

### Notice of Meeting:

I hereby give notice that an extraordinary meeting of the Planning and Environment Committee will be held on:

**Date:** Thursday 14 April 2022

**Time:** 2.30 pm

**Venue:** via Zoom audio visual link

The meeting will be live streamed on the Council's YouTube page <https://youtu.be/f3qLidq0KAo>

Sandy Graham  
Chief Executive Officer

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## Planning and Environment Committee

### PUBLIC AGENDA

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#### MEMBERSHIP

<b>Chairperson</b>	Cr David Benson-Pope	
<b>Deputy Chairperson</b>	Cr Sophie Barker	Cr Steve Walker
<b>Members</b>	Cr Rachel Elder	Mr Matapura Ellison
	Cr Christine Garey	Cr Doug Hall
	Mayor Aaron Hawkins	Cr Carmen Houlahan
	Cr Marie Laufiso	Cr Mike Lord
	Cr Jim O'Malley	Cr Jules Radich
	Cr Chris Staynes	Cr Lee Vandervis
	Ms Rachel Wesley	Cr Andrew Whiley
<b>Senior Officer</b>	Robert West, General Manager Corporate and Quality	
<b>Governance Support Officer</b>	Lauren McDonald	

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Lauren McDonald  
Governance Support Officer

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Lauren.mcdonald@dcc.govt.nz  
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**Note:** *Reports and recommendations contained in this agenda are not to be considered as Council policy until adopted.*

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<b>PART A REPORTS (Committee has power to decide these matters)</b>		
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**1 APOLOGIES**

At the close of the agenda no apologies had been received.

**2 CONFIRMATION OF AGENDA**

Note: Any additions must be approved by resolution with an explanation as to why they cannot be delayed until a future meeting.

## **DECLARATION OF INTEREST**

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### **EXECUTIVE SUMMARY**

1. Members are reminded of the need to stand aside from decision-making when a conflict arises between their role as an elected representative and any private or other external interest they might have.
2. Elected members are reminded to update their register of interests as soon as practicable, including amending the register at this meeting if necessary.

### **RECOMMENDATIONS**

That the Committee:

- a) **Notes/Amends** if necessary the Elected Members' Interest Register attached as Attachment A; and
- b) **Confirms/Amends** the proposed management plan for Elected Members' Interests.

### **Attachments**

	<b>Title</b>	<b>Page</b>
<a href="#">A</a>	Register of Interest as at 31 March 2022	6

Councillor Register of Interest - Current as at 29 March 2022				
Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
Aaron Hawkins	Trustee	West Harbour Beautification Trust	Potential conflict WHBT work with Parks and Reserves to co-ordinate volunteer activities	Withdrawal from all West Harbour Beautification Trust/ DCC discussions involving this relationship.
	Trustee	St Paul's Cathedral Foundation	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Residential Property Owner - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Thank You Payroll	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	ICLEI Oceania Regional Executive	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Hospital Local Advisory Group	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Green Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Connecting Dunedin (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Board Member	Otago Museum Trust Board (Council appointment)	Duties to Trust may conflict with duties of Council Office. Recipient of Council funding	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Otago Theatre Trust (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If in confidential leave the room. Seek advice prior to the meeting.
	Member	Otago Polytech's Research Centre of Excellence	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	LGNZ National Council	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Alexander McMillan Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Cosy Homes Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	LGNZ Policy Advisory Group	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Local Government New Zealand Zone 6 Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Sophie Barker	Director	Ayrmed Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Ocho Newco Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Various publicly listed companies	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Property Owner	Residential Property Owner - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Beneficiary	Sans Peur Trust (Larnach Castle)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Mentor	Business Mentors NZ	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Southern Heritage Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Friends Otago Museum	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Peninsula Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Orokunui Ecosanctuary	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Dunedin Heritage Fund Trust (Council appointment)	Duty to Trust may conflict with duties of Council Office	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Otago Settlers Association (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Vegetable Growers Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Committee Member	Otago Anniversary Day Dinner	No conflict identified	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Dunedin Gas Works Museum Trust (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
David Benson-Pope	Owner	Residential Property Ownership in Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee and Beneficiary	Blind Investment Trusts	Duty to Trust may conflict with duties of Council Office	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Yellow-eyed Penguin Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	New Zealand Labour Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Heritage Fund Trust (Council appointment)	Duty to Trust may conflict with duties of Council Office	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Connecting Dunedin (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Tertiary Precinct Planning Group (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Delegation holder	Second Generation District Plan (2GP) Authority to Resolve Appeals on behalf of Council (Council appointment)	No conflict identified.	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Hospital Local Advisory Group	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Regional Transport Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Commissioner (Community Representative)	District Licensing Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Rachel Elder	Owner	Residential Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Greater South Dunedin Action Group	Decisions may be considered on the future of South Dunedin.	Withdraw from discussion and leave the table. If in confidential leave the room. Seek advice prior to the meeting.
	Host Parent	Otago Girls High School	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Advisor/Support Capacity	Kaffelagic	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Dunedin Trails Networks Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Southern Urban Dunedin Community Response Group	Decisions about emergency response recovery may be conflicted	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Craigieburn Reserve Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Keep Dunedin Beautiful (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Okia Reserve Management Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Toitu Otago Settlers Museum Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Disability Issues Advisory Group	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Christine Garey	Trustee	Garey Family Trust - Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Creative Dunedin Partnership (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Women of Ōtepoti	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Symphony Orchestra Foundation Board of Trustees (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Theomin Gallery Management Committee (Olveston) (Council appointment)	No conflict identified	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Chair	Grants Subcommittee (Council Appointment)	No conflict identified	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Local Government New Zealand Zone 6 Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Doug Hall	Director/Owner	Hall Brothers Transport Ltd	May contract and provide service to DCC	Withdraw from discussion and leave the table. If in confidential leave the room. Seek prior approval from Office of the Auditor General when required.
	Director/Owner	Dunedin Crane Hire	May contract and provide service to DCC	Withdraw from discussion and leave the table. If in confidential leave the room. Seek prior approval from Office of the Auditor General when required.
	Director/Owner	Wood Recyclers Ltd	May contract and provide service to DCC	Withdraw from discussion and leave the table. If in confidential leave the room. Seek prior approval from Office of the Auditor General when required.
	Director/Owner	Dunedin Concrete Crushing Ltd	May contract and provide service to DCC	Withdraw from discussion and leave the table. If in confidential leave the room. Seek prior approval from Office of the Auditor General when required.
	Director/Owner	Anzide Properties Ltd - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	The Woodshed 2014 Limited	May contract and provide service to DCC	Withdraw from discussion and leave the table. If in confidential leave the room. Seek prior approval from Office of the Auditor General when required.
	Owner	Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Farmlands	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Shareholder	Ravensdown Fertiliser	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	PGG Wrightson	Currently no likely conflict	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Silver Fern Farms	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Valley View Development Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Geekfix Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Milburn Processing Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Appellant	2GP	Appellant to the 2GP	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Financial Donor	Dunedin North Community Patrol	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Donor of the use of a building free of charge to the group	North Dunedin Blokes Shed	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Partner	Highland Helicopters	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Supplier	Southweight Truck and Weights for testing Weighbridges Otago & Southland	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Craigieburn Reserve Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Chinese Garden Advisory Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Toitu Otago Settlers Museum Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Carmen Houlahan	Owner	Residential Property - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Rental Property - North Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Part Owner	Adobe Group Ltd, Wanaka	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Rotary Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Institute of Directors	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Property Investors Association	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Company Owner/Sole Director	Shelf Company - RU There	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Startup Business	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Toitu Otago Settlers Museum Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Dunedin Public Art Gallery Acquisitions Committee (Council appointment)	Possible grants recipient	Withdraw from discussion and leave the table. If in confidential leave the room. Seek advice prior to the meeting.
	Member	Dunedin Public Art Gallery Society (Council appointment)	Possible grants recipient	Withdraw from discussion and leave the table. If in confidential leave the room. Seek advice prior to the meeting.
	Member	Mosgiel Taieri Community Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Marie Laufiso	Property Owner	Residential Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Community Building Trust - Trust Owner of Property 111 Moray Place	Duty to Trust may conflict with duties of Council Office	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Otago Mental Health Support Trust	Potential grants applicant which would result in pecuniary interest. Duty to Trust may conflict with duties of Council Office	Do not participate in consideration of grants applications. If the meeting is in confidential, to leave the room.
	Member	Women of Ōtepoti Recognition Initiative	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Family Member	Staff member a relative	Potential conflict depending on level of staff member involvement	Managed by staff at officer level if a perceived conflict of interest arises.
	Secretary	Brockville Improvements and Amenities Society (BIAS)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Corso Ōtepoti Dunedin Trust	Potential grants recipient	Withdraw from discussion and leave the table. If in confidential leave the room. Seek advice prior to the meeting.
	Member	Dunedin Manufacturing Holdings Inc	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	National Communications Officer	P.A.C.I.F.I.C.A Inc	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Dunedin Branch Treasurer	P.A.C.I.F.I.C.A Inc	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Green Party of Aotearoa New Zealand	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Age Concern (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Abrahamic Interfaith Group (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Dunedin Refugee Steering Group (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Fair Trading Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Deputy Chair	Grants Subcommittee	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Social Well Being Advisory Group (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Mike Lord	Trustee	ML Lord Family Trust - Owner of Residential Properties - Dunedin	Duty to Trust may conflict with duties of Council Office	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Fonterra	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Federated Farmers	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Director	Mosgiel Rotary Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Mosgiel RSA	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	National Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Federated Farmers Charitable Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Various publicly listed companies	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Otago Rural Support Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Otago Youth Adventure Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Strath Taieri Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Hereweka Harbour Cone Trust (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	District Licensing Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Jim O'Malley	Owner	Biocentrix Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Mosgiel Association Football Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Ocho Newco Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Residential Property Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Ayrmed Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Ice Sports Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Manufacturing Holdings	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Ice Sports Dunedin Incorporated (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If in confidential leave the room. Seek advice prior to the meeting.
	Member	Connecting Dunedin (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Okia Reserve Management Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Tertiary Precinct Planning Group (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Waikouaiti Coast Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Jules Radich	Shareholder	Izon Science Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Taurikura Drive Investments Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Shareholder	Golden Block Developments Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Cambridge Terrace Properties Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Southern Properties (2007) Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Arrenway Drive Investments Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Golden Centre Holdings Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	IBMS Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Raft Holdings Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Otago Business Coaching Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Effectivise Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Athol Street Investments Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Allandale Trustee Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Aberdeen St No2 Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Public Art Gallery Acquisitions Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Public Art Gallery Society (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Road Safety Action Plan	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	100% Shareholder/Director	Panorama Developments Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Tertiary Precinct Planning Group (Council appointment - alternate)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Saddle Hill Community Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Chris Staynes	Chairman	Cargill Enterprises	Contractor and service provider to DCC	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room.
	Director	Wine Freedom	Supplier to DCC	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room.
	Patron	Otago Model Engineering Society	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Balmacewen Lions Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Otago Southland Manufacturers Association Trust	Possible co-funder of ED project. Duties to the Trust may conflict with duties of Council	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Life Member	Otago Chamber of Commerce	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Deputy Chair	Cancer Society of Otago/Southland	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Board Member	NZ Cancer Society	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Patearoa Golf Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	President	Balmacewen Lions	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	CJ and CA Staynes Family Trust - Property Owner - Dunedin and Patearoa	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	George Street Wines Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Saddle Hill Investment Trust Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	NZ Association of Amateur Radio and Transmitters	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Board Member	Otago Museum Trust Board (Council appointment)	Duties to Trust may conflict with duties of Council Office. Recipient of Council funding	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Trustee	Theomin Gallery Trust (Council appointment)	Duties to Trust may conflict with duties of Council Office. Recipient of Council funding	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Chairman	Grow Dunedin Partnership (Council appointment)	Duties may conflict with duties of Council Office. Recipient of Council funding	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Dunedin Shanghai Association (Sister City Society) (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Trustee	For Trades Apprenticeship Training Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Social Well Being Advisory Group (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Local Government New Zealand Zone 6 Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Lee Vandervis	Director	Lee Vandervis, Antonie Alm-Lequeux and Cook Allan Gibson Trustee Company Ltd - Residential Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Bunchy Properties Ltd - Residential Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Vandervision Audio and Lighting - Hire, Sales and Service Business	May contract and provide service to DCC	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
Steve Walker	Chairperson	Dunedin Wildlife Hospital Trust	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Chairperson	West Harbour Beautification Trust	Potential conflict WHBT work with Parks and Reserves to co-ordinate volunteer activities	Withdrawal from all West Harbour Beautification Trust/ DCC discussions involving this relationship.
	Member	Orokoni Ecosanctuary	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Member	Port Chalmers Golf Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Keep New Zealand Beautiful	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Member	Society of Beer Advocates	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	New Zealand Labour Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Port Chalmers Historical Society	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Owner	Residential Property - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Various publicly listed companies	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	NZ Sea Lion Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Edinburgh Sister City Society (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Connecting Dunedin (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Te Ao Turoa Partnership (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Keep Dunedin Beautiful (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Tertiary Precinct Planning Group (Council appointment - alternate)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	West Harbour Community Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Andrew Whiley	Owner/Operator	Whiley Golf Inc and New Zealand Golf Travel Ltd	No conflict identified	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Director/Shareholder 22 May 2017	Estate of Grace Limited	No conflict identified	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Trustee	Japek (Family Trust) - Property Ownership - Dunedin	Duties to Trust may conflict with duties of Council Office.	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Otago Golf Club	No conflict identified	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Dunedin South Rotary Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Board Member	New Zealand Professional Golfers Assn	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Institute of Directors	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	National Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairman	Volunteer South	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Otaru Sister City Society (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Dunedin Public Art Gallery Society (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Grow Dunedin Partnership (Council appointment - alternate)	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	NZ Masters Games Trust Board (Council appointment)	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Chair	Dunedin Community House Executive Committee	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in confidential, leave the room. Seek advice prior to the meeting.
	Member	Puketāi Residential Centre Liaison Committee (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Property Investors Association	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Chisholm Links Golf Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Peninsula Community Board (Council appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Rachel Wesley	Chairperson	Te Rūnanga ō Ōtakou	Possible conflict if Rūnaka a submitter to an agenda item	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Chief Executive/Employee	Aukaha (1997) Ltd	Possible conflict if Aukaha is a submitter to an agenda item	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Board Member	Otago Museum Trust Board (Council appointment)	Duties to Trust may conflict with duties of being a committee member.	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Trustee	Ngāi Tahu Māori Rock Art Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Co-Chair	Workforce Central Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Scott Hall Inc	Potential conflict as hall is owned by DCC and receives a management grant	Withdraw from discussion and leave the table. If the meeting is in confidential leave the room. Seek advice prior to the meeting.
	Property Owner	Residential Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Beneficiary	T.A.T. Wesley Whānau Trust - owns Māori freehold land	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Green Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Institute of Directors	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	New Zealand Archaeological Association	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Matapura Ellison	Chairperson	Kati Huirapa Rūnaka ki Puketeraki	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Rūnaka Representative	Te Rūnanga ō Ngāi Tahu	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Director	Ōtākou Health Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Waikouaiti Māori Foreshore Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Otago Museum Māori Advisory Committee	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Runaka Representative	Māori Participation Working Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

## **PART A REPORTS**

### **GEORGE STREET RETAIL QUARTER DEVELOPED DESIGN**

Department: Project Management Office

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#### **EXECUTIVE SUMMARY**

- 1 This report is to update the Planning and Environment Committee on the developed design for George Street Retail Quarter (Retail Quarter).
- 2 The report discusses the key features of the developed design, the cultural narrative and the next steps in design and implementation.

#### **RECOMMENDATIONS**

That the Committee:

**Notes** the George Street Retail Quarter Developed Design report.

#### **BACKGROUND**

- 3 The Central City Plan and Retail Quarter upgrade have been reported to Council on several occasions.
- 4 The Retail Quarter project aims to renew existing three waters infrastructure, improve safety and accessibility, and enhance the amenity of the Retail Quarter.

#### **DISCUSSION**

- 5 The Retail Quarter developed design is the culmination of a process started in 2011 with the development of the Central City Plan. Since 2019, the feedback from workshops, consultation events and various forms of public feedback sessions have been incorporated into the design. Community engagement and feedback has been carefully considered in the developed design to reflect Dunedin's diverse culture and history.
- 6 As detailed design is progressed, the team will continue to incorporate further stakeholder feedback.

##### **The Kāi Tahu Cultural Narrative**

- 7 The design team have worked closely with Kāi Tahu through Aukaha to integrate a cultural narrative into the Retail Quarter design.

- 8 This cultural narrative brings key Kāi Tahu principles to the fore of the design. These principles have been integrated into the design in a range of ways including the paving design, colour palate, symbology, species used in plantings, public art, use of quotes and other te reo in the streetscape, and increased space for informal sharing and interaction between people.
- 9 Further discussion of the various ways these principles have influenced the design is available in the design report (Attachment A).

**Other histories**

- 10 Recognising that George Street is a multi-layered and multicultural meeting place, the design team will also work to incorporate other voices into the street through the detailed design process through such elements as public art, story-telling and furniture design. One such partnership with City of Literature is already underway, bringing through a number of written elements that can be used throughout the street to celebrate Dunedin's literary history.
- 11 A website (tentatively titled "Hidden in Plain Sight") is also under development that will enable visitors and the community to learn more about the history of the area including the important buildings, communities, and people associated with the Retail Quarter. This will enable the telling of multiple stories about George Street without adding too many signs or interpretive elements that would clutter the street. It will also provide opportunities for different elements to be focused on at different times and for information to evolve as research adds to our understanding of the history of the area.

**Accessibility**

- 12 A project goal has been to make the street more accessible for people with disabilities. Targeted consultation has occurred with representatives from the disability community and will continue throughout the project. A specific accessibility review of the detailed designs will take place alongside the safety review and any recommended outcomes will be included.

**Car parking**

- 13 When Council endorsed the adaptation of George Street to a one-way, slow street, one of the concerns raised was to ensure similar levels of on-street car parking were maintained. The design team has achieved this outcome, both expanding the area available for people and amenity space while maintaining the existing levels of car parking. In the Farmers Block (the first George Street block to commence construction) the design has maintained 17 car parks.
- 14 Further detail on car parking, including the exact numbers, locations, uses and time allocations will be confirmed as detailed design is worked through in each block.

**OPTIONS**

- 15 This is a report for noting. There are no options.

**NEXT STEPS**

- 16 Detailed design is now underway for the Farmers Block and other blocks will continue in succession as the project proceeds. Construction of the Farmers Block will commence in late April 2022.

- 17 Procurement processes for public art and further refinement of specific elements of the design, such as the play area, will continue over the coming months alongside staged construction and implementation.

### Signatories

Author:	Glen Hazelton - Project Director, Central City Plan
Authoriser:	Josh Von Pein - Programme Manager - Major Projects Simon Drew - General Manager Infrastructure and Development

### Attachments

	<b>Title</b>	<b>Page</b>
<a href="#">↓A</a>	Developed Design Report	23

## SUMMARY OF CONSIDERATIONS

### ***Fit with purpose of Local Government***

This decision enables democratic local decision making and action by, and on behalf of communities. This decision promotes the social, economic, environmental and cultural well-being of communities in the present and for the future.

### ***Fit with strategic framework***

	Contributes	Detracts	Not applicable
Social Wellbeing Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic Development Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environment Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arts and Culture Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Waters Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spatial Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated Transport Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks and Recreation Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other strategic projects/policies/plans	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Retail Quarter project has worked to embody key elements of Council's Strategic Framework.

### ***Māori Impact Statement***

There continues to be a focus on working closely with mana whenua on the Retail Quarter project and there is a strong emphasis in the design on re-invigorating the area with visual and cultural expressions of mana whenua identity. The developed design presented here has involved strong collaboration with Aukaha.

### ***Sustainability***

The design includes a number of sustainability elements such as the rain gardens for managing and filtering stormwater, planting to attract native insects and birds, and the use of locally-sourced materials in paving.

Digital workshops and mentoring are underway to assist with business sustainability in collaboration with Business South. The design also seeks to encourage greater social sustainability by creating a more equitable and accessible place for people of all ages and abilities

### ***LTP/Annual Plan / Financial Strategy /Infrastructure Strategy***

The Retail Quarter project is funded within the Long Term Plan.

### ***Financial considerations***

There are no new financial considerations resulting from this report.

### ***Significance***

The report is considered low in terms of Council's Significance and Engagement Policy.

### ***Engagement – external***

Engagement has occurred on the project through many forums such as the Central City Plan and through many groups such as the Central City Advisory Group and Construction Reference Group. External engagement will continue with the focus now on minimising disruption to stakeholders during construction.

## **SUMMARY OF CONSIDERATIONS**

### ***Engagement - internal***

There remains internal engagement with all parts of the DCC around the coordination and implementation of the project. The developed design has been presented to key technical staff and refinements are being made.

### ***Risks: Legal / Health and Safety etc.***

The project maintains a comprehensive risk register that is assessed on a monthly basis.

### ***Conflict of Interest***

There are no identified conflicts of interest.

### ***Community Boards***

The project is of interest to all residents of the city including those covered by Community Boards.



# Retail Quarter Upgrade

Public Realm  
Developed Design Report



Rev A

Document prepared by the  
Ō3 Collective for Dunedin City  
Council.

March 2022

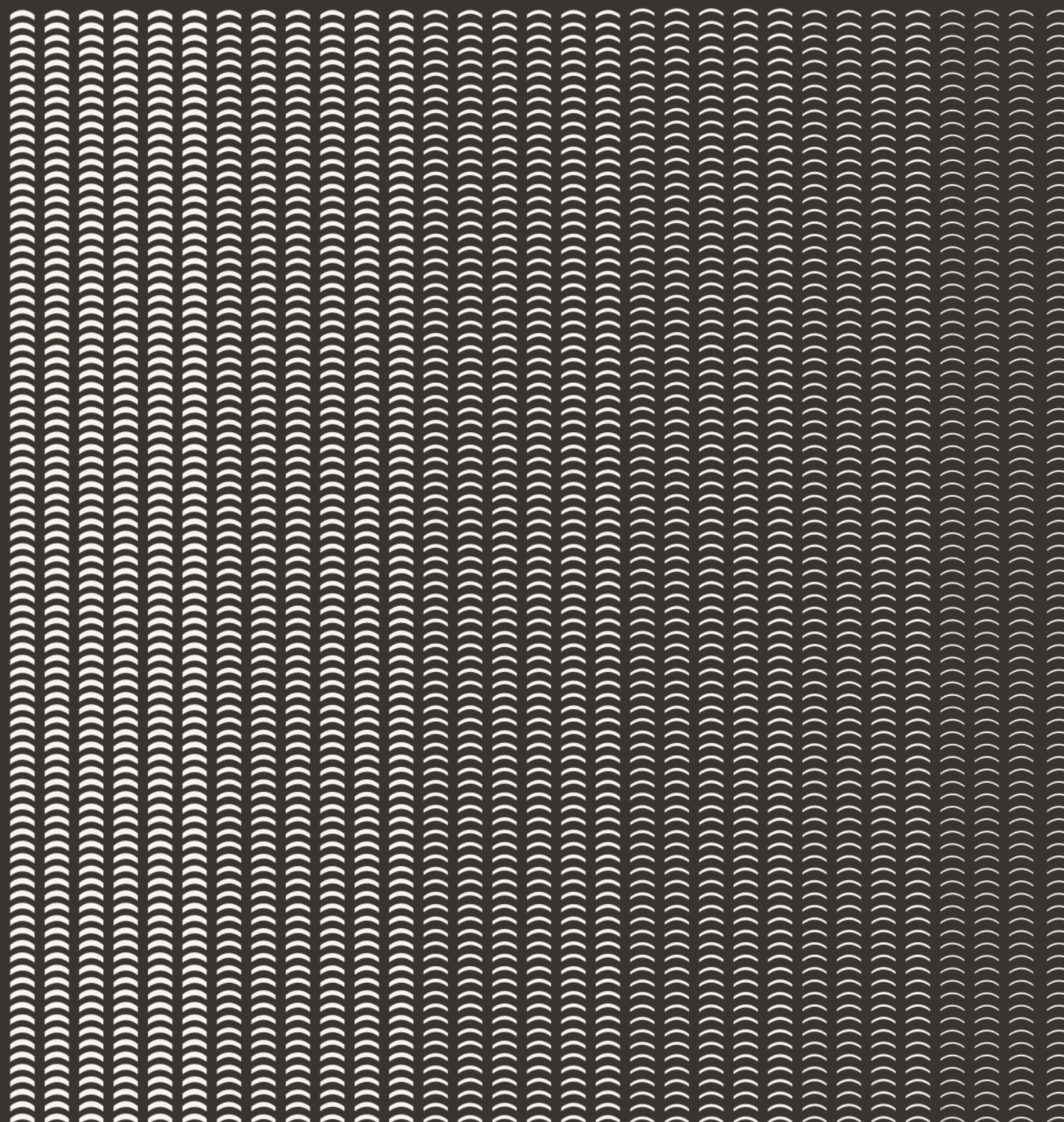


Ō3 Collective

**JASMAX**

**isaac**

**AECOM**



# Executive Summary

Following on from councils resolution for a one-way south function for George Street, the Ō3 Collective, Dunedin City Council and Aukaha have collaborated to deliver the Developed Design for George Street.

This developed design report has built on the preliminary design and provides greater clarity and detail for the proposed new street layout. This document crystallises the design thinking to date and provides illustrative imagery, plans and 3D views to further explain the layout of the street and the components that are proposed within it. It is supported by a technical set of 1:100 general arrangement plans and keynotes.

The redesign of George Street has been a long time in the making, necessitated by the need to upgrade aging infrastructure as well as aiming to reinvigorate the city centre for the residents of greater Dunedin and those who live nearby or within the Retail Quarter. It looks to compliment the aspiration of the central city plan, to make Dunedin 'one of the worlds great small cities'.

The George Street project aspires to re-think how to move through, and around the city centre safely and comfortably. The wider opportunity for central Dunedin is to provide a main street that re-engages with the natural beauty of the region and reflects the strong sense of place. It also provides a central destination that people want to spend time in and is lively, active and a prosperous place to do business. Streets reflect the people and place in which they are set, and this document reflects considerable effort defining the identity of the city and converting it into the streetscape.

Interwoven throughout the design is a strong presence of Kāi tahu and recognition of mana whenua. Values are imbued at the macro and the micro scales. For example, the individual paving units are bespoke and their shape is based on the very definition of Ōtepoti itself with the larger paving setout referencing the traditional patterns on the windows of Ōtākau marae. The colour palette acknowledges mahika kai species and the proposed catenary lighting is a metaphoric barracouta darting across the street. The proposed design reflects the whakapapa of place.

George Street has a rich colonial heritage which is represented today with many beautiful façades that line the street. The design seeks to showcase and enhance the richness of the beautiful heritage assets by allowing the public to explore the street out beyond the awnings where a better view is enabled as well as framing particular views and selecting locations for trees that compliment the architectural façades.



Historic photo of George Street, early 20th century. Source DCC.





Artist impression of future George Street.



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**Design partners:**

The Ō3 Collective is a consortium formed of the following organisations.

- Jasmax. (Urban design and landscape architecture)
- AECOM. (Engineering)
- Isaacs. (Contractors)

The Ō3 Collective is working in close partnership with Dunedin City Council (DCC) and Aukaha to ensure a cohesive and transparent design process is undertaken to ultimately inform an outstanding result.



# Introduction

## 1.1 Introduction

This report contains the Developed Design phase of the Retail Quarter Project for George Street. The designs contained within the report follow on from the Preliminary Design Report prepared by the O3 Collective dated April 2020 and builds on the Detailed Business Case prepared in 2021.

### 1.1.1 The project background

Dunedin City Council (DCC) and its partners have recognised the need for upgrades to George Street and the Retail Quarter to focus on the future. In 2018-2019 DCC prepared high level look and feel designs for George Street and engaged with stakeholders and the people of Ōtepoti Dunedin to get feedback and input into the design process.

This project's scope covers four city blocks within the Retail Quarter from Albany Street to Moray Place and Great King Street to Filleul Street. George Street, the traditional retail destination in Ōtepoti Dunedin is the focus of the project. (see map opposite which identifies the project extents).

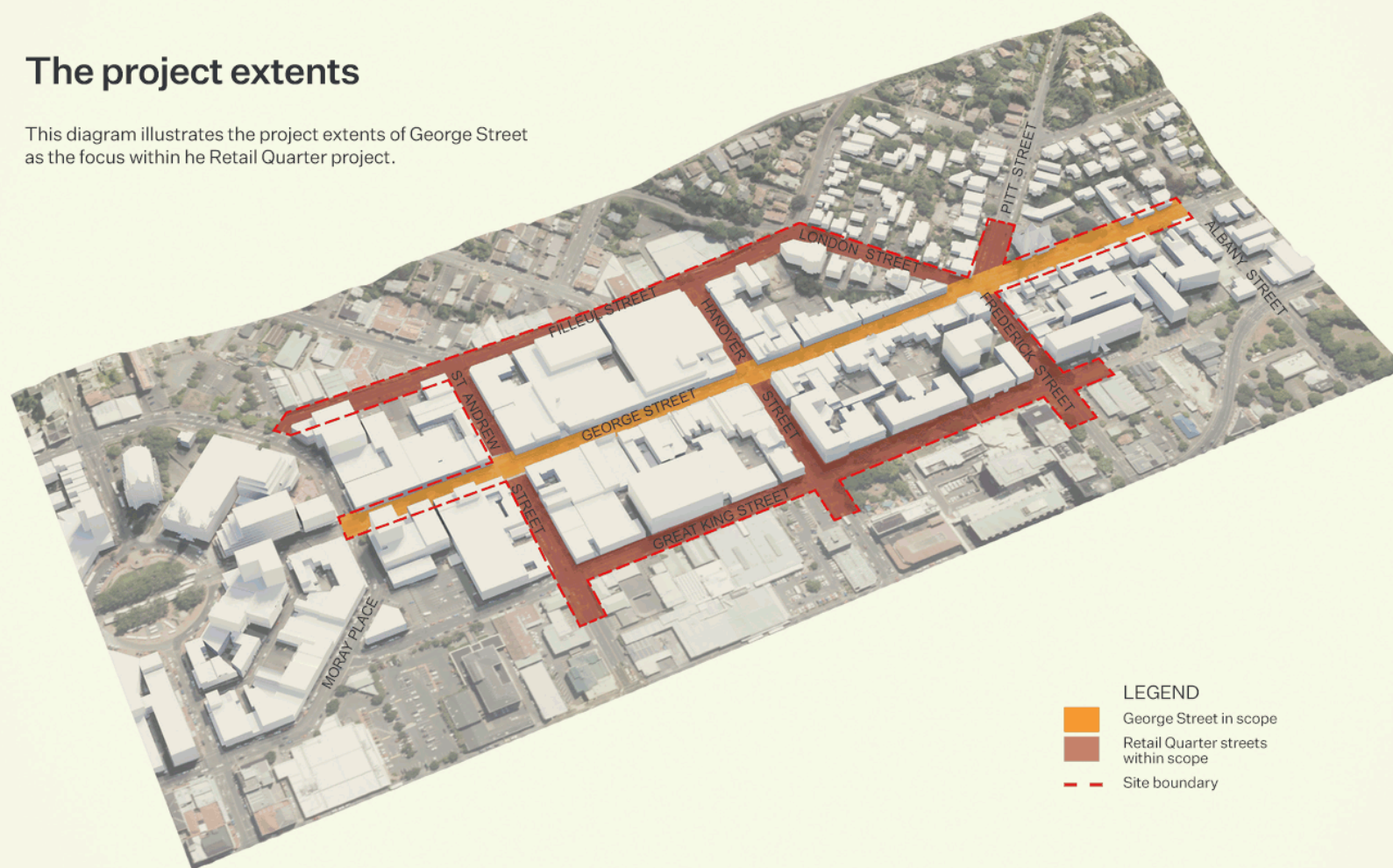
A key mandate for the project was to partner with Kāi Tahu mana whenua through the life of the project, to share responsibilities in the decision making process and to prepare a shared vision for George Street and the Retail Quarter. The relationship is summed up in this statement prepared by DCC:

**“Dunedin City Council and mana whenua working together in a partnership of shared values to enhance and protect our unique Ōtepoti Dunedin for the future of its people.”**



## The project extents

This diagram illustrates the project extents of George Street as the focus within the Retail Quarter project.



### 1.1.2 Purpose of this document

The intention of this Developed Design is to integrate and review stakeholder feedback from the Detailed Business Case and Preliminary Design for George Street and to take the design thinking forward, applying more detailed consideration.

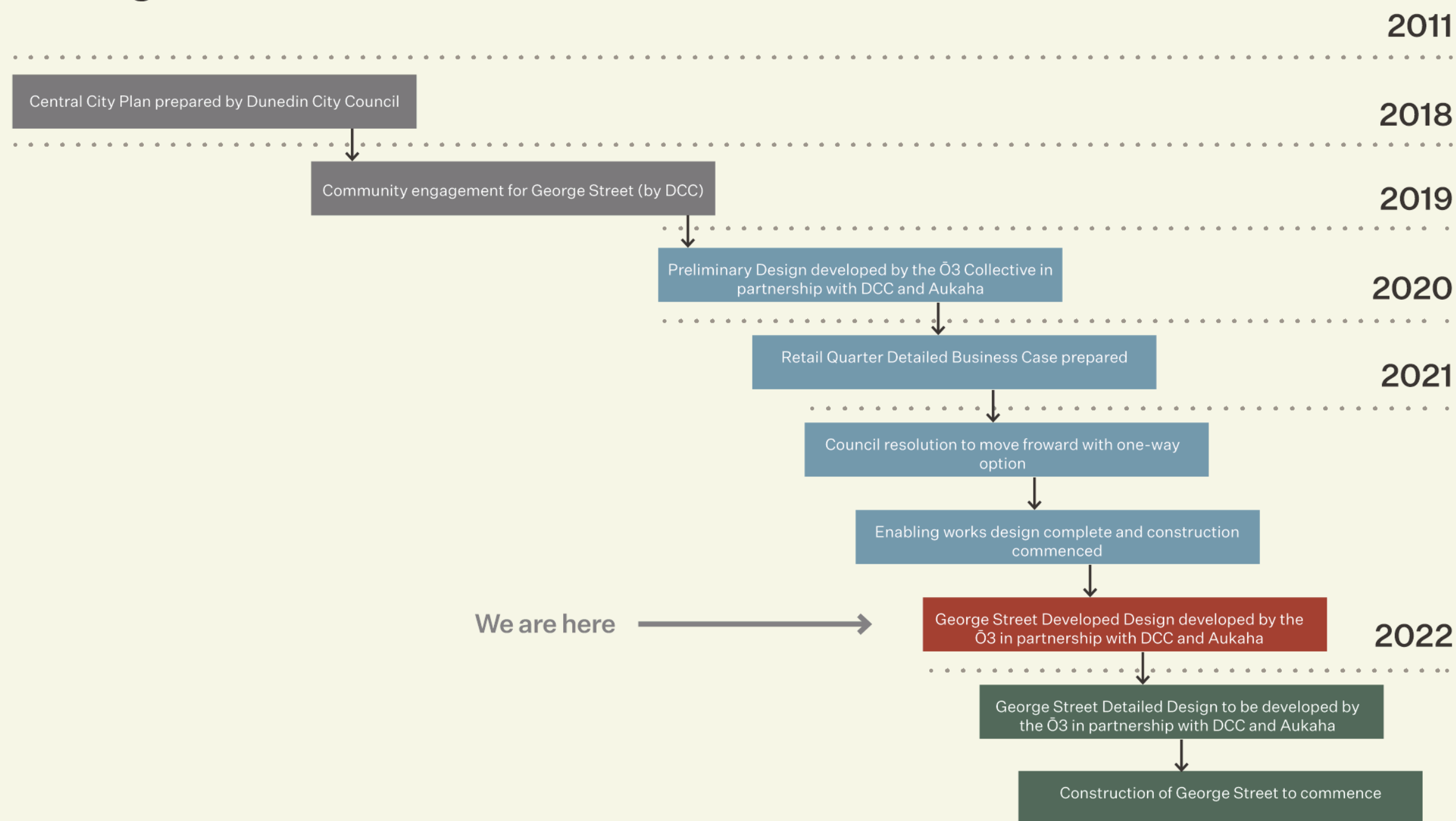
This report should be read in conjunction with the preliminary design report which provides details on the central city context and background to the proposals.

### 1.1.3 The project programme

The diagram opposite illustrates the George Street project programme from the city centre plan inception through to the developed design report and the commencement of construction in the future.

The Developed Design stage is now 100% complete with the submission of this report. The next stage will be the detailed design where construction drawings and specifications will be prepared ready for construction in 2022.

# Programme



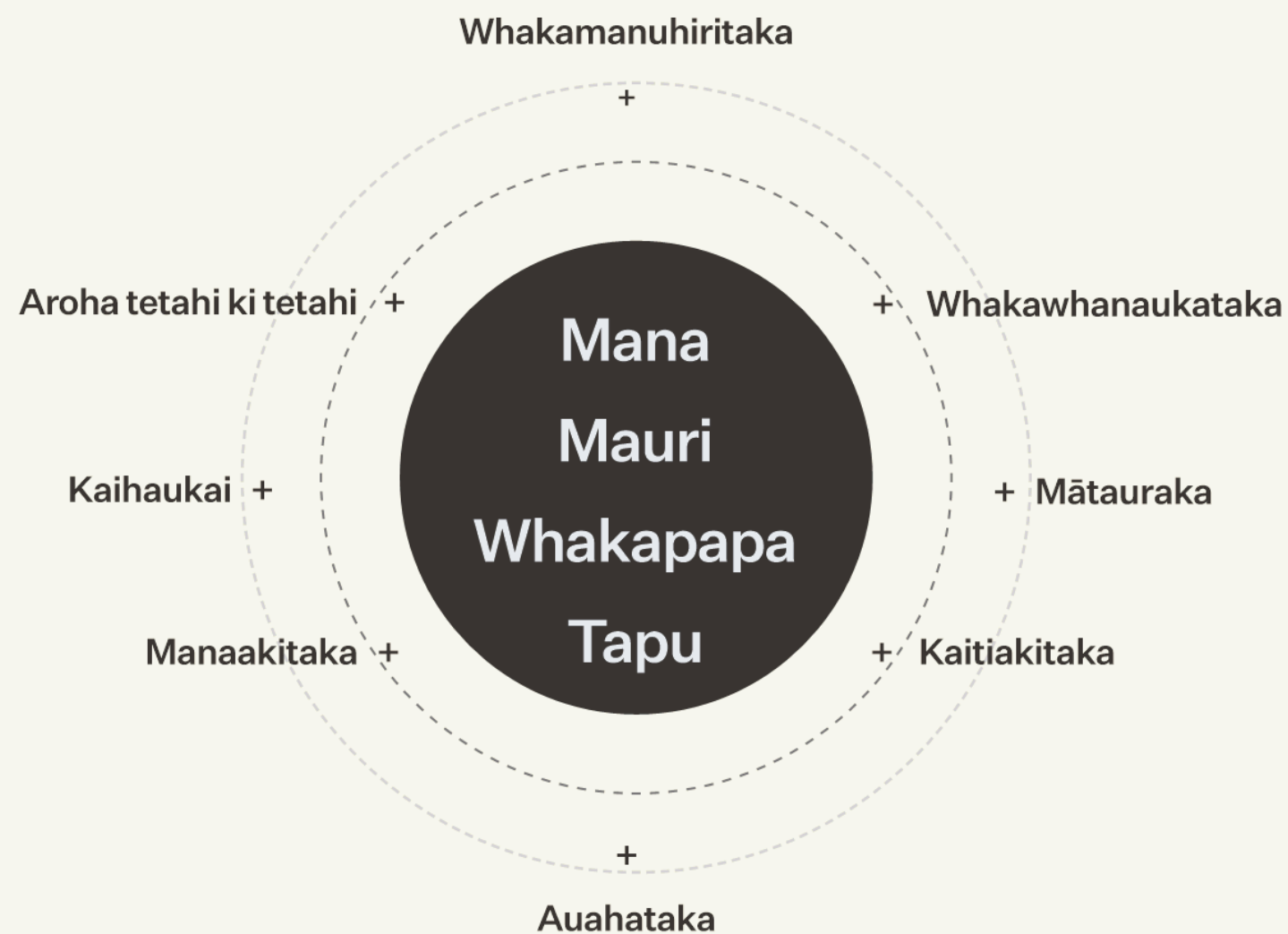
# Kāi Tahu cultural values framework

## 1.2 Kāi Tahu cultural values

Whilst the colonial heritage of Dunedin is well understood and forms the backbone of the city centre's architectural heritage, the incorporation of Kāi Tahu cultural values are another key element of the project brief. Representatives of mana whenua have been involved in the project process as a partner to DCC and have given guidance and input into the design throughout the preliminary and developed design phase.

The diagram opposite illustrates the cultural values framework developed by mana whenua for projects within their takiwā and adapted for the Retail Quarter and George Street project specifically.

The inner ring provides the four core cultural values of Mana, Mauri, Whakapapa and Tapu that are foundational to a mana whenua world view. The surrounding rings identify other cultural values and concepts that are informed by the four core values. Mana whenua have identified these supporting values to be of a particular relevance to this project. In this diagram only the values that have highest importance for George Street are identified (there are many more that reside in the outer tiers that will be more or less important for other areas and projects in the rohe)



Below is the Kāi Tahu whakatauki that sits above and provides the overall aspiration of mana whenua in Ōtepoti and across Te Wai Pounamu.

**Puritia  
Tawhia  
Kia ita  
Te mana whenua , Te mana tupuna,  
Te mana takata**

*Holdfast  
Steadfast and resolute  
To the authority on land, to the heritage  
bestowed,  
to human right*

## 1.2.1 Explanation of cultural values

### Mana

For Kāi Tahu, mana is inherited from their tupuna, their rights and responsibilities have never been extinguished and it is at the forefront of how they see themselves in the city. How important is it for the city to have mana? This is a discussion about the prestige of Ōtepoti Dunedin and how we enhance it together.

### Whakapapa

To acknowledge the whakapapa of place and people is important. It creates a deeper understanding of who we are as individuals and as a community and the recognition of the interconnectedness of ecosystems and humans.

### Mauri

Mana whenua acknowledges the existence of Mauri: It is an active phenomena in all things animate and inanimate. Mauri is the protector of the health of a person or place.

### Kaitiakitaka

Kaitiakitaka relates to the interconnection and interdependence on our natural environment past, present and future. Guardianship is a responsibility for all of us. Respecting the environment and taking care of our resources as individuals and community.

