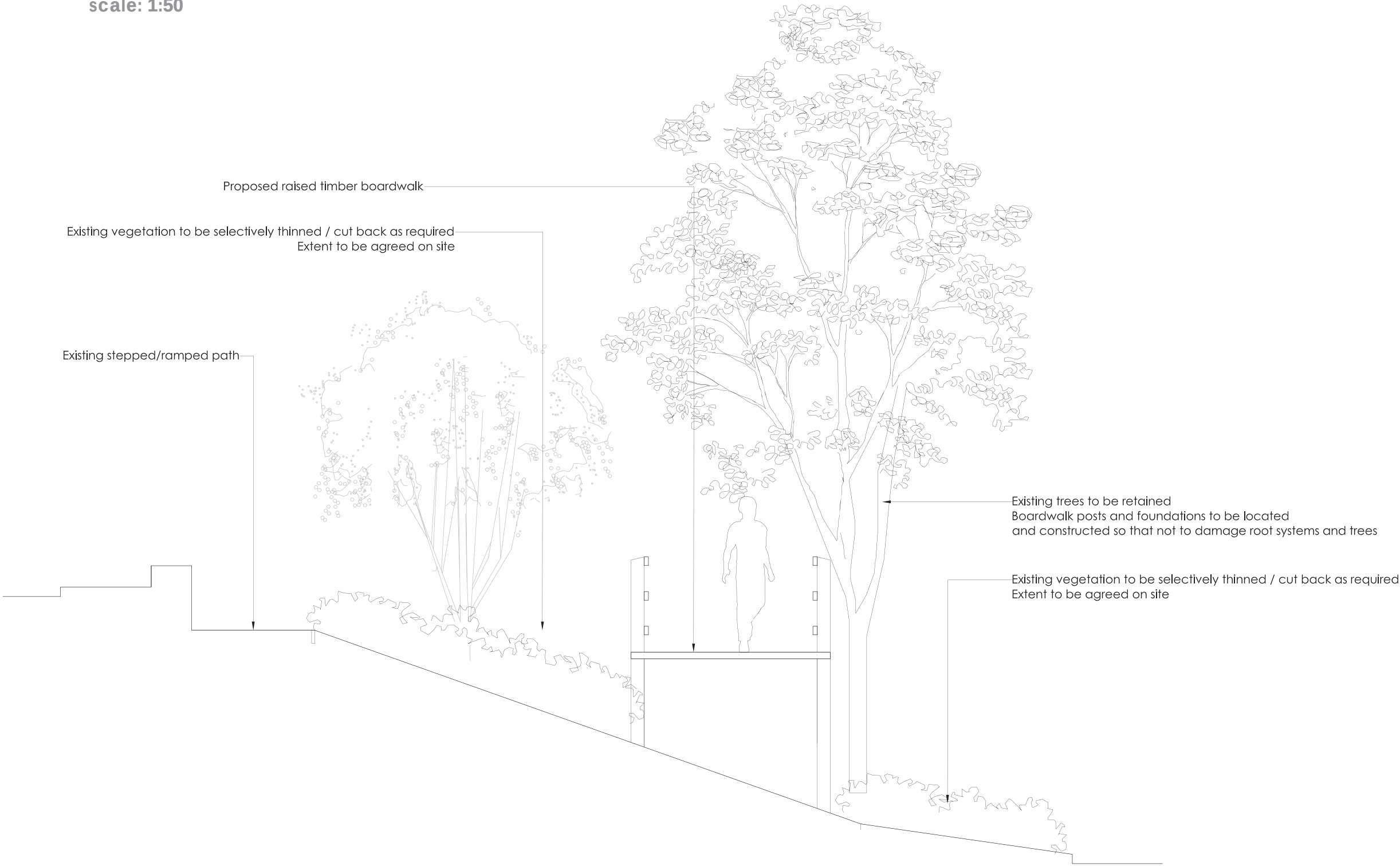


Bb Coordination section Bb
Scale 1:50

2.2 SECTIONS: TM206SKS06 ILLUSTRATIVE SECTION
PROPOSED VEGETATION STRATEGY



2.2 SECTIONS: TM206SKS04 ILLUSTRATIVE SECTION
RAISED TIMBER BOARDWALK
scale: 1:50



2.3 PLANTING SCHEDULE

TREE PLANTING

ABBREVIATION	SPECIES	COMMON NAME	HEIGHT	STEM	CONTAINER	SPECIFICATION
Ace pseu	Acer pseudoplatanus	Sycamore	5-5.5m	18-20cm	RB	
Ame Lam	Amelanchier lamarckii	Snowy mespilus	3.5-4.0m	Multi	450L	Min 3 breaks from ground
Be ut Jac 1	Betula utilis jacquemontii	White-barked Himalayan Birch	3.0-3.5m	Multi	110L	Min 3 breaks from ground
Be ut Jac 2	Betula utilis jacquemontii	White-barked Himalayan Birch	5.5-6 m	Multi	300L	Min 3 breaks from ground
Pru avi	Prunus avium	Bird Cherry	5-5.5m	18-20cm	RB	
Til cord	Tilia cordata	Small-leaved Lime	6-6.5m	20-25cm	RB	

HEDGE PLANTING

ABBREVIATION	SPECIES	COMMON NAME	TYPE	SIZE	POT SIZE	DENSITY	SPECIFICATION
Ca bet	Carpinus betulus	Common hornbeam	Hedge	100-125cm	10L	4/lin m	Feathered, double staggered row
Pru lau Otto 5L	Prunus laurocerasus 'Otto Luyken'	Cherry Laurel 'Otto Luyken'	Hedge	40-60cm	5L	4/lin m	Bushy, min 5 breaks double staggered row

