

aurecon

City Rail Link Project

In association with:

Mott MacDonald
Jasmax
GRIMSHAW
ARUP

ALBERT STREET PUBLIC REALM

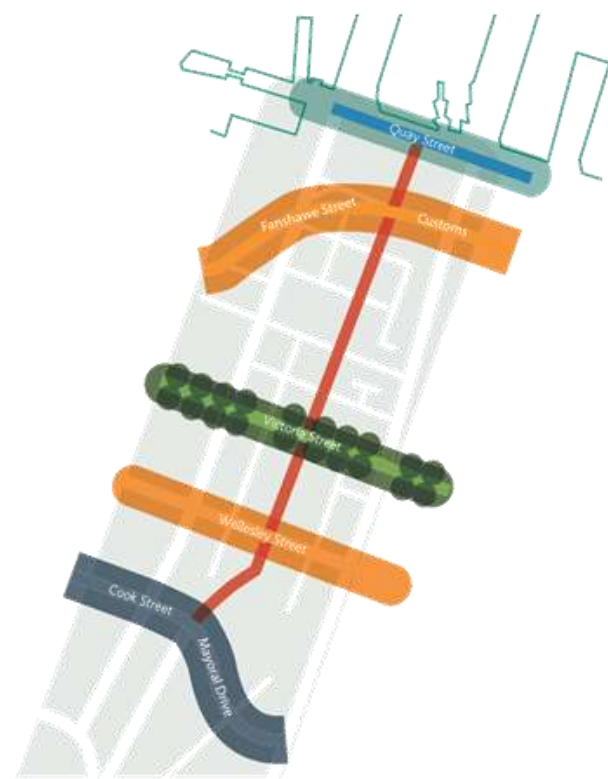


INTERNAL WORKING DOCUMENT
COMMERCIAL IN CONFIDENCE

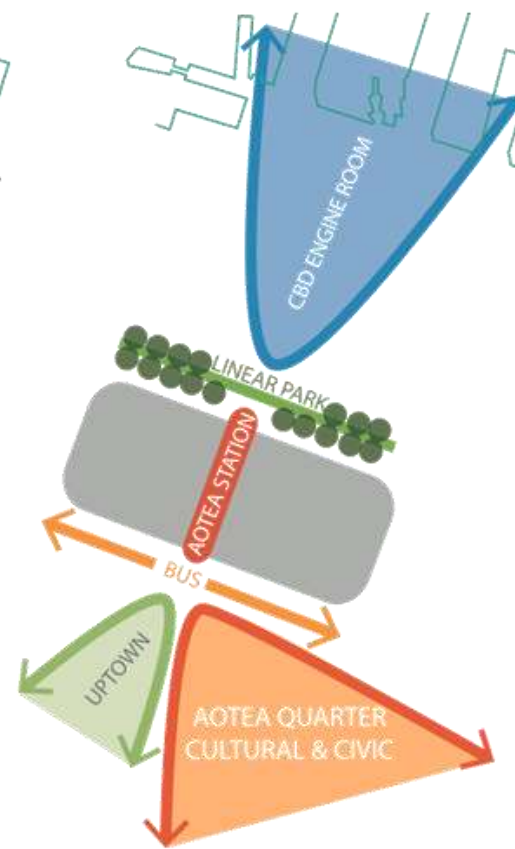
CITY RAIL LINK SCOPE OF WORKS



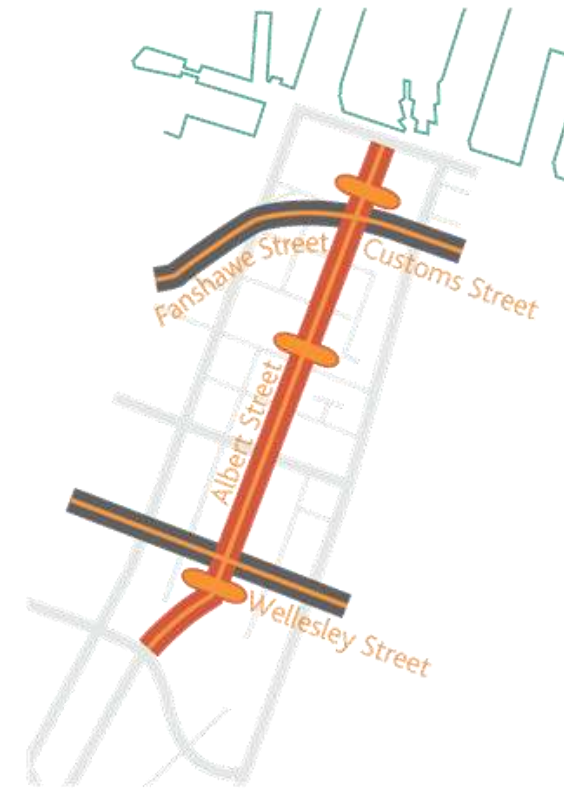
CONCEPTUAL IDEAS
ALBERT ST DESIGN FRAMEWORK (ADO)



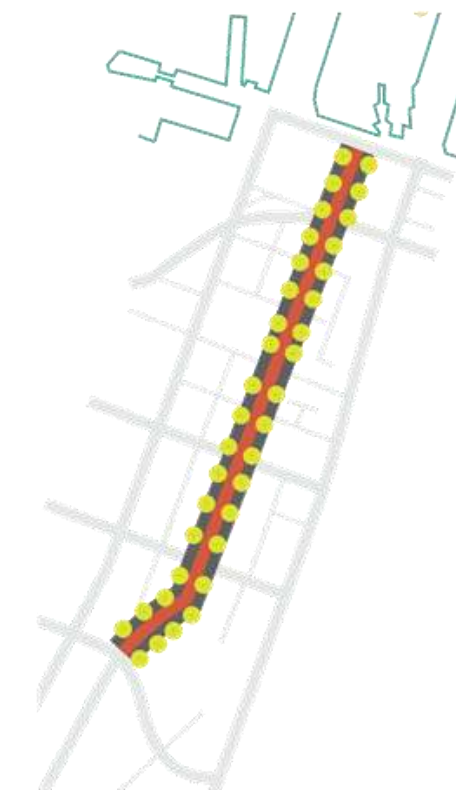
Major east-west streets take precedence over Albert St



Albert St broken up into distinct sections pivoted around Aotea Station block



Recognised as a celebrated civic pt street consistent in quality with other major bus streets in the CBD

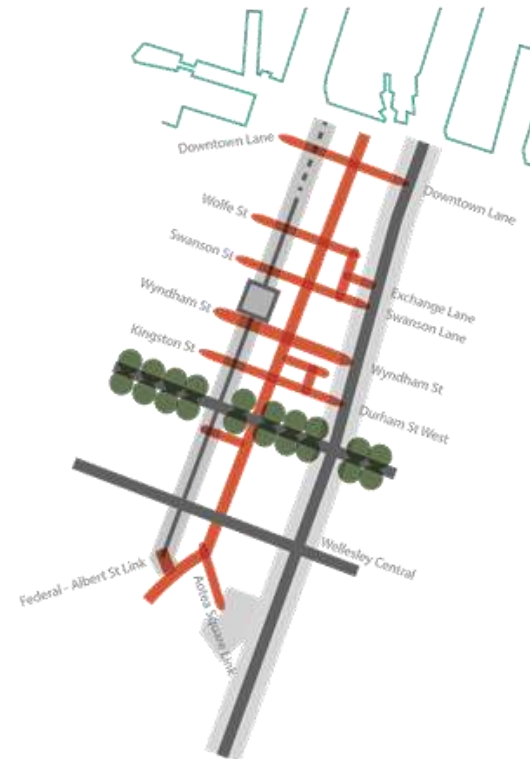


Street trees and surface materials provide continuity + consistency

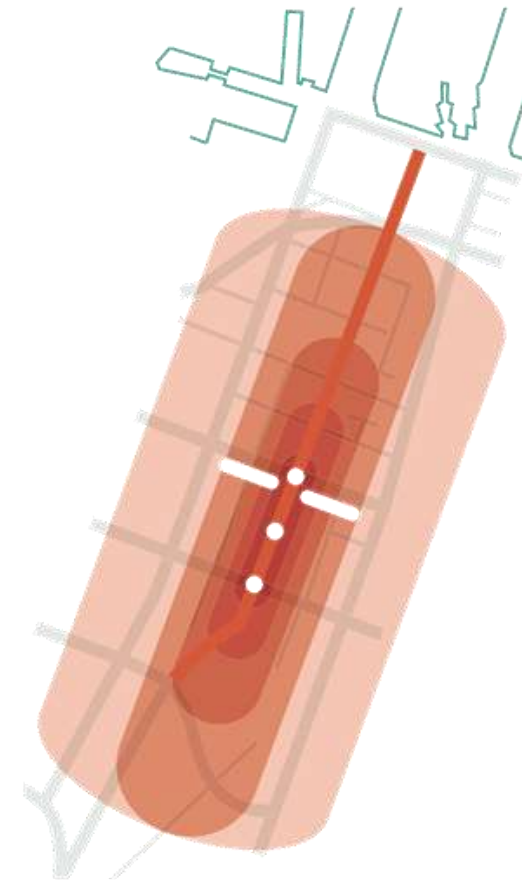
CONCEPTUAL IDEAS
ALBERT ST DESIGN FRAMEWORK (ADO)