### Mātauraka

Knowing our stories to gather an authentic and informed knowledge of what has happened in the past.

### Manaakitaka

In the modern day context can mean to be hospitable, to be generous and show general respect. It is about acknowledging the mana of each individual as a reciprocal process.

### Whakamanuhiritaka

Is about hospitality, catering for people when they arrive to a place. To provide sustenance to others and live comfortably in a shared space, sharing resources together.

### Aroha tetahi ki tetahi

Is about respect and reciprocity. Considering and caring for others and respecting and acknowledging each other's customs.

### Kaihaukai

Being dependent upon the sustainable harvesting and preservation of local resources (looking after our economy in our own back yard). This is the traditional practise of trading and exchanging. A fundamental component is the building of relationships through regular exchanges that strengthen within and extending out to new communities. It is dependant on tikaka practices to ensure correct procedures are acknowledged in order for exchange to happen.

### Whakawhanaukataka

This encompasses relationships, kinship and sense of family connection. It describes relationships through shared experiences and working together providing people with a sense of belonging.

### Auahataka

Is the creative essence imbued within a thing or a place that gives it its special presence and uniqueness.



# Background Central City Plan



## 1.3 The Central City Plan

The bold vision that has come from the Central City Plan is make Ōtepoti Dunedin 'One of the world's great small cities'. A significant body of work has been done in the creation of the Central City Plan that sets out how this can be achieved.

The CCP identified a series of 'quarters' and 'precincts' in order to break down the central city and define areas of character, function and land use. The Quarter Plan is illustrated opposite.

The extents of this project covers a significant proportion of the Retail Quarter (the Dunedin Hospital redevelopment makes a up the majority of the rest).

One of the key outputs of the CCP was the establishment of the spatial plan strategic objectives which give the high level direction across the central city. These objectives are listed below:

- A liveable city
- An environmentally sustainable and resilient city
- A city that enables a prosperous and diverse economy
- An accessible and connected city
- A vibrant and exciting city
- A memorable and distinctive city

In addition the CCP objectives a further three objectives were established for the Retail Quarter in the DCC concept design stage. These objectives are listed below:

- Make George Street a more attractive place for people to visit
- Improve the safety and accessibility for pedestrians and other vulnerable road users and reduce crash rates
- Coordinate infrastructure renewals to limit the extent of further disturbances

### Central City Plan objectives



George Street

Developed Design Report

March 2022

Rev -

10

### 1.3.1 The Retail Quarter

The Retail Quarter Objectives and Design Principles were developed by DCC through the development of the Central City Plan in 2011. Extensive engagement with both stakeholders and the public was undertaken at this stage. Feedback received by DCC has informed the Retail Quarter's 3 objectives and 4 design principles generated for consultation from February to April 2019.

These are relevant to both the Retail Quarter as a whole and also as a starting point for the development of specific George Street objectives.



George Street

## 3 Objectives

1. Improve safety and accessibility for pedestrians and other vulnerable road users and reduce crash rates
2. Make George Street a more attractive place for people to visit
3. Coordinate infrastructure renewals to limit the extent of further disturbances

## 4 Design Principles

1. Putting people first
2. Expressing an Ōtepoti / Dunedin sense of place
3. Greening the city
4. Streets as places

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11

# Background preliminary design project objectives

## 1.4 Preliminary design objectives

Building on the Central City Plan six project objectives were developed during the Preliminary Design stage of the project. These objectives evolved through a series of workshops with key stakeholders DCC, Aukaha and the O3 Collective (refer to the George Street Preliminary Design Report for further details and explanation of the process of establishing the objectives).

The George Street project objectives are used within the Developed Design and throughout the life of the project as a guide to ensure that these key outcomes are achieved.

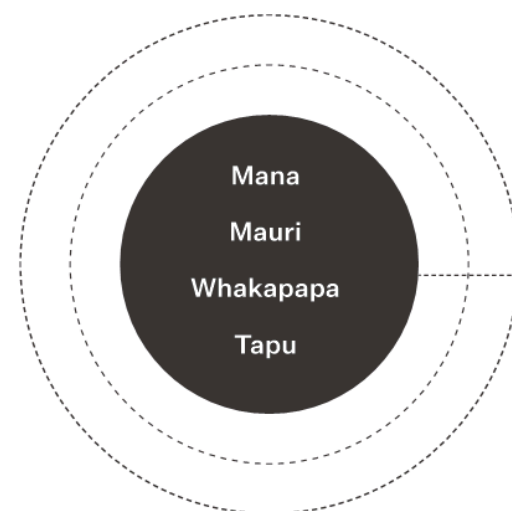


## 1.4.2 Embedding Kai Tahu values

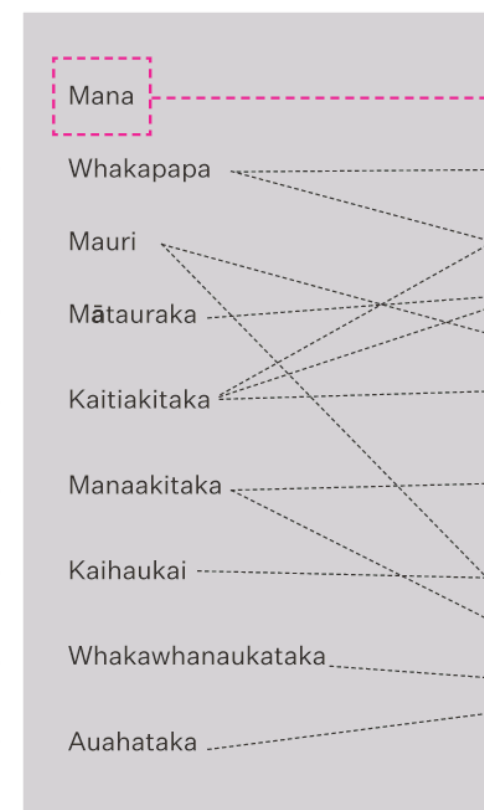
The flow diagram below illustrates the process of embedding the Kāi Tahu cultural values within the George Street project objectives. The diagram also highlights the design response including the Preliminary Design Big Moves and Spatial Framework (refer to the George Street Preliminary Design Report for further details on the Big Moves and Spatial Framework).

Briefing.

Kāi Tahu values.



George Street principles.



Project objectives.

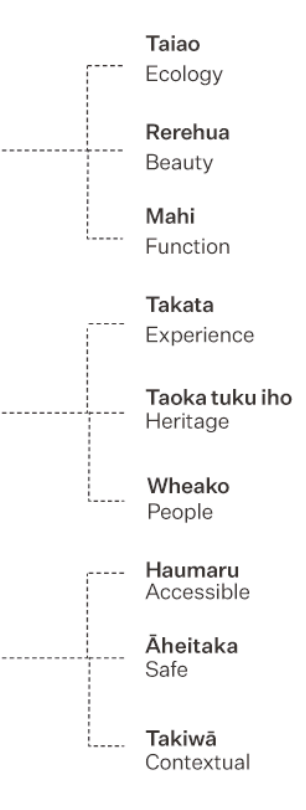


Design response.

Big moves.



Spatial framework.



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# Background preliminary design big moves

## 1.5 The big moves

The three big moves were prepared during the Preliminary Design phase which aim to consolidate the Kāi Tahu values, the George Street Principles and the Project Objectives within the design. They provide a way to focus design energy on the things that matter most for the street.



## Kaitiakitaka

A living street

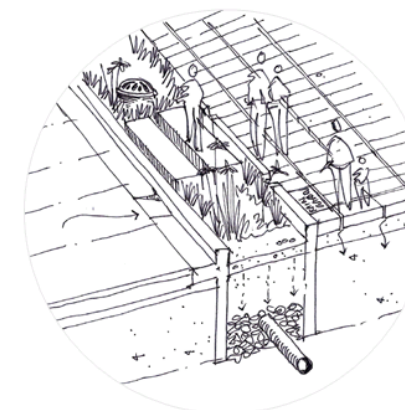
*A living street will be full of life and connected with natural systems such as water and the forest ecology that exists in the nearby greenbelt. It will be beautiful so that everyone enjoys its appearance and cares for it.*



Taiao - Ecology



Rerehua - Beauty



Mahi - Function

## Whakapapa

An authentic street

*Dunedin is unique. Its city centre streets should provide an authentic experience that represents the city's rich heritage and community of people that are creative, diverse and resilient. People of all ages, abilities and backgrounds will experience a street network that is safe, inclusive and vibrant and reflects their values.*



Takata - People



Taoka tuku iho - Heritage

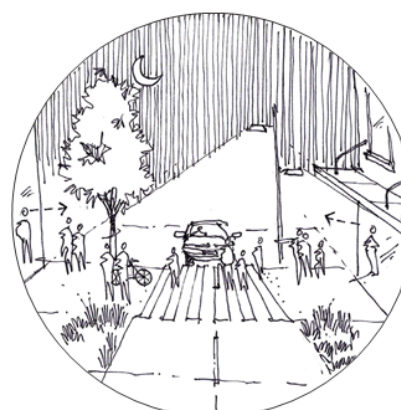


Wheako - Experience

## Manaakitaka

A connected street

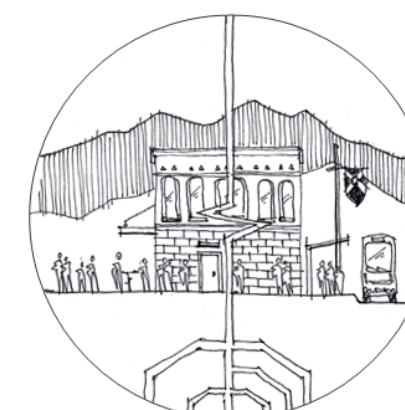
*Streets are for everyone, where public life plays out and reflects the personality of the city and its inhabitants. It's where we receive our guests and citizens, making them feel welcome and respected through the provision of a public realm that is safe and accessible.*



Haumaru - Safe



Āheitaka - Accessible



Takiwā - Contextual



# Retail Quarter detailed business case (DBC)

## 1.6 Detailed business case

The Retail Quarter detailed business case was completed in mid 2021 with the aim to provide a body of evidence and analysis of the options developed in the Preliminary Design phase and variations of these options that were proposed in councils peer review processes.

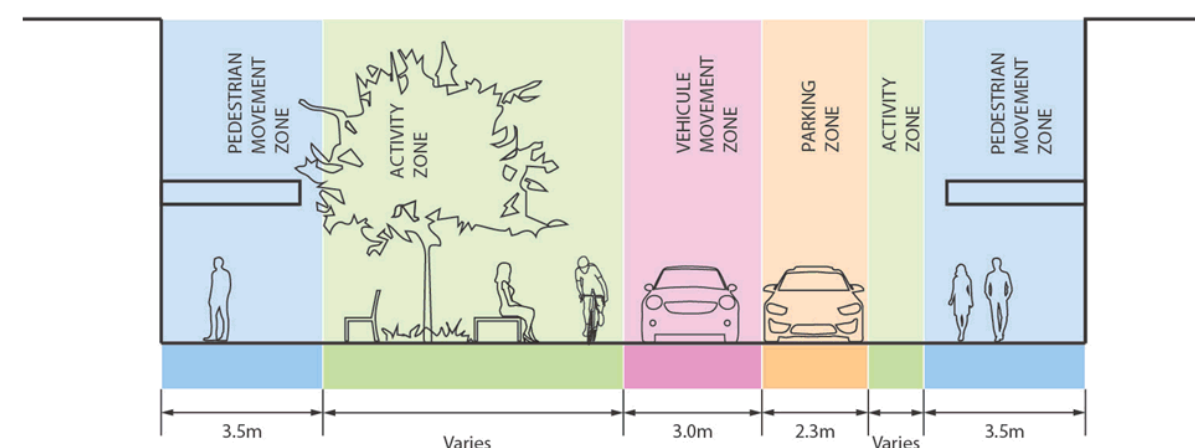
The options considered were based on vehicle movement in the form of two-way or one-way streets as illustrated in the diagrams opposite. The options were

- Do min with limited change
- Two-way slow street
- One-way south shared space
- One-way north shared space

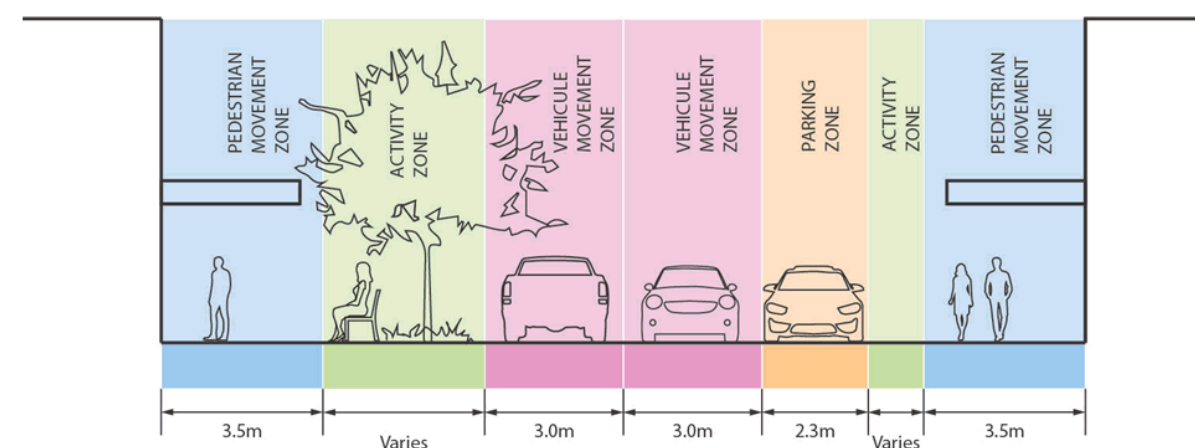
The business case was agnostic on either of the two-way and one-way options as all three had benefits which were relatively equivalent, there was no clear leading option. The business case did determine that the do minimum which was the limited change option was not favourable.

The business case report was then provided to full council to deliberate over the options on the table. Through the voting process the one-way south option was approved to be taken forward into Developed Design and through to construction.

1 Way Street



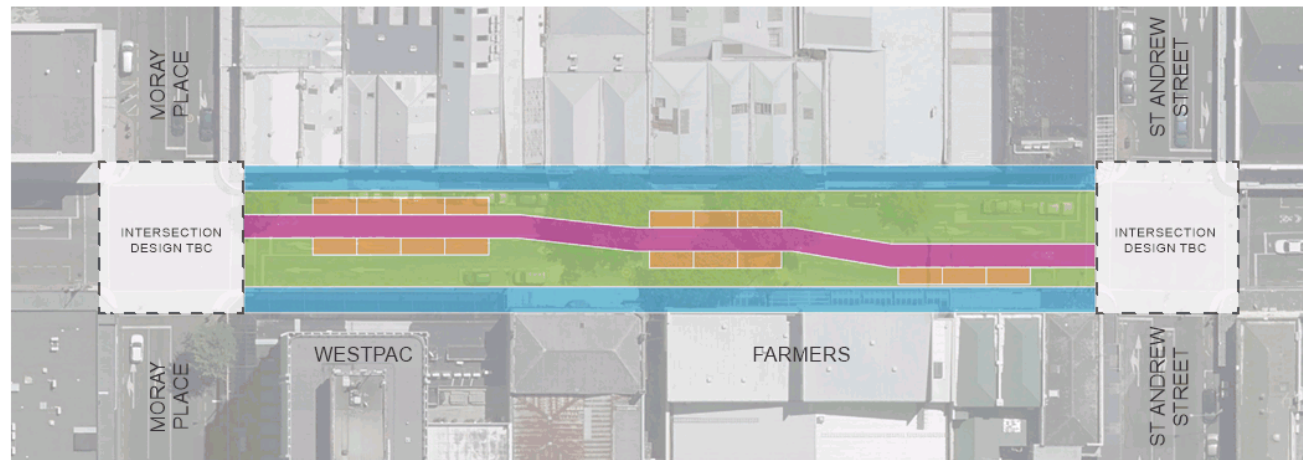
2 Way Street



Diagrams sourced from the Retail Quarter DBC 2021



Farmers Block  
examples



Diagrams sourced from the Retail Quarter DBC 2021



George Street

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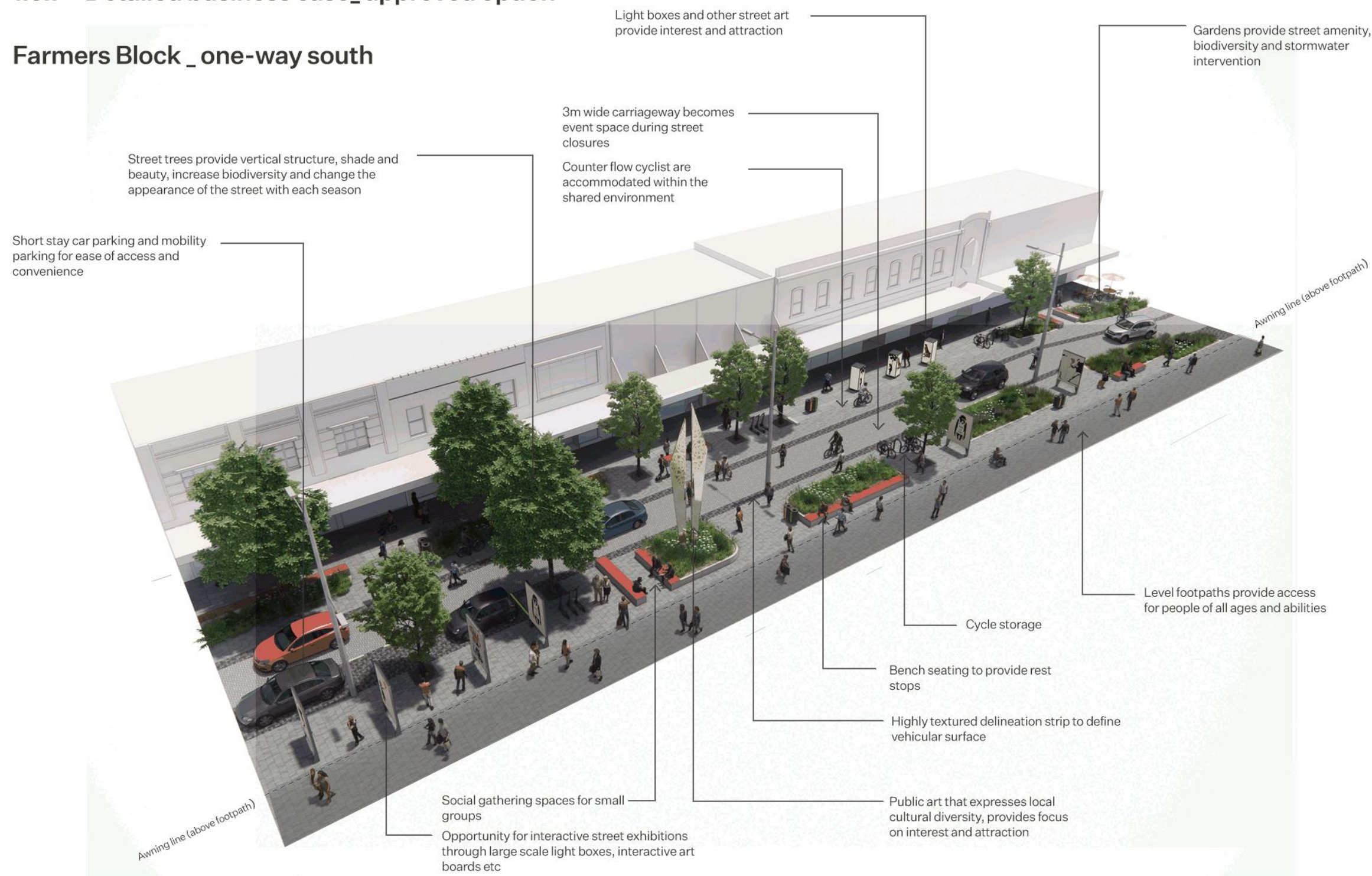
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## 1.6.1 Detailed business case\_ approved option

### Farmers Block \_ one-way south



George Street

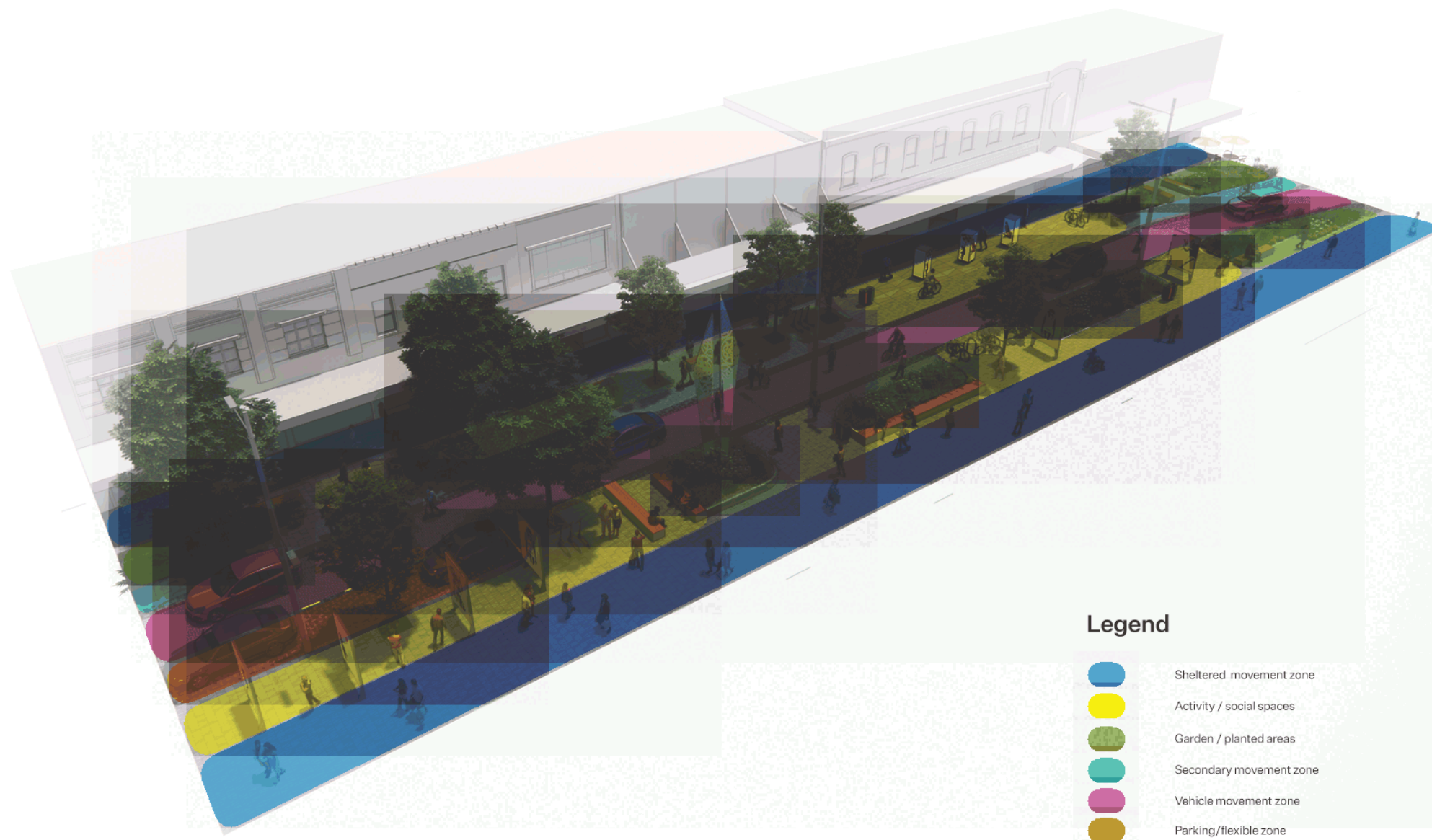
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## Farmers Block \_ One-way south \_ activity map



# Design strategies

## 2.0

### 2.1 Introduction

This section of the report outlines the key design strategies for George Street. The design strategies build on previous work undertaken in the Preliminary Design phase of the project providing greater detail and refinement of the street layout and elements.



# Mana whenua design strategies

## 2.2 Revealing whakapapa

The revealing of whakapapa refers to storey telling of both tangata and whenua which have importance for mana whenua in this area. It is about addressing the absence of the physical and visual expression of Ōtēpoti for mana whenua in the street today. Revealing whakapapa is a key concept that relates to all mana whenua design strategies.

The text written here is based on the cultural narrative titled 'George Street' prepared by Megan Potiki on behalf of Aukaha (refer to appendix A for cultural narrative). The narrative outlines the whakapapa of George Street and wider central city area from the period of early contact between mana whenua and European settlers to the establishment of the city in its current location.

The map opposite provided by Aukaha illustrates the original shoreline with the key landmarks of Ōtepoti, Mataukareao and Te Tutai o Te Matauirā. Superimposed are the successive reclamations into the harbour resulting in the waterfront we see today.

The landscape in the area pre-European settlement was a strong contrast of dense enclosed bush and open estuarine wetlands. The whakapapa of the landscape is expressed and explored through concepts illustrated in the design.



Image provided by Aukaha

# Design framework

## 2.2.1 Key narratives

Four key narratives emerged through the Preliminary Design phase which have now been explored in more detail. The diagram on this page identifies these four key narratives, Ōtepoti, Mātauraka, Mahika kai and Kaihaukai and illustrates how each one is related closely to the others.

Ōtepoti is the overarching concept and references the corner of the traditional four cornered kete that it is believed was the origin of the Māori name for Ōtepoti / Dunedin. This project looks at re-establishing the traditional definition of Ōtepoti.

Closely related to this are the ideas of:

- Mātauraka, knowing our stories to gather an authentic and informed knowledge of what has happened in the past
- Mahika kai, the practise of gathering and nurturing resource and food
- Kaihaukai, the traditional practise of trading and exchanging

Essentially, each one of these values supports the next and vice versa, for example, mātauraka as revealing the traditional stories of Ōtepoti with mahika kai as the gathering and use of natures resource which in turn can be used for kaihaukai (trade and exchange) and further connected to the use of the poti as the traditional basket for trade and exchange of goods.

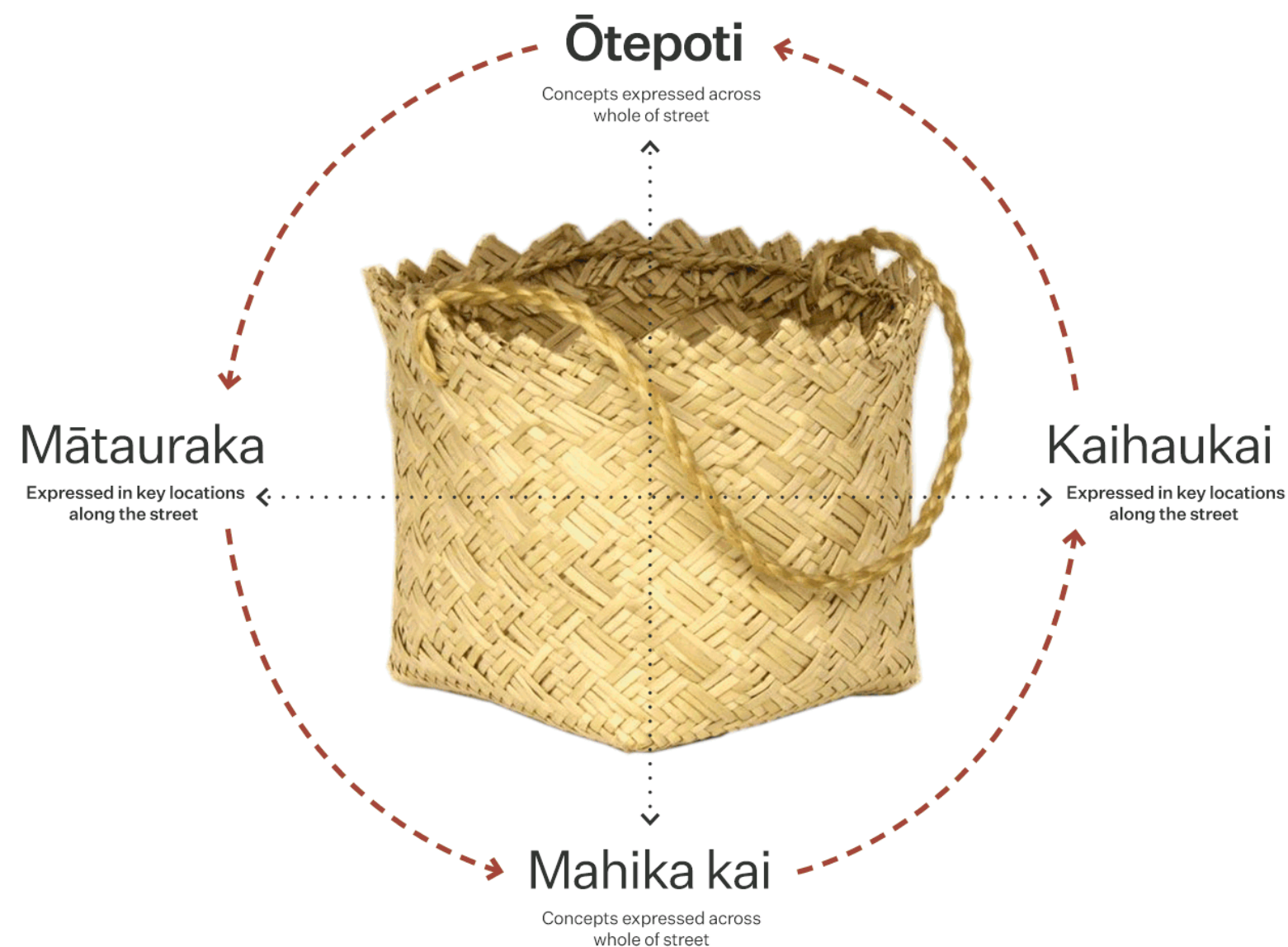
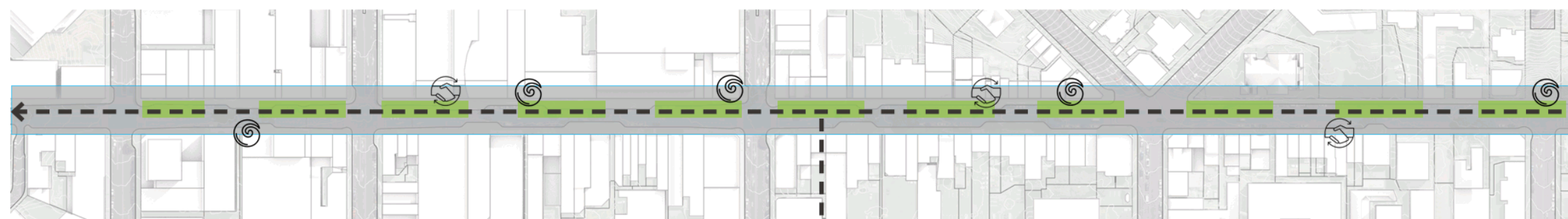


Image provided by Aukaha

The following organisational strategy informs the distribution of the key narratives across the street.



#### Narratives imbued across the whole of the street

##### 01 - Ōtepoti.



The entire street expresses a geometry that is unique to Ōtepoti and provides a strong sense of place.

##### 02 - Mahika kai



Garden beds are placed throughout the entire street and provide opportunity to present nature's abundant resource.

#### Episodic moments to express narratives positioned at key locations throughout the street (indicatively shown)



##### 03 - Mātauraka

Selected locations to express particular stories within the design of the public realm.

##### 04 - Kaihaukai

Selected locations to encourage moments of social and economic trade and exchange.

# Ōtepoti

## 2.2.2 Significance

The meaning of Ō-te-poti is significant here in relation to a number of key Māori histories:

- Landing place of waka
- Food gathering – mahika kai
- The significance of old Māori language
- Maintaining the original place names and reclaiming names.
- The concept of Māori travelling up the Ōtākou awa (harbour) to gather food or exchange food.

The name Ōtepoti itself is an ancient one according to Tahu Pōtiki. He disagreed that it had any meaning related to boats or a port but was in fact the shape of the area that looked like the corner of a Māori woven food basket, known as a poti. This name has a longer history than contact period and European boats.



*Images provided by Aukaha*

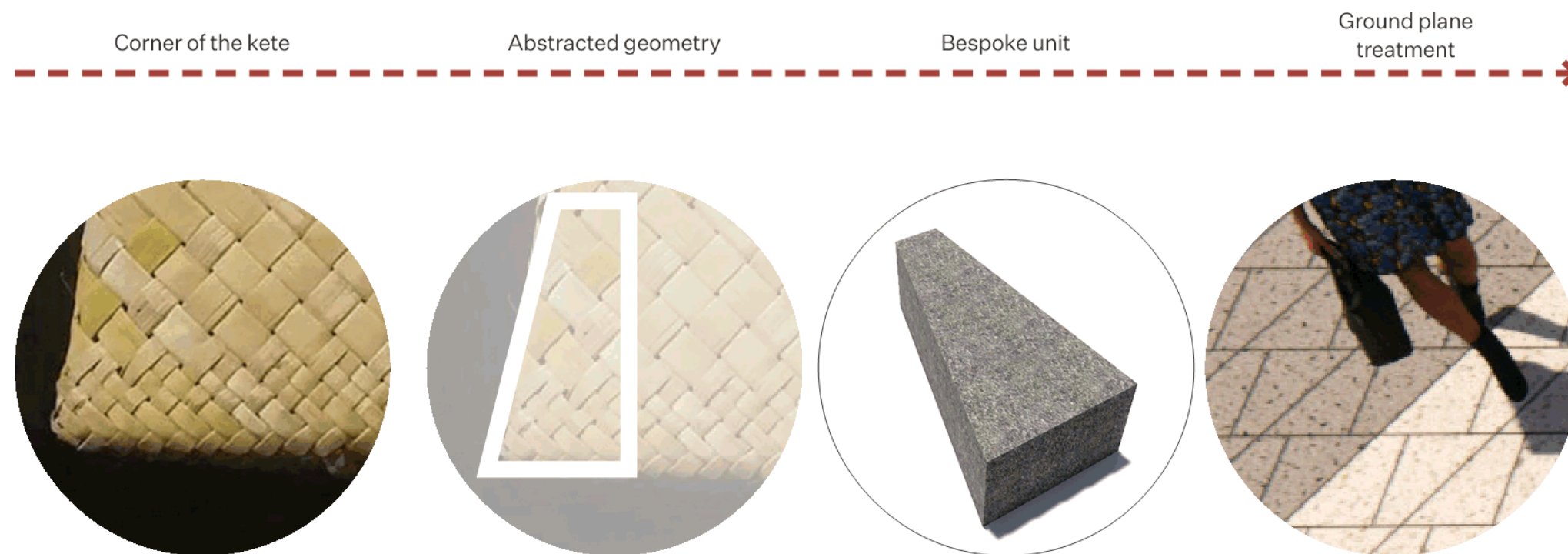
# Poti

## 2.2.3 Informing geometry

The four cornered kete, or poti, is used to drive the geometry of the paving chosen in the ground plane. This surface treatment will be unique and meaningful for Ōtepoti Dunedin.

It is an authentic shape for Ōtepoti and a powerful way of providing a surface treatment that is contextual, meaningful and relates back to the principals of whakapapa.

The diagram opposite shows the evolution of the poti paver from the inspiration of the poti through to the individual paver.

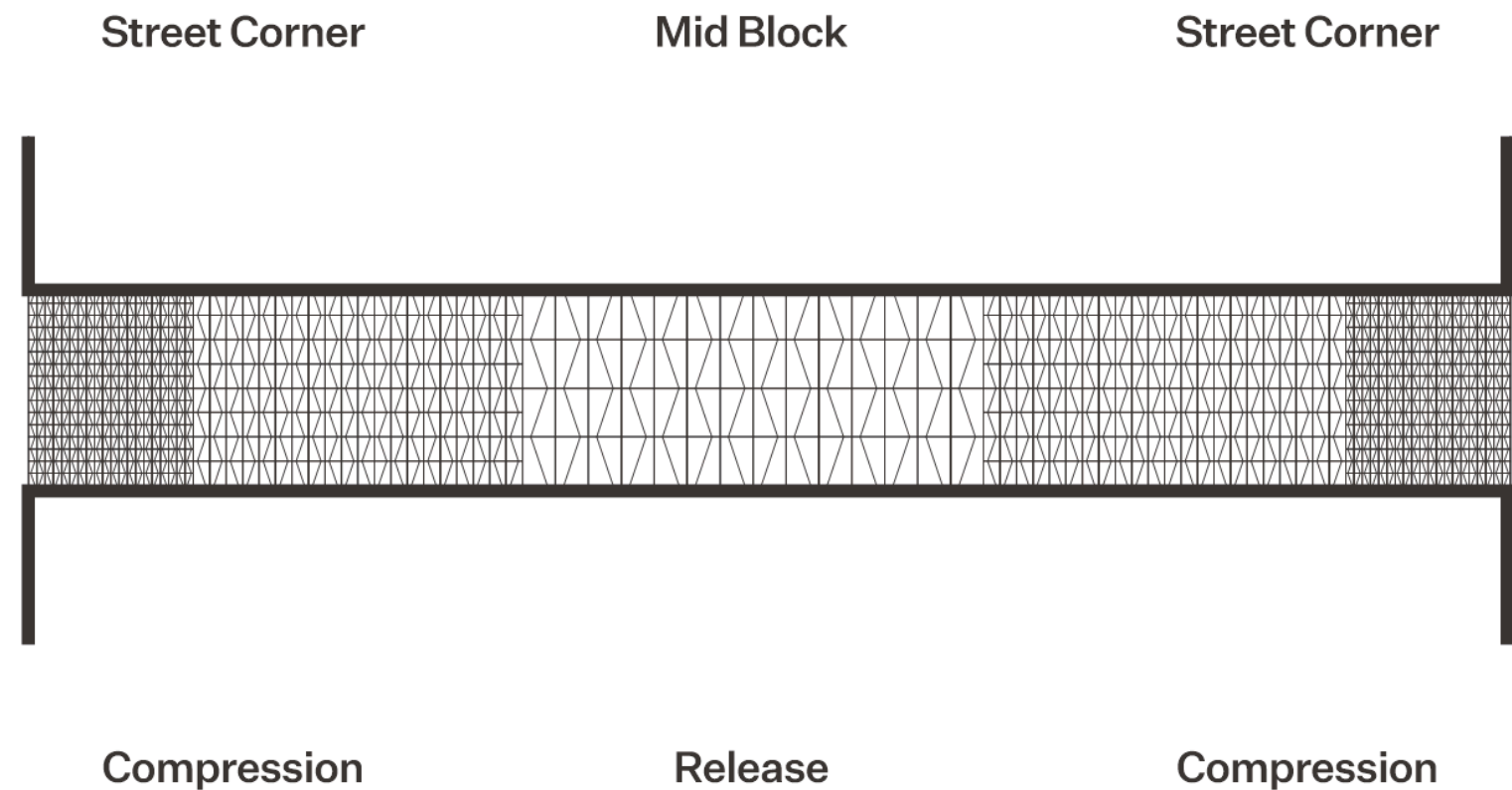
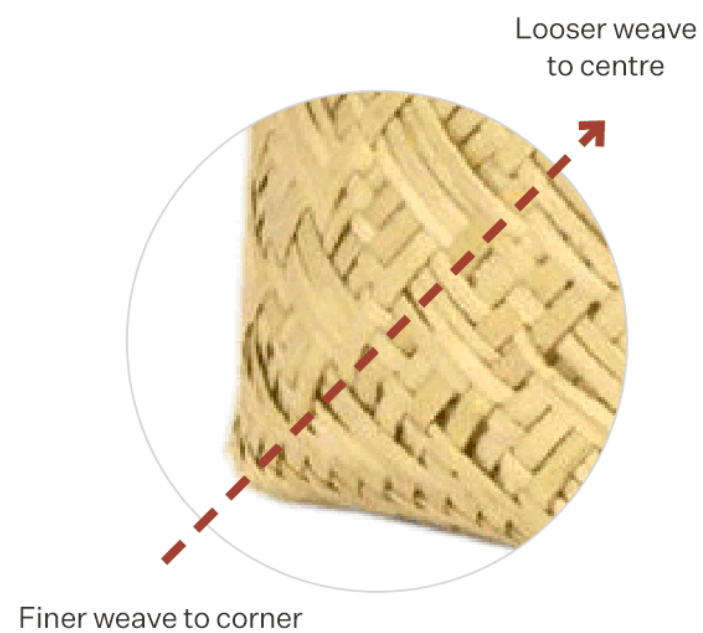


# Poti

## 2.2.4 Grain and scale

The corners of the poti are a critical element in the function and strength of the poti, similar to how the intersections of the city blocks are critical to the strength of the street. The corners hold the kete and have a finer grain with a more complex weave that releases as it moves away from the corner, similar to how a city block works.

The structure of the poti has provided inspiration for the scale and layout of the ground plane and other elements within the street. Compression of form and grain occurs at the street corners and a releasing occurs towards the middle of the block.



# Kaihaukai

## 2.2.5 Trade and exchange

Streets are public places for everyone. They are the canvas for everyday interaction and life. Therefore they should be laid out to allow for a range of social interactions from small spaces to eat lunch and take a phone call through to larger spaces for hosting events and gatherings of people.

The spaces with George Street are designed to provide a platform for daily human life which enable trade and exchange of not just goods and services but of social interaction and information.