BULBS

	SPECIES	COMMON NAME	TYPE	ROOT		SPECIFICATION
	Narcissus 'Actaea'	Poeticus daffodil bulbs	Bulbs	Bulbs		Bulbs to be scattered in irregular groups within marked out areas. Plant 10-15cm deep
	Narcissus 'Dutch Master'	Daffodils	Bulbs	Bulbs		Bulbs to be scattered in irregular groups within marked out areas. Plant 10-15cm deep

ORNAMENTAL SHRUB PLANTING

ABBREVIATION	SPECIES	COMMON NAME	TYPE	SIZE	POT SIZE	DENSITY	SPECIFICATION
Cea thy	Ceanothus thyrsiflorus repens	Creeping Blueblossom	Shrub	30-40cm	3L	5	Bushy, min 5 breaks
Cor san 5L	Cornus sanguinea	Common Dogwood	Shrub	40-60cm	5L	2	Bushy, min 7 breaks
Cor san MidW	Cornus sanguinea 'Midwinter Fire'	Dogwood	Shrub	30-40cm	5L	5	Bushy, min 5 breaks
Cor san MidW 3/m	Cornus sanguinea 'Midwinter Fire'	Dogwood	Shrub	30-40cm	5L	3	Bushy, min 5 breaks
Cor seri Flav	Cornus sericea 'Flaviramea'	Golden twig Dogwood	Shrub	40-60cm	5L	5	Bushy, min 5 breaks
Co al K	Cornus alba 'Kesselringii'	Dogwood	Shrub	40-60cm	3L	5	Bushy, min 4 breaks
Heb Cham	Hebe 'Champagne'	Hebe	Shrub	20-30cm	3L	5	Bushy, min 4 breaks
Lav ang Hid	Lavandula angustifolia 'Hidcote'	Lavender 'Hidcote'	Shrub	15-20dia	3L	7	Bushy, min 5 breaks
Lon nit May	Lonicera nitida 'May Green'	Box Honeysuckle 'Maygreen'	Shrub	25-30 dia	3L	5	Bushy, min 5 breaks
Mah aqui Apol	Mahonia aquifolium 'Apollo'	Oregon Grape 'Apollo'	Shrub	30-50cm	5L	3	Branched, min 3 breaks
Pru lau Otto 3L	Prunus laurocerasus 'Otto Luyken'	Cherry Laurel 'Otto Luyken'	Shrub	30-40cm	3L	5	Bushy, min 3 breaks
Rus acu	Ruscus aculeatus	Butcher's broom	Shrub	30-40cm	3L	5	Branched, min 3 breaks
Sar hook Purp	Sarcococca hookerana digy. 'Purple Stem'	Sweet box	Shrub	20-30cm	3L	5	Bushy, min 6-7 breaks
Sar hook Ghor	Sarcococca hookeriana 'Ghorepani'	Sweet box	Shrub	20-30cm	3L	5	Bushy, min 6-7 breaks
Ski jap KewG	Skimmia japonica 'Kew Green'	Skimmia	Shrub	30-40cm	3L	5	Bushy, min 3 breaks
Sym che Han	Symphoricarpus chenaulti 'Hancock'	Snowberry	Shrub	30-40cm	3L	5	Bushy, min 3 breaks
Vib burk	Viburnum burkwoodii	Burkwood Viburnum	Shrub	100-125cm	18L	as per plan	Branched, min 4 breaks
Vib dav	Viburnum davidii	Viburnum	Shrub	30-40cm	3L	5	Bushy, min 3 breaks

