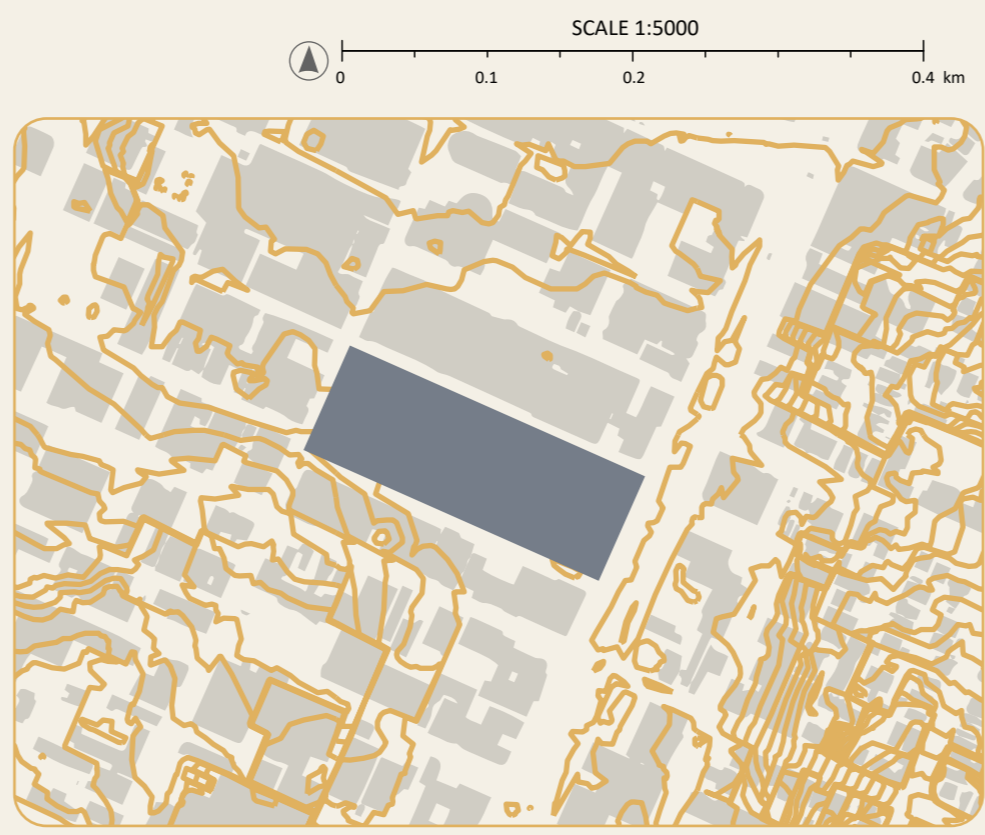
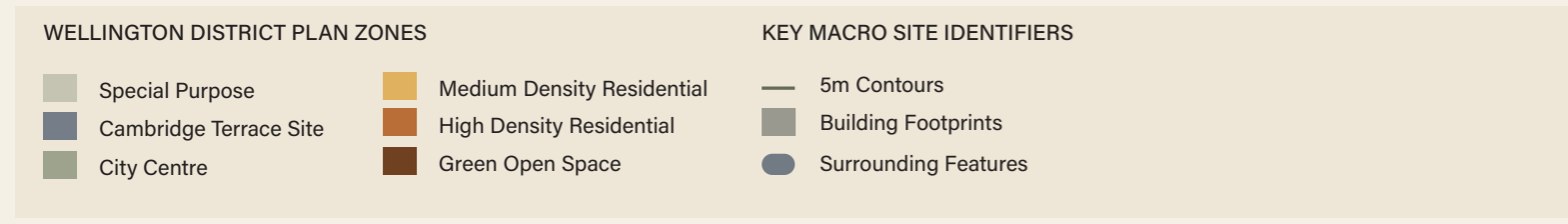


CAMBRIDGE TERRACE MASTERPLAN

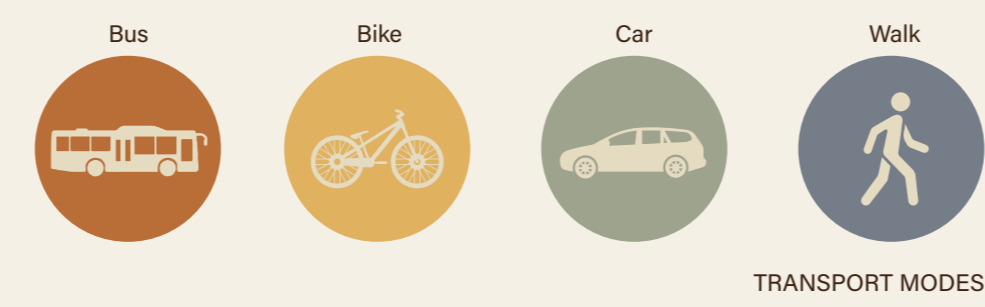
MASTERPLAN DEVELOPMENT OF MEDIUM DENSITY HOUSING + MIXED CITY CENTRE USE

The Cambridge Terrace development of the Moore Wilsons central block provides Wellington City with a viable and profitable project that includes a mix of uses, including high quality medium density housing. This community focused development feeds off of the wider Wellington vision towards a sustainable, beautiful, function, thriving city. Revitalising the Moore Wilsons block welcomes in local colour, as all public engage in the unique urban space, designed just for them. These transformative changes work together to enhance the pre-existing community, commercial, recreation, transport, housing conditions of the capital city, fostering an healthy environment for prosperous living.

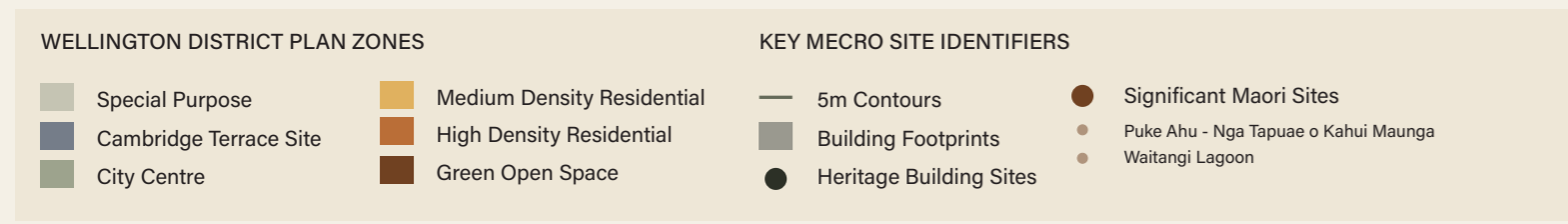
MACRO ANALYSIS



The topographical qualities of Central Wellington is relatively flat, with gentle sloping. The topography immediately surrounding the site block is considerably level, making it a prime location for development. The lack of surrounding incline does leave the site exposed to the prevailing Wellington winds, creating wind tunnels around the neighbouring buildings.



