

under: the Resource Management Act 1991

in the matter of: an application by Ryman Healthcare Limited for
resource consent to construct, operate and maintain a
comprehensive care retirement village at 26 Donald
Street and 37 Campbell Street, Karori, Wellington

between: Ryman Healthcare Limited
Applicant

and: Wellington City Council
Consent Authority

Statement of evidence of **Isaac Samuel Greig Bright** on behalf
of Ryman Healthcare Limited

Dated: 29 August 2022

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STATEMENT OF EVIDENCE OF ISAAC SAMUEL GREIG BRIGHT ON BEHALF OF RYMAN HEALTHCARE LIMITED

INTRODUCTION

- 1 My full name is Isaac Samuel Greig Bright.
- 2 I am a Registered Architect and the Group Design Manager at Ryman Healthcare Limited (*Ryman*). I have worked at Ryman for 3 years and 8 months. I have held the position of Group Design Manager for 2 years, 8 months. Previously, I was the Group Concept Design Manager, a position that I held for 1 year.
- 3 I hold a Bachelor of Architecture Degree with honours from Unitec in Auckland.
- 4 I have over 15 years' of professional experience in Architecture in New Zealand, Australia, the Pacific and Asia. My experience has been across a wide range of sectors including Aged Care, Education, Commercial, Retail, Tourism, Healthcare, Industrial, Master-planning, Community Buildings and Residential. My project experience spans design and delivery of large, medium and small scale buildings, green-field, brown-field, refurbishment, alteration and fit-out projects.
- 5 I am a member of the New Zealand Institute of Architects (NZIA), membership number 19899. I am also a New Zealand Registered Architect (NZRAB), membership number 4995.
- 6 I am highly familiar with Ryman's resource consent application to construct and operate a comprehensive care retirement village (*Proposed Village*) at 26 Donald Street and 37 Campbell Street, Karori, Wellington (*Site*).
- 7 In my current role, I manage the Ryman Design Team across Melbourne, Auckland and Christchurch. Currently, we have 30 villages in design and construction across New Zealand (18) and Australia (12). I am a member of the project team that designed the Project Village with a multidisciplinary team including Architects, Designers, Interior Designers, Landscape Designers, Graphic Designers and Visual Designers. We worked collaboratively to produce this design with both internal teams and external consultants. I was also an active member in the Design Review and Quality Assurance team for this project.
- 8 I prepared the architectural design statement for the Proposed Village dated July 2021.
- 9 I have visited the Site and its surroundings, most recently on 8 July 2022.

SCOPE OF EVIDENCE

- 10 My evidence provides the following:
 - 10.1 A summary of the Proposed Village's layout and design;
 - 10.2 A summary of the design rationale for the Proposed Village;
 - 10.3 An overview of the design development process;
 - 10.4 The methodology for preparing key architectural and assessment materials;
 - 10.5 My response to the design issues raised in submissions;
 - 10.6 My response to design matters raised in the Council Officer's Report (*Officer's Report*); and
 - 10.7 My conclusions.

SUMMARY OF EVIDENCE

- 11 My evidence provides an overview of the Proposed Village's layout and design, which can be viewed on *Drawing RC04 – Proposed Site Plan with Aerial*. In summary, the Proposed Village will include:
 - 11.1 A village centre (Building B01A) containing communal amenities and independent living apartments;
 - 11.2 A residential care building (Building B01B) containing independent living apartments, assisted living suites and care rooms for rest home, hospital, and dementia level care;
 - 11.3 Six apartment buildings (Buildings B02 – B07) containing independent living apartments;
 - 11.4 Vehicular and pedestrian circulation and parking for residents, visitors and staff; and
 - 11.5 A range of outdoor amenity areas for residents, the Lopdell Gardens, landscaped areas, and a pocket park.
- 12 My evidence also provides a summary of the design rationale for the Proposed Village. In summary:
 - 12.1 Through the design process, we considered how the Proposed Village stitches into, and integrates with, its' surrounding context. This integration was a key driver in the design process and was informed by advice from Ryman's independent experts.

- 12.2 The Site is challenging given the range of constraints and opportunities that needed to be considered during the design process. The constraints include the existing built form of the retained Teacher's College buildings and their heritage qualities, mature garden landscapes, the varying contours across the Site (both engineered and organic), other engineering constraints such as significant and unusual stormwater management requirements, as well as the general need to design the Proposed Village for functional and operational efficiencies, and make it work together as a cohesive whole. These constraints have been addressed and improved through the design process to develop legible communal spaces and a building layout that creates a high quality development designed for people, connection and community.
- 12.3 The former Teachers' College site layout consisted of buildings on the northern part of the Site orientated on a north/south axis, which provided building façade aspect to morning and afternoon sun (east and west). The courtyards between the buildings addressed site contours, provided outlook from the buildings, and connection and spaces to access high day sun to the north. The natural and built form provided protection to the south and enclosure for the courtyards.
- 12.4 The Proposed Village built form responds to and respects the former Teachers' College site layout and draws on the north/south orientation axis, which provides considered and proportioned building frontages to Donald and Campbell Streets, tying the Proposed Village into the neighbourhood character. Natural and built form elements at the southern ends of the north/south buildings (B02 – B06) create 'U' shapes, which form a series of north facing courtyard spaces and help with wind protection in southerly winds.
- 12.5 Existing landscaping has been incorporated into the design and developed further to provide a series of courtyards, connecting gardens, walkways, a pocket park, formal and informal gardens, raised podium gardens and dementia gardens. These landscape amenities are connected with a footpath network and will provide spaces for residents and their visitors to look at, pass through and enjoy from within. The pocket park on Donald Street will also be publicly accessible. These series of open spaces will provide social hearts throughout the Proposed Village from small intimate areas to the open spaces of the Village Centre which occupies the previous 'Quad' area.
- 12.6 Pedestrian and vehicle movement through and within the Site was carefully considered creating a series of axes, nodes and

shared spaces. The vehicle movement has been rationalised with the main entry point off Donald Street and a secondary entry point via Campbell Street. Pedestrian entry points, pathways and footpaths are of a finer grain and accommodate a more organic movement network. The pedestrian network follows contours, is designed with accessibility in mind and has direct routes between buildings including the use of connecting bridges.

- 12.7 I support the height and bulk distribution across the Site from an architectural point of view. Height and bulk is located in the north of the Site where it can be accommodated by the topography and is at a distance from adjoining residences. The architecture and building composition (including aspect) is well considered and respects the former Teachers' College layout axes and building configurations. Scale in the existing developed area provides the opportunity for new building masses to be positioned to capture sun and aspect throughout the day. From an architectural point of view, the Proposed Village creates a high quality development for residents and their visitors to enjoy.
- 12.8 In my opinion, intelligent design has been applied throughout each of the design phases from master planning to preliminary design including consideration of composition, proportion and scale both on boundary interfaces to complement the surroundings and from within the Site. The team considered both interior and exterior viewpoints to fit the Proposed Village into the neighbourhood. The Proposed Village has been designed to be experienced as a series of revealed viewpoints as you move around and through it. The buildings, their typologies and the functions within show their various facades in a considered way giving a sense of place and scale.
- 13 Overall, I consider the Proposed Village design has been well considered, appropriately addresses the Site's heritage and surrounding context, and is of a high quality. The Proposed Village will be appreciated by residents and the community alike for many years to come.

OVERVIEW OF THE PROPOSED VILLAGE LAYOUT AND DESIGN

- 14 Drawing RC04 – "Proposed Site Plan with Aerial" shows the Proposed Village layout. In general, the Proposed Village layout consists of retained and new buildings in the northern portion of the Site that previously accommodated the former Teachers' College and new buildings in the southern portion of the Site that previously accommodated the netball and tennis courts and sports fields.

