
AYRBURN SCREEN HUB

MASTERPLAN PEER REVIEW

Dated: 05 February 2025

1. Introduction and Qualifications

- 1.1 My full name is Gerald Nicholas Barratt-Boyes. I am a registered architect with the New Zealand Registered Architects Board (NZRAB). I have a Bachelor of Architecture from the University of Auckland (BArch 1984), I am a Fellow of the New Zealand Institute of Architects (FNZIA), a member of the Architects Registration Board UK (ARB) and a Chartered Member of the Royal Institute of British Architects (RIBA).
- 1.2 I have 38 years' experience as an architect. I have practiced as an architect and urban designer in New Zealand and Great Britain. I am an independent commissioner for resource consent hearings with expertise in architecture and urban design.
- 1.3 I am a founding director of Studio of Pacific Architecture (Studio Pacific). As a practicing architect and urban designer, I am, and have been, actively involved in a diverse range of residential and mixed-use Masterplans and urban design projects throughout New Zealand. My experience in urban design, research, housing, and mixed-use regeneration within New Zealand and internationally is listed in Appendix A.

2. Background

- 2.1 In 2017 Studio Pacific was instructed by Waterfall Park Developments limited (WPDL) to undertake a comprehensive design for a hotel and conference centre in the Waterfall Park Zone. Resource Consent RM180584 for the Waterfall Park Hotel was granted in March 2019.
- 2.2 In 2019 Studio Pacific was commissioned by WPDL to design a low-rise retirement village by WPDL for the adjacent Ayrburn farm site for the purposes of a resource consent. (Application not pursued).
- 2.3 In 2021, I prepared urban design evidence on behalf of WPDL for the proposed Ayrburn Zone Appeal/ENV-2019-CHC-090 in the Environment Court (Appeal unsuccessful).
- 2.4 In 2023 I was commissioned by WPDL to prepare an Urban Design Statement for RM220926 for the proposed retirement community and boutique hotel and spa (Northbrook Arrowtown) within the Waterfall Park Zone (resource consent granted).

3. Purpose of Review

- 3.1 In August 2024 I was asked by WPDL to undertake a Masterplan Peer Review for the Fast Track Application for the proposed Screen Hub in Ayrburn Farm. The purpose of the review was to ensure that the proposal achieved good integrated design outcomes.

4. Relevant Reports

- 4.1 I have read the following relevant reports in relation to the Masterplan to be lodged as part of the fast-track consent application.
- I. Ayrburn Screen Hub Design Report by Winton dated 30 January 2025
 - II. Ayrburn Screen Hub Architectural Design Report by SA Studio dated 4 February 2025
 - III. Landscape and Visual Assessment by Rough and Milne dated 31 January 2025
 - IV. Transportation Assessment by Carriageway Consulting dated 4 February 2025

5. Scope of Peer Review

- 5.1 The scope of the peer review is as follows:
- I. Peer review process
 - II. Context – The evolving neighbourhood
 - III. Connectivity with surrounding neighbourhood
 - IV. Relevant site features
 - V. Masterplan outcomes
 - VI. Summary
- 5.2 The scope of my review concentrates on the quality of the built environment of the proposal and how it stitches into its existing natural context. I have, in addition, had regard to how it fits into the adjacent consented and constructed context. This is in essence an inside out lens on the qualitative aspects of the proposed development.
- 5.3 I rely on Mr Tony Milne in terms of the Landscape and Visual Assessment and the aspects of the proposal from an external lens.
- 5.4 Given the departure of the application from what is anticipated within this Wakatipu Basin Rural Amenity Zone (WBRAZ) I have not undertaken a comprehensive review of the proposal against the WBRAZ Rules in Chapter 24 of the District Plan. However, I have been cognisant of the height rules and the materiality aspects in my review.