MECRO ANALYSIS



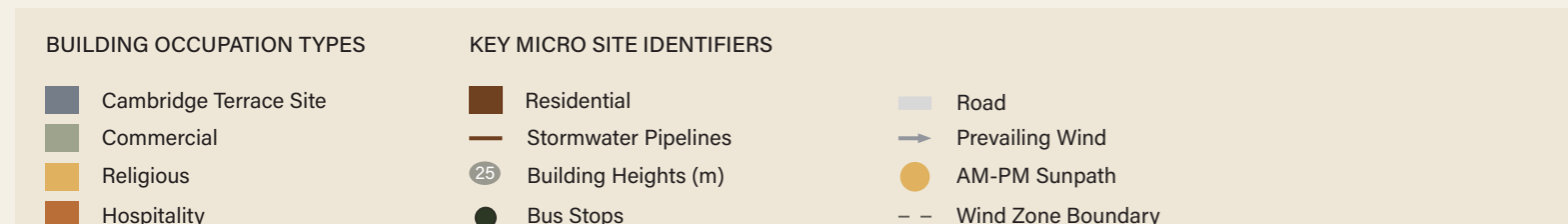
FLOODING ANALYSIS



The development site experiences some surrounding flooding due to the relatively level topography. The lack of slopes consequently relates to minimal gravitational drainage. Additionally, as the majority of the cities material is concrete (for which holds no porosity) there is no natural absorption of rain or runoff water.



MICRO ANALYSIS

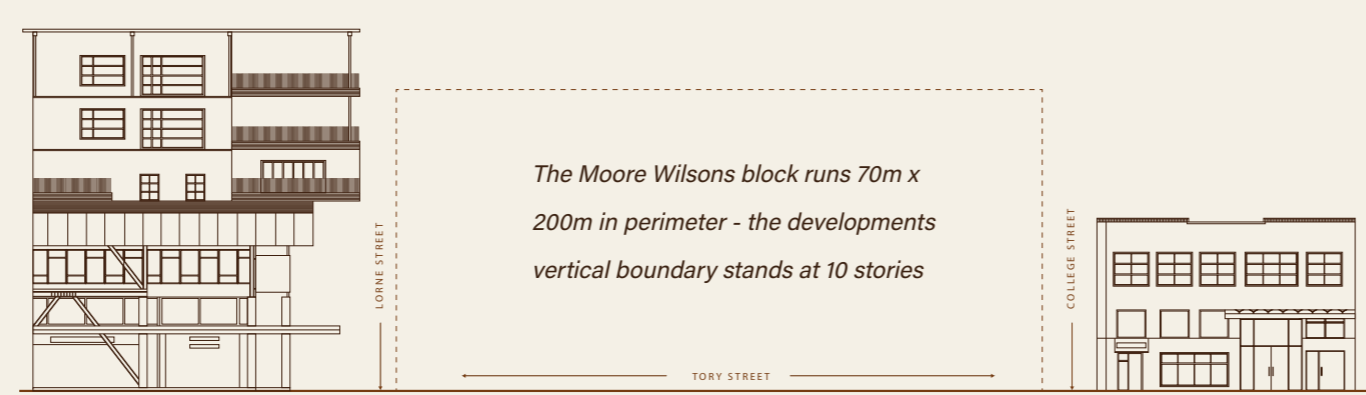


- STRENGTHS**
 - Central location with lots of public, commercial, and hospitality interaction
 - Level topographic surface for the development block
 - Numerous access pathways that accommodate for pedestrians, cars, bikes and buses
 - Close proximity to public transport options - many bus routes available
- WEAKNESSES**
 - Shadowing from surrounding buildings blocking sunlight penetration
 - Largely non-porous construction materiality (concrete) causing flood risk
 - Concealed city streets and lack safe lighting causing unsafe night atmospheres
 - Consistent surrounding street noise from restaurants, bars, traffic and people
- OPPORTUNITIES**
 - Community engagement enhanced within the city centre
 - Increase green presence for CO2 absorption and support for biodiversity
 - Increase affordable city central medium density housing that leads an example
 - Extend transportation lines to the site to promote sustainable movement
- THREATS**
 - Potential lack of government/council support or economic funding
 - Community opposition due to local disruption (noise, movement, closures etc.)
 - Lack of indigenous Maori representation/inclusion in development decisions
 - The development contributing to greenhouse gas emissions (during construction)