Buildings B01A

- 15 Building B01A includes the retained Tennant Block, Allen Ward Hall and Oldershaw Block octagonal building, as well as new buildings and connections between the buildings.
- 16 Building B01A covers an area of approximately 3,533 m². It extends up to five levels.
- 17 Buildings B01A is the village centre and will provide a wide range of amenities including: common lounge, bar and dining areas, indoor pool and spa, theatre, crafts room, gym, activities room, reflection room, café, salon/barber and beauty salon, library, pool and darts room, residents workshop, staff conveniences and offices, commercial kitchen and commercial laundry. Level 3 of Building B01A will open out to the bowling green.
- 18 Building B01A will also provide independent living apartments and basement carparking.
- 19 *Drawings RC19 Level 1 Terrace – RC25 Overall Roof Plan* show the layout and design of Building B01A.
- 20 Building B01A was designed to be sympathetic to the former architecture of the Waghorn, Gray and Oldershaw Music Block buildings, utilising elements of form, exposed aggregate panels, concrete hoods and mullions, and window fenestration. The layout retains the established urban structure, with the existing courtyard area (known as 'the Quad') to the north.

Building B01B

- 21 Building B01B will provide a new building in the general location of the former Malcolm Block, Panckhurst, Theatre Block, Dance Studio and Mackie Gym buildings.
- 22 Building B01B covers an area of approximately 2,786 m². It extends up to 7 levels (including the basement).
- 23 Building B01B will provide the residential care area, with rest home, hospital and dementia care rooms as well as assisted living suites. Building B01B will also provide independent living apartments and basement carparking.
- 24 *Drawings RC RC18 Level 0 Basement Plan – RC25 Overall Roof Plan* show the layout and design of Building B01B.
- 25 Architecturally, this building relies less on the architectural palette and elements of the former Teachers' College buildings compared to Building B01A. Building B01B has been designed to have its own architectural identity, which is complementary to both Building B01A (which draws more on heritage elements) and Buildings B02 – B07 (which respond more to their surrounding residential context).

- 26 The building layout and functional use has influenced the architecture of this building. Openings are uniform in both location and size. The composition and application of materials reflect the use of exposed concrete in the form of sills and beams. Infill panels and screens provide interest and texture.

Building B01A and B01B connections

- 27 Buildings B01A and B01B are made up of a number of interlinked buildings.
- 28 Buildings B01A and B01B are linked by two air bridges based on the same design philosophy as the previous Teachers College air bridges. The main function of the bridges is to link the independent apartments, assisted living suites and care rooms in Building B01B to the main Village Centre in Building B01A. The air bridges extend over the Lopdell Gardens that will be re-established as an open space feature within the Site.
- 29 *Drawings RC20 Level 2 Terrace & RC22 Level 4 First Floor* show the layout and design of connections.

Buildings B02-B07

- 30 Buildings B02-B07 are oriented on the flat south westerly part of the Site facing east/west. Building B02 aligns to Campbell Street with Buildings B03-B06 on a similar axis creating north facing courtyards and garden space. Building B07 aligns to Donald Street. Buildings B02 – B06 are connected by a single-level garage element.
- 31 The architectural language of Buildings B02-B07 takes on less of the influence from the Teachers' College buildings, and instead these buildings are designed to relate to the residential neighbours and streetscape in both scale, mass and the way they are modulated and articulated. The functional layout and placement of entrances, the living spaces combined with windows, doors and balconies inform the modulation, configuration, and rhythm of the facades and create a positive street interface. The apartment configuration and placement of windows has also been designed to minimise overlooking of neighbouring properties.
- 32 The east and west facing apartment orientations maximise daylight into living spaces and respond well to prevailing winds providing shelter. Amenity spaces in the form of gardens are provided between apartments. The southern elevations of the Buildings B02-B06 respond to the boundary with short facades, considered window placement and a step back at the upper level to provide a reduction in scale and mass. The upper most levels take on a dark colour to provide a recessive appearance.
- 33 Building B07 has a similar architectural language to Buildings B02-B06 but makes reference to the framing and composition of the heritage facades of the adjacent Allen Ward VC Hall that also fronts

Donald Street to the north. Building B07 has been designed to relate to the scale and form of the Allen Ward VC Hall, while providing a transition to the surrounding residential environment. As Donald Street slopes down from north to south, Building B07 steps with reference to the topography change complementing the streetscape.

Building B02

- 34 Building B02 will cover an area of approximately 1,555 m² and extends up to 3 levels reducing to 2 levels at its northern and southern ends.
- 35 Building B02 will provide independent living apartments and undercroft parking.
- 36 *Drawings RC31 Ground Floor Plan – RC34 Roof Plan* show the layout and design of Building B02.
- 37 Both pedestrian and vehicle access is provided from Campbell Street with a single vehicle access located at the southern end of the Site frontage. Ground floor apartments have individual pedestrian connections to Campbell Street.

Buildings B03-B06

- 38 Buildings B03-B06 will cover areas of approximately 1,730 m², 1,120 m², 1,120 m², and 920 m² respectively. These buildings extend up to 3 levels reducing to 2 levels at their southern ends.
- 39 Buildings B03-B06 will provide independent living apartments and undercroft parking.
- 40 *Drawings RC RC31 Ground Floor Plan – RC34 Roof Plan* show the layout and design of Buildings B03-B06.

Building B07

- 41 Building B07 will cover an area of approximately 1,697m² and extends up to 3 levels reducing to 2 levels at its northern end.
- 42 Building B07 will provide independent living apartments and basement parking.
- 43 *Drawing RC36 Proposed Apartment B07 Floor Plans* show the layout and design of Building B07.

Pedestrian and vehicle connections

- 44 The main entry axis and arrival point is located on Donald Street (towards the south of the western boundary) through a quality landscaped entry point between Building B07 and the pocket park.
- 45 This entry axis provides for both vehicle and pedestrian access and is a clear entry point. The vehicle movement along this main axis

has three key arrival points and three connections to basement parking and on grade parking. The main entry points are:

- 45.1 The portcohere of the Village Centre (Building B01A);
 - 45.2 Buildings B02-B06; and
 - 45.3 The portcohere of the care building (Building B01B).
- 46 There is a secondary entry point via Campbell Street, which provides resident access to undercroft parking for Buildings B02-B06.
- 47 There are three pedestrian entry points on Donald Street, two main pedestrian entries on Campbell Street as well as individual entrances to the ground floor apartments within Building B02. The pedestrian network has been designed with accessibility in mind and provides direct routes between buildings including the use of connecting bridges.

Open spaces

- 48 The open spaces on the Site will consist of:
- 48.1 The Village Centre courtyards around Building B01A and B will form the social heart of the Village with communal amenities both external and internal opening onto these spaces;
 - 48.2 The retained and restored Lopdell Gardens in the northern part of the Site;
 - 48.3 An area of vegetation located in the south east of the Site. This area will continue to provide stormwater detention following the construction of the Proposed Village;
 - 48.4 A pocket park in the south east corner of the Site facing Donald Street. This area will be publicly accessible;
 - 48.5 Amenity spaces for residents including the bowling green and landscaped courtyards between Buildings B02-B06. These well-defined, interrelated and legible communal outdoor spaces will act as social gathering areas, contribute to the Proposed Village character and enhance orientation and way-finding within the Site;
 - 48.6 Boundary landscaping treatments; and
 - 48.7 Landscaping across areas of the Site that are not occupied by buildings, accessways or parking.

49 The landscape planting for the Proposed Village has been designed by Sullivan and Wall Landscapes (see *RCA98a Landscaping Plan*) to achieve a park-like setting.

Elevation to Campbell Street (West)

50 The Campbell Street elevation (Figure 1) focuses on the relationship between Building B02 and the character of the immediate streetscape and surrounding context.

51 The design form and mass of Building B02 ensure it takes on a residential scale. A series of six façade framing elements differing in height project approximately 800mm proud of the main façade. These frames create depth and relief in the elevation and fascia line and help break the building up into sections. The stepping down of the building at the northern and southern ends provides longitudinal variation. A portion of the upper level facing the northern boundary and Campbell Street is clad in a dark colour to provide a recessive appearance. Between the six façade frame elements, a combination of materials, colours, and fenestration (railings) provide contrast, depth, and a human scale to the Campbell Street interface. The roof line is varied with subtle changes in parapet height, slope, and materiality.



Figure 1: Campbell Street elevation

Elevation to Donald Street (East)

52 The Donald Street elevation (Figure 2) can be broken into two roughly equal length parts.

53 The northern half (on the crest of the hill) has the retained former Teachers' College buildings, Tennant Block and Allen Ward VC Hall, that will be adaptively repurposed into the Village Centre.

