



Investigation into the New Plymouth Central Area and Building Heights



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EXECUTIVE SUMMARY

More people living and working in New Plymouth's Central Area will no doubt result in more shops and services, more exciting and innovative companies, enhanced recreational opportunities and perhaps an improved public transport service, and of course, more buildings. Fundamental to this is that these new buildings must be designed and built well in order for the continued success of the central area.

As a result of the New Plymouth Central Area Urban Design Framework, this report has investigated the current overall state of New Plymouth's built form with a focus to the city's taller elements. Further analysis was also conducted into what, if any, barriers exist in regards to the development of not only taller buildings, but development in general within the Central Area that might assist in the long-term viability of businesses and recreational uses within this important part of our city.

Key findings are as follows:

1. New Plymouth's current built form

- New Plymouth is a predominantly low rise city of one and two levels and spread over a relatively wide geographic area
- Certain locations do have clusters of taller buildings and denser built form
- Aside from Devon Street retail strip, no real evidence of key urban design principals in Central Area buildings and most noticeably more so, in recent building development

2. Barriers to building development in New Plymouth

- The New Plymouth District Plan and its interpretation
- Limited supply of quality building lots in Central Area and abundance of available Greenfield lots
- Large scale building development and associated economic implications at a provincial level
- Continuing social reluctance towards non-traditional forms of building and/or living arrangements

3. The Case for increased height limit allowances and new building development in New Plymouth

- No real appetite for change from the point of view and of the public and seemingly no pressing demand for change from the professional sector regarding the current 14m height limit
- However, there is a latent opportunity to utilise taller buildings to generate positive urban developments around specific parts the Central Area
- Coupled with this opportunity is the chance to establish new urban design initiatives, be it regulatory or voluntary, into the on-going development of the Central Area to allow for enriched spaces at both a public and private level

It is hoped that this project can contribute to making the Central Area a vibrant mixed use space, and encourage discussion and actions surrounding high quality, sustainable urban form. As a provincial New Zealand city in the 21st century, New Plymouth faces several challenges to its traditional CBD operational model and must now look to new, and perhaps visionary, ways to ensure the continued sustainability of the Central Area.

ACKNOWLEDGEMENTS

The Central Area Building Heights project has been developed with internal stakeholders within the New Plymouth District Council, and external stakeholders that contribute to urban development in the New Plymouth District. Many thanks are given to those that have contributed valuable insights, knowledge and perceptions to this project. Their enthusiasm, knowledge and the spontaneous provision of their time has been greatly appreciated.

1. INTRODUCTION AND PROJECT BACKGROUND

New Plymouth is a unique and special place. With an abundance of natural assets easily accessible, including a world famous surfing coastline and the ever-present Mt Taranaki Egmont National Park, coupled with a mild climate, the outdoor lifestyle opportunities that are on offer in New Plymouth are truly 'like no other'.¹

However New Plymouth, like many other towns and cities throughout New Zealand can fall short in aspects of its built environment. While by no means a failure in urban issues, there is however a latent opportunity to make New Plymouth a much better place in regards to urban design and living, which in the end will create a much more prosperous place to be for residents and visitors alike.

While New Zealand as a country is world renowned for its wilderness and open spaces, New Zealanders essentially chose to live in towns and cities. In fact over 85% of Kiwis live in cities or towns, which makes New Zealand one of the most urbanised countries in the world.² Unfortunately, our record for designing and building pleasant urban environments has not been overly remarkable. The Ministry for the Environment has recognised this issue and established a nationwide Urban Design Protocol, of which New Plymouth has been a signatory since 2011. The purpose of this Urban Design Protocol is that with the collective actions of all its signatories will make a significant difference to the quality and success of urban design in our towns and cities and enable them to become:³

- Competitive places that thrive economically and facilitate creativity and innovation
- Liveable places that provide a choice of housing, work and lifestyle options
- Healthy environments that sustains people and nature inclusive places that offer opportunities for all citizens
- Distinctive places that have a strong identity and sense of place
- Well-governed places that have a shared vision and sense of direction

Further to the Urban Design Protocol, in 2010 the Ministry for the Environment also established a Technical Advisory Group to review urban planning and the built environment in regards to the Resource Management Act 1991. Their research established that our urban environments were integral to national economic competitiveness, productivity and prosperity, including environmental, economic and social well-being.⁴

Why is this important? Cities are where we live, work and play and while it is still relatively easy for us to 'escape' to the countryside, we ultimately spend most of our time in an urban environment. Therefore, shouldn't these places be somewhere that fill us with excitement, promise, intrigue and vitality, and which ultimately make our lives better.

¹ (Venture Taranaki, 2014)

² (Statistics New Zealand, 2011)

³ (Ministry for the Environment, 2005)

⁴ (Ministry for the Environment, 2010)

Significantly, in the modern urbanised world which we live, cities (and towns) are increasingly beginning to recognise that well designed and built urban environments are not only good for their inhabitants, but good for enticing new people and thus, new social and economic initiatives to their towns. Added to this, new urban design methods are enabling development that is better for the wider natural environment, with the net overall effect being more sustainable places and urban spaces on social, economic, and environmental levels.

The challenge for New Plymouth as a progressive provincial city has been to recognise the significance and opportunity of its built environment. The Central Area Urban Design Framework, published by the New Plymouth District Council in June 2013, does so, and is a broad strategic document which sets about outlining the community's vision for future development of New Plymouths Central Area over the next 30 years.

The next logical step of this process is to now go about establishing how to implement this vision in a tactical way with recognition and analysis of items that could be crucial to the success of the city's built environment. Elements such as building height limits and urban housing initiatives within the Central Area have been recognised as issues that require closer investigation due to the long term and highly significant impact they can have in creating a better, more vibrant central area.

Therefore, pivotal to this report, will be the analysis of New Plymouth's current situation in regards to building heights and what the current population density is within the Central Area under the existing built form and what possible densities there might possibly be achievable if buildings were developed to the permitted height limits. Further examination will establish whether certain locations within the central area are more suited to taller buildings, beyond what the current maximum height limits are within the New Plymouth District Plan. Consequently, an evaluation of what taller buildings in these locations might then look like and overall consideration on how they might enhance the built environment and what, shifts in the District Plan permitted baselines might be necessary to assist with achieving the vision set out within the Central Area Urban Design Framework.

The underlying rationale for this report is that as an evolving entity, New Plymouth's Central Area constantly experiences demand for growth and development in various and dynamic ways. This development is valuable for the continued growth and viability of the downtown area and should be encouraged. However, what is becoming apparent is that the traditional central area model of commerce and retail is under significant pressure from new alternative options, such as the internet and large format retail centre's, such as the Valley Mega Centre on the city's northern outlet.

As the core element of the largest urban area on New Zealand's west coast, New Plymouth's Central Area is too important to allow it to deteriorate to a point where it is no longer relevant to a majority of the District's residents. Therefore investigation of the actual and perceived constraints of development growth and providing direction and confidence to new development must be considered to ensure the continued viability of the Central Area, of which permitted building heights is one of these. On face value, the equation is simple, taller buildings accommodate more people, be it residential or commercial, thus more people in the central area all adding to its vitality and success. Furthermore, building within the central areas defined area allows for the efficient use of existing public infrastructure and has the potential to provide alternative housing opportunities to people.

However, the raising of height limits needs to be carefully considered in detail and balanced against the central area's amenity to the public and to what, effect it may have on what makes it unique and special. There would be no point allowing taller buildings if the end result is the degradation of most of the central area or if ultimately these taller buildings do not positively contribute to the dynamic and amenity of the Central Area.

What's more, there is anecdotal evidence that effective and coherent development of the central area has been constrained by a number of factors in recent years. This seems especially so for the development of taller buildings, with several high profile developments failing to materialise.

The evidence suggests that constraints to growth may have been experienced a number of ways:

- The District Plan environment areas and planning provisions, such as permitted building heights, have been increasingly tested through the resource consent process.
- There may be a limited supply of quantity lots within the Central Area.
- There are potential accessibility issues arising from the size and spread of New Plymouth's Central Area.
- There are physical constraints to further growth, in that the central area is confined within the coast to the north, Pukekura Park to the south. Furthermore, the state highway and one-way roading network, along with various waterways that make their way through the city further exacerbate physical limitations for development.

As a result, this report will look to improve understanding of the demand and the capacity for growth across the Central Area through analysis of the current local conditions and market. This analysis will then subsequently provide information that can be drawn upon to help ensure appropriate recommendations are put forward to inform the 2015 District Plan review.