### Opportunities:

- Provide a range of opportunities in the design of the public realm that allows urban life to flourish
- Knowledge sharing through interpretive signage and storytelling - for example, interpretive signage to inform of values of plants within the public realm
- Provide a range of street furniture or elements that encourage social interaction of varying scales



Spaces for gathering.  
South Frame. Image source - Jasmax



Interpretive signage.  
South Frame. Image source - Jasmax



Opportunity to create an urban lounge that provides a venue for social interaction

# Mahika kai

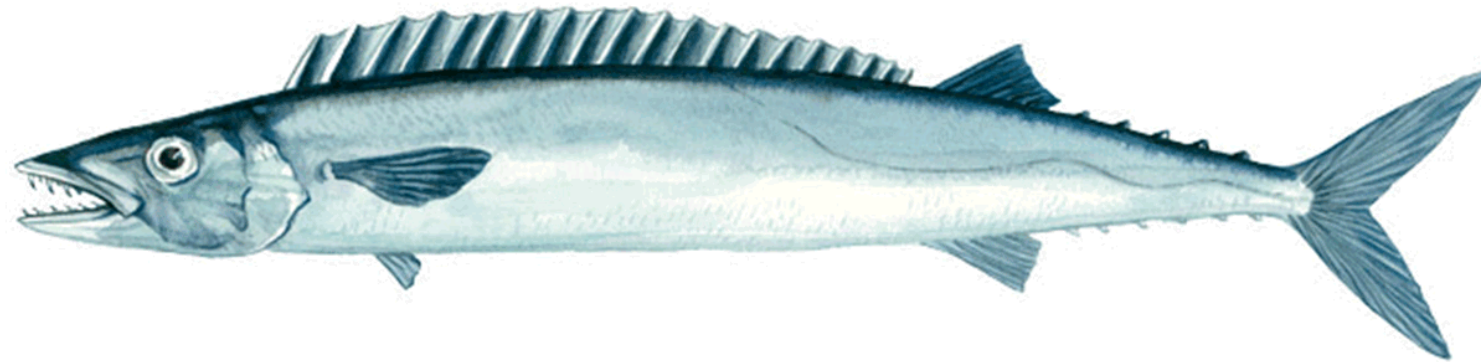
## 2.2.6 Key species

Nature provides an abundant resource basket for Māori. Early Māori were adept at learning the secrets of nature's resources and developed a hard-won knowledge of the native flora and fauna of Ōtepoti which enabled survival and ultimately, the ability to thrive.

The dried form of barracouta was a key trade item during the 1830s and was the most prominent fish supplied to Dunedin's settlers during their lean, early years.

### Opportunities:

- Reveal the intimate and respectful relationship with nature
- Express how Te Wao Nui o Tane (the great forest of Tane) provided everything required to sustain life. From being a food market, a source of medicine, a tool shop, a trade centre and a playground all at once
- Consider how natural cycles of plants and fauna reflect the seasons
- Bring native species and particularly species found in and around Ōtepoti into the design of the public realm



# Mahika kai

## 2.2.7 Colour concept

The following colour palette which is used as 'accents' throughout the street has been developed to reflect the natural colours of key mahika kai species as well as providing the connection back to Ōtākou Marae.

### Makā / barracouta

In the past fish sourced around the Ōtepoti coast provided up to 50% of the protein to Maori. The Makā / Barracouta made up around 50% of the catch. Dried barracouta was a key trade commodity in 1830s during early European settlement.

The shimmering silvers of the fish and flashes of blue as it moves through the water provide inspiration for colour accents along the street.

Silver can be incorporated through the use of stainless steel with subtle blues and pale silver whites representing the scales and upper spine of the fish.



Other materials : Stainless Steel



Dark blue R-46 G-86 B-112



Pale cream R-253 G-253



Pale blue R-172 G-201 B-205



Mid blue R-118 G-170 B-191

### Kererū / NZ wood pigeon

There is a strong desire for Kererū to return in numbers to the peninsula and for native birds to return to the central city. New plantings and wider biodiversity initiatives throughout the emerging new CBD will look to encourage habitat for native birds and insects.

The distinctive green hues of the Kererū along with splashes of pale purple and cream are reflective of the feathers of the bird and can provide inspiration for colour accents along the street.



Pale purple R-164 G-157 B-175



Pale cream R-253 G-253



Teal R-109 G-165 B-166



Dark teal R-93 G-122 B-130

### Ōtākou Red

The red shade seen at the Ōtākou Marae has recently been developed and refined into it's own specific colour specification, known as Ōtākou Red.

Ōtākou Red can be incorporated into the new urban street elements to provide a meaningful link between the Marae on the Peninsula with the central city.



Exact colour to be provided



# Mahika kai

## 2.2.8 Paving patterns

The Pātiki and Aramoana are patterns found in the windows of Ōtākou Marae that represent important mahika kai.

These patterns have been used in the design to drive pattern concepts in the ground plane in terms of paving and surface treatments along the street.



Aramoana pattern in stained glass  
*Image supplied by Aukaha*



Pātiki pattern in stained glass  
*Image supplied by Aukaha*

# Mātauraka

## 2.2.9 Art works

The street design considers a number of locations for commissioned artworks to be located.

Mana whenua have expressed a desire for a significant artwork to be commissioned of either an ancestor or event that talks to the whakapapa of place which would be undertaken by a nominated Kāi Tahu artist. The sculpture would be located at the end of the New Edinburgh Way block next to the Frederick Street intersection.

Examples of similar artwork include:

- Ko te Tūhono the waharoa designed by Ayesha Green, installed in the Octagon in 2021
- Maori Chief designed by Molly Macalister, 1967, in Tāmaki on lower Queen Street
- Kurahaupō/ Te Paepaeroa O Kahukura, Ephraim Russel, 2021<
- Te Wahoroa ki te Ao Maarama , Lonnie Hutchenson, 2013, Pembroke Street, Hamilton

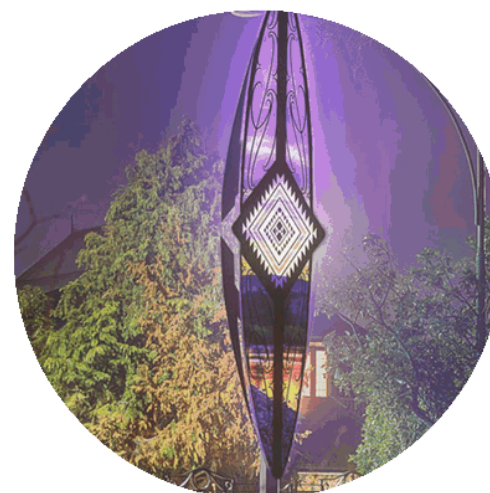
The specifics of the commission are yet to be determined including the artist, the brief and scope and orientation of the works.



Ko te Tūhono, Ayesha Green, Octagon Ōtepoti, 2021



Maori Chief, Queen street Tāmaki, Molly Macalister, 1967



Kurahaupō/ Te Paepaeroa O Kahukura, Ephraim Russel



Te Wahoroa ki te Ao Maarama , Lonnie Hutchenson

# Mātauraka

## 2.2.10 Whakataukī / quotes

Quotes and whakataukī (proverbs) are being identified by mana whenua as key narratives to be expressed in the design of paving and street furniture as illustrated in the examples opposite.

Specific text for George Street will be worked through with mana whenua in the detailed design phase for George Street.

Below is a whakataukī example:

**Puritia  
Tawhia  
Kia ita  
Te mana whenua , Te mana tupuna,  
Te mana takata**

*Holdfast  
Steadfast and resolute  
To the authority on land, to the heritage  
bestowed,  
to human right*



Te reo etched into pavers



Whakataukī etched / sand-blasted or cast/  
moulded into pre-cast concrete planters

# Mātauraka

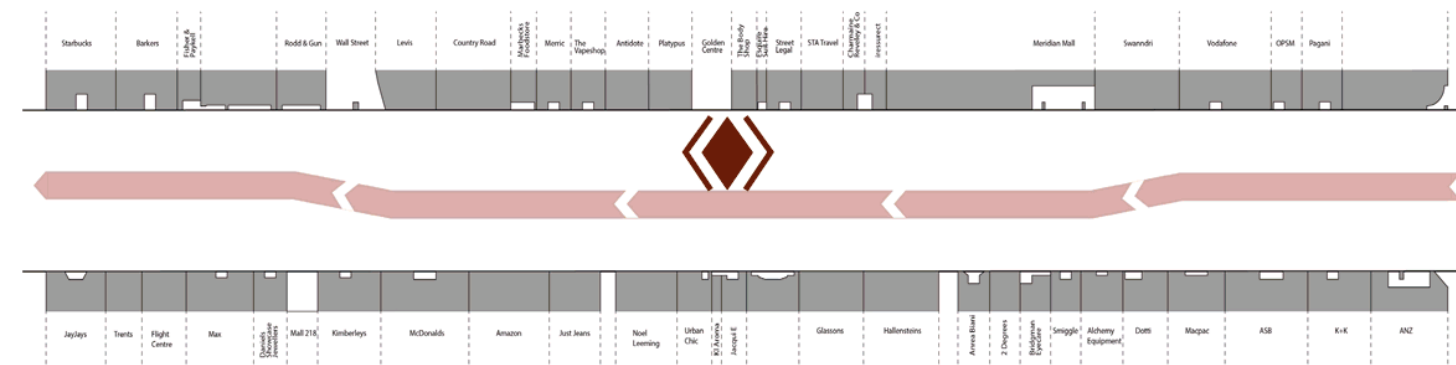
## 2.2.11 Mapping

Drawing inspiration from the Aukaha map a centrally located etching in basalt stone is proposed in the Golden Block. This 'ground map' tells the story of the pre-European shore line, landmarks important to mana whenua, historic reclamation events within the harbour and the street grid of today. The map provides a geographic orientation within the city and connects back to the pre-reclamation shoreline.

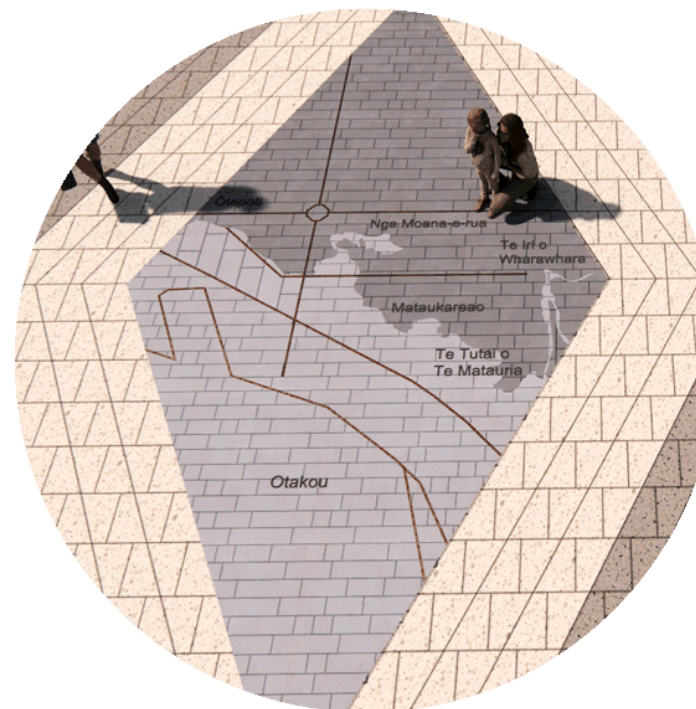
### Opportunities.

- Acknowledging a Māori world view of the significance of landmarks and the ability to locate ones self within the wider context of the landscape
- Identifies te reo place names
- Consideration of the historic waterfront and coastal features within the design of the contemporary context

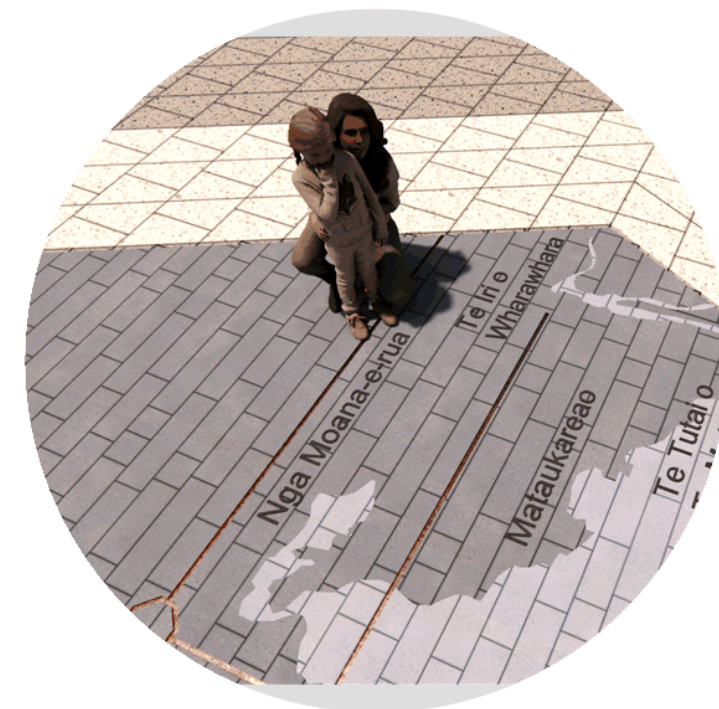
## Location : Golden Block



Aukaha map



Mapping to be incorporated into the ground plane



Te reo place name text to be incorporated into the ground plane

# Heritage

## 2.3 Heritage - hidden in plain sight

George Street contains a richness of heritage buildings and building façades that are significant contributors to the character and sense of place of the Retail Quarter. However very little is commonly known in terms of the narratives, history and whakapapa of these buildings. There is a opportunity to enhance the experience of the street by providing access to these narratives of the George Street heritage.

### Hidden in plain sight

This concept refers to the desire to provide a means to access the rich history of buildings and places within the street. It is about exploring the whakapapa of place.

### Digital portal (outside this project scope)

It is not practical or desirable to install traditional 'heritage information boards' within the street. Historic buildings and sites are too numerous and this traditional approach would either create significant clutter due to the share number of boards required or not do justice to the richness of heritage along the street.

Therefore the project team recommends that a digital online platform is used to record and provide access to this rich history of place. In this way the information collection can be dynamic, changing and updated over time.

The online resource will be accessed through cues within the street such as QR Codes embedded in pavers adjacent to significant heritage buildings or sites.

Process of accessing the historical information of George Street through and online portal (to be procured separate from the George Street project and would be updated over time)



Place



Access to portal through QR codes



Online resource

## 2.3.1 Framing heritage architecture

### Preserving views of Heritage buildings

The diagrams on the following pages identify heritage buildings along George Street. The DCC scheduled heritage buildings and character contributing façades within George Street are highlighted in pink and blue respectfully.

To coordinate street design with heritage buildings, trees will be placed to avoid screening of the façades. In some cases, tree shape, size and placement will be used to frame buildings, entrance ways or to align with the rhythm of the building facade.

Further detail on the locations of trees in relation to the façades is found in section 2.7 of this report. Examples of heritage architecture in George Street:



Knox Church  
449 George St



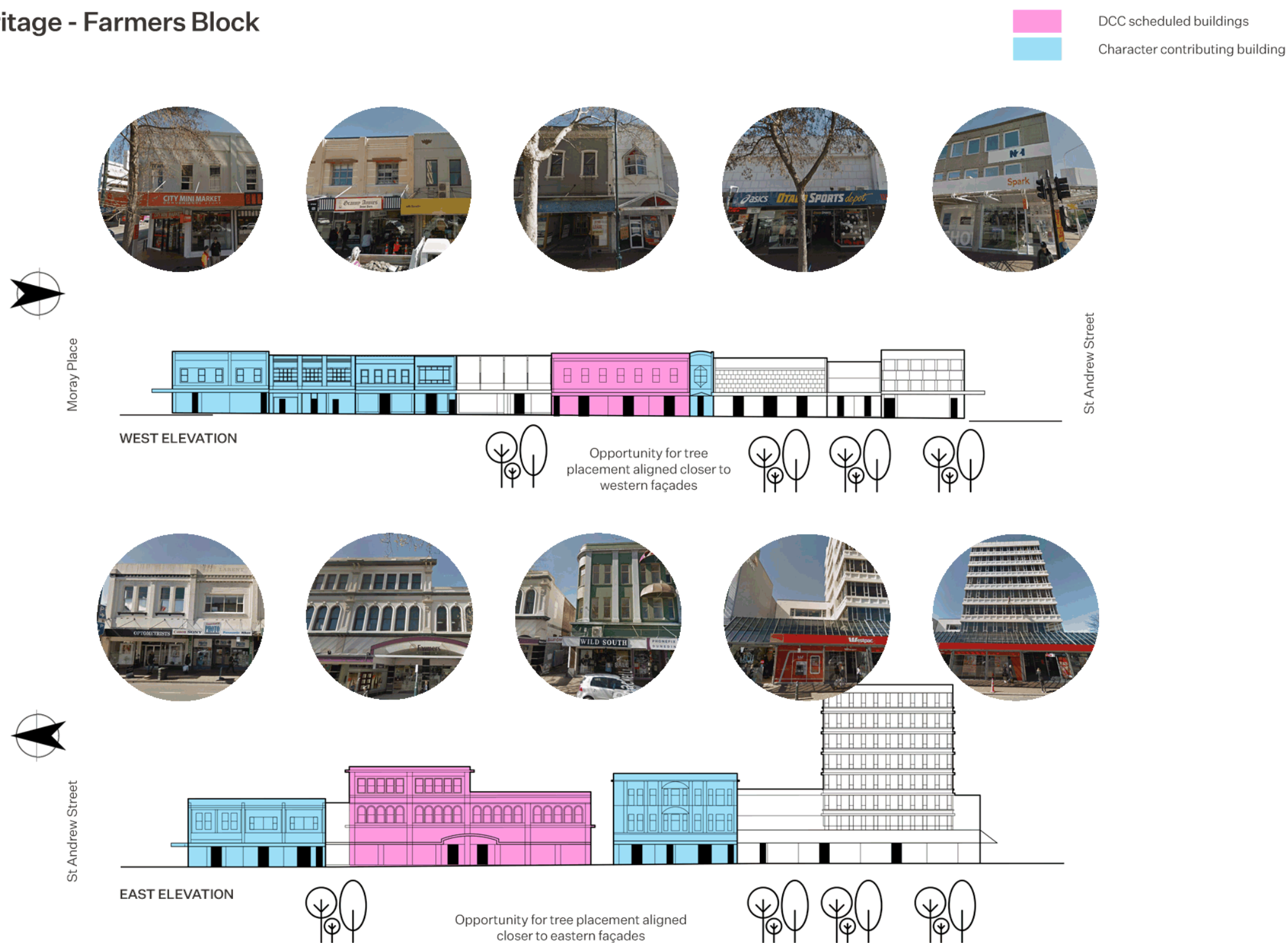
Adams Bruce Ltd.  
310 George St



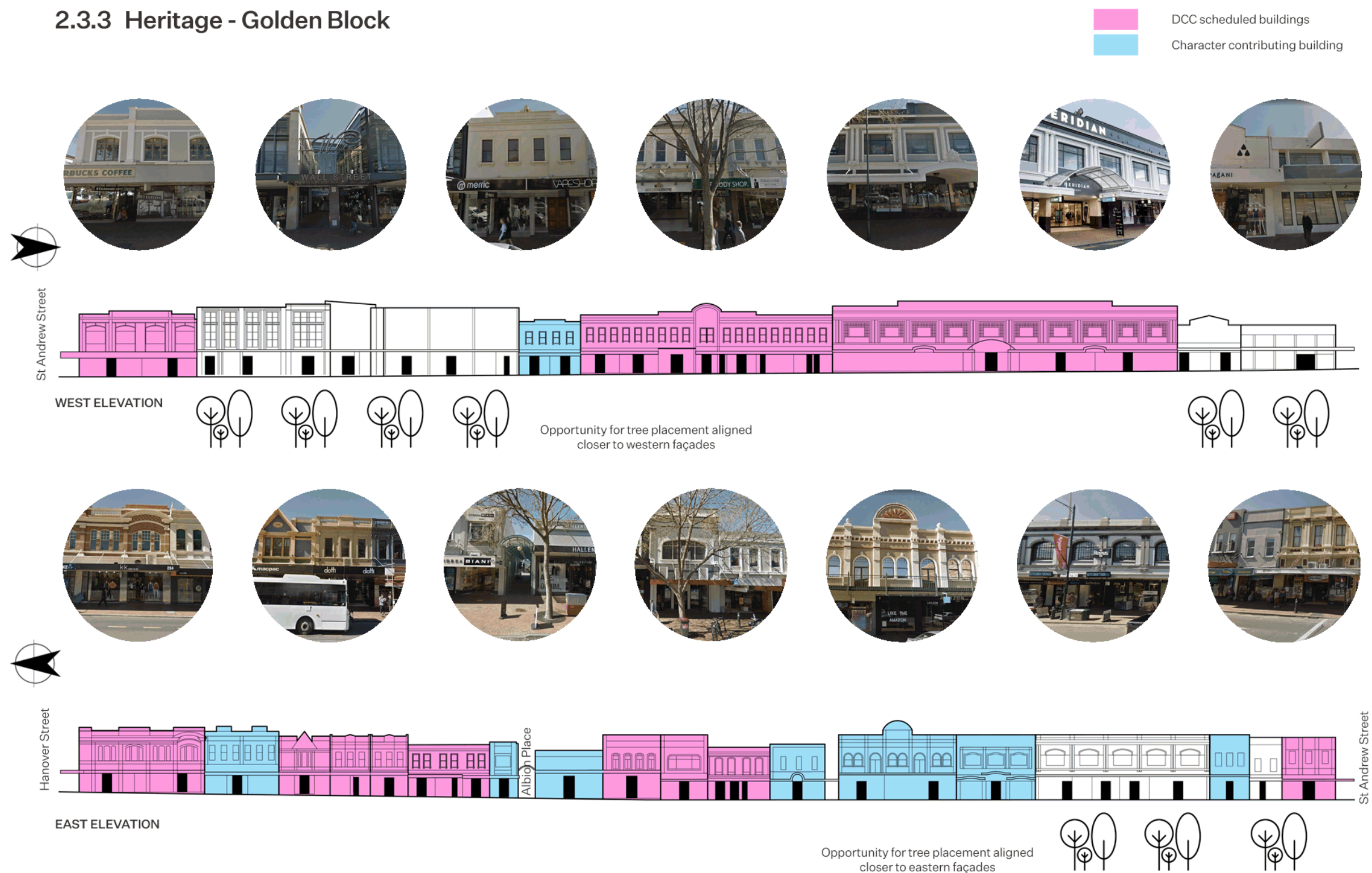
Crown Clothing Co.  
392 George St



## 2.3.2 Heritage - Farmers Block



## 2.3.3 Heritage - Golden Block



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## 2.3.4 Heritage - New Edinburgh Way



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## 2.3.5 Heritage - Knox Block



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# City of Literature

## 2.4 City of Literature

The George Street project provides an ideal opportunity to celebrate Ōtepoti - Dunedin's status as a 'City of Literature'. It is one of 42 cities worldwide that has been given the UNESCO status celebrating the many past and present writers and poets.

The George Street city of literature strategy is to provide text passages, words and phrases from important writers such as Janet Frame and Hone Tūwhare within the street. Below are some examples of potential text that have been nominated as inspiration and which could be etched into the ground plane, planter walls and street furniture. Specific text will be worked through with DCC in the detailed design phase for George Street.



“Once upon a time (and it happens to this day) there was Late Night in the city, or Friday Night Shopping. On Late Nights the streets and shops, as you know are filled with people hurrying and scurrying and buying things. In the middle of one city stood a large store which was crowded with people every Friday night; for it sold everything, or nearly everything – soap and peppermint cushions and handkerchiefs and electric light bulbs and clothes and skeins of wool and dahlia seeds. One night when so many people were trampling and shoving over the floor, one of the floorboards said in floor-language, ‘Squirk’, which meant ‘Oh dear. Oh dear’.”

**Janet Frame**  
(from ‘The Friday Night World’, Gorse is Not People, Janet Frame, Penguin Books, 2012)

“oystercatchers by night, above Knox Church, cluck and chuckle, flying seawards.”

**David Eggleton**  
(from ‘Dada Dunedin’ Time of the Icebergs, David Eggleton, Otago University Press, 2010)

“I walked the City last night stopping to take everything in:

....  
And the City seemed  
the same lovely woman I used  
to know  
grown somewhat more ample  
more assured  
with new baubles on display”

**Hone Tūwhare**  
(from ‘Prodigal City’, Deep River Talk, Hone Tuwhare, Godwit Press 1993)

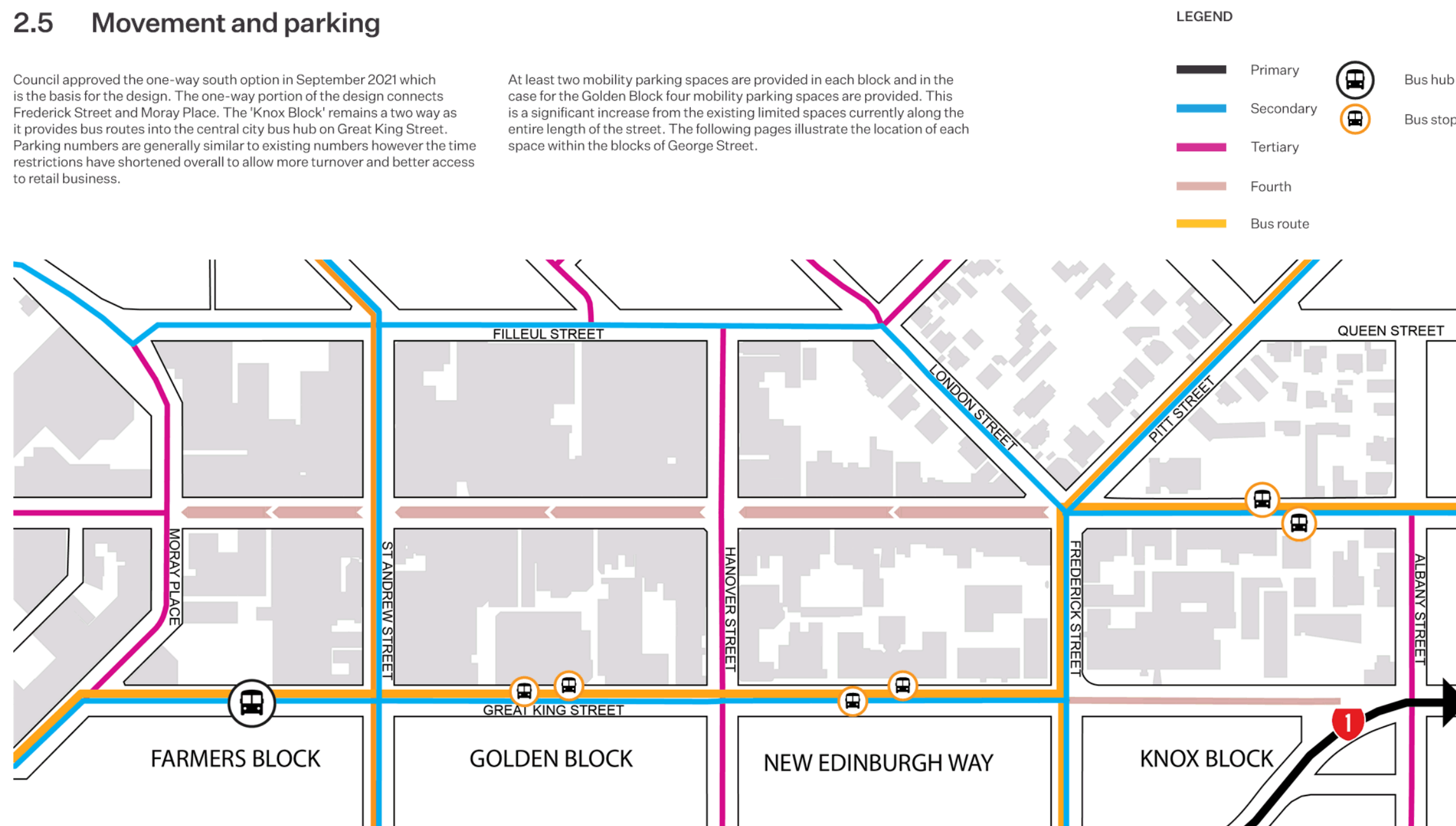


# Movement and parking

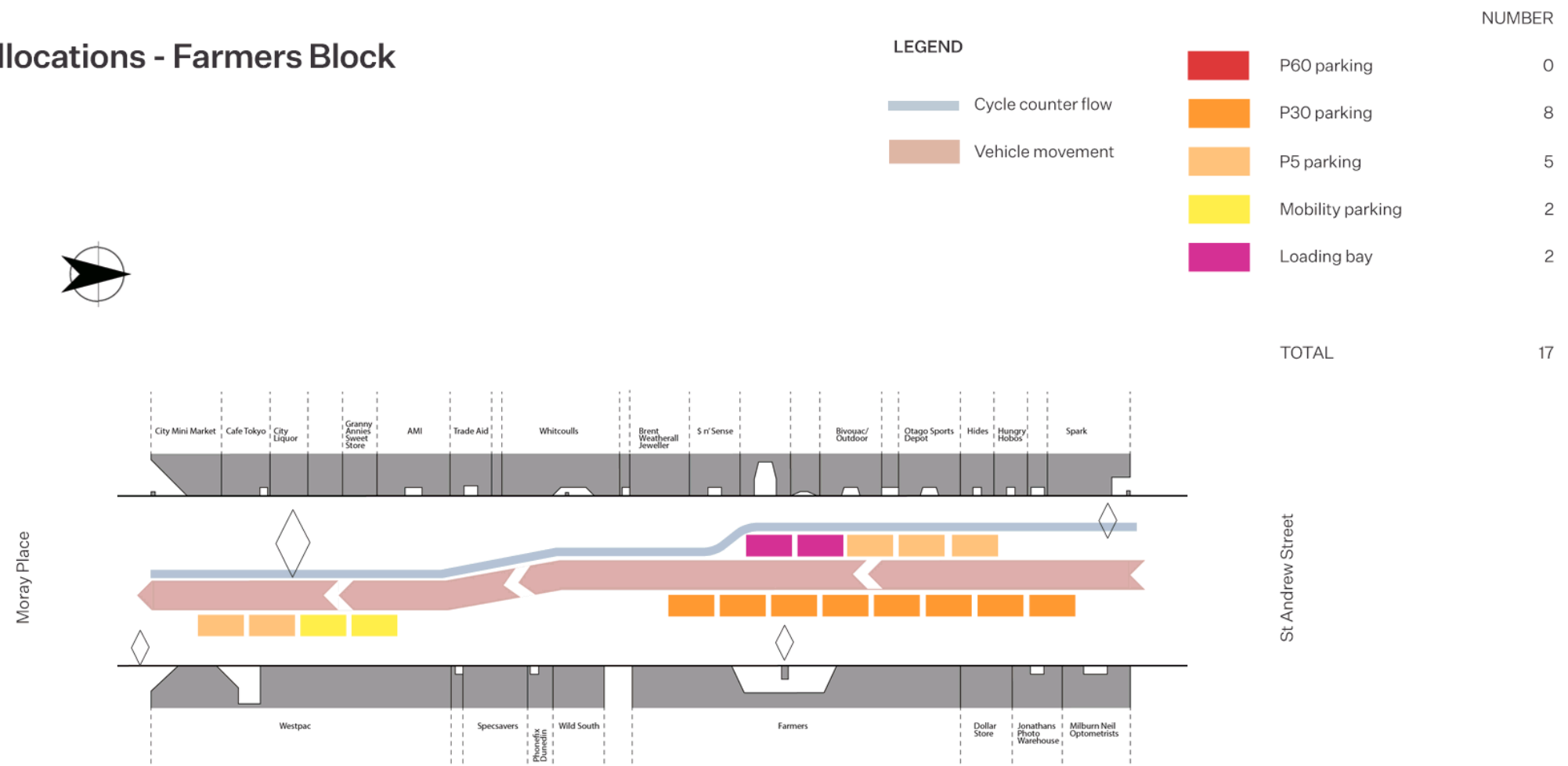
## 2.5 Movement and parking

Council approved the one-way south option in September 2021 which is the basis for the design. The one-way portion of the design connects Frederick Street and Moray Place. The 'Knox Block' remains a two way as it provides bus routes into the central city bus hub on Great King Street. Parking numbers are generally similar to existing numbers however the time restrictions have shortened overall to allow more turnover and better access to retail business.

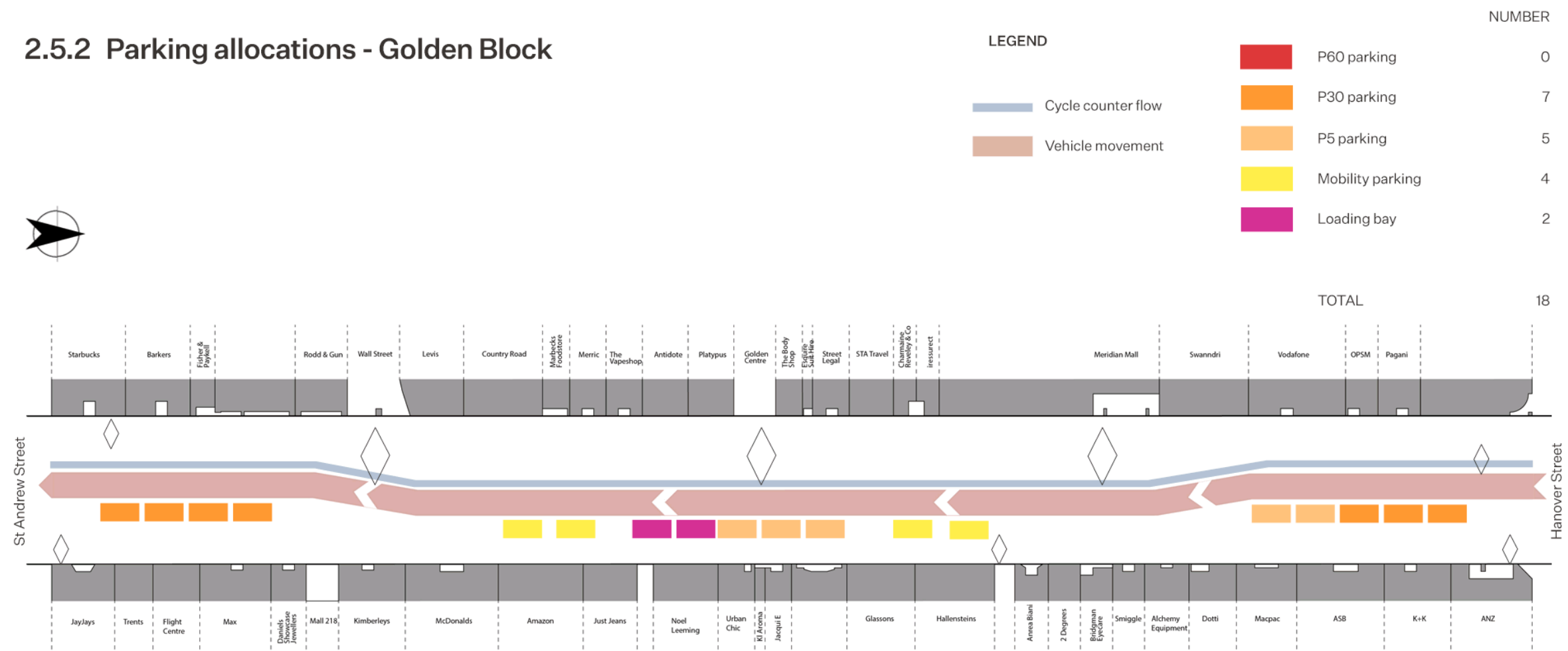
At least two mobility parking spaces are provided in each block and in the case for the Golden Block four mobility parking spaces are provided. This is a significant increase from the existing limited spaces currently along the entire length of the street. The following pages illustrate the location of each space within the blocks of George Street.



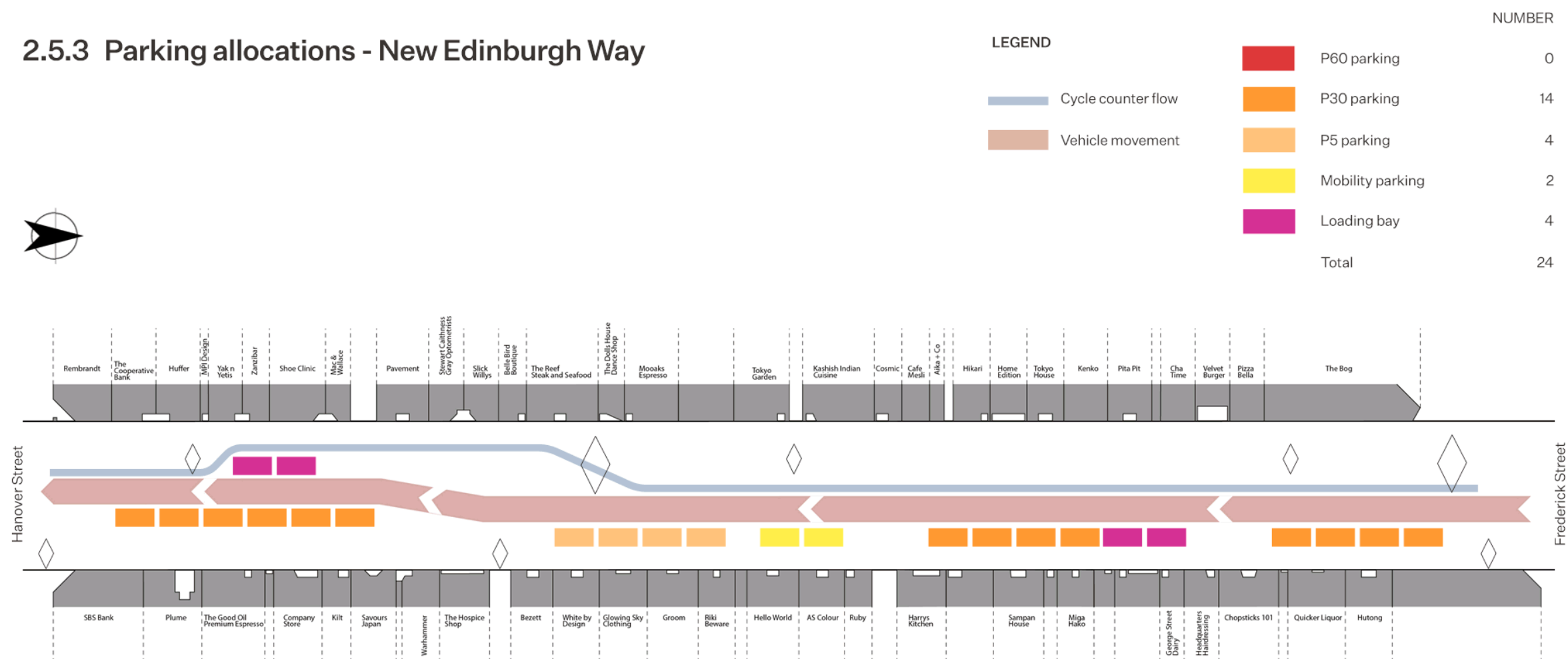
## 2.5.1 Parking allocations - Farmers Block



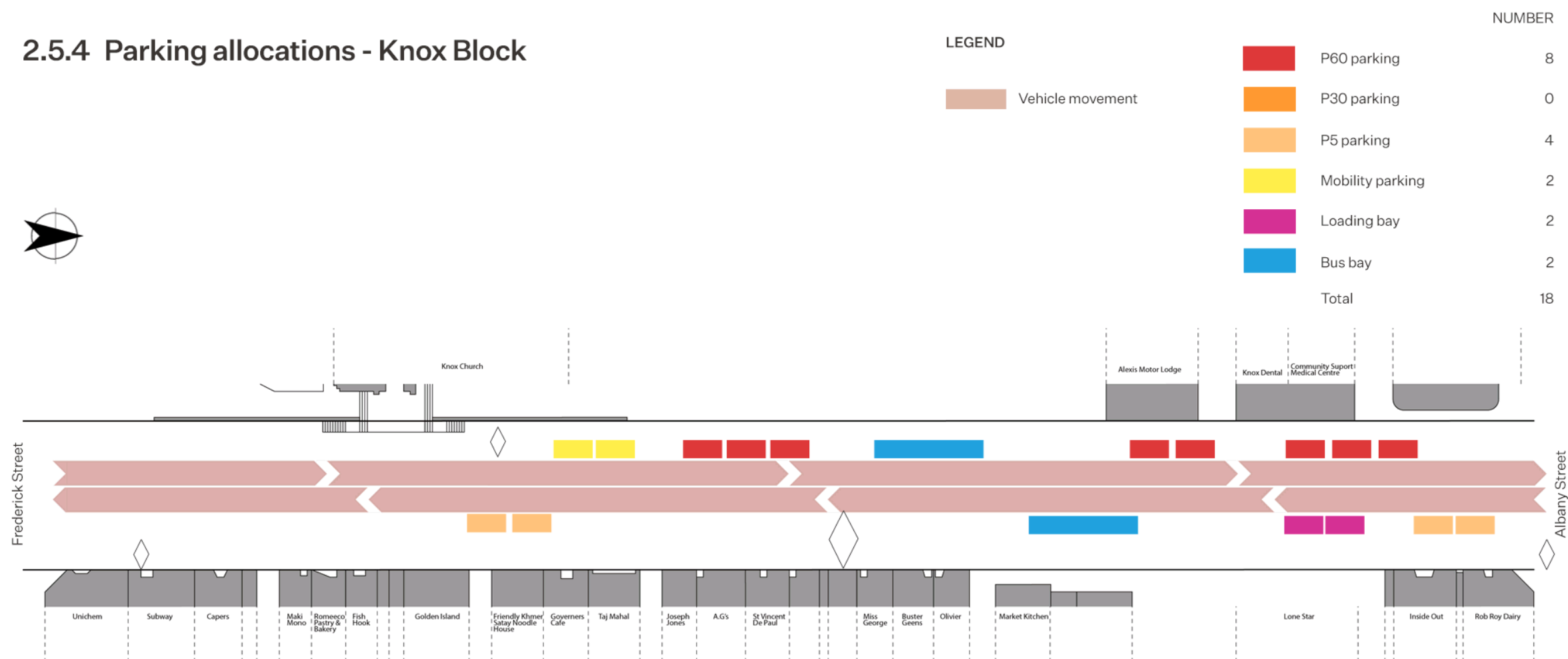
## 2.5.2 Parking allocations - Golden Block



## 2.5.3 Parking allocations - New Edinburgh Way



## 2.5.4 Parking allocations - Knox Block



# Materials

## 2.6 Materials selection criteria

Materials both surface treatments and street furniture have been selected based on the following criteria:

- Cost** - Selection of materials and construction methods that are within project budgets.
- Carbon emissions** - Selecting products and suppliers that have sustainability and processes that reduce carbon emissions. This goes hand in hand with sourcing material locally to reduce carbon emissions in transportation.
- Whole of life costs** - Ongoing costs to maintain and operate streetscapes throughout their lifespan.
- Maintenance** - Selecting products that are easy for DCC to maintain (and source) into the future.
- Local** - Ideally, materials will be sourced locally to the Otago region and NZ although with the understanding that some specialty products may need to be imported.
- Appearance** - Selected materials need to be attractive and respond to local context. Surface finishes should perform in accordance with the local conditions, be slip resistant, and able to withstand expected loadings.
- Function** - Ensuring surface finishes perform in accordance with the local conditions. Be slip resistant and able to handle the expected loading put on them.