54 The southern half of the elevation slopes down from the crest of the hill to the main entry point and pocket park near Scapa Terrace. Building B07 is located between the main entry to the Proposed Village and the Allen Ward VC Hall. This building steps down the slope to relate to the contours with a series of four façade framing elements differing in height projecting approximately 800mm proud of the main façade. These frames create depth and relief in the elevation. A deep fascia creates a defined "cap" to the building. Three of the four façade elements are capped with parapet walls to

provide a break in the roof line. The combination of façade frames and parapet walls provide variation to the street facing façade and give the building the appearance of individual buildings. The southern end of the upper level is clad in a darker material to provide a recessive appearance. The balconies provide contrast in light and dark colours to give depth and shading as well as to give human scale to the streetscape.

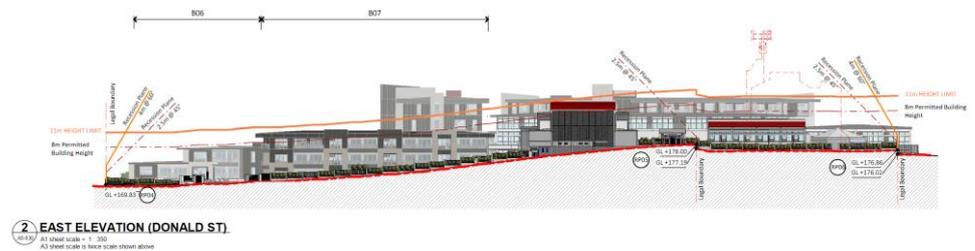


Figure 2: Donald Street elevation

Materiality

- 55 The retained former Teachers' College buildings are clad in materials that reflect their heritage. The materials include various forms and finishes of concrete including off the form insitu concrete, precast concrete aggregate-faced panels, timber window and door joinery, and maroon feature cladding elements.
- 56 The exterior treatments of the new building elements of Building B01A and new Building B01B consist of light grey brick, dark grey metal sheeting, light and light grey plaster finishes, exposed concrete precast panels, coloured rough textured concrete, wood effect external screens, dark window and door joinery, clear and grey tinted glass, light weight panelised cladding, and vertical metal sheeting (colour matched to the maroon cladding on the retained buildings) for feature pop-up roof forms. These materials were chosen to be considerate of and complement the material palette of the retained buildings. The exterior treatments are also durable, easy to maintain and when applied to the facades produce high quality built environments and forms.
- 57 The exterior cladding of new Buildings B02 - B07 consists of light and grey brick, dark grey metal sheeting, white and light grey plaster finishes, dark window and door joinery, and a dark vertical spaced balustrade. These materials were chosen to complement and be closely linked to the material palette of the retained and new Building B01A and B01B buildings. Again, durability and ease of maintenance was very important in the selection and application of the materials.

DESIGN RATIONALE

- 58 The design of the Proposed Village has evolved into the scheme that is before the Hearings Commissioners in response to:
- 58.1 The Operative Wellington City Council District Plan (*Operative Plan*) objectives, policies and rules;
 - 58.2 The surrounding environment and neighbouring properties, including advice from Ryman's independent landscape, visual, urban design and heritage experts on the potential impacts of the design;
 - 58.3 The bulk, height and axis of the former Teachers' College buildings;
 - 58.4 The heritage values and structural integrity of the former Teachers' College buildings;
 - 58.5 The functional and operational needs of the Proposed Village;
 - 58.6 Daylight, wind, orientation and massing considerations;
 - 58.7 Vehicular and pedestrian connectivity needs;
 - 58.8 The existing vegetation on the Site and the evolution of the landscaping design;
 - 58.9 The impact of overland flowpaths; and
 - 58.10 Feedback from Council officers.
- 59 My evidence focuses on the design responses to address the factors in paragraphs 58.2 to 58.10 above. The Statements of Evidence of Ms Rebecca Skidmore, Mr Andrew Burns, Mr David Pearson and Mr Richard Turner address the Operative Plan provisions (as well as the more recent Proposed District Plan provisions) and the effects of the Proposed Village on neighbouring properties and the broader environment.
- The surrounding environment and neighbouring properties**
- 60 This section describes the surrounding environment and neighbouring properties and then explains how the Proposed Village design responds to that context.
- Wider context**
- 61 The Site is located in the suburb of Karori, which is on the western edge of the urban area of Wellington, approximately 4km from the city centre.

- 62 The Site sits within a predominantly residential context of single and occasionally two storey detached houses of varying characters. The wider context also includes educational, recreational and commercial elements, including the Karori Pool, Karori Normal School and the Karori shopping centre.



Figure 3: The Site and wider surrounding environment

Northern boundary

- 63 The Site’s northern boundary, and the northern half of its western boundary, adjoin a staggered boundary with a variety of immediately neighbouring land uses as follows (from east to west):
- 63.1 The Site adjoins the vehicular accessway and parking area running alongside the Karori Normal School to the Karori Pool.
 - 63.2 From the entrance to the Karori Pool a sloping pathway winds westwards down the hill to a flat lane leading to Campbell Street. This pathway has traditionally been used by the public, but sits partially within the Site. A boundary adjustment and vesting in Council will ensure this pathway can remain in its current position.
 - 63.3 Further to the west is Karori RSA at 27A Campbell Street and Karori Kids at 29 Campbell Street. The remainder of the northern boundary is bordered by residential properties at numbers 33 and 33A Campbell Street.



Figure 4: A view of the educational character of the Karori Normal School buildings

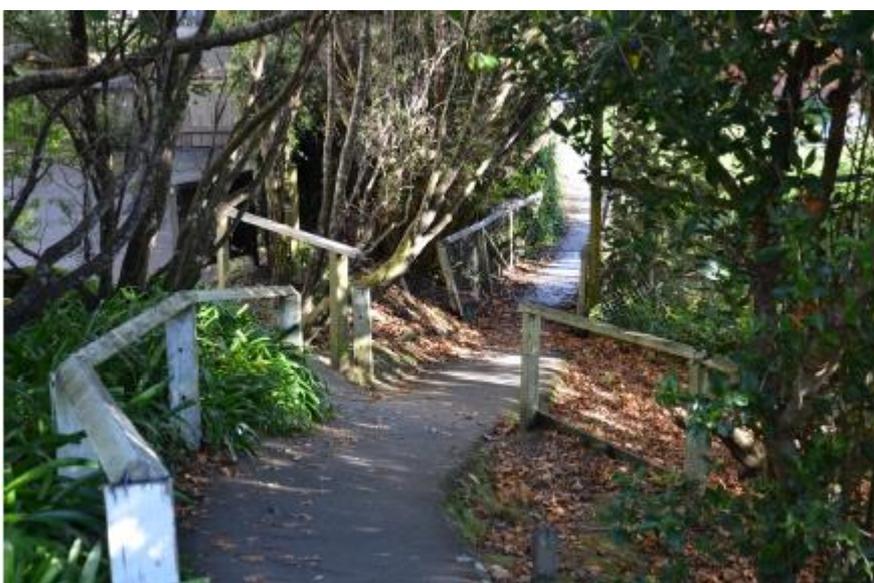


Figure 5: A view of the public walkway along the northern boundary that connects Donald Street and Campbell Street

Southern boundary

- 64 The southern boundary of the Site is relatively straight. It adjoins the side or rear of the following residential properties: 42 Donald Street, 6, 8, 10, 12, 14, 16, 18, 20, 22 and 24 Scapa Terrace and 45 and 49 Campbell Street.
- 65 The land along this boundary appears to have been excavated in the past as there is an approximately 1.5m high on-site retaining wall between the former tennis and netball courts and the boundary fencing.



Figure 6: The central portion of the southern boundary of the Site

Eastern boundary

- 66 The eastern boundary is formed by Donald Street. Residential properties on the eastern side of Donald Street face the Site, with a view towards (from north to south) the Tennant Block, Allen Ward VC Hall and an open space area.



Figure 7: A view looking northwards along Donald Street

Western boundary

- 67 The western boundary is formed by Campbell Street. Residential properties on the western side of Campbell Street face the Site. These properties experience varying views of the Site, with garages and planting and fencing in some front yards. Beyond those foreground features, there is the grassed fields and playing surfaces of the Site.