2. PROJECT OBJECTIVES

This report will primarily be framed by the following questions:

- What is New Plymouths current building stock?
- What number of storeys are these existing buildings?
- What is the (floor area) and current occupancy of those buildings?
- What are the barriers (real and perceived) to growth in New Plymouth?
- What effect, if any, are these 'barriers' having on development in New Plymouth – is it negative, or are their positive effects from these barriers also?
- What development and growth pressure and/or opportunities for increased building heights are there in New Plymouth?
- What case is there for increased building heights for establishing a better urban environment in New Plymouth?
- What urban design tools are available to ensure an appropriate built environment is achieved for the betterment of all residents of New Plymouth?

3. PROJECT SCOPE

The project is focused on the Central Area (illustrated below in Figure 1) as the physical study area. Essentially the area below is that which is bounded by the Tasman Sea and the one-way street system on a north/south axis and Hobson and Morley streets on a west/east axis.



Image 1: New Plymouth Central Area

4. NEW PLYMOUTH CENTRAL AREA URBAN DESIGN FRAMEWORK ('THE FRAMEWORK')

The New Plymouth Central Area Urban Design Framework (the Framework) identifies that one of New Plymouth's most distinguishing features is its low rise built environment which maintains a 'Human Scale'⁵ as a special quality of the Central Area, in that most buildings are not too large or dominate over the street which create unpleasant environmental conditions such as shading, wind tunnels and cold streets, which are usually found in larger metropolitan areas.

With a permitted maximum building height of 14 and 10 metres covering a majority of the Central Area (See appendix B), it has been possible to retain views to both the sea and mountain, both integral parts of what makes New Plymouth unique.

Furthermore, the Framework identified that the Human Scale character of the Central Area was one that retained peoples link with the street, which resulted in the increased perception of safety, as people looking from building windows to the street can recognize faces. It also easily provides the opportunity for people in buildings to easily wander out of doors and join in with street activity, therefore creating a more vibrant built environment.⁶

A significant aspect of the Framework was the notion of 'Good Urban Manners', in that any new development regardless of height should be well designed and contribute positively to the amenity, sense of place and streetscapes. A survey of locals for the Framework found that while Devon Street was a lively and active main street, other parts of the Central Area were seen as mixed quality and in some places, dull or inactive.⁷

As the Framework documented, that with the relatively slow rate of growth in the Central Area it is important that new developments are done right, as there may not be a second chance to improve the quality of the built environment. Therefore buildings, be they tall or not, need to seamlessly integrate into the Frameworks vision for them to be ultimately successful.



Image 2: Part of what makes New Plymouth unique & special, The Coastal Walkway

⁵ (New Plymouth District Council, 2013)

⁶ (New Plymouth District Council, 2013)

⁷ (New Plymouth District Council, 2013)

5. STUDY METHODOLOGY

1. Interviews with key stakeholders
2. Observational Analysis
3. Desktop Analysis
4. Literature Analysis

6. THE MINISTRY FOR THE ENVIRONMENT'S 7 C's

The 7 C's (principles) has been developed as a key component of the Ministry for the Environment's Urban Design Protocol.⁸ The New Plymouth Central Area Urban Design Framework has drawn from this resource to assist in achieving the vision of a vibrant city centre, and attractive inner city living.

<p>Context</p> <p>Quality urban design sees buildings, places and spaces not as isolated elements but as part of whole town or city.</p>	<p>How do building heights fit within the New Plymouth context, celebrating the district's unique identity and understanding the barriers to new developments in central area context</p>
<p>Character</p> <p>Quality urban design reflects and enhances the distinctive character and culture of our urban environment, and recognises that character is dynamic and evolving, not static.</p>	<p>Exploring the previous and current character of the central area building stock and how can new developments maintain and enhance provincial coastal city character and help ensure residents feel a sense of place</p>
<p>Choice</p> <p>Quality urban design fosters diversity and offers people choice in the urban form of our towns and cities.</p>	<p>Providing diversity and choices of density, urban form, building types, and activities for residents and visitors and provide choices that are inclusive of differing age groups and changing demographics</p>
<p>Connection</p> <p>Good connections enhance choice, support social cohesion, make places lively and safe, and facilitate contact between people.</p>	<p>Investigating the various zones within the city and how these are connected, both physically, figuratively, and metaphorically and if there is scope to enhance these connections through development</p>
<p>Creativity</p> <p>Quality urban design encourages creative and innovative approaches. Creativity adds richness and diversity, and turns a functional place into a memorable place.</p>	<p>Innovative options for building development within the Central Area contributing to overall attractiveness and vibrancy</p>
<p>Custodianship</p> <p>Quality urban design reduces the environmental impacts of our towns and cities through environmentally sustainable and responsive design solutions.</p>	<p>Investigating energy efficiency of new developments and how these can be low impact and energy efficient and utilising infill development to protect rural land and make most of current infrastructure</p>
<p>Collaboration</p> <p>Towns and cities are designed incrementally as we make decisions on individual projects. Quality urban design requires good communication and co-ordinated actions from all decision-makers</p>	<p>Drawing on information from resident surveys, Architects, designers, council staff, developers, and valuers to ensure successful visions of the Central Area</p>

⁸ (Ministry for the Environment, 2005)

7. NOTHING WORTHWHILE EVER COMES EASY

What constrains development within the Central Area?

What are the things that affect the development of New Plymouth's central area and are they real or are they simply perceived? Are there any key indicators as to what might restrain growth and within these indicators, are there any standout trends that can be uncovered?

The analysis over the following pages investigates what could be the key factors as to what might hinder tall building development and what, if any, items may be more prominent than others.

7.1 Physical Factors

7.1.1 Location, Location, Location.

As anyone who has brought a property can attest, the right location is perhaps one of the most vital considerations in the process of acquiring a property. This mantra is no different when developing a large scale building project. When choosing a site, it must be appropriate for the type and/or scale of the development, be it residential or commercial. Furthermore, site selection will ultimately have an effect for the wider community, be it positive or negative.⁹

For a regional city, New Plymouth has a relatively large central urban area, which is further exacerbated by its long linear nature bounded by the sea to the north and the state highway/one-way network to the south.

This spread may have an effect on how different zones within the central area relate to each other and perhaps impact on decisions around what is the best, or most suitable site for larger scale or taller building within the central area, as there may be a disconnect between various areas and/or zones of the city.¹⁰

An indication that this could be occurring are that there are notable 'mini' clusters of high-rise buildings within the central area that are quite removed from the retail/pedestrian strip and also with no apparent connection to each other. This is in direct contrast to the Devon Street/main shopping area, which is still quite low-rise.

These 'mini clusters' are:

1. Far end of Devon Street West (Shell/Atkinson Buildings)
2. Liardet and Gill Street block (22 Liardet Apartments, Worley Parsons Building & Gill Street Towers)
3. Waterfront area around St Aubyn, King and Egmont Streets (Reef, Devonport, Waterfront, Puke Ariki etc). However, these buildings are relatively less 'high-rise' in nature than the other two identified clusters, with the notable exception being the Richmond Estate tower.



Image 3: Top to Bottom, New Plymouth's CBD in relation to Rotorua, Melbourne, Wellington and Taupo

⁹ (Department of the Environment, Heritage and Local Government, 2007)

¹⁰ (New Plymouth District Council, 2008)

The implications of this lower density central area have meant that New Plymouth has expanded geographically much further than our relative city size. What's more, distinct areas within the central area may be beginning to evolve that do not have apparent clear connection to each other and/or have fluctuating private and civic investment over the years. An indicator of this in a local context could be the ongoing development of the Cultural Zone on the western side of the CBD around Puke Ariki, the Govett Brewster and TSB Showplace, with substantially more development in relation to those Central Area blocks of Molesworth, Gill and Devon Streets to the north-east of Gover Street.



Image 4: Devon Street East north of Gover Street intersection

Whether this is a result of the city's geographic nature or through planning, or perhaps a combination of both, the indication is that developers, designers and/or council alike may have an element of uncertainty of just where the city's future growth areas could or should be. As a result, there may be a reluctance to invest in a particular area because of uncertainty around what may happen there in the future and/or a lack of appreciation for the best locations for higher density development.

A further effect of these tall clusters in specific locations of the central area may also result in a disproportionate intensity of activity and urban density in that area and the hollowing out of other areas. This occurs when people gravitate to an area of higher amenity through better urban development, which then as a consequence erodes the amenity of another area without the corresponding development activity occurring, with the ultimate effect being the downward spiral of the overall amenity of the area without appropriate intervention.

As one property developer who focuses more on suburban detached type development commented, New Plymouth needs a clear vision of where it is going and how it is going to get there. While they agreed that no one can predict the future, their opinion is that they would absolutely put money into the central area, but in order to invest, they need to know that the risk is mitigated through a clear knowledge and/or identification of that what they are doing is part of a bigger picture and not a sporadic act of financial roulette versus the relative certainty they have when undertaking greenfield development.