Cost



Carbon emissions



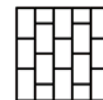
Whole of life costs



Maintenance



Local



Appearance

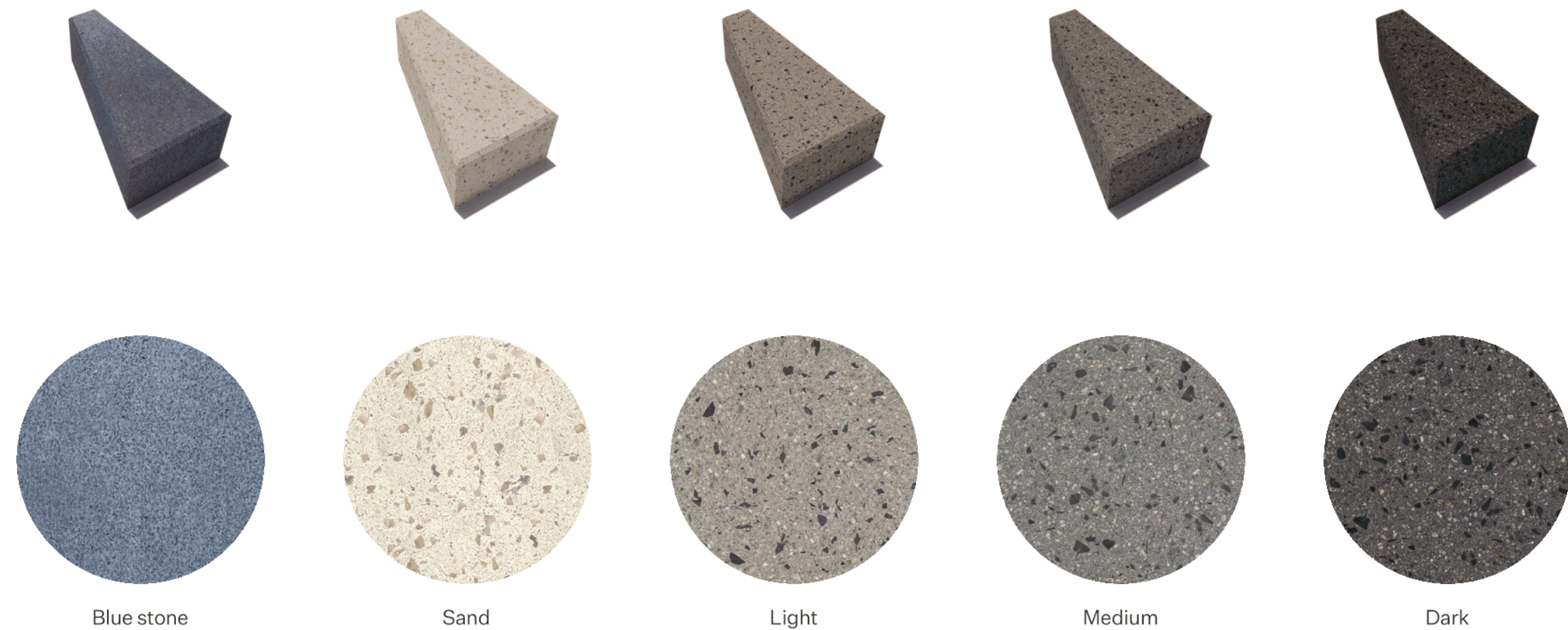


Function

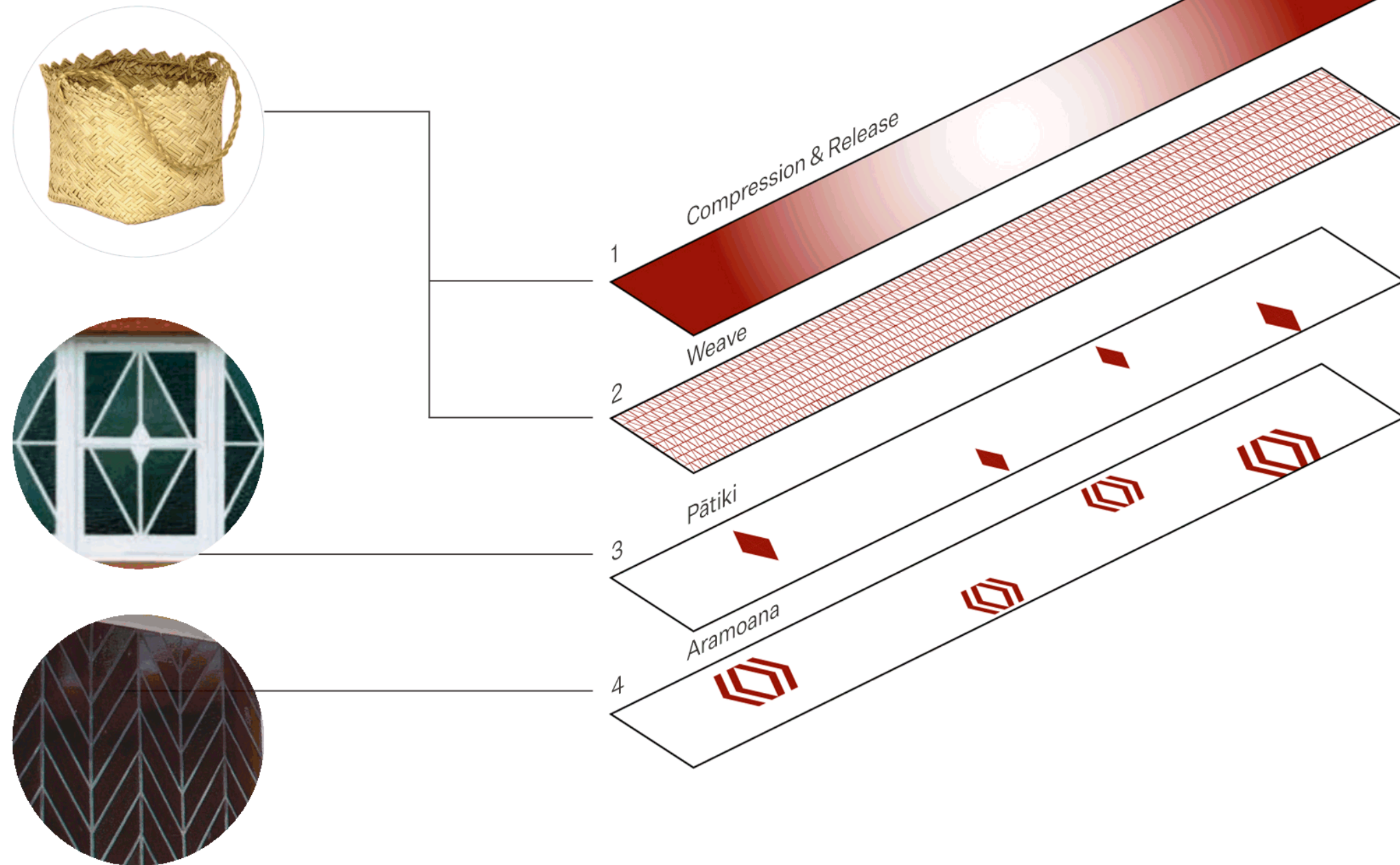
# Paving

A bespoke paving unit has been developed for George Street. It is intended to be used throughout the central city. The paving has been developed with input from mana whenua and is representative of the corner of the poti (kete). As discussed in section 2.2.4 of this report the authentic shape of the paver for Ōtepoti is a powerful way of providing a surface treatment that is contextual, meaningful and relates back to the principal of whakapapa.

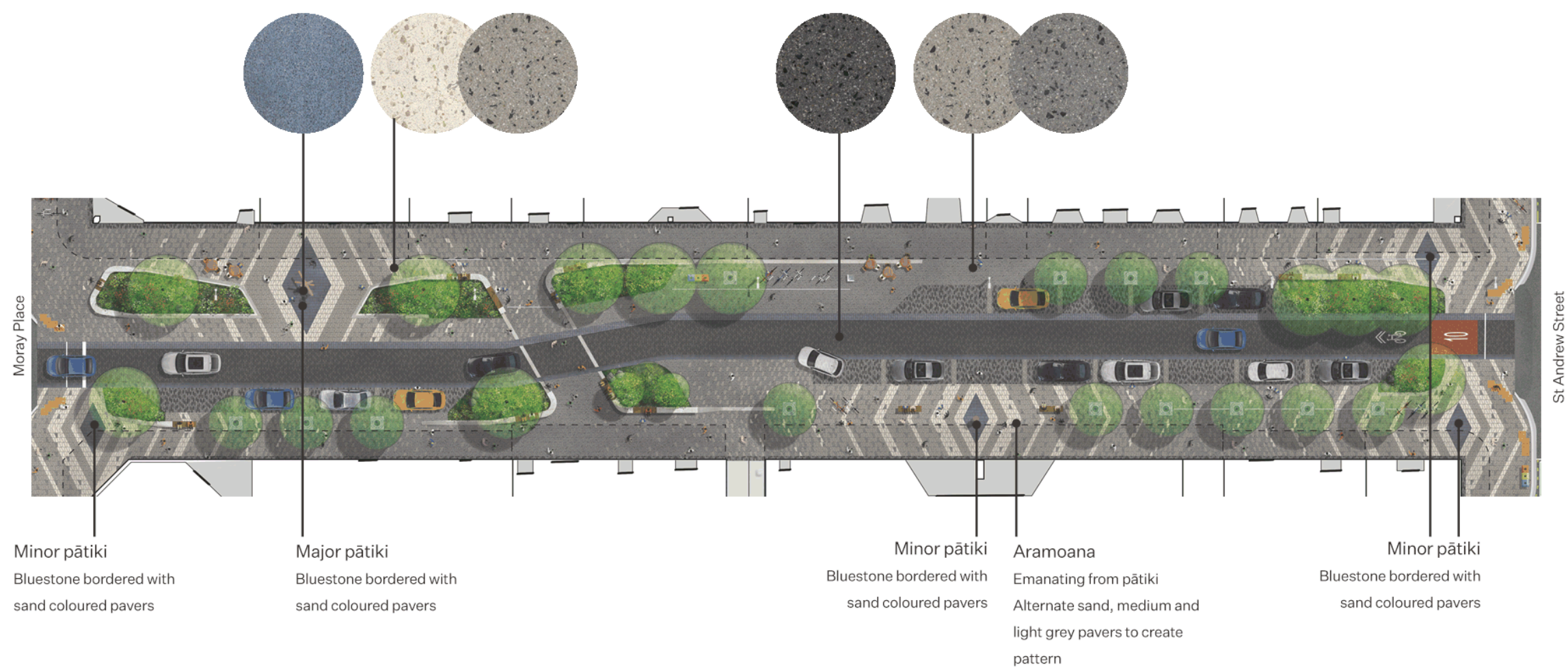
## 2.7 Paving concept - Unit paver



## 2.7.1 Paving concept - pattern

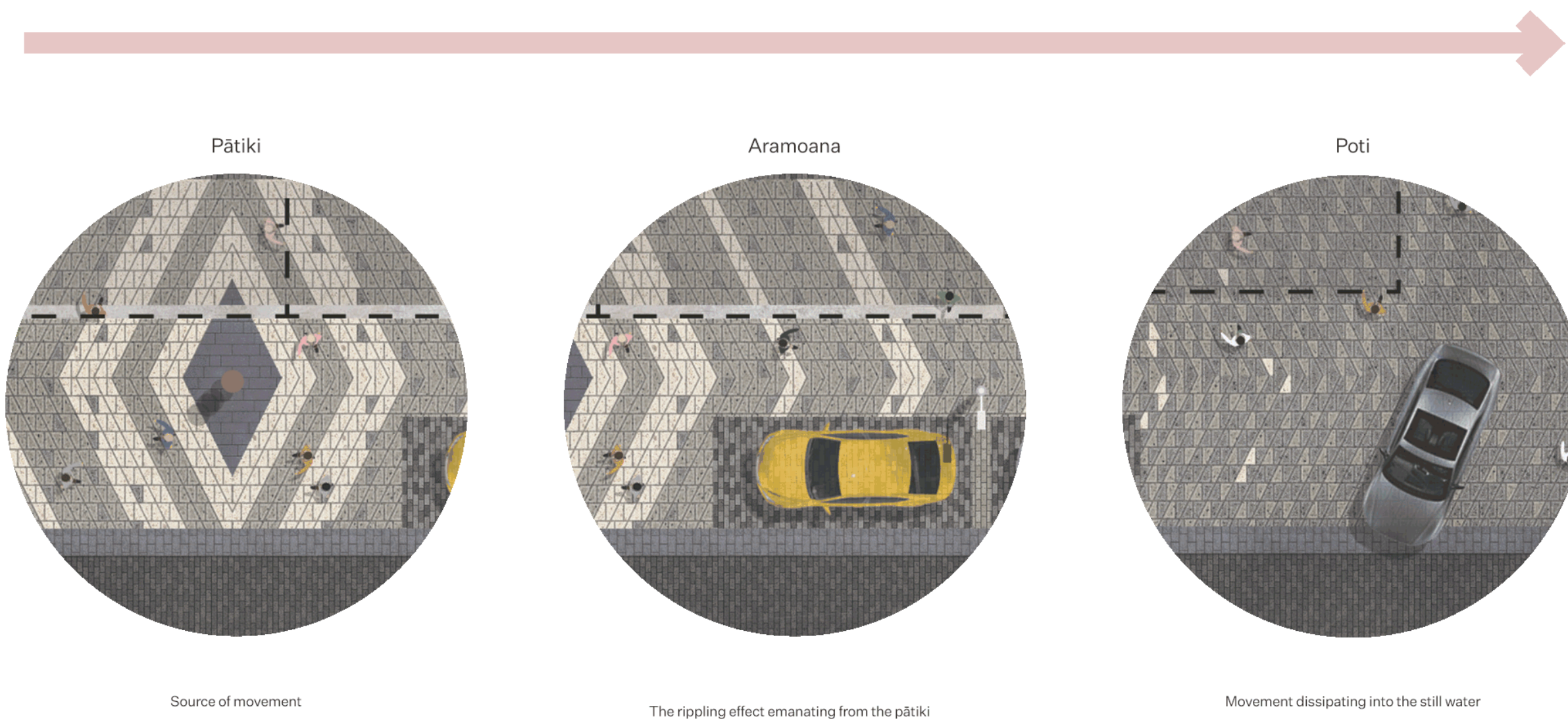


## 2.7.2 Paving concept - pattern

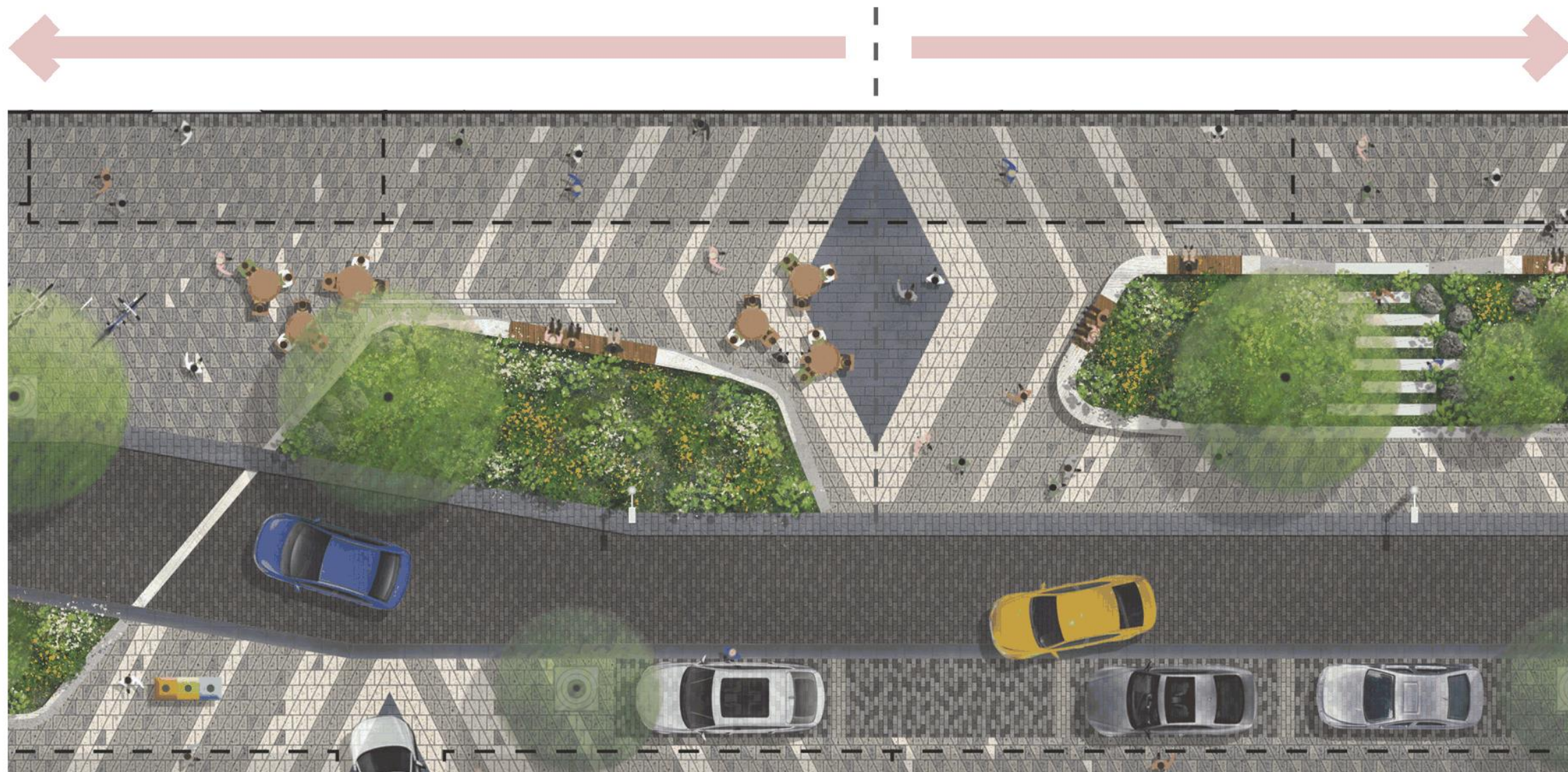


## 2.7.3 Paving concept - pātiki setting the movement within the pattern

Deconstruction of pattern moving away from pātiki sets up a repeating rhythm along the street



## 2.7.4 Paving concept - pattern street view



# Furniture

## 2.8 Components

The following pages identify the type, location and quantum of street furniture proposed throughout the street. In general street furniture can be classified into four main groups, cycle racks, rubbish and recycling bins, seating areas and drinking fountains (see chapter 5 of this report for specific furniture elements proposed).

The lighting strategy is covered in the separate section 2.10.



### Cycle racks

Cycle racks are provided in convenient locations that do not disrupt pedestrian areas within each block. They are placed both centrally within the street adjacent to movement zones and at the junctions of east west streets. The capacity of each cycle rack area is 6-10 cycles.



### Rubbish & recycling bins

Rubbish and recycling bins 'multi bins' are strategically located along the street based on need and convenience. Extra bins are located in areas that are anticipated to generate higher waste.



### Seating areas

Seating is provided in abundance along the street with a variety of types and uses. This will include seats with arm and back rests. Bench seating integrated on top of planter walls and large platform seating for groups of people.







### Drinking fountains

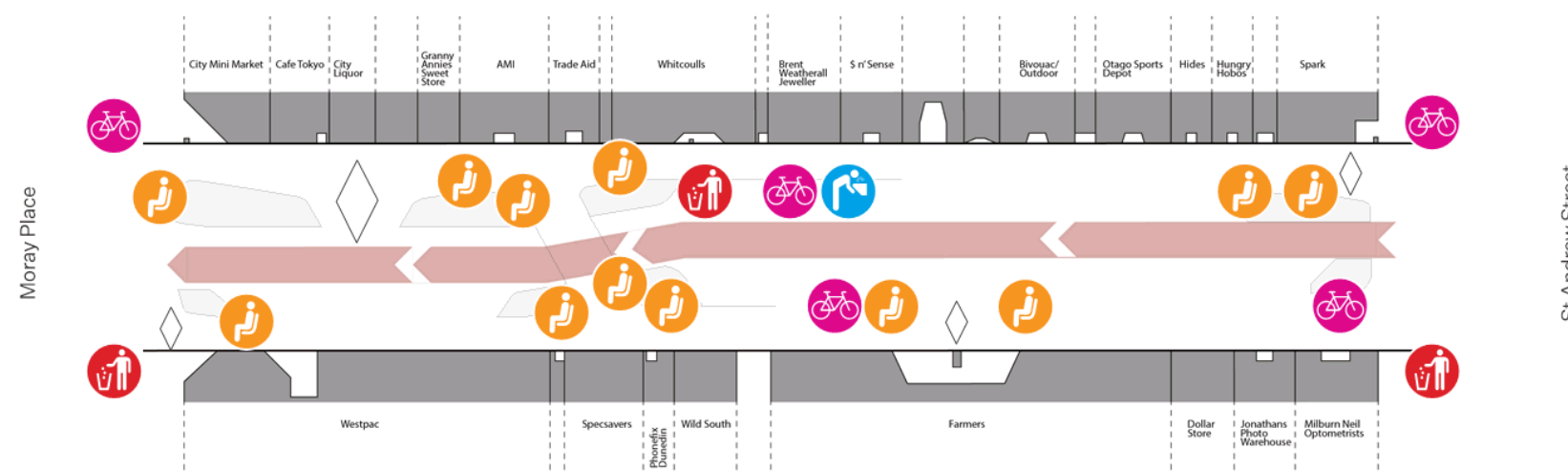
Access to water is important and will be provided in each block. Water fountains are located in high use areas where a mixture of movement along the street and seating areas are provided.

## 2.8.1 Furniture distribution - Farmers Block

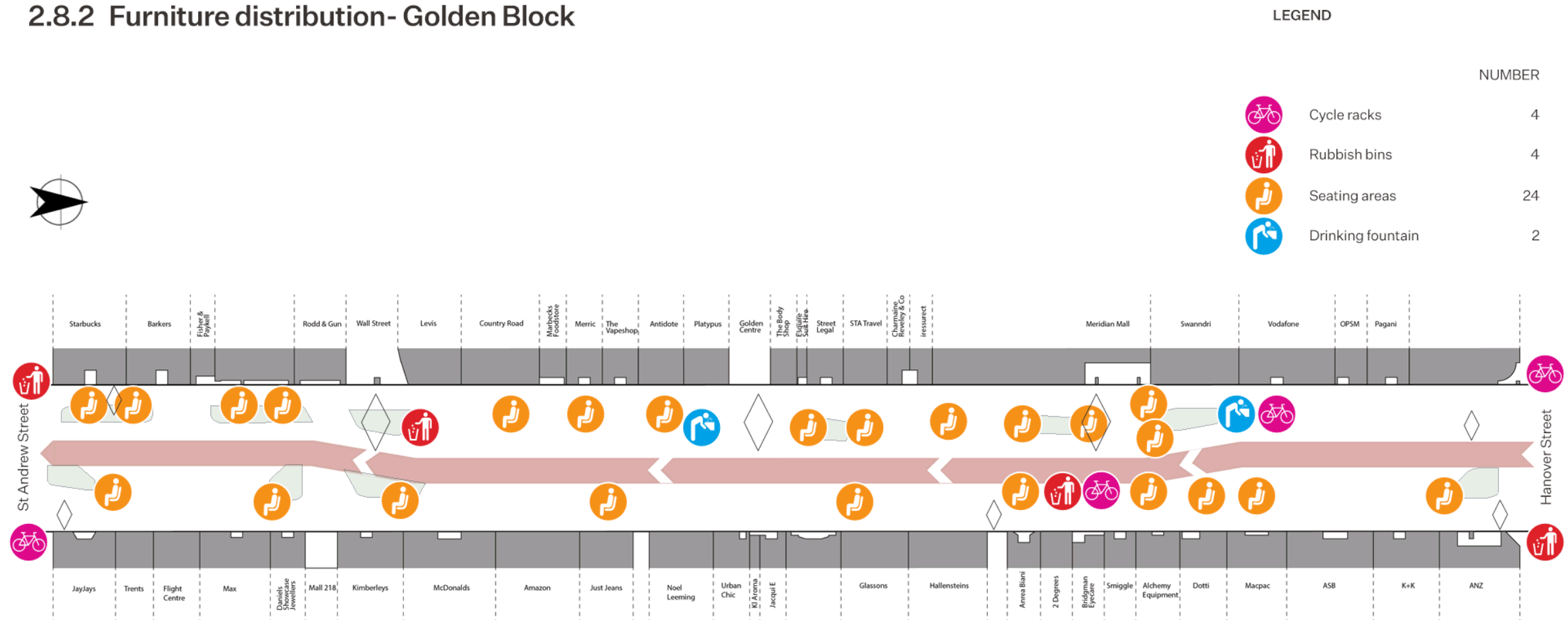


### LEGEND

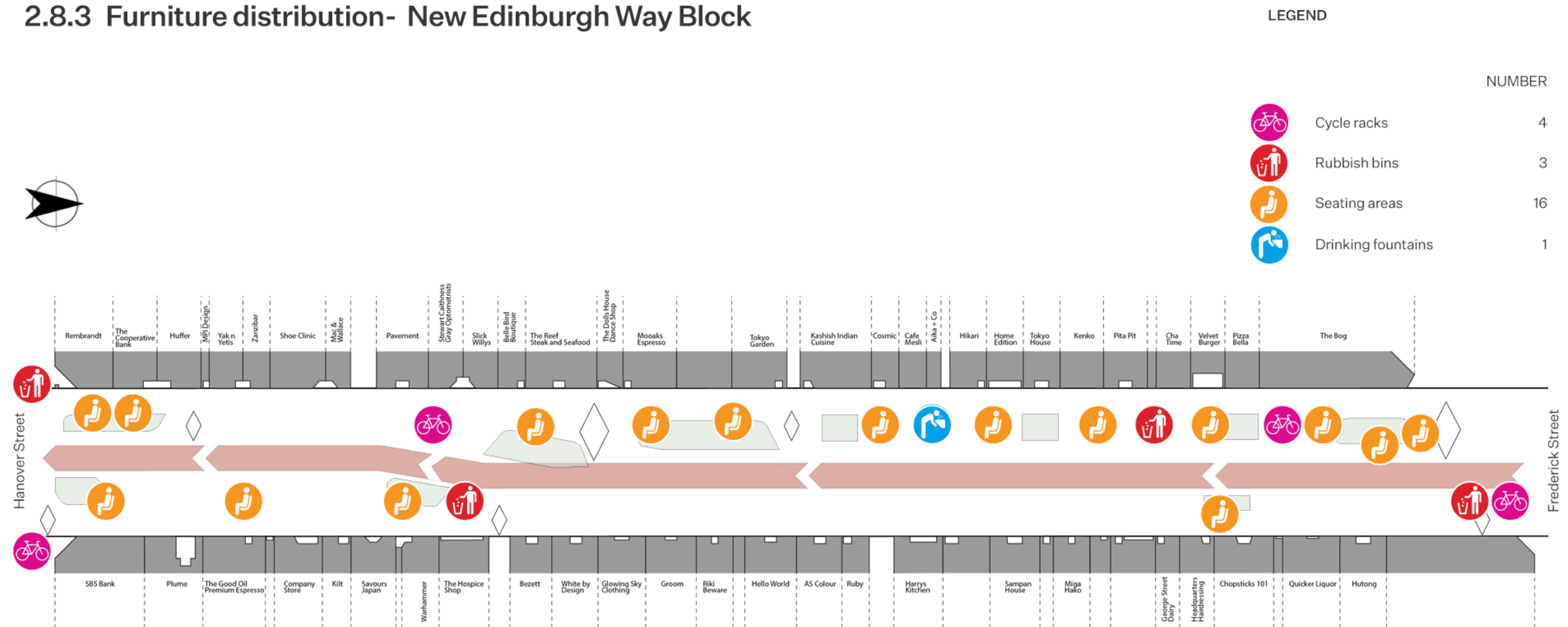
	NUMBER
	5
	3
	12
	1



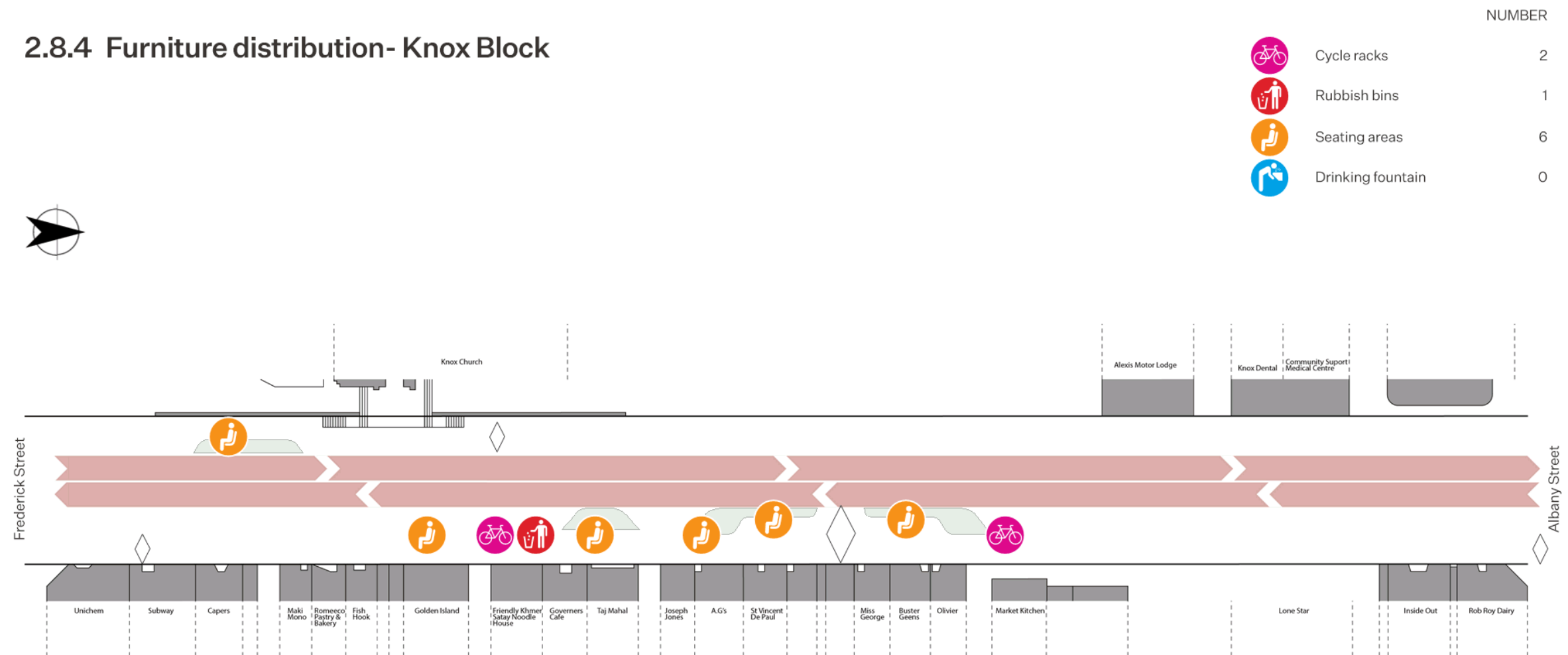
## 2.8.2 Furniture distribution- Golden Block



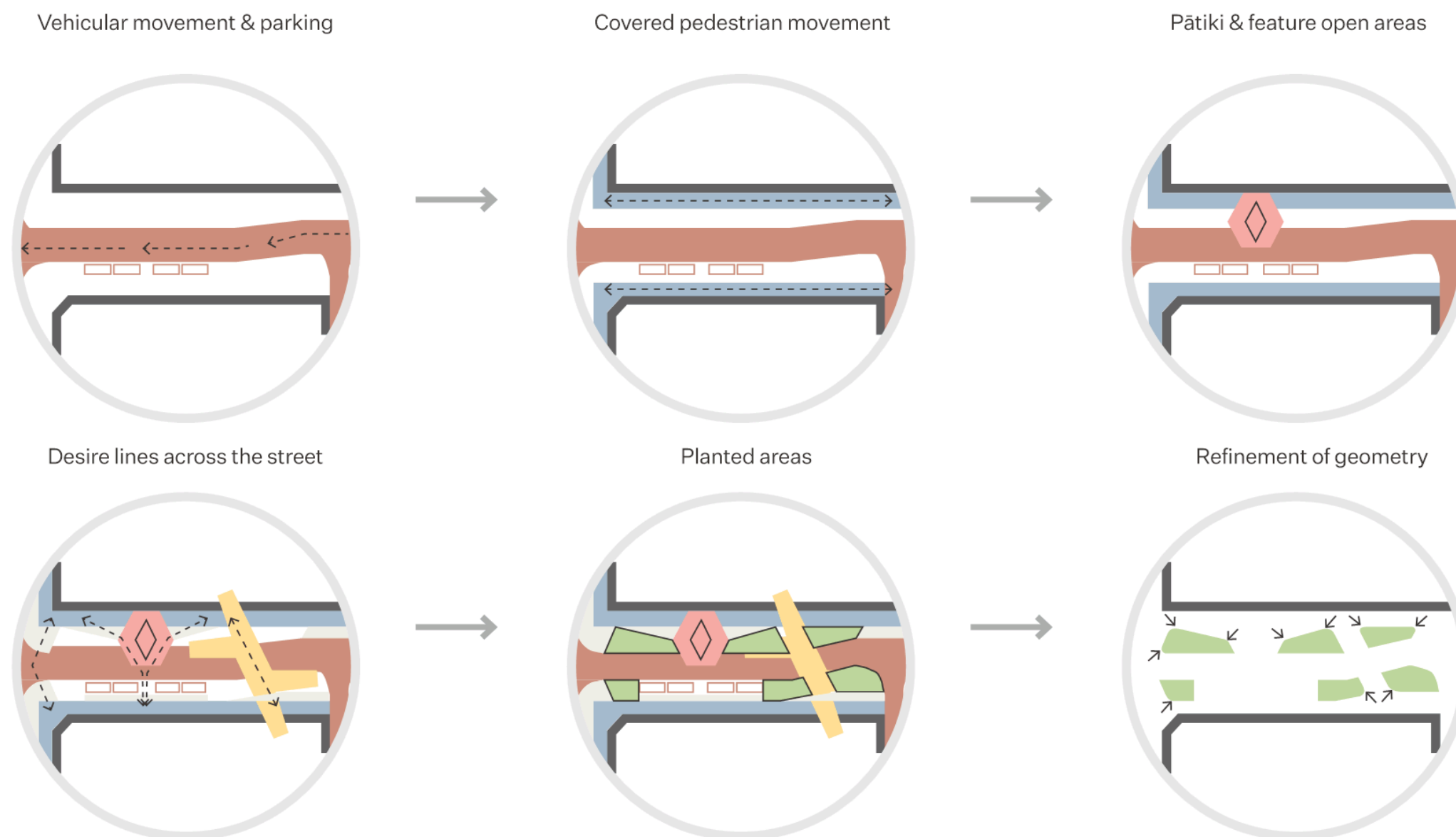
### 2.8.3 Furniture distribution- New Edinburgh Way Block



### 2.8.4 Furniture distribution- Knox Block



## 2.8.5 Planter bed geometry -informing layout / carving out space



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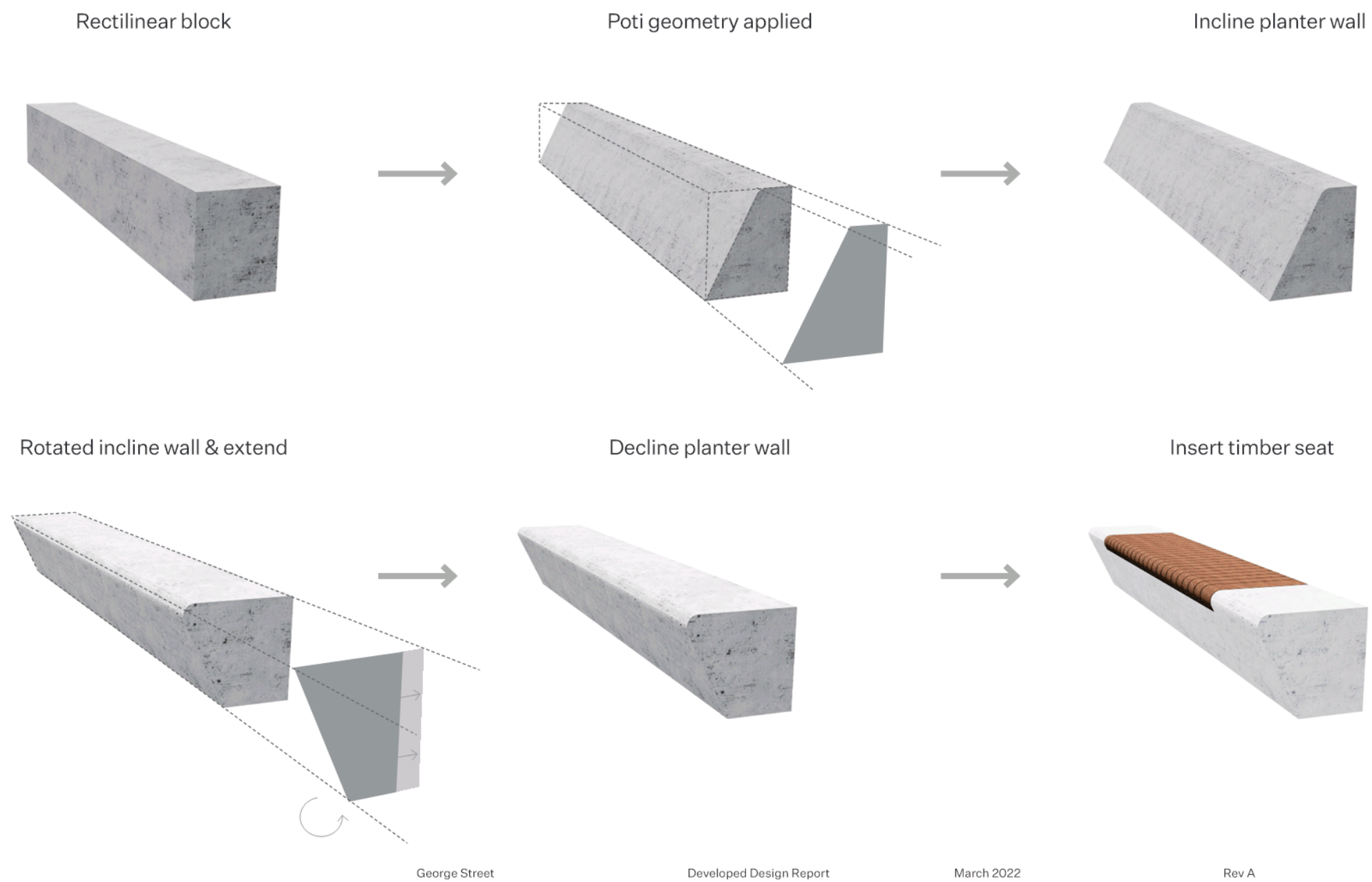
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## 2.8.6 Planter bed geometry-informing components



## 2.8.7 Planter bed geometry examples

Raised garden



Transition garden  
(raised to flush with  
internal crossing)



Flush garden



# Planting

## 2.9 Planting

The three key objectives for the planting are to:

1. Create a verdant “Green Street” that is full of life
2. Provide planting that reflects the natural and cultural heritage of Ōtepoti
3. Arrange the planting so that they frame and enhance the architectural heritage of George Street

In order to achieve these objectives we need to:

- Use plants that connect the town belt with George Street, to attract birds and insects
- Arrange clusters of various sized and shaped planting beds and trees, to create an overall appearance of a verdant “Green Street”
- Use locally sourced native plants that reinforce local ecology, sense of place and are resilient to local conditions
- Employ ecosystem services to treat stormwater, prior to entering the ground water and harbour
- Employ a diverse palette of tree shapes and sizes to align with immediate context (architectural heritage and the grain of the built form) and to produce seasonal interest
- Augment plantings with non-local species that enhance the visual appearance of plantings, so that they can be enjoyed by everyone
- Employ a methodology that is suited to urban plantings; enabling fast close out, robust and low maintenance species and arrangements that won’t interfere with sight-lines, services or pavements



## 2.9.1 Planting - strategy

Ecosystem services are widely defined as the benefits that nature provides humans. Various planting attributes will be designed with to provide ecosystem services, which are aligned with the Kāi Tahu values and project objectives.

### Ecosystem services

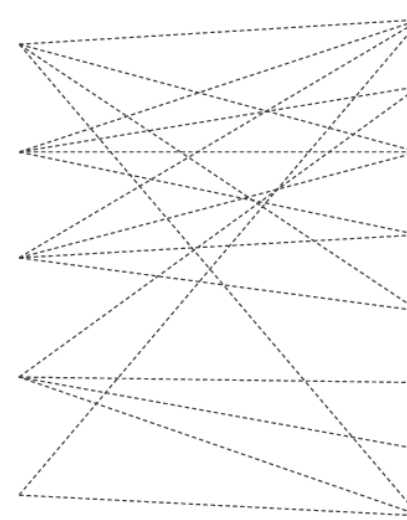
**Whakapapa**  
Identity + sense of place

**Taiao**  
Ecology + wildlife

**Rerehua**  
Beauty + wellbeing

**Mahi**  
Function + sustainability

**Mahika kai**  
Natures resource



### Planting attributes

**Local ecosystem**

**Water purification**

**Flowering**

**Fruiting**

**Foliage**

**Evergreen**

**Deciduous**

**Productive use**

### Planting attributes



#### Local ecosystem

Plants native to the Dunedin ecosystem will reflect local identity, have traditional uses for Māori and Kāi Tahu, be resilient to the environmental conditions and provide natural habitats for native wildlife.



#### Water purification

Use specific plants in rain gardens that function to polish the water from the pavements, prior to releasing into the groundwater and harbour.



#### Flowering

Use a variety of flowering plants to add beauty and vibrancy along the streets. Express seasonal change and provide for plant pollination, habitats and food sources for birds and insects.



#### Berries and seeds

Encourage wildlife corridors to form with the town belt, pulling nature through the city by using some fruit and seed producing plants, which birds and insects will flourish upon.



#### Foliage

Use a range of different shaped and textured plants to compose interesting and appealing garden mixes, creating variety along the streets.



#### Evergreen

A high proportion of evergreen plants will ensure a full foliage cover all year round.