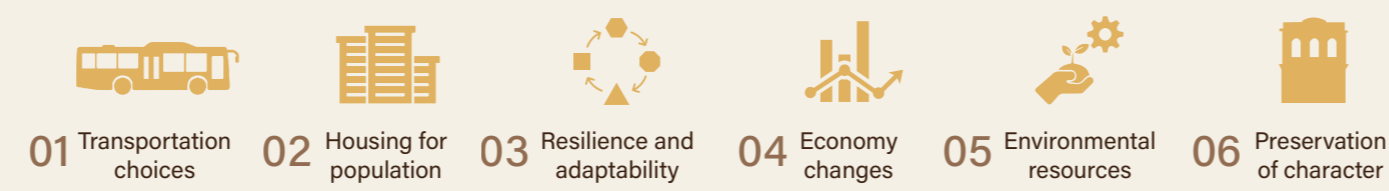
DEVELOPMENT URBAN DESIGN PRINCIPLES



TORY STREET BUILDING ELEVATION

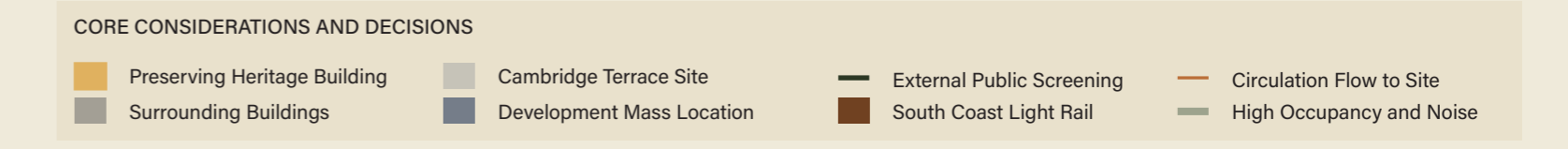
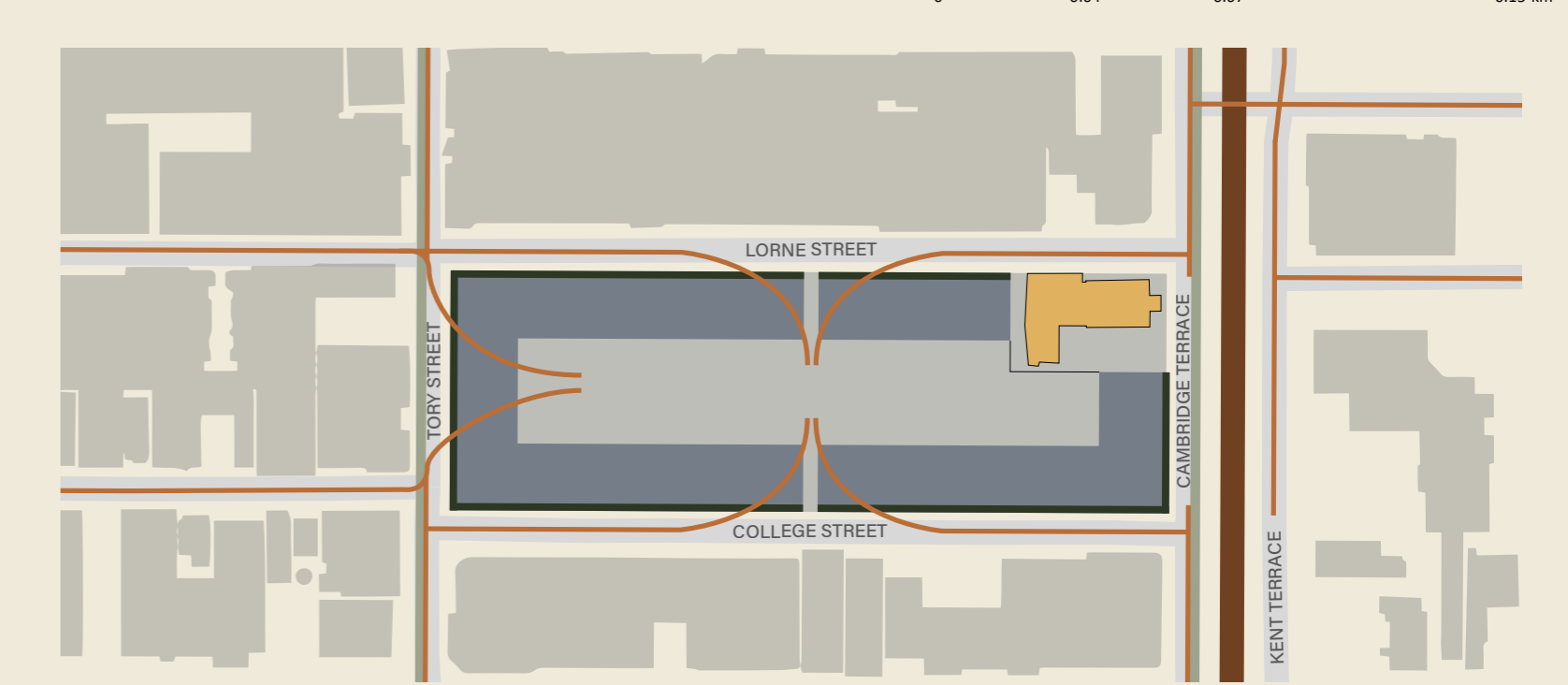


CURRENT CHALLENGES FACING THE URBAN DEVELOPMENT OF WELLINGTON CITY



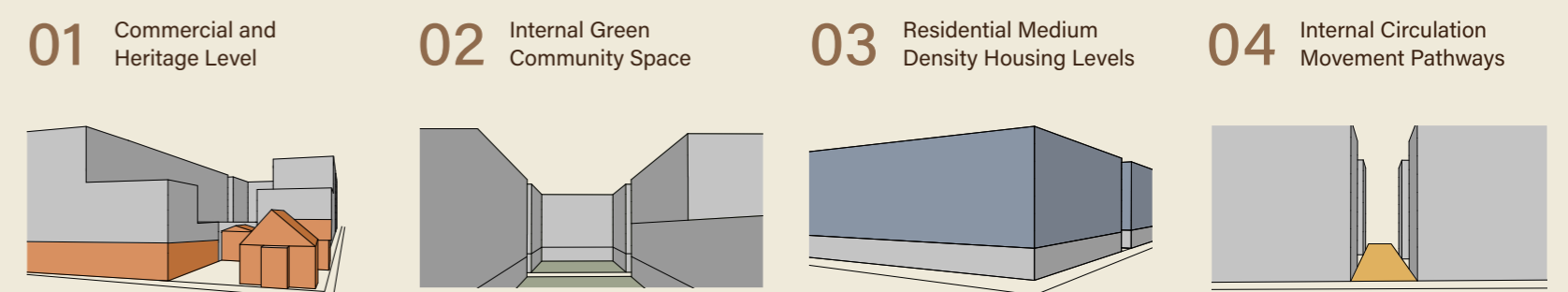
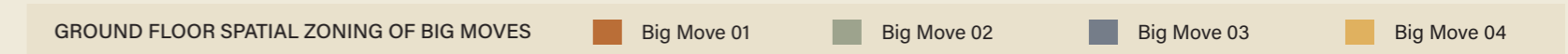
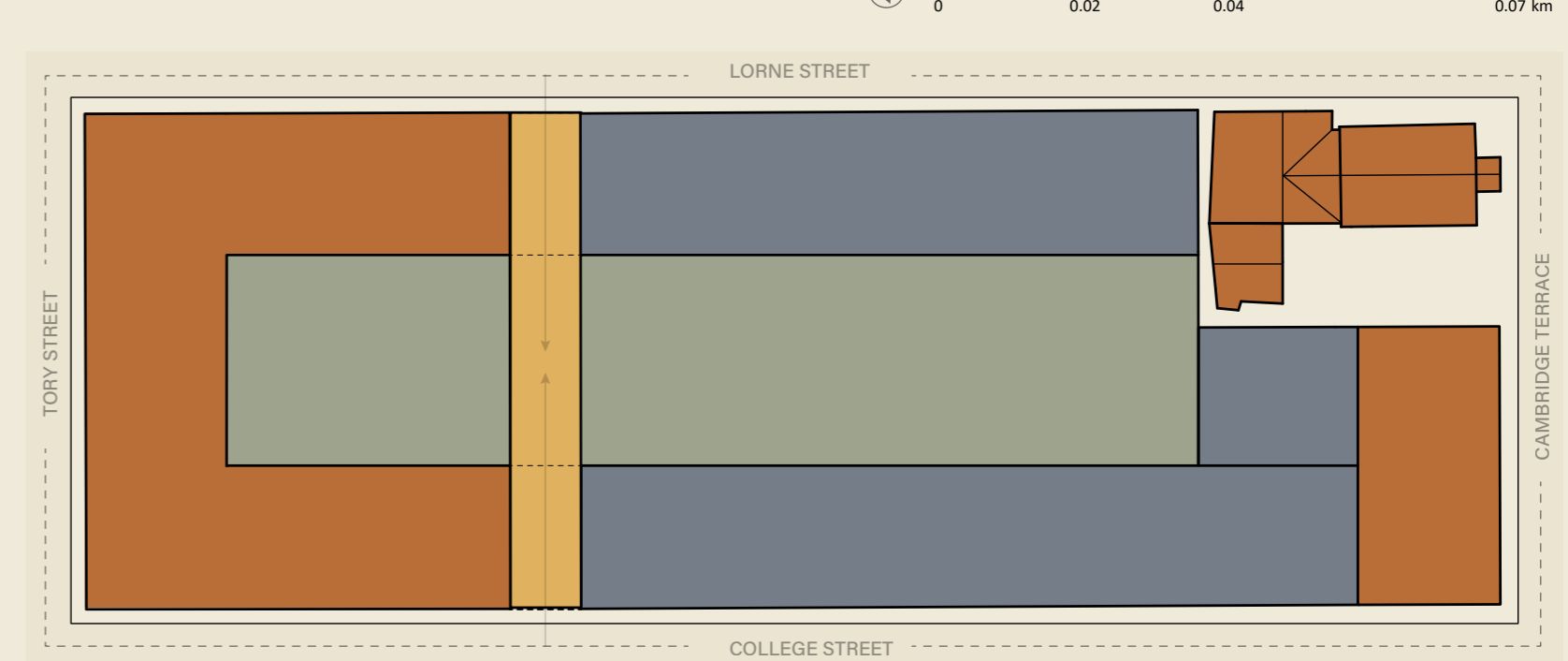
Adapting contemporary urban developments to tackle the challenges facing Wellington produces outcomes that are appropriate the an ever transforming city. These challenges can be reversed into opportunities to design prosperous, functional, spatially enhancing urban environments. The vision for Wellington city sets out a pathway for the future based on becoming a people centered, connected, dynamic, eco city. Urban designs of Wellington should take on the responsibility of leading the future for sustainability as New Zealand's capital city. People should be connected spatially and socially across the city, manifesting a strong sense of place and community. The Cambridge Terrace development embodies opportunity to tackle the challenges presented.