A common approach to the design of main intersections to prioritise pedestrian movement and reclaim junctions as an important public place



Strengthen east-west links with Federal St and Queen St

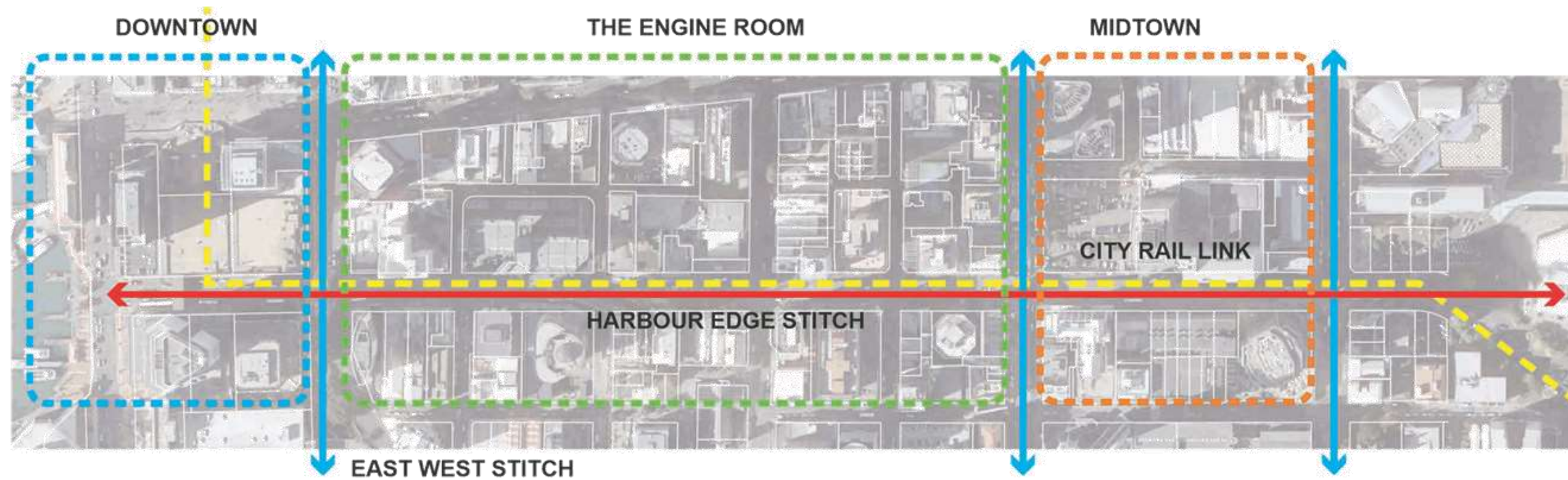


Support Aotea Station becoming a regenerative force across Midtown and Aotea Quarter



Strengthen and enhance sightlines from key intersections

STRATEGIC DESIGN CONTEXT
CRL ENABLING WORKS REFERENCE DESIGN (ADO / CRL)



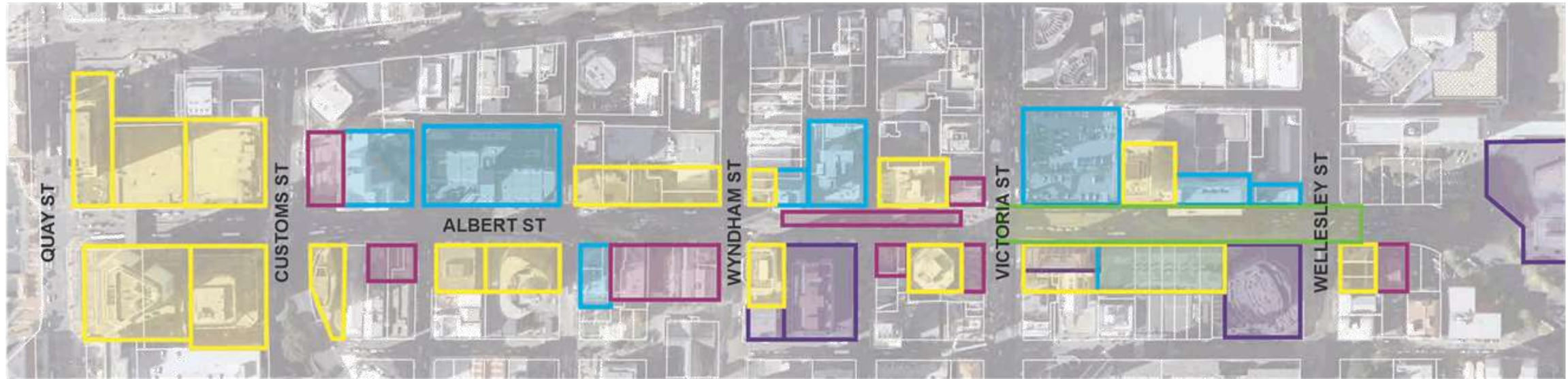
1. A High Quality Civic Corridor
2. A Pedestrian Focused Environment
3. An Efficient Public Transport Network
4. A Legible Civic Public Transport Street

5. Connecting The City To The Harbour And Beyond
6. Integration Of Cultural Design Principles
7. Stimulates Investment And Economic Vitality

STRATEGIC DESIGN CONSIDERATIONS

ALBERT STREET STAKEHOLDERS / RESIDENTS

What is Albert Street's role and status in the Central City?



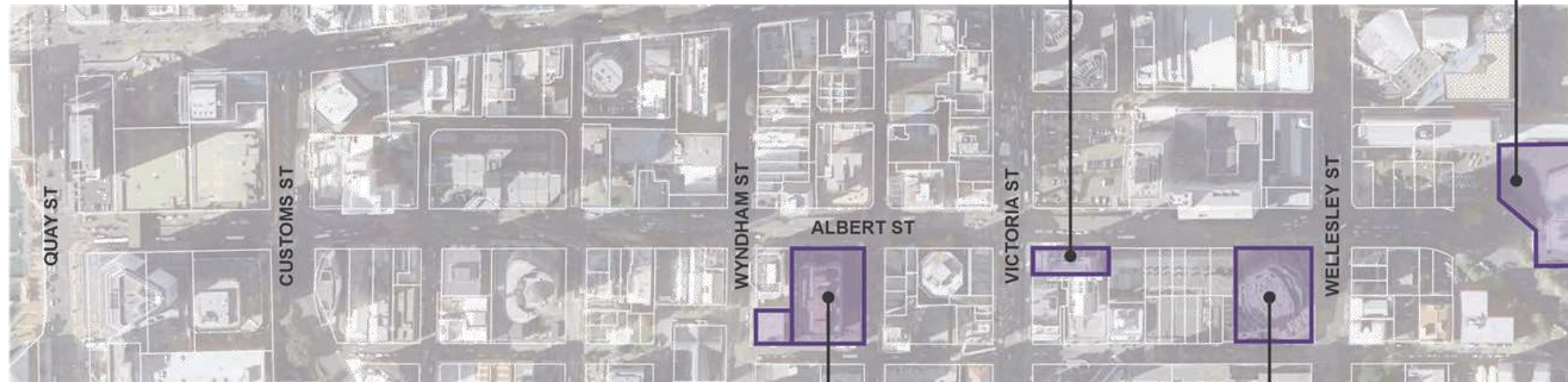
STAKEHOLDER ANALYSIS CIVIC BUILDINGS / FUNCTIONS

Albert Street is home to some of Auckland's most notable public institutions and as such contribute significantly to the physical character and function of the corridor.