#### Deciduous

Locate deciduous trees to maximise urban comfort by providing summer shade and winter sun. Choreograph the timing of autumn leaves for a prolonged seasonal display.



#### Productive use

Include plants that provide mahika kai and rokoa values, for uses such as food, craft and medicine.



## 2.9.2 Planting - concept





### A 'seasonal symphony'

The drama of each season can be related to the four movements of a symphony. The planting concept for the Retail Quarter will carefully select plants and combine them in mixes to create a choreographed dance and display of flowering, fruiting and coloured foliage. This will provide a continual change throughout the year and along the streets. Like a backdrop, a high proportion of evergreen plants will ensure a permanent planting presence.




The planting selections will consider each plants temporal cycles to prolong and emphasise the effect of each season. This will provide an abundance of ecological habitats and corridors for birds and insects, productive value for people to engage with and a healthy, verdant 'Green Street' that is full of life.

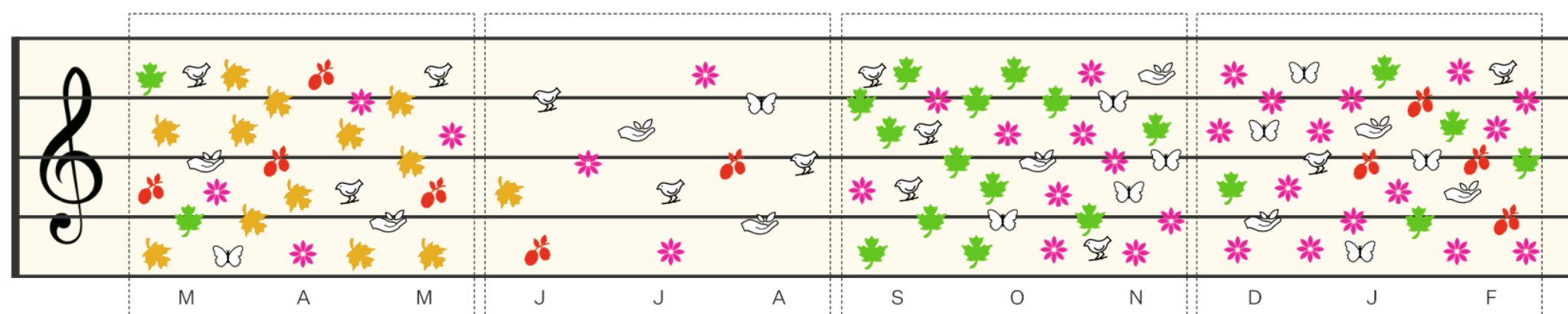
### LEGEND

#### Plant activity

-  Flowering
-  Berries and seeds
-  Tree foliage (Green)
-  Tree foliage (Coloured)

#### Human and wildlife activity

-  Productive
-  Birds
-  Insects



**Movement 1: Autumn**  
Allegro: Brisk and lively

**Movement 2: Winter**  
Adagio: Slow and lyrical

**Movement 3: Spring**  
Minuet/scherzo: Dancy

**Movement 4: Summer**  
Rondo: Rollicking



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## 2.9.3 Planting layout

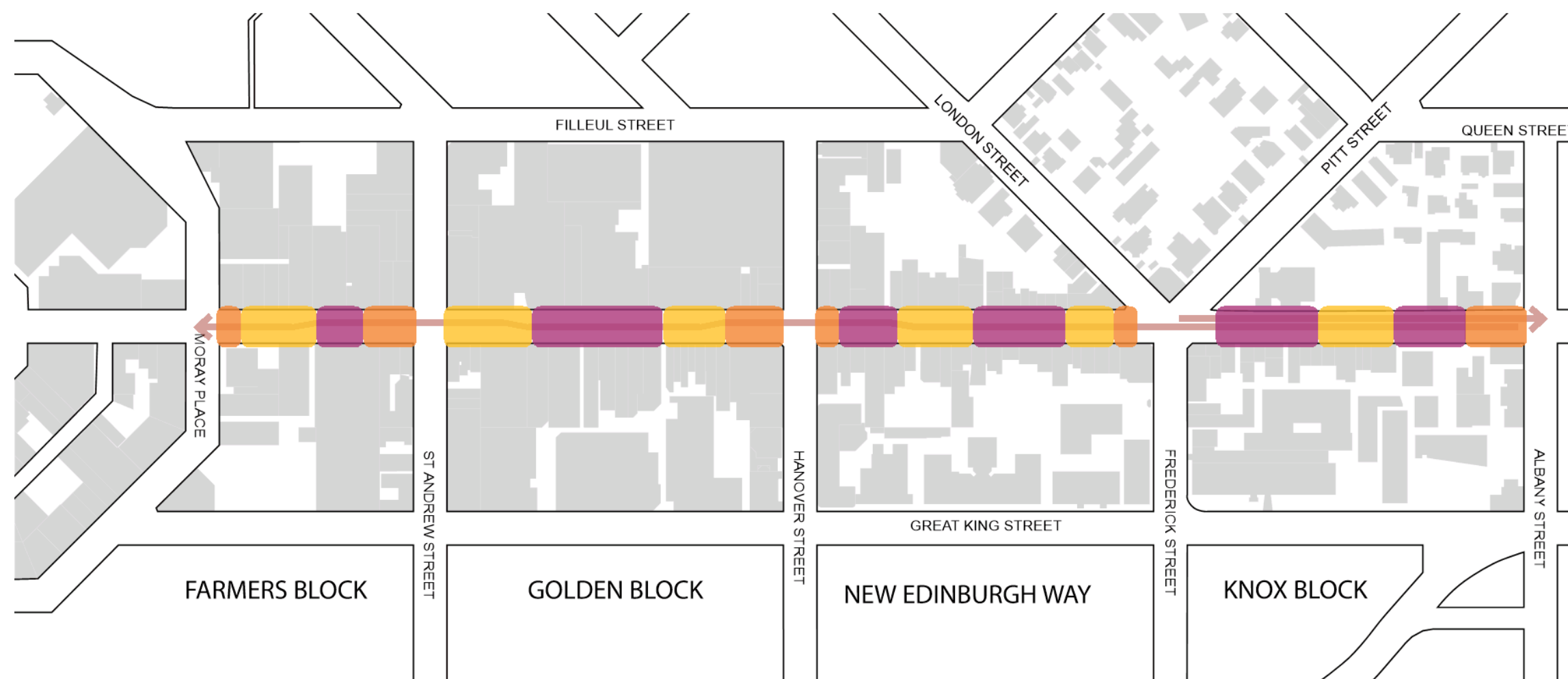
### Planting Layout Concept

Street trees and planting are proposed to reinforce the general spatial concept of George Street. The layout has three parts, thresholds at the street entrances, activity areas where programmed spaces are located, and clear zones where the sense of openness is intended.

Several lines of trees are aligned along the street to reduce visual clutter but to also help make the street look full.

### LEGEND

-  Vehicular route
-  Thresholds  
Trees and planting frame the street entrances and provide enclosure
-  Informal social spaces  
Trees and planting provide a beautiful and attractive setting for social gathering spaces
-  Clear zones  
Mid block areas where programmed activities are located, limited planting and trees are proposed. Views to and from heritage façades are maintained



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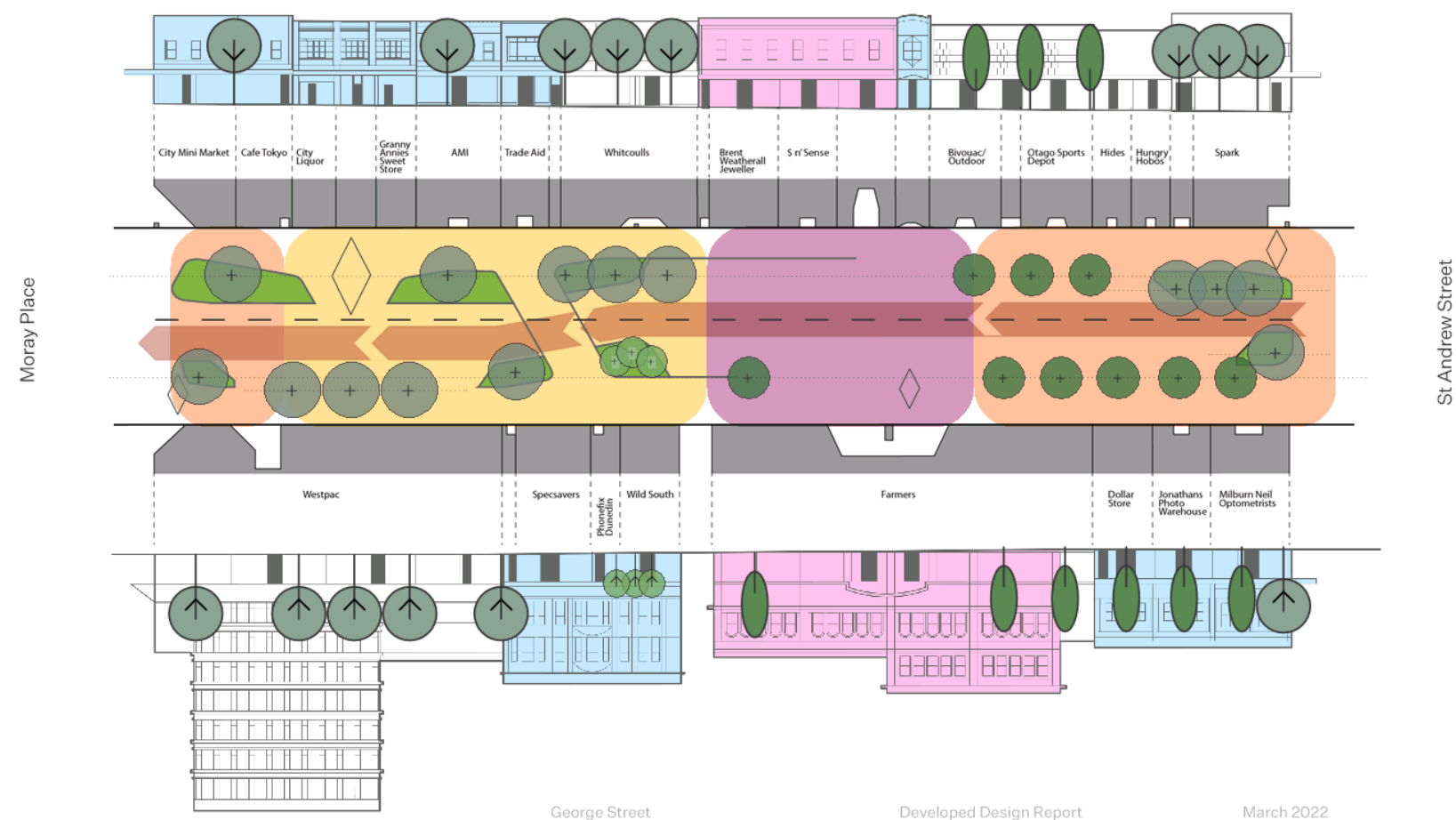
## 2.9.4 Planting layout - Farmers Block



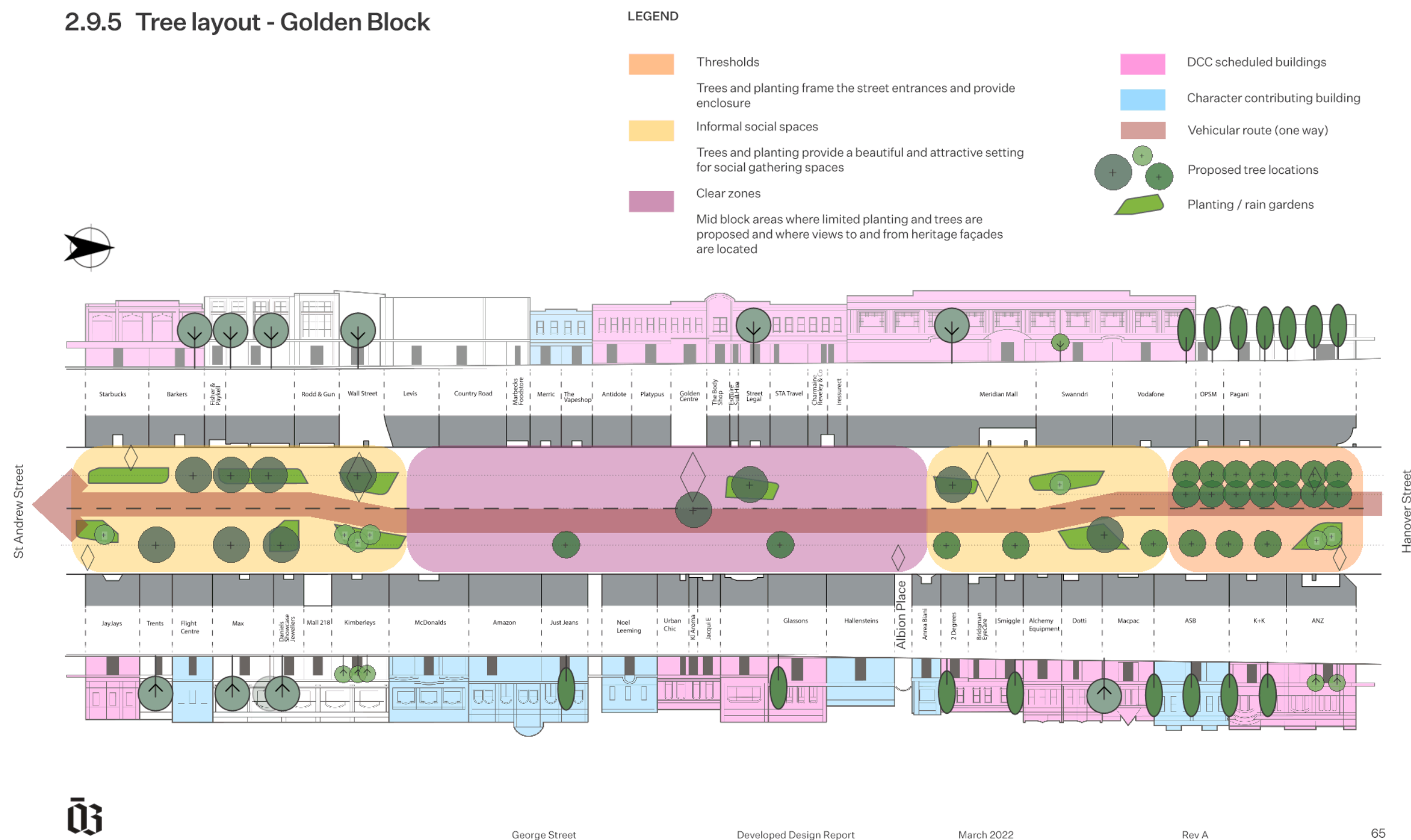
### LEGEND

- Thresholds  
Trees and planting frame the street entrances and provide enclosure
- Informal social spaces  
Trees and planting provide a beautiful and attractive setting for social gathering spaces
- Clear zones  
Mid block areas where limited planting and trees are proposed and where views to and from heritage façades are located

- DCC scheduled buildings
- Character contributing building
- Vehicular route (one way)
- + Proposed tree locations
- Planting / rain gardens



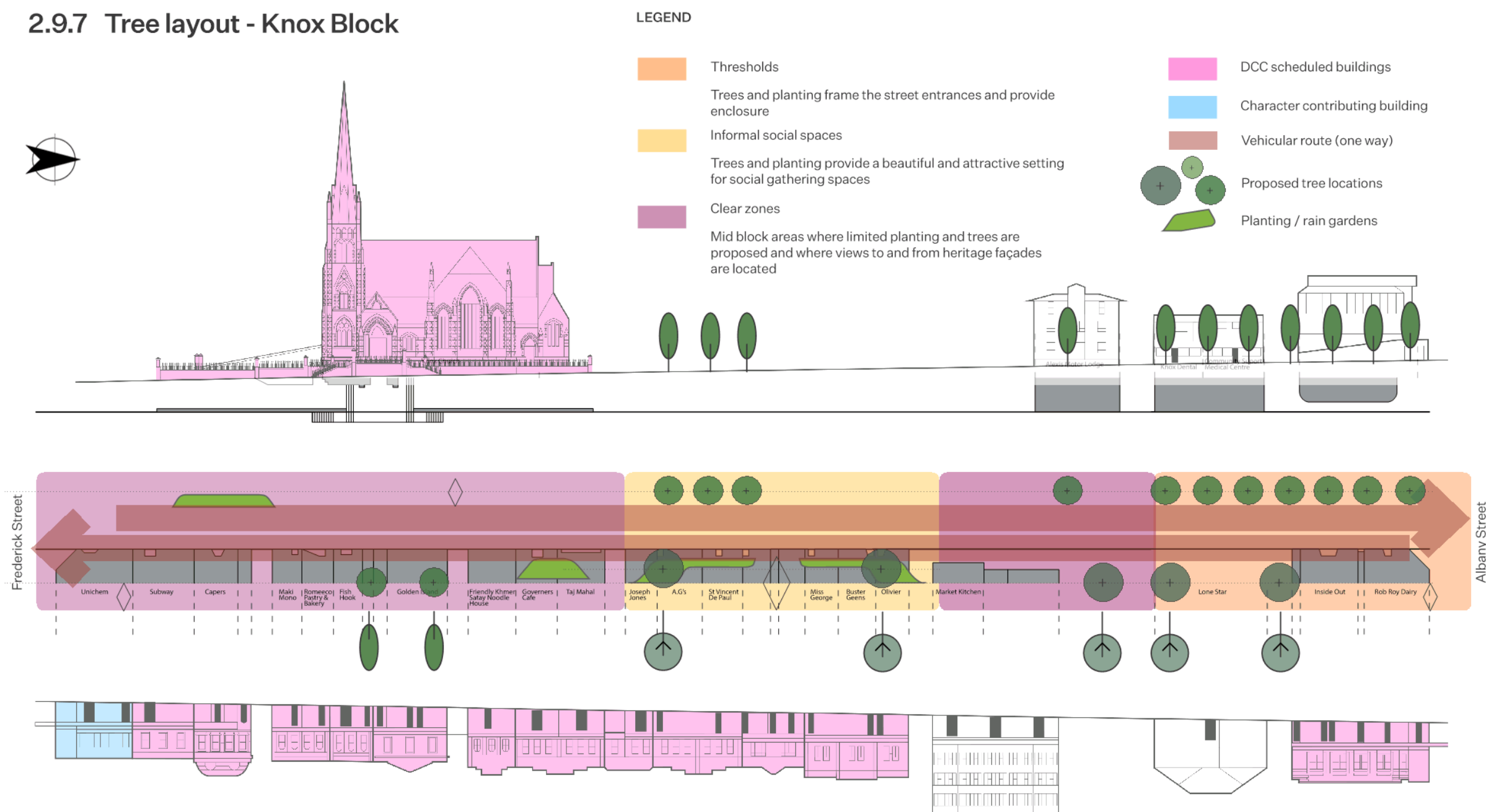
## 2.9.5 Tree layout - Golden Block



## 2.9.6 Tree layout - New Edinburgh Way



## 2.9.7 Tree layout - Knox Block



# Stormwater management

## 2.10 Stormwater management

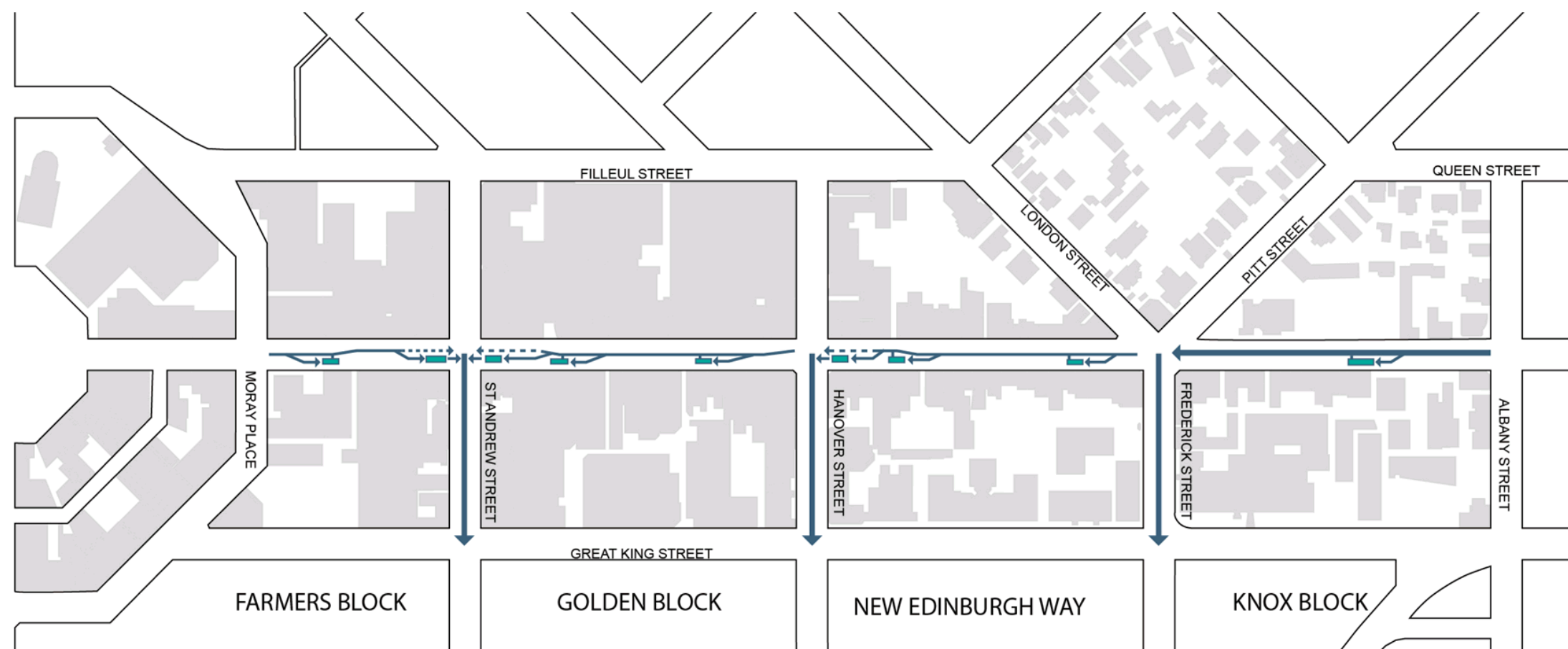
Urban stormwater run-off can have adverse effects on the drainage, ecological, cultural, recreational, landscape and heritage values of waterways. Discharge of untreated stormwater to groundwater can also affect the quality of shallow groundwater.

Rain gardens are engineered gardens designed to harness the natural ability of vegetation and soils to treat stormwater. Treatment occurs through sedimentation, filtration, adsorption and uptake by vegetation. They can be used to reduce the effects of stormwater volumes, peak flows and contaminant loads on waterways.

This project aim is to achieve for full road and footpath coverage within the corridor being discharged to rain gardens.

### LEGEND

- Location of rain gardens
- Overland flow path and direction of flow



# Lighting

## 2.11 Lighting strategy

The lighting strategy is to provide V3 lighting category. This is primarily for safety, to ensure all objects can be easily seen at night. A colour temperature of 4000K along the street will enable good colour rendition and facial recognition is achieved in all locations. In certain locations, a higher colour temperature and luminance levels may be applied to increase visibility and achieve a more festive atmosphere.

Light poles with high performance and long life LED luminaires set at 10m high at nominal 20-25m spacings will light the carriageway and footpaths under awnings.

Lighting proposed is in two categories:

1. Functional lighting, in the form of poles along the street providing levels of light that is welcoming and safe, facial recognition and visual access across the street is achieved
2. Feature lighting, providing an attractive and dynamic night-time atmosphere which will highlight specific areas such as the pātiki, ground plane or planter lighting to emphasise movement, and catenary lighting above



Functional

WE - EF VFL Luminaire with 1.0m outreach arm on slimline pole in Tauranga.  
*Image source - Jasmax*



Catenary

Overhead catenary lighting system.  
*Image source - Ronstan*

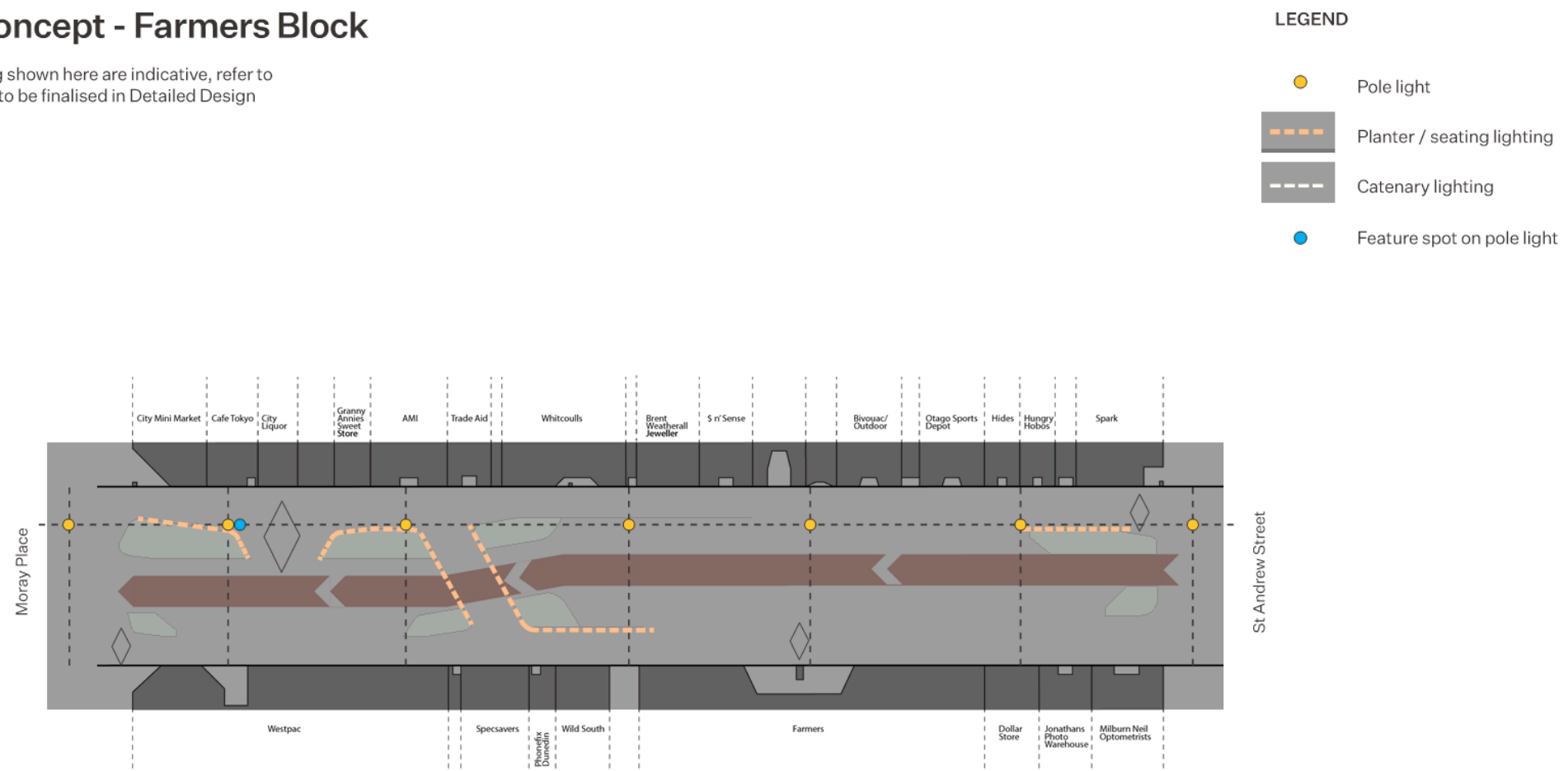


Feature

In ground lighting, Cathedral's Apse, Square, Tortosa, Spain

## 2.11.1 Lighting concept - Farmers Block

Note: light poles and feature lighting shown here are indicative, refer to technical drawings set for locations to be finalised in Detailed Design



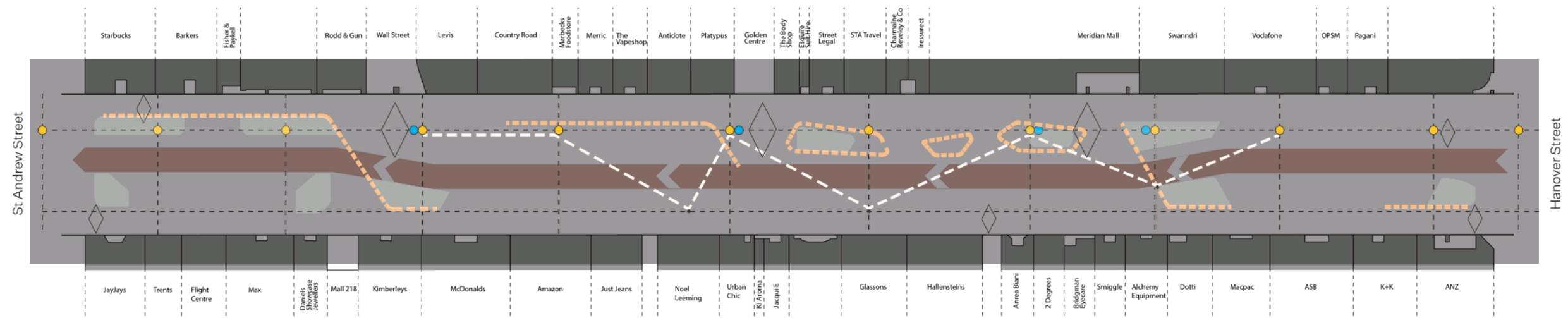
## 2.11.2 Lighting concept - Golden Block

Note: light poles and feature lighting shown here are indicative, refer to technical drawings set for locations to be finalised in Detailed Design



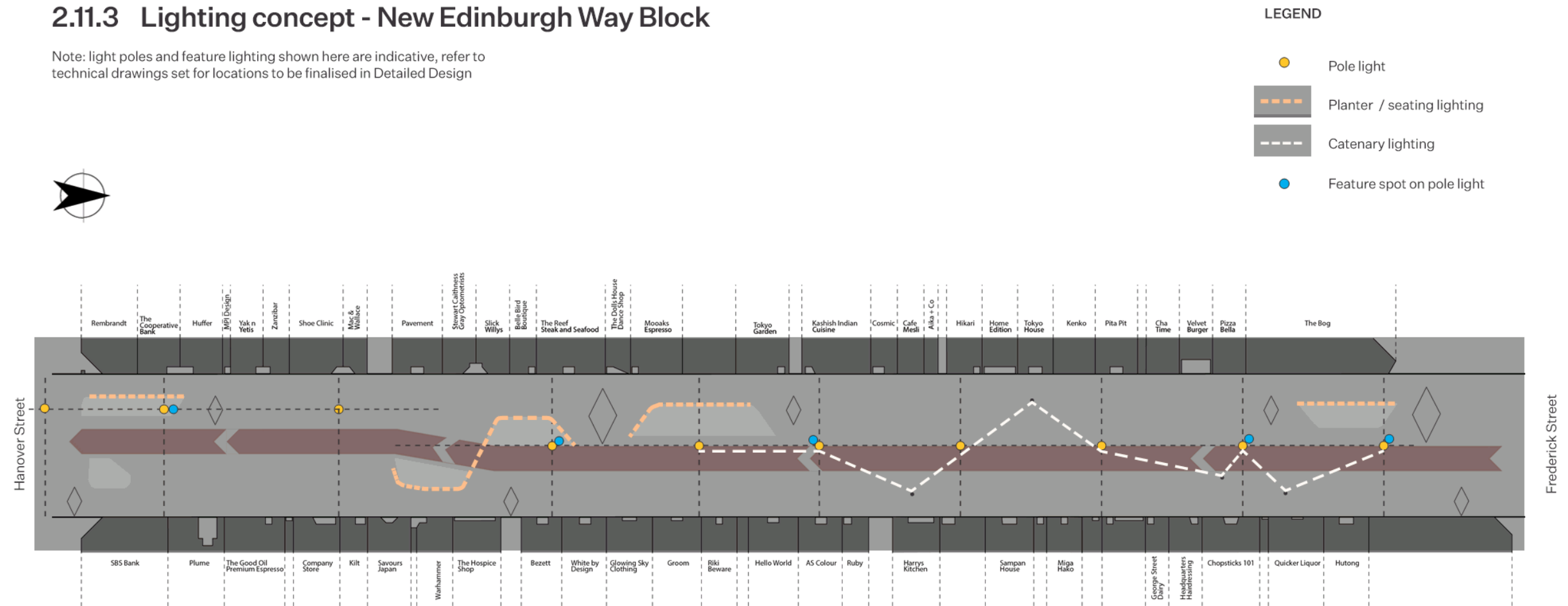
### LEGEND

- Pole light
- Planter / seating lighting
- Catenary lighting
- Feature spot on pole light



## 2.11.3 Lighting concept - New Edinburgh Way Block

Note: light poles and feature lighting shown here are indicative, refer to technical drawings set for locations to be finalised in Detailed Design







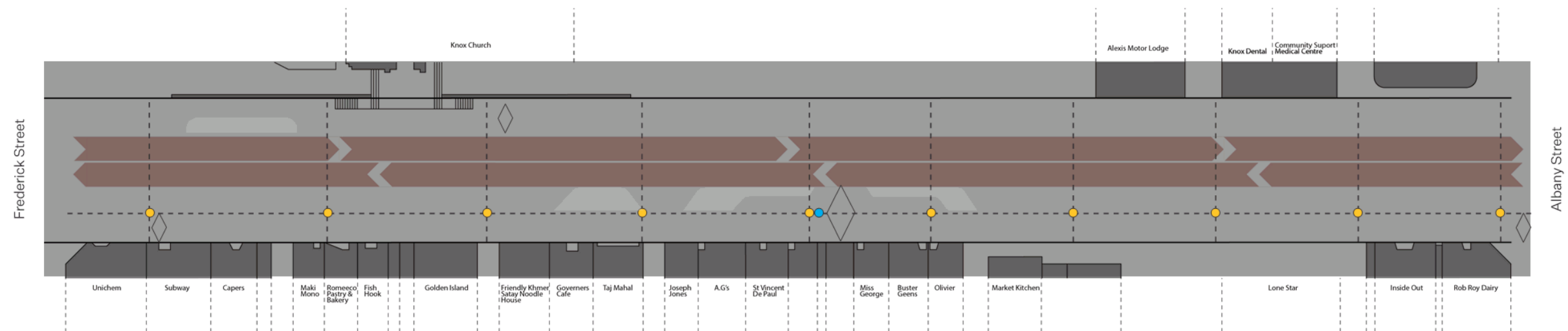
## 2.11.4 Lighting concept - Knox Block

Note: light poles and feature lighting shown here are indicative, refer to technical drawings set for locations to be finalised in Detailed Design



### LEGEND

-  Pole light
-  Planter / seating lighting
-  Catenary lighting
-  Feature spot on pole light



# Play

## 2.12 Play strategy

The play strategy for George Street is to provide a diversity of informal and formal play opportunities along the street.

The focus will be the play space located in the Golden Block between the entrances of the malls. It is located here to provide an opportunity for children to have fun in the city while out with their parents and guardians.

It is true that play is not just for kids and this play space is also for adults and therefore the structures and activities proposed are suitable for all ages. Consideration has been made in terms of safety standards and setbacks, soft-fall materials and fall distances.

Informal play is considered along the street, the planters themselves offer opportunities to 'walk the edge' as they undulate up and down the street. Stepping stones and boulders are proposed as alternative ways to cross the planters in various locations.



Informal play - elements throughout the street



Play surface treatments- soft fall



Play space -programmed play space within the Golden Block

## 2.12.1 Play activities

Play in George will consist of a number of activities that can be considered passive or active in nature. The approach to play will allow for as many of these activities as possible such that a dynamic and rich opportunity of play is accessible for ages and abilities within the street. Below are some of the possible passive and active play activities for George Street:

### Active activities

- Climbing - on obstacles such as planter edges or on cargo nets
- Swinging - from dedicated elements
- Balancing - on boulders, beams and ledges
- Running - between activities
- Jumping - on spring mats and between obstacles



Active climbing



Active balancing



Passive lounging



Passive listening

## 2.12.2 Golden Block play space

The concept for the Golden Block play space is inspired from the kareao (or supplejack) vine which according to mana whenua was common in the dense bush that occupied the foreshore of Ōtepoti before the city was settled. The intertwining vines formed a near impenetrable barrier within the forest.

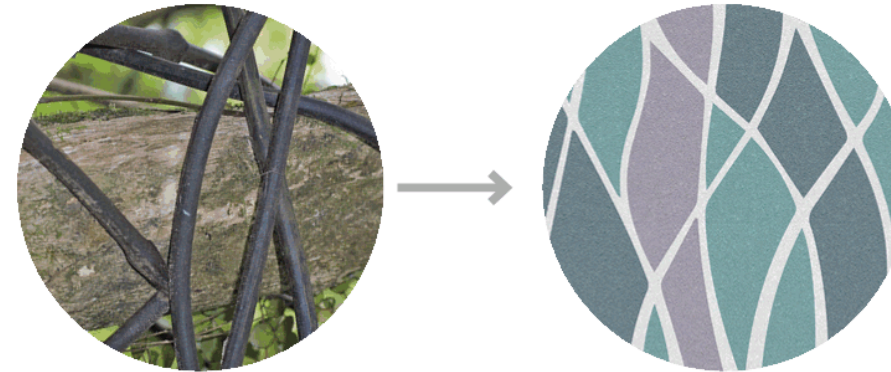
The play concept is derived from forging a pathway through the kareao labyrinth.

The three key components of the play space are:

- Ground plane - surface treatment is an abstraction of the complex lattice of kareao vines
- Journey - a playful element that is multi dimensional enables navigation through the space
- Obstacles - episodic play elements that occur along the journey that are conquered as you pass through

Ground plane

Kareao vines informing the geometry of the ground plane



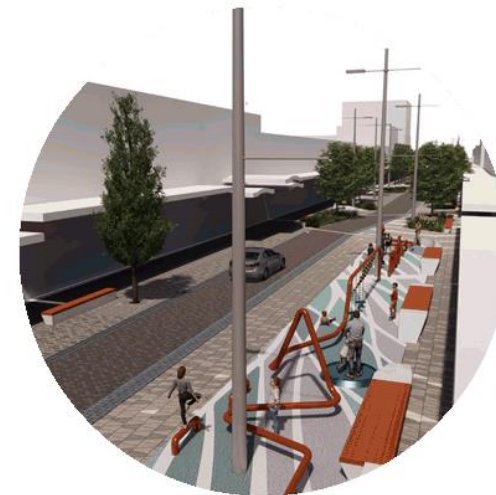
Journey



Obstacles



### 2.12.3 Golden Block play space views



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# Street Programming

## 3.0

### 3.1 Street programming

As Dunedin's premier retail street George Street needs to deliver value at all levels for the whole community and their guests. Attracting people to spend time in the street will contribute to the economic performance of the businesses that line the street and promote activities that will keep the street occupied and feeling safe.

Activities in the buildings that line the street will be reflected in the layout of the street - to frame them and enhance views to reinforce identity. Crossings and sitting areas will be associated with natural movements and sunny places to stop and watch the world go by, perform and play. Areas where food and entertainment is clustered will enable outdoor dining to extend businesses and enliven the street.

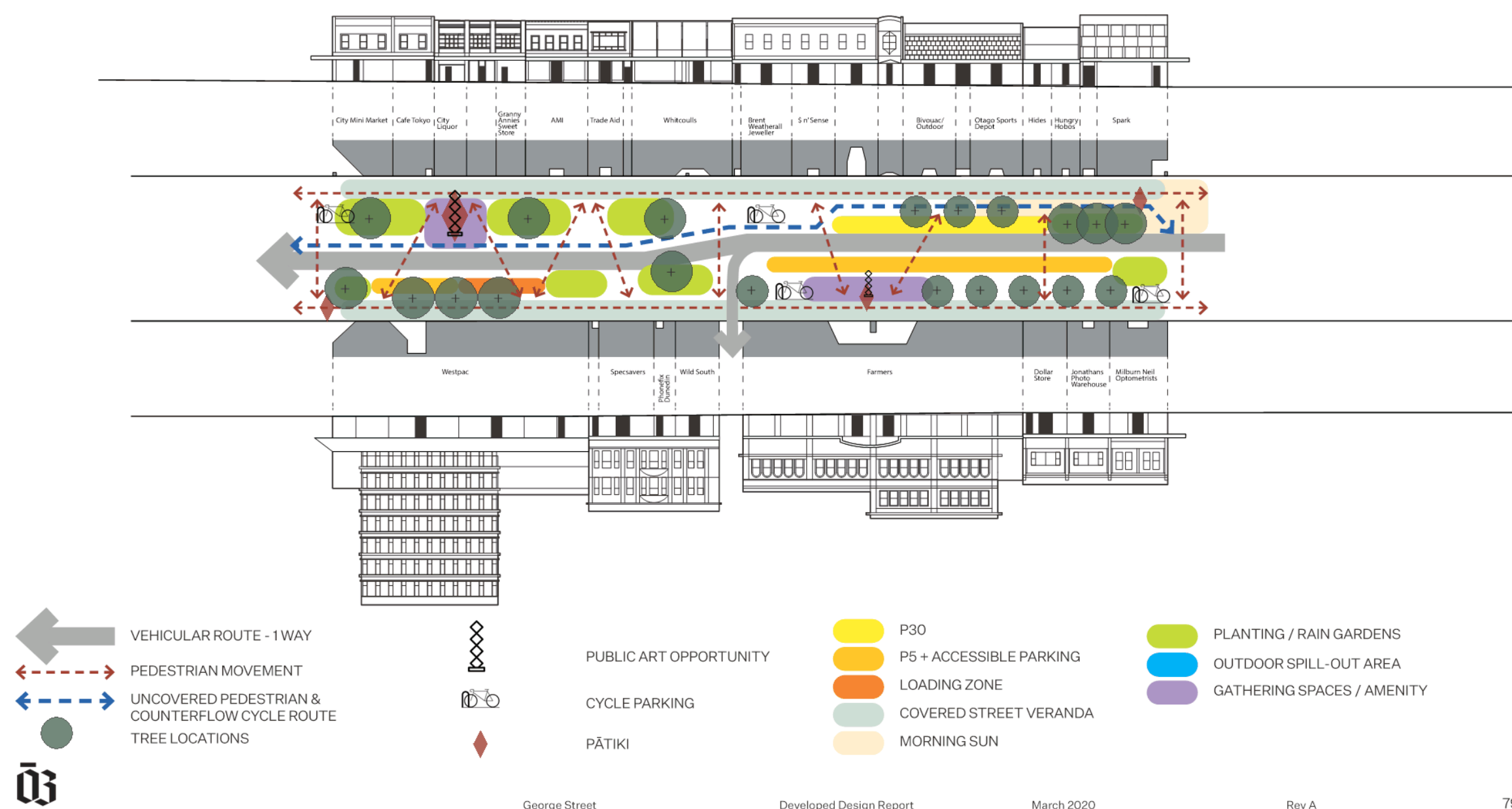
The following pages explore how the street is 'programmed' to ensure a balance is achieved between movement and destination social space.