Figure 8: A view looking south-eastwards along Campbell Street

Design response

- 68 The Proposed Village design responds to each boundary interface and its context as described above in a considered way.
- 69 The northern boundary context and its varied building functions and complex contours have informed the proposed building elements in the northern portion of the Site. Given the non-residential uses on this boundary interface, more bulk (similar to the former Teachers' College) is accommodated near this interface. Buildings B02 and B03 respond to the residential nature of the part of the boundary they adjoin by stepping down to two levels at the boundary interface and being spaced roughly 18m apart.
- 70 The southern boundary context of the adjoining Scapa Terrace residences has strongly informed the architecture of Buildings B02-B06. The buildings are set back off the boundary and have been orientated to present their short ends towards the boundary interface. The orientation of apartments to the east and west and provision of high level windows facing the Scapa Terrace residences minimises overlooking. The independent apartment buildings are a combination of one, two and three storey elements, which responds to the residential neighbours by stepping back from the boundary interface and providing a layered built form with depth and perspective. The two and three storey elements are evenly spaced roughly 20m wide along the boundary interface.
- 71 The eastern boundary context of Donald Street has informed the overall elevation composition of Building B07. The northern part on the crest of the hill has the retained former Teachers' College buildings. Building B07 steps down the slope and utilises a series of façade framing elements. The design approach gives the building the appearance of individual buildings and gives a human scale to the streetscape, which relates to the neighbouring homes across the street.
- 72 The western boundary context of Campbell Street has informed the architecture of Building B02 with the proposed façade design focusing on the relationship between the building and the character of the immediate streetscape and surrounding context. The design

form and mass take on a residential scale as described at paragraph 51 above to relate to the residential properties across the street.

The bulk, height and axis of the former Teachers' College buildings

- 73 The former Teachers' College occupied the Site in a series of purpose-built education buildings between 1970 and 2016.
- 74 The buildings were constructed in two stages creating an urban connection through the Site mostly on an east-west axis. Stage 1 was built on the north-eastern corner of the Site fronting onto Donald Street (the Tennant, Allen Ward VC, Gray, and Waghorn buildings). Stage 2 was built on the northern central part of the Site (the Malcolm and Pankhurst buildings). The Lopdell Gardens between the Waghorn and Panckhurst buildings marked the 'boundary' between Stages 1 and 2. Both stages were built in the 'Brutalist' architectural style, which makes extensive use of in-situ concrete and pre-cast concrete panels in a variety of textured finishes. The architecture is described in more detail in the Statement of Evidence of Mr David Pearson.
- 75 The Lopdell Gardens connect and integrate a changing typography across this part of the Site from a high point in the north-east corner dropping towards the west and south.
- 76 The educational use, scale and unusual Brutalist architecture of the former Teachers' College buildings contrasted markedly with the architecture and character of the neighbouring single and double storey residential buildings. The ten storey high Malcolm Block with the large telecommunications aerials attached to its roof was a particularly distinctive and prominent feature within the central Karori environment. As a result, the Site has become a highly visible and distinctive, institutional, 'landmark' feature of the immediate and wider Karori landscapes.
- 77 The bulk, height and axis of the former Teachers' College buildings and the spaces between them have influenced the Proposed Village design, bulk, height, building orientation, shape and placement. The predominant height and bulk of the Proposed Village design is located in the north of the Site where it can be, and was previously, accommodated by the topography and is a distance from adjacent residences. The former Teachers' College site design and building configuration has been respected throughout the architectural design of the Proposed Village. The former Teachers' College design was based on tried and tested design philosophies and principles, which consider and respond to environment, people, context and place. The former Teachers' College buildings were designed for people to occupy, learn, create relationships, and to be collegial, which has similar pedagogy to retirement living especially in occupation and relationship. The main difference in the former Teachers' College design is the buildings' structural grid, which did

not align to a functional grid spacing to house independent apartments, assisted living suites, and care suites.

- 78 The proposed Buildings B01A and B01B follow the general layout of the former Teachers' College buildings to create a series of 'U' shapes carefully located in the landscape to address the contours and create open courtyards orientated to the north.



Figure 9: A view from Donald Street showing proposed Building B07 (left) and the buildings to be retained (Allen Ward Hall (centre) and Tennant Block (right))



Figure 10: A view from Lower Street of the former 10 storey Malcolm Block (left), 4 storey Panckhurst Block (centre) and 3 storey Theatre Block (right)



Figure 11: A view from Lower Street of proposed Building B01B

Heritage significance and structural integrity of the Teachers' College buildings

- 79 The heritage significance of the former Teachers' College buildings is addressed in the Statement of Evidence of Mr Pearson.
- 80 The following former Teachers' College buildings were identified to be removed to enable the master planning and design of a functional retirement village: the Malcolm Block, Panckhurst Block, Theatre Block, Dance Studio, Mackie Gym, two prefabricated buildings, various out buildings and the Ako Pai Marae.
- 81 An early design of the Proposed Village sought to retain the Waghorn Block, Gray Block, and Oldershaw Music Block. However, after specialist, in-depth engineering review, these buildings were deemed structurally unsafe to be retained and reused for the proposed retirement village use. The buildings were therefore also removed.
- 82 The removed Teachers' College buildings are shown in pink on Figure 12 below.



Figure 12: Retained buildings (white) and removed buildings (pink)

- 83 Although not required by the Planning regime, Ryman decided to retain and reuse the Tennant Block, Allen Ward VC Hall and the Oldershaw Octagonal building as part of Building B01A in recognition of their heritage significance (shown in white on Figure 12 above).
- 84 The Allen Ward Hall provides context to Donald Street and displays several significant architectural elements as explained in the heritage evidence. The adaptive reuse of the Hall will require structural strengthening and built fabric refurbishment and re-establishment. This building will continue to provide a heritage interface to Donald Street to the east. The Hall will contain some of the main Village Centre functions, including the dining room, servery, games room and library for the Proposed Village.
- 85 The Tennant Block also provides context to Donald Street and displays several significant architectural elements as explained in the heritage evidence. The building fabric and structure will be upgraded. This building will provide independent apartments, which have been designed around the structural elements and allow for the contour change between the neighbouring car park to the east and courtyard area to the west.
- 86 A replacement link between the Allen Ward Hall and Tennant Block will replicate the existing architectural elements.

87 The Allen Ward Hall and Tennant Block architecture has influenced building design in the Proposed Village including façade proportions, composition of architectural panel elements, ratios and rhythms.

The functional and operational needs of the Proposed Village

88 There are several fundamental design requirements for a Ryman comprehensive care retirement village, including:

88.1 Ryman villages have a meaningful entry sequence that is welcoming for both residents and guests along an axis that orientates and introduces people to the village layout and design illustrating the quality of environment. The design provides clear signage and wayfinding to the various functions from the landscaped spaces, the village centre, entry portcoheres, independent living areas, care centre, assisted living areas, car parking and back of house spaces for service deliveries and collections.

88.2 The creation of a social heart through the clustering of services and amenities towards the centre of the Proposed Village is an important functional feature. Community and connection is one of the most important design drivers as Ryman's villages need to be "good enough for Mum and Dad".

88.3 Care beds and assisted living suites are located within a large specialist mixed use building at the heart of the Site. This central location caters for less mobile residents with staff located in the same building to provide the levels of care required (assisted living, rest home, hospital and dementia care). The main buildings are highly functional and the provision of support and care with specific staffing ratios is key to operational efficiencies.

88.4 The co-adjacencies of specialist spaces and required operational rooms (ie commercial kitchens and laundries) including front of house and back of house functions is critical. Having these spaces centrally located in the main building is essential to the operation of the Proposed Village. Considered pedestrian movement pathways and nodes provide convenient access for residents in bad weather to enable and encourage residents to the social heart of the Proposed Village.