CORE MOVES



The core site development moves serve as planning oriented decisions for the Big Moves to come. The introduction of the South Coast light rail on tracks provides dedicated public transport lanes that can also be used by regular buses. The light rail permits very good carbon reductions from more people walking, biking and using public transport - which is beneficially oriented approximate to the development site. Considering noise pollution from the streets, and high occupancy pathways informs design decisions to introduce the idea of exterior protection/interior connection. This concept directly relates to the location of building mass around the exterior perimeter of the site (leaving the historic Wellington Chapel untouched).

BIG MOVES

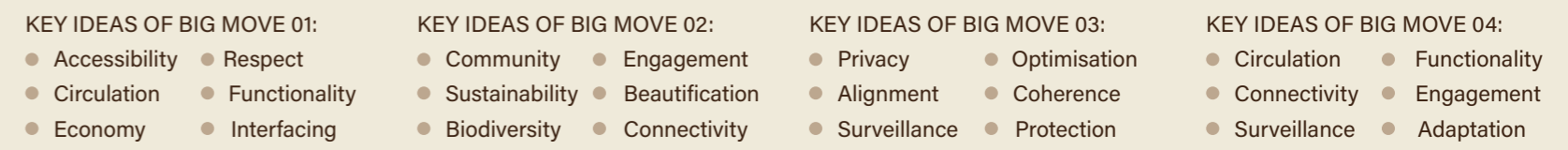


Big Move 01 surrounds the re-establishment of the commercial/heritage elements that are pre-existing to the site. The decision to limit retail, hospitality, and heritage spaces to the ground floor is based off of enhancing the economy and public interaction with the development. Moore Wilsons supermarket will be reintroduced to the site due to its popularity and convenience. Protecting the heritage building of the Wellington Chapel is vital to preserving the culture, history and individuality of the city.

Big Move 02 ensures the site layout is optimised by orienting the residential units to face either opening to an internal community space with the development. This decision simultaneously takes many effects: increased green and biodiversity, reduced CO2, interconnectivity, landscape engagement, sunlight penetration. The community space will transform the site into a place for public and residents to spend time and engage among. The community space can be accessed through ground level hospitality spaces.

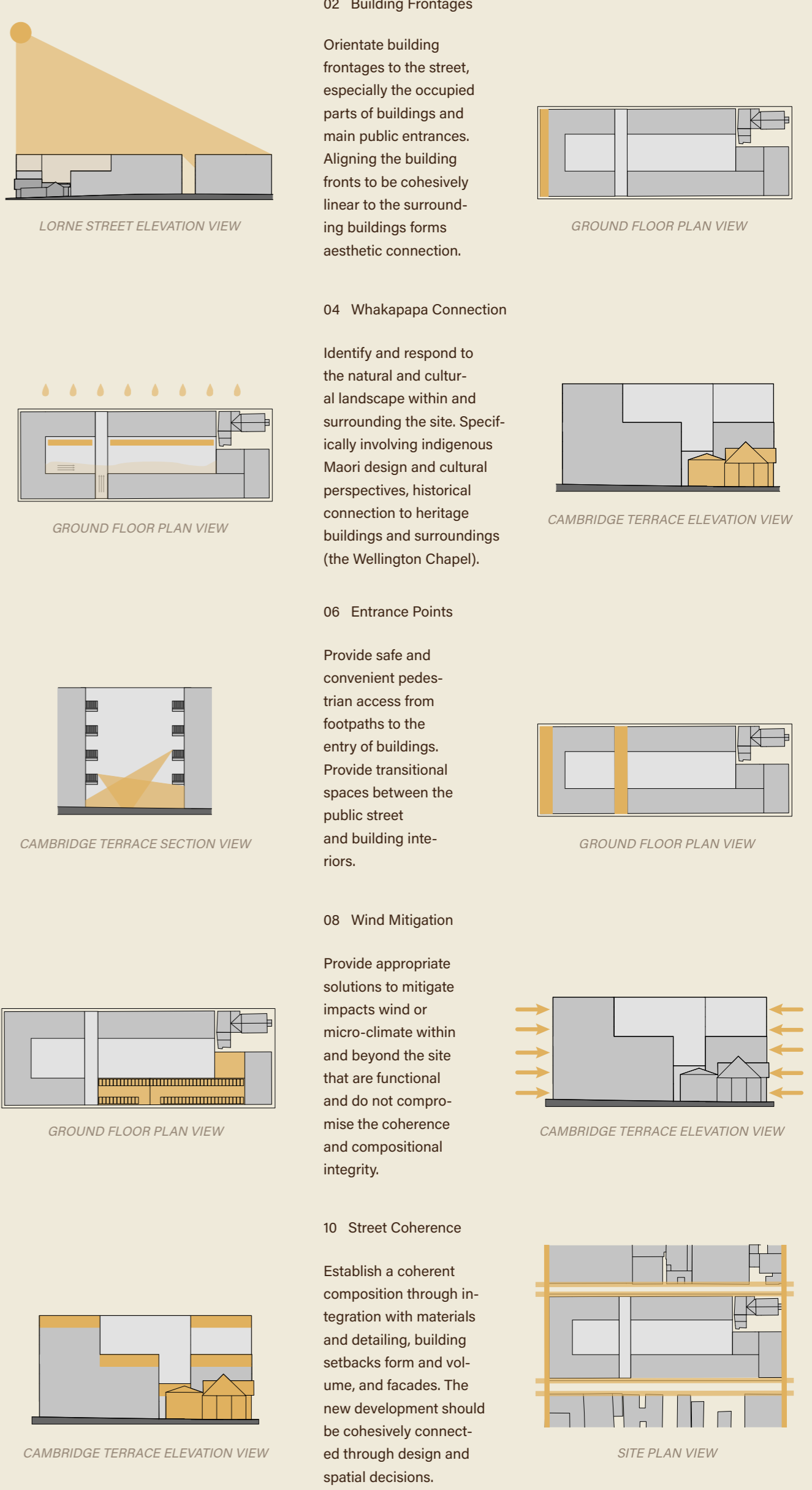
Big Move 03 establishes the location of the buildings around the perimeter of the site. Situating nearly all of the housing units above the ground floor creates a level of privacy from the public. The buildings external facades align with the footpaths, roads, and surrounding buildings which ensures visual continuity of new and old. Medium density housing allows a smaller building footprint with optimal capacity. The opportunity for balconies from the units will provide external connection and passive surveillance.