#### Considerations

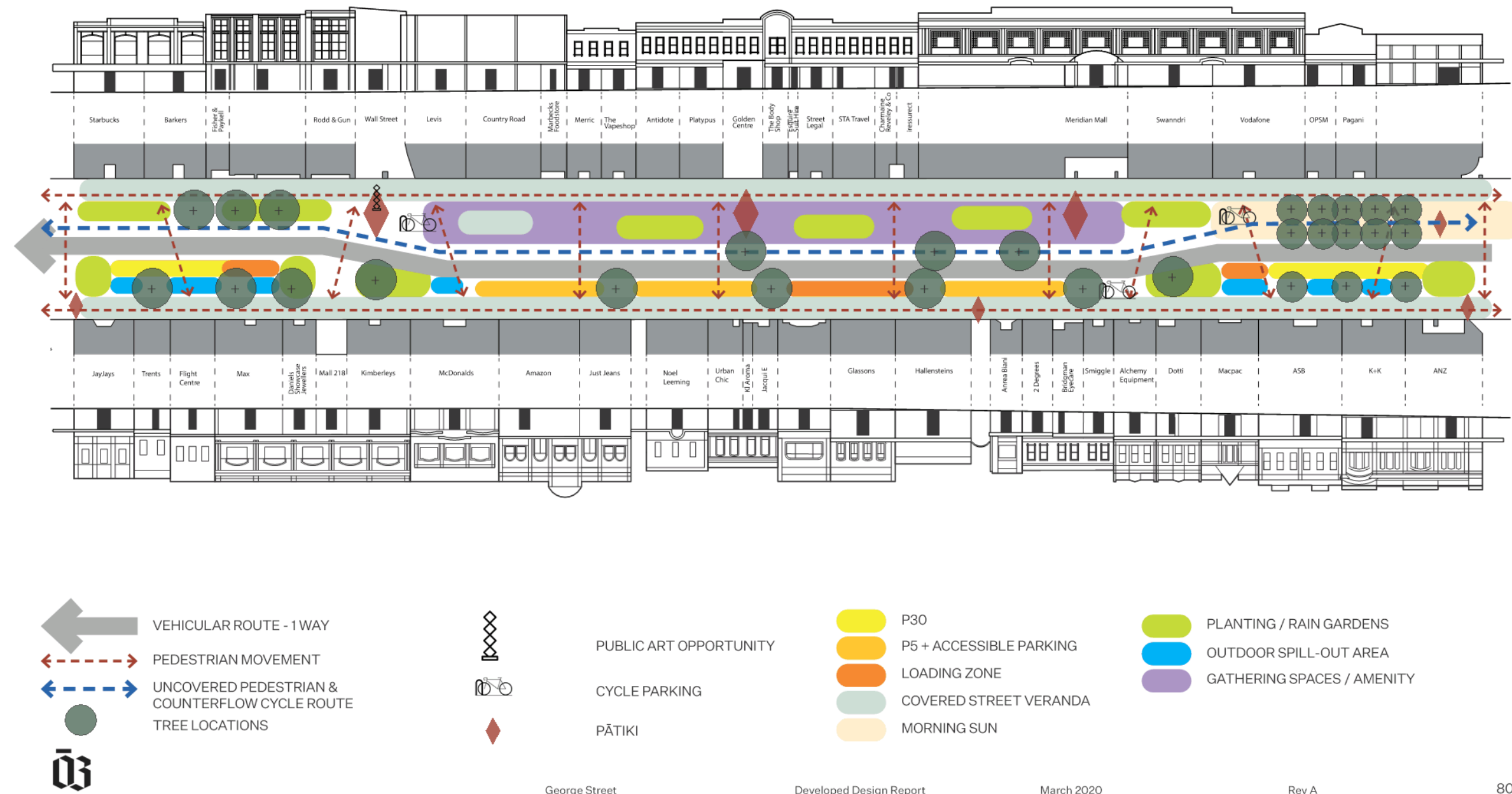
- Shade and sun access to provide warmth and shelter where its needed
- Heritage and character buildings - to frame and protect views of façades
- Location of trees and planting
- Location of public art installations
- Location of Pātiki and other breakout spaces
- Entry points into buildings where people will be moving
- Desire lines for pedestrians crossing
- Vehicle movement, parking and loading
- Adjacent use (food and beverage, retail, commercial)
- Access to lane-ways and service routes
- Cycle routes and parking stands
- Placement of street furniture



## 3.2 Farmers Block Programme



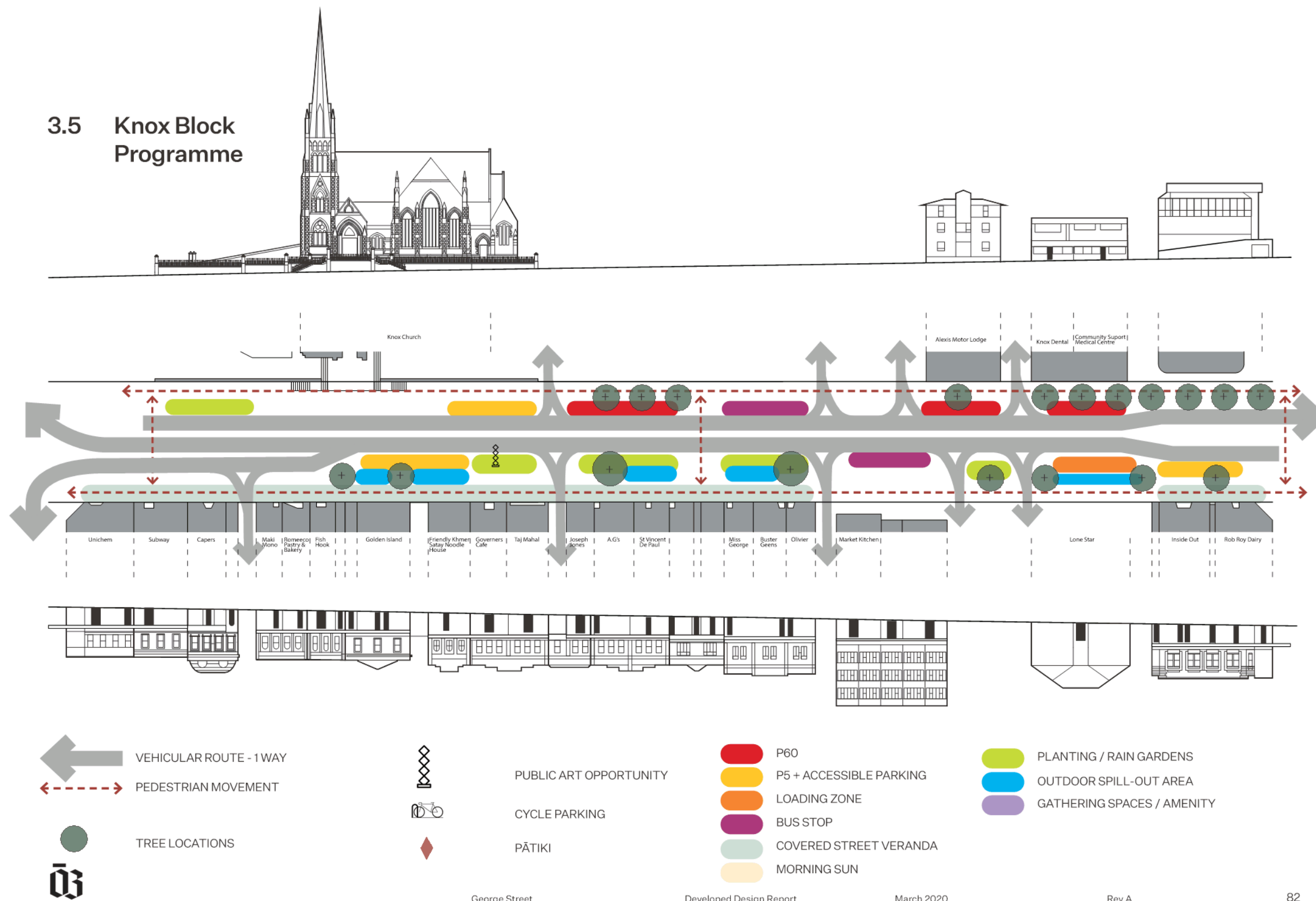
### 3.3 Golden Block Programme



### 3.4 New Edinburgh Way Programme



### 3.5 Knox Block Programme



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# Design Drawings

## 4.0 Design Drawings

This section provides rendered street views, illustrative plans and axonometric drawings of the Developed Designs for George Street.

These drawings are to be read in conjunction with the technical drawings which provide more detailed set-outs and information on tree, planting, features and furniture placements.

Paving geometry is to be further fine tuned during detailed design.





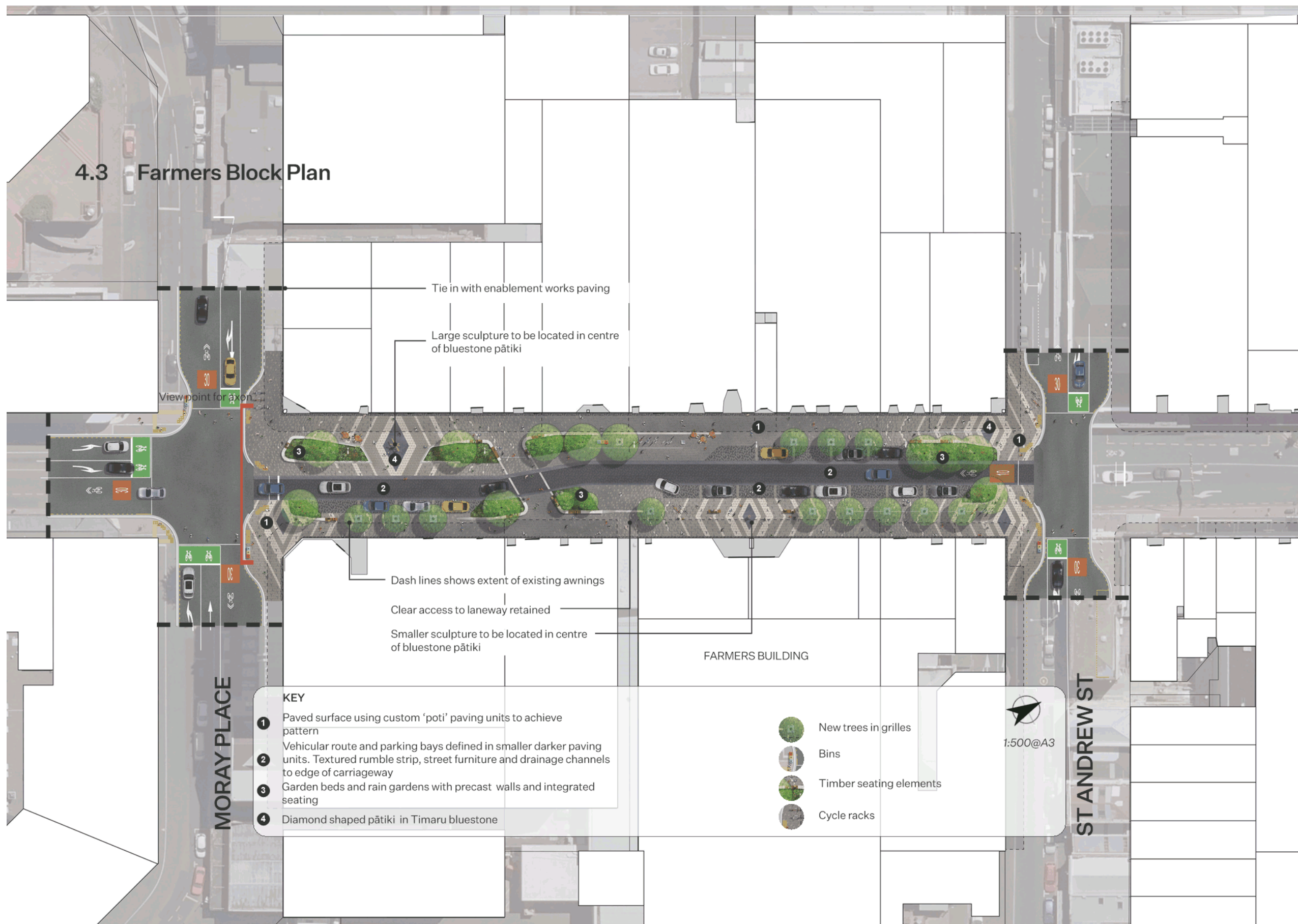
4.1 New Edinburgh Way view





4.1 Golden Block view





## 4.4 Farmers Block Axon



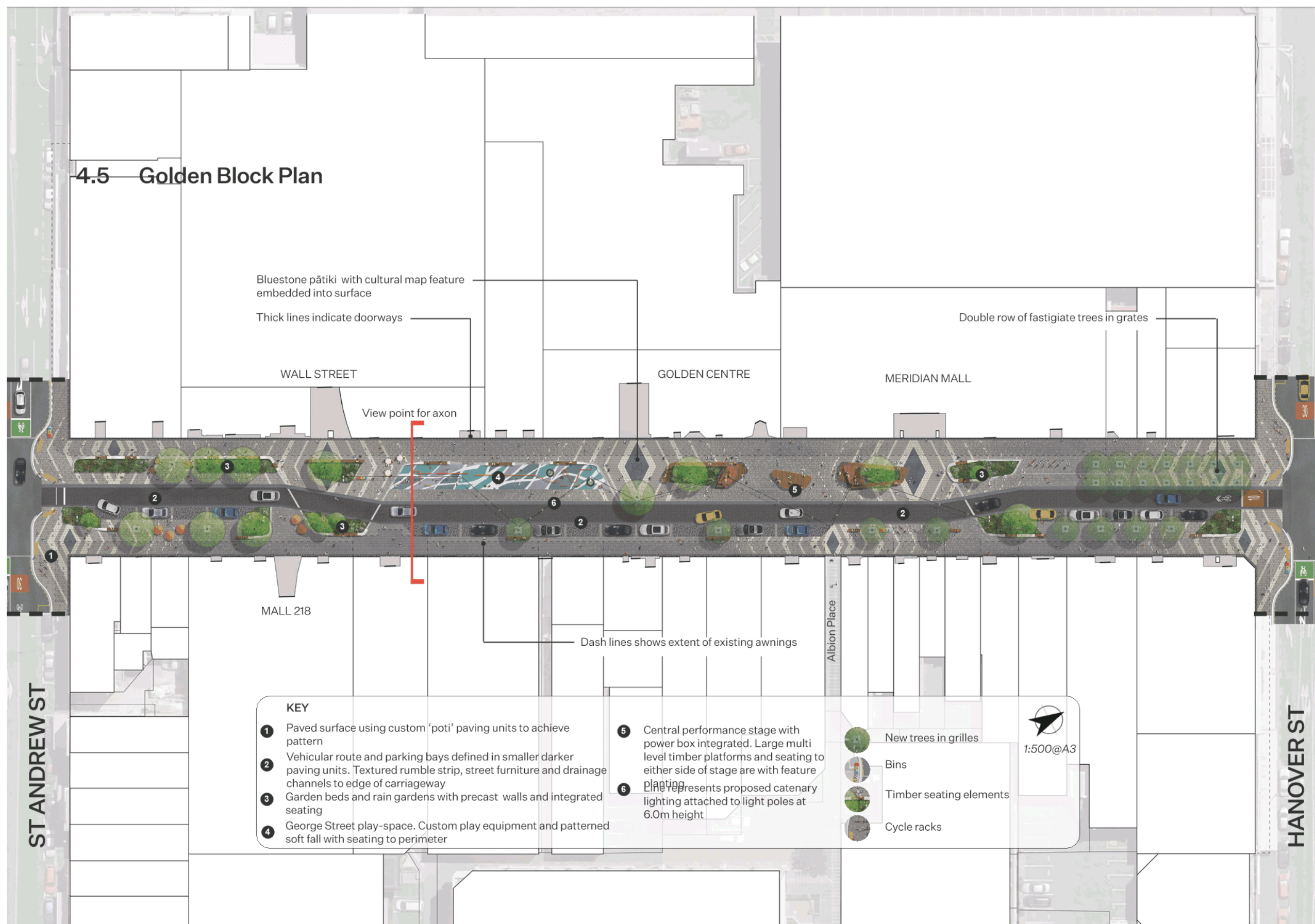
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## 4.6 Golden Block Axon



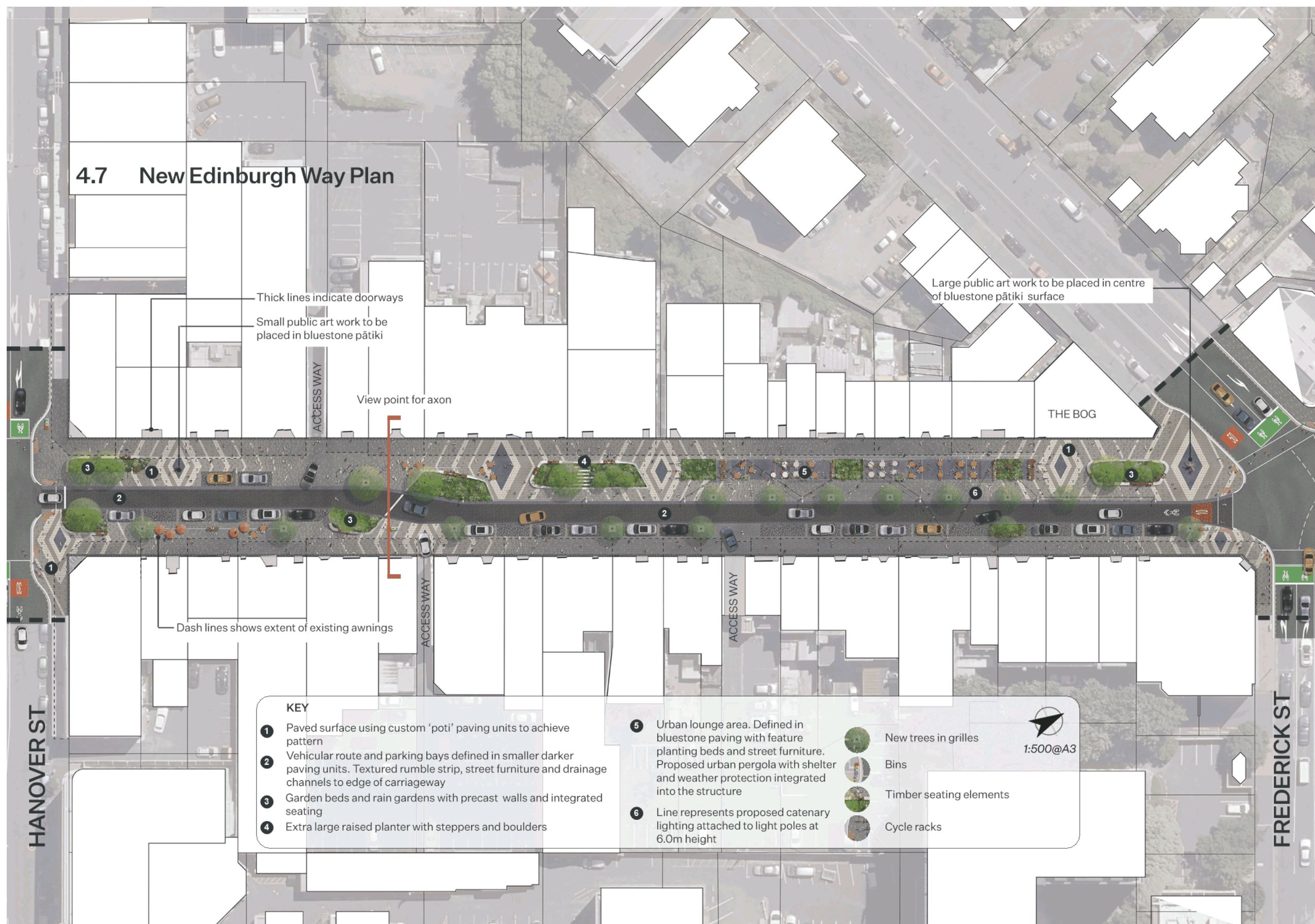
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## 4.8 New Edinburgh Way Axon



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## 4.10 Knox Block Axon



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# Project Components

## 5.0

### 5.1 Introduction

This section of the report provides drawings and descriptions of the key components within the design for George Street. It covers the proposed paving materials, infrastructure / drainage, street furniture and planting. Key notes are cross referenced with the technical drawing set in section 6 of this report.

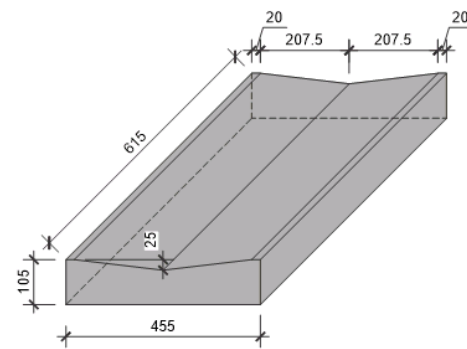


## 5.2 Surface material nominations

<b>AC ASPHALT FOOTPATH</b>	<b>P01 CONCRETE UNIT PAVERS MOVEMENT ROUTE</b>	<b>P02 CONCRETE PAVERS MAKE UP STRIP</b>	<b>P03 CONCRETE PAVERS INFRASTRUCTURE STRIP</b>	<b>P04 BLUESTONE PAVING PATAKI</b>	<b>P05 BLUESTONE PAVING RUMBLE STRIP</b>
	Firth Piazza Pavers	Firth Holland 'Sett' Pavers	Firth Holland 'Sett' Pavers	Timaru Bluestone	Timaru Bluestone
	SIZE 397 x 197 x 80mm COLOUR Volcanic Ash FINISH Bush Hammered Honed	SIZE 197 x 97 x 80mm COLOUR Black Sands FINISH Volcanic Ask Bush Hammered Honed	SIZE 197 x 97 x 80mm COLOUR Black Sands FINISH Volcanic Ask Bush Hammered Honed	SIZE Varies: 200mm Wide x 80mm Thick COLOUR Natural FINISH First Rub	SIZE 300 x 150 x 60mm COLOUR Natural FINISH Split Face
<b>P06 CONCRETE UNIT PAVING VEHICLE CORRIDOR</b>	<b>P07 CONCRETE UNIT PAVING PARKING BAYS</b>	<b>POTI-1 POTI PAVER CUSTOM PAVING UNIT</b>			
Concrete unit paver	Concrete unit paver				
SIZE 200 x 100 x 80mm COLOUR Dark Grey FINISH Black Sands	SIZE 200 x 100 x 80mm COLOUR Mid Grey FINISH Light Grey Bush Hammered Honed	COLOUR 'Dunedin Light' 'Dunedin Mid' 'Dunedin Dark' 'Dunedin Gold' Bush Hammered Honed			



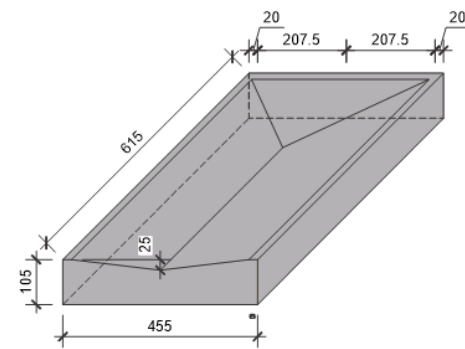
## 5.3 Street infrastructure nominations



**D-01 BASALT DISH CHANNEL**

Timaru Bluestone

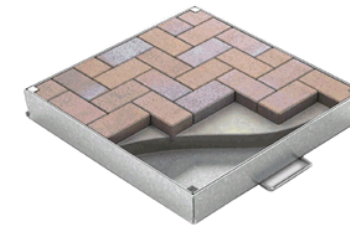
SIZE 455x615x105mm  
COLOUR Natural  
FINISH First Rub



**D-02 BASALT DISH CHANNEL -  
END UNIT**

Timaru Bluestone

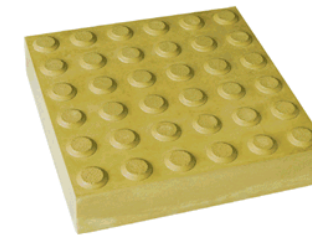
SIZE 455x615x105mm  
COLOUR Natural  
FINISH First Rub



**INFILL SERVICE LIDS**

MATERIAL S/S (given proximity to coast)  
DIMENSIONS Varies depending on utility  
INFILL Infilled with adjacent material  
TYPE Wundercover (or similar)

- Coordination with utility providers and DCC required to clearly identify service cover type and requirements



**TACTILE GROUND SURFACE  
INDICATORS**

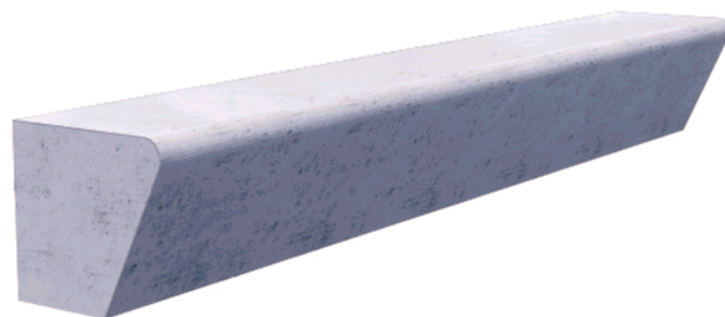
DIMENSIONS 300x300x80/60mm  
COLOUR Yellow  
TYPE Precast concrete tactile paver combination of warning pavers (circles) and directional (elongated bars) depending on location

- To meet NZ standards

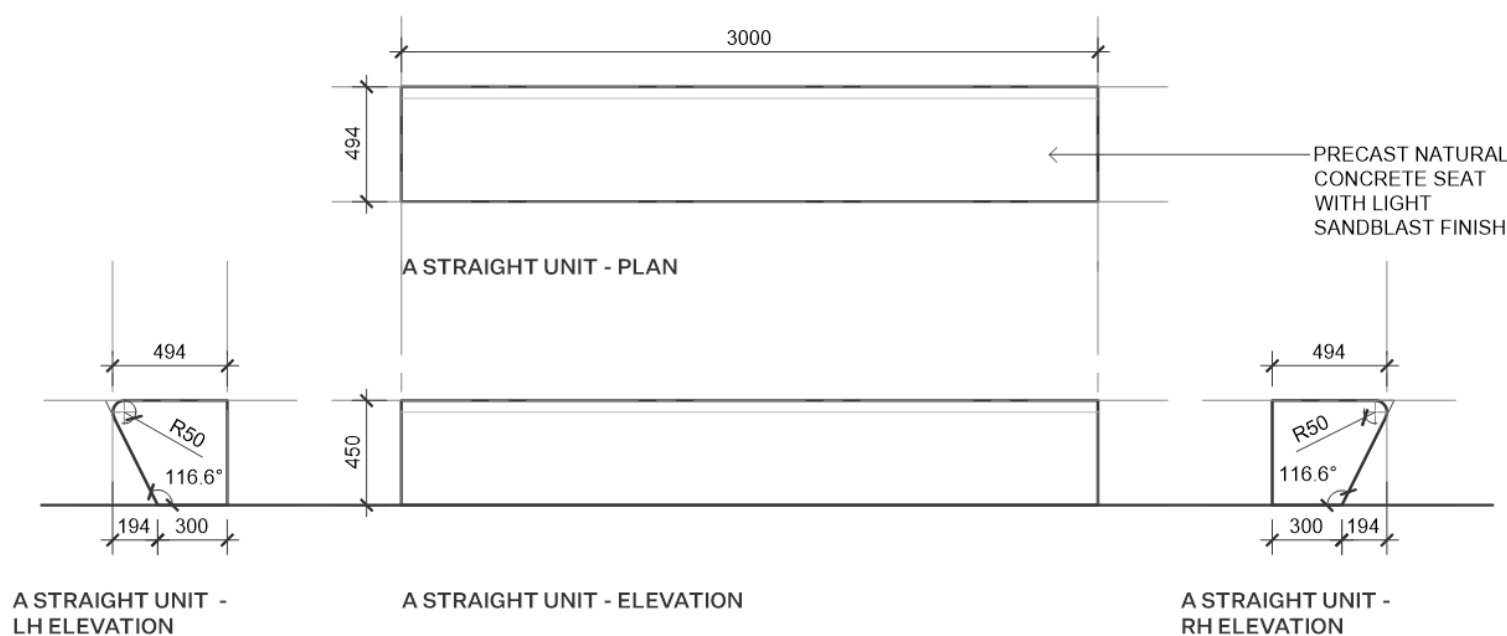
## 5.4 Furniture - precast modules

### PROFILE A - STRAIGHT UNIT

3.0m long raised concrete precast unit to form edging to garden beds with wide flat top. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.



PROFILE A STRAIGHT - RENDER

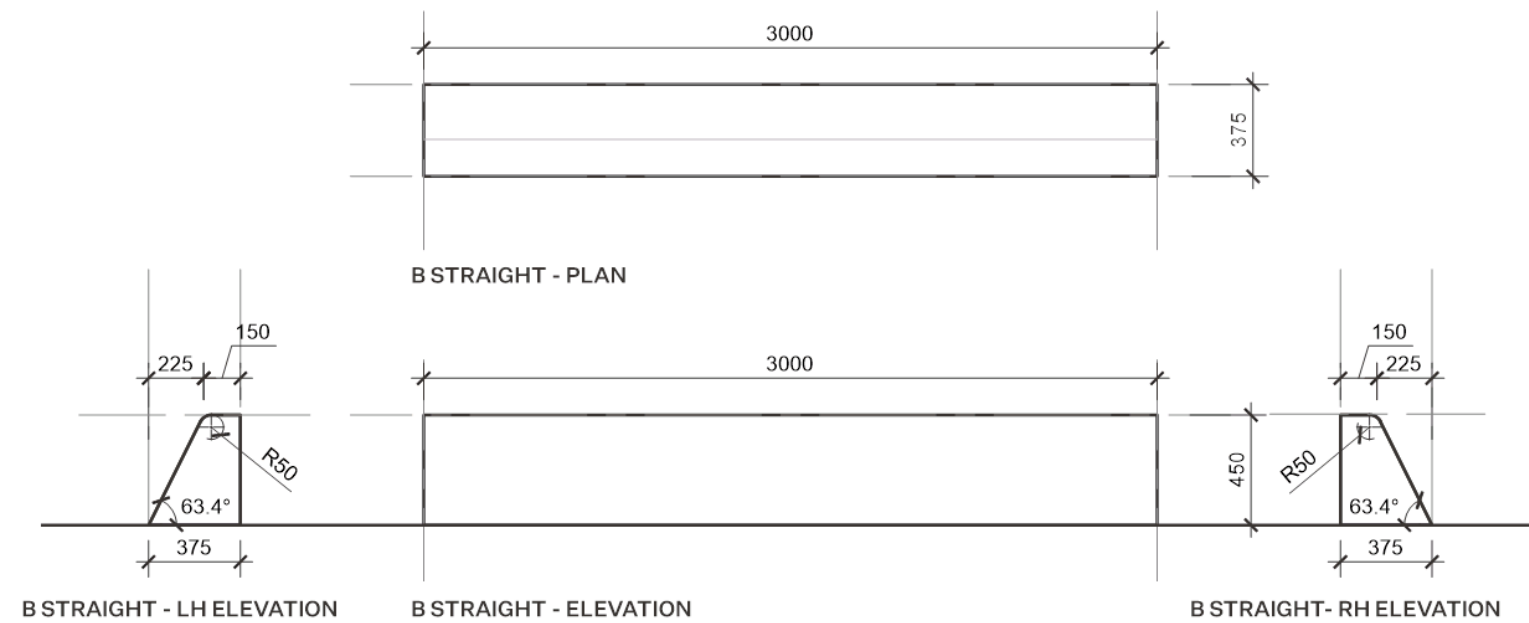


#### PROFILE B - STRAIGHT UNIT

3.0m long raised concrete precast unit to form edging to garden beds with narrow flat top. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.

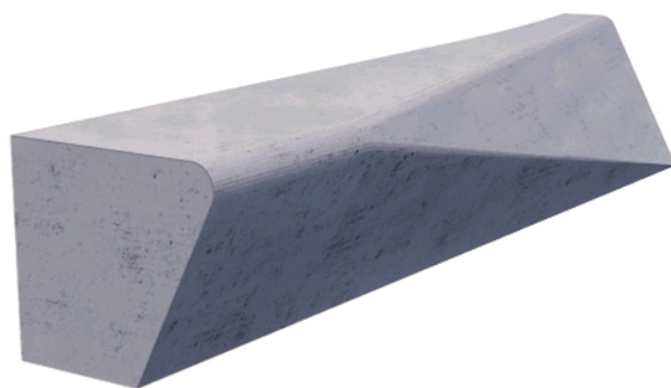


PROFILE B STRAIGHT- RENDER

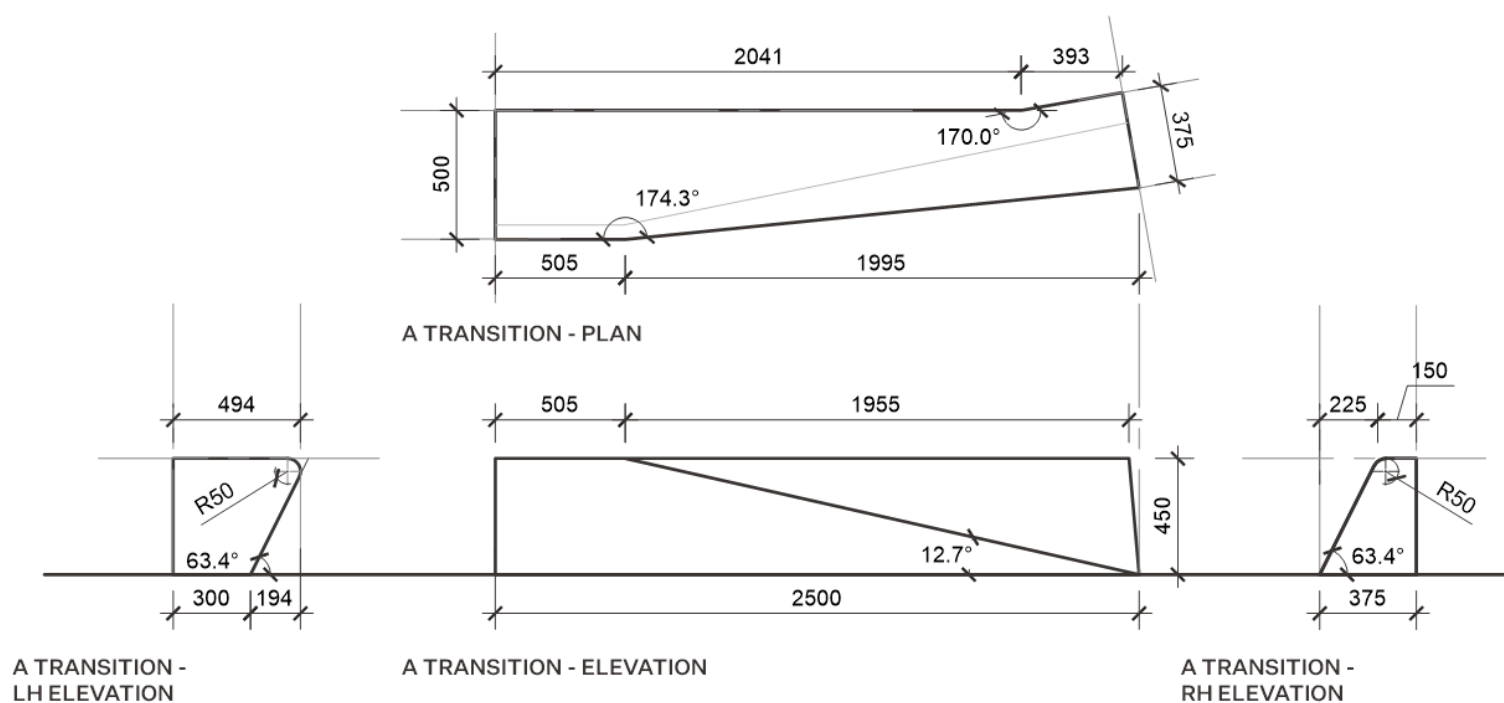


#### PROFILE A - TRANSITION UNIT

Unit to transition between profile A and profile B. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.

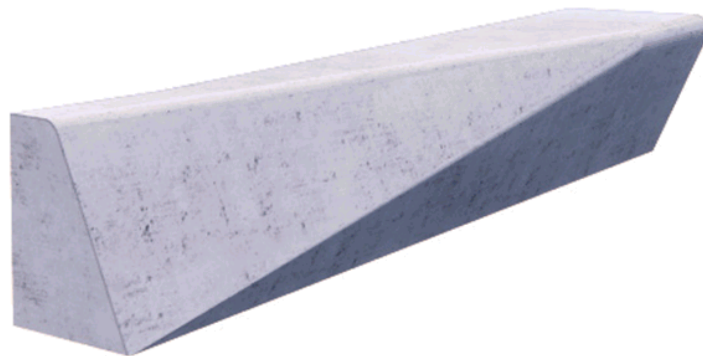


PROFILE A TRANSITION - RENDER

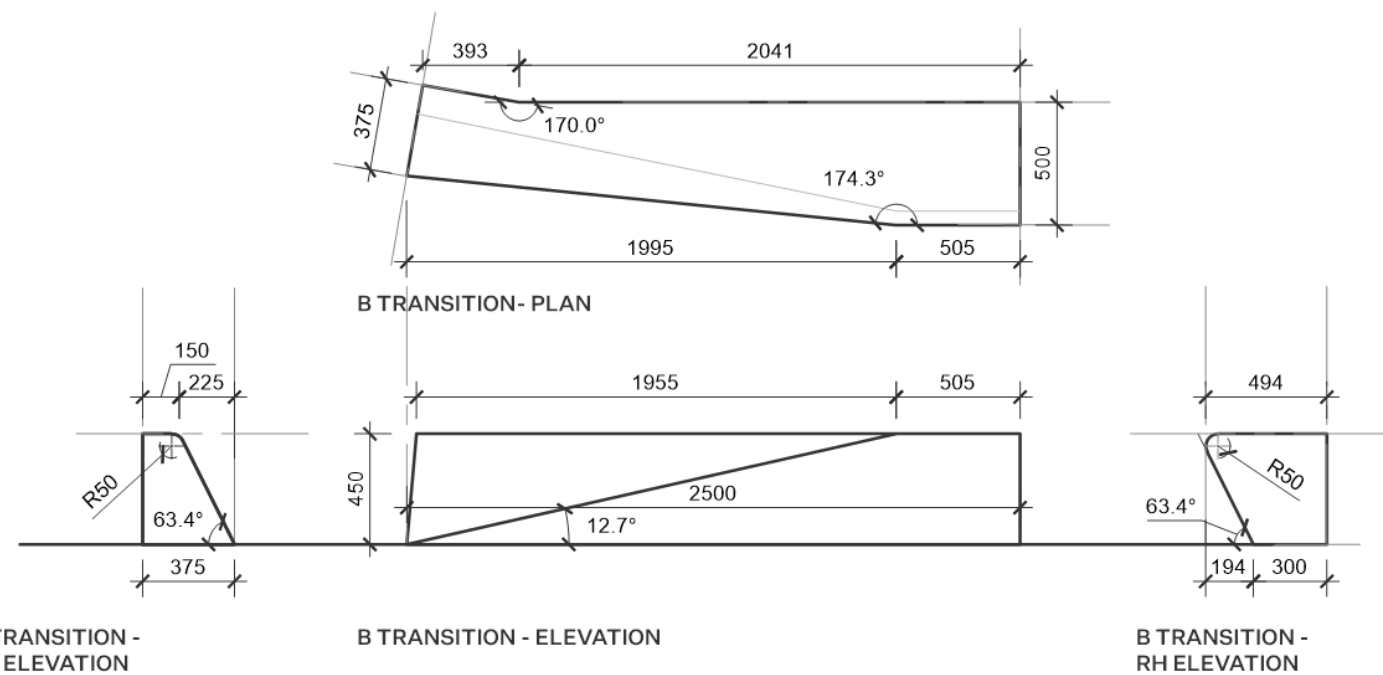


#### PROFILE B - TRANSITION UNIT

Unit to transition between profile B and profile A. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.

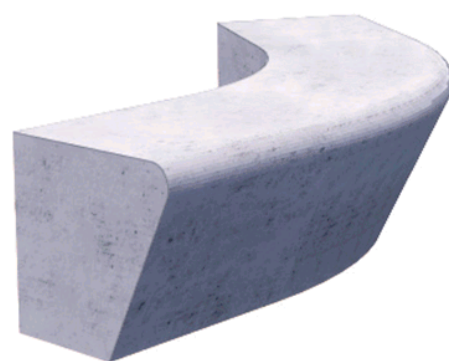


PROFILE B TRANSITION - RENDER

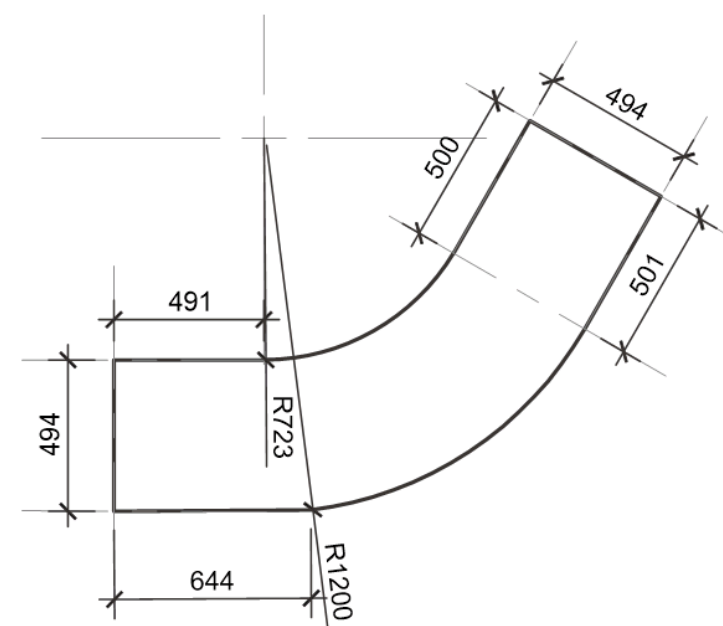


# PROFILE A - 1200 60D CURVE UNIT

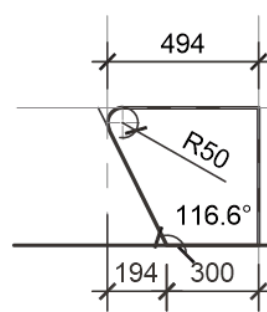
Corner unit to allow radial curves to be created. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.