6. Peer Review Process

- 6.1 I acknowledge that the WBRAZ zoning of the application site recognises values that do not contemplate such an intensive land use. That zoning anticipates consent for potentially up to four lifestyle properties on the application site. Given WPDL wishes to create a regional screen hub at this location, the review assesses how the proposal can be realised with minimal adverse impact to the surrounding WBRAZ within which it sits.
- 6.2 The approach necessitates a Masterplan design strategy where the built fabric is to be nestled into a natural cocoon. Where the development is visible, it is to be carefully crafted and articulated to mitigate any adverse impacts while noting that the area is one of a number of pockets of settlement and intensification within the vicinity.
- 6.3 Cocooning the development is paramount. This is to be achieved by virtue of the existing substantive shelter belt to the south, Christine's Hill to the north and a combination of existing grapevines, a regenerated gully, a proposed extended spur landform and proposed buffer planting on top of the spur to the west.
- 6.4 Cocooning the proposal informs most of the Masterplan outcomes outlined in the following section during the review sessions and workshops.
- 6.5 I reviewed the Masterplan as part of an iterative process with the design team over a 12-week period commencing August 13th 2024. This gave me the opportunity to comment on the design as it evolved.
- 6.6 Most of my comments were considered and taken on board as the design developed and continually refined the proposal. The following is a record of the design review process in 2024.
- I. Site visit 13th August site visit (in person)
 - II. Design workshop 14th August (in person)
 - III. Design review 23rd August (digital)
 - IV. Design review 27th August (digital)
 - V. Design review 11th September (digital)
 - VI. Design review 3rd October (digital)
 - VII. Design review 10th October (digital)
 - VIII. Design review 26th November (digital)
- 6.7 The iterative peer review process was instrumental in fostering a healthy collaborative approach and ensuring good built environment outcomes.

7. Contextual Analysis – The evolving neighbourhood

7.1 The proposed Screen Hub sits within an evolving neighbourhood. Ayrburn has developed significantly since my first involvement in the site in 2017. What has been constructed to date within the Ayrburn hospitality precinct includes;

- I. 4x Restaurants
- II. 6x Bars
- III. Productive garden with extensive landscaping
- IV. Stream restoration
- V. Riparian/ecological planting
- VI. Foot and vehicular bridges
- VII. Sculpture
- VIII. The Dell
- IX. Walkways
- X. Cycle trails
- XI. Car parking
- XII. Entranceways
- XIII. Grapevines
- XIV. Heritage building restorations
- XV. 2x ponds (constructed)
- XVI. Freshwater Koura breeding habitat within the large ponds (implemented)
- XVII. Bakery, butcher and retail (constructed)

7.2 What has been consented to date and under construction in the balance of Ayrburn Farm includes;

- I. Fine dining restaurant in heritage building (under construction)
- II. Wedding venue (consented)

7.3 What has been consented to date and is currently being marketed in the Waterfall Park Zone includes;

- I. Northbrook at Arrowtown – a 196 bed retirement community with independent living, assisted care and club house.
- II. 112 pax wedding venue
- III. 18 room boutique hotel

- 7.4 The neighbourhood around Ayrburn is evolving. For example, to the north of the site Millbrook Resort continues to expand. Notably Millbrook Resort has undeveloped consented land about 7 hectares in size zoned as a Village Activity Area allowing for bars, restaurants theatre and retail at the top of Christine's Hill directly north of the site.
- 7.5 To the west of Ayrburn on the other side of the Countryside Trail a private innovation conference centre, Te Wharehuanui, is under construction. Refer Ayrburn Screen Hub Design Report at page 6 dated 26 November 2024.
- 7.6 To the east of Ayrburn is Hogans Gully Resort Zone, Hills Resort Zone and Arrowtown Retirement Village forming a pattern of existing and proposed resort and retirement development.
- 7.7 The proximity to Arrowtown (5 minutes by car), proximity to Lake Hayes and the neighbouring resort zonings, make this area particularly attractive and rich in amenity within the Wakatipu Basin. Development appears, in my view, to be slowly radiating out from Arrowtown forming interconnected fingers and hubs of development set within the landscape creating a natural extension to the township's heritage core.
- 7.8 The proposed screen hub would not only add another dimension to the mix of uses listed above but would add more critical mass and human activity to the precinct. Hence, the need for it to be stitched and integrated into its context extremely carefully.

8. Connectivity with the surrounding neighbourhood

- 8.1 The proposed screen hub site is well disposed to be able to be stitched into the adjacent uses, future and existing amenity and the surrounding existing networks. This creates a high degree of permeability, choice and connectivity for the screen hub with the surrounding area, particularly access to all the amenity that the Ayrburn hospitality precinct offers as listed above.
- 8.2 In terms of connections to the existing trail networks the following opportunities can be realised, (i) west to the existing Countryside Trail linking Arrowtown to Queenstown, along an extension to the Countryside Trail through the mature conifer shelter belt, (iii) east to Ayr Avenue with bus stops for public transport and walking and cycling connections to Ayrburn and south to a potential trail connecting to Lake Hayes. Refer Ayrburn Screen Hub Design Report page 24.