Internal Affairs
Te Tari Taiwhenua
'Building a safe, prosperous and respected nation'



Aotea Centre



Ministry of Justice
Tāhū o te Ture



Auckland Council
Te Kaurihera o Tāmaki Makaurau



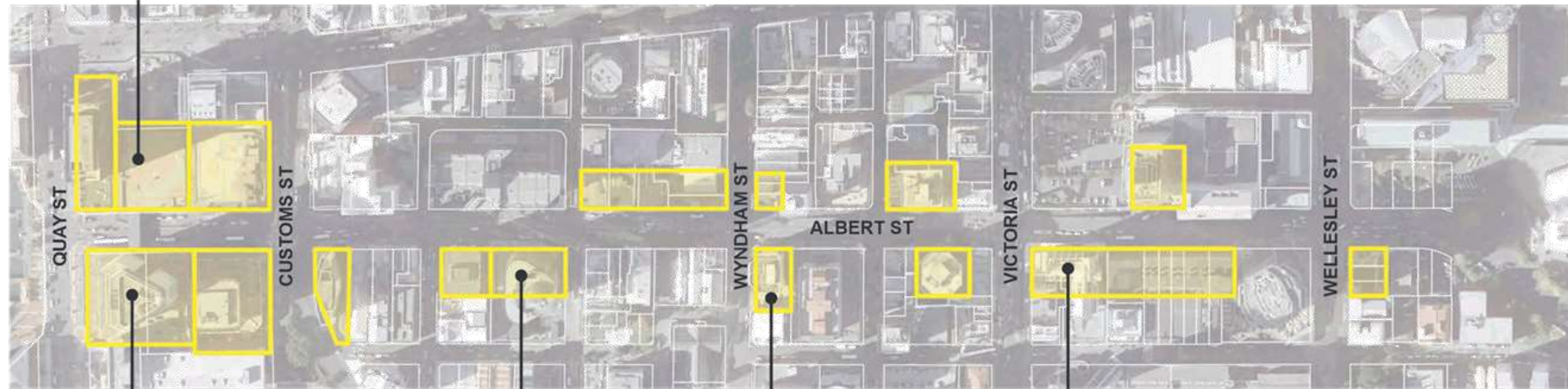
STAKEHOLDER ANALYSIS COMMERCIAL / BUSINESS

Commercial Bay



The banking, finance and insurance industry hold a significant present on the corridor with a number of New Zealand's most notable business's calling Albert Street home.

These organisations play a key role in the economic stability and prosperity of the country. Alongside these anchor business' are a range of other commercial enterprises such as educational facilities, retail and food and beverage outlets



Shanghai Banking / PWC



ANZ



AMI



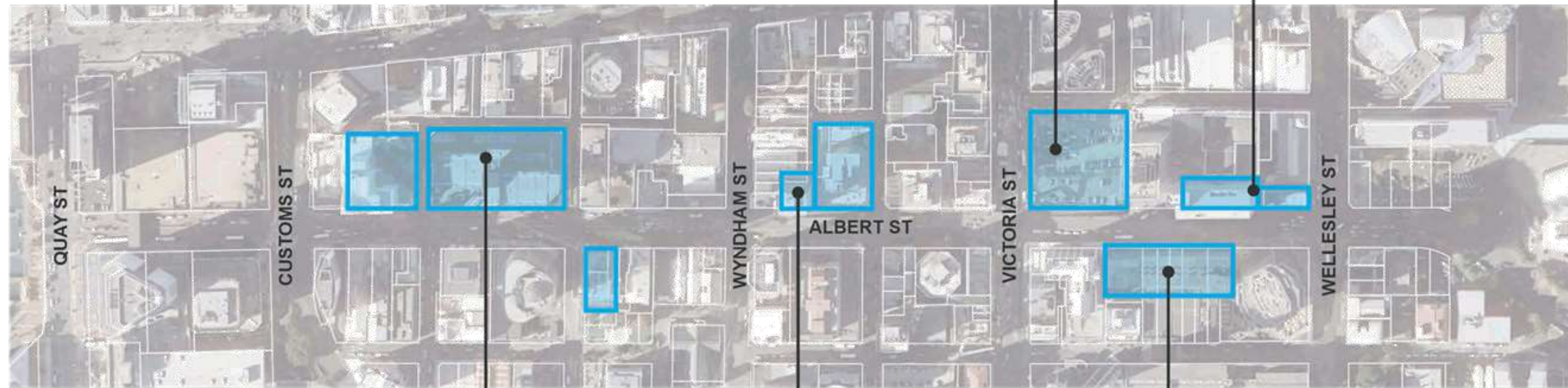
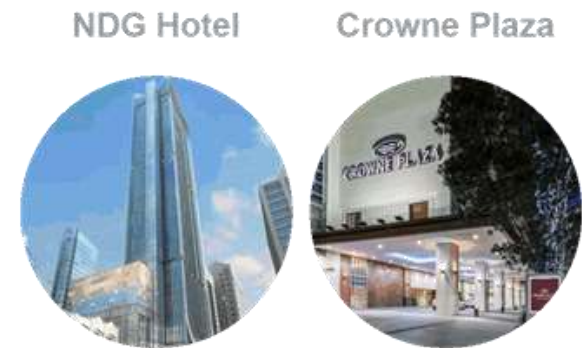
AA



STAKEHOLDER ANALYSIS ACCOMMODATION

A number of Auckland's premier hotel accommodation is situated on Albert Street. The first impression of Auckland for many visitors is when they leave their hotels for the first time.

A growing number of residents are choosing to live in central Auckland with apartment developments established, under construction or proposed for the street. As such a safe healthy environment is important.



Stamford Plaza



Barclay Suites



Sky City Grand



STAKEHOLDER ANALYSIS
HERITAGE CHARACTER

DFS Galleria



98 Albert St



There are a number of character buildings and features that enrich the historic value of the corridor.



9 Wolfe St



Shakespeare Hotel



Bluestone Wall



Martha's Corner

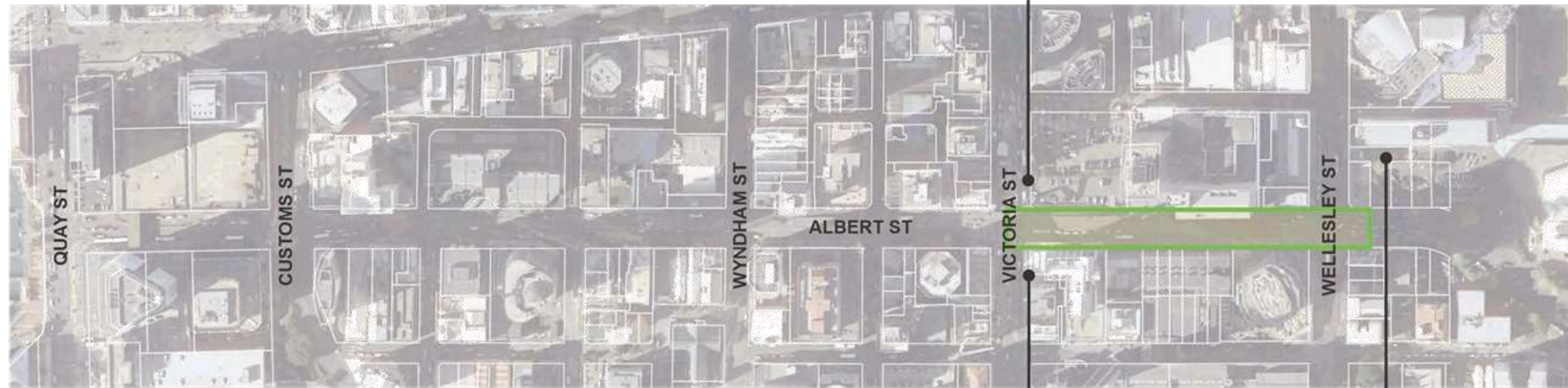


Public Trust Office



STAKEHOLDER ANALYSIS CITY RAIL LINK

The proposed Aotea Station that spans the block between Victoria and Wellesley Street will transform midtown Auckland. It is likely the station will be the busiest on the rail network.



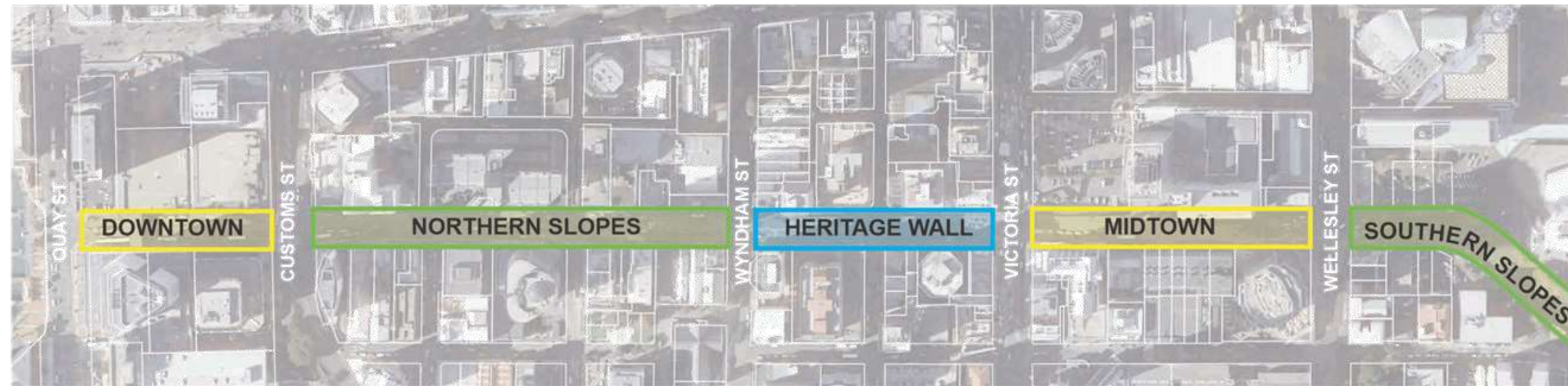
ALBERT STREET CORRIDOR ZONES

Downtown

- Transport interchange and associated infrastructure
- High pedestrian concentration
- Landmark commercial office buildings and the proposed Commercial Bay development