2.3 PLANTING SCHEDULE

HERBACEOUS PLANTING AND ORNAMENTAL GRASSES

ABBREVIATION	SPECIES	COMMON NAME	TYPE	POT SIZE	DENSITY	SIZE/SPECIFICATION
Alc moll	Alchemilla mollis	Lady's Mantle	Herbaceous	2L	7	15-20dia, Full pot, fully rooted pot, healthy crown
Ane less	Anemanthele lessoniana	New Zealand wind grass	Grass	2L	5	Full pot, fully rooted system, min 5 canes
Ane hup Sept	Anemone hupehensis 'September Charm'	Windflower 'September Charm'	Herbaceous	3L	5	Full pot, fully rooted , healthy crown
Ane hyb Jon	Anemone hybrida 'Honorine Jobert'	Windflower 'Honorine Jobert'	Herbaceous	3L	5	Full pot, fully rooted , healthy crown
Asa euro	Asarum europaeum	wild ginger	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Athy nipo	Athyrium niponicum pictum	Japanese Painted Fern	Fern	3L	5	
Ber Silb	Bergenia 'Silberlicht'	Elephant's Ears 'Silberlicht'	Herbaceous	2L	7	Full pot, fully rooted , healthy crown
Bru macr Jac	Brunnera macrophylla 'Jack Frost'	Siberian bugloss	Herbaceous	2L	5	Full pot, fully rooted , healthy crown
Cal acut Carl	Calamagrostis acutifolia 'Carl Foerster'	Feather reed grass	Grass	3L	5	Full pot, fully rooted pot, healthy clump
Car oshi Ever	Carex oshimensis 'Everest'	Japanese sedge	Grass	3L	7	Full pot, fully rooted pot, healthy clump
Car oshi EG	Carex oshimensis 'Evergold'	Japanese sedge	Grass	3L	7	Full pot, fully rooted pot, healthy clump
Car pend	Carex pendula	Pendulous sedge	Grass	2L	7	Full pot, fully rooted pot, healthy clump
Des cesp	Deschampsia cespitosa	Tufted hair grass	Grass	2L	5	Full pot, fully rooted pot, healthy clump
Epi you Niv	Epimedium youngianum 'Niveum'	Barrenwort	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Ger Lil	Geranium 'Lilac Ice'	Geranium	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Ger macr Whi	Geranium macrorrhizum 'Whiteness'	Geranium	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Ger macr Sp	Geranium macrorrhizum 'Spessart'	Geranium	Herbaceous	2L	7	Full pot, fully rooted pot, healthy crown
Ger Roz	Geranium 'Rozanne'	Geranium	Herbaceous	2L	7	Full pot, fully rooted pot, healthy crown
Hel Harv Wh	Helleborus 'Harvington White'	Lenten rose	Herbaceous	2L	7	Full pot, fully rooted , healthy crown
Hel Harv WhSp	Helleborus 'Harvington White Speckled'	Lenten rose	Herbaceous	2L	5	Full pot, fully rooted, healthy crown
Hel Pret	Helleborus 'Pretty Ellen White'	Lenten rose	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Ir foet V	Iris foetidissima 'Variegata'	Stinking Gladwyn	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Ir foet	Iris foetidissima	Stinking Gladwyn	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Lir musc Mun	Liriope muscari 'Munro White'	Lily-turf	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Luz nive	Luzula nivea	Snowy Wood Rush	Grass	2L	7	Full pot, fully rooted pot, healthy clump
Luz sylv A	Luzula sylvatica 'Aurea'	Great Wood Rush 'Aurea'	Grass	2L	7	Full pot, fully rooted pot, healthy clump
Mat stru	Matteuccia struthiopteris	Ostrich Fern	Ferns	3L	5	
Pac term	Pachysandra terminalis 'Green Carpet'	Japanese Spurge	Herbaceous	2L	7	15-20 dia, full pot
Pen alop H	Pennisetum alopecuroides 'Hameln'	Fountain Grass 'Hameln'	Grass	2L	5	Full pot, fully rooted pot, healthy clump
Per Blue	Perovskia 'Blue Spire'	Russian sage	Herbaceous	3L	5	30-40cm, bushy, min 3 breaks
Poly acu	Polystichum aculeatum	Hard Shield Fern	Ferns	3L	5	
Poly mun	Polystichum munitum	American Sword Fern	Ferns	3L	5	
Poly set Her	Polystichum setiferum 'Herrenhausen'	Soft shield fern	Ferns	3L	5	
Pul Blue	Pulmonaria 'Blue Ensign'	Lungwort	Herbaceous	2L	7	Full pot, fully rooted, healthy crown
Stip ten	Stipa tenuissima	Stipa	Grass	3L	5	Full pot, fully rooted system, min 5 canes
Sti cala	Stipa calamagrostis	Pheasant grass	Grass	3L	5	Full pot, fully rooted system, min 5 canes
Vi mi GJ	Vinca minor 'Gertrude Jekyll'	Lesser Periwinkle 'Gertrude Jekyll	Herbaceous	2L	7	40-50dia, full pot, fully rooted

2.3 PLANTING SCHEDULE

NATIVE SHRUB MIX

ABBREVIATION	SPECIES	COMMON NAME	TYPE	SIZE	ROOT	DENSITY	SPECIFICATION
Ace cam	Acer campestre	Field maple	Native shrub	80-100cm	BR	3	Bushy, min 3 breaks
Cor san BR	Cornus sanguinea	Common Dogwood	Native shrub	80-100cm	BR	3	Bushy, min 3 breaks
Cor ave	Corylus avellana	Common Hazel	Native shrub	80-100cm	BR	3	Bushy, min 3 breaks
Cra mono	Crataegus monogyna	Hawthorn	Native shrub	80-100cm	BR	3	Bushy, min 3 breaks
Il aqui	Ilex aquifolium	Holly	Native shrub	40-60cm	3L	3	Leader and laterals
Lig vul	Ligustrum vulgare	Common Privet	Native shrub	60-80cm	BR	3	Bushy, min 3 breaks
Ros can	Rosa canina	Dog Rose	Native shrub	30-40cm	BR	3	Bushy, min 3 breaks
Vib opu	Viburnum opulus	Guelder Rose	Native shrub	80-100cm	BR	3	Bushy, min 3 breaks

CLIMBERS

ABBREVIATION	SPECIES	COMMON NAME	TYPE	SIZE	POT	DENSITY	SPECIFICATION
Hed heli	Hedera helix, for infill planting	Common Ivy	Climber	20-30cm dia	3L	5	Branched, min 5 breaks
Hed heli Gla	Hedera helix 'Glacier'	Ivy 'Glacier'	Climber	20-30cm dia	3L	5	Branched, min 5 breaks
Lon peri S	Lonicera periclymenum 'Seritonina'	Honeysuckle	Climber	100-150cm	10L	2/lm	

WILDFLOWER MEADOW

SPECIES	COMMON NAME
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Alliaria petiolata	Garlic Mustard
Centaurea nigra	Common Knapweed
Clinopodium vulgare	Wild Basil
Digitalis purpurea	Foxglove
Galium album - (Galium mollugo)	Hedge Bedstraw
Geum urbanum	Wood Avens
Hypericum perforatum	Perforate St John's Wort
Leucanthemum vulgare	Oxeye Daisy
Plantago lanceolata	Ribwort Plantain
Primula veris	Cowslip
Prunella vulgaris	Selfheal
Silene dioica	Red Champion
Stachys sylvatica	Hedge Woundwort
Torilis japonica	Upright Hedge-parsley
Vicia cracca	Tufted Vetch
Agrostis capillaris	Common Bent (w)
Anthoxanthum odoratum	Sweet Vernal-grass (w)
Brachypodium sylvaticum	False Brome (w)
Cynosurus cristatus	Crested Dogstail
Deschampsia cespitosa	Tufted Hair-grass (w)
Festuca rubra	Slender-creeping Red-fescue
Poa nemoralis	Wood Meadow-grass