9. Site Features

- 9.1 Details of the site's features are identified in the Ayrburn Screen Hub Design Report pages 9, 10 + 11. The site is relatively flat other than the sloped change of level at the base of Christine's Hill. The site is elevated from Ayrburn and the Mill Creek corridor by a gently sloping bank of approximately 7m metres in height. There are views to the surrounding ranges and peaks in all directions.

- 9.2 The formative existing features that define how the Masterplan is arranged on the site are:
- I. The existing mature trees – most of which are to be protected and help break the scale of the proposed development,
 - II. Christine’s Hill – which allows the screen hub studio larger buildings to be tucked under,
 - III. The existing mature conifer buffer – which shelters the site from the neighbouring lifestyle properties to the south,
 - IV. The grapevines to the west – which retain rural character in the foreground of views from the Countryside Trail,
 - V. The gully which provides a native wetland corridor to the west and retains the rural character when viewed from the west and the Countryside Trail,
 - VI. The flower garden and greenhouses at the base of the bank – which connect the site to Ayrburn.

10. Masterplan Design Outcomes

- 10.1 The following criteria forms the basis and focus of the peer review. They were addressed as the Masterplan evolved. Consideration was given to each aspect by the design team and modifications to the plan were made accordingly. The final Masterplan for lodgement achieves the following outcomes.

11. Visibility and Screening Outcome

- 11.1 The accumulative cocooning effect of nestling the development into an armature of existing and proposed landforms and trees successfully integrates and screens the development from the critical views from the south, west and north. This fundamental to the Masterplan.
- 11.2 In terms of the view from the south the existing mature conifer tree shelter belt shields and screens the development from view from the neighbouring lifestyle properties in the WBRAZ.
- 11.3 To the west planting grapevines, enhancing the naturally formed stream gully with riparian native planting, extending the spur of Christine’s Hill and cluster planting on the top of the spur screen the view from the Countryside Trail. This is a layered screening approach with grapevines in the foreground, the gully in the mid ground and the planted spur in the background.
- 11.4 Strategically placing and cutting-in the larger screen studio buildings at the base of Christine’s Hill shields them from view from the Countryside Trail to the west and to the north.
- 11.5 The view of the development from the east is a view internal to Ayrburn. This view provides important connectivity and accessibility between the two. The development is completely protected further eastward from view from the Arrowtown - Lake Hayes Road by virtue of the combination of open space designations, existing grapevines, ponds, planting, landform and heritage buildings.

- 11.6 I acknowledge that, notwithstanding all the screening, the development will still be visible from some specific vantage points on the Countryside Trail and the adjacent WBRAZ to the west. Refer Mr Tony Milne Landscape and Visual Assessment. Due to the location of the Countryside Trail any built fabric on the site would be visible from the west, including the anticipated lifestyle properties.
- 11.7 In my opinion, given the sensitivities with adjacencies with the WBRAZ, the proposed layered cocooning creates an effective, integrated and appropriate buffer for a development of this nature and scale.

12. Solar Orientation Outcome

- 12.1 There are very few south facing rooms in the residential accommodation. This is achieved by rotating the accommodation blocks predominantly north-south which gives east-west outlook and natural sunlight during some part of the day.
- 12.2 In my opinion this is a good outcome even though the Masterplan proposes only short stay accommodation allied with the screen studios and not permanent residential units.
- 12.3 Three-dimensional modelling has been undertaken to ensure that key open spaces are not overshadowed by the buildings and the development is not overcrowded. In my opinion a balance of built fabric to open space has been met.