88.5 Exterior spaces are well defined, interrelated and provide legible communal outdoor spaces for residents to enjoy.

89 Other functional and operational requirements specific to the Site are addressed throughout this evidence.

Daylight, wind, orientation and massing considerations

- 90 The orientation and arrangement of Buildings B02-B07 to, achieve a positive relationship with adjacent streets, provide individual residential units access facing east or west sun (morning and afternoon) minimises south facing unit orientation and enables outlook to landscaped courtyards between the buildings both on grade and at podium level. These courtyards will capture sun and aspect, provide quality outdoor spaces between buildings, space the building mass along the southern boundary and the podium garden spaces provide visual screening to carparking and wind protection.
- 91 The units within the Proposed Village will receive varying amounts of sunlight, which will meet the different needs of our residents. Some residents like sunnier units, while others prefer less sunny units. The Proposed Village has therefore been designed to cater for this need. Further, residents will have access to a wide range of communal spaces that will get sun at different times of the day and year.
- 92 Wind considerations, including prevailing wind directions, influenced the Proposed Village design. Buildings were aligned to the prevailing wind directions, height was concentrated in the middle of the Site and the buildings were setback from the boundaries. In addition, wind mitigation has been designed in to improve the built outcomes, both engineered and landscaped. In response to the Council wind evidence, we have worked with WSP to introduce additional fences and landscaping in the dementia courtyard between the two wings of Building B01B to further address potential wind impacts. We intend to continue refining the wind mitigation options as the detailed design develops.
- 93 Buildings B02-B07 have been designed and orientated with short ends (rather than long walls) interfacing with neighbouring properties to the north and south. The buildings also have recessive stepped ends down to two levels at the residential boundaries, and boundary setbacks with landscape planting. Windows facing the residential boundaries are high and narrow to minimise overlooking.
- 94 The Proposed Village provides some basement carparking under Buildings B01A, B01B and B07 and undercroft carparking under Buildings B02-B06. Both basement and undercroft parking minimise carparking at grade and maximise on grade landscaping between buildings. The undercroft carparking also enables raised podium planting zones between buildings. Undercroft carparking was utilised under Buildings B02-B06 to minimise the need for excavation and resulting neighbourhood disruption. It also simplified the engineering for overland flow and storm water solutions. The undercroft carparking also allows for a more balanced traffic entry and exit volume to the neighbouring street network providing choice for the residents.

Vehicular and pedestrian connectivity

- 95 Pedestrian and vehicle movement within the Site has been carefully considered to create a series of axes, nodes and shared spaces. The vehicle movement has been rationalised to provide a main entry point via Donald Street (aligned to the previous main entry point) and a secondary entry point via Campbell Street. Pedestrian entry points, pathways and footpaths are of a finer grain and accommodate a more organic movement network.

The existing vegetation and the landscape design

- 96 As described in the Statement of Evidence of Mr Pearson, the Lopdell Gardens make a significant contribution to the character of the Site and historically formed an important space between buildings. Accordingly, Ryman decided to retain the Lopdell Gardens will be retained as much as practicable during the construction process and enhance it with further planting following construction.
- 97 The Site also contains an area of vegetation in the south east corner of the Site, part of which performs a stormwater detention function. This area is adjacent to the Proposed Village's entrance off Donald Street and will be retained. Ryman decided to upgrade the street facing part of this area for public use in the form of a pocket park to establish a community amenity.
- 98 The landscape design has been developed in conjunction with the architectural design to ensure there is a positive relationship between the interior and exterior spaces. The design of these spaces provides areas for connection, community, activity, contemplation, reflection and private use.
- 99 The Ryman Design Team worked closely with Sullivan and Wall (the landscape architects for the Proposed Village) from concept design to developed design. The landscaping has been used to soften the relationship with neighbouring properties, provide wind protection where required and to establish different exterior zones for quality resident space and amenity. The landscaping includes at grade planting and elevated landscaping on podiums between buildings to create formal and informal spaces between buildings, while enhancing the exterior environment for both residents and neighbours.
- 100 The landscape design also provides specialist designed dementia gardens to provide meaningful activity for residents. Indoor/outdoor connection with walking loops prevents dead end zones. There are raised communal landscaped zones that interact with the Lopdell Gardens and provide the Village Centre both indoor and outdoor connection. The street interfaces have also been developed to provide planting to ensure the Proposed Village fits into its neighbourhood setting upon completion.

The impact of overland flowpaths

- 101 The Site layout and proposed finished floor levels for the buildings have been significantly influenced by the civil design given parts of the Site are impacted by existing flood flows. This point is addressed in the Statement of Evidence of Mr Ajay Desai.

DEVELOPMENT OF THE LAYOUT AND DESIGN

- 102 In this section, I summarise the design process that occurred prior to lodgement of the application, as well as the design amendments that occurred following lodgement in response to feedback from Council officers. More detail on the development of the layout and design was provided in the Architectural Design Statement.

Pre-application design development

- 103 The design process, from masterplanning, concept, preliminary and developed design has produced various iterations of site plan layouts and individual building designs. The iterations continued to develop a more refined Proposed Village layout and design in response to specialist inputs (both internal and external) concerning a wide range of matters.
- 104 The form and articulation of Building B01 was subject to the most refinement. In the various iterations, the shape of Building B01 shape was pushed and pulled to create functional floor plan layouts while responding to the complex contours of the Site and creating meaningful spaces between buildings. Following heritage consultant inputs regarding the value of building siting and the spaces between buildings, the Building B01 shape was explored further and was broken up into smaller forms with finer grained connections.
- 105 The design process particularly focused on the relationship between the proposed buildings and the surrounding streets and residences, as well as carparking and landscaping options. It considered the full range of design factors described above. In addition to building layout, bulk and height, it considered building form including modulation and articulation as well as materiality, composition and colour.

Design amendments in response to Council feedback

- 106 In response to feedback from Council officers, elements of the Proposed Village design were further refined during 2021.
- 107 The focus of the design amendments related to the facades of Building B01B, Building B02, and Building B07 with a view to improving the fit of the Proposed Village within its context as follows:

107.1 The design of Building B01B continues to reference elements of the former Teachers' College buildings, with their Brutalist architecture, however the fenestration and modulation of the

openings, the façade treatment and the roof composition was refined to reduce the visual mass of the building when viewed from the surrounding areas.

107.2 The original design of Building B02 borrowed heritage elements from the former Teachers' College buildings. The current design focuses more on the relationship between the building and the character of the immediate streetscape and surrounding context to ensure the design form and mass take on a more residential scale.

107.3 The original design of Building B07 also borrowed heritage elements from the former Teachers' College buildings. The current Building B07 design continues to reference cues from the Allen Ward VC Hall while also focusing on the relationship between the buildings and the immediate streetscape to provide a transition between the Alan Ward VC Hall and the residential context.

108 To ensure internal cohesion between buildings, the facades of Buildings B03, B04, B05 and B06 were also amended to complement the façade changes to Building B02.

109 The design of the Donald Street pedestrian entrance was also refined to provide a more prominent entry point into the Proposed Village.

ASSESSMENT MATERIALS

110 The team I lead was responsible for preparing the architectural and assessment packages, as well as the visual simulations. This section of my evidence details the methodology for preparing the key assessment materials.

Cross sections

111 My team uses Autodesk Revit software to produce architectural models. These models are developed in 3D virtually to be actual size or 1:1 scale and are cut both vertically and horizontally to create the 2D drawings for the architectural (RCT) and assessment (RCA) drawing sets.

112 To produce the cross sections, a vertical plane cuts the 3D model to create the 2D views. The cross section view illustrates and represents accurately surveyed existing ground information by Aurecon in its real world location, the civil as-designed surface model information produced by Woods, and the architectural model as designed sitting in its real world location utilising co-ordinates.

Shading diagrams

113 Two software programmes have been utilised (Autodesk Revit and Adobe Photoshop) to produce the shading diagrams. The two

software programmes are required to create the overlay of shading information requested.

- 114 Autodesk Revit has a solar study tool, which generates shadows of the Revit model onto the accurate surveyed topography produced by Aurecon. The solar study tool uses the real world location, the year, the month, the day and the time of day to position the sun to create the shadow views. The shadows are cast onto the topography for each phase/shading situation.
- 115 Four shading situations (shading from retained former Teachers' College buildings, shading from demolished former Teachers' College buildings, shading from Proposed Village buildings and shading from envelopes compliant with the residential building standards) were generated to create the shading diagrams that have been presented in the assessment drawing set (RCA). The shading for the four situations are transposed over each other onto an aerial photograph in Adobe Photoshop to enable the shading situations to be shown on a single image.
- 116 Further shading diagrams have been produced using the same methodology (eg 2m permitted height fence).