7.1.2 Geological

New Plymouth has been built over a network of gullies, rivers and streams that over time have been built over, or in-filled. The result of which, can make the establishment of new large buildings a complex and expensive exercise to construct. Different soil characteristics can result in expensive geotechnical requirements in regards to engineering to establish good footings for a building.

On this page, is an image of the original survey map done by Frederick Carrington, who undertook the mapping and surveying of the new settlement of New Plymouth in 1842.¹¹ It is remarkably accurate and several local Architects and Structural Engineers still refer to it when considering potential sites for new developments and the implications around a buildings sub-structure.

Further evidence of the tricky nature of New Plymouths geological nature is evidenced in the biography of prominent New Plymouth builder and developer Willie Still. Within, it states "The Daily News building at 10 Powderham Street presented quite a challenge. Much of the soil in the central business district is unstable and ranges between eight and thirty feet before hitting the rock below. Whoever had designed the building had either been unaware of that or decided to ignore it. Consequently the building broke its back. Willie Still's crew had to dig by hand, 30 feet down to solid rock and build a new foundation, inserting jacks to lift the building".¹²



Image 5: Carrington's original map of New Plymouth

¹¹ (www.teara.govt.nz)

¹² (Still, 2011)

7.1.3 Topographical

The hilly nature of New Plymouth is also a factor to consider when investigating building development. The natural assumption is that a building's height would be exaggerated if it is set towards the apex of a hill and thus create an artificially higher impact on the visual amenity of an area. Conversely, a taller building set at the base of a gully or hill will appear relatively lower or even level with other buildings of a lesser height situated at higher ground levels, which in effect can seemingly lessen the effect of a new building.



Image 6: Central Area High & Low points

However, urban design strategies generally encourage taller buildings to be either at the crest of a hill, or at least very close to it. The rationale for this is that tall slender buildings have the effect of accentuating and thus enhancing the topography of an area, whereas larger buildings located on the slopes or at the base of hills will flatten the topography, overwhelm natural landforms and block views, and generally disrupt the character of the city.¹³

Furthermore, of the urban design requirements of several cities with hilly terrain, such as San Francisco for example also advocate for the clustering of larger, taller buildings at higher points and/or important activity centres which acts as a visual expression of the functional importance of these centres and or the landscape context. All further stated that sporadic taller building development did not enhance the urban form of the city.

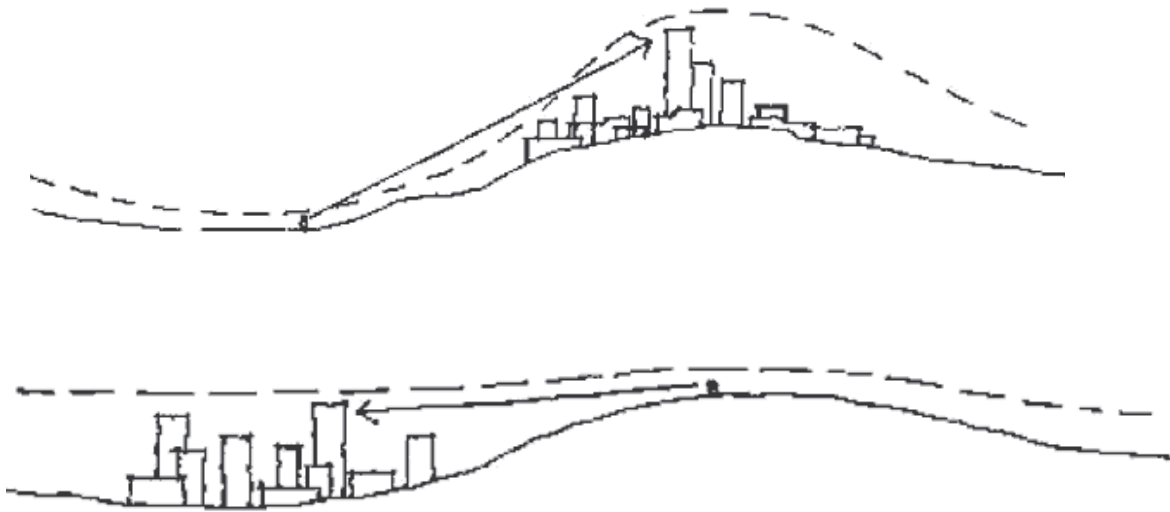


Image 7: Images showing the effect of building at the crest and base of a hill.

¹³ (City of San Francisco, 2011)

7.2 Central Government Legislation

The key piece of central government legislation that has an effect building design and development at a local level is the Resource Management Act 1991. Within this legislation are the parameters of what New Plymouth's District Plan is effectively allowed to do.

However in 2010, The Minister for the Environment, Hon. Nick Smith commented that there were major question marks over the way the Resource Management Act 1991 (RMA) is working in urban areas, and whether we have the right incentives for developers to do the best urban design in large cities. ¹⁴

An Urban Technical Advisory Group (UTAG) was established to investigate these question marks and reported that evidence suggested that the RMA provided inconsistent understanding of, and support for good urban planning and design throughout New Zealand. In their opinion, the benefits of good urban planning and design are "missed because the qualitative nature of urban design assessment (e.g. amenity) is sometimes over-ridden in decision making by quantitative considerations (e.g. traffic counts, parking space numbers, or wind speeds)". ¹⁵

What's more there were clear examples where there is variation and inconsistency of what constitutes good urban planning and design, leading to uncertainty of outcome(s) and delays for both applicants and councils. As a planning statute it provided an uncertain regulatory framework that acts as a barrier to growth. ¹⁶

There are many more examples of central government legislation and regulations which are fundamental to the design development and construction of any new building project. These include the Building Act and associated Building Codes and Standards, Health and Safety Act, etc. While no doubt important, these are set at a national level and revolve around building construction and/or compliance, thus is perhaps beyond the necessary scope or purposes of this particular project apart from their added affect on costs to a developer when undertaking a project.

¹⁴ (Ministry for the Environment, 2010)

¹⁵ (Ministry for the Environment, 2010)

¹⁶ (Ministry for the Environment, 2010)

7.3 New Plymouth District Plan ('The Plan')

See Appendices A & B for more information as to specific baselines within District Plan relating to height

The District Plan is New Plymouth's most significant document in terms of planning and development within the district. New Plymouth's District Plan is relatively unique in New Zealand, in that it sits further towards an 'effects' based end of the spectrum, when compared to other District Plans. As it is more effects based, it does not contain lists of uses or activities that are generally considered appropriate within a particular zoned area. Rather, it looks at the effects of an activity, and sets standards that the activity must meet – such as the height of buildings, noise levels etc, based on the Environment Area in which it is located. It also recognizes additional values, such as heritage or landscape values or areas of concern, such as Viewshafts, by identifying them as "Overlays" and placing additional requirements accordingly.¹⁷

In a nutshell, the District Plan essentially says that anything is allowed in New Plymouth, as long as it meets certain prescribed standards and the effects are no more than minor and can be mitigated etc. Importantly there are also no specific zones with the plan, therefore no apparent rigidity around what is allowed in specific areas, such as an historic zone with its own set of special identifiable rules for example. This in turn has created a relatively permissive set of planning rules for development within the district.



Image8: New Plymouth Central Area Environment Areas coloured by permitted building height levels.

(Red = 14m; Orange = 10m; Amber = 8m; Lemon = 9m).

¹⁷ (New Plymouth District Council, 2005)

However as a resource, does the District Plan offer enough certainty or guidance to developers and/or designers when they consider options available to them for a new building and its built form and/or what height it will be? Is it flexible enough or too flexible? Furthermore, are there issues in how particular people then interpret the various intricacies of plan?

An interesting outcome of discussions with various professionals spoken to for the purposes of this report, was that on the whole they believe that in regards to height, New Plymouth has got it about right. Furthermore, they also feel that if a developer wishes to test the permitted baselines within the plan then there is an appropriate forum for this to occur through a Resource Consent process. One prominent Architect remarked that increasing permitted heights levels is not really a pressing issue for New Plymouth. The current system is (in their view) while not perfect, works fine in that if somebody wants to take that risk, there is a process in place for this to occur.

While several architects and designers feel that taller buildings are not necessarily a pressing requirement for New Plymouth, they did note that when they are buildings in general are assessed through a resource consent process, the effects on the natural environment seem to be weighted disproportionately to the effect on the built environment, which is consistent with the UTAG report of 2010. As a result, they also felt that this does not necessarily ensure the best built form in an urban context and they feel that perhaps the Resource Consent process is a good opportunity to consider the qualitative effects of how a building may actually complement the overall built form of a city.

