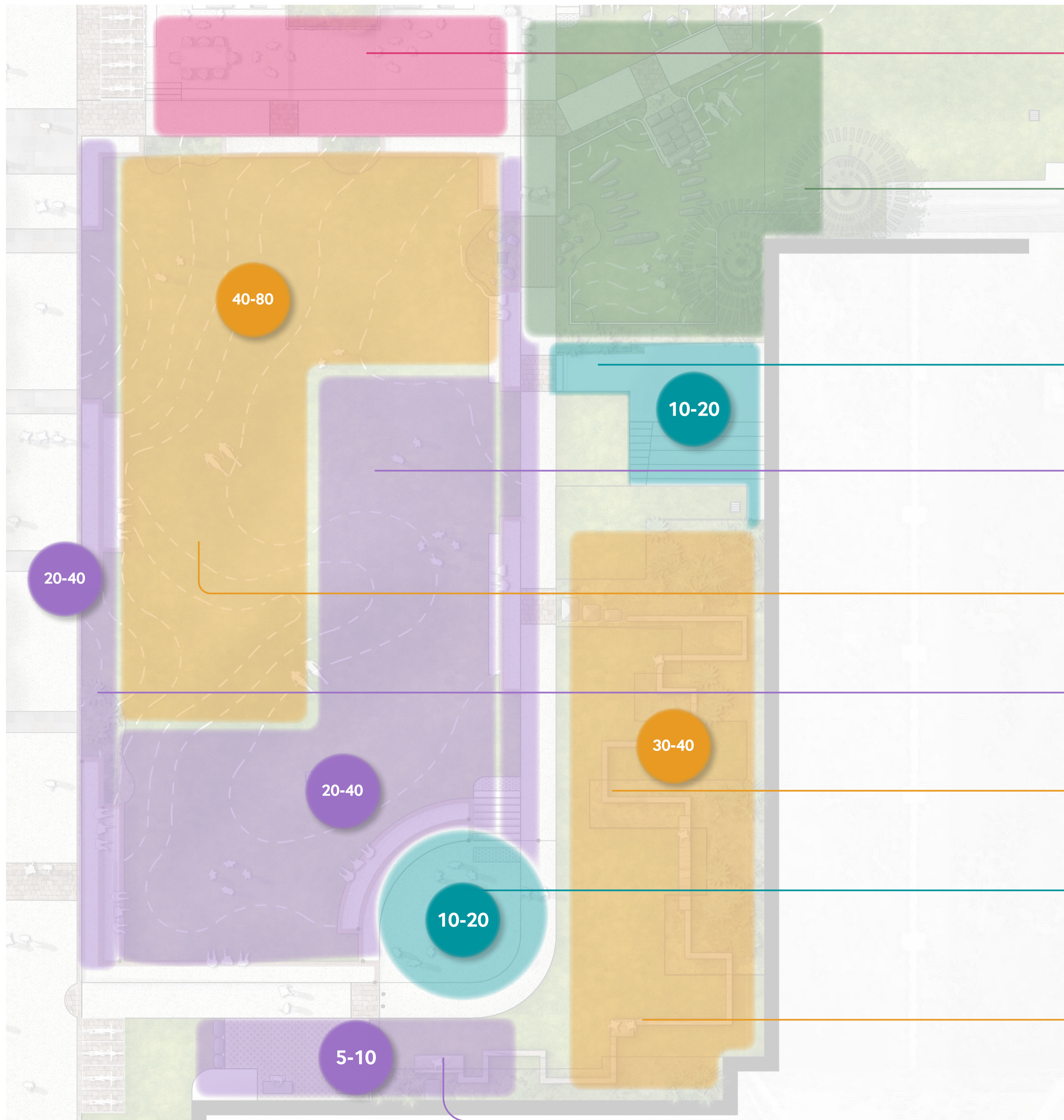


3.8 COURTYARD A - PROGRAMMING PLAN



COMMUNITY KITCHEN
MEDIUM PROGRAMMED GATHERING

- BBQ SPACE & KITCHEN BENCH
- TABLE SETTINGS
- SHELTERS OVER
- PLENTING TO SHIELD ROAD TO THE NORTH

WATER SENSITIVE ECOLOGICAL SPACE
LOW PROGRAMMED GATHERING

- TURF SWALE TO DRAIN GREATER MOUNDED LAWN WITH NATIVE GRASS PLANTING
- MOUNDED AREAS AROUND THE PERIMTER FOR WATER MOVEMENT
- RECYCLED BLUESTONE BOULDERS TO SLOW WATER AND AS STEPPING ELEMENT
- UTILISES EXISTING STORMWATER INFRASTRUCTURE

ACTIVE CULTURAL SPACE
MEDIUM PROGRAMMED ACTIVITY

- TERRACE SEATING
- OUTDOOR CINEMA
- SECONDARY FORECOURT FOR DIVISION A EVENTS

PASSIVE RECREATION
LOW PROGRAMMED GATHERING

- MOUNDED LAWN OFF MAIN THOROUGHFARE FOR SPECTATING AND RELAXING
- SCATTERED LOW PLANTING

ACTIVE RECREATION SPACE
LOW PROGRAMMED ACTIVITY

- SPACE FOR MULTITUDE OF ACTIVITIES
- MOUNDED LAWN SPACE
- SHELTERS AND SEATING TO THE NORTH

PASSIVE RECREATION
LOW PROGRAMMED GATHERING

- TERRACES INTEGRATED INTO LAWN SPACE FOR SPECTATING/SURVEILLANCE/RELAXATION

ACTIVE RECREATION SPACE
LOW PROGRAMMED ACTIVITY

- LOW HEIGHT, ORGANIC PLAY ELEMENTS
- SEATING FOR CARERS ADJACENT
- SURROUNDED BY PLANTING AND LAWN

ACTIVE CULTURAL SPACE
HIGH PROGRAMMED ACTIVITY

- EXTRUDED STAGE FOR PERFORMANCES
- CULTURAL EXPRESSION ie. BANDS, TALKS etc.
- POTENTIAL SHELTER OVER

PASSIVE RECREATION
LOW PROGRAMMED GATHERING

- MIX OF LAWN AND LOW PLANTING
- ARTICULATED PLAY ELEMENT THROUGHOUT
- STORY TELLING OPPORTUNITY

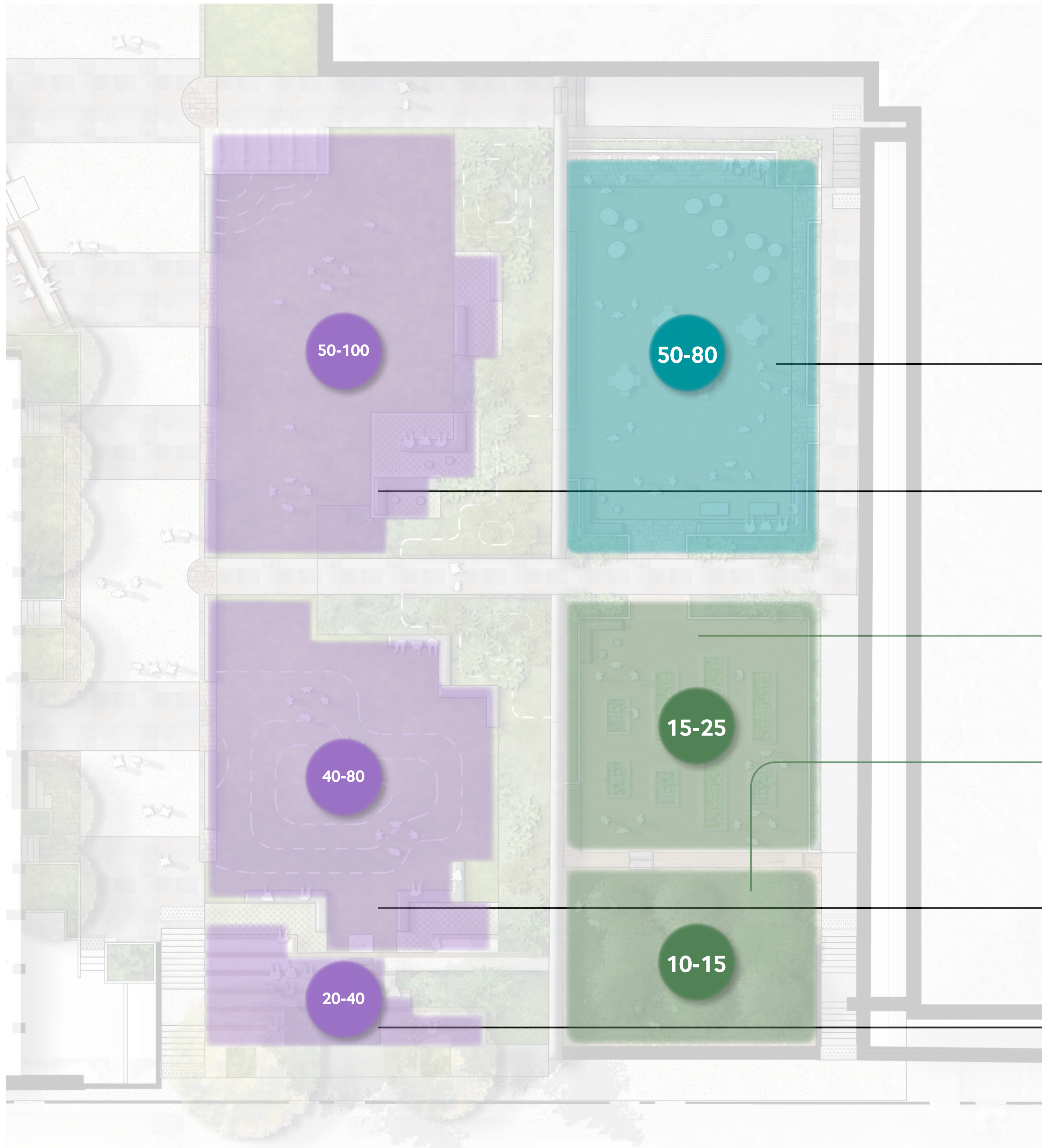
PASSIVE RECREATION
LOW PROGRAMMED GATHERING