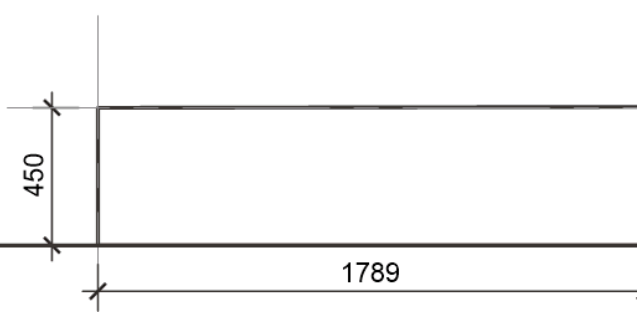
PROFILE A - 1200 60D CURVE UNIT RENDER



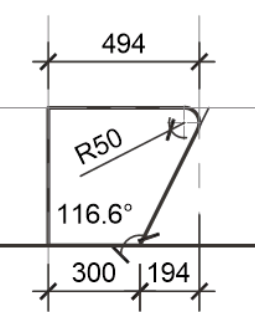
A TRANSITION - PLAN



A TRANSITION - LH ELEVATION



A TRANSITION - ELEVATION



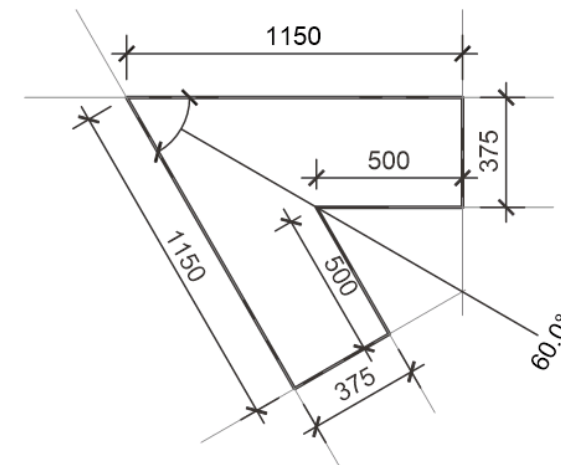
A TRANSITION - RH ELEVATION

#### PROFILE B - 60D CORNER UNIT

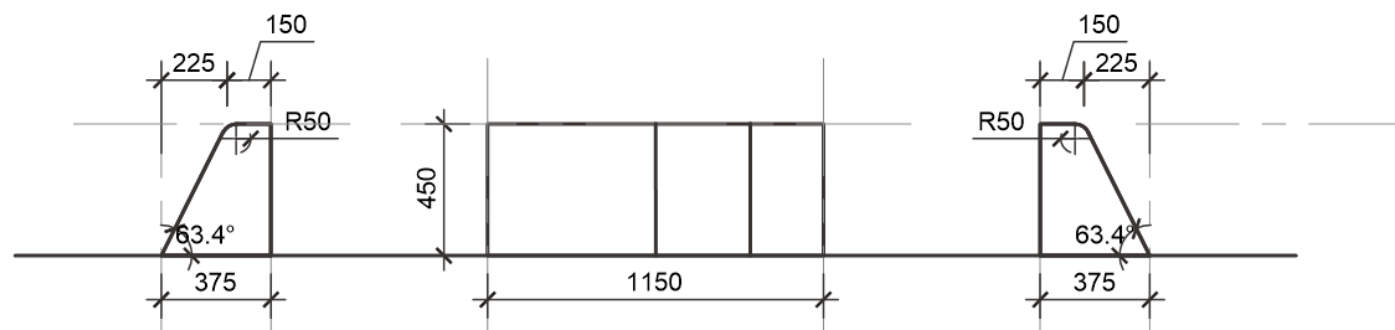
Corner unit to allow sharper profile corners to be created. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.



PROFILE B - 60D CORNER UNIT RENDER



A TRANSITION - PLAN



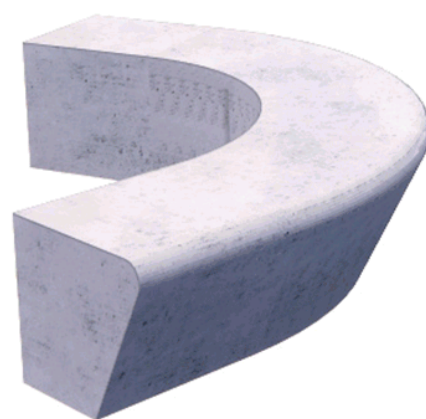
A TRANSITION - LH ELEVATION

A TRANSITION - ELEVATION

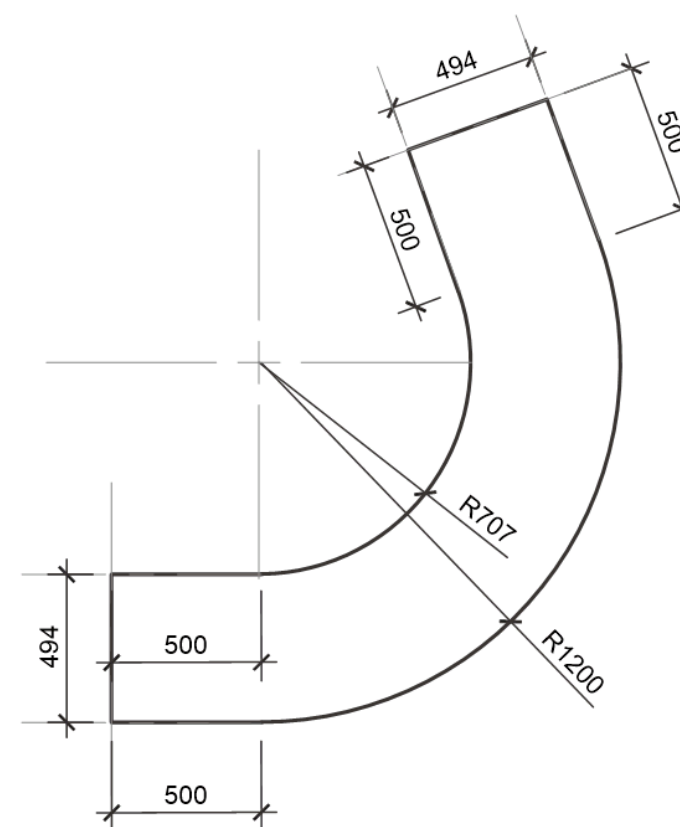
A TRANSITION - RH ELEVATION

# PROFILE A - 1200 110D CURVE UNIT

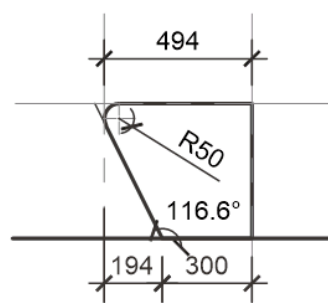
Corner unit to allow radial curves to be created. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.



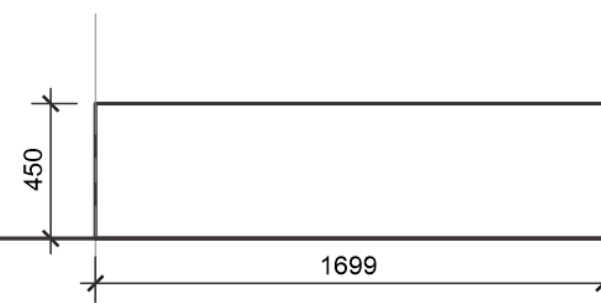
PROFILE A - 1200 110D CURVE UNIT RENDER



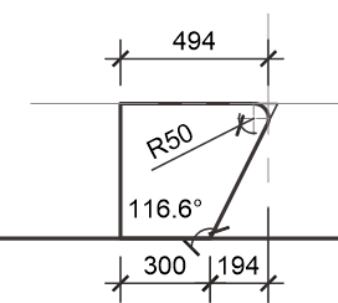
A 1200 110D CURVE UNIT - PLAN



A 1200 110D CURVE UNIT - LH ELEVATION



A 1200 110D CURVE UNIT - ELEVATION

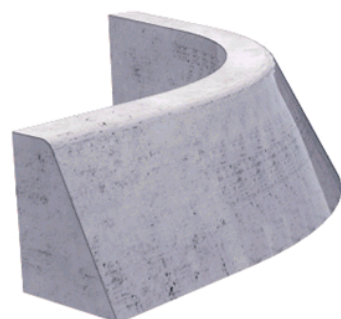


A 1200 110D CURVE UNIT - RH ELEVATION

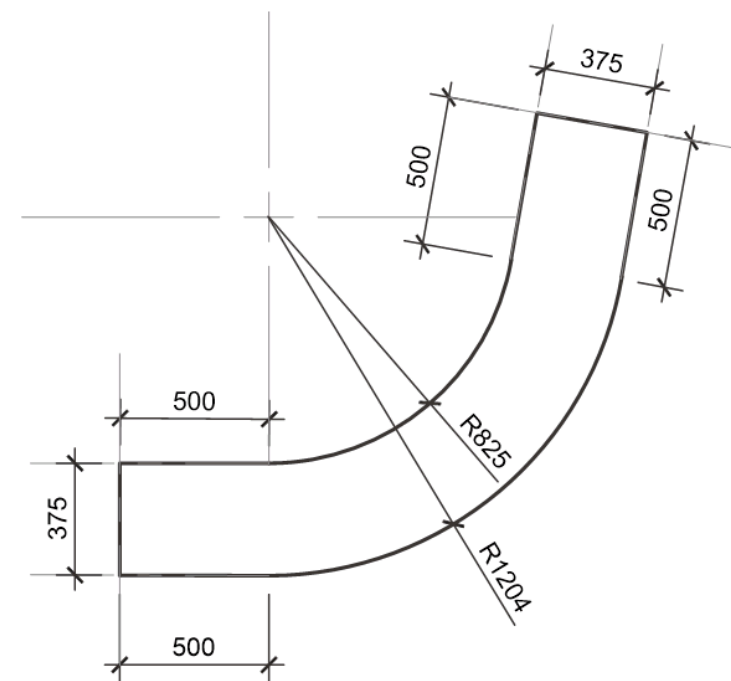


# PROFILE B - 1200 80D CURVED UNIT

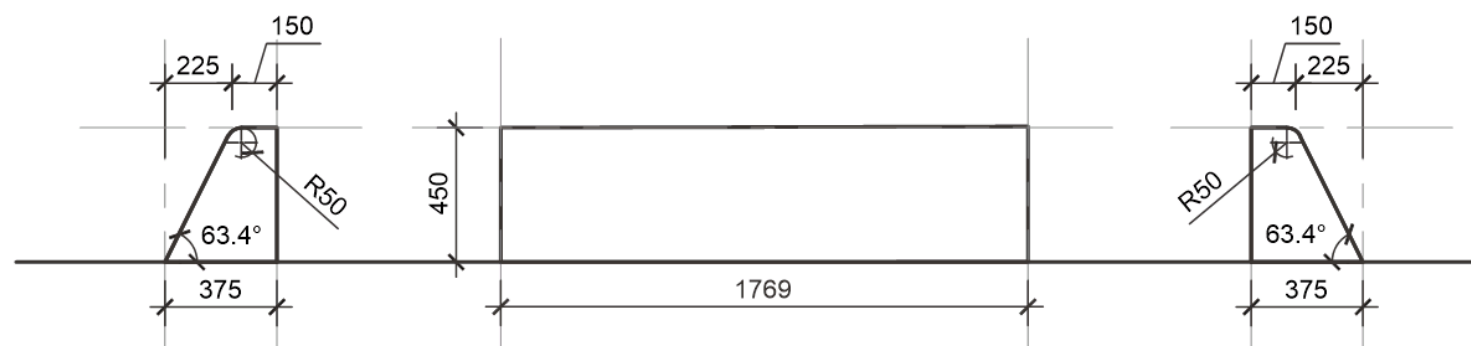
Corner unit to allow sharper profile corners to be created. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.



PROFILE B - 1200 80D CURVED UNIT RENDER



B 1200 80D CURVED UNIT - PLAN



B 1200 80D CURVED UNIT -  
LH ELEVATION

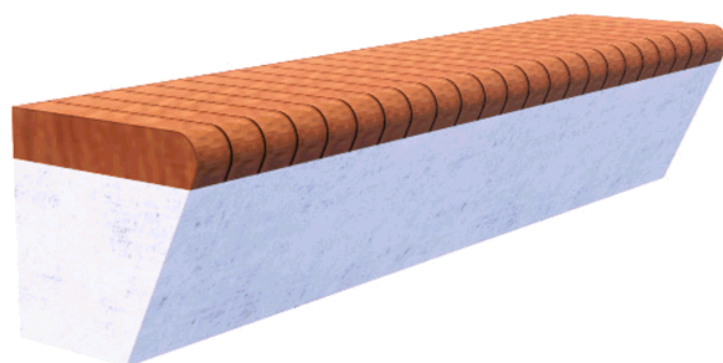
B 1200 80D CURVED UNIT -  
ELEVATION

B 1200 80D CURVED UNIT -  
RH ELEVATION

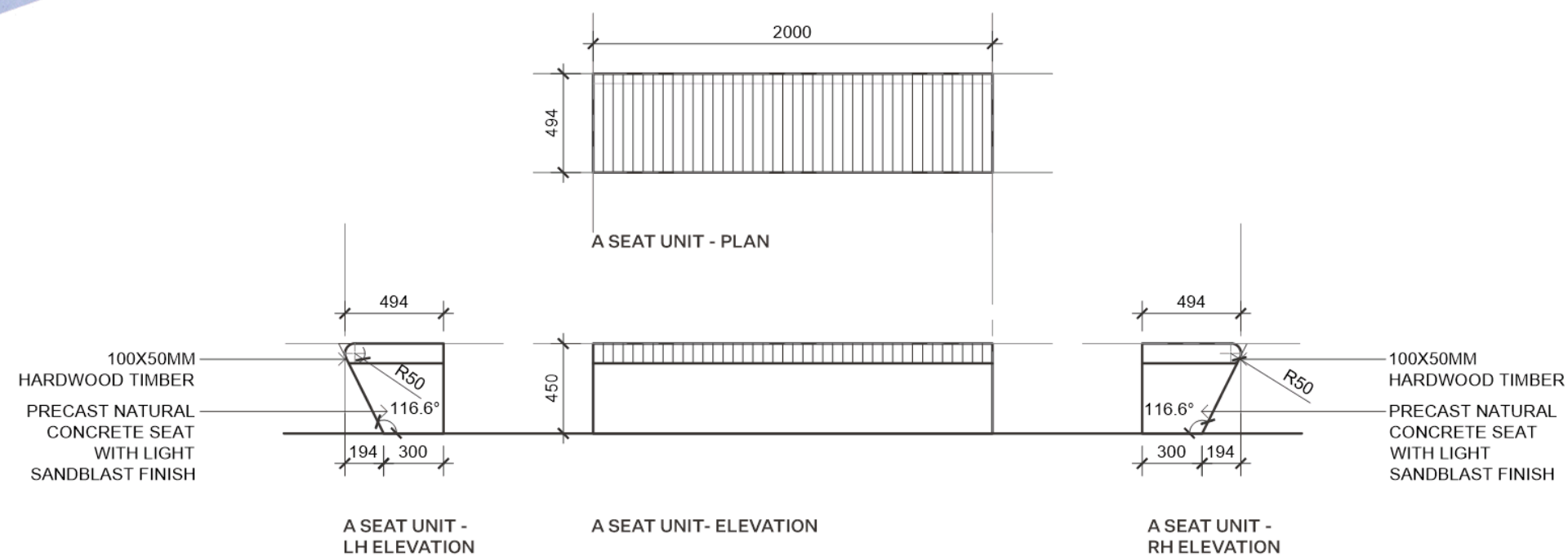


#### PROFILE A - SEAT UNIT

Timber seating slats to be incorporated into the profile of the precast units. Further development of units to determine extent of seating to have back and arm rests to occur during detailed design.



PROFILE A - SEAT UNIT RENDER

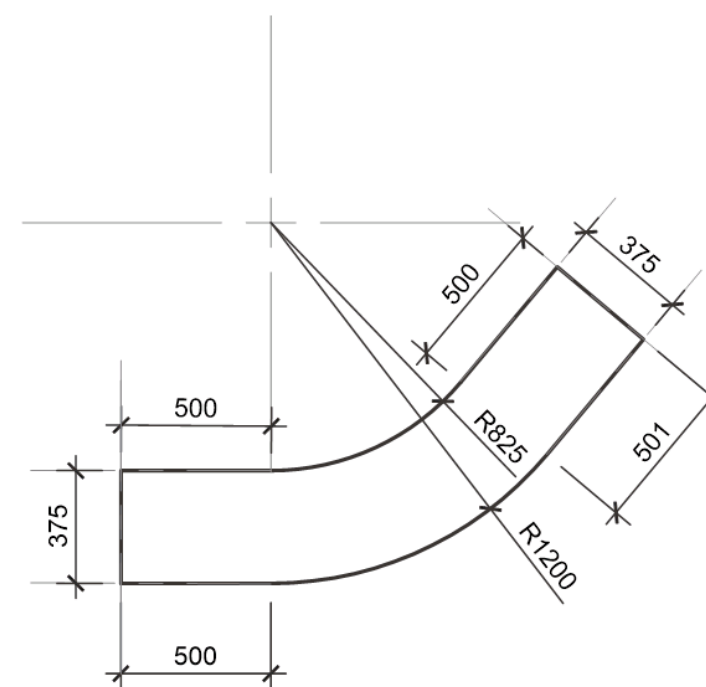


# PROFILE B - 1200 50D UNIT

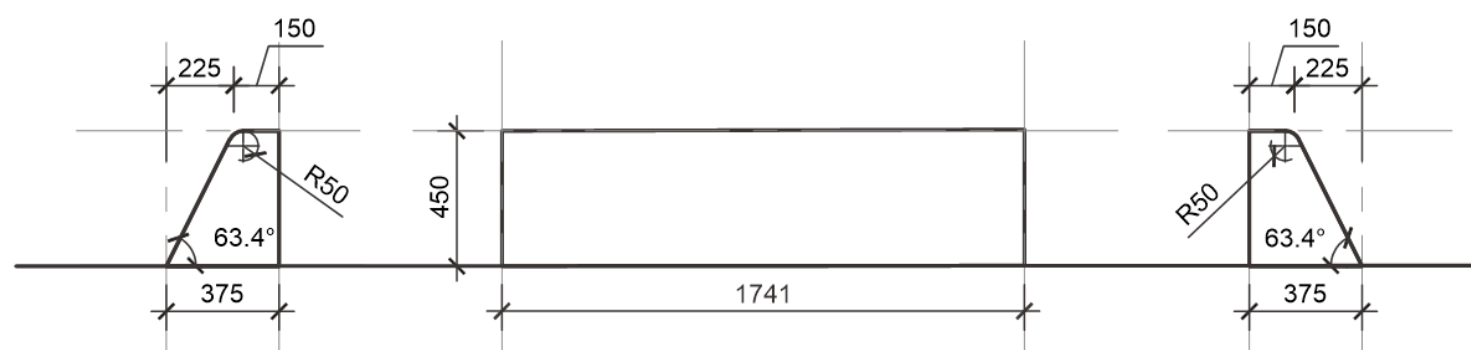
Corner unit to allow radial curves to be created. Further development of units to allow for lifting provisions and to accommodate change in levels within ground plane to occur during detailed design.



PROFILE B - 1200 50D UNIT RENDER



B 1200 50D CURVED UNIT - PLAN



B 1200 50D CURVED UNIT -  
LH ELEVATION

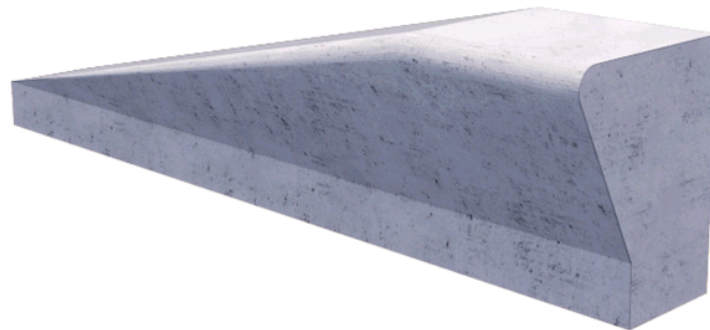
B 1200 50D CURVED UNIT -  
ELEVATION

B 1200 50D CURVED UNIT -  
RH ELEVATION

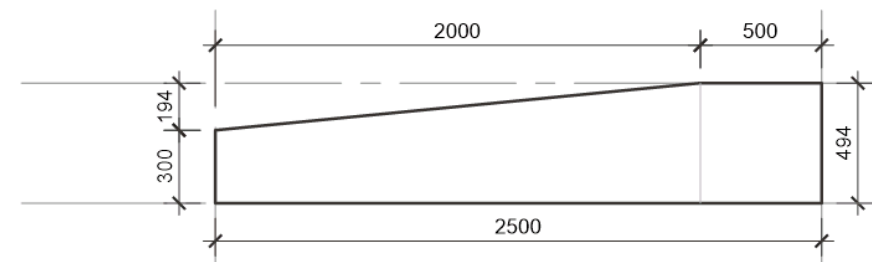


#### PROFILE A - FLUSH TRANSITION UNIT

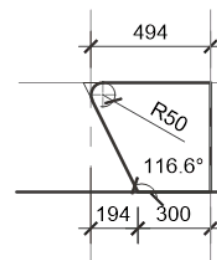
Unit to taper down from finished seat wall height to flush with ground plane. Further development of units to occur during detailed design.



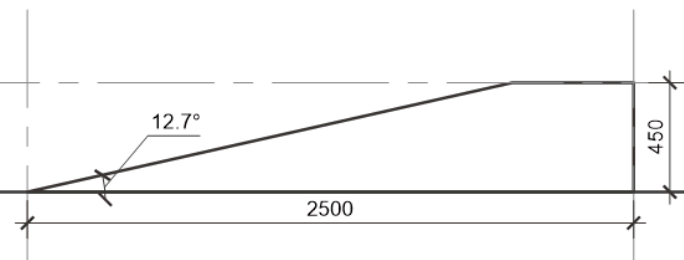
PROFILE A - FLUSH TRANSITION UNIT RENDER



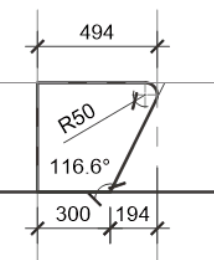
A FLUSH TRANSITION UNIT - PLAN



A FLUSH TRANSITION UNIT - LH ELEVATION



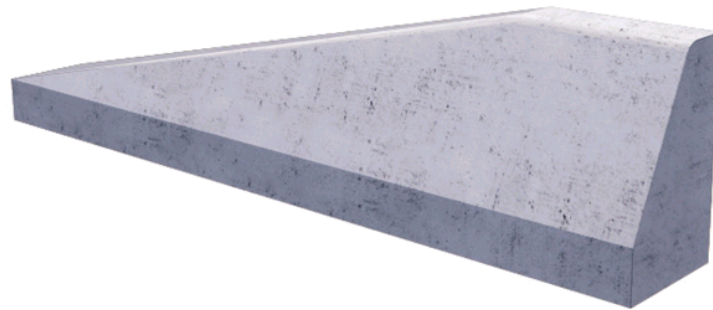
A FLUSH TRANSITION UNIT - ELEVATION



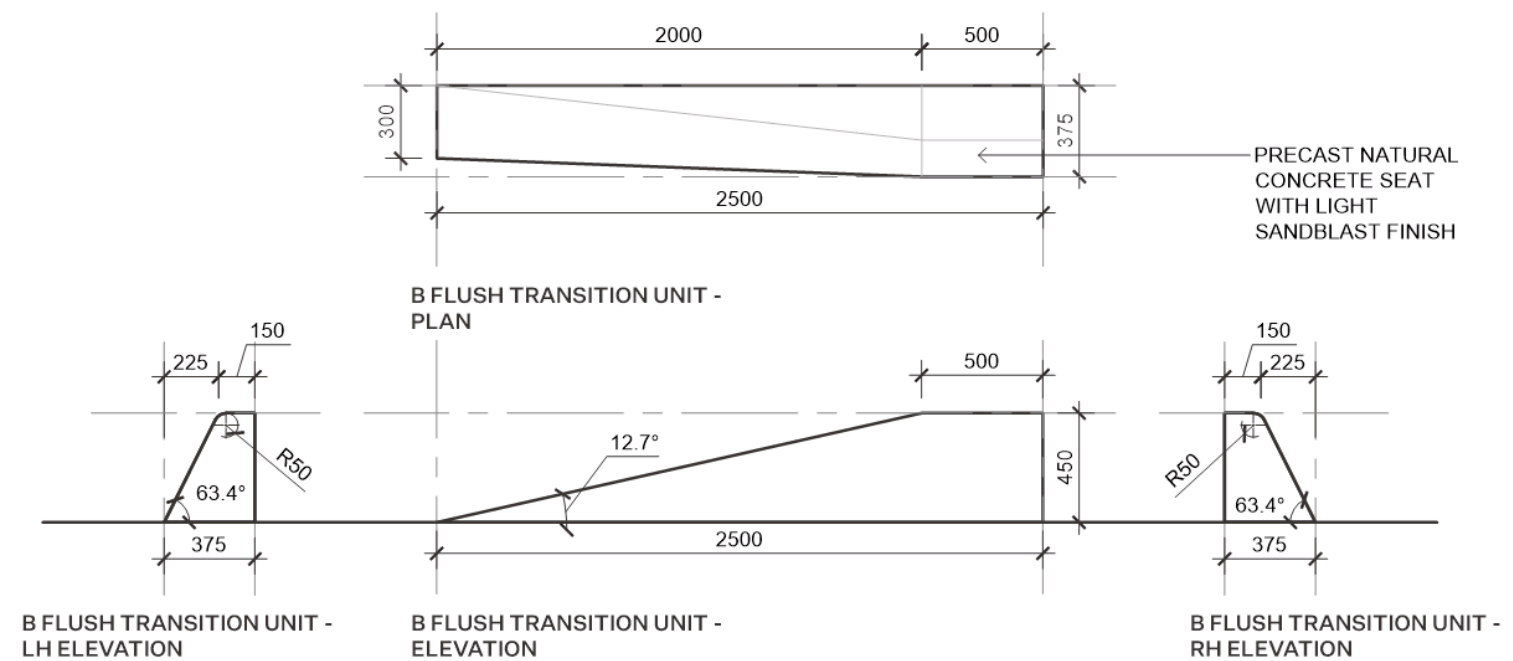
A FLUSH TRANSITION UNIT - RH ELEVATION

### PROFILE B - FLUSH TRANSITION UNIT

Unit to taper down from finished seat wall height to flush with ground plane. Further development of units to occur during detailed design.



PROFILE B - FLUSH TRANSITION UNIT RENDER

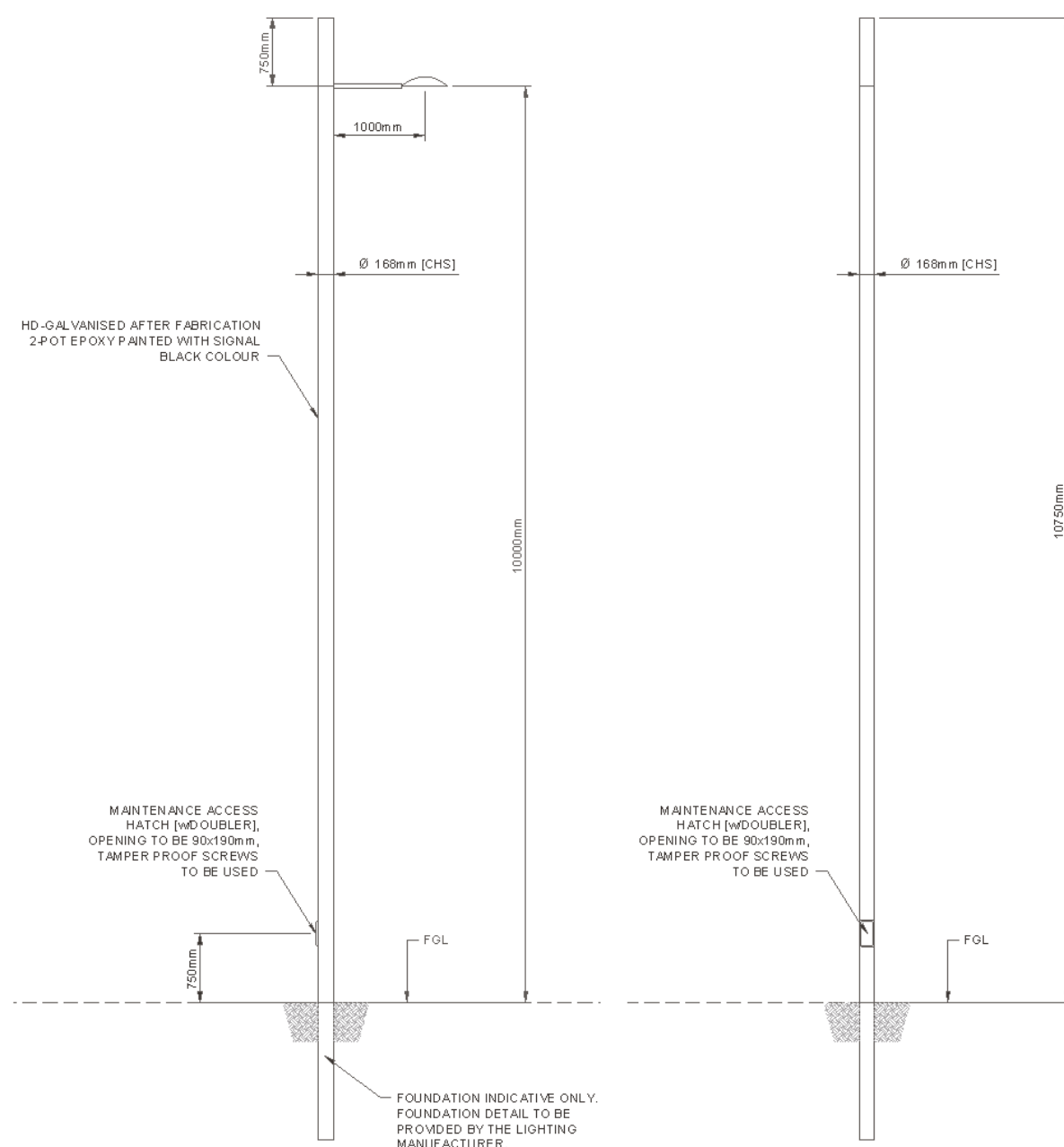


## 5.5 Furniture - light poles

### LP01 LIGHT POLE

10.75m high light pole painted  
Resene 'Blast Grey 3'.

Single luminaire to be mounted on  
carraigeway side of pole at 10.0m  
height orientated perpendicular  
to the carraigeway. Banner Arm  
to mounted at 6.0m height -  
specifications to be confirmed with  
DCC.



LP01 ELEVATIONS

LP01 RENDER



#### LP02 LIGHT POLE

10.75m high light pole painted Resene 'Blast Grey 3'.

Typical luminaire to be mounted on carriageway side of pole at 10.0m height orientated perpendicular to the carriageway. Additional feature directional spot lighting to be mounted on poles to be directed at street features. Spot luminaire and mounting details to be confirmed in detailed design.



LP02 RENDER

#### LP03 LIGHT POLE

10.75m high light pole painted Resene 'Blast Grey 3'.

Typical luminaire to be mounted on carriageway side of pole at 10.0m height orientated perpendicular to the carriageway. Catenary lighting wire and luminaires to be strung between these poles.



LP03 RENDER

#### LP04 LIGHT POLE

10.75m high light pole painted Resene 'Blast Grey 3'.

Typical luminaire to be mounted on carriageway side of pole at 10.0m height orientated perpendicular to the carriageway. Additional feature directional spot lighting to be mounted on poles to be directed at street features. Catenary lighting wire and luminaires to be strung between these poles. Spot luminaire and catenary lighting mounting details to be confirmed in detailed design.



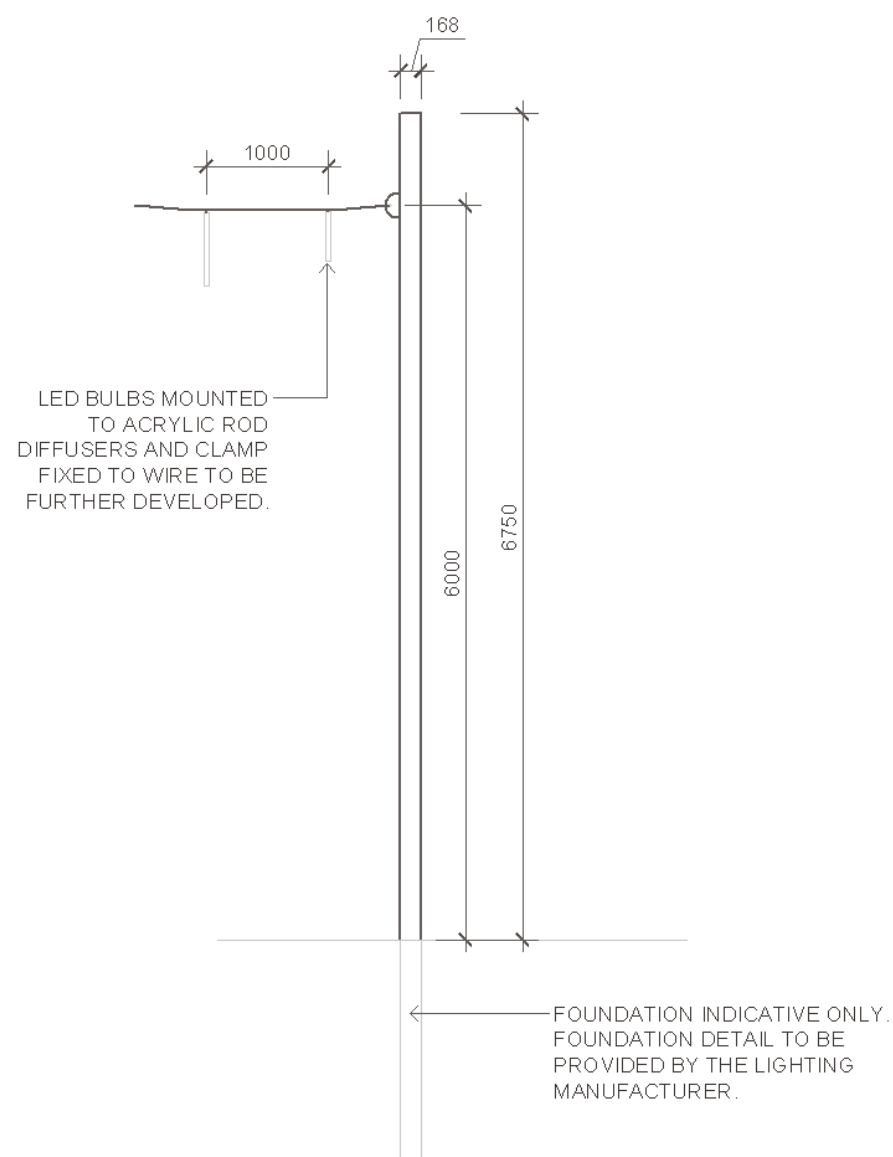
LP04 RENDER

#### LP-CAT CATENARY SUPPORT POLE

6.75m high catenary light pole painted Resene 'Blast Grey 3' with catenary lighting mounted at 6.0m above finished ground level. Power supply requirements, fixing details and wiring details to be confirmed and coordinated with supplier and electrical engineer.

#### CAT CATENARY LIGHTING

LED bulbs mounted to acrylic rod diffusers and clamp fixed to stainless steel catenary wire. Lighting to be installed as per suppliers details.



LP-CAT CATENARY SUPPORT POLE ELEVATION

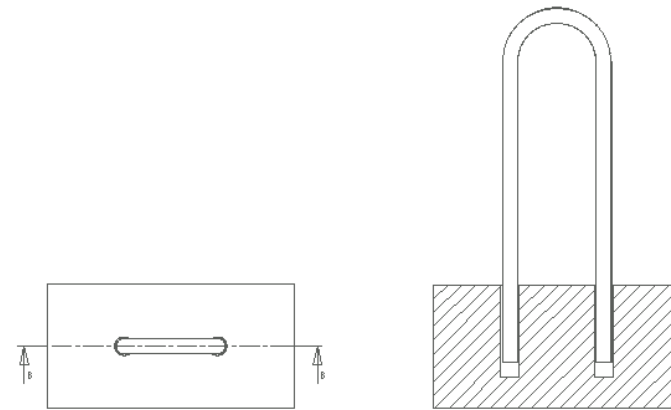


LP-CAT + CAT RENDER

## 5.6 Furniture - bins and cycle stands

### BIKE - Bicycle Rack

TYPE: BR\_01  
MATERIAL: Stainless Steel 304  
DIMENSIONS: W300xH900xdia  
50mm  
FINISH: Satin Linish  
FIXING: Surface mounted to  
concrete paving - as  
per manufacturers  
details  
SUPPLIER: Walkspace (or  
approved alternative)



BIKE PLAN

BIKE ELEVATION



BIKE RENDER

### BINS - Rubbish Bins

TYPE: DCC Triple Waste  
Splitting Bin  
Supplier: DCC approved  
supplier  
FIXING: Sub-surface mounted  
to concrete pad as  
per suppliers details

- Continue to roll out larger waste  
splitting bins city wide



BINS RENDER

### GRATE - Tree Grate

TYPE: DCC Custom Tree  
Grate  
SUPPLIER: TBC  
FIXING: Sub-surface mounted  
to concrete support  
structure  
MATERIAL: Steel

- opportunity to customise  
pattern on grates
- sizes modular with paving units  
to reduce cutting and wastage



TREE GRATE PRECEDENT



## 5.7 Furniture - drinking fountains

### AQUA - Drink fountain and bottle filler

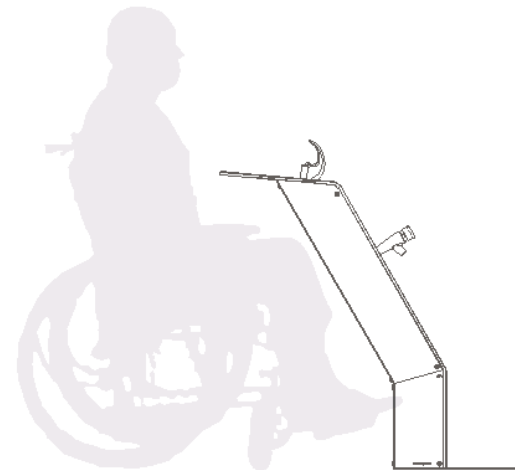
TYPE: DF\_02 accessible drink fountain  
 MATERIAL: 316 Stainless steel  
 DIMENSIONS: D775xW150xH775  
 FINISHES: Linish stainless steel  
 FIXING: Sub-surface mounted to suppliers details  
 DRAIN: In ground drainage grate  
 SUPPLIER: Walkspace (or approved alternative)



AQUA PLAN



AQUA ELEVATION

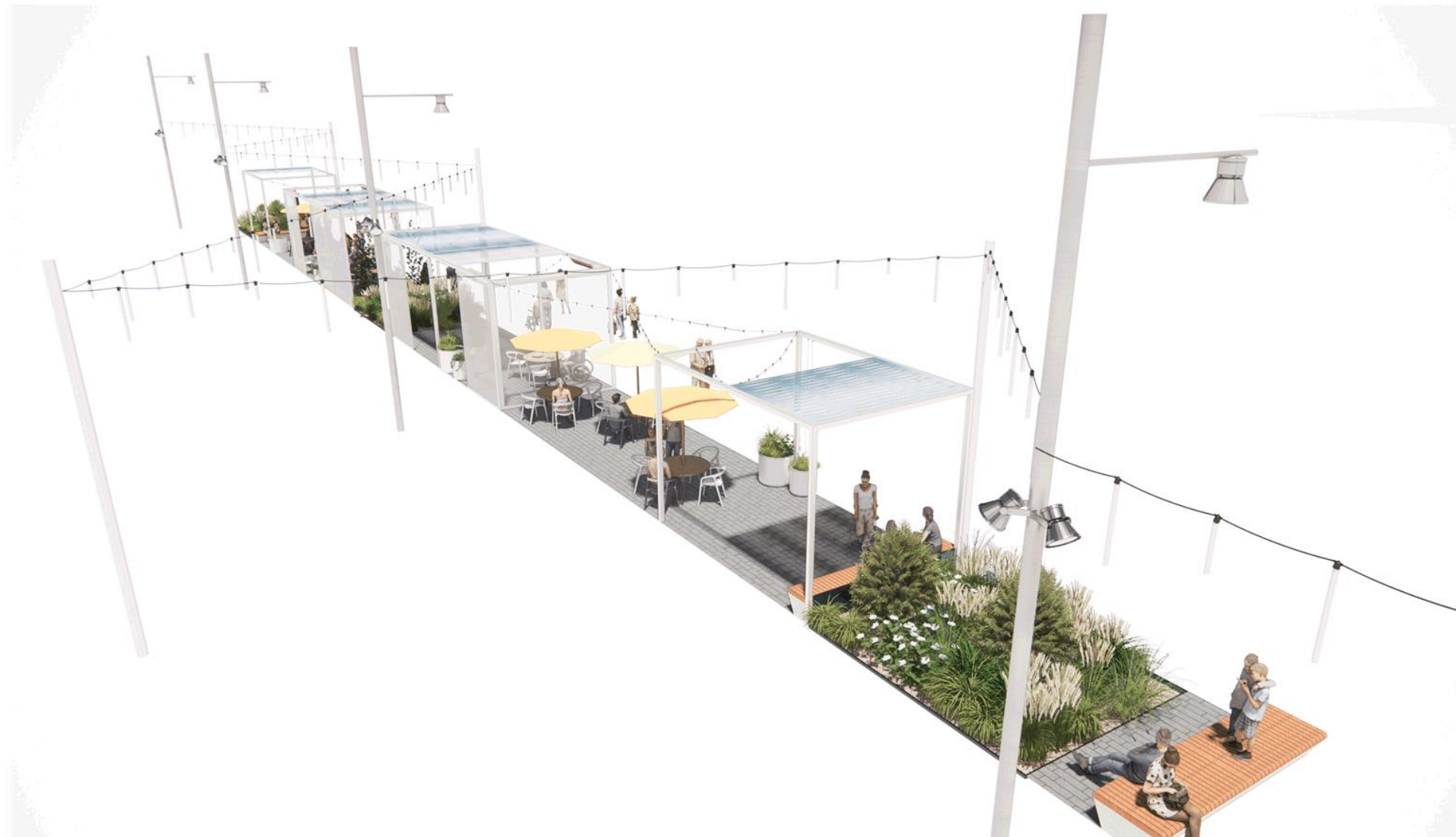


AQUA RENDER

## 5.8 Urban lounge

### FULL STRUCTURE

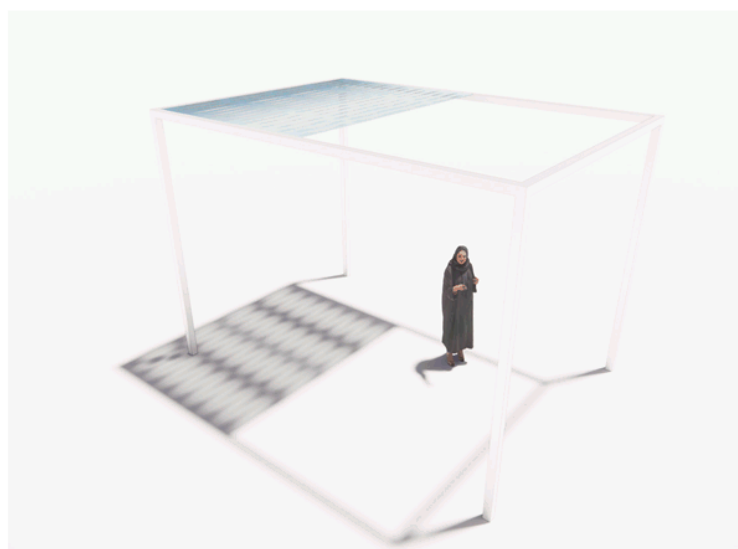
Urban lounge with overhead shade structure, fixed pots, precast concrete seat units and catenary lighting overhead.