Midtown

- Proposed CRL Aotea Station
- Includes the Crown Plaza, Auckland Council, Sky City, AA building and proposed NDG building.
- High pedestrian concentration with multiple pedestrian movement desire lines.
- Strong association with the East-West linear park
- Constrained cross section



Northern Slopes

- Pedestrian and transport movement zone
- Corridor supports tree lined street
- Requirement for integration of bus stops

Heritage Wall

- Existing stone heritage wall and the associated laneways defines the character of the block
- Pedestrian and transport movement zone
- Constrained cross section

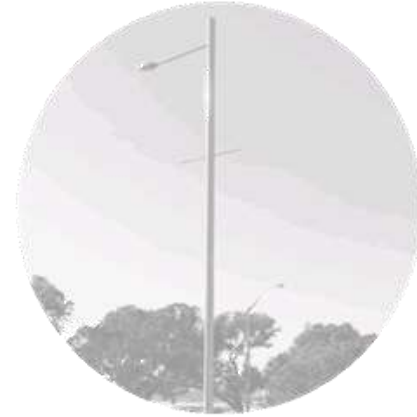
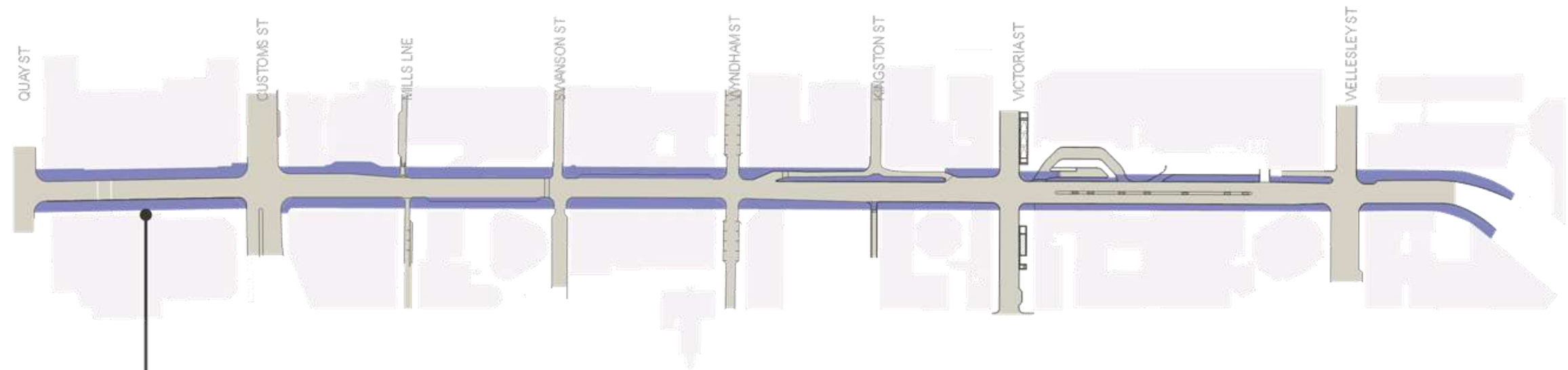
Southern Slopes

- Pedestrian and transport movement zone
- Substantial existing street trees
- Large bus stops situated on the street providing access to Aotea Centre and Square

PROJECT SCOPE OF WORKS
CRL ENABLING WORKS REFERENCE DESIGN (ADO)



DESIGN STRATEGY
PAVING MATERIALS



TRAFFIC LANE CONFIGURATION

The arrangement of traffic lanes can have an impact on the look and feel of the street.

Over engineered lane configurations with little consideration to pedestrian amenity can feel vehicle centric and lack design compositional rigor.

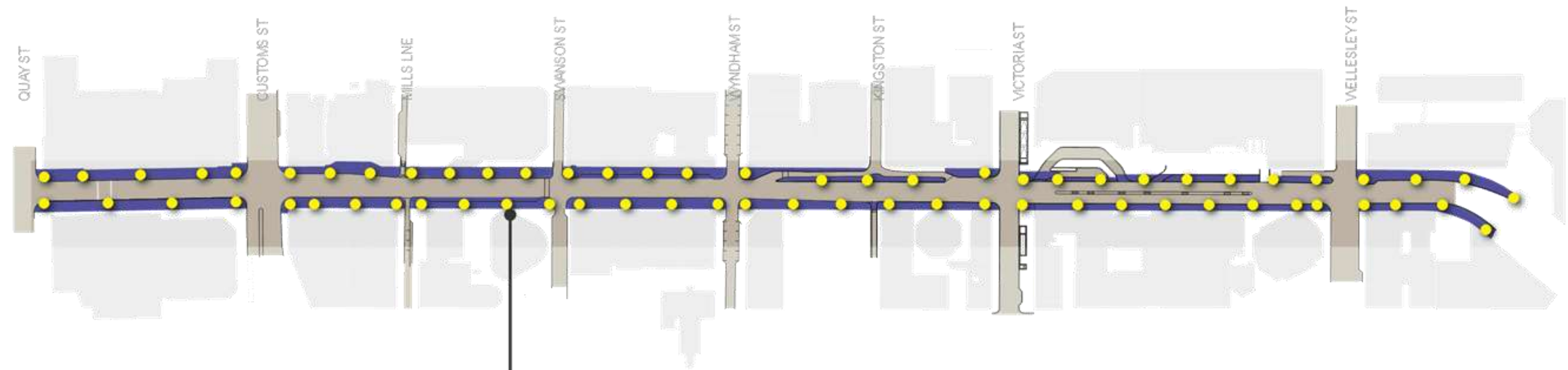
Albert Street is designated a major bus network corridor and as such integration of the bus operation requirements is key to the success of the street.



The design;

- Has undergone a rigorous evaluation by bus operations and meets their requirements
- The alignment of the kerbs are parallel to the building facades where achievable to create a unified cross sectional design response.
- Kerb radii are kept to a minimum to prioritise pedestrian movements at intersections

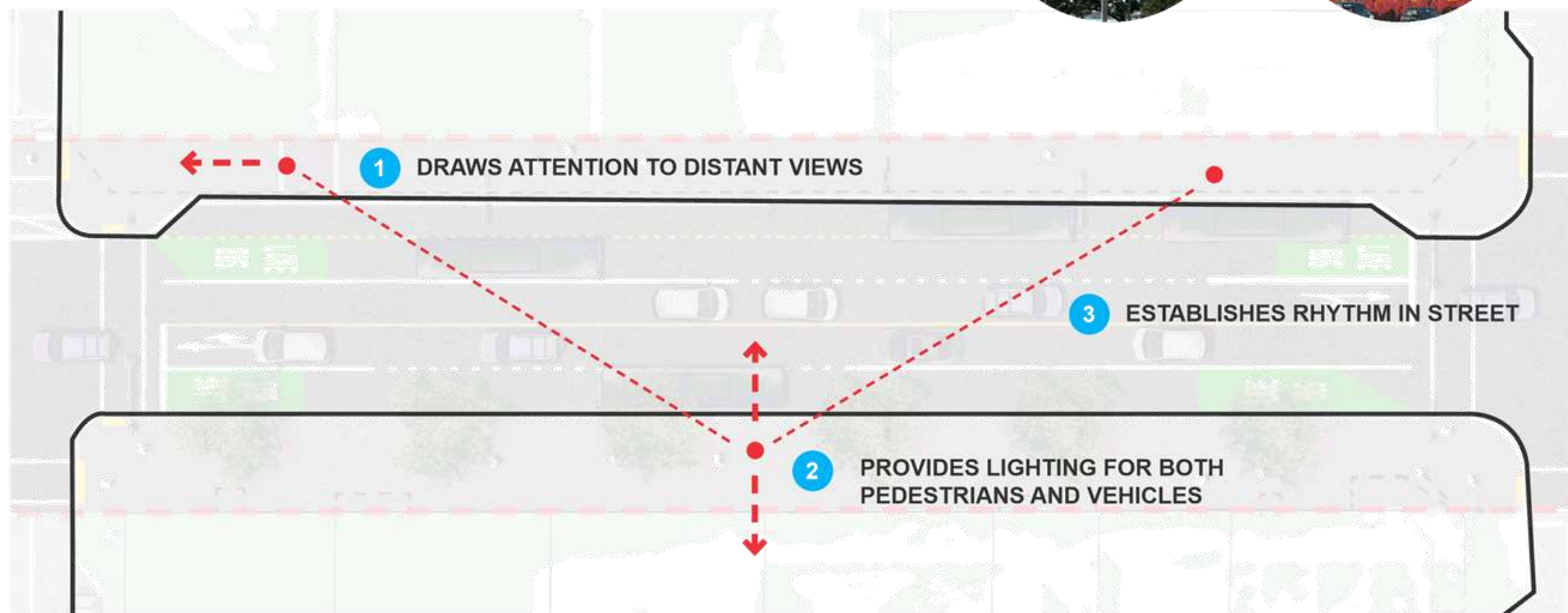
DESIGN STRATEGY LIGHTS



VERTICAL ELEMENTS

Vertical elements such as light columns and banner poles can play an important role in the visual cohesion of the street.