While industry professionals, Architects, Designers and developers alike, generally feel the current limit within the District Plan was suitable, there were some perceived concerns in regards to how applications might be processed and/or inconsistent information or 'changing goal posts' there were when dealing with Resource Consent applications. However many did also point out that because building is such a complex and sometimes dynamic industry, that it is only human that there will be differing opinions and/or preferred outcomes and that they can always be resolved with good effective dialogue.

Therefore, to mitigate any unnecessary time delays, increased costs, anxiety and stress for Developers, Designers and Council Officers alike, it is important that anybody involved in a building development should obtain good professional advice in regards to planning and design as soon as they can. What's more, to ensure overall success from the earliest stages possible, there should be adequate factoring of timeframes and regulatory processes into a development strategy.¹⁸

Several respondents did mention that it could be advantageous if there was a single person/s within council to assist in the facilitation of large private investment projects, which would assist in bringing the various entities together. In their view the benefit of having such a position could result in excellent dialogue from the earliest possible stage of a project and enhance the overall success of it from all parties' perspectives. While an excellent point, rather than council taking on this role, it could be something factored into the scope of Venture Taranaki's responsibilities, as this is the dedicated business development agency for the region and would also maintain the council's relative impartial status in these types of activities.

¹⁸ (Department of Building and Housing, 2014)

Furthermore, while not strictly regulatory related, it was noted by all, designers and developers alike, that the non-adoption of an Urban Design Panel was to the detriment of not just them, but to New Plymouth. They felt that this was an excellent opportunity to establish a forum for considered discussion amongst a broad range of professionals at an early stage of a project that would assist in the smoother transition of a development application through the resource consent process and achieve quality design.

While the District Plan provides assessment criteria for items such as visual amenity and effects on outstanding natural landscapes for example, when a building is outside the permitted 14 metre baseline, the Plan is limited in its current form, in that it does not provide any direction which can provide better urban design outcomes in the development of buildings in any form. Except for the maintenance of retail frontage on Devon Street, the plan does not actually provide any formal outline for buildings new buildings both within and outside the permitted baseline for heights.

Although the following is perhaps a ridiculous notion, a council planner did remark that, essentially if a building was to meet the permitted baseline for height, parking etc, in a 14 metre zone, it could essentially be a 14 metre high concrete box with no street value whatsoever, and it would be acceptable under the current form of the District Plan.

While it would be near impossible to establish rules around how a building might achieve good design, as this is more subjective, there is apparent scope within the District Plan for establishing better design directions for buildings. How this might be achieved is noted further in the recommendations of this report, *page 45*.

To conclude the section relating to the District Plan, one comment of interest relating to the current height limits of interest came from a property developer who believes that while maximum height limits within the District Plan are fine, there should be a lowering the permitted height limits on waterfront sites from nine metres to perhaps six or seven metres maximum. His opinion was that he not understand the need for three levels directly on the waterfront and feels that there should be some sort of mechanism in place to stagger the height limits closer to the coast, so that there is not a potential wall of nine metre buildings right along the foreshore, be it in either an urban or suburban environment.

7.4 Social

As a provincial city, are the people of New Plymouth ready for central urban living and working, along with a higher density of buildings? Essentially, is there a demand for taller buildings?

Evidence would largely suggest that this may not be the case. Pivotal to this argument is the current New Plymouth District Plan, which came about after extensive consultation with residents of New Plymouth. The District Plan as an entity, is essentially a reflection of the desires of the community and the maximum 14 metre limit is in fact the desired height limit for the majority of the population of New Plymouth. However, it must also be noted that the District Plan was ratified 10 years ago and are the permitted baselines within it still relevant in the context of today's environment?

Further relevant evidence that collaborates with the District Plan of the communities desire to maintain the current building height status quo came in the form of the New Plymouth Central Area Urban Design Framework where 63% of respondents surveyed for this document 'agreed' or 'strongly agreed' that existing height limits were appropriate. However, despite this majority, there was still a significant 21% minority of respondents 'disagreed' or 'strongly' disagreed, indicating that there is still a considerable amount of people that feel that there is still scope for additional height.¹⁹

As a leading Landscape Architect noted, "there is no doubt that New Plymouth would be more vibrant with more height, as there more people around, however, are skyscrapers what New Plymouth really wants?" His feelings are that more height may lead to more shading and also in windy cities such as New Plymouth, would more than likely create a wind tunnel effect, which is not conducive to pedestrian amenity (even if there are active edges at street level). He felt that four to five levels is about right, but New Plymouth needs better active edges and pedestrian street amenity and cited Paris, Barcelona and London as perfect examples of predominantly 'low-rise' cities, but are full of life and vitality, as they are dense and primarily geared to pedestrians, not cars.

Added to this, there is also the wide-spread perception amongst the general population that since the Christchurch earthquakes of 2011, taller buildings are inherently not as safe. While this assumption can be debunked by standard Building Code requirements and construction methods, which was clearly evident in the Japanese earthquake of 2011, this perception will still largely remain.

Further evidence of local lack of interest in taller buildings and apartment style living, may be that several projects investigated for the purposes of this report resulted in low sales volumes and subsequently apartments were sold at discounted premiums.²⁰ Conversely, there have also been several successful apartment developments within the central area that are coveted for their design, location and amenity. Therefore the question remains around what makes a development successful in New Plymouth?

¹⁹ (New Plymouth District Council, 2013)

²⁰ 22 Liardet, Quarterdeck

Property value trends have revealed that New Plymouth, like many other centres had a relatively converse demand and supply situation. This is that when there was high demand for apartments there was a low supply, which resulted in developers rushing to meet demand, but by the time the apartments are built, the supply had tapered off. These trends also indicated that demand for apartment style living is again starting to increase in other areas of New Zealand and that as a rule, this eventually manifests in New Plymouth, albeit a short time later than a larger centre.

A traditional barrier to taller residential buildings and more intensive urban development are also the negative perceptions that people associate with taller, higher density living and infill development. There are many historical, and unfortunately contemporary, examples of taller residential done badly, not only in relation to their construction, but also their location. Many of the baby boomer generation will mention dreary social housing estates they witnessed in the 1960's in places such as the UK and eastern United States that were high-rise low-socio crime ridden slums. This perception has been further enhanced recently here in New Zealand with a range of high-rise apartments predominantly built in Auckland during the late 1990's and early 2000's that were poorly constructed, had prohibitively small apartment spaces and were ultimately inferior for productive modern living.

However, when people are surveyed and given best practice examples and provided with understanding about the key urban design principles of higher density living, respondents are more favourable to the notion. Once the stigma was overcome, these studies showed there was considerable support for intensification in the form of smaller sections, low level terrace housing and town house dwellings in subdivisions, infill in older suburbs, and modern apartment buildings in Central Areas ²¹.

One assumption is that if any new tall buildings are proposed for New Plymouth in the future they will more than likely be of a residential nature. The rationale for this assumption is that there has not been a significant tall commercial building development in the city since the late 1980's, whereas there have been several taller residential buildings over a circa 30 year period.²²

Therefore, if taller residential and its corresponding higher densities is to be a new housing choice for the city, it will be a new challenge to the conventional housing model for many of the residents of New Plymouth. New Zealand's "Quarter Acre Kiwi Dream" has been a hallmark of our residential heritage and as a provincial town, New Plymouth's predominant residential stock is the detached single dwelling combined with a large garden area.

While this model will continue to be a significant part of the city's housing stock in the future, it is important to note that while these properties are suited to the needs and lifestyles of many particular people, they may not be suitable, practical, or even affordable to everyone. Thus, a range of building types might need to be established in central New Plymouth to ensure the long term viability of the Central Area – and large apartment buildings over 14 metres in height may well be one of the building types the market chooses.

²¹ (Cityscope Consultants, 2011)

²² Last tall commercial development was Gill Street towers A & B, 1989

7.5 Economic

Economic viability is perhaps the single biggest driver for the development of large scale tall developments in any location and by its very nature, one of the biggest barriers. A potential developer may spend many hundreds of thousands of dollars in pre-construction costs, before the buildings construction even starts, and this is usually where the real expense starts. Therefore a developer needs to be absolutely sure of the amount of financial exposure they are willing to take before even considering embarking on a large project. The factors that make up the Economic barriers are many, such as

- Cost of design – Architectural, Sub consultants (such as Structural engineer), Legal representation, planning consultants, to name but a few
- Cost of Consent – Resource and Building Consents (along with any monitoring and/or inspection costs throughout the construction of the building)
- Cost of Construction – Construction contractor/s, sub consultants, service providers
- Cost of financing from Banks and/or other institutions
- Cost of marketing the building to potential tenants or purchasers
- Cost of building maintenance and general building warrant of fitness requirements

This financial risk is further exasperated for potential developers in a local context, as it is essentially the risk becomes double jeopardy. That is, there is a limited amount of funding available to property developers and/or property owners to undertake large scale developments and a far reduced potential market for the building compared with larger metropolitan areas, hence all adding to greater risk. As a worked example, below is a simplified breakdown of potential costs a developer can reasonably expect to pay for the construction of a building, say of a similar nature to the existing Gill Street Tower A, which is eight storey's tall in 2012 prices.²³

Estimated Cost of construction = \$2,800 per square metre.