2.4 OUTLINE SPECIFICATION FOR SOFT LANDSCAPE

ROOT PROTECTION AREAS OF EXISTING TREES

- Work within RPA to be undertaken by hand and in accordance with BS5837:2012 and Arboriculturist consultants recommendations.**
- Machinery is not to be used within Root Protection Areas (RPA) of existing trees unless prior agreement with Arboriculturist consultant
 - Do not regrade levels within RPA without prior agreement with Landscape Architect and Arboriculturist consultant
 - For excavation within RPA, contractor to provide method statement for approval by Landscape Architect and Arboriculturist.
- SOIL DEPTHS, TYPICALLY:**
- Turf and grass areas: 150mm topsoil, 450mm subsoil
- Meadow seeding: 250mm subsoil
- Ornamental Shrub and herbaceous planting: 450mm topsoil, 400mm subsoil (loosened)
- Trees in grass/shrub areas: 450mm topsoil, 400mm subsoil (loosened)
- Trees in underground crate structures: As per section SKS08/SKS12
- Proposed ornamental shrub planting and lawn areas within root protection areas (RPA’s) of trees to be retained:**
- Excavation to be kept to a minimum. If necessary), excavation and backfilling is to be undertaken carefully by hand to avoid damage to roots.**
- Any works within RPA’s to be undertaken in accordance with BS5837:2012 and in accordance with advice from arboricultural consultant.**

HANDLING OF SOIL

- HANDLING TOPSOIL & PROTECTION OF SUBSOIL FROM COMPACTION:
- Ensure free from weeds.
- Aggressive weeds:
- Species: Included in the Weeds Act, section 2 or the Wildlife and Countryside Act, Schedule 9, part II.
- Earthmoving equipment:
- Select and use to minimize disturbance, trafficking and compaction.
- Dump trucks used to transport material must only operate on the 'basal'/non-soil layer.
 - Excavators should only operate on the topsoil layer
- Compaction:
- Where this occurs or where it is necessary for dump trucks to use the sub-soil layer then decompaction must be carried out prior to re-instatement of topsoil
- Operation:
- Haul routes and storage areas must be defined and stripped first.
- Contamination:
- Do not mix topsoil with:
- Subsoil, stone, hardcore, rubbish or material from demolition work.
 - Oil, fuel, cement or other substances harmful to plant growth.
 - Other grades of topsoil.
- Multiple handling:
- Keep to a minimum. Use topsoil immediately after stripping or place in temporary storage piles.
- Weather conditions:
- Handle topsoil in the driest condition possible.
- Do not handle during or after heavy precipitation (includes snow and hail)

SUBSOIL

- SUBSOIL SURFACE PREPARATION:
- General: Excavate and/or place fill to required profiles and levels.
- Loosening:
- Light and non-cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm.
 - Stiff clay and cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm.
 - Rock and chalk subgrades: Lightly scarify to promote free drainage.
- Decompaction:
- Where compaction of the ‘Subsoil’ layer has occurred, or where recently installed ‘Subsoil’ is of poor quality or has been damaged by handling, deep rip to a depth of 600mm at 1m centres
 - Ripping is only to be undertaken both ways along one axis and at an orientation to promote down-slope drainage
 - Each successive pass is to overlap
 - In small confined areas, rotavation or hand contamination in dry conditions
- Stones:
- Immediately before spreading topsoil, remove stones larger than 50 mm in any dimension.
- Remove Arisings, contaminants and debris and Builder’s rubble.
- MATERIALS NOT PERMITTED
- Peat and Products containing peat.
- GRADING SUBSOIL
- General:
- Grade to smooth flowing contours to achieve specified finished levels of topsoil.
- Areas of thicker topsoil: Excavate locally.
 - General: Excavate and/or place fill to required profiles and levels

2.4 OUTLINE SPECIFICATION FOR SOFT LANDSCAPE

TOPSOIL

IMPORTED TOPSOIL, CUSTOM MIX MULTIPURPOSE TOPSOIL

Quantity:
Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.

Standard Requirements:
This soil is to comply with BS3882:2007 Specification for Multipurpose topsoil with the following amendments:
Stone: Size in any dimension (maximum):
- >2mm: 0-15% .
- >20mm: 0-5%
- >50mm: 0%
- Stone content by dry weight (maximum): 20% .

Foreign matter:
On visual inspection, free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like.

PREPARATION OF UNDISTURBED TOPSOIL:
Standard:
In accordance with BS 4428.
- Hard ground: Break up thoroughly.
- Clearing: Remove visible roots and large stones with a diameter greater than 50 mm
- Areas covered with turf or thick sward: Plough or dig over to full depth of topsoil.
- Fallow period (minimum): One month
- Weed control: At appropriate times treat with a suitable translocated non-residual herbicide

TOPSOIL STORAGE HEAPS:
- Locate in dry ground, not in hollows and do not disrupt local surface drainage.
- Protect from run-off/ponding by a cut-off ditch.
- Site of stockpiling to be thoroughly prepared by grading and removal of rubbish to be approved by the contract administrator/landscape architect
- To be stored separately from the subsoil
- Soil should be stored on protected ground. On areas of existing hard surfacing this protection should shall take the form of tarpaulin, plastic sheets,

boards or similar surfaces and the contractor shall be responsible for making good any damage caused by the operations.