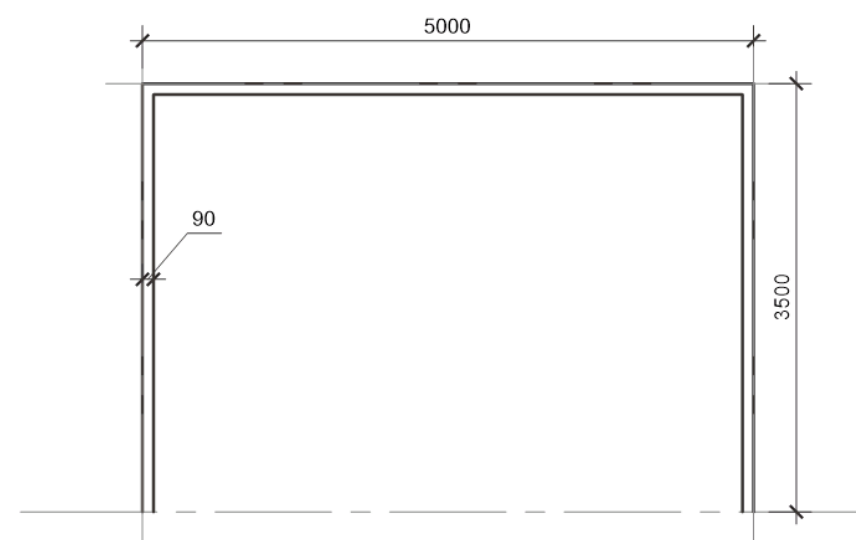
## 5.8.1 Urban lounge components

### PERG URBAN PERGOLA STRUCTURE

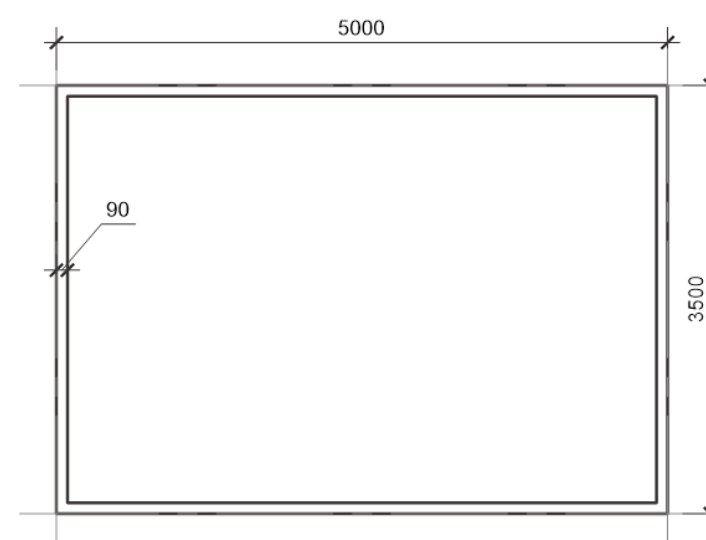
Urban pergolas modules to be 3.5m high x 3.5m wide x 5.0m long. Frame to be constructed using 89 x 89 x 9mm SHS grade steel butt welded on site. 2 Pot epoxy paint finish to all steel in Resene 'blast grey 3'. Ground planted columns to engineers specifications. Tempered glass panels with concealed fixings to top rails of structure. Coloured and fritted panels to cast light pattern to surfaces below. Details to be confirmed in detailed design.



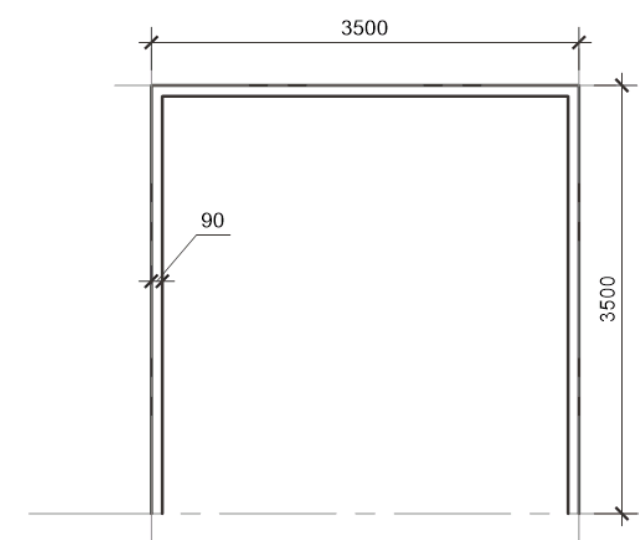
PERG RENDER



PERG ELEVATION



PERG PLAN



PERG END ELEVATION



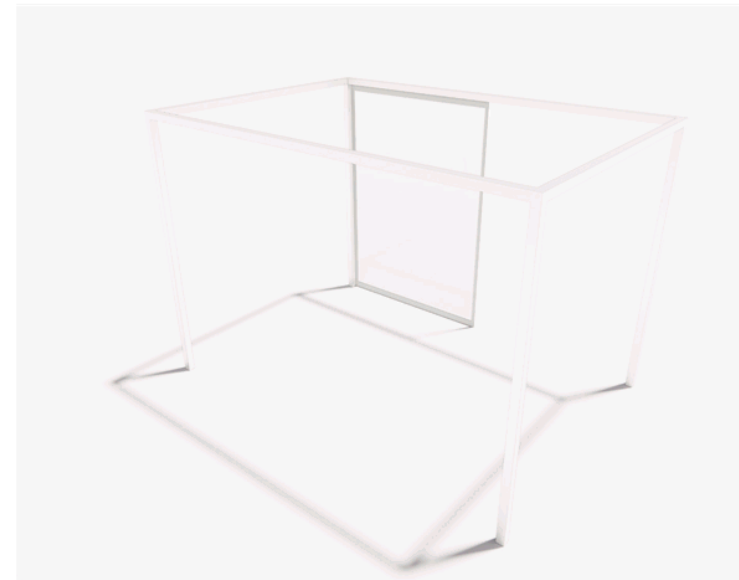
## 5.8.1 Urban lounge components



### PERG RENDER - HEATER

Outdoor heaters mounted internally on framework as per manufacturers specifications.

TYPE: SL40 4.0km  
Slimline  
SUPPLIER: Infratech (or similar approved)



### PERG RENDER - SIDE SCREEN

Calido clear PVC zip screen internally mounted within modules. End screens to span full width. Details TBC in detailed design.



### PERG RENDER - TENSIONED STAINLESS STEEL WIRE

5.0mm stainless steel tensioned wire eye hooked to top rail of structure module an sub surface mounted within paving using 304 stainless steel turnbuckles. Details TBC in detailed design.

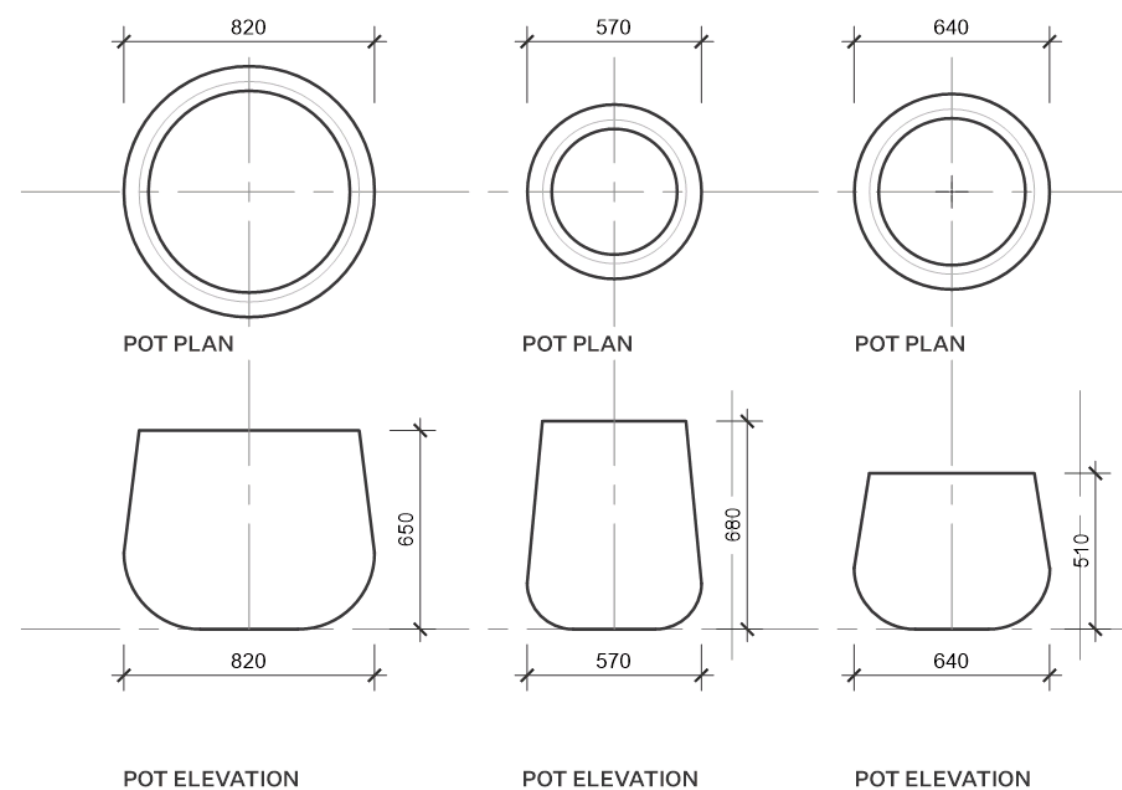
## 5.8.1 Urban lounge components

### CYLINDRICAL PLANTERS

TYPE:	Urban Planter / urban tall planter
MATERIAL:	Glass reinforced concrete
DIMENSIONS:	680Hx570W (large) 510Hx640W (Medium) 650Hx382W (small)
FINISH:	2-Pot epoxy paint finish white
SUPPLIER:	Urban effects



POTS RENDER



## 5.9 Planting - selection criteria

### STREET TREE PLANTING DESIGN

Street trees add considerable value to urban environments, although they need to mature before their full value can be realised. Too often street trees are removed too early due to complications with their management, poor planting practices or being the wrong shapes and sizes for their locations.

In selecting the long list of street trees for George Street, we have prioritised the following:

#### 1. Longevity.

We want street trees to be multi-generational, outliving us all and going on to shade and beautify the street for decades. Trees that are typically short lived have been selected out, as have trees that have roots that are known to damage underground services and pavements, drop branches, block drains, have allergens or are toxic, or don't have a track record of thriving in tough urban environments.

#### 2. Responding to context.

The shape, size, habit, and provenance of trees will suit their final locations. We don't want to march trees down the street at regular spacings, ignoring adjacent context and making each block look the same, regardless of changes in context.

#### 3. Creating a 'gardened' environment.

Each block is different with regards to land uses and architectural style and scale. The composition of the street should change as you move through it and view it from different vantage points. And it should change through the day and through the seasons too.

There is **beauty in diversity**. We have chosen to break from tradition and provide diversity of shape, size, habit, and provenance. Street trees will be selected and located to:

- frame valued buildings, doorways, and views
- shade parts of the footpath, and let light and warmth through to others
- create shape and volumes in the street that are proportional to human scale and the built environment
- create seasonal interest with deciduous trees, and hold the street together in the cooler months with a framework of evergreen trees
- reinforce local identity and make connections between cultural heritage and the built environment
- support local birds and insects through the seasons
- collectively green the street, being purposefully offset rather than inline to fill the street out when viewing it longitudinally, but spacious when amongst them.

Street trees aren't easy to establish and retain over the long term. The following forms part of our philosophical and technical design response:

- Prepare trees ahead of time in the nursery ready for planting out, achieving strong root growth in favour of height and girth
- Create ideal conditions that will support each tree through to maturity and beyond, allowing 12 – 15 cubic metres of tree pit volume and using strata vault tree pit cells under pavements
- Aggregate tree pits in common trenches to enable trees to 'talk to each other' through their roots and the mycorrhizal network
- Passively irrigate trees wherever possible
- Structurally separate tree pits from raingardens so tree roots aren't disturbed during maintenance.



## 5.10 Planting - Street trees evaluation criteria

BOTANICAL NAME	MAORI/COMMON NAME	PROVENANCE	LEAF RETENTION	TREE SIZE	MAHINGA KAI	ECOLOGICAL	SEASONALITY	LONGEVITY (YEARS)
		<ul style="list-style-type: none"> <li>LOCAL</li> <li>NATIVE</li> <li>EXOTIC</li> </ul>	<ul style="list-style-type: none"> <li>DECIDUOUS</li> <li>EVERGREEN</li> </ul>	XL L M S			W S S A	<ul style="list-style-type: none"> <li>Long (&gt;100)</li> <li>Moderate (50-100)</li> <li>Short (&lt;50)</li> </ul>
<i>Acer campestre</i> cvs.	field maple	•						L
<i>Acer cappadocicum</i> 'Rubrum'	red cappadocian maple	•						M
<i>Acer palmatum</i> cvs.	Japanese maple	•						M
<i>Carpinus betulus</i> 'Fastigiata'	upright hornbeam	•						M
<i>Cordyline australis</i>	ti kouka, cabbage tree	•						L
<i>Fagus sylvatica</i> 'dawyc'	upright european beech	•						L
<i>Dacrydium cupressinum</i>	rimu, red pine	•						L
<i>Fraxinus excelsior</i> 'Green glow'	european ash	•						M
<i>Fuscopora cliffortioides</i>	tawhai rauriki, mountain beech	•						L
<i>Ginkgo biloba</i>	maidenhair tree	•						L
<i>Ginkgo biloba</i> 'Fastigiata'	upright maidenhair tree	•						L
<i>Kunzea ericoides</i>	kānuka, white tea tree	•						L
<i>Liriodendron tulipifera</i> 'fastigiata'	upright tulip tree	•						L
<i>Nyssa sylvatica</i>	sourgum, tupelo	•						M
<i>Pistacia chinensis</i>	Chinese pistachio	•						M
<i>Podocarpus laetus</i>	hall's tōtara	•						L
<i>Podocarpus totara</i>	tōtara	•						L
<i>Prumnopitys ferruginea</i>	miro	•						L
<i>Metrosideros umbellata</i>	Southern Rata	•						L
<i>Sophora microphylla</i>	south island kowhai	•						L
<i>Tilia cordata</i>	linden lime	•						M
<i>Tilia cordata</i> 'Spring Glow'	golden small leaved lime	•						M
<i>Zelkova serrata</i>	Japanese zelkova	•						L



## 5.11 Planting - Proposed tree palette

### PROPOSED STREET TREE SPECIES OPTIONS



FIELD MAPLE  
*Acer campestre* cvs.



CAPPADOCIAN MAPLE  
*Acer cappadocicum*  
'Rubrum'



JAPANESE MAPLE  
*Acer palmatum* cvs.



UPRIGHT HORNBEAM  
*Carpinus betulus* 'Fastigiata'



TĪ KŌUKA  
*Cordyline australis*



RIMU  
*Dacrydium cupressinum*



UPRIGHT BEECH  
*Fagus sylvatica* 'dawyc'  
(purple, green or gold)



EUROPEAN ASH  
*Fraxinus excelsior*  
'Green glow'



TAWHAI RAURIKI  
*Fuscopora cliffortioides*



MAIDENHAIR TREE  
*Ginkgo biloba* 'Fastigiata'



KĀNUKA  
*Kunzea ericoides*



TULIP TREE  
*Liriodendron tulipifera*  
'fastigiata'



SOURGUM  
*Nyssa sylvatica*



CHINESE PISTACHIO  
*Pistacia chinensis*



HALL'S TŌTARA  
*Podocarpus laetus*



TŌTARA  
*Podocarpus totara*



MIRO  
*Prumnopitys ferruginea*



SOUTHERN RATA  
*Metrosideros umbellata*



KŌWHAI  
*Sophora microphylla*



LINDEN LIME  
*Tilia cordata*



SMALL LEAVED LIME  
*Tilia cordata* 'Spring Glow'



JAPANESE ZELKOVA  
*Zelkova serrata*

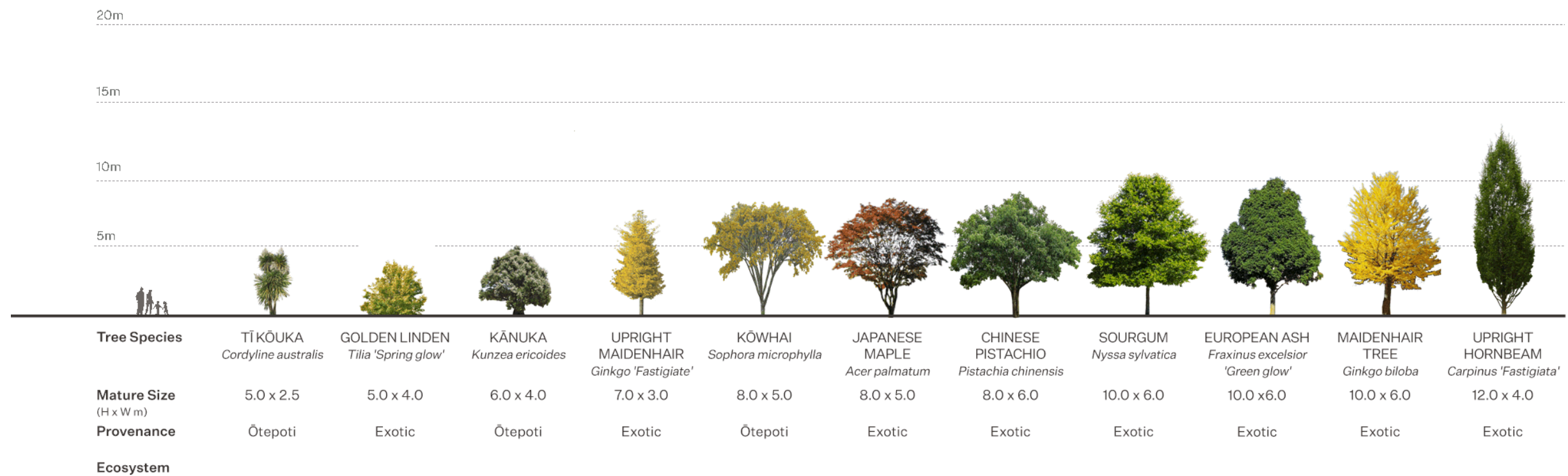
#### LEGEND

- taiao/ecology: integrate nature  
attract native wildlife and insects
- rerehua/beauty: reflect the seasons  
seasonal interest
- taoka/tuku iho/heritage: reinforce identity  
mahinga kai valuehinga kai

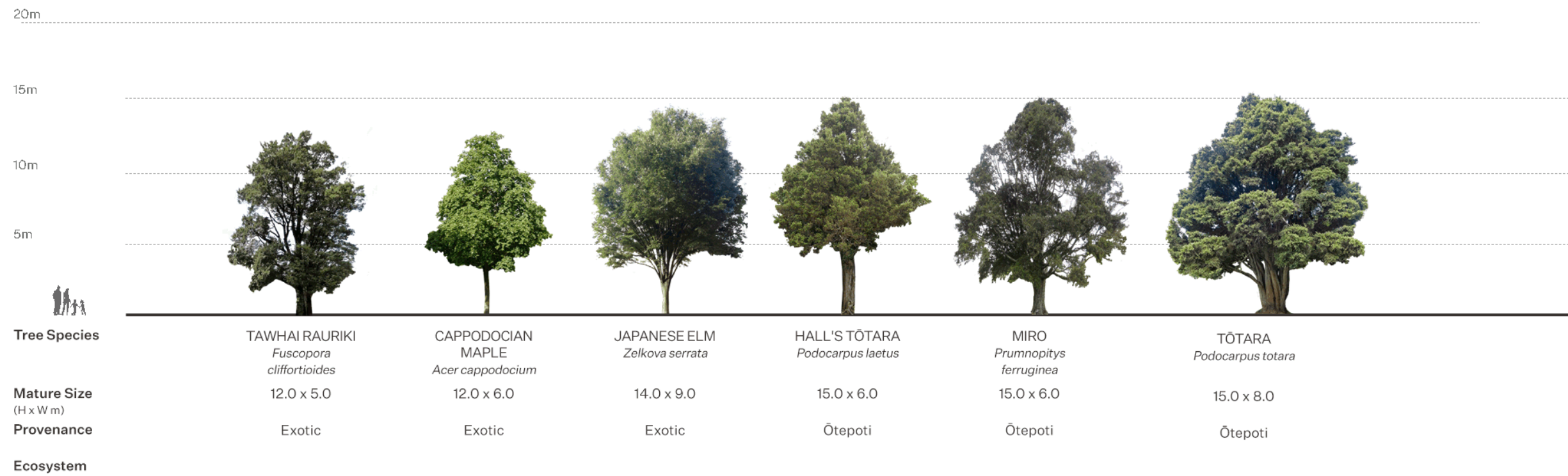


## 5.12 Planting - Tree height comparison

### STREET TREES - FULL SIZE COMPARISON (INDICATIVE)



STREET TREES - FULL SIZE COMPARISON (INDICATIVE)



STREET TREES - FULL SIZE COMPARISON (INDICATIVE)



## 5.13 Planting - Shrub selection criterea

BOTANICAL NAME	MAORI/Common NAME	PROVENANCE	LEAF RETENTION	PLANT FORM	MAHINGA KAI	ECOLOGICAL	SEASONALITY
		<div> <div>● LOCAL</div> <div>● NATIVE</div> <div>● EXOTIC</div> </div>	<div> <div>DECIDUOUS</div> <div>EVERGREEN</div> </div>	<div> <div>SHRUB</div> <div>G/COVER</div> <div>FERN</div> <div>GRASS/STRAPPY</div> </div>	<div> <div>BUILDING</div> <div>MEDICINE</div> <div>CRAFT</div> <div>FOOD</div> </div>	<div> <div>BIRD</div> <div>INSECT</div> <div>LIZARD</div> </div>	<div> <div>FRUIT</div> <div>FLOWER</div> <div>AUTUMN COLOUR</div> </div>
<i>Coprosma acerosa</i>	tarakupenga, sand coprosma	●	EVERGREEN	SHRUB	MEDICINE CRAFT FOOD	BIRD LIZARD	FRUIT FLOWER
<i>Euphorbia glauca</i>	waiūatua, shore spurge	●	EVERGREEN	SHRUB	MEDICINE	LIZARD	FRUIT FLOWER
<i>Euphorbia 'Polychroma'</i>	cushion spurge	●	EVERGREEN	SHRUB		INSECT	FLOWER AUTUMN COLOUR
<i>Gaura lindheimeri</i>	pink butterfly bush	●	EVERGREEN	SHRUB		INSECT	FLOWER
<i>Hebe albicans</i>	koromiko, mt arthur hebe	●	EVERGREEN	SHRUB	MEDICINE FOOD	BIRD INSECT	FLOWER
<i>Hebe pimeleoides 'Quicksilver'</i>	quicksilver hebe	●	EVERGREEN	SHRUB	MEDICINE FOOD	BIRD INSECT	FLOWER
<i>Hebe propinqua</i>	whipcord hebe	●	EVERGREEN	SHRUB	MEDICINE FOOD	BIRD INSECT	FLOWER
<i>Hebe 'Wiri Mist'</i>	koromiko	●	EVERGREEN	SHRUB	MEDICINE FOOD	BIRD INSECT	FLOWER
<i>Hebe 'Wiri Prince'</i>	koromiko	●	EVERGREEN	SHRUB	MEDICINE FOOD	BIRD INSECT	FLOWER
<i>Leptospermum scoparium 'Red Falls'</i>	mānuka, prostrate tea tree	●	EVERGREEN	SHRUB	BUILDING MEDICINE CRAFT FOOD	BIRD INSECT LIZARD	FLOWER
<i>Leucophyta brownii 'Silver nugget'</i>	silver cushion bush	●	EVERGREEN	SHRUB		INSECT	FLOWER
<i>Podocarpus nivalis</i>	snow totara	●	EVERGREEN	SHRUB		BIRD INSECT LIZARD	FRUIT
<i>Sedum spectabile</i>	stone crop	●	EVERGREEN	SHRUB		INSECT	FLOWER
<i>Sophora prostrata 'Little Twister'</i>	prostrate kowhai	●	EVERGREEN	SHRUB	BUILDING MEDICINE CRAFT	BIRD INSECT LIZARD	FRUIT FLOWER
<i>Acaena caesiiglauca</i>	piripiri, glaucous bidibidi	●	EVERGREEN	G/COVER		BIRD INSECT	FRUIT FLOWER
<i>Acaena inermis 'Purpurea'</i>	piripiri, purple bidibid	●	EVERGREEN	G/COVER		BIRD INSECT	FRUIT FLOWER
<i>Acaena novae-zelandiae</i>	piripiri, red bidibidi	●	EVERGREEN	G/COVER		BIRD INSECT	FRUIT FLOWER
<i>Anaphalioides bellidioides</i>	everlasting daisy	●	EVERGREEN	G/COVER	BUILDING MEDICINE CRAFT FOOD	INSECT	FLOWER
<i>Bergenia 'Bressingham White'</i>	siberian tea, elephant ears	●	EVERGREEN	G/COVER		INSECT	FLOWER AUTUMN COLOUR
<i>Coprosma acerosa 'Hawera'</i>	sand coprosma	●	EVERGREEN	G/COVER		BIRD LIZARD	FRUIT
<i>Coprosma acerosa 'Red Rocks'</i>	sand coprosma	●	EVERGREEN	G/COVER	MEDICINE CRAFT FOOD	BIRD LIZARD	FRUIT
<i>Disphyma australe</i>	horokaka, NZ ice plant	●	EVERGREEN	G/COVER	MEDICINE CRAFT FOOD	INSECT	FRUIT FLOWER
<i>Fuchsia procumbens</i>	creeping fuchsia	●	DECIDUOUS	G/COVER	MEDICINE FOOD	BIRD INSECT LIZARD	FRUIT FLOWER



BOTANICAL NAME	MAORI/Common NAME	PROVENANCE	LEAF RETENTION	PLANT FORM	MAHINGA KAI	ECOLOGICAL	SEASONALITY
		<div> <div>● LOCAL</div> <div>● NATIVE</div> <div>● EXOTIC</div> </div>	<div> <div>DECIDUOUS</div> <div>EVERGREEN</div> </div>	<div> <div>SHRUB</div> <div>G/COVER</div> <div>FERN</div> <div>GRASS/STRAPPY</div> </div>	<div> <div>BUILDING</div> <div>MEDICINE</div> <div>CRAFT</div> <div>FOOD</div> </div>	<div> <div>BIRD</div> <div>INSECT</div> <div>LIZARD</div> </div>	<div> <div>FRUIT</div> <div>FLOWER</div> <div>AUTUMN COLOUR</div> </div>
<i>Gunnera prorepens</i>	gunnera	●	EVERGREEN	SHRUB		INSECT	FRUIT AUTUMN COLOUR
<i>Leptinella dioica</i>	shore leptinella, cotula	●	EVERGREEN	SHRUB		INSECT	FRUIT FLOWER
<i>Ligularia reniformis</i>	tractor seat	●	EVERGREEN	SHRUB		INSECT	FLOWER
<i>Linum monogynum</i>	rauhua, native linen flax	●	EVERGREEN	SHRUB		INSECT	FLOWER
<i>Lobelia angulata</i>	panakenake	●	DECIDUOUS	SHRUB	FOOD	BIRD INSECT LIZARD	FLOWER
<i>Muehlenbeckia axillaris</i>	creeping pohuehue	●	DECIDUOUS	SHRUB		BIRD INSECT LIZARD	FLOWER
<i>Pachystegia insignis</i>	marlborough rock daisy	●	EVERGREEN	SHRUB		INSECT	FLOWER
<i>Pimelea prostrata</i>	pinātoro, NZ daphne	●	EVERGREEN	SHRUB	MEDICINE FOOD	INSECT LIZARD	FLOWER
<i>Pimelea urvilleana</i>	NZ daphne	●	EVERGREEN	SHRUB		BIRD INSECT	FLOWER
<i>Tetragonia implexicoma</i>	kōkihi, native spinach	●	EVERGREEN	SHRUB	MEDICINE CRAFT FOOD	BIRD LIZARD	FRUIT FLOWER
<i>Thymus serpyllum 'Coccineus'</i>	creeping thyme	●	EVERGREEN	SHRUB		INSECT	FLOWER
<i>Asplenium bulbiferum</i>	mouku, hen and chicken fern	●	EVERGREEN	FERN	MEDICINE CRAFT FOOD	LIZARD	
<i>Hypolepis ambigua</i>	rough pig fern	●	EVERGREEN	FERN		LIZARD	
<i>Polystichum vestitum</i>	pūniu, prickly shield fern	●	EVERGREEN	FERN		LIZARD	
<i>Arthropodium 'Matapouri Bay'</i>	rengarenga	●	EVERGREEN	GRASS/STRAPPY	MEDICINE FOOD	INSECT LIZARD	FLOWER
<i>Astelia fragrans</i>	kakaha, bush lily	●	EVERGREEN	GRASS/STRAPPY	CRAFT	BIRD INSECT LIZARD	FRUIT FLOWER
<i>Astelia nervosa</i>	mountain astelia	●	EVERGREEN	GRASS/STRAPPY	MEDICINE CRAFT FOOD	BIRD INSECT LIZARD	FRUIT FLOWER AUTUMN COLOUR
<i>Dianella revoluta 'Little Rev'</i>	little rev turf lily	●	EVERGREEN	GRASS/STRAPPY	BUILDING MEDICINE CRAFT FOOD	BIRD INSECT	FRUIT FLOWER
<i>Dianella nigra</i>	turutu, nz blueberry	●	EVERGREEN	GRASS/STRAPPY		BIRD INSECT	FRUIT FLOWER
<i>Dietes grandiflora</i>	fairy iris	●	EVERGREEN	GRASS/STRAPPY	CRAFT	INSECT	FRUIT FLOWER
<i>Libertia grandiflora</i>	mikoikoi, NZ iris	●	EVERGREEN	GRASS/STRAPPY		BIRD INSECT	FRUIT FLOWER
<i>Libertia ixioides</i>	mikoikoi, NZ iris	●	EVERGREEN	GRASS/STRAPPY		BIRD INSECT	FRUIT FLOWER
<i>Libertia peregrinans</i>	creeping iris	●	EVERGREEN	GRASS/STRAPPY		BIRD INSECT	FRUIT FLOWER



BOTANICAL NAME	MAORI/Common NAME	PROVENANCE	LEAF RETENTION	PLANT FORM	MAHINGA KAI	ECOLOGICAL	SEASONALITY
		<div> <div>● LOCAL</div> <div>● NATIVE</div> <div>● EXOTIC</div> </div>	<div> <div> DECIDUOUS</div> <div> EVERGREEN</div> </div>	<div> <div> SHRUB</div> <div> G/COVER</div> <div> FERN</div> <div> GRASS/STRAPPY</div> </div>	<div> <div> BUILDING</div> <div> MEDICINE</div> <div> CRAFT</div> <div> FOOD</div> </div>	<div> <div> BIRD</div> <div> INSECT</div> <div> LIZARD</div> </div>	<div> <div> FRUIT</div> <div> FLOWER</div> <div> AUTUMN COLOUR</div> </div>
<i>Phormium cookianum</i> 'Emerald Gem'	wharariki, mountain flax	●					
<i>Carex buechananii</i>	buechanan's sedge	●					
<i>Carex solandri</i>	forest sedge	●					
<i>Carex virgata</i>	swamp sedge	●					
<i>Chionochloa flavicans</i>	haumata, miniature toe toe	●					
<i>Chionochloa rigida</i>	wī kura, narrow-leaved snow tussock	●					
<i>Festuca novae-zelandiae</i>	fescue tussock, hard tussock	●					
<i>Poa cita</i>	wī, silver tussock	●					
<i>Achillea millefolium</i> 'Terracotta'	common yarrow	●					
<i>Agastache foeniculum</i>	anise hyssop	●					
<i>Echinacea purpurea</i> 'Magnus'	purple coneflower	●					
<i>Felicia amelloides</i>	blue marguerite	●					
<i>Helleborus orientalis</i>	lenten rose	●					
<i>Rudbeckia fulgida</i> 'Goldstrum'	black eyed susan	●					
<i>Colchicim speciosum</i>	autumn crocus, naked ladies	●					
<i>Galanthus nivalis</i>	snowdrops	●					
<i>Muscari armeniacum</i> 'Touch of snow'	grape hyacinth	●					
<i>Narcissus</i> 'Carlton'	carlton daffodil	●					
<i>Zephyranthes candida</i>	rain lily	●					

## 5.14 Planting - Planter bed palette

### LEGEND

- taiao/ecology: integrate nature  
attract native wildlife and insects
- rerehua/beauty: reflect the seasons  
seasonal interest
- taoka tuku iho/heritage: reinforce identity  
mahinga kai value

### SHRUBS



TARAKUPENGA  
*Coprosma acerosa*



WAIŪATUA  
*Euphorbia glauca*



CUSHION SPURGE  
*Euphorbia 'Polychroma'*



BUTTERFLY BUSH  
*Gaura lindheimeri*



MT ARTHUR HEBE  
*Hebe albicans*



QUICKSILVER HEBE  
*Hebe pimeleoides*  
'Quicksilver'



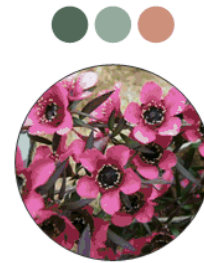
WHIPCORD HEBE  
*Hebe propinqua*



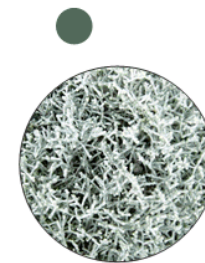
WIRI MIST HEBE  
*Hebe 'Wiri Mist'*



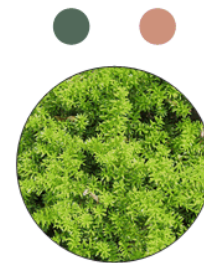
WIRI PRINCE  
*Hebe 'Wiri Prince'*



MĀNUKA  
*Leptospermum scoparium*  
'Red Falls'



SILVER CUSHION  
*Leucophyta brownii*  
'Silver nugget'



SNOW TOTARA  
*Podocarpus nivalis*



STONE CROP  
*Sedum spectabile*  
'Autumn Joy'



PROSTRATE KŌWHAI  
*Sophora prostrata*  
'Little Twister'

### FERN



MOUKU  
*Asplenium bulbiferum*



ROUGH PIG FERN  
*Hypolepis ambigua*



PUNIŪ  
*Polystichum vestitum*



GROUNDCOVERS

LEGEND

- taiao/ecology: integrate nature  
attract native wildlife and insects
- rerehua/beauty: reflect the seasons  
seasonal interest
- taoka/tuku iho/heritage: reinforce identity  
mahinga kai value



GLAUCOUS BIDI BIDI  
*Acaena caesiiglauca*



PURPLE BIDIBIDI  
*Acaena inermis 'Purpurea'*



RED BIDIBIDI  
*Acaena novae-zelandiae*



EVERLASTING DAISY  
*Anaphalioides bellidioides*



SIBERIAN TEA  
*Bergenia cordifolia*  
'Bressingham White'



SAND COPROSMA  
*Coprosma acerosa*  
'Hawera'



SAND COPROSMA  
*Coprosma acerosa*  
'Red rock'



HOROKAHA  
*Disphyma australe*



CREeping FUCHSIA  
*Fuchsia procumbens*



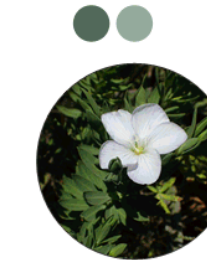
GUNNERA  
*Gunnera prorepens*



SHORE LEPTINELLA  
*Leptinella dioica*



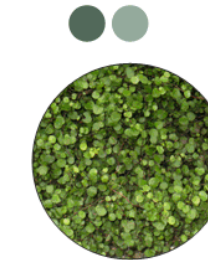
TRACTOR SEAT  
*Ligularia reniformis*



RAUHUIA  
*Linum monogynum*



PĀNAKENAKE  
*Lobelia angulata*



CREeping POHUEHUE  
*Muehlenbeckia axillaris*



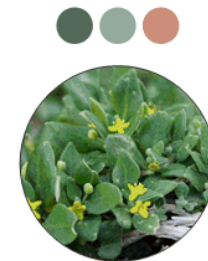
MARLBOROUGH  
ROCK DAISY  
*Pachystegia insignis*



PINĀTORO  
*Pimelea prostrata*



NZ DAPHNE  
*Pimelea urvilleana*



KŌKIHI  
*Tetragonia implexicoma*



CREeping THYME  
*Thymus serpyllum*  
'Coccineus'



FLAX & STRAPPY PLANTS

LEGEND

- taiao/ecology: integrate nature  
attract native wildlife and insects
- rerehua/beauty: reflect the seasons  
seasonal interest
- taoka tuku iho/heritage: reinforce identity  
mahinga kai value



RENGARENGA  
*Arthropodium cirratum*  
'Matapouri Bay'



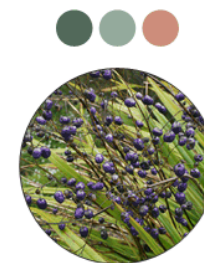
KAKAHA  
*Astelia fragrans*



MOUNTAIN ASTELIA  
*Astelia nervosa*



TURF LILY  
*Dianella revoluta* 'Little Rev'



TURUTU  
*Dianella nigra*



FAIRY IRIS  
*Dietes grandiflora*



MIKOIKOI  
*Libertia grandiflora*



MIKOIKOI  
*Libertia ixioides*



CREEPING IRIS  
*Libertia peregrinans*



PURPLE LILY TURF  
*Liriope muscari*  
'Royal purple'



WHARARIKI  
*Phormium cookianum*  
'Emerald Gem'

GRASS, SEDGE & RUSH



BUCHANAN'S  
SEDE  
*Carex buchananii*



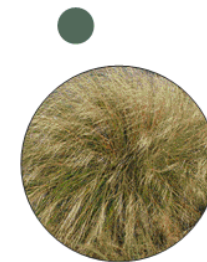
FOREST SEDGE  
*Carex solandri*



SWAMP SEDGE  
*Carex virgata*



HAUMATA  
*Chionochloa flavicans*



WI KURA  
*Chionochloa rigida*



FESCUE TUSOCK  
*Festuca novae-zelandiae*



WI  
*Poa cita*



### SEASONAL COLOUR



COMMON YARROW  
*Achillea millefolium*  
 'Terracotta'



ANISE HYSSOP  
*Agastache foeniculum*



PURPLE CONE FLOWER  
*Echinacea purpurea*  
 'Magnus'



BLUE MARGUERITE  
*Felicia amelloides*



LENTEN ROSE  
*Helleborus orientalis*



BLACK-EYED SUSAN  
*Rudbeckia fulgida*  
 'Goldstrum'

### LEGEND

- 
**taiao/ecology: integrate nature**  
 attract native wildlife and insects
- 
**rerehua/beauty: reflect the seasons**  
 seasonal interest
- 
**taoka tuku iho/heritage: reinforce identity**  
 mahinga kai value

### BULBS



AUTUMN CROCUS  
*Colchicum speciosum*



SNOWDROPS  
*Galanthus nivalis*



GRAPE HYACINTH  
*Muscari armeniacum*  
 'Touch of snow'



CARLTON DAFFODIL  
*Narcissus 'Carlton'*

# Appendices

## 6.0

This section provides the technical appendices for the George Street Developed Design.



## 6.1 Appendix A - Aukaha Cultural Narrative



George Street

Developed Design Report

March 2020

Rev A

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## 6.1 Appendix B - Technical drawings



George Street

Developed Design Report

March 2020

Rev A

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George Street

Developed Design Report

March 2020

Rev A

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