13. Bulk and Location Outcome

- 13.1 The screen hub is nestled within a cocoon. The buildings are laid out in ribbons responding to the curvilinear nature of the site edges. The string of accommodation buildings, for example, meander and follow the southern and western site boundary and the screen studios follow the northern edge of the site creating a horseshoe effect opening out to the east and the Ayrburn hospitality precinct.
- 13.2 The outer ring of radiating buildings creates a porous edge - broken with landscaping. This avoids a wall of buildings effect to the west.
- 13.3 The inner centre horseshoe buildings wrap around a landscaped open space with stormwater ponds, walkways and existing mature trees that link back to the flower farm at the base of the bank, Mill Creek and Ayrburn.
- 13.4 All the buildings, other than the screen studios themselves, are two storey and all sit underneath the 8-metre height limit other than the screen studio and a few gable roof ridges which protrude above 8 metres. Refer Compliance Drawings Architectural Design Report page 37.
- 13.5 As noted above the screen studios are tucked in under Christine's Hill. They are set on an upper terrace from the rest of the buildings for privacy and security reasons. I acknowledge that the screen studios are demonstrably taller than the 8-metre limit. However, given that (i) they are tucked in at the base of the hill (ii) adjacent mature trees have been protected to break the scale of the studios and (iii) their external design and appearance is rural vernacular in character, in my opinion, they do not dominate the development. They sit in the background on an upper landscaped terrace with a landscaped wall in the foreground.

- 13.6 In my opinion, the bulk and location of the buildings is carefully considered and arranged to mitigate any adverse impacts from the surrounding context.

14. Building Hierarchy Outcome

- 14.1 There are approximately 17 buildings within the screen hub. A clear hierarchy between them is achieved by creating legibility for key marker buildings.
- 14.2 The marker buildings are (i) the reception and gym/wellness building which has been configured as a long barn form with a covered porte cochere opening in the middle for arrival and drop off aligned with the front main entrance road to the site ii) the Ayrburn depot building which is split level and creates a bookend to the north of the site adjacent to the screen studio entrance and service entrance and (iii) the screening stages and workshop/workroom spaces are distinctive in scale and clearly mark the presence of the studios and (iv) the stand alone venue building which has a distinctive hospitality character.
- 14.3 In my opinion the building hierarchy is legible, and the marker buildings are well positioned.

15. Architectural Character and Materiality Outcome

- 15.1 The overriding aesthetic of the proposed development is rural vernacular. Refer Ayrburn Screen Hub Architecture Design Report for details of each building. This architectural style is, in my opinion, empathetic with the adjacent refurbished heritage buildings at Ayrburn and the broader local vernacular in the Wakatipu Basin.
- 15.2 I acknowledge that the proposed development has greater density in built form than anticipated by the WBRAZ zoning. However, deploying a cohesive rural character to all the buildings helps them to read as a unified whole, not just a sporadic grouping of buildings. Cocooned by landform and trees the layered ribbons of built fabric create an overall village form set within a natural setting.
- 15.3 The string of film office and accommodation buildings are developed with pitched roofs, gable ends, punched windows and roof dormer windows. The hotel entrance building including reception offices, gym and wellness, for example, is housed in an elongated barn-like structure with pitched roof gable ends and dormer windows.
- 15.4 The palette of materials across the development strongly reflects the local vernacular. The use of local schist stone, stained timber, iron claddings along with corrugated iron roofing profiles soften the buildings, add texture and tactility. The materials comply with the tones and reflectance levels detailed in the QLDC District Plan.
- 15.5 The split-level Ayrburn depot building harks back to a farm aesthetic. Clad in corrugated iron and timber sidings, smaller punched windows it is a workman-like structure reflecting its depot function.
- 15.6 The screening stages, workshops and workroom spaces are predominately high stud, mono pitch structures, empathetic with the slope of Christine's Hill. They are clad in metal and timber claddings and reminiscent of large rural sheds with an industrial overlay, e.g. hay barns, and wool sheds. Their scale is broken up by the staggered plan which creates shadow and relief. Smaller roof elements such as gables and porches help break the scale.

16. Futureproofing Outcome

- 16.1 There are two areas of flexibility that are successfully built into the Masterplan design. Firstly, the screen studios are designed for multiple different crews working on different screens of varying scales contemporaneously. This fits, as I understand it, the potential demand profile of screening in the region.
- 16.2 Secondly the accommodation is designed to allow for shifts in the demand between screen support office space, shared accommodation facilities and traditional independent hotel rooms.

17. Accessibility Outcome

- 17.1 Careful attention is given to ensuring all walkways and accessways across the site are designed to meet compliance with NZ accessibility standards and codes. This means gradients between the hospitality precinct and the accommodation meet code and likewise access to the screen studio terrace meets code. This is a good outcome and encourages active walking and cycling options throughout the development.