- SEATING INTEGRATED INTO EXISTING LOW WINDOW SILLS OF DIVISION A NORTH WALL

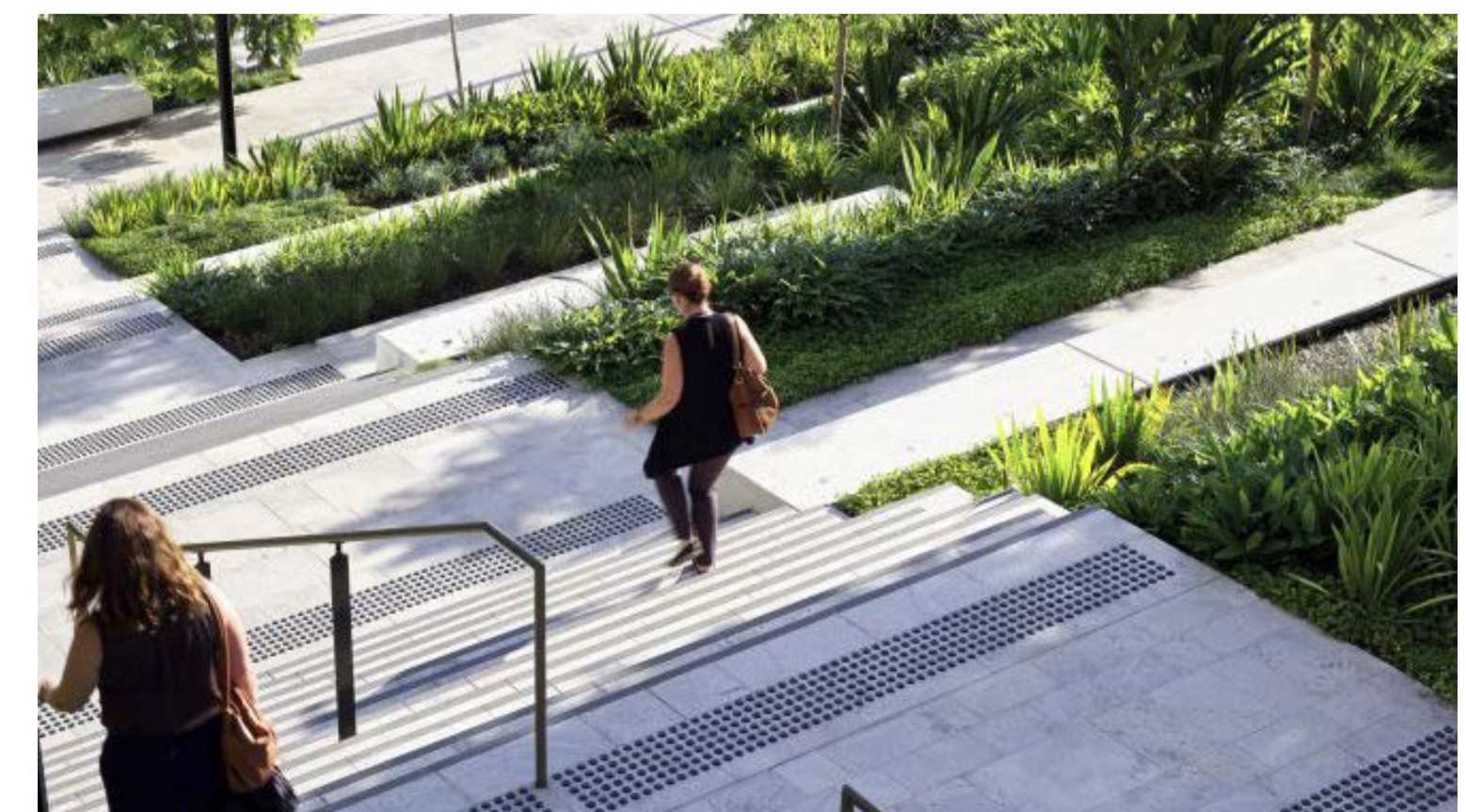


5-10 APPROX. CAPACITY OF SPACE

3.9 COURTYARD B - PROGRAMMING PLAN



- CULTURAL EVENT SPACE**
LOW PROGRAMMED GATHERING
 - FLAT OPEN PAD FOR EVENTS HOSTING
 - PERIMETER PLANTING CREATES PRIVACY WHILE MAINTAINING SITELINES
 - THREE DESIGNATED EGRESS POINTS
- PASSIVE RECREATION**
LOW PROGRAMMED GATHERING
 - LAWN SPACE OFF MAIN THOROUGHFARE
 - BENCH SEATING TO PERIMETER
 - **DDA COMPLIANT ACCESS**
 - PLANTING TO EAST
- COMMUNITY GARDEN**
MEDIUM PROGRAMMED GATHERING
 - GARDEN BEDS FOR VEGETABLES/BUSH FOODS
 - WORK BENCH & COMPOST BINS
 - BENCH SEATING TO PERIMETER
 - PLANTED SURROUNDS
 - **DDA COMPLIANT ACCESS**
- COMMUNITY ORCHARD**
MEDIUM PROGRAMMED GATHERING
 - IN GROUND SMALL FRUIT TREE AND BUSH FOOD PLANTING
 - WORK BENCH & COMPOST BINS
 - BENCH SEATING TO PERIMETER
 - **DDA COMPLIANT ACCESS AROUND PERIMETER**
- PASSIVE RECREATION**
LOW PROGRAMMED GATHERING
 - OPEN, MOUNDED LAWN SPACE WITH SCATTERED FIXED SEATING FOR INFORMAL GATHERING AND OPPORTUNITIES FOR KICK AND THROW
- PASSIVE RECREATION**
LOW PROGRAMMED GATHERING
 - TERRACING WITH PLANTING AND COURTYARD TREES FOR SHADE
 - OPPORTUNITY FOR PASSIVE SURVEILLANCE OVER OPEN KICK AND THROW SPACE



5-10 APPROX. CAPACITY OF SPACE

3.10 UPPER GROUND - BUILDING 01



LEGEND

- | | | | |
|-----|---|--|--|
| PT1 | Exposed/Honed Ag
Various Colours | | Seat Type 1
Concrete Cast in-situ
Allow for exposed artwork etc. |
| PT2 | Cobblestone
Bluestone or similar | | Bike racks |
| PT3 | Large Unit paver
Bluestone or similar | | Recycled Bluestone blocks
location TBD on site |
| PT4 | Steel Mesh Walkway
Distressed look
Suspended over swale | | Trellis type 1
Refer to Schedule |
| PT5 | Decomposed Granite
Concrete Reinforced | | |
| P01 | Planting on ground | | |
| P02 | Containerised/walled Planting | | |
| TF1 | Turf on ground
'A' grade | | |