Visual simulations

- 117 The visual simulations, when printed and viewed at the nominated scale, are true scale photo simulations that represent what would be seen from the actual photo point location in the particular scenario. The simulations reflect the time and day conditions as experienced on the day the photography was taken. The photo simulations are a tool for visual assessment and the following sections explain the methodology for producing the visual simulations. The assessment of the visual simulations is contained within the Statement of Evidence of Ms Rebecca Skidmore.
- 118 The visual simulations are produced in-house by the Ryman 3D visualisation team. The team have over 10 years of experience in creation of visual simulations, and have provided survey accurate visual simulations across multiple projects in New Zealand, Australia, USA and Canada. I am not personally involved in the preparation of the visual simulations, but have a good understanding of the methodology.
- 119 The methodology is as follows:
- 119.1 Site visits are undertaken to take necessary photography for the Site. A registered surveyor is on site at all times with photographer to capture the coordinates and height of the camera locations.

- 119.2 The photography is then inputted into a software programme (PTGui) to stitch it together and create a replica of the view captured on site.
- 119.3 Using the survey location of the camera, the photography is replicated in 3D space using Autodesk 3DS Max. A surveyed point cloud capture of the site is imported and placed in the same file. The photography and point cloud are then aligned.
- 119.4 The design is then exported from Autodesk Revit to Autodesk 3DS Max. Materials and landscaping are applied in 3DS Max. The landscaping reflects the tree type and height at 10 years of growth. Autodesk 3DS Max also allows the sun to be simulated so the lighting and shadows on the proposed buildings matched the sunlight on the day of photography.
- 119.5 The design is then placed into the existing photography. Some edits may occur at this stage eg removal of trees as per the proposal.
- 119.6 The imagery is then cropped into a field of view (124° horizontal and 50° vertical).
- 120 All visual simulations completed by Ryman follow and comply with those outlined in the NZILA Best Practise Guide for Visual Simulations BPG10.2.

Renders of views from backyards

- 121 The computer-generated renders of 16, 20 and 24 Scapa Terrace (attached to the evidence of Mr Andrew Burns) were produced in Autodesk 3DS Max. These renders are not intended to be visual simulations.
- 122 Photography was taken from the backyard of those properties during arranged visits to give physical context of the built and natural environments in the specific back yards. The photograph content was then modelled in 3DS Max and captured in the render foreground.
- 123 The renders illustrate a computer-generated viewpoint from the backyard showing the detailed Autodesk Revit modelled Village design showing beyond the backyard boundary.

RESPONSE TO SUBMISSIONS

- 124 I have reviewed the submissions on the Proposed Village relevant to architectural design matters and identified the following key submission points:

- 124.1 A number of submissions comment positively on the design and layout of the Proposed Village and consider the end result will be a high quality and attractive environment;
- 124.2 The scale and bulk of the buildings and overall character of the Proposed Village design;
- 124.3 The open space provision;
- 124.4 The design of other Ryman villages; and
- 124.5 The accuracy of the shading diagrams.
- 125 I address those submission points in the following sections.
- Scale, bulk and character**
- 126 I note that other witnesses will address the environmental effects arising from the scale and bulk of the Proposed Village.
- 127 I have described the principles that informed the design of the Proposed Village above.
- 128 The Proposed Village design fits into its context in a considered way. Each buildings' orientation, aspect, composition and interface has been extensively considered and designed from an individual's view point – including from points within the Site, on a boundary interface, or from a distant public space. The scale of the buildings' composition parts (including the façades) reflect a residential character and scale. The Proposed Village design considers view points and perspective to ensure the buildings are viewed and experienced in a series of moments as opposed to being seen in their entirety. The vertical and horizontal rhythm of the buildings is residential as they house residential living functions. The buildings have been designed to have a classic and timeless aesthetic, creating a high quality design outcome both now and into the future.
- Adequacy of open space**
- 129 Some submitters raise concerns about a perceived lack of green space/open space within the Proposed Village.¹
- 130 I strongly disagree. As shown on the landscape plan prepared by Sullivan and Wall, a number of high-quality, carefully designed open and green spaces will be provided across the Proposed Village. There are three areas which are heavily vegetated (the Lopdell Gardens between Buildings B01A and B01B and planting in the south east corner of the Site). There are four formal gardens

¹ Submission 15 (O'Hagen) and 45 (Hamilton).

designed as communal spaces for residents to congregate in and move through. There is a specialist designed dementia garden to enable residents to move freely from inside to outside and participate in meaningful activities such as growing vegetables for cooking. Each boundary interface has landscaping. The social heart of the Proposed Village has a bowling green which connects visually to the Lopdell Garden providing a high quality exterior environment that the communal village centre functions open out onto. There is a pocket park which has been designed facing Donald Street for the community to enjoy also. In my view, the Proposed Village will provide extensive green space/open space that will meet the needs of the future residents.

Design of other Ryman villages

131 A submitter refers to the design elements of Bob Scott village.²

132 In the Wellington region, Ryman has four operational villages (Bob Scott, Malvina Major, Rita Angus, and Shona McFarlane) which are all very different. The Proposed Village has been designed to respond to its context (including its former Teachers' College role), the Operative Plan provisions, and Ryman's functional and operational requirements. I do not consider it is particularly helpful to compare the design of the Proposed Village to other Ryman villages.

Accuracy of the shading diagrams

133 A submitter raises concerns in relation to the accuracy of the shading diagrams and the approach to shading from trees.³

134 I have outlined the methodology for producing the shading diagrams above. I am confident the shading diagrams have a high degree of accuracy.

135 The shading diagrams do not show shadows from natural landscape elements, including trees.

RESPONSE TO COUNCIL OFFICER'S REPORT

136 The Officer's Report and supporting Urban Design and Landscape and Visual Effects Assessments make a number of positive comments in relation to the Proposed Village design. I also note the Council Officer considers the Proposed Village will provide a high-

² Submission 65 (Responsible Development Karori Inc).

³ Submission 65 (Responsible Development Karori Inc).

quality living environment for the future residents.⁴ I agree with those comments.

Landscaping

- 137 The Officer's Report makes various recommendations in relation to landscaping.⁵ The Indicative Landscape Plan and Details Schedule have been updated to address some of the recommendations (see **Appendix 1** to my evidence). The Statement of Evidence of Ms Skidmore will address the landscaping-related recommendations.

Lighting

- 138 The Officer's Report notes that RCA05 shows the proposed lighting but is not part of the RCT drawing set that will be listed in the consent conditions.⁶ It is normal practice for Ryman to prepare its lighting design at the detailed design phase. Nevertheless, I can confirm that outdoor lighting will consist of low level bollard lighting with proprietary lenses to angle light towards footpaths, and low height hooded street lights to light the internal road network. These outdoor lights will not have light spill impacts.

CONCLUSION

- 139 The Ryman design team and I are very proud of the Proposed Village design. The design embraces the past and establishes a new function within an existing environment, revitalising and restoring the existing built architectural and landscaped environments. In my opinion, the architectural design of the Proposed Village has been well considered, will produce a high-quality living environment and will appropriately address the heritage and surrounding context. The new buildings have been designed to complement the existing built form, while having a residential character in materiality, composition and scale that also meets the functional and operational needs of a retirement village. The existing buildings will be brought back to their former glory. I consider the Proposed Village design to be of high-quality and will be appreciated by residents and the community alike.

Isaac Bright
29 August 2022

⁴ Council Officer's Report, Recommendation Report – Laura Brownlie, paragraph 518.

⁵ Council Officer's Report, Recommendation Report – Laura Brownlie, paragraphs 353-356.

⁶ Council Officer's Report, Recommendation Report – Laura Brownlie, paragraphs 486-490.