Big Move 04 transforms the circulation patterns around the site, enhancing efficient movement. The decision to introduce a circulation pathway will encourage engagement with the development, particularly the internal community green space. The pathway additionally separates the buildings, opening up space for sunlight penetration. Increased movement flows is an additional passive safety consideration. Providing multiple exit points from the internal space ensures people do not feel trapped/enclosed.



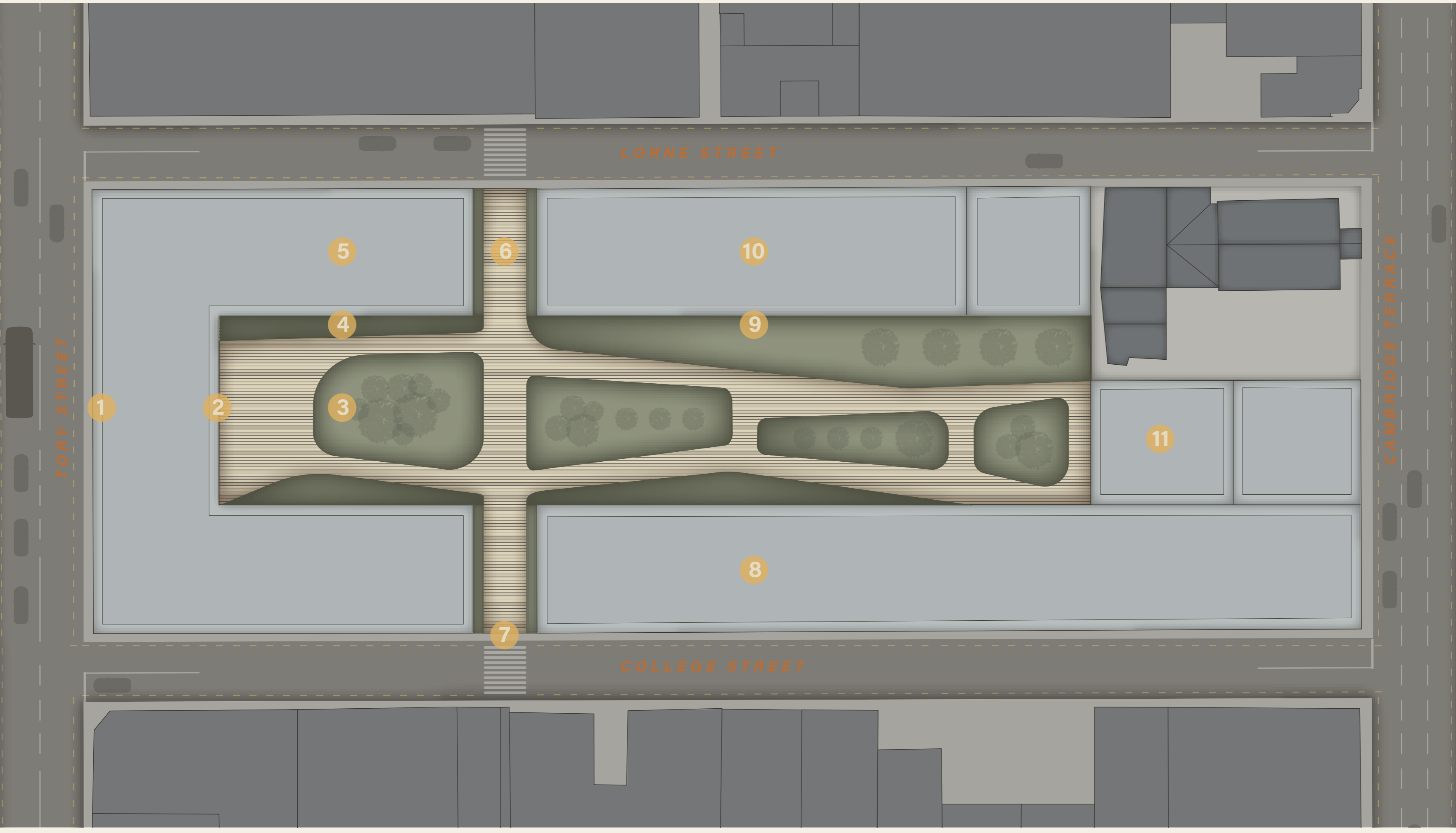
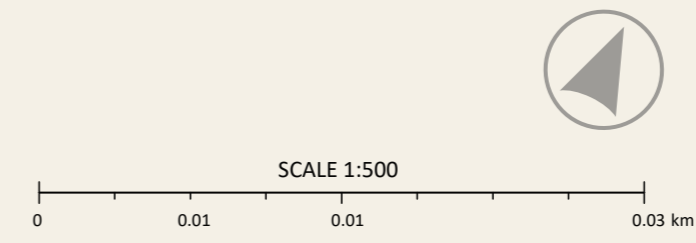
SUPPORTING MOVES