18. Landscape Outcome

- 18.1 The landscape design is integral to the Masterplan. Refer Ayrburn Screen Hub Design Report. The inner heart of the screen hub is a landscaped series of open spaces integrated with proposed stormwater ponds and wetlands. The ponds not only provide visual amenity but provide stormwater management, biodiversity for flora and fauna and other positive ecological benefits.
- 18.2 Interconnected by walkways, the strings of open spaces run east west through the development. This creates a permeable network of walking and cycling routes through the site back to the Ayrburn hospitality precinct, and the existing wider walking and cycle trails network.
- 18.3 Protection of existing mature trees adjacent to the flower farm on the bank, to the screen studios and to the conference venue break the scale of the buildings, add maturity and act as focal points for the landscape within the development.
- 18.4 The substantive protected conifer shelter belt to the south of the site adds a mature backdrop to the screen hub. The tree planting on the proposed spur will break the scale of the buildings on the perimeter.
- 18.5 The grapevines intensify the agrarian landscape to the west adjacent to the Countryside Trail. The open hillock pastures on the slopes of Christine's Hill, currently being grazed by sheep, add authenticity to the background landscape. The proposed riparian planting in the existing stream gully defines and enhances the ephemeral waterway and bringing biodiversity and ecological benefits.
- 18.6 In my opinion the proposed landscaping is appropriate to the scale and nature of the screen hub development and builds on the extensive, high-quality landscaping already evident at Ayrburn.

19. Carparking Outcome

- 19.1 Carparking is configured as a series of interconnected green rooms. This strategy breaks up what could be otherwise a sea of surface carparking. The green rooms are clustered and broken up by landscape courts – utilising, gravel, local schist stone and native planting. There are five landscape courts linking the parking areas. The courts align with critical points to define entrances and gateways.
- 19.2 Over and above private car parking, active modes of walking and cycling are integrated into the design. Access to the bus stop on Ayr Avenue reinforces the connection to public transport.
- 19.3 In my opinion the Masterplan design strikes a balance between adequate provision for private vehicles and futureproofing for the active modes of transport which are prevalent in the district and public transport.

20. Servicing Outcome

- 20.1 Servicing is discretely designed by virtue of a dedicated service lane to the north of the development adjacent to the Ayrburn depot building. This provides servicing to the depot building from the rear and leads to the screen studio's-controlled access gates for cars, vans and large trucks.
- 20.2 There is a dedicated back lot behind the screen studios up against the retaining wall at the base of Christine's Hill. This is a screened secure yard for storage, catering trucks, outdoor sets and additional carparking as required.
- 20.3 The service lane weaves its way through the carparking green rooms in a loop picking up all the accommodation buildings for deliveries, rubbish collection, and emergency vehicles etc. The service loop extends to the conference venue and exits via the main entrance to the hotel.
- 20.4 In my opinion servicing is designed to be discrete and screened. The screen studios would require the greater degree of servicing, and this is provided for particularly by the rear yard at the base of the retaining wall and behind the screen studio buildings.

21. Summary

- 22.1 This peer review process focusses on the internal arrangement of the Masterplan to ensure it achieved good design outcomes while being cognisant of the importance of integrating the proposal with the adjacent rural areas.
- 22.2 The peer review focusses on optimising the cocooning effect by virtue of existing and proposed landforms and substantive planting to encapsulate and buffer the screen hub from the west, south and north.

- 22.3 The development is stitched into its immediate and neighbourhood context efficiently and seamlessly.
- 22.4 In terms of assessing the visibility of the development I rely on the evidence of Mr Tony Milne.
- 22.5 In my opinion, the proposed development is carefully considered and crafted to nestle into its local context and the existing environment.

Author
Gerald Nicholas Barratt-Boyes

BArch FNZIA, ARB, RIBA

APPENDIX A – URBAN DESIGN, HOUSING AND MIXED USED EXPERIENCE

New Zealand Urban Design Experience

2023-Ongoing Silverstream Forest: A masterplan for 1500 homes adjacent to an existing forest integrating biodiversity preservation, housing, and public recreational networks. Silverstream Upper Hutt.

2022-Ongoing Sunfield: A 4,000 home mixed-use masterplan for compact living in a car-less environment that prioritises people and community. Sunfield has been designed using '15-minute neighbourhood' urban design principles with the majority of residents' day to day needs provided within a short 15-minute walk or bike ride from home. Takanini Tamaki Makaurau.