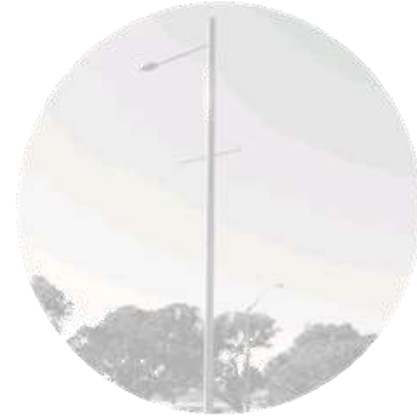
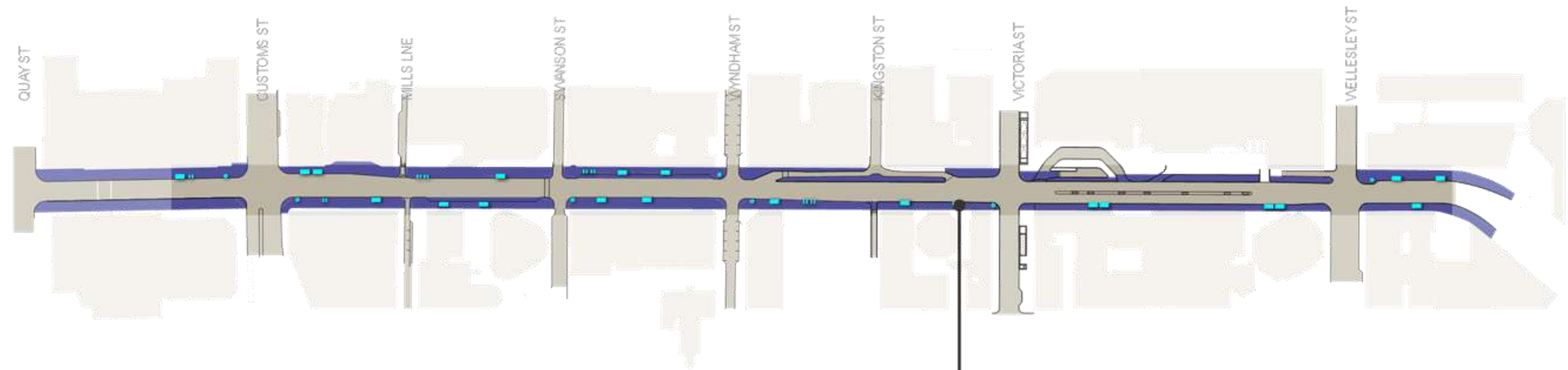
The rhythm that is established through pole placement is pleasing to the eyes and draws your attention to distant views such as the Harbour in the case of Albert Street. Various vertical element placements have been tested such as locating the poles down the centre of the street in a medium maximising visual cohesion however the team is recommending the poles be located in the footpaths.



The reason includes;

- The corridor is reasonably narrow and placing poles in the centre bifurcates your spatial perception.
- Poles to the edges provide a visual transition between the adjacent buildings and street improving the human scale.
- Lighting can be directed towards both the street and footpath areas from a single location. Poles in a medium would require additional pole lighting for footpaths.
- Poles in the footpaths can work in tandem with street trees strengthening the vertical rhythm to the street edge.

DESIGN STRATEGY
FURNITURE



EDGE ACTIVATION

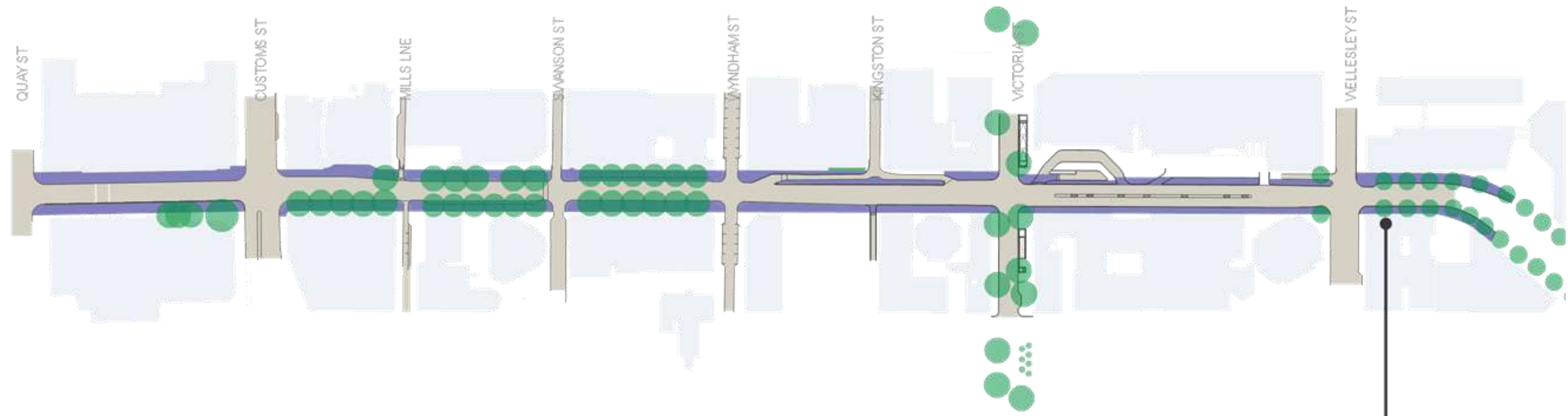
The type and mix of development along the edge of the corridor has a major impact on the vitality of the street.

Given Albert Street has a number of large civic buildings and commercial developments along its edges there is a somewhat sporadic edge activation limited to the pockets of smaller character buildings. These typically house retail and food and beverage offerings.



This project has little control over this however the project can act as a catalyst for investment in new mixed use development in underutilised areas of the corridor.