- 01 Solar Orientation**: Orientate buildings to maximise solar access to improve energy efficiency. Maximising the solar penetration of the site provides natural light and warmth, boosts vibrancy and user happiness.
- 02 Building Frontages**: Orientate building frontages to the street, especially the occupied parts of buildings and main public entrances. Aligning the building fronts to be cohesively linear to the surrounding buildings forms aesthetic connection.
- 03 Water Mitigation**: Use vegetative planting as a way to mitigate stormwater runoff and flooding effects. Inclusion of bioswale systems, where the topography naturally leads water runoff, will filter sustainably.
- 04 Whakapapa Connection**: Identify and respond to the natural and cultural landscape within and surrounding the site. Specifically involving indigenous Maori design and cultural perspectives, historical connection to heritage buildings and surroundings (the Wellington Chapel).
- 05 Passive Surveillance**: Maintain visual connections between building interiors and the public realm to ensure passive surveillance is achieved. Additions of balconies from the housing units allows passive surveillance to be achieved in a functional manner.
- 06 Entrance Points**: Provide safe and convenient pedestrian access from footpaths to the entry of buildings. Provide transitional spaces between the public street and building interiors.
- 07 Carparking Location**: Locate car parking to be convenient while not compromising the quality of the street edge or the status of the building. Carparking for commercial users as well as residential occupants will be separate for clarity.
- 08 Wind Mitigation**: Provide appropriate solutions to mitigate impacts wind or micro-climate within and beyond the site that are functional and do not compromise the coherence and compositional integrity.
- 09 Dimensional Relationship to Heritage Buildings**: The new development should be designed to avoid visual dominance over the heritage building. A scale transition between the pair should be achieved to interconnect new and old into one composition.
- 10 Street Coherence**: Establish a coherent composition through integration with materials and detailing, building setbacks form and volume, and facades. The new development should be cohesively connected through design and spatial decisions.



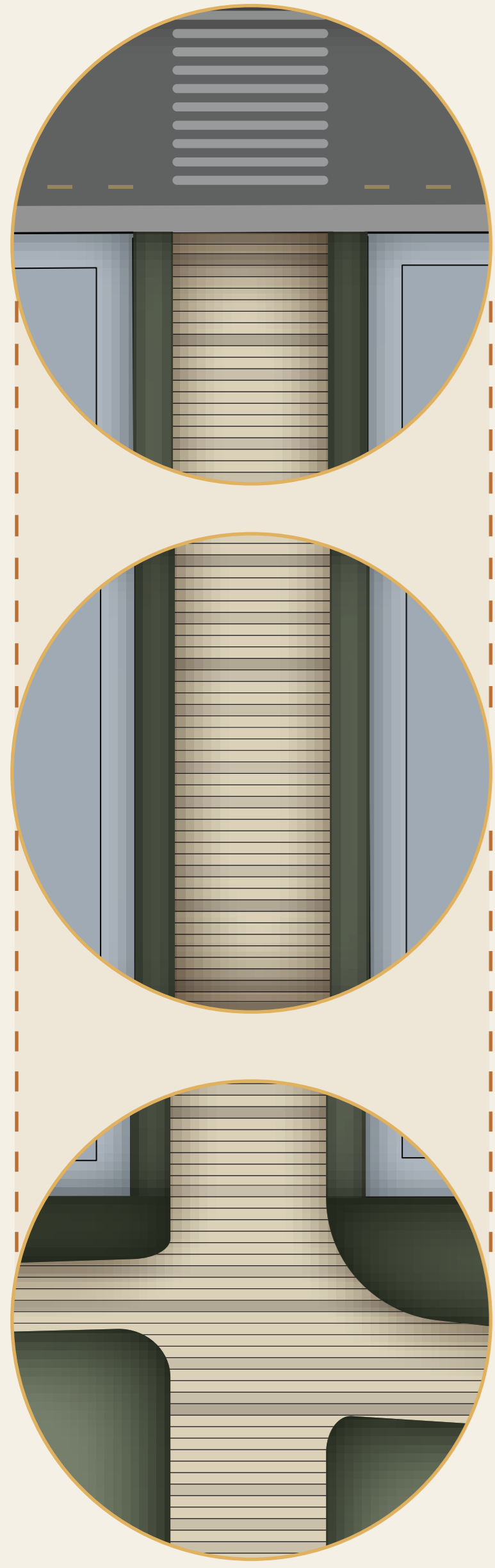
CAMBRIDGE TERRACE MASTERPLAN

MASTERPLAN DEVELOPMENT OF MEDIUM DENSITY HOUSING + MIXED CITY CENTRE USE



FINAL SITE PLAN

- 1 Tory Street Main Entrance and Ground Level Commercial
- 2 Commercial Connection to Internal Community Space
- 3 Green Space with Vegetative Planting and Grass Coverage
- 4 Bioswale System at Lowest Zone of Topography Slope
- 5 Residential Medium Density Social Housing (7 Levels)
- 6 Circulation Pathway Connecting Lorne and College Street
- 7 Pedestrian Crossing from Sidewalks
- 8 Ground Level Carparking for Commercial and Residential
- 9 Bioswale System at Lowest Zone of Topography Slope
- 10 Residential Medium Density Social Housing (7 Levels)
- 11 Community Engagement Centre



PEDESTRIAN CROSSING FOR SAFETY OF PUBLIC

Enhancing circulation around the Cambridge Terrace site is important to be established functionally and safely. A pedestrian crossing on Lorne Street and College Street create safe circulation into the internal green community space.

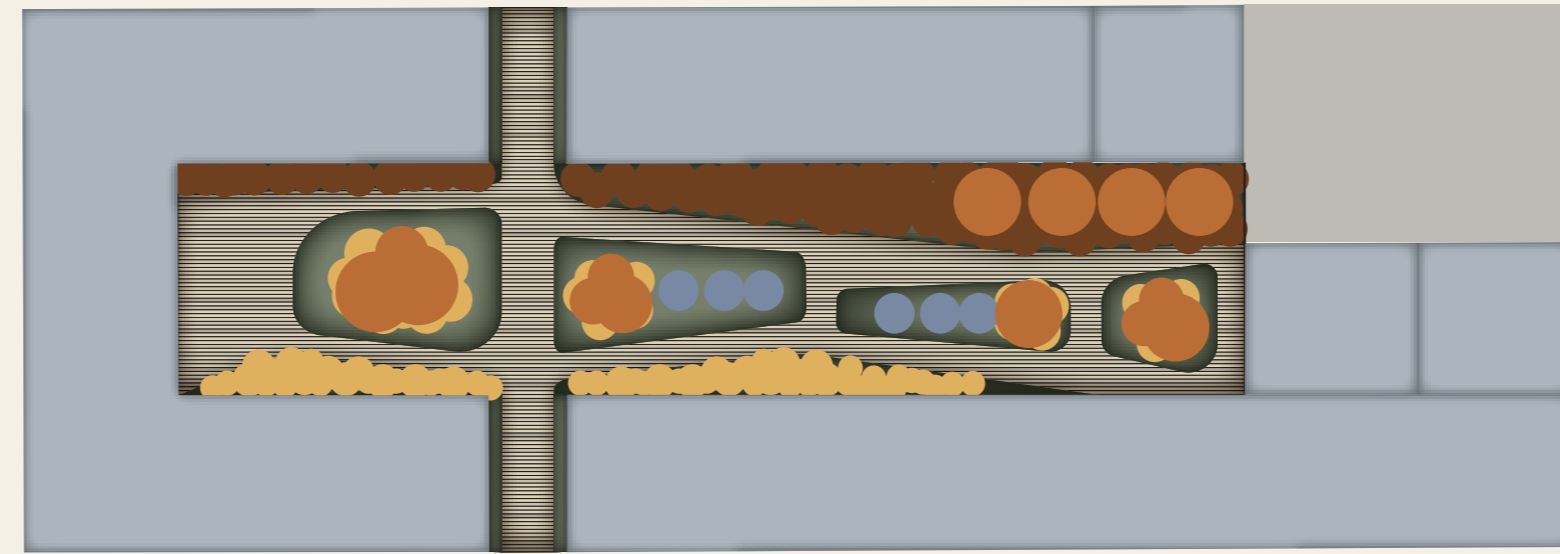
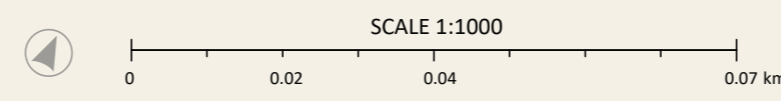
CIRCULATION PATHWAY FOR CONNECTION