Dimensions:
- Height (maximum): 1.5m if heap is to be maintained for a period exceeding 2 weeks 3m for periods less than 2 weeks
- Width (maximum): 3m if heap is to be maintained for a period exceeding 2 weeks 10m for periods less than 2 weeks
- Angle of Sides: 45°

Protection:
- Do not place any other material on top of storage heaps.
- Do not allow construction plant to pass over storage heaps.
- Prevent compaction and contamination.
- Once completed enclose storage heap with a chestnut pale fence as Q40 and prevent all construction access.

Weeds:
- The soil shall be kept clear of weeds by mechanical or approved chemical means.
- The enactments and regulations in respect of injurious weeds are to be complied with at all times, and note taken of the Weed Act 1959.

GRADING OF TOPSOIL:
Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage.
- Hollows and ridges: Not permitted.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.
- Blade grading: May be used to adjust topsoil levels provided depth of topsoil is nowhere less than 150 mm.

HANDLING TOPSOIL:
- Aggressive weeds: Give notice and obtain instructions before moving topsoil.
- Plant: Select and use plant to minimize disturbance, trafficking and compaction.

Contamination:
Do not mix topsoil with:
- Subsoil, stone, hardcore, rubbish or material from demolition work.
- Other grades of topsoil.

Multiple handling:
Keep to a minimum. Use or stockpile topsoil immediately after stripping.

Wet conditions:
Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit (less 3%, to BS 1377-2)

SPREADING TOPSOIL:
Temporary roads/surfacing: Remove before spreading topsoil.

Layers:
- Depth (maximum): 150 mm.
- Gently firm each layer before spreading the next.
Depths after firming and settlement (minimum)
- Grass areas 150mm
- Shrub/herbaceous planting areas 450mm
- Native shrub areas: 300mm
- Tree pits 450mm

Crumb structure:
Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT:
Above adjoining paving or kerbs: 20 mm
Below dpc of adjoining buildings: Not less than 150 mm
Shrub areas: Higher than adjoining grass areas by 50 mm
Within root spread of existing trees: Unchanged.
Adjoining soil areas: Marry in.
Thickness of turf or mulch: Included.

APPLYING MAINTENANCE FERTILIZER:
Time of year: March or April.

Application:
Evenly spread, carefully incorporating below mulch

2.4 OUTLINE SPECIFICATION FOR SOFT LANDSCAPE

materials.
Rate: To manufacturer’s recommendations,
Do not fertilise wildflower areas

SEEDED AND TURFED AREAS

Growth and development:
Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.

Appearance:
To provide a closely knit, continuous ground cover of even density, height and colour.

CLIMATIC CONDITIONS:
General: Carry out the work while soil and weather conditions are suitable,during Autumn or Spring unless agreed with Client.
Work is to be suspended when persistent cold or drying winds are likely to occur or when soil is frost bound waterlogged or excessively dry.

WATER RESTRICTIONS:
Timing: If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/ turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

PREPARATION FOR SEEDING/TURFING

CHEMICALS - GENERAL:
Chemicals shall not be toxic to human beings, birds or animals or environmentally damaging when applied as recommended by the manufacturers, Chemicals must comply with the ‘Agricultural Chemical Approval Scheme’ and be on the list of approved products.
- Observe all precautions recommended by the manufacturer

PREPARATION OF MATERIALS:
General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

HERBICIDE: FOR ALL GRASSED AREAS
- Type: Suitable for suppressing perennial weeds.
- Timing: Allow fallow period before cultivation.
- Duration: As manufacturer’s recommendation.

PEAT:
Peat or products containing peat: Do not use.

CULTIVATION:
- Compacted topsoil: Break up to full depth.
- Soil ameliorant/ Conditioner/ Fertilizer: Fully incorporate in to topsoil ta depth of 150 mm.
- Tilth: Reduce topsoil ta tilth suitable for blade grading.
- Depth: 100 mm.
- Particle size (maximum): 10 mm.

Material brought to the surface:
Remove stones and clay balls larger than 50 mm in any dimension, roots, tufts of grass, rubbish and debris.

GRADING:
Topsoil condition: Reasonably dry and workable.

Contours:
Smooth and flowing, with falls for adequate drainage.
- Hollows and ridges: Not permitted.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.
- Blade grading: May be used to adjust topsoil levels provided depth of topsoil is nowhere less than 150 mm .
- Give notice: If required levels cannot be achieved by movement of existing soil.

FINAL CULTIVATION:
Timing: After grading and fertilizing.
Seed bed: Reduce to fine, firm tilth with good crumb structure.
- Depth: 25 mm.
- Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted.
- Remove surface stones/earth clods exceeding:
 General areas: [20 mm].
 Fine lawn areas: 10 mm.

Adjacent levels: Extend cultivation into existing

adjacent grassed areas sufficient to ensure full marrying in of levels.

SEEDS AND SEEDING

WILDFLOWER SEED MIX
Supplier: Emorsgate or equal approved
- Mixture reference: EH1
Application rate: as per manufacturer’s specification: typically 4g/m²

SOWING:
General: Establish good seed contact with the root zone.

Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.
- Distribution: 2 equal sowings at right angles to each other

TURF EDGING TO SEEDED AREAS ADJACENT TO PAVEMENT
Standard: To BS 3969, with no perennial ryegrass.
- Seed mix: Similar to seeded area.

Timing: Before sowing.

Preparation:
Rake back a 500 mm wide margin around prepared seed beds.
- Level of seed bed: Married in with turf.
Placement: Single row laid end to end and trimmed to a line.

Watering: On completion.

EDGES TO SEEDED AREAS ADJACENT TO PLANTING BEDS AND TREE PITS
Timing: After seeded areas are well established.
Edges:
Clean straight lines or smooth curves.
- Mulch and soil: Draw back to permit edging.
Arisings: Remove.
Completion: Respread soil and mulch.