2022-Ongoing Surf Park: Masterplan for an artificial wave lagoon set within a mixed-use development including an extensive solar farm and data centre. Albany Tamaki Makaurau.

2023 Northbrook, Arrowtown: Expert witness urban design for Northbrook retirement community hearing in the Waterfall Park Zone.

2020-2024 Ladies Mile Structure Plan, Queenstown: Plan Change, masterplan and Structure Plan for a mixed use greenfields medium to high density new residential community via a streamlined planning process on a 160 hectare site for Queenstown Lakes District Council.

2020-Ongoing Beachlands South Auckland: Masterplan for a 307 hectare coastal site adjacent to the existing community of Beachlands, including low, medium and high density residential, community and village hub, secondary and primary schools, light commercial and retirement activities, set within a network of estuarine coastal walkways, native forest revegetation and recreational open spaces. In association with Jasmax, Studio Woodroffe Papa and Woods Bagot. For Russel Property Group and NZ super fund.

2021 Ayrburn Farm Arrowtown: Preparation of urban design evidence and attendance at Environment Court for Ayrburn Farm zoning appeal.

2021 Belmont Sites Framework Masterplan, Devonport: Spatial Framework for three sites surrounding the Waioroka Oneroa inlet, Devonport for Ngāti Whātua Ōrākei

2021 Peninsula Hill, Queenstown: Masterplan for 140 hectares at residential zoned land at base of Peninsula Hill, including low density and medium density housing, open space network, 9 local centre and community facilities for the Meehan family

2020 Wesley Framework Plan, Mt Roskill Auckland: Large-scale mixed-use brownfields regeneration spatial framework, including social housing, community facilities and commercial hubs, integrated transport hubs and open space networks on the Oakley Creek stream for Kāinga ora. Approximately 8,500 houses.

2020 Neighbourhood D, East Porirua: Neighbourhood Masterplan for revitalising local centres, upgrading parks, schools, social housing, affordable housing and market housing for Kāinga Ora.

2019 East Porirua Spatial Delivery Masterplan: All of Government Masterplan initiative led by Kāinga Ora, Porirua City Council and Ngāti Toa. Masterplan includes social housing, community, facilities, commercial centres, transport hubs and open spaces. Approximately 3500 houses.

2019 Urban Design Assessment, Wellington: Proposed urban design assessment for a new office building adjacent to the listed Heritage NZ Old St Paul's Cathedral, 48 Mulgrave Street, Wellington.

2019 Northlake ODP Wanaka: Masterplan for 175 Kiwibuild houses. Expert Witness Urban Design

2018-2019 Tamaki Spatial Masterplan: Comprehensive brownfields masterplan for 2500 new social houses and 5000 market homes across Glen Innes, Panmure and Point England suburbs in Tamaki, Auckland for Tamaki Redevelopment Company (TRC) and HLC.

2019-2018 Research Lead, "Quantifying Density" Stage 2 Medium Density Housing: Studio Pacific joint venture with Victoria University Wellington.

2018 Urban Design Statement, Northlake Hotel, Wanaka: Urban Design assessment for proposed new Hotel to support Resource Consent Application.

2018-2017 Centreport Wharves, Wellington: Expert Witness Urban Design Greater Wellington Proposal Natural Resources Plan Hearing for Interislander and Waterloo wharves redevelopment framework.

2018–2017 Lakes Edge Development Kawerau Village, Queenstown: Expert Witness Urban Design Architecture QLDC Hearing for proposed 350 room waterfront hotel.

2018- 2017 Te Kauwhata Lakeside Housing Development: **PC 20** Peer Review Urban Design and Expert Witness Urban Design for Plan Change 20 for 179 Hectare Residential Masterplan Greenfields site on Lake Waikare, Waikato.

2018-2017: Tauriko West, Tauranga: Masterplan and Structure Planning for new growth corridor for 350 hectare greenfields site on Wairoa River for medium density housing.

2017 - 2013: Okura Residential Development, Auckland: Expert Witness in Urban Design for IHP, AUP & Environment Court, 130 hectare greenfield site housing masterplan.

2017 - 2015: Hobsonville: Launch Bay Precinct, Auckland: Masterplan for medium density generally 6 storey apartments on the headland by the landing. Approximately 350 dwellings.