Enhancing circulation between Lorne Street and College Street is a functional design decision to create human movement. Encouraging movement through the site will increase user engagement with the community centre and external green space.

WAYFINDING THROUGH VEGETATION NETWORKS

The design positioning of vegetation green spaces is strategically located to enhance natural human wayfinding and exploration of movement. The vegetation islands form the pathway networks, as well as reducing CO2 levels, filtering water runoff, and enhancing aesthetic atmosphere.

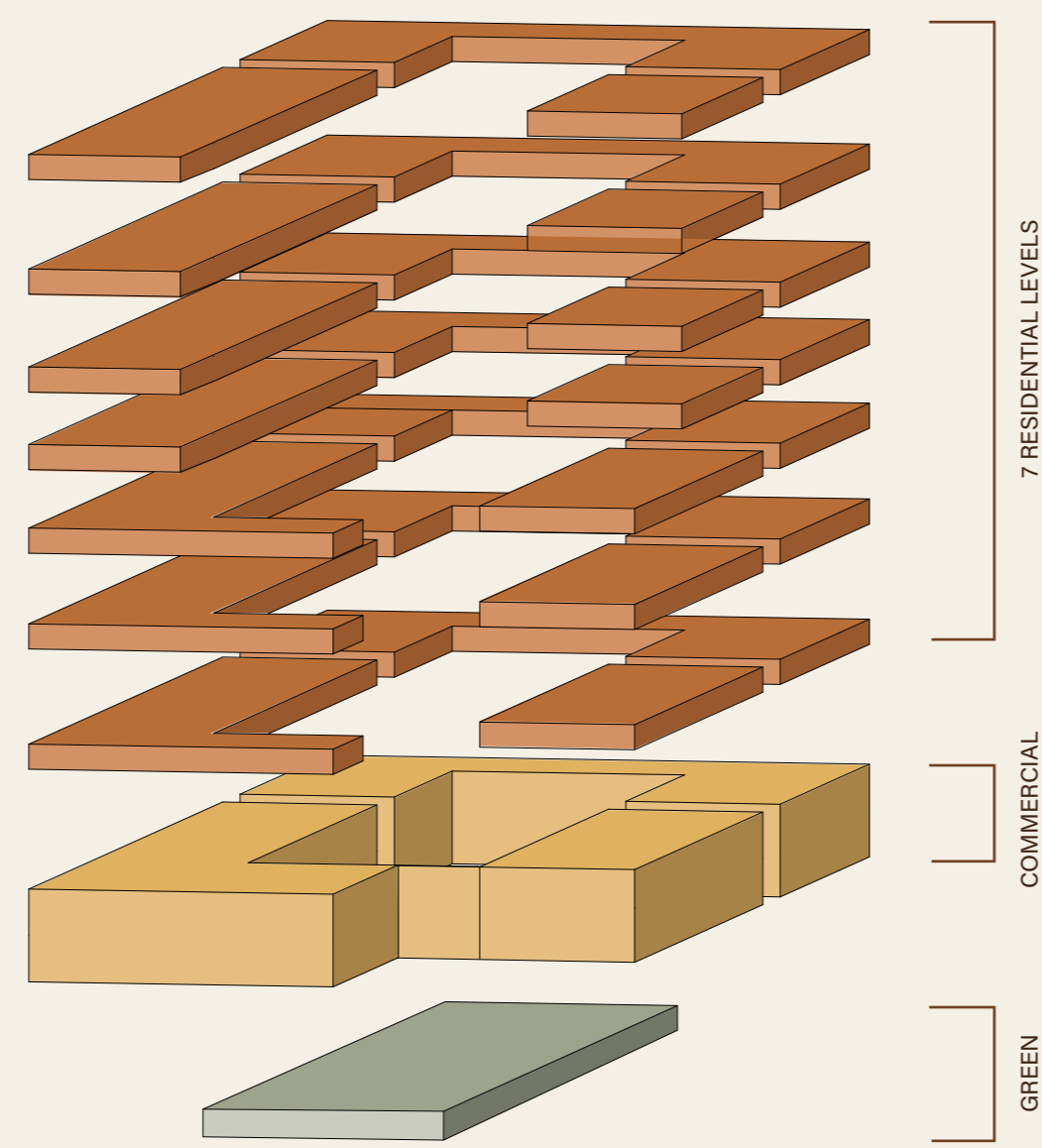
PLANTING SCHEME



PLANTING CATEGORIES: Green Native Trees, Fruit Trees, Native Shrubs, Bioswale Specific

The planting plan reveals the intentions of vegetative scheming within the site. The internal community green space of the development targets reducing CO2 levels, increasing biodiversity, providing public with city central green areas, and natural water mitigation. Selecting vegetation that provides fruit enhances the sense of community, providing natural food sources to the residents, public, homeless etc. Selecting trees and shrubs that are native to New Zealand is vital to establishing a culturally specific design.

AXONOMETRIC ILLUSTRATION



SUCCESSFUL MOVES

The establishment of the light-rail to Wellington City Central successfully enhances sustainable public transport. The proximity of the rail line to the site development ensures users will engage in sustainable lifestyle choices rather than defaulting to singular use options.

Medium density social housing successfully provides numerous housing units, for varying users groups. The development is designed to create a sense of community that is passively safe in an otherwise risk filled city environment.

Commercial spaces were successfully retained to the ground floor of the development, providing functional access to flourish Wellingtons economic growth. Retail, hospitality and commercial stores will attract public to the engage with the development, while being simultaneously convenient for residents.

Green presence was successfully established within the development, serving as the core of the site. Enhancing biodiversity, community engagement, and aesthetic beauty, while reducing the CO2 pollution of the city, is critical to the overall success of the development.