Total area of each floor plate, 30x30m = 900m²

900m² x \$2,800 = \$2,520,000 per floor

\$2,500,000 x 8 floors = \$20,160,000 estimated total cost of building

Furthermore, an inherited difficulty of encouraging development within the Central Area is the value of land within the Central Area, coupled with an abundance of land available on the periphery. While, interestingly land within the central area is relatively comparable with that on the outskirts of the city, it is the associated costs of the central area land that make it more prohibitive to develop.²⁴

²³ Rawlinson's Building Data 2012. Note: figures used were Dunedin building cost data.

²⁴ Quotable Value New Zealand

Generally there are significantly more challenges associated with a central area redevelopment than a new Greenfield development. Greenfield development is attractive because it is easy, and in New Plymouth, readily available, so naturally it dominates development. Central redevelopment can be less economically competitive, as it is usually a complex and time consuming process. This complexity is particularly acute in redevelopment projects where there are more upfront financial implications, such as remediation, demolishing and cleaning up costs. A Greenfield development has the distinct advantage of starting clean.²⁵

Furthermore, there is usually the associated 'regulatory' cost of developing central areas. Developments within areas already established may require a Resource Consent, as the effect of the development will be more noticeable than that where there are less parties affected. A Resource Consent process has several financial consequences, from the up-front cost of the application, through to the additional costs associated with obtaining competent planning and design advice from suitable professionals, through to the inevitable delay that the process may have on a project which again, costs the developer. So while it is clear that inner city revitalisation and development would be an effective means to achieving sustainable community objectives, there is a seemingly lack the motivation and incentives in relation to Greenfield development.²⁶

Another factor that could be limiting further development in the central area is that there are no real restrictions to stop a business locating outside the Central Area. This lack of a barrier in this regard may actually be creating a barrier for central area new development or redevelopment, in that Greenfield or suburban sites are readily available and easily convertible for business needs. The net effect of this happening is that as more workers potentially move away from the central area, there is the gradual reduction of retail return, and less incentive for those workers to live in and/or participate in central area.²⁷

Higher density Central Area development and any associated taller development can ultimately provide a financial boom for all. For developers, if they are astute enough, they will obtain the best design advice and construct a high amenity building that realises a paramount return on investment. What's more, unconstrained development on the urban periphery can increase pressures on infrastructure and social services, increase unsustainable commuting patterns and intrude on productive rural land. Therefore by enticing people to live and work in the city centre can add to the economic and prosperity of urban dwellers, retailers, business and council alike, which ultimately will lead to greater social prosperity, which is discussed further in *Section 14* of this document.²⁸

²⁵ (Department for the Prime Minister and Cabinet, 2012)

²⁶ (Department for the Prime Minister and Cabinet, 2012)

²⁷ (New Plymouth District Council, 2005)

²⁸ (Jacobs & Appleyard, 1987)

8 WHAT'S HERE NOW?

Existing Central Area Buildings

The New Plymouth central area has a wide range of building types of varying heights and occupancy characteristics, from large floor plate commercial premises to traditional residential dwellings. For the purposes of this study, the key focus will be on those buildings that are relatively more 'urban' in nature, in that they are either of a commercial nature or higher density residential type buildings. *For a more comprehensive analysis of stand-alone residential type buildings, please refer the Urban Housing Document written in conjunction with this report.*

As the focus of this report is urban heights, analysis will begin with the existing buildings that are outside the current permitted baselines within the District Plan. That is 14 metres or more, and then work backwards to the buildings that are more predominant in the city, of one and two levels.



Image 9: New Plymouth 14m plus Buildings

8.1 Central Area 14 metre plus buildings

There are currently 15 buildings over 14m in height within the parameters of the Central Area study scope. The majority of these buildings were built in a circa 30 year period between the mid-1960's and late 1980's, before the adoption of the current District Plan in 2005, with a small number recently constructed in the past 10 years. A snapshot of these and how they fit into the urban built form follows.



1. Richmond Estate Tower
2. Glenport Building
3. TSB Bank Centre
4. Education House
5. 44 Liardet Street
6. Clock Tower
7. Whitely Presbyterian Church
8. St Andrews Church
9. 22 Liardet Apartments
10. Shell Todd Building
11. Plymouth Hotel
12. Quarterdeck
13. Atkinson Building
14. WINZ Tower
15. PWC Tower

Image 10: New Plymouth 14m plus Buildings

8.2 Buildings nine to 14 metres

In addition to 14 metre plus buildings, there are a significant number of buildings that are between nine and 14 metres in height, which contribute to the urban density of the central Area. Moreover, some of these buildings, especially the older ones fall outside permitted height allowances due to the nature of the District Plan environment areas such as Business B and sections of the Urban Viewshafts, which specify (in some parts) a minimum of 8 and/or ten meters maximum building height. Not included in the assessed buildings below are buildings over nine metres that are outside the geographic area of study, such as Taranaki base Hospital Building in Westtown and the Port Taranaki Headquarters at Ngamotu Beach, for example.



Image 11: New Plymouth 9 – 14 metre Buildings

8.3 Buildings under nine metres

Like most provincial cities in New Zealand, the majority of New Plymouth's central building stock is an eclectic mix of heritage and modern two storey buildings. Main street buildings are essentially older in nature and have a retail component predominantly at street level, with a level above that was previously used as the shop keeper's quarters and/or the storage area for the shop below.

Areas off the main street are a mix of the traditional shop archetype, whilst in areas at the fringe of the central area are home to more modern arrangements of a bulk retail typology with an off street car-parking component. The illustrated examples below are not all the existing buildings under nine metres in the central area, but provide a cross section of buildings and the overall style and condition of these.



Image 12: New Plymouth Buildings under 9 metres

8.4 Looking Back: New Plymouth's Tall Built Heritage

Evidence would indicate that building taller has also been an integral part of New Plymouth's built form since the early stages of the city's development. This can be evidenced in the now demolished Post Office and New Zealand Insurance buildings and the still standing Colliers and former Phillips and Impey buildings.



Colliers Building 1941
Architect: Thomas Bates



Empire/Victoria Building 1925
Architect: Thomas Bates



NZI Building 1910 d.1969
Architect: Thomas Bates



Phillips & Impey Building 1958
Architect: R.W. Syme



Devonport Apartments 1935
Architect: Frank Messenger



**New Plymouth Post Office &
Clock Tower 1872 d.1969**
Architect: W. H. Clayton



St Mary's Church 1869
Architect: F De J Clere

Image 13: New Plymouth's Tall Heritage

8.5 Summary of New Plymouth's central area built form

	14m+	9 – 14m	Under 9m
Age:			
Age 0-25 years	1	4	TBC
Age 25 – 50 years	5	3	TBC
Age >50 years	9	11	TBC
Total	15	18	695
Use:			
Public	1	2	1
Residential	3	3	290
Retail	0	0	174
Commercial (ie: Car Sales/Supermarket etc)	7	8	15
Light Industrial	0	0	315
Accommodation (eg: Hotel)	1	3	8
Mixed Use	1	15	TBC
Devotional	3	0	1
Heritage Building	0	x	18
Urban Design Summary:			
Human Scale	5	18	NA
Active Edges	2	15	170
Interesting & Clear Facade	7	14	TBC
Accessibility	6	18	208
Quality Materiality	11	15	TBC

As the figures above indicate, New Plymouth's building stock is predominantly low rise, which coupled with its relatively wide geographic spread, creates quite an open and sparse built form. There are however, certain locations and aspects around the city, that do create an impression of both a tall and dense built form, and shown in *image 13* on this page, which could provide an indicator as to how the city could look if more infill occurred within the central area. It is perhaps these areas, previously noted on *page 10*, which will provide further development capacity within the central area.

At a pedestrian level, the public realm of Devon Street and central periphery streets, such as Currie, Brougham and Liardet, are of a reasonably open and with generally good pedestrian amenity. However, this gradually begins to change as the central area radiates outwards with a large amount of poor urban design aspects – and interestingly, mainly in the vicinity of where the city's taller buildings are located.