DESIGN STRATEGY
TREES



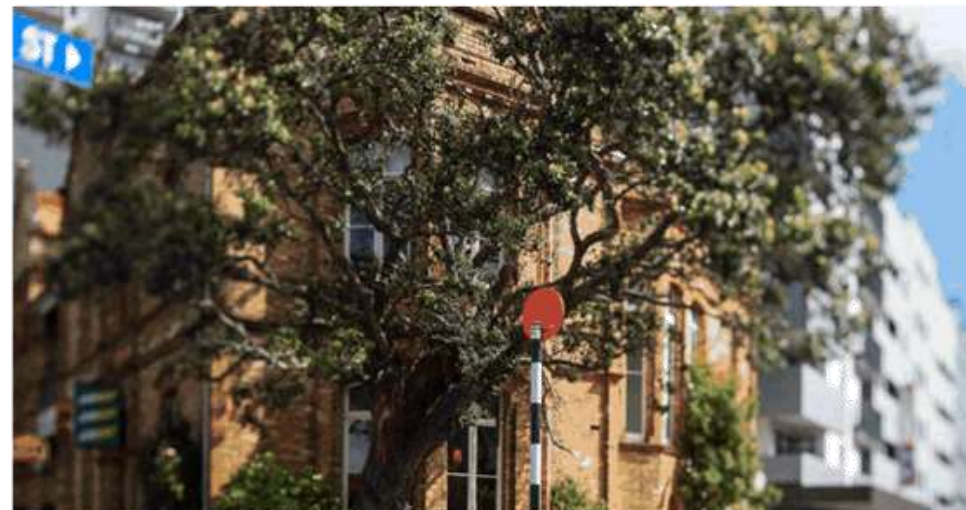
RECOMMENDATIONS SUMMARY



Stone pavement to all footpath areas



Smart poles for street and intersection lighting

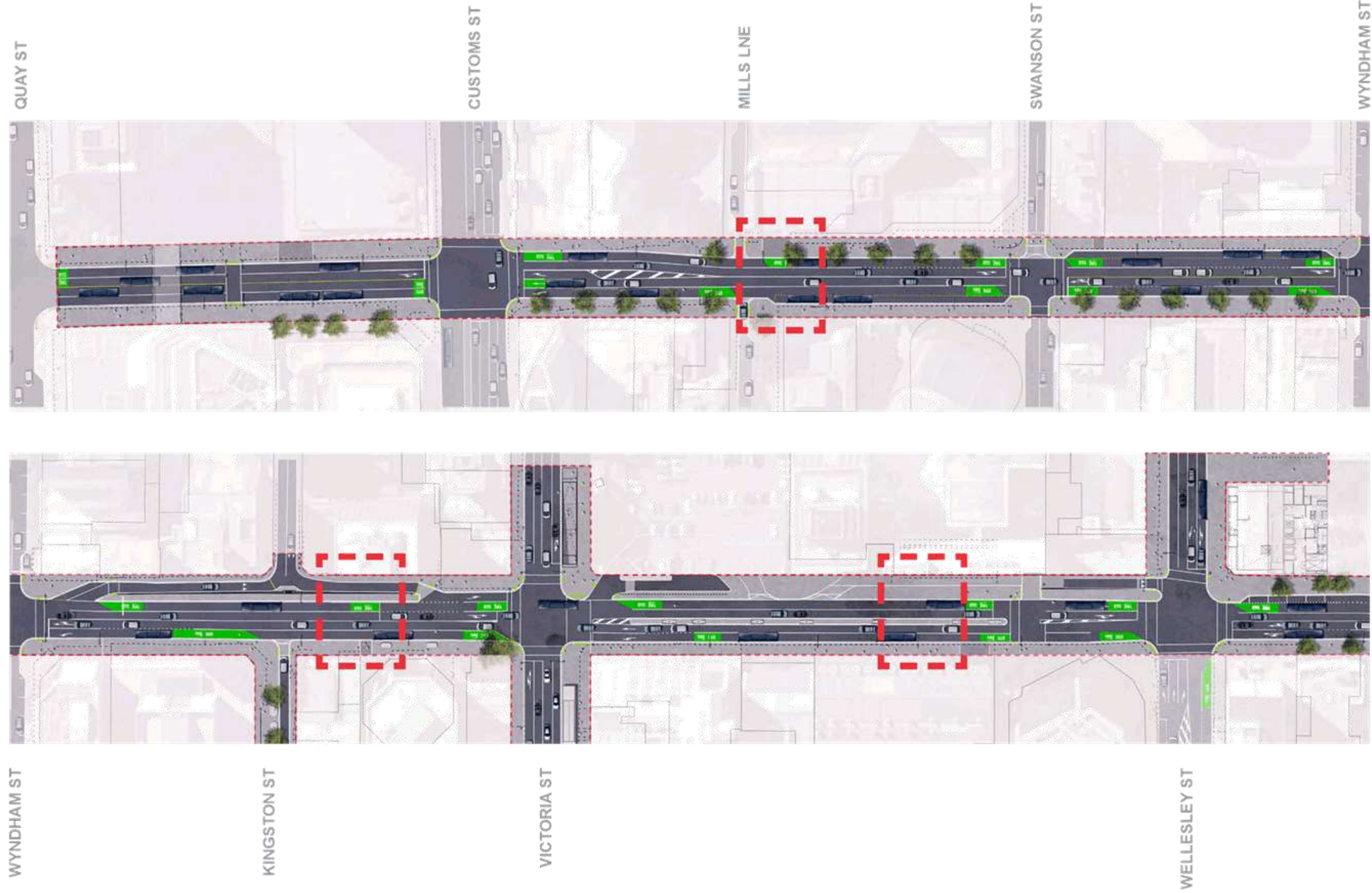


Mature tree specimens



CBD furniture suite

ALBERT ST
QUAY TO CUSTOMS

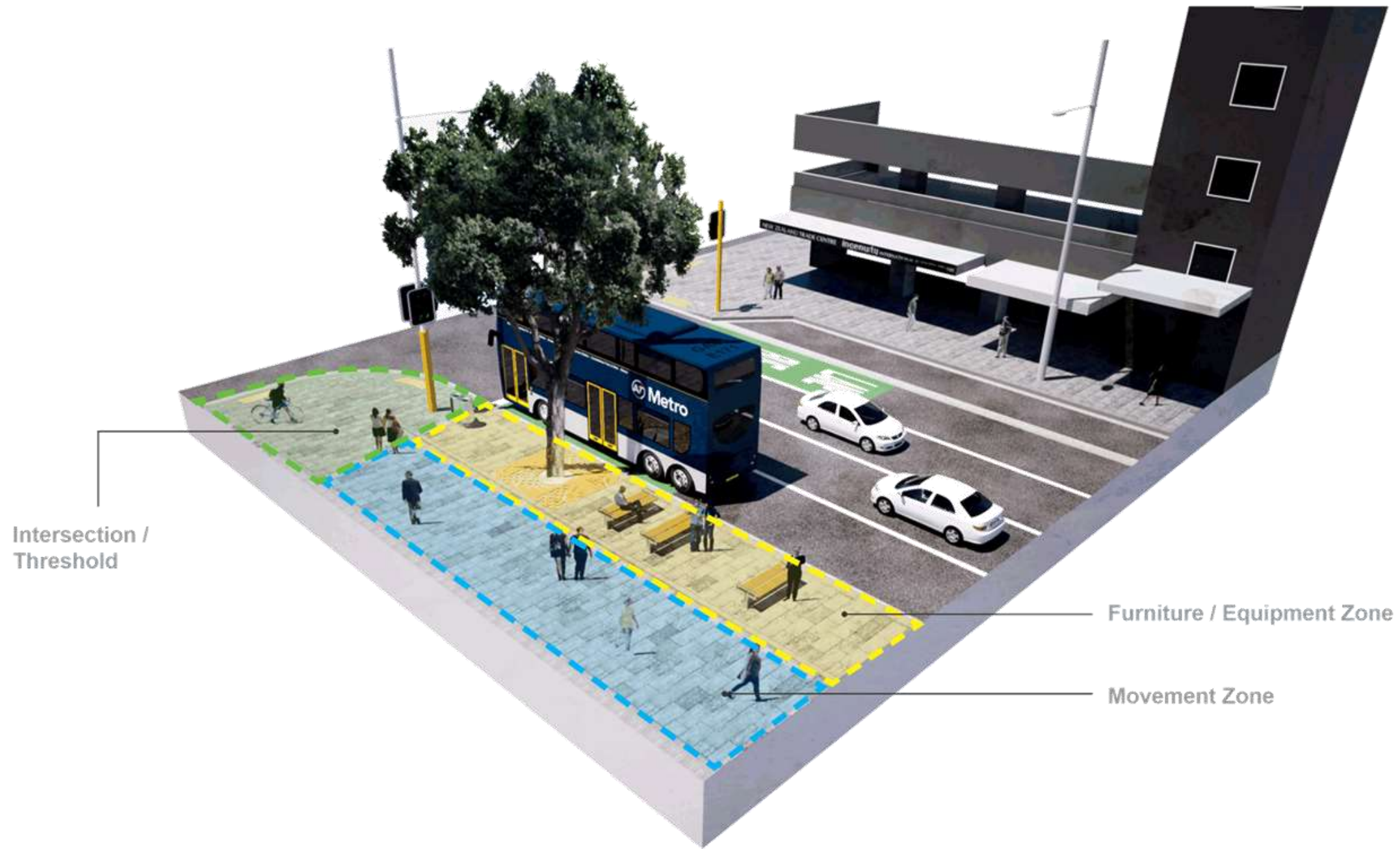


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GENERAL ARRANGEMENT
NORTHERN SLOPES