3.11 UPPER GROUND - BUILDING 02



LEGEND

- PT1 Exposed/Honed Ag
Various Colours
- PT2 Cobblestone
Bluestone or similar
- PT3 Large Unit paver
Bluestone or similar
- PT4 Steel Mesh Walkway
Distressed look
Suspended over swale
- PT5 Decomposed Granite
Concrete Reinforced
- P01 Planting on ground
- P02 Contanerised/walled Planting
- TF1 Turf on ground
'A' grade

Furniture

- Seat Type 1 Concrete Cast in-situ
Allow for exposed artwork etc.
- BR Bike racks
- BT1 Recycled Bluestone blocks
location TBD on site
- Trellis type 1 Refer to Schedule



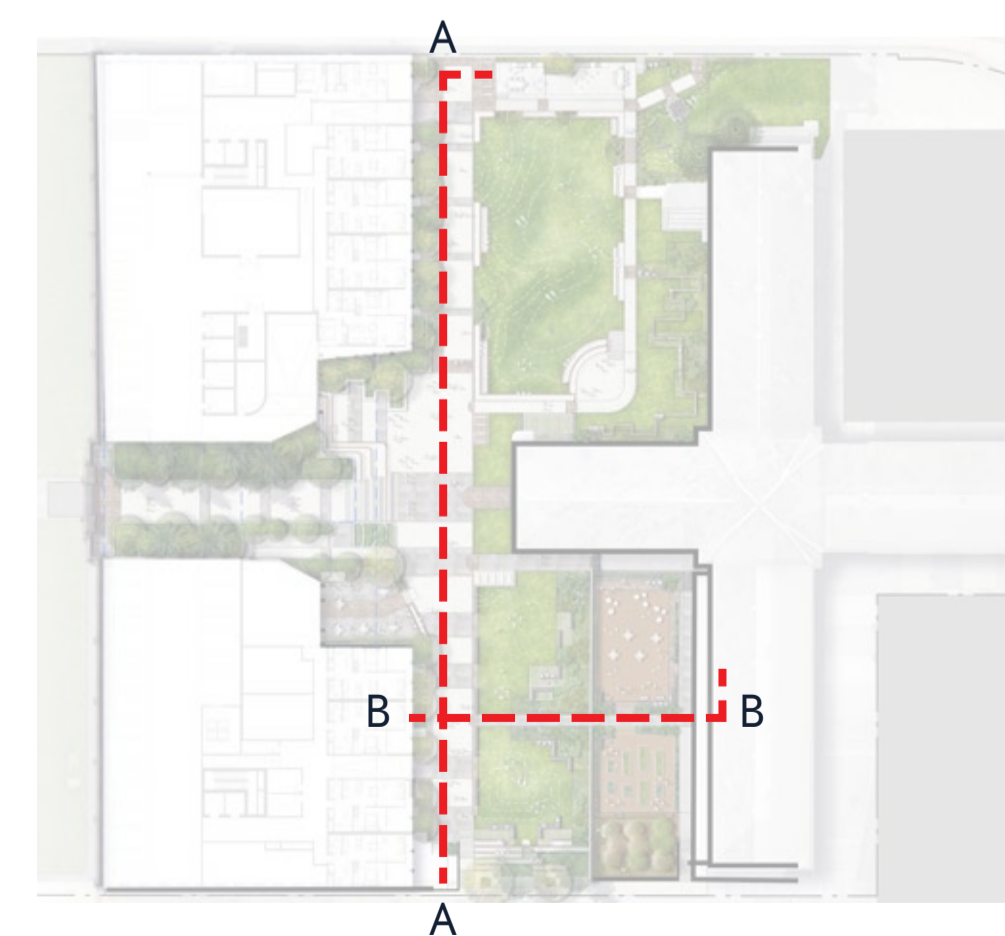
3.12 SECTIONS



SECTION A - NORTH/SOUTH SPINE



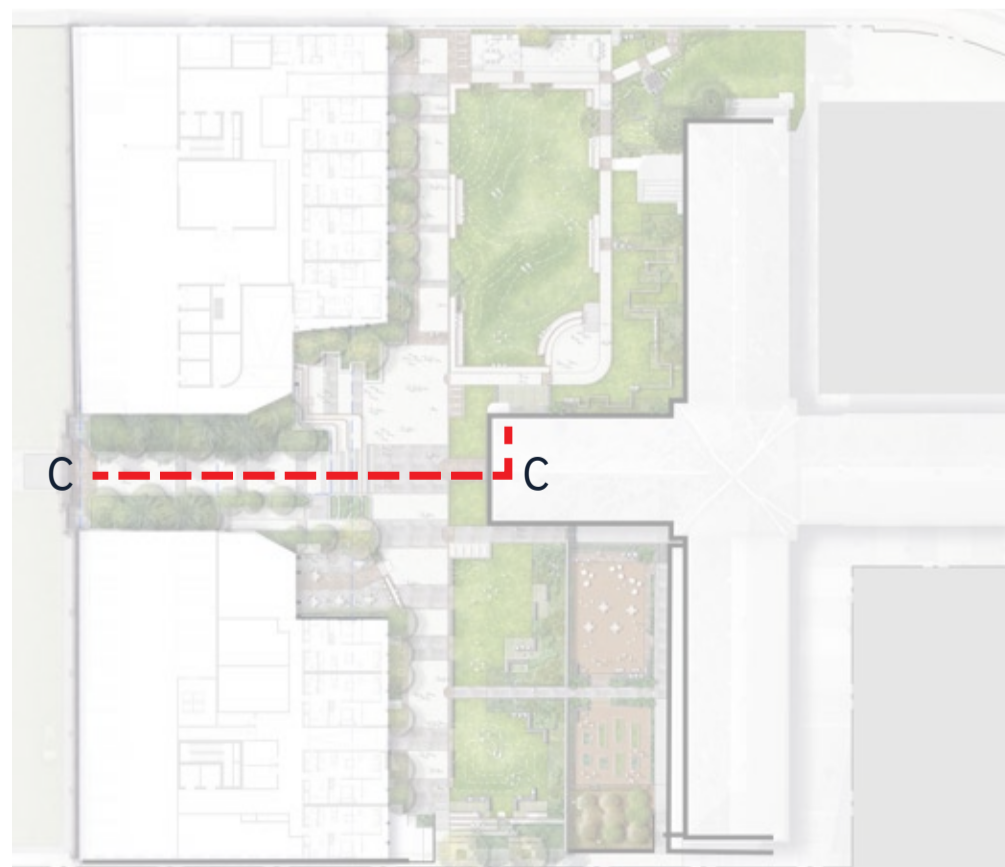
SECTION B - COURTYARD B



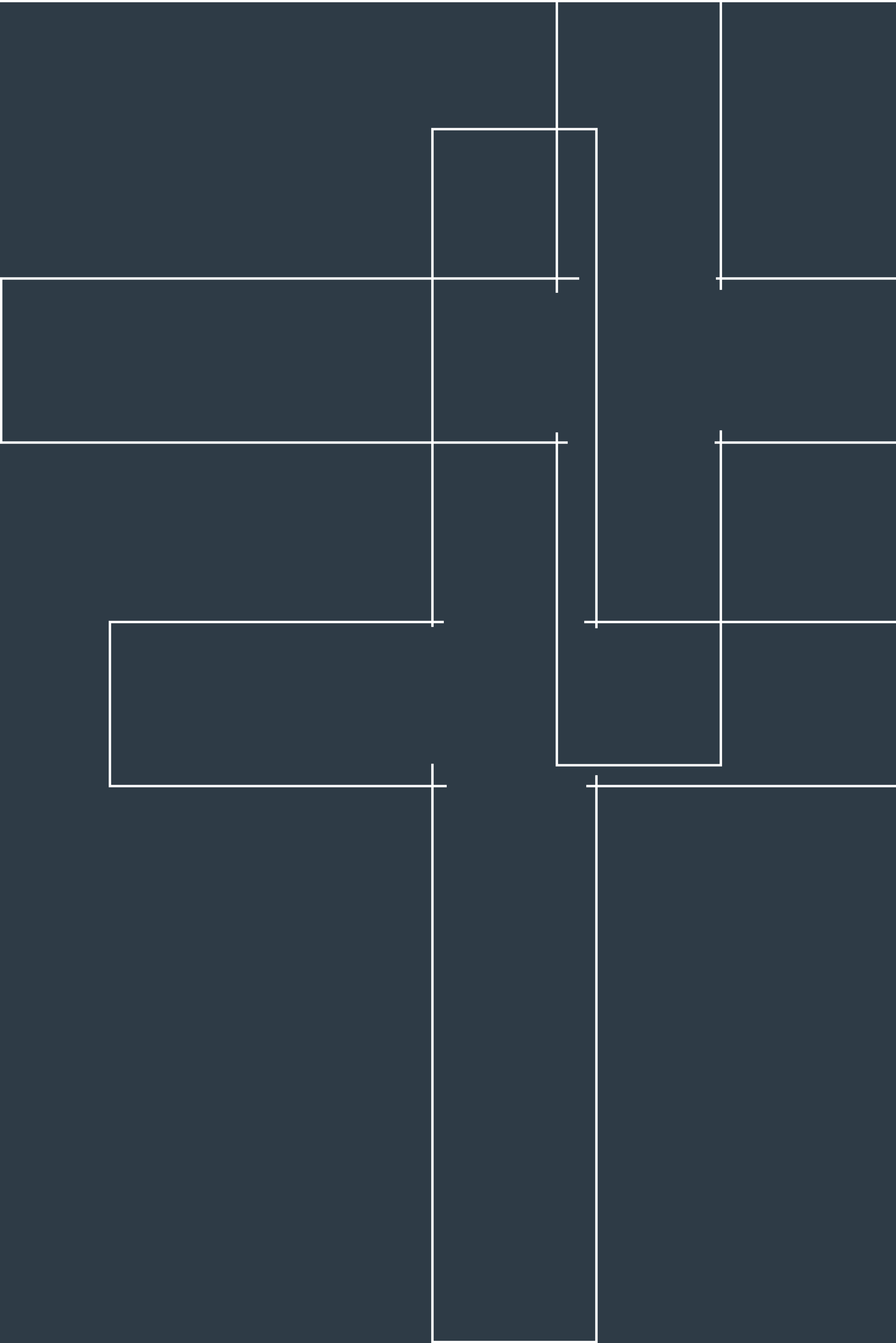
3.12 SECTIONS



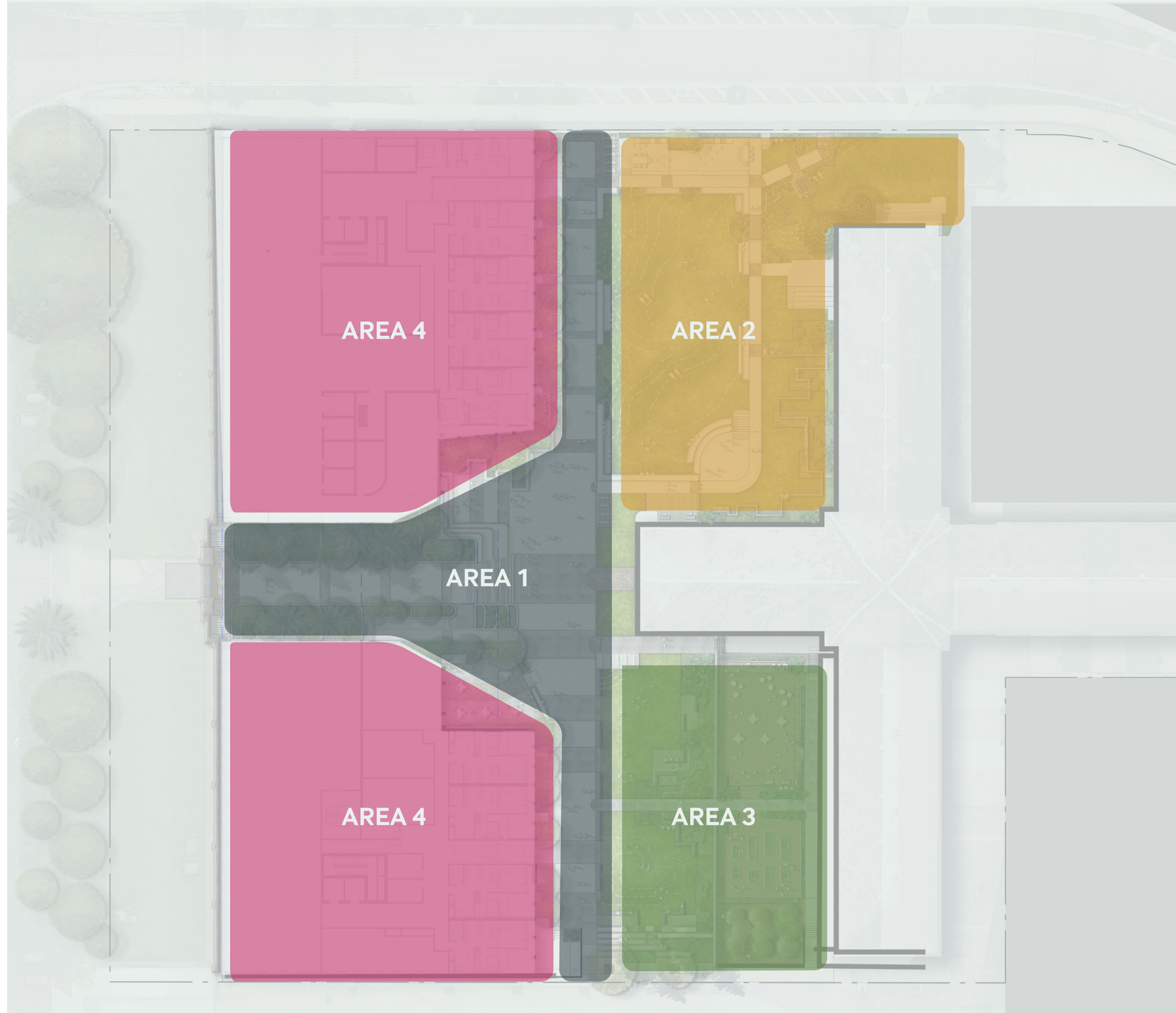
SECTION C - EAST/WEST SPINE



4.0 GREENING STRATEGY



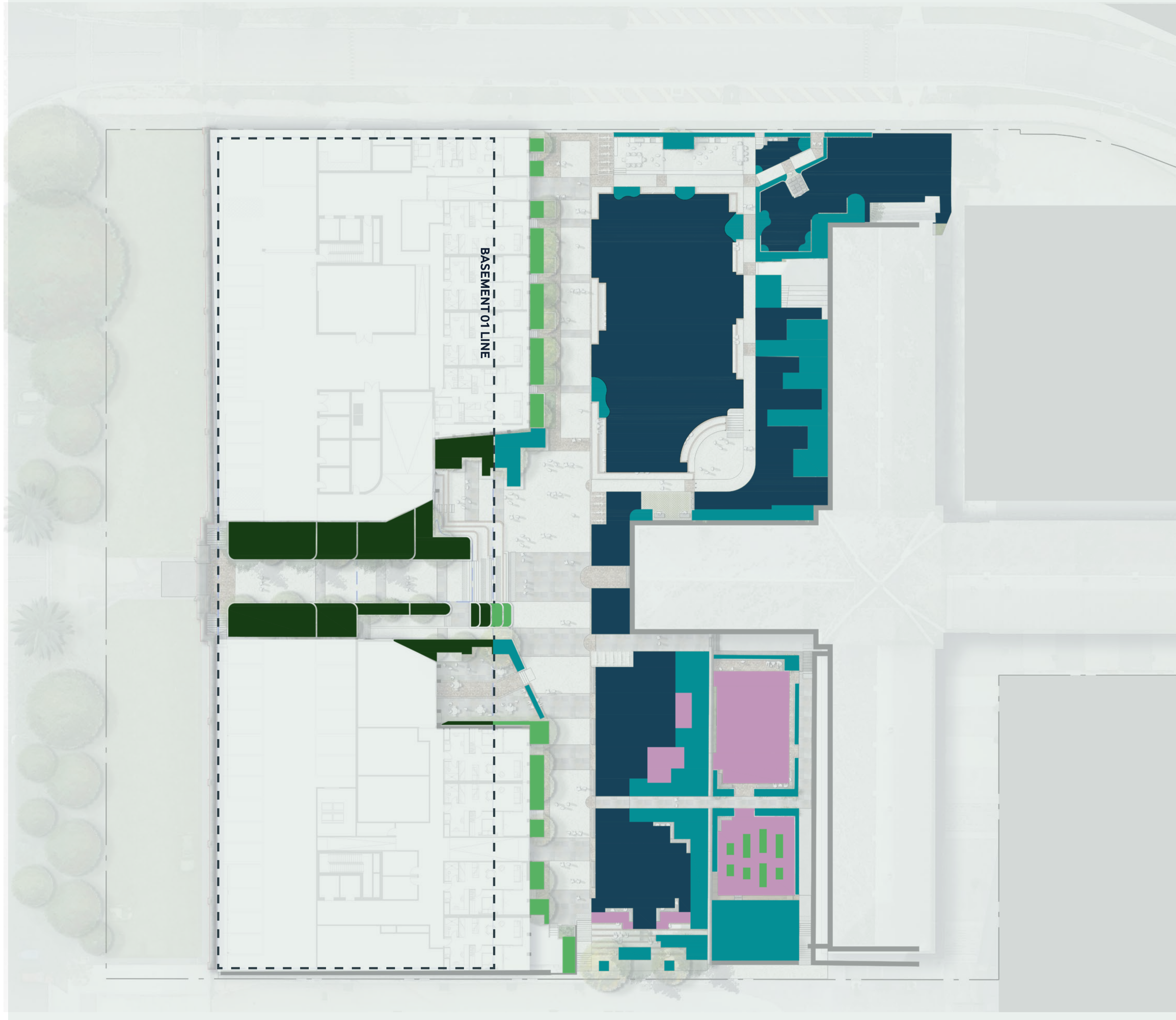
4.1 PLANTING STRATEGY - KEY PLAN



LEGEND

- AREA 1 Transition area - Some podium & some Ground floor species