Image 13: At certain vantage points, New Plymouth's built form can appear relatively dense and quite tall

The overall impression of New Plymouth's existing 14m+ buildings is poor. With exception to the churches and the Clock Tower structure, only three buildings have active edges. These buildings are 44 Liardet Street, the TSB Bank Centre (Devon Street side) and one of the Gill Street commercial buildings, (which has a restaurant at street level). In fact, no buildings constructed (or refurbished) within the past 10 years have included an active edge and/or interesting street frontage. Somewhat disappointingly, although these buildings are within the central area and have large amounts of pedestrian traffic pass by, all have built solid walls at street level and visual inspection would indicate that this has essentially been to allow for a car parking component.

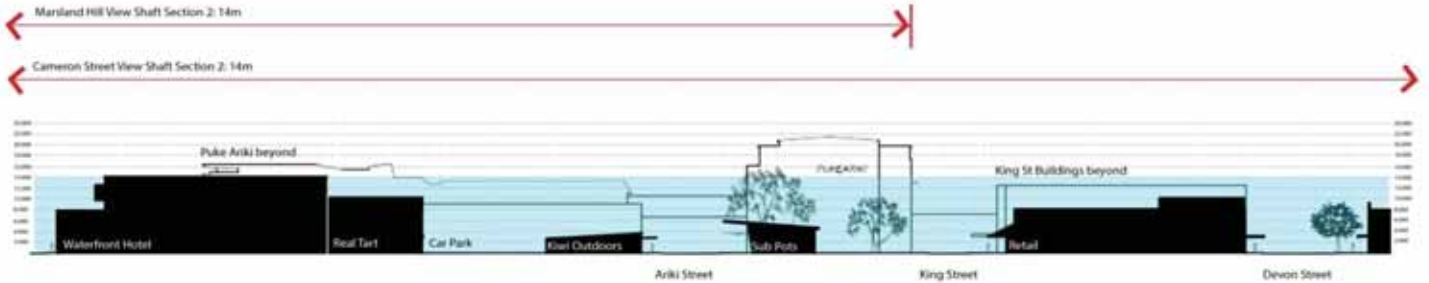
There is an evident improvement in buildings that are lower than 14m, with a majority exhibiting elements of good urban design. However, there is a worrying observation that the more contemporary buildings (usually residential), and less than 14 metres within the central area are not adopting good urban design practice. Notable examples would be the Reef apartments, Waterfront Hotel, both on St Aubyn Street and the former Govett Quilliam legal chambers building conversion to Apartments on Brougham Street. These buildings are of a high quality design and build, but have chosen to forsake the street edge.

Again, the apparent rationale for this lack of urban consideration is to accommodate car-parking facilities. While no one would argue for the need to provide suitable and sufficient amounts of car-parking for residents and guests alike, there are however many design techniques available so that car-parking and active edges are not mutually exclusive when developing a new buildings. Examples of this can be found in *Section 16* of this report.



Image 14: Opportunity Lost? Examples of recent quality building developments within the CBD, however they have no street edge activation

8.6 Egmont and Gill Street Case Studies



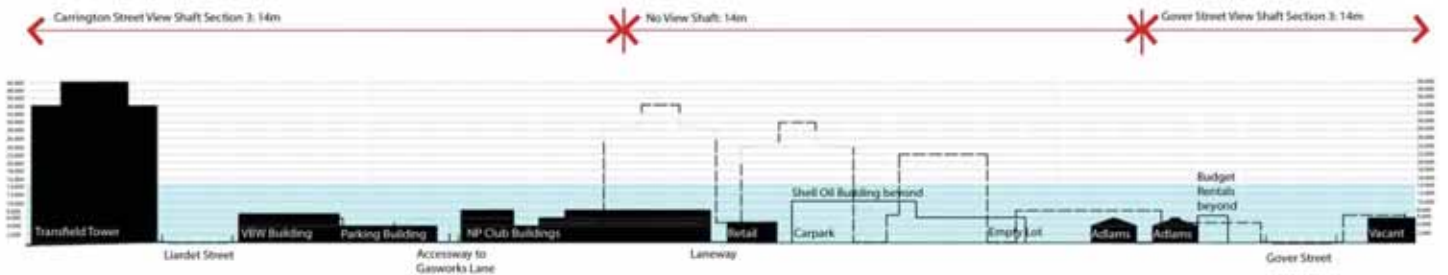
Section through Egmont Street looking East

n.t.s



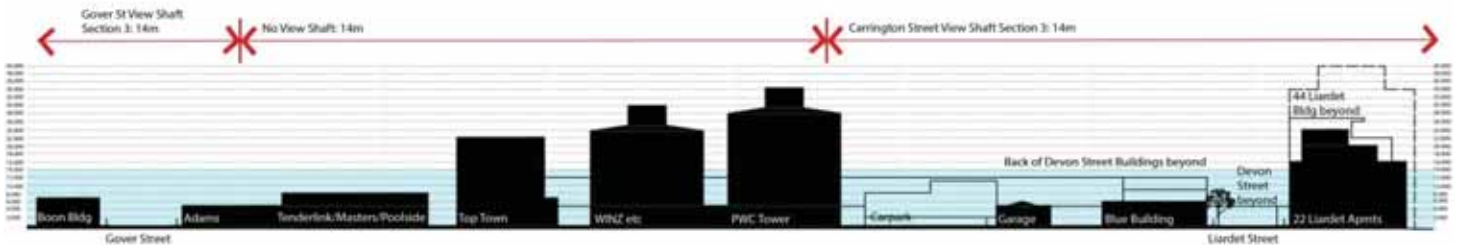
Section through Egmont Street looking West

n.t.s



Section through Gill Street looking North

n.t.s



Section through Gill Street looking South

n.t.s

9 APPLES FOR ORANGES

New Plymouth compared to other Regional Centres

New Plymouth is also relatively unique in terms of a provincial city in New Zealand, in that it has a comparatively high number of buildings that could be considered tall (12m plus). The table below lists all New Zealand cities, their population at last census (2013) and a visual count of tall buildings within their central area, excluding churches. The three main metropolitan centres of Auckland, Wellington and Christchurch have also been omitted.²⁹

City (not incl. District)	Population (2013 Census) ³⁰	Number of 12m + buildings
<i>Whangarei</i>	52,900	2
<i>Hamilton</i>	212,000	27
<i>Tauranga/Mount Manganui</i>	123,500	11 (6/ 7)
<i>Rotorua</i>	56,200	8
<i>Gisborne</i>	34,800	2
<i>Napier</i>	58,800	2
<i>Hastings</i>	66,500	0
<i>New Plymouth</i>	53,400	12
<i>Whanganui</i>	39,400	0
<i>Palmerston North</i>	83,800	15
<i>Blenheim</i>	30,900	2
<i>Nelson</i>	61,600	2
<i>Dunedin</i>	119,100	35
<i>Invercargill</i>	49,000	8

A conclusion that could be drawn is that New Plymouth may be better suited to taller buildings based on the above data. However this assumption is purely subjective, as it does not take into consideration any of the circumstances as to why this observable detail has occurred in New Plymouth or other urban centres. However, what the data does indicate is that New Plymouth for a city of its size, it is relatively more urban in nature than many of its peers and thus, is a gauge that the city may be more acceptable to more intensive and innovative types of development than perhaps other cities are.

²⁹ www.skyscrapercity.com

³⁰ (Statistics New Zealand)

10 TESTING THE BASELINES

Resource Consents for Additional Height Allowances between 1995 and 2014

By looking at Resource Consent applications for additional heights above the current District Plan Rules we can ascertain a What, Where, When and Why, as to rationale for the application/s testing of the District Plan and what the over-riding issues were, along with what decisions were reached and why.

For the purposes of this study, Resource Consent applications considered are those that occurred under the current District Plan as it stands, which became active in 2005, including any applications received during the transitional District Plan between 1995 and 2005. A summary of the facts follow:

- A seemingly small number of height related resource consent applications, with ten applications in total since introduction of New Plymouth District plan in 2005 (including Transitory Plan period of 1995 – 2005).
- This equals approximately one Resource Consent Application relating to testing the permitted baselines on height limits and Urban Viewshaft overlays every two years.
- Of the ten Resource Consent applications, eight were approved and two declined – an approval rate of 80%.
- There were no Resource Consent applications for construction of commercial buildings, with the exception of two consents for additions to existing hotel operations and one consent for a new hotel to be built on the corner of Hobson & Leach Street.
- It should be noted that while there was an application for the Hobson Hotel relating to height, it was part of a wider set of issues that needed to be resolved in order for the project to proceed.
- The majority of applications were for buildings of a residential nature, being either private residential additions to an existing building or new apartment buildings
- Three applications were for new buildings. The majority of applications were for additions to existing buildings within the central area.
- Several projects, although granted Resource Consent, ultimately did not go ahead. Two notable projects being the addition of another level to the Grand Central Hotel and the Q2 apartment development on the corner of King and Young Streets.
- Most projects via the Resource Consent process established mitigating considerations that allowed for smoother integration and reduced negative effects on the local environment.
- The two applications that were declined (Kawaroa Apartments development and Waterfront Hotel additions) had significantly more press articles within file, indicating their relatively high profile and significant public interest
- Furthermore, in the two failed consent applications, the buildings were to be situated on direct waterfront sites, that is, with no other buildings in front of them before the coastline, over the approved consents that were all situated further inland from the coast.
- With the Kawaroa Apartments application, it is interesting to note that while the application was declined on height grounds, the basis for the decline was about shadow effects on neighbouring properties, not in fact the physical effect of building's design would have on the natural or urban environment.