2017 - 2014: Wynyard Quarter, Auckland: Masterplan for medium to high-density mixed-use inner city new waterfront residential neighbourhood, approximately 800 apartments.

2017 - 2013: Hobsonville: Sunderland A Precinct, Auckland: Masterplan for medium-density housing and Axis Homes under Special Housing Accord including landscape and open space design.

2015: Northlake, **PC45**, Wanaka: Expert witness Urban Design in support of residential intensification and rezoning for an approximate 170 hectare greenfield rural site incorporating approximately 1500 dwellings and small community hub.

2015-2009: Flatbush Town Centre (Ormiston), Manukau City: Masterplan for 19 hectare green fields mixed-use new Town Centre including medium-density housing, retail and cultural amenity.

2014: Springpark Affordable Housing, Mt Wellington, Auckland: Expert Witness Urban Design Masterplan for medium-density 'market affordable' housing, approximately 420 houses within brownfields former quarry, 11 hectares.

2014-2010: Frankton Flats Special Zone, **PC19**, Queenstown: Expert Witness Urban Design for mixed-use Structure Plan including affordable housing, town centre retail, industrial and commercial uses.

2014-2001: Harbour Quays Masterplan, Wellington: Masterplan for 10 hectare mixed-use waterfront CentrePort Limited.

2013: Navy Sites, Devonport, Auckland: Masterplanning for medium-density housing and residential intensification for multiple sites for Proposed Auckland Unitary Plan submissions for Ngati Whatua-o-Orakei.

2013: Overlea Precinct – Tamaki, Auckland: Masterplan for inter-generational mixed-tenure and blind tenure affordable and social housing for Tamaki Redevelopment Company and Housing New Zealand.

2011: Shotover Country, **PC41**, Queenstown: Expert Witness Urban Design for medium-density housing and capacity testing masterplanning, 6 hectares.

2010: Crown Lynn, New Lynn, Auckland: Masterplan for mixed-use medium to high-density residential Masterplan, (TOD) Transport Orientated Development, 19 hectares.

2009-2007: Wellington International Airport Masterplan: Mixed-use masterplan, structured around landside commercial opportunities, hotels and short stay accommodation and airside aeronautical operations, 112 hectares.

2009-2006: Kumutoto Masterplan, Wellington: 6 hectare waterfront mixed-use Masterplan for Wellington Waterfront Limited.

2008: Porirua City Centre Revitalisation: Masterplan for revitalisation of CBD of Porirua City.

2008-2005: The Waterfront Seatoun, Wellington: Masterplan for 4 hectare green fields coastal medium-density residential community on the former Fort Dorset military base.

2008-2003: Kawarau Falls Station, Frankton, Queenstown: Masterplan for 6 hectare lakefront Alpine Resort Village and residential.

2007-2005: MacArthur Ridge, **PC10**, Central Otago: Masterplan for 800 hectare low-density residential accommodation, golf course, vineyard and hotel lodge within an Outstanding Natural Landscape.

2007-2001: Beaumont Quarter, Victoria Park, Auckland: Masterplan for 2.4 hectare medium-density mixed-use brownfields inner city innovative housing project, approximately 240 townhouses and apartments.

2006: Watermark, Wellington: Expert urban design evidence/witness. Environment Court Non-complying height and listed heritage building use.

2006: Kilbirnie Suburban Centre, Wellington: Masterplan for revitalisation of historic Kilbirnie Bus Tram Depot into mixed-use medium-density residential precinct.

2006-2002: Lighter Quay, Viaduct Harbour, Auckland: Masterplan for former brownfields site, medium to high-density apartments and five star hotel structured around new canal.

International Urban Design Experience

2010: Regatta Tripoli, Libya: Masterplan for mixed use, medium-density sustainable residential neighbourhood on Mediterranean coast: 96 hectares in association with the Brisbane Group and UPET.

2005: ANZAC War Memorial, Canberra Australia: Winner international competition, urban design and open space design for memorial in association with sculptor and artist Kingsley Baird.

1994: CIBOGA: Groningen Netherlands: Winner international competition for mixed-use masterplan "*New Ways of Living*" (S333).

1992: Revitalisation of Samarkand Uzbekistan: Winner international competition for cultural centre and Masterplan for 70 hectare site (S333).