GENERAL ARRANGEMENT
NORTHERN SLOPES



Intersection /
Threshold

Furniture / Equipment Zone

Movement Zone

NORTHERN SLOPES
OUTSIDE THE STAMFORD PLAZA

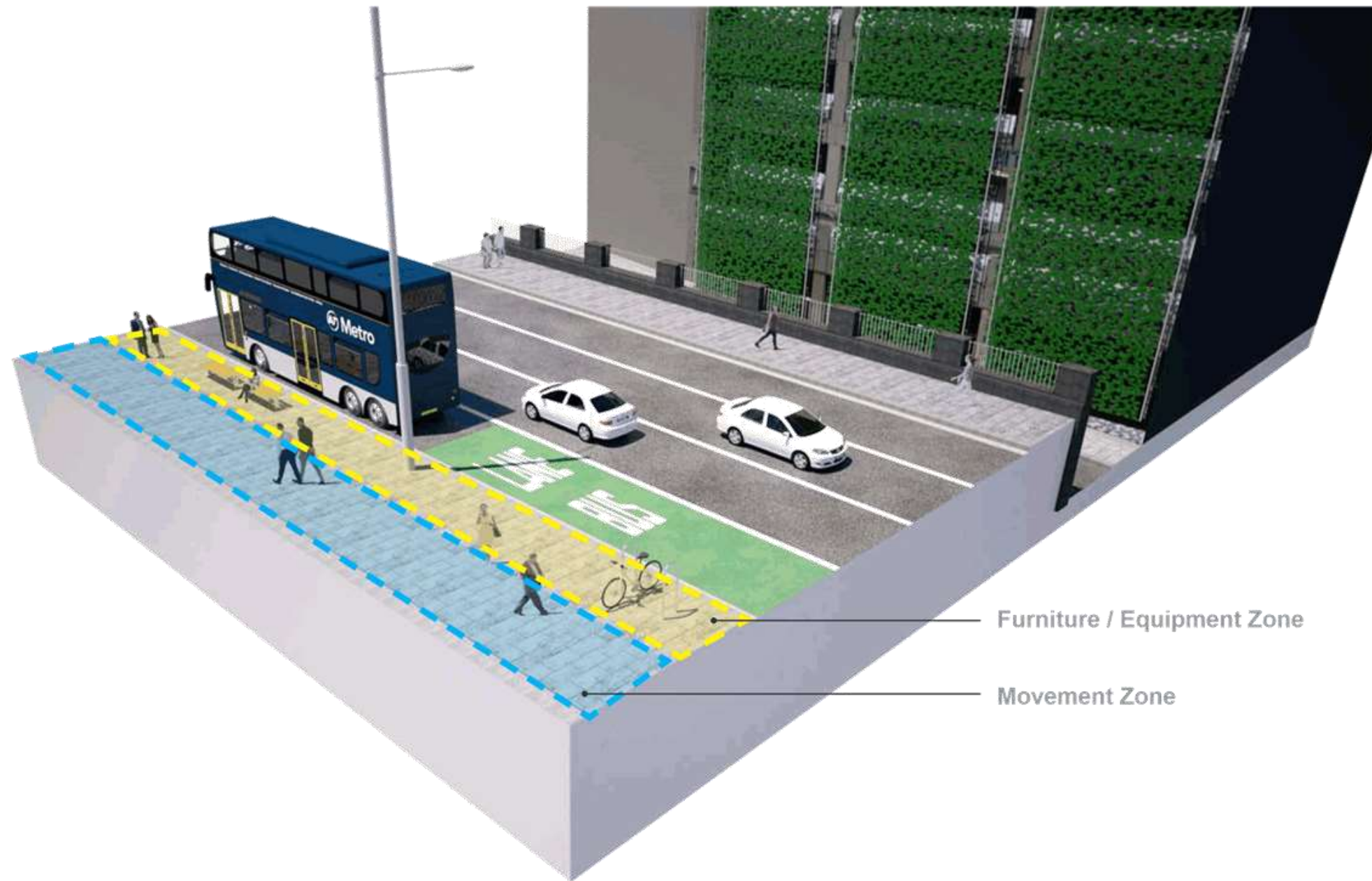


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GENERAL ARRANGEMENT
HERITAGE WALL



GENERAL ARRANGEMENT HERITAGE WALL



Furniture / Equipment Zone

Movement Zone

HERITAGE WALL
OUTSIDE THE MEDIA DESIGN SCHOOL

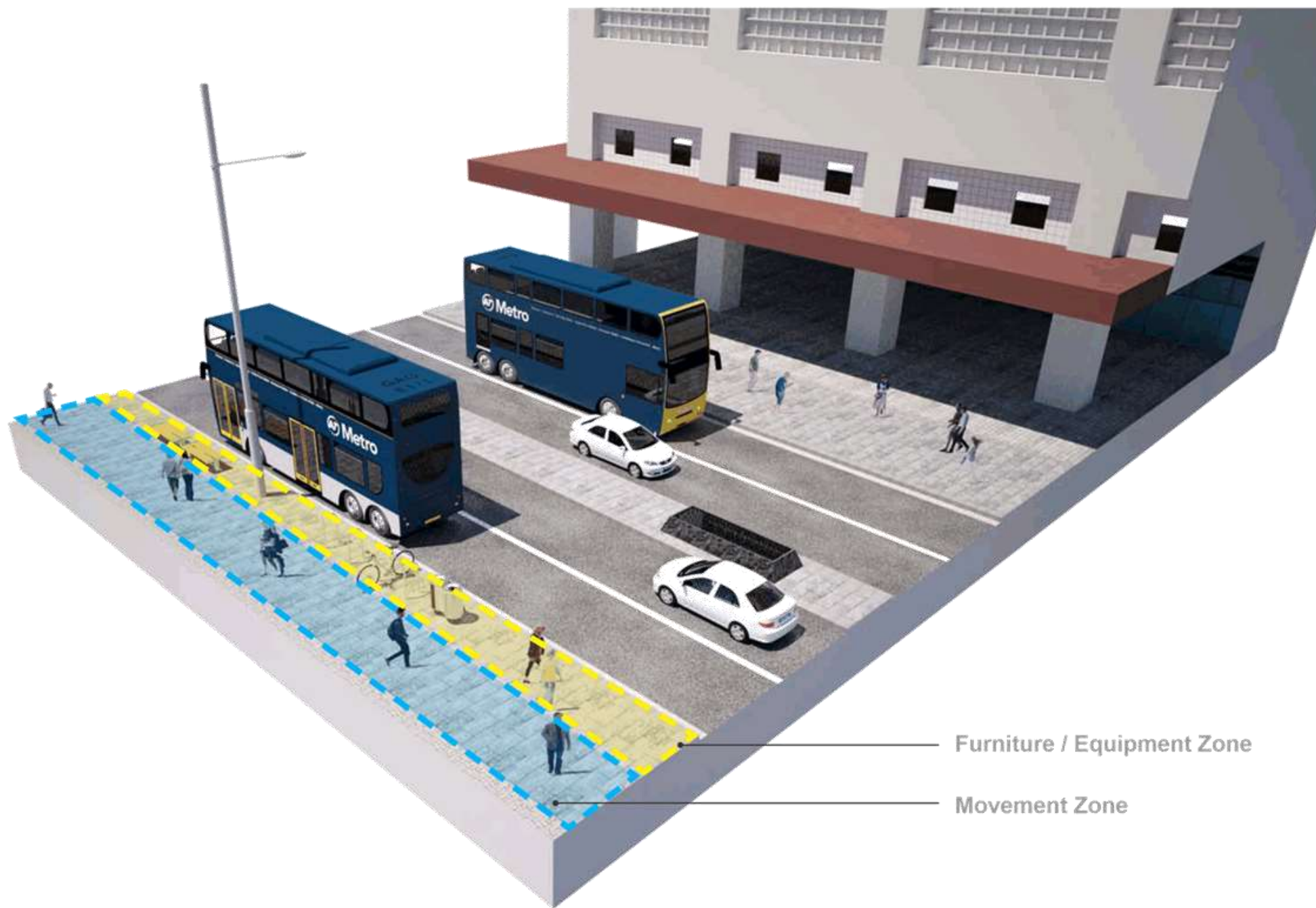


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GENERAL ARRANGEMENT
MIDTOWN



GENERAL ARRANGEMENT
MIDTOWN



Furniture / Equipment Zone

Movement Zone

MIDTOWN
VICTORIA ST INTERSECTION



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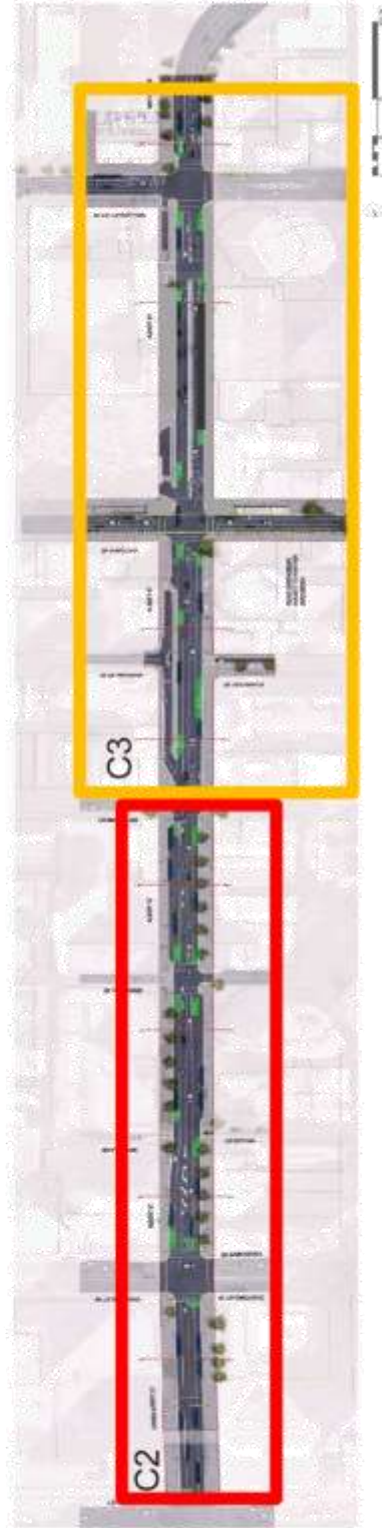
MIDTOWN
WELLESLEY ST INTERSECTION



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Albert Street Concept Design May 2017



C2 Estimate \$figures May 24th 2017

A BASE OPTION

A1 CONTRACT 2 - BASE OPTION

A1A Zone 1: Albert Street (Customs Street to Wyncham Street)	8,411	577	4,850,000
A1B Zone 2: Albert Street (Quay to Customs Street)	3,962	1,297	5,140,000
A1 - CONTRACT 2 - BASE OPTION	12,373	\$607	\$9,990,000

A2 ASSOCIATED UTILITIES DIVERSION WORK (PROVISIONAL SUM)

A3 P&G/MARGIN/FEES/CONTINGENCY & MSQA (INCLUDES RISK)

A - BASE OPTION 12,373 \$1,824 \$22,565,000

- Concrete kerbs
- Std footpath- BOAC concrete
- Some trees and tree pits
- Only within Albert Street/CRL designation
- Standard street lighting



Concept Phase 2 future proofed area C2B1A



 C2B1C1 Mills Lane extension area.