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TURF AND LAYING OF TURF

CULTIVATED TURF:
Supplier: Rolawn Limited or equal and approved
- Product reference: Rolawn Medallion® turf to BS3936 or equal and approved.

DELIVERY AND STORAGE:
Timing:
- Turf must be laid or rolled out on holding bed immediately in spring and summer, and within 24hrs, October to March.
- Lay turf with minimum possible delay after lifting.
- Stacking height (maximum): 1m.
- Dried out or deteriorated turf: Do not use.

COMPOST DRESSING FOR TURF FOR LAWN AREAS
- Type: Sanitized and stabilized compost.
- Standard: To PAS 100.
- Application rate: To supplier’s recommendations
- Timing: Apply prior to cultivation.

TURFING GENERALLY:
Timing of laying:
- Spring and summer: Within 18 hours of delivery.
- Autumn and winter: Within 24 hours of delivery.
- Weather conditions: Do not lay turf when persistent cold or drying winds are likely to occur or soil is frost bound, waterlogged or excessively dry.
- Working access: Planks laid on previously laid turf. Do not walk on prepared bed or newly laid turf.
- Jointing: Laid with broken joints, well butted up. Do not stretch turf.
- Edges: Whole turfs, trimmed to a true line.
- Adjusting levels: Remove high spots and fill hollows with fine soil.
- Consolidating: Lightly and evenly firm as laying proceeds to ensure full contact with substrate. Do not use rollers.
- Dressing, brushed well in to completely fill all joints: [35% Finely sifted topsoil, 35% Compost, 30% Sand].
- Watering: Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

FAILURES OF SEEDING/TURFING:
Duration: Carry out the following operations from

completion of seeding/ turfing until the end of the rectification period
- Defective materials or workmanship: Areas that have failed to thrive.
- Exclusions: Theft or malicious damage.
- Method of making good: Recultivation and reseedling/ returfing.

PLANTING

CLIMATIC CONDITIONS:
General: Carry out the work while soil and weather conditions are suitable.
Suitable weather conditions: Shall mean mild, moist, dull, overcast, even in winter, with the soil in properly workable condition.
- Strong winds: Do not plant.
- Periods of persistent drying cold winds: Do not plant
Additional: If for any reason the Contractor is carrying out planting during periods of persistent cold or drying wind he shall provide temporary windbreak protection for conifers and evergreen shrubs, and will protect exposed roots on bare root and all other stock.

TIMES OF YEAR FOR PLANTING:
Deciduous trees and shrubs: Late October to late March.
Conifers and evergreens: September/ October or April/ May.
Herbaceous plants (including marginal): September/ October or March/ April.
Container grown plants: At any time if ground and weather conditions are favourable.
Dried bulbs, corms and tubers: September/ October.
Green bulbs: After flowering in spring.

MECHANICAL TOOLS:
Use only machinery and tools suitable for the site conditions and the work to be carried out.
Restrictions: Do not use within 500 mm of tree and plant stems.

WATERING:
Quantity: Wet full depth of topsoil.
Application: Even and without damaging or displacing plants or soil.

Frequency: As necessary to ensure establishment and continued thriving of planting.

PREPARATION, PLANTING AND MULCHING MATERIALS:
General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

PLANTS AND TREES

PLANTS - GENERAL:
Condition: Materially undamaged, sturdy, healthy and vigorous.
Appearance: Of good shape and without elongated shoots.
Hardiness: Grown in a suitable environment and hardened off.
Health: Free from pests, diseases, discolouration, weeds and physiological disorders.
Budded or grafted plants: Bottom worked.
Root system and condition: Balanced with even branch system.
Standard: The National Plant Specification
Species: True to name.
Origin/ Provenance: Grown in the United Kingdom for at least one growing season, unless otherwise approved
Definition: Origin and Provenance have the meaning given in the National Plant Specification.

TREES - GENERAL:
Condition: Materially undamaged, sturdy, healthy and vigorous.
Appearance: Of good shape with balanced and even tree crown the whole way round and strong leader.
Hardiness: Grown in a suitable environment and hardened off.
Health: Free from pests, diseases, discolouration, weeds and physiological disorders.
Budded or grafted plants: Bottom worked.
Root system and condition: Balanced with even branch system.
Standard: The National Plant Specification
Species: True to name.
Origin/ Provenance: Grown in the United Kingdom

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for at least one growing season, unless otherwise approved.
Definition: Origin and Provenance have the meaning given in the National Plant Specification.

PLANTS/ TREES - SPECIFICATION CRITERIA:
Name, forms, dimensions, provenance and other criteria: As scheduled and defined in the National Plant Specification.

CONTAINER GROWN PLANTS/ TREES:
Growing medium: With adequate nutrients for plants to thrive until permanently planted.
Plants: Centred in containers, firmed and well watered.
Root growth: Substantially filling containers, but not root bound, and in a condition conducive to successful transplanting.
Hardiness: Grown in the open for at least two months before being supplied.
Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

PLANT HANDLING, STORAGE TRANSPORT AND PLANTING:
Standard: To HTA 'Handling and establishing landscape plants'.

Frost: Protect plants from frost.

Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.

Plant packaging: Black polyethylene bags.
Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped .

Transport: By open backed vehicles not permissible

Site Storage: Store plant material on site on level free draining ground a way from and protected from other site operations and routeways.

Site Storage Duration: Minimum required. If site storage is to exceed any 24hr Period, ensure adequate

measures are taken to water and care for plant material as necessary to maintain quality.

Planting: Upright or well balanced with best side to front.

TREES

TREATMENT OF TREE WOUNDS:
Cutting: Keep wounds as small as possible.
- Cut cleanly back to sound wood using sharp, clean tools.
- Leave branch collars. Do not cut flush with stem or trunk.
- Set cuts so that water will not collect on cut area.