- AREA 2 Courtyard A - Focus on full-sun native wildflower plantings with some larger shrubs on corners that won't obscure views of Division A
- AREA 3 Courtyard B - Low scrambling natives that grow well in semi-full sun, transitioning to low light species around the base of Division A
- AREA 4 Podium - Focus on more lush planting that grows well in lower light

4.2 SOIL PLAN - GROUND FLOOR



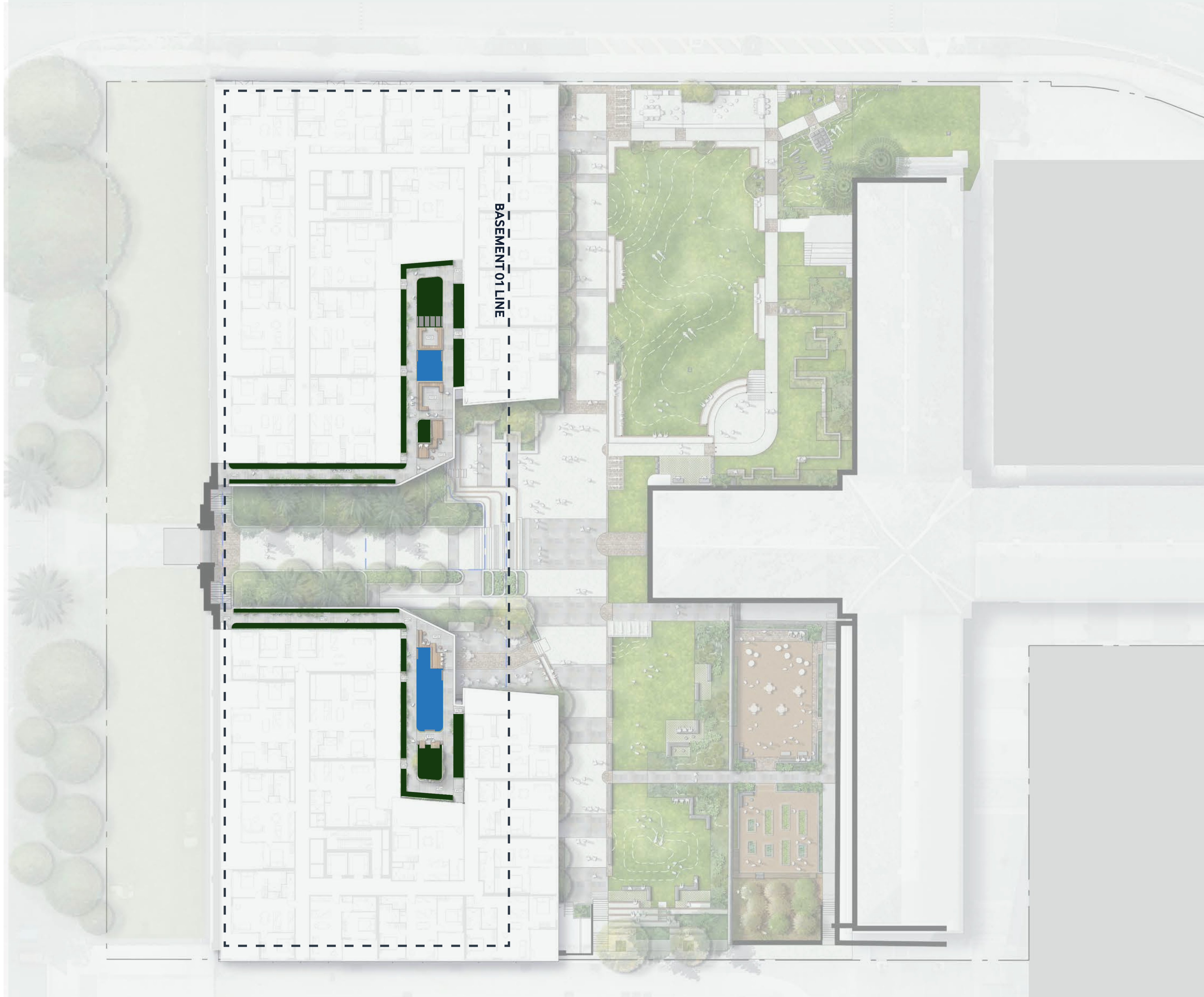
SOIL QUANTITIES

Legend	Soil Type	Soil Depth	Quantity
	Turf on Grade	Deep Soil	1195m ²
	Planting on Grade	Deep Soil	498m ²
	Walled/Containerised Planting	Natural Ground	106m ²
	Planting on Structure	500mm-1000mm	258m ²
	Additional Permeable Area		251m ²

TOTAL DEEP SOIL AREA: **1,678 m²**
 % OF SITE: **22.68%**

TOTAL PERMEABLE AREA: **2,308 m²**
 % OF SITE: **31.19%**

4.3 SOIL PLAN - PODIUM



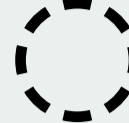





SOIL QUANTITIES

Legend	Soil Type	Soil Depth	Quantity
	Planting on Structure	500mm-1000mm	107m ²
	Turf of Podium	200mm-400mm	37m ²

4.4 TREE AND CANOPY PLAN - GROUND FLOOR



LEGEND

-  Existing tree to be retained