C2B1C2 Wolfe Street extension area.



C2B1C3 Swanson Street extension area.



C2B1C4 Wyndham Street extension area.



Albert Street C2 Option 1

CRL

- Concrete kerbs
- Std footpath- BOAC concrete
- Some trees and tree pits
- Only within Albert Street/CRL designation
- Standard street lighting

CCAB

- Stone kerbs
- Stone paving to footpath
- Future proofed bus bay removal replaced with tree plantings and footpath
- Lighting enhancements
- Some work outside designation



C2 Estimate May 24th 2017 Option 1

B1 Contract 2 Extra Value for enhanced option 1		
B1A Zone 1: Albert Street (Customs Street to Wyndham Street)	\$3,150,000	
B1B Zone 2: Albert Street (Quay to Customs Street)	\$1,950,000	
B1C Additional scope of works areas		
B1C1 Mills Lane	\$ 520,000*	
B1C2 Wolfe Street	\$ 100,000*	
B1C3 Swanson Street	\$ 100,000*	
B1C4 Wyndham Street	\$ 610,000*	
B1 Contract 2 Extra Value for enhanced option 1	<u>\$ 6,430,000*</u>	
B2 associated utilises diversion work (provisional sum)	\$ 970,000	
B3 Extra design work and resource consenting	Excl.	25% total
Extra Value for Enhanced option	\$7,400,000*	
Estimated C2 net cost		\$29,965,000*





Albert Street C2 Option 1A

CRL

- Concrete kerbs
- Std footpath- BOAC concrete
- Some trees and tree pits
- Only within Albert Street/CRL designation
- Standard street lighting

CCAB

- Stone kerbs
- Stone paving to footpath
- No future proofed bus bay removal replaced with tree plantings and footpath
- Lighting enhancements
- Some work outside designation



C2 Estimate May 24th 2017 Option 1A

B1 Contract 2 Extra Value for enhanced option 1A		21% total
B1A Zone 1: Albert Street (Customs Street to Wyndham Street)	\$2,530,000*	
B1B Zone 2: Albert Street (Quay to Customs Street)	\$1,950,000	
B1C Additional scope of works areas		
B1C1 Mills Lane	\$ 520,000*	
B1C2 Wolfe Street	\$ 100,000*	
B1C3 Swanson Street	\$ 100,000*	
B1C4 Wyndham Street	\$ 610,000*	
B1 Contract 2 Extra Value for enhanced option 1	<u>\$ 5,810,000*</u>	
B2 associated utilises diversion work (provisional sum)	\$ 300,000*	
B3 Extra design work and resource consenting	Excl.	
Extra Value for Enhanced option	\$6,110,000*	
Estimated C2 net cost	\$28,675,000*	





C3 Estimate \$figures May 23rd 2017



A BASE OPTION

A1 CONTRACT 3 - BASE OPTION

A1A	Wyndham Street to Victoria Street	6,702	619	4,150,000
A1B	Victoria Street to Wellesley Street	8,433	611	5,150,000
A1C	Mayoral Drive	2,917	833	2,430,000
A1 - CONTRACT 3 - BASE OPTION		18,052	\$650	\$11,730,000

A2 ASSOCIATED UTILITIES DIVERSION WORK (PROVISIONAL SUM)

A3	P&G/MARGIN/FEEES/CONTINGENCY & MSQA (INCLUDES RISK)			2,500,000
				18,630,000

A - BASE OPTION 18,052 \$1,820 \$32,860,000

- Concrete kerbs
- Std footpath- BOAC concrete
- Replace Harvey Tree
- Only within Albert Street/CRL designation
- Standard street lighting



C3 B1A Wyndham to Victoria enhancement.





Albert Street C3 Option 1

CRL

- Concrete kerbs
- Std footpath- BOAC concrete
- Replace Harvey Tree
- Only within Albert Street/CRL designation
- Standard street lighting

CCAB

- Stone kerbs
- Stone paving to footpath
- No Areas outside designation.
- Lighting enhancements
- Flood lighting to wall
- Green wall to car park



C3 Option 1 Estimate May 24th 2017

B EXTRA VALUE FOR ENHANCED OPTION

B1 CONTRACT 3 - EXTRA VALUE FOR ENHANCED OPTION

B1A	Wyndham Street to Victoria Street	6,702	785	5,260,000
B1B	Victoria Street to Wellesley Street	8,433	519	4,380,000
B1C	Mayoral Drive	2,917	716	2,090,000

B1D Additional Scope of Works:

B1D1	Wyndham Street	Delete Additional scope areas		
B1D2	Kingston Street			
B1D3	Victoria Street			

B1D - Additional Scope of Works:

B1 - CONTRACT 3 - EXTRA VALUE FOR ENHANCED OPTION

B2 ASSOCIATED UTILITIES DIVERSION WORK (PROVISIONAL SUM)

B3 EXTRA DESIGN WORK AND RESOURCE CONSENTING

B - EXTRA VALUE FOR ENHANCED OPTION ~~49,985~~ **\$11,730,000** 26% total

ESTIMATED NET COST 38,037 **\$1,264** \$44,590,000



Option 1 C2 and Option 1 C3 combined

- Stone pavement and stone kerbs to both C2 and C3
 - Future proofing bus for trees on future footpath C2
 - Heritage and place mats C2 and C3
 - Some extra scope to side streets C2
 - Green wall and flood lighting to heritage wall C3
 - Targeted Rate contribution
 - C2 \$ 7,400,000*
 - C3 \$11,730,000
 - Albert Street **\$19,130,000*** (\$870,000 contingency from \$20million)
- City Rail Link cost **\$55,425,000**
- Estimate Net cost **\$74,555,000***



Option 1A C2 and Option 1 C3

- Stone pavement and stone kerbs to both C2 and C3
- No future proofing bus bays for trees on future footpath C2
- Heritage and place mats C2 and C3
- Some extra scope to side streets C2
- Green wall and flood lighting to heritage wall C3
- Targeted Rate contribution
 - C2 \$ 6,110,000*
 - C3 \$11,730,000
 - Albert Street **\$17,840,000*** (\$2,160,000 contingency from \$20million)

City Rail Link cost **\$55,425,000**

Estimate Net cost **\$73,265,000***





Lower Queen/Britomart surrounds

CRL

- Replace areas opened/impacted during construction
- Bus provision
- Street lighting
- No trees
- No art
- Basic furniture.
- Toilet
- Kiosk- std



CCAB

- Entire Lower Queen Street area
- Stone finishes
- Plaza and shared space finishes
- Trees
- Art
- Lighting- events and mood
- Kiosk- flexible

C1 Estimate \$figures August 2016-[April 2017]

C1	CRL Provisional	CRL revised estimate August 2016	Difference/Delta
E8 Lower Queen Street	\$3,800,000	\$13,700,000	\$9,900,000
E9 Tyler and Galway Streets	\$4,900,000	\$8,500,000	\$3,600,000
E10 Area behind CPO	\$4,900,000	\$5,750,000	\$850,000
sub-total	\$13,600,000	\$27,950,000	\$14,350,000
Potential nominated CC Targeted contribution			\$10,000,000
make up funding outstanding (need for design to be revisited to fit available funds)			\$4,350,000
			35% of total



Lower Queen St. current considerations

- Removal of water feature (PRVsum \$1,000,000)
- Removal of permanent kiosk pavilion- replace with more flexible option/s.(PRVsum \$500,000)
- One single monumental artwork/waharoa (PRVsum \$400,000)
- Reuse of elements of forest poles from Britomart Station (\$?!)
- Single large or very few large tree specimens, instead of greater number of smaller trees(\$?!)
- Simple pavement to better reflect importance of *atea*/plaza space in context
- All shared surface if buses go (\$ +)...



Suggested Approach (C1), (C2, C3)

- Targeted Rate contribution
- C1 \$10,000,000
- C2 \$ 6,110,000 (option 1A)
- C3 \$11,730,000 (option 1)
- Total contribution \$27,840,000
- Leaving \$2,160,000 contingency
- CRL \$ funding contribution
- \$69,025,000
- Total net funding/estimate
- TR \$27,840,000
- CRL \$69,025,000
- Total \$96,865,000