Fungicide/ Sealant: Do not apply unless instructed.

PROTECTION OF EXISTING GRASS:
General: Protect areas affected by planting operations using boards/ tarpaulins.
- Excavated or imported material: Do not place directly on grass.

SURPLUS MATERIAL:
Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

PREPARATION OF PLANTING BEDS

HERBICIDE: TO CLEAR OVERGROWN BEDS
Locations: All planting areas
Type: Suitable for suppressing perennial weeds.
Timing: Allow fallow period before cultivation.
Duration (minimum): As manufacturer's recommendation

WEED CONTROL: FOR INVASIVE NON-NATIVE WEEDS
Locations: Whole site
General: Prevent weeds from seeding and perennial weeds from becoming established by suitable herbicide

GENERAL FERTILIZER FOR FLOWERING SHRUBS:
Locations: All planting areas except swale areas.
Application: Spread evenly
- Timing: Immediately before cultivation
- Rate: to manufacturer's recommendations

SOIL AMELIORANT/ CONDITIONER FOR FLOWERING SHRUBS:
Locations: All planting areas
Application: Spread evenly.
- Timing: Apply prior to cultivation.
- Rate: To manufacturer's recommendations

COMPOST FOR ORNAMENTAL GRASSES, HERBACEOUS AND FLOWERING SHRUBS:
Locations: All planting areas except swale areas.
Type: Sanitised and stabilized compost.
Standard: To PAS 100.

CULTIVATION:
Compacted topsoil: Break up to full depth.

Cultivation: Loosen, aerate and break up soil into particles of 2-8 mm.
- Depth: 450 mm
- Timing: Within a few days before planting.
- Weather and ground conditions: Suitably dry.
Surface: Leave regular and even.

Levels:
- 25 mm above adjoining paving or kerbs;
- 50 mm above adjoining lawns; and

2.4 OUTLINE SPECIFICATION FOR SOFT LANDSCAPE

- Minimum 150 mm below dpc of adjoining buildings].

Undesirable material brought to the surface: Remove visible weeds, roots and large stones with any dimension exceeding 50 mm
Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate.

SHRUB PLANTING PITS:
Timing: Excavate 1-2 days (maximum) before planting.
Sizes: 150 mm wider than roots when fully spread and 400 mm deep, where necessary increase these dimensions to ensure that pits are at least 25 mm deeper than root system.
Pit bottom improvement: Break up to a depth of 150 mm, incorporating 25 g of slow release fertilizer per planting pit
Backfilling material: [Shrub planting backfilling material
Finished level: To be at original soil mark on shrubs and 30 mm above surrounding level to allow for settlement

CLIMBING PLANTS:
Planting: 150 mm clear of supporting structure (e.g. wall/ fence) with roots spread outward.
- Branches: Lightly secured to supports.
- Climber supports: Softwood and Stainless steel wire.

SHRUB, HERBACEOUS AND BULB BACKFILLING MATERIAL FOR FLOWERING SHRUB PITS
Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required: Ameliorant/ Conditioner: Sanitised and stabilized compost
- Application rate: to manufacturer's recommendation

Fertilizer: Slow release
- Application rate: to manufacturer's recommendations

AFTER PLANTING:
Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
Firming: Lightly firm soil around plants and fork and/ or

rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
Top dressing: Sanitised and stabilized compost
- Depth: 25-30 mm.

Material: Medium grade bark mulch
- Purity: Free of pests, disease, fungus and weeds.
Preparation: Clear all weeds. Water soil thoroughly.
Coverage: 75 mm depth
Finished level of mulch: 10 mm below adjacent grassed or paved areas

PLANTING TREES

PLANTING TREES - GENERAL:
Positioning: Plant trees upright, unless otherwise instructed, in centre of pit and at original soil depth.
Root balled trees: Place in planting pit before hessian or other protective material is removed to avoid disturbing rootball. Wire netting may be left on the rootball provided there is only biodegradable porous material between the wire netting and the rootball. Cut wire netting in several places to speed its corrosion.

Backfill material:
Firm around root ball in 150mm layers, ensuring that all air pockets are eliminated and loosening face of root ball as backfilling proceeds.

Watering:
Create a watering hollow 100mm deep and 500mm wide at the surface of each pit for trees of standard size and above. Water trees thoroughly immediately after backfilling, volume of water TBC, appropriate for size of tree.

Pruning:
The crown of each tree shall be lightly pruned by agreement with CA to remove any damaged twigs or buds to promote even vigorous growth.

Growth springing from below 1.8 metres on scheduled clear stemmed plants shall be removed.

Mulch: After watering spread a 75 mm layer of peat

free planting and mulching compost over the whole area of the tree pit.

TREE PITS IN SOFT LANDSCAPE
Accessories:
- Guying: Underground guying
- Perforated plastics irrigation/ ventilation pipe
- Min 100mm depth drainage layer with clean washed pea shingle 5 -10mm diameter, no fines wrapped in geofabric 'Terram 1000' (or equal & approved). Connected to positive drainage outlet to engineers details
Setting out: Set out positions using pegs or canes and obtain Landscape architect's approval before proceeding.

Sizes:
Not less than the following, increase as necessary to ensure that pits are wide enough to accommodate roots when fully spread.
- Bush, whip and small Feathered trees, 600mm wide and 75mm deeper than rootball.
- Standards to 8/10 and large feathered trees, 900mm wide and 75mm deeper than rootball.
- Standards 10/12 & 12/14, 1200mm wide and 75mm deeper than rootball.
- Extra Heavy Standards, 2000mm wide and 75mm deeper than rootball.
- Semi-mature trees 20cm+ , 500mm wider and 75mm deeper than rootball.