-  LIVISTONA australis (13)
-  WATERHOUSEA floribunda (17)
-  CUPANIOPSIS anicardioides (25)
-  DICKSONIA antarctica (27)
-  HYMENOSPORUM flavum (2)
-  CORYMBIA citriodora (9)
-  ARAUCARIA cunninghamii (9)
-  Fruit tree species (9)
-  Division A wall - Critical Heritage View
-  Clear zone from the highest point to ensure views to Division A

4.5 TREE AND CANOPY PLAN - PODIUM

LEGEND

-  CUPANIOPSIS anicardioides (2)
-  WATERHOUSEA floribunda (2)
-  LIVISTONA australis (27)



4.6 TRANSITION AREA - PLANT PALETTE

	JANUARY BIDERAP	FEBRUARY	MARCH IUK	APRIL	MAY	JUNE WARING	JULY	AUGUST GULING	SEPTEMBER POORNEET	OCTOBER	NOVEMBER BUARTH GURRU	DECEMBER GARRAWANG
SENECIO serpens Blue chalksticks												
PYCNOSORUS globosus Billy Buttons												
ACACIA cognata Bower wattle												
DIANELLA revoluta Flax lily												
RUSSELIA equisetiformis Firecracker plant												
CYCAS revoluta Sago palm												
DICKSONIA antarctica Soft tree fern												
LIVISTONA australis Cabbage tree palm												
CORYMBIA citriodora Lemon-scented Gum												