The report outlines how the proposal although declined, its visual effects, both immediate and distant would only be minor. Furthermore, the independent commissioner even went as far to say that the permitted baseline activity of 10m with no yard setbacks is in itself, not a *'fanciful proposition'*, in that many of the effects of a 25m building would still be evident in a 10m baseline permitted building.³¹

- Independent commissioner for Waterfront Hotel hearing seemingly applied a strict interpretation of the District Plan rules, in that they believed that the minimum heights outlined with the District Plan were there for a reason and that they were the absolute height to which the residents New Plymouth were comfortable with.

The commissioner felt if there was to be an ability to increase the height of buildings, it should be part of an overall comprehensive urban design and district plan approach that is more holistic in nature, as opposed to one that is resource consent based. *'It is inappropriate in my view to just consider building height on a case by case basis. There does need to be a clear policy and rule framework in the District Plan that provides certainty and takes a more holistic view of such matters as opposed to a case by case approach'*.³²



Image 15: Recent Resource Consent applications, top to bottom, Q2 development (approved, not built, Hobson Hotel, approved, under construction and private residence, approved, construction pending.

³¹ Independent Resource Consent Hearing Commissioner 2004

³² Independent Resource Consent Hearing Commissioner 2009

11 WHAT'S HAPPENING ELSEWHERE?

Interesting examples of what other cities have done around building heights

The urban form of the world in general is becoming taller. Building tall is what an increasing number of cities are now doing. Rapid urban population growth is necessitating that cities transform themselves to become more dense, compact and sustainable places, which invariably means growing upwards rather than outwards. Furthermore, the opportunities around regenerating central areas through higher density and mixes of activity is also an argument in favour of tall buildings.

The following examples, while not an absolute illustration of what is happening around the world, they are from cities that are considered to be exemplar in regards to urban design and/or terms of rated highly on liveable city indexes.

In Vancouver, the city council has adopted a policy to unlock the height limit for new buildings on specific sites in the downtown core.³³ This approach consists of 20-30-storey mixed-use buildings where a setback tower sits behind a 3-4 story podium which faces the street. Furthermore, these buildings are carefully designed through a public consultation and negotiation process with the community.



Image 16: Taller building set back from the street edge with low rise buildings in front, in Vancouver

In Geelong and Newcastle, approximately two hours' drive from Melbourne and Sydney respectively and currently undergoing a renaissance of sorts from somewhat unforgettable industrial cities into vibrant seaside commuter cities are allowing buildings above permitted heights limits, but then only with strict urban design rules that ensure an enhanced public realm at ground level. That is, no blank walls at street level, landscaped areas and also readily publically accessible.³⁴

When Washington DC considered if the city should raise building heights above its existing eight story maximum, they looked at corresponding building heights with the width of the street it was on. If this concept was adopted in New Plymouth, it would allow for buildings on Gill Street to be 24 metres tall, as this is the width of that particular street.

Interestingly, in San Francisco, most of the city is zoned for buildings of only four levels or less. However, a report for their City Hall noted that allowing an increase in permitted building heights along transit corridors could improve urban design, and allow more housing to be built on available sites at a reasonable cost. Furthermore by raising the height limit by approximately only another 2-3 metres opened up further opportunities for taller ground floor retail spaces, or ground-floor apartments to be lifted a few steps up the footpath for greater light and privacy.³⁵

³³ (www.geographyjobs.com)

³⁴ (City of Geelong, Victoria)

³⁵ (www.livablecity.org)

Even closer to home in Auckland, within its Unitary Plan and 30 year vision document where it aims to become the world's number one most liveable city, it also (controversially) is allowing for the raising of building heights in selected suburban areas outside the central city, which is where traditionally, the taller buildings have been built. As one Auckland Architect stated, although it is causing much debate, the reality is that Auckland is one of the most expensive places in the world to buy a property and land prices keep on increasing. People are going to have to get used to this new model of housing and city development, because the old way of living in Auckland simply just does not exist anymore.

The Auckland Council has developed a set of design guidelines for good design practice along all typologies of buildings and particularly residential/mixed typologies and is freely available on the internet for residents and designers to utilise as a resource. Furthermore, it has created an Urban Design Review Panel to review all consent applications to ensure that buildings are of an appropriate nature to its local context and provide a suitable amount of public amenity.³⁶



Image 17: Auckland's Wynyard Quarter

³⁶ (Auckland City Council, 2013)

12 REACH FOR THE SKY

Would Taller really be better for New Plymouth?

What constitutes a tall building is very place-specific and it is important to note at here that building height is relative to location. That is, in New Plymouth a six, seven, or eight storey building at approximately 14+ metres is considered to be a tall building. However, in larger centres such as Auckland, Sydney or Melbourne, for example, such a building would be considered relatively low-rise.

If New Plymouth were to adopt a strategy around allowing taller buildings than currently permitted under the District Plan, and assuming this would be for residential usage, as noted earlier in this report, there are important questions around whether taller buildings offer better living environments and would they offer the best type of urban form and amenity to New Plymouth's central area?

What's more, the question of whether taller buildings are right for New Plymouth, also has a direct correlation to population density and is the city ready for more higher density living and working arrangements and is that better for the city overall? To answer the above questions, we must first establish what are the accepted best levels of urban density and what, if any, are the 'about right' height limits for buildings, based on readily available data through international/local examples and case studies.

To begin, New Zealand has one of the lowest population densities in the world by any measure at roughly 9 dwellings per Hectare,³⁷ which equals approximately 36 people per hectare. This figure is almost level with the accepted bear minimum figure of 30 people per hectare for community sustainability and vibrancy.³⁸ This lower population density figure could be cause for concern on several levels, as it is widely recognised that central urban areas should be the central focal point for a city's population and are a key driver of economic, social, cultural and environmental sustainability.³⁹

What's more, research is now beginning to highlight that sprawled low density suburban development may actually be starting to compromise the quality of life that suburbs often promise, with such things as more leisure time spent commuting, a reliance on cars being a disadvantage to those who cannot afford one or do not have the ability to drive, large amounts of car transport generate large amounts of pollution, attractive rural spaces being lost to development, and worryingly, a diminished civic responsibility of the occupants within these neighbourhoods.⁴⁰

Added to the mix, is an ever increasing sense of isolation for residents from the wider community via the 'compounding' of houses. That is, the ring fencing of a property with large/high walls or fences that effectively disengage the occupants with the wider community once within the gate. Therefore, it is important that more ways are considered to achieve the goal of higher urban densities, and taller residential buildings can have distinct advantages over low-rise, low-density development. However, if not done right, there can be considerable downsides too. Interestingly, the disadvantages noted in the diagram below, can all be overcome with good design techniques.

³⁷ (Stout, 2013)

³⁸ (Newman & Kenworthy, 1999)

³⁹ (Ministry for the Environment, 2010)

⁴⁰ (Lennard & Lennard, *Livable Cities Observed*, 1995)

Advantages and disadvantages of high density housing or apartment living ⁴¹

Advantages

- Lifestyle and inner city living
- Proximity to work
- Proximity to shopping and entertainment
- Low maintenance
- Better safety and security
- Better thermal insulation and lower heat loss as walls and floors connected within building

Disadvantages

- City noise and noise from neighbours
- Lack of outdoor space
- Living too close to neighbours
- Apartment size and lack of storage space
- Parking issues

In some places such as London, where high-rise living was once considered to be the domain for lower, or low socio economic classes to be allocated housing within high rise council estates, high-rise residential living is now considered to be very fashionable, with associated modern lifestyle benefits and many high-rise apartment developments selling out off the plans before construction even starts.⁴²

People will normally associate higher density with high-rise apartment towers anywhere from 10 – 40+ levels, or more and for many, this is not the New Zealand way of life. This high-rise type housing living, which is common in most world cities, is an ‘overseas phenomenon’ as one observer put it. However, extreme tall is not the only way to achieve higher density outcomes. In fact, some of the cities with the highest population densities actually have more distinctly low rise attributes than many people realise and what’s more, provide excellent public amenity.⁴³