APPENDIX 1 – UPDATED LANDSCAPING PLANS

KEY

- soft landscape area
- hedging
- proposed water features
- mezzanine viewshed
- Surface material change to enhance pedestrian amenity

- Trees recommended for retention:**
- Kauri (*Agathis australis*) x2 to be retained.** Will require protection during construction phase.
 - Pohutukawa (*Metrosideros excelsa*) x1 to be retained.** Will require protection during construction phase. Tree to be 'limbed up' to enable seating access underneath. Appropriate hardscape incorporated with paving to be installed to protect tree roots.
 - Totoro (*Podocarpus totora*) x2 to be retained.** New plantings of other native species and removal of exotics will complement the Kauri.

It is likely that the existing vegetation will not be retained due to demolition and construction activities. The number of replacement trees will be determined at the time of detailed plant planning and is dependent on what can be retained. This area will be revegetated using primarily NZ natives and exotics that provide seasonal colour and interest.

Ginkgo biloba fastigiata, a narrow upright tree, will follow the upright linear nature of the building frontage with a bonus of bright yellow autumn foliage. The placement pattern is repeated along the front of each apartment wing.

Area between footpath and boundary fence too narrow to support tree species. Suggest planting with climbers (e.g. Trachelospermum jasminoides, wisteria sinensis) along fenceline interspersed with Ilex 'Sky Pencil' or Buxus 'Graham Blandy' (both reach height of approx 2m).

Bespoke planter boxes with open base (1.5m x 1.5m x 0.8m) will be used as for individual trees. Tree will form a clear trunk of approx 1.5m and a 10 year growth height of approx 5m. Using planter boxes to raise the tree canopy will assist with reducing the negative impact of shading for ground floor apartments. This treatment will provide a measure of privacy for 33 Campbell Road from the 2nd story apartment wing. Repeating x4 along the face of both apartment buildings gives a uniformity and rhythm to the planting scheme along the Campbell Street pedestrian entrance.

Standards will be used to highlight the entrance paths to each of the courtyards of the apartment buildings.

Prunus Shimidsu Sakura along the length of the courtyard frame the area while providing privacy for residents. The late spring blossom and autumn foliage add seasonal interest and complement the internal garden layout.

A pergola with seating forms a central area for residents to use. Albizia julibrissin (Silk Tree) at each end of the pergola will form a spreading canopy providing shade with a mass of soft pink flowers in the summer. Underplanting along the length of the pergola provides a beautiful focal point for residents.

Approximate position of detention tank. Area re-designed with Planter boxes along northern edge to provide a visual and physical buffer from carpark area. A small waterfeature and a pergola above seating area to provides height completes the community area.

Sophora 'chathamica', a small evergreen tree, tolerates wind. Used in this instance to frame each external entrance to each ground floor apartment. Use of a native tree along the street frontage will work well with other native plantings in the area.

Michelia 'Bubbles', a small evergreen tree set against the apartment wall are a focal point for each courtyard area. In addition, the Michelias will be accompanied with densely planted taller shrubs and perennials to provide a green environment to reduce the visual impact of the solid 'wall and vent' system of the parking level.

Trees along the S/W boundary will be supplied as large grade for planting (160L bag size). Grade will be dependent on availability and species. Intent is to provide an 'established' look and feel at time of planting.

Mixed native tree planting within the mezzanine viewshed to provide privacy for private residents to the south.

To address the potential privacy issues of being able to look into the rear of Scapa Terrace properties: planter boxes along the southern end of the mezzanine floor will be planted with species that will have a finished height (pot and plant) of 1.5m height.

Lopdell Gardens: Existing tree vegetation to be retained where possible. Vegetation along the 4m construction zone will be removed and/or old and diseased will be replaced with appropriate native tree species. To be decided at time of development. Additional earthworks and wall surface designs will be used in conjunction with appropriate planting to alleviate the stark relief of the foundation walls.

Existing tree vegetation to be retained where possible. Vegetation removed for construction purposes and/or old and diseased will be replaced with appropriate native tree species. To be decided at time of development.



Trees along the N/E boundary will be supplied as large grade for planting (160L bag size). Grade will be dependent on availability and species. Intent is to provide an 'established' look and feel at time of planting.

Area is to be underplanted with native ferns and shrubs. The low growing nature of these species provides a view through to street from B01 main entrance.

Pyrus calleryana 'Candelabra' (Ornamental pear) and Magnolia 'Teddy Bear' along the frontage of B07 highlight the fenceline features and are the same species that has been used along the western boundary.

Cordyline australis (Cabbage tree) has been used to continue the planting theme from the public garden area in the south eastern corner. The planting highlights the 'gate' feature in the boundary fenceline.

Acer rubrum will be used at each end of the main thoroughfare to provide repeat focal points with its stunning red autumn foliage.

The beautiful Hymenosporum flavum with its lemon yellow flowers in summer highlight either side of the main vehicle entrance to the village.

Existing Kowhai (Sophora species) along main carriageway to be removed. These will be replaced with Alectryon excelsa (a narrow upright growing native tree).

Garden area with seating for public use. Ref. L0-020PP

Majority of existing vegetation to remain. Some exotic species will be removed and replanted with appropriate native species to complement remaining vegetation. Decision based on health/size/species of which trees to remove and replant will be made at time of construction.

Dense planting of native tree species provides visual screening for residents south of the boundary

Prunus Shimidsu Sakura (spring flowering) flank the quiet seating area and Cornus 'Eddies White Wonder' (summer flowering) at the end of the pathway frame the view to the covered walkway from the roadside.

Approximately 50m of boundary (as indicated) will be restricted to smaller native trees shrubs and groundcover due to stormwater drainage requirements. Placement of trees will need to accommodate the overland stormwater flow.

Deciduous trees of an upright nature (Ginkgo biloba fastigiata) will provide screening from the street above and also act as street trees. Deciduous trees have been used to ensure winter light levels are maintained for the lower level apartments on this southern boundary. Larger shrubs and underplanting along with tall planter boxes will also provide some privacy for the ground level (below streetlevel) apartments.



U	Large Grade Tree Text	26/07/2022
T	Southern Boundary planting altered along B02-B06.	22/06/2022
S	Minor adjustments to road surface graphic	14/07/21
R	Changes as per Urban Designer requests	24/06/2021
Q	Amendment to Donald and Campbell Street planting	29/04/2021
P	Amended trees on southern boundary by stormwater	21/08/2020
O	Amendments to planting and features over detention tank.	20/08/2020
N	Remove Text	14/07/2020
M	Tree placement southern boundary amended	2/06/20