GROUND FLOOR - GROUNDCOVER PALETTE

	JANUARY BIDERAP	FEBRUARY	MARCH IUK	APRIL	MAY	JUNE WARING	JULY	AUGUST GULING	SEPTEMBER POORNEET	OCTOBER	NOVEMBER BUARTH GURRU	DECEMBER GARRAWANG
ASPERULA conferta Common Woodruff												
CALOCEPHALUS citreus Lemon Beauty-heads												
CALOTIS cuneifolia Blue Burr-daisy												
LINUM marginale Native Flax												
MARIEANA decalvans Black Cotton-Bush												
MINURIA integerrima Smooth Minuria												
PRATIA pendunculata White Star Creeper												
PYCNOSORUS globosus Billy Buttons												
SWAINSONA procumbens Broughton Pea												
VIOLA hederacea Native Violet												
XEROCHRYSUM viscosum Everlasting Daisy												

GROUND FLOOR - TREES & SHRUBS PALETTE

	JANUARY BIDERAP	FEBRUARY	MARCH IUK	APRIL	MAY WARING	JUNE	JULY	AUGUST GULING	SEPTEMBER POORNEET	OCTOBER	NOVEMBER BUARTH GURRU	DECEMBER GARRAWANG
CYCAS revoluta Sago palm												
BANKSIA spinulosa hairpin banksia												
DORYANTHES excelsa Gynea lily												
HYMENOSPORUM flavum Native Frangipani												
LIVISTONA australis Cabbage tree palm												
CUPANIOPSIS anicardioides Tuckeroo												
CORYMBIA citriodora Lemon-scented Gum												

PODIUM - PLANT PALETTE



	JANUARY BIDERAP	FEBRUARY	MARCH IUK	APRIL	MAY WARING	JUNE	JULY	AUGUST GULING	SEPTEMBER	OCTOBER POORNEET	NOVEMBER BUARTH GURRU	DECEMBER GARRAWANG
PRATIA pendunculata White Star Creeper												
VIOLA hederacea Native Violet												
SENECIO serpens Blue chalksticks												
ACACIA cognata Bower wattle												
MICROSORUM pendunculata Kangaroo paw fern												
POLYPODIUM musifolium Crocodile fern												
DIANELLA revoluta Flax lily												
DICKSONIA antarctica Soft tree fern												
LIVISTONA australis Cabbage tree palm												

4.7 PLANTING SCHEDULE

GROUND & TRANSITION AREAS

Botanical Name	Common Name	Mature HeightxSpread	Quantity
GROUNDCOVERS			
ACACIA cognata	Bower Wattle	.5m x 1m	7 per sqm
ASPERULA conferta	Common Woodruff	.2m x 1m	7 per sqm
CALOCEPHALUS citreus	Lemon Beauty-heads	.5m x 1m	7 per sqm
CALOTIS cuneifolia	Blue Burr-daisy	.5m x .5m	7 per sqm
DIANELLA revoluta	Flax Lily	.5m x 1m	7 per sqm
LINUM marginale	Native flax	.5m x .3m	7 per sqm
MARIEANA decalvans	Black Cotton-bush	.5m x 1m	7 per sqm
MINURIA integerrima	Smooth Minuria	.5m x 1m	7 per sqm
PRATIA pendunculata	White Star creeper	.2m x 1m	7 per sqm
PYCNOTORUS globosus	Billy Buttons	.9m x .5m	7 per sqm
RUSSELIA equisetiformis	Firecracker plant	1m x 1.5m	7 per sqm
SENECIO Serpens	Blue Chalksticks	.3m x 1m	7 per sqm
SWAINSONIA procumbens	Broughton Pea	.5m x 1m	7 per sqm
VIOLA hederacea	Native violet	.2m x .5m	7 per sqm
XEROCHRYSUM viscosum	Everlasting Daisy	.5m x .5m	7 per sqm
SHRUBS			
BANKSIA spinulosa	Hairpin Banksia	2m x 2m	3 per sqm
CYCAS revoluta	Sago Palm	3m x 3m	3 per sqm
DICKSONIA antarctica	Soft Tree Fern	3mx2m	27
DORYANTHES excelsa	Gynea Lily	3m x 3m	3 per sqm
TREES			
ARAUCARIA cunninghamii	Hoop Pine	20mx4m	9
CORYMBIA citriodora	Lemon Scented-gum	20m x 6m	9
CUPANIOPSIS anicardiodes	Tuckeroo	10m x 4m	25
HYMENOSPORUM flavum	Native frangipani	7m x 6m	2

PODIUM

Botanical Name	Common Name	Mature HeightxSpread	Quantity
GROUNDCOVERS			
ACACIA cognata	Bower Wattle	.5m x 1m	7 per sqm
DIANELLA revoluta	Flax Lily	.5m x 1m	7 per sqm
PRATIA pendunculata	White Star creeper	.3m x 1m	7 per sqm
SENECIO Serpens	Blue Chalksticks	1m x .3m	7 per sqm
VIOLA hederacea	Native violet	.2m x .5m	7 per sqm
SHRUBS			
MICROSORUM musifolium	Crocodile fern	1m x 1m	3 per sqm
TREES			
CUPANIOPSIS anicardiodes	Tuckeroo	10m x 4m	7
LIVISTONA australis	Cabbage tree palm	10m x 2m	17
WATERHOUSEA floribunda	Weeping Lilly Pilly	8m x 5m	4

4.8 MATERIALS & FINISHES



LEGEND

- 1.) Exposed Aggregate
- 2a.) Bluestone pavers, Large format
- 2b.) Contrasting Bluestone Cobblestone pavement
- 3.) Aged metal mesh walkway
- 4.) Plit tumbled granite picher (Terrace Nosing)
- 5.) Ironwood Travertine Cobblestone
- 6.) Recycled Bluestone blocks
- 7.) Decomposed Granite
- 8.) Turf
- 9.) Concrete Seat w/ bluestone topper
- 10.) Silvered Timber planters and benches
- 11.) Hoop Fines mulch

4.9 MAINTENANCE STRATEGY



MINIMISING MAINTENANCE NEEDS

The maintenance of the landscape will be important to its success both in the critical establishment phase (the first 12 months) and ongoing for its life span. The reduction and practicality of ongoing maintenance requirements has been intrinsic in the design with key considerations as follows:

- Use of endemic and native species and those known to do well in the local area.
- Selection of species by their size and habit, which do not require frequent pruning to maintain their form as a hedge or to contain them within the desired planting zone.
- Species selected for each area determined based on the micro-climatic conditions, particularly in respect to sun and shade conditions.
- Selection of low water plants to reduce the need for additional watering.
- Roof water to be collected for use in irrigation to reduce the need for the use of potable water for this purpose. Automatic irrigation provided throughout the landscape areas.



MAINTENANCE SCHEDULE

The maintenance of the landscape will be undertaken by the contractor for the first 12 months to ensure successful establishment. Following this the maintenance will be taken over by a maintenance contractor.

The maintenance to be undertaken will be detailed in the landscape specification in the form of a Landscape Maintenance Plan. The Landscape Maintenance Plan will ensure the necessary scope and level of maintenance is achieved to ensure the plants remain healthy and other landscape elements are maintained in a safe, functional and attractive condition and will include the following:



SHRUB PRUNING & TRIMMING

- Tip prune shrubs and ground covers to encourage density in spring and winter. Length removed depending on vigor of previous plant growth.
- Pruning should reflect the natural growth, flowering and regrowth habit of the individual species. Generally prune after flowering. Inspect for failed or dying plants requiring replacement monthly and record probable cause.
- All plants that have died or failed (lost more than 50% of their normal foliage cover) shall be replaced with the same species and commercially available size as the plant to be replaced.
- Generally plant material shall be uniformly high quality stock equal to best available for 'retail sale'. The root systems shall be balanced in relation to the size of the plant.
- Plants shall be healthy well grown, hardened off specimens of good shape and free from pests and diseases and in accordance with 'Specifying Trees: a guide to assessment of tree quality' (Clark 2006). Should the contractor believe that alternative species should be utilised a proposal is to be put to POLY for approval. Inspect climbers, trailing plants monthly, train leaders onto supports as required. Prune long leaders which cannot be reattached to climbing frame or mesh supports in summer.