The historical value of the immediate site was preserved, ensuring that the Wellington Chapel remains proudly standing. This successfully protects the city's cultural and historical value, ensuring a respectful design.

PRECEDENT STUDIES



MASON ON MARIPOSA, SAN FRANCISCO, DAVID BARKER

- Circulation Pathways
- Green Space
- Vegetation
- Passive Surveillance
- Human Engagement
- Varying Building Use
- Lighting
- Seating
- Cohesivity



LIBERTY PARK, NEW YORK, AECOM

- Circulation Pathways
- Bioswales
- Vegetation
- Urban Proximity
- Human Engagement
- Open Space
- High Usage
- Seating
- Landscape

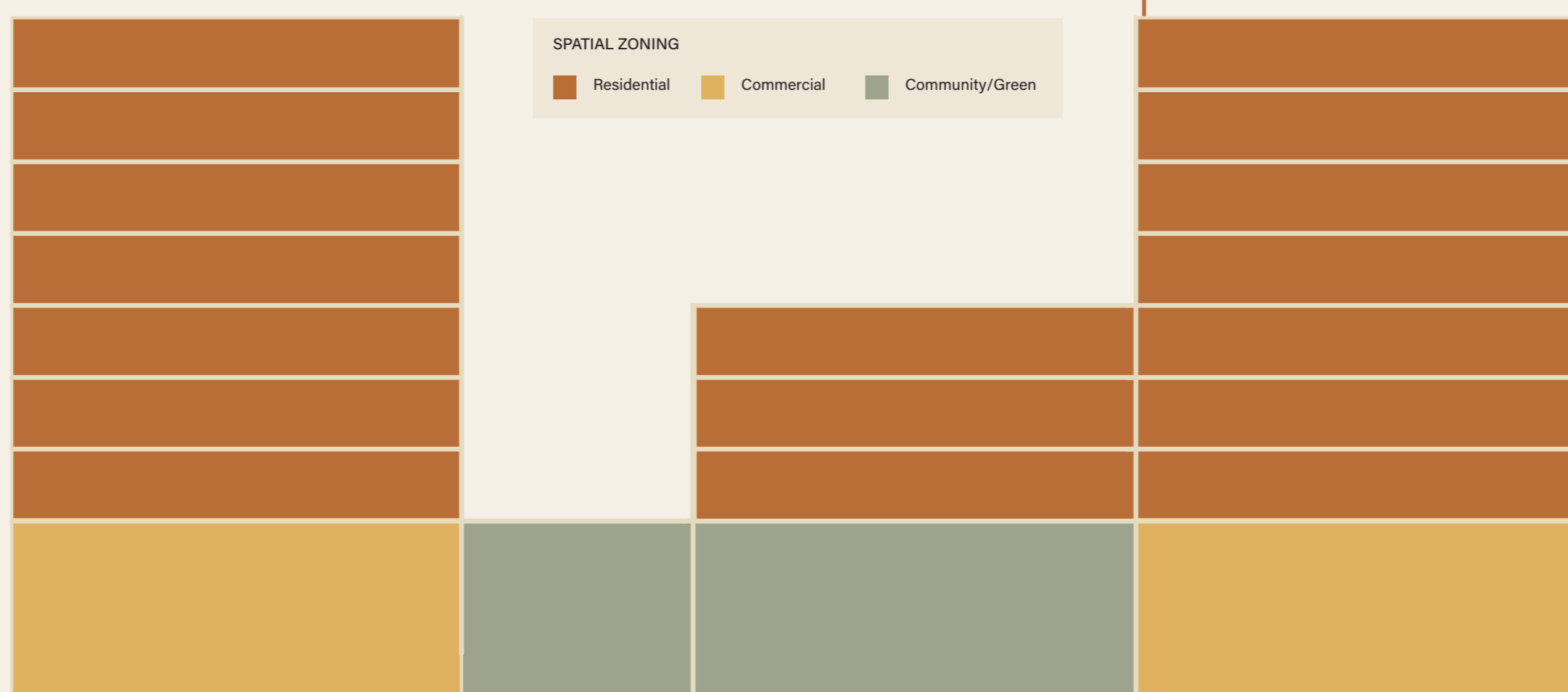
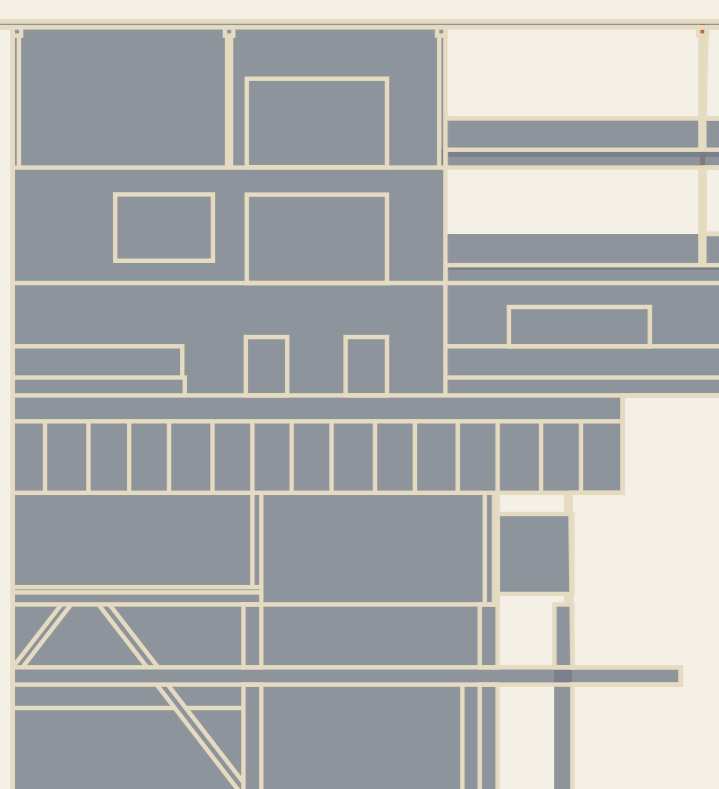


CLOCKHOUSE GARDENS, WELWYN, STOCKWOOL

- Circulation Pathways
- Residential Connection
- Ranging Vegetation
- Community Links
- Human Engagement
- Open Space
- Balconies
- Biodiversity
- Green Roof

MASON ON MARIPOSA <https://www.dbarchitect.com/projects/mason-mariposa>
 LIBERTY PARK <https://www.stockwool.co.uk/our-projects/residential/clockhouse-gardens-welwyn/>
 CLOCKHOUSE GARDENS <https://architizer.com/idea/1979886/>

SECTION TORY STREET



- HOUSING
- GREEN
- SAFETY
- LIGHT
- COMMUNITY
- REUSE
- SUSTAINABLE
- ECONOMIC