Ryman Healthcare										
Karori Retirement Development										
Tree Schedule										
TREES										
ID	Qty	Latin Name	Common Name	Notes	Height	Spread	D/E	Size at planting		
39	336	39	38	39	39	39	39	39		
ACEpb	3	Acer palmatum 'Bloodgood'	Japanese Maple 'Bloodgood'	Large bushy deciduous small tree with deep red-purple leaves - turn red in autumn.	4.0m (3m)	3.0m (2.5m)	D	2.0m		
ACERpos	1	Acer palmatum 'Osakazuki'	Japanese Maple	Large lobed leaves. New growth a pinky bronze that turns green. Scarlet autumn colours.	4.0m (3m)	3.0m (2.5m)	D	2.0m		
ACEps	3	Acer palmatum 'Senkaki'	Coral Bark Japanese Maple	Coral Bark Maple. Soft lime green, red margined foliage in spring turning green mid summer- bright gold in autumn. Brilliant red trunk in winter.	4.0m (3.0m)	2.5m (1.8m)	D	1.8m		
ACEj	6	Acer rubrum x freemanii 'Jeffersred'	Freeman Maple	Medium sized vase-shaped tree. Large green leaves with silvery undersides. Red-orange leaves from March.	10.0m (6.0m)	4.0m (2.0m)	D	3.0m		
ALBju	2	Albizia julibrissin	Silk Tree	Fluffy pink flowers Summer. Ferny open foliage. Spreading habit.	6.0m (4.5m)	4.0m (3.0m)	D	2.0m		
ALEex	13	Alectryon excelsus	Titoki	NZ Oak. Glossy green ash-like leaves with black seeds held in scarlet cups.	7.0m (4.0m)	4.0m (2.0m)	E	2.5m		
CORau	21	Cordyline australis	NZ Cabbage Tree	Strap like foliage. Masses of tiny white fragrant flowers on stalk.	6.0m (4.0m)	2.0m (2.5)	E	Various sizes		
Ceww	6	Cornus 'Eddies White Wonder'	Dogwood	Rounded green leaves turning yellow to red in autumn. White flower bracts in spring. Upright grower	5.0m (3.0m)	3.0m (1.5m)	D	2.0m		
Cola	4	Corynocarpus laevigatus	Karaka	Canopy tree with large leathery, glossy, green leaves. Large bright orange fleshy drupes that ripen in summer.	8.0m (4.5m)	5.0m (3.0m)	D	1.8m		
Cdea	15	Cyathea dealbata	Siver fern	This fern is known to grow to heights of 10 m or more. The crown is dense, and the fronds tend to be about 4 m long and have a silver-white colouration on the undersides	3.0m (2.0m)	1.5m (1.5m)	E	Various Sizes		
Da cu	3	Dacydium cupressinum	Rimu	Pendulous, willow-like branchlets when young. Fruit from March to May attracts birds.	6.0m (4.0m)	3.0m (2.5m)	E	2.5m		
DicFib	10	Dicksonia fibrosa	Wheki Ponga Tree Fern	New Zealand Ponga or Tree Fern. Hardy, slow grower with crown fronds that grow in a shuttlecock shape.	3.0m (1-2.0m)	2.0m (1.5m)	E	Various Sizes		
Gbi	20	Ginkgo biloba fastigiata	Upright Maidenhair Tree	A very neat, narrowly erect form with a myriad of uses for confined tight spaces, both in narrow streets and smaller home gardens. Bares the usual deep green distinctive maidenhair leaves with their gorgeous golden autumn tones.	6.0m (3.0m)	2.5m (1.8m)	D	1.5m		
Han	7	Hoheria angustifolia	Narrow-leaved Lacebark.	Narrow serrated foliage. White flowers late summer.	6.0m	4.0m	E	1.8m		
Hyf	2	Hymenosporum flavum	Australian Frangipani	Open habit with glossy green leaves and masses of yellow scented flowers.	6.0m (3.5m)	4.0m (2.5m)	E	2.0m		
Kex	4	Knightsia excelsa	Rewarewa	Foliage deep green, glossy with toothed margins. Small reddish flowers in summer.	7.0m (4.0m)	2.0m (1.5m)	E	2.0m		
Lns	7	Laurus nobilis 'Standard' 1.5m	Sweet Bay or Bay Laurel	Standard. Leathery dark green aromatic foliage.	2.5m (2.0m)	1.5m (1.2m)	E	1.8m		
LIQsgs	5	Liquidambar styraciflua 'Gumball' Standard 1.8m	SweetGum	Maple like leaf on a tight restricted head. Brilliant autumn tones. Corky bark on branches. Standard. Clip to ball.	3.0m (3.0m)	1.5m (1.5m)	D	1.8m std		
Ltf	6	Liriodendron tulipifera 'Fastigiatum'	Upright Tulip Tree	Large bright green lyre-shaped leaves turning buttery yellow in Autumn. Large fragrant light lime green tulip shaped flowers in early summer. Narrow erect form.	7.0m (5.0m)	1.5m (2.5m)	D	2.5m		
Mgb	3	Magnolia grandiflora 'Blanchard'		Very dark green glossy leaves. Creamy white fragrant blooms in summer	5.0m (4.0m)	3.0m (1.5m)	E	2m		
Matb	8	Magnolia grandiflora 'Teddy Bear'	Magnolia	Smaller narrow columnar growth with tight branch structure. Large fragrant white flowers through summer.	5m (3.5m)	3m (2.0m)	E	4m		
Mex	6	Metrosideros excelsa	Pohutukawa or NZ Xmas Tree	Dense ovate green foliage. Crimson/red flowers in summer.	5.0m (4.0m)	4.0m (3.0m)	E	4m		
Mmp	10	Metrosideros Maori Princess	Pohutukawa or NZ Xmas Tree	Conical upright form making it a great tree for streets or narrow situations. Rich, green, oval-shaped leaves, crimson red flowers and rough dark brown bark. It has a very straight trunk.	6.0m (4.0m)	4.0m (3.0m)	E	2.0m		
Mib	15	Michelia 'Bubbles'	Michelia Bubbles	Glossy green leaves and white blooms with pink margins. Very sweetly vanilla scented.	5.0m (3.0m)	4.0m (2.0m)	E	1.8m		
Mgstd	6	Michelia gracipes 'Standard' 1.2m	Michelia Standard	A small tree with shiny dark green leaves. In spring masses of perfumed white flowers are produced from velvety brown buds. Evergreen. 1.5m Standard	1.8m (1.8m)	1.2m (1.2m)	E	1.2m std		

Peco	5	Pennantia corymbosa	Kaikimako - Bellbird Tree	Slender tree - divaricating juvenile form maturing to glossy green foliage. White fragrant flowers followed by black berries. Hardy	8.0m	3.0m	E	2m		
Peu	21	Pittosporum eugenoides	Lemonwood	Wavy pale green foliage.	5.0m (3.0m)	3.0m (2.0m)	E	1.8m		
Pit	13	Pittosporum tenuifolium	Kohuhu	Slender growth. Black branches and stems. Pale green wavy foliage.	5.0m	3.0m	E	1.8m		
Pwr	9	Pittosporum tenuifolium 'Wrinkled Blue'	Kohuhu	Vigorous upright grower with silver/blue wavy foliage.	3.0m	1.5m	E	1.8m		
PRUhs	4	Prunus hillieri 'Spire'	Flowering Cherry	Narrow upright form. Bronze spring leaves - green in summer - orange in autumn. Soft pink blossom in spring.	5.0m (3.5m)	2.5m (1.8m)	D	2.5m		
PRUok	2	Prunus 'Okame'	Pink Flowering Cherry	Masses of carmine pink bell shaped flowers in early spring. Compact upright grower with autumn colours.	4.0m (3.0m)	2.5m (3.0m)	D	2.5m		
PRUss	13	Prunus 'Shimidsu Sakura' 1.8m std	Flowering Cherry	Pink bud, double white flowers in spring. Standard.	4.0m (2.5m)	3.0m (1.8m)	D	1.8m Std		
Par	12	Pseudopanax arboreus	Five Finger	Small rounded tree with open habit. Deep glossy green leaves with serrated margins, in 5 or 7 leaflets.	3.0m	3.0m	E	1.8m		
Pcw	14	Pseudopanax lessonii 'Cyril Watson'	Houpara	Compact bushy habit. Leathery green lobed leaves.	3.0m	2.0m	E	1.2m		
Pccan	9	Pyrus calleryana 'Candelabra'	Ornamental Pear	Upright growth, hardy, White flower, green summer growth, and red autumn colours to finish off the season.	6.0m (4.5m)	4.0m (2.5m)	D	4.0m		
Scha	6	Sophora chathamica	Coastal Kowhai	Tiny compound leaves with yellow flowers in late winter to early spring. Has no juvenile stage. Hardy	5.0m (3.5m)	3.5m (2.0m)	E	4m		
Sot	18	Sophora tetraptera	N Z Kowhai North Island	Cluster of large yellow flowers in spring.	5.0m (4.0m)	3.0m (2.5m)	E	1.5m		
Tos	23	Thuja Occidentalis 'Smaragd'	White cedar	'Smaragd' is a slow-growing, conical, coniferous evergreen shrub with erect sprays of scale-like, ovate, bright green leaves.	3.0m (1.8m)	1.0m (0.75m)	E	1.0m		
Zse	1	Zelkova serrata	Japanese Zelkova	Semi open tree with serrated green leaves turning red and yellow in autumn.	8.0m (5.0m)	6.0m (4.0m)	D	2.0m		

R	Southern Boundary planting amended along B02-B06	22/06/2022
Q	Changes as per Urban Designer requests	24/06/2021
P	Amendments to Campbell and Donald Street Planting	29/04/2021
O	Tree planting amended southern boundary	21/08/2020
N	Amendments over detention tank area	20/08/2020
M	Additional Planting along S/W area	13/08/2020
L	Remove Text	14/07/2020
K	Tree planting amended southern boundary	2/06/20
J	Removal of trees due to Proposed Stormwater Plan	7/05/2020
I	Amendment to Tree Planting on SW Boundary	12/03/2020