TREE MAINTENANCE

- Inspect trees monthly during the first 12 months and annually thereafter. Ensure trees are not showing any signs of stress, adjust watering as required to ensure good health and top up mulch to specified depths as required.
- Avoid unnecessary pruning during the first three years. Prune only critical branches and remove damaged or dead wood. Remove branches that limit public access or present a safety risk.
- Lift the crown of the trees to maintain clear site lines where required to a level of 2.5m.
- Structural tree work including the removal of large branches should be undertaken by a qualified arborist with appropriate applications for the works made to Council.



TURF MAINTENANCE

- Mow turf every 2 weeks in summer, 3 weeks in Spring / Autumn and 4 weeks in winter. Mow at heights of between 40 to 60mm & remove no more than 1/3 of the leaf blade at any one time. Do not mow under wet conditions.
- Apply fertiliser at rates as recommended by manufacturer in Spring and Autumn. Apply fertiliser at rates as recommended by manufacturer
- Inspect for compaction and thatching in Spring. Carry out aeration treatment if required using dethatching or verticutting equipment
- Inspect for failed turf requiring replacement and record probable cause in Winter. Remove failed turf, prepare surface & lay new turf in accordance with original turf specified.



FERTILISING, SOIL IMPROVEMENT & PEST CONTROL

- Soil testing is to be undertaken at the commencement of the maintenance contract and shall include taking samples from a cross section of planting areas. Slow release fertiliser selected to take into account the soil testing results and the insitu plants should be applied annually in spring and in accordance with the manufacturer's recommended rate. Prior approval required for fertiliser use.
- Check for incidence of fungal and insect attack monthly.
- Apply appropriate treatment for fungal and insect attack if necessary subject to approval.
- Avoid use of chemical sprays. If chemical control is considered necessary, these should be mixed and applied in strict accordance with manufacturer's directions. Do not spray in windy or extreme weather. Prior approval required of chemical to be applied.
- Do not remove leaf litter from planted areas unless depth of litter is impacting on plant growth.



MULCHING & WEEDING

- Prevent reproduction of weeds by removal of seedlings and established weeds before seed set. This work should be carried out regularly so that the planted and mulched areas are weed free when observed at monthly intervals.
- Weed garden areas manually or with approved herbicide monthly. Prior approval required for Herbicide use. Approved Herbicide use to be in accordance with regulation rates and manufacturer's recommendation. Protect plants from overspray and avoid if rain is likely within 12 hour period
- Surface mulch is to be replenished as required, at least annually in spring, to maintain a consistent depth as specified at installation. Mulching materials to be consistent with those specified at installation.
- Plant and other litter to be removed from paths and garden areas where required.



ADJUSTMENT OF TREE STAKES & TIES

- Inspect stakes and ties monthly, replace as required. Check the straps during spring and autumn, ensuring they are loose around the tree to prevent damage to the trunk.
- Remove all stakes and ties at the completion of the 12 month establishment period.



MAINTENANCE OF HARD LANDSCAPE ELEMENTS

- Sweep paved areas, particularly in high use areas monthly. Oil stains in any key areas to be removed using a mild dish washing liquid and warm water solution.
- Inspect paving and walls for areas of moss or mold and remove if found using a mild ammonia solution.
- Weeds are to be removed from all landscape walls, paving and gravel areas monthly.
- Leaf Litter to be removed from all paving areas, paths and gravel areas monthly.
- Drainage pits are to be cleared of mulch and other material regularly so that all pits are cleared when observed at monthly intervals or after significant storm events.
- Inspect seats, benches, tables and other furniture monthly. Undertake any repairs or replacement as required.
- Inspect garden bed edges between soft surfaces annually. Repair any damage or replace as specified.
- Inspect all retaining and planter walls annually. Should any cracking, settling or displacement be observed notify SHMH and determine required rectification actions to be undertaken.
- Inspect all pergolas, mesh screens, climbing structures and shelters annually. Should any rust, damage or structural issues be identified notify Stockland and determine required rectification actions to be undertaken.



IRRIGATION

Automatic irrigation system to be inspected monthly as per manufacturers specifications. The following are to be checked:

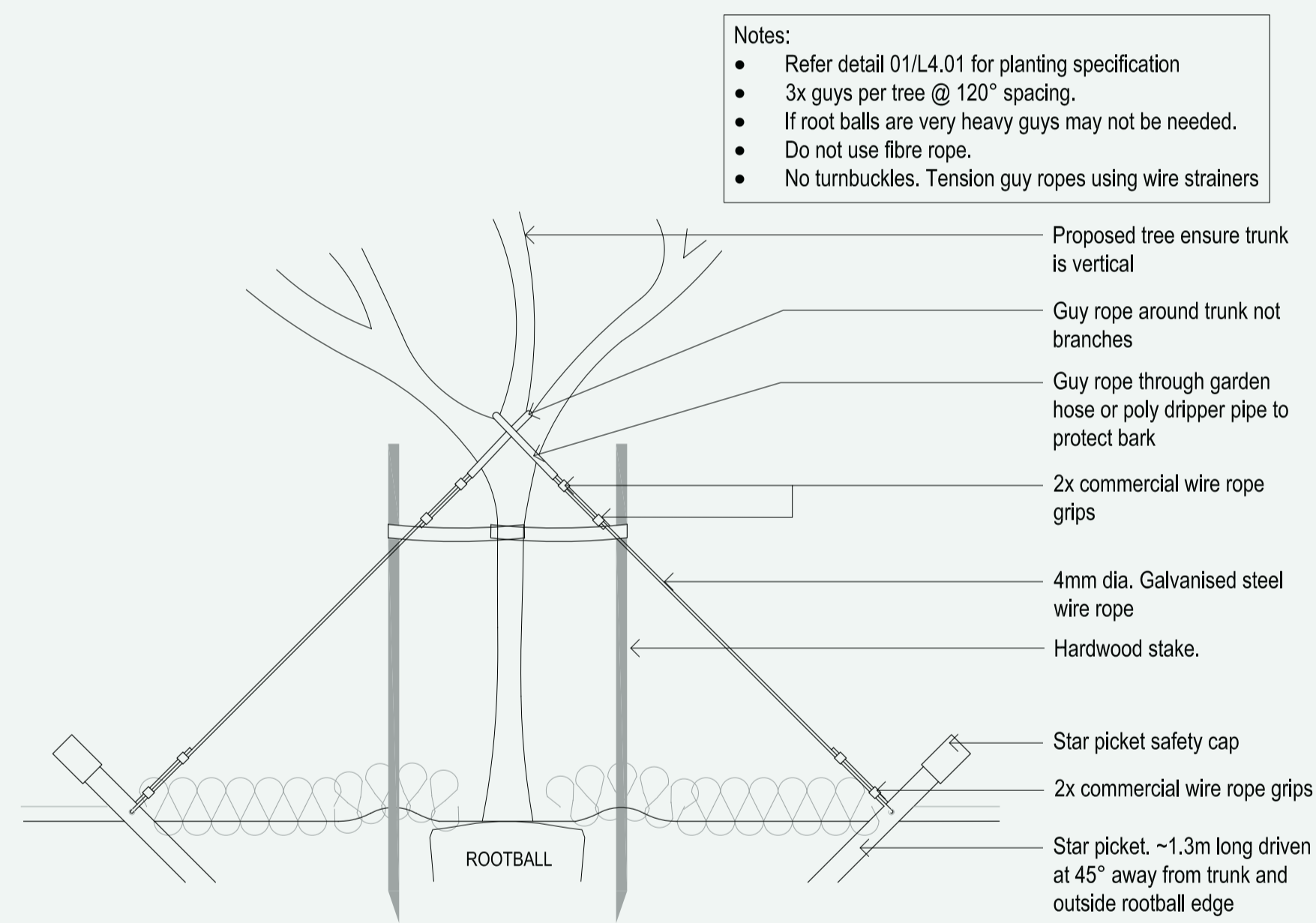
- Controller and soil moisture sensor
- Cabinets clean / clear
- Wiring condition and electrical connections
- Back flow prevention device
- Battery replacement
- Valve covers, valve boxes
- Heads missing, clogged, leaking, broken, tilted or misdirected
- Drip emitters connected to flex line, flex line connected to riser, micro adjustment nozzles connected
- Service filter strainer
- Automatic flush valves
- Operational pressures
- Frequency adjusted to maintain healthy plant growth.