Sloping ground:
Maintain horizontal bases and vertical sides with no less than minimum depth throughout.

Pit bottoms:
With slightly raised centre. Break up to a depth of 200 mm.
- Treatment: Soil ameliorant worked into pit bottoms.
Pit sides: Scarify.
Backfilling material generally: Top soil/subsoil

TREE PITS IN HARD LANDSCAPE:
Accessories:
- Underground guying
- Tree pit drainage layer
- Perforated plastics irrigation/ ventilation pipe as

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- Root barrier
- Bottom of tree pit lined with geotextile membrane;
- Loose gravel infill
- Cell Soil Structure System: GreenBlueUrban Strata Cells (or equal)
- Root deflector to appropriate depth
- Double inlet aeration/irrigation system with cast inlets

Sloping ground:
Maintain horizontal bases and vertical sides with no less than minimum depth throughout.

Pit bottoms:
With slightly raised centre. Break up to a depth of 200 mm.
Treatment: Soil ameliorant worked into pit bottoms.

Pit sides: Scarify.
Backfilling material: Topsoil/subsoil

Sequence of works:
The following issues must be considered where applicable
The tree pit shall be excavated, deadmen and guys where specified supplied and installed and the tree soil supplied and installed, prior to construction of surrounding pavings and edgings.
- The granular drainage material and the deadmen or other underground components of the underground guying system shall be installed at time of filling to avoid excavation later. No loose wires or other items which might pose a risk to or be damaged by the public shall be left near the surface.
- If there is a time-lapse between construction of the pit and planting of the tree, the contractor shall allow for temporary covering using paving or other approved detail. At time of planting, the contractor shall remove and dispose of the temporary cover, excavate sufficient material to plant the tree and install accessories, backfill with excavated Tree soil to manufacturer's recommendations, and install the tree surround as specified.
- The contractor shall also note the high post-planting water requirements of trees in tree soil and must irrigate sufficiently to ensure that trees suffer no stress.

TREE PIT ROOT BARRIERS:
Locations:
- Wherever the installed rootball will be within 2.0 m of a building foundation
- Wherever the installed rootball will be within 2.0 m of an underground service route

TREE PIT DRAINAGE:
Depth of excavation: Increase from specified size to allow for aggregate layer, with base slightly falling to outlet.
Aggregate layer: Clean gravel or broken stone, with no fines, graded 40 to 20 mm.
- Depth: 200 mm
Connection to positive drainage: refer to engineers drawings for details
Drainage pipes:
- Type: Perforated plastics
- Diameter: 50 mm
- Position: Lay around perimeter of pit within aggregate layer.
- Discharge: Connect to drainage to Engineers details
Geotextile filter:
Completed pits: Test for free drainage before planting.

SEMIMATURE TREES:
Standard: Prepare roots and transplant to BS 4043.
Support: underground guying
Protection: Wrap trunks and lower branches with hessian strips and leave on for at least two summers

STAKING GENERALLY:
Stakes: Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots and with pointed lower end.
Stake size (minimum): Sufficient in length when inserted in ground to hold tree firmly with no wind-rock.

SHORT DOUBLE STAKING
Staking: Drive stakes vertically at least 300 mm into bottom of pit on either side of tree position before planting.
- Backfilling: Consolidate material around stakes.
Height of stakes: Cut to approximately 600 mm above ground level.

Cross bar: Flexible webbing within 25 mm of top of stake
- Firmly fix on windward side of tree and as close as possible to stem.
Ties: Expanding ties
Tying: Secure tree firmly but not rigidly to cross bar.

TREE BACKFILLING MATERIAL:
Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required.
Ameliorant/ Conditioner: Sanitised and stabilized compost.
- Application rate: To soil report recommendations.
- Application rate: To suit soil report and supplier's recommendations.

MULCHING TREES IN SOFT LANDSCAPE:
Material: Bark Mulch
- The product shall consist of predominantly matured European Pine Bark with an even nominal particle size distribution of 5-75mm with minimal dust and fines and less than 15% wood content.
- The pH to be between 4.5 and 5.5.
- The product shall be pest, disease and weed free and not have been treated with Methyl Bromide or any additives.
- The product shall have been tested in accordance with the requirements of BS 4790:1987, for fire resistance.
Finished level of mulch: 30 mm below adjacent grassed or paved areas

2.4 OUTLINE SPECIFICATION FOR SOFT LANDSCAPE

WORK TO EXISTING WOODLAND ALONG CANAL

WOODLAND WORK GENERALLY

Services:

Check for below and above ground services, including land drainage, in the vicinity. Give notice if they may be affected and obtain instructions before proceeding.

Safety:

Comply with Arboriculture and Forestry Advisory Group Safety leaflets.

EXISTING VEGETATION/ SHRUB CLEARANCE:

Extent in accordance with agreement with Hillingdon Council

- Areas: In accordance with TM206-L05 soft landscape masterplan, TM206-R07 report and Arboriculturist's recommendations

Arisings:

Generally remove, however retain the following:

- Suitable logs for log piles to form Invertebrae habitats as per Ecologist's recommendation
- Tree trunks to form play/climbing features within play area.

REMOVING TREES AND HEDGES:

Identification: Clearly mark trees and hedges to be removed.

Work near retained trees: Where canopies overlap, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.

Arisings: Remove.

Tree stumps: Remove mechanically to a minimum depth of 300 mm below ground level

APPENDIX 1

TM206L05 SOFT LANDSCAPE MASTERPLAN

APPENDIX 2

TM206L04 DETAILED PLANTING PLAN

APPENDIX 3

TM206R08 SOFT LANDSCAPE MANAGEMENT AND MAINTENANCE REPORT