Planting areas not covered by the irrigation system will be covered by the provision of hose cocks at regular intervals which will allow for hose watering as required during establishment and during particularly dry conditions to ensure healthy plant growth.

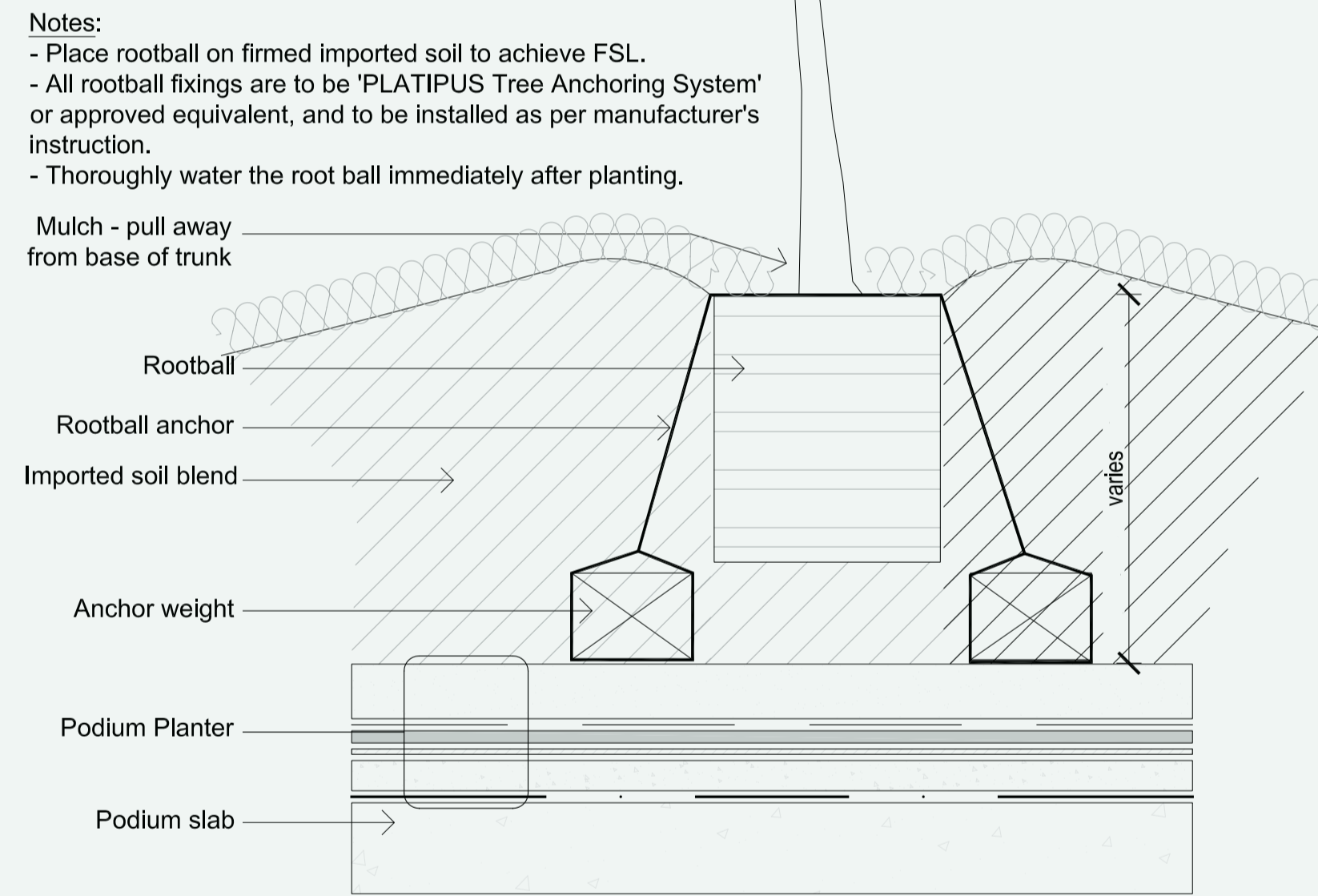
4.10 TYPICAL DETAILS

LANDSCAPE STRATEGY - WIND PROTECTION

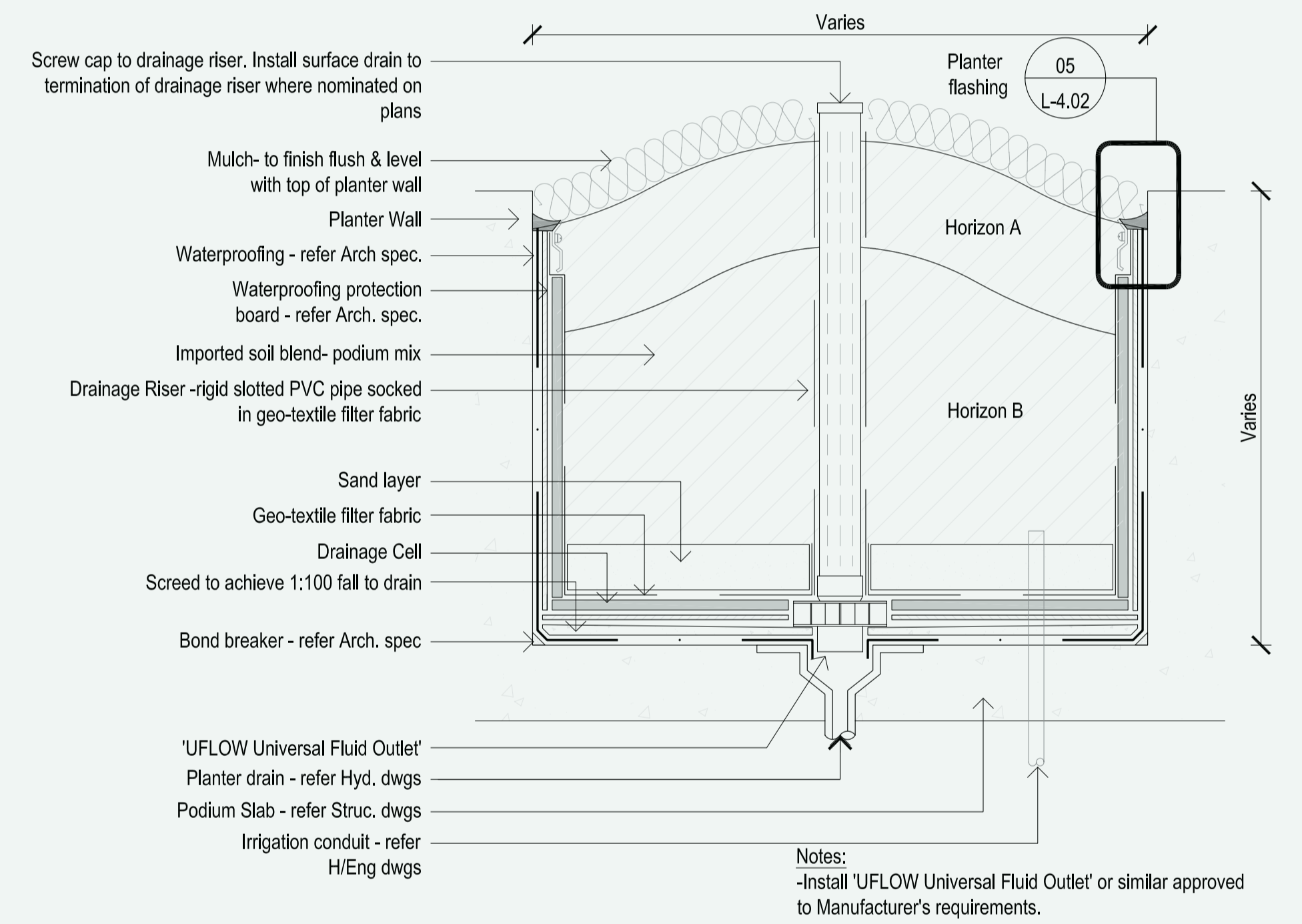
New developments often create wind tunnels that effect landscapes on podium spaces which can damage tree species in storm conditions. A series of details including guying, rootball anchoring and deep soil podium planters can help provide trees the infrastructure and stability during early establishment periods and ensuing mature vegetation will not be damaged in high wind conditions.



TREE GUYING DETAIL -SCALE 1: 20@A1



ROOT BALL ANCHOR TYPICAL -SCALE 1:10 @A1



TYPICAL PODIUM PLANTER DETAIL -SCALE 1:10

rps