For example, if looking at Singapore, with a metropolitan area of 710 km² versus Paris’ metropolitan area of 17,174 square kilometres, an area 24 times larger. In this way, Singapore’s population of 5 million+ yields a density of 7,130 inhabitants per km², while Paris’ density yields a mere 704 inhabitants per km². However, if you compare the inner ring of Paris, which has an area similar in size (657 km²) to Singapore, the density is 6,647 inhabitants per square kilometre (almost the same density). Within the 105 km² of the City of Paris itself, density is 20,169 inhabitants per square kilometre.⁴⁴

How does this relate to the New Plymouth context? Even at the higher end of building heights that might be considered for future urban development in the central area, say 16-18 metres (six to eight storeys), the net result is still a comparatively low rise city in terms of world standards, and in fact, these heights would deliver the right density, but at what many urban analysts call a ‘Human Scale’.⁴⁵

⁴¹ (Cement & Concrete Association of New Zealand (CCANZ), 2013)

⁴² (Carroll, 1999)

⁴³ (Stout, 2013)

⁴⁴ (Livable Cities, 2013)

⁴⁵ (Lennard, Principles of True Urbanism, 2004)

Looking further at the Singapore model, the real difference between Singapore and European cities such as Paris is that Singapore has embraced high-rise, 50+ story buildings with large footprint shopping malls accessible mainly by automobile. In contrast, European cities, such as Paris and London for the most part, have maintained a human scale continuous urban fabric of 6-8 stories with a very fine textured street grid, and mix of uses that support continuous retail and make every neighbourhood walk-able and embody a quality of life.⁴⁶

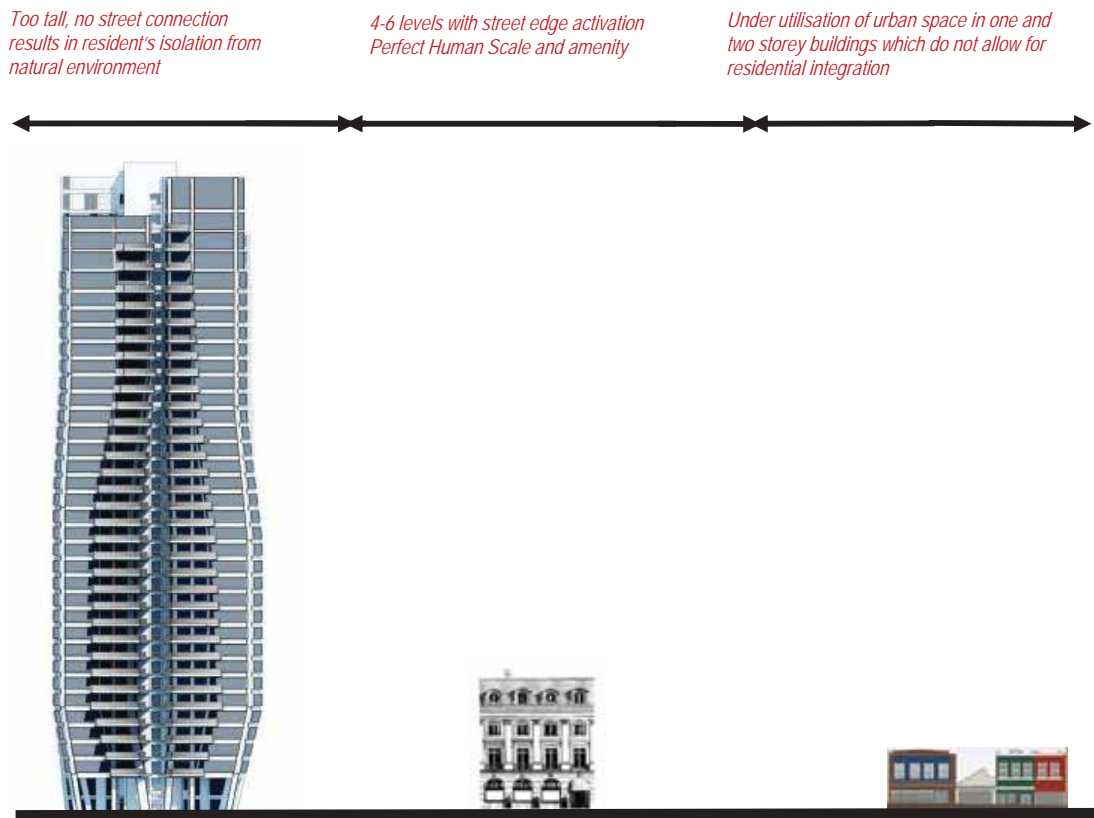


Image 18: L-R Apartments in Singapore, Residential Building in Paris and Devon Street West buildings, New Plymouth

These small footprint shops and apartments in a fine textured urban fabric yield smaller profits, spread out among many individuals and businesses in the community. Over centuries, this human scale urban fabric has proved to be adaptable to changing political and economic times, making the community resilient, durable and sustainable.⁴⁷

It is then, perhaps no co-incidence then that some of the world's most exciting economically, socially and culturally vibrant cities and also touted as the most liveable by many commentators, also have some of the highest population densities, but are built at a low rise scale. This is similar to what might be achievable in New Plymouth.

⁴⁶ (Rifkin, 2004)

⁴⁷ (Rifkin, 2004)



Image 19: Barcelona, Paris and Dublin Urban Experience

The above pictures, exhibit the relatively low-rise nature of Paris, Barcelona and Dublin respectively, whilst maintaining a compact urban environment. They could even resemble an urban New Plymouth street in some respects, but the fundamental difference is that many of these cities residents will live, work and play above or around these urban streets, as opposed to spending significant amounts of time and energy commuting to suburbs.

14.1 Benefits of Greater Population Density with more Building Height

According to census figures, there is a resident population of 930 people within the boundaries of the central area study and circa 10,000 daily workers.⁴⁸ Given the physical size of the central area, at approximately 18 Km² that equals a population density of 51 resident people per km² and a total daily population density of 611 people per km².

Taking into account that an average five level modern apartment building with a mix of apartment types will accommodate approximately 50 to 60 people, if there were 15 new five level apartment buildings, comprising of approximately 750 to 900 people, the resident population and density of the central area would effectively double in size. Those additional people living, shopping and entertaining within the central area would no doubt add significant economic benefit.

Added to this, an average five level modern commercial building, such as the TSB Bank headquarters can accommodate 150 to 200 people comfortably. Therefore, using the same rationale as above for the residential calculation, in theory 10 new commercial buildings at five levels of full capacity could allow for 2,000 new workers within the city daily, who all need to buy lunch, do shopping and perhaps may also wish to live close to where they live – in the Central Area.

Although the above figures are purely hypothetical in nature, they are still a reasonably conservative indication of the increased density that could be achieved if there was an equilibrium of demand and supply within the central area.

⁴⁸ Statistics New Zealand – Census 2011

13 GETTING IT RIGHT

Considerations for Buildings in Urban Context

13.1 Urban Design

Conventional wisdom is that as a city grows denser, it loses green open space and becomes more polluted and congested. However modern planning and architecture principles are moving to establish greener, sustainable and healthier cities, regardless of how tall its buildings are. Good Urban Design or Manners is perhaps one of the most important factors to consider, as this will ultimately underpin the new developments acceptance by the community, the speed and value of its sale, and the ease of its future management.

While the definition of good design is highly subjective and personal, there are some over-riding design principles that can be adopted when designing a building within an urban context. By doing so, better outcomes are achieved for all – not just the property owner and/or developer, but the community as a whole. A well designed building that is also constructed well with the right material will make its occupants experience more enjoyable and provide the community with a valuable urban asset.

At the core of good urban design is scale, relationships with adjacent buildings, the way a building connects with the street, along with the quality of the street space it occupies are vital, therefore it is very important to get right to allow a new building to ultimately look and feel appropriate to the area.

13.2 Human Scale

Human Scale means that scale of a building is fundamentally human in nature. That is, people are able to relate their own physical size to the architecture, in that there are no grandiose statements or blank walls at street level.⁴⁹

Cities built at a pedestrian or human scale tend to embody a better quality of life for their inhabitants and visitors to that city.

A city that is more human in scale will by default, place a greater emphasis on the well-being of community relationships over individual autonomy/reduced civic responsibility.⁵⁰



Image 20: Low-rise human scale



Image 21: Building setback for Human scale

⁴⁹ (Lennard, Principles of True Urbanism, 2004)

⁵⁰ (Jacobs & Appleyard, 1987)

3.3 Active Edges

Again one of the more fundamental of urban design criteria as active edges are a necessary prerequisite for street life.

Wherever possible buildings should avoid extensive areas of inactive edges and look to be located or designed to provide a matrix of interesting activities and/or choices for people that is the provision of space on ground level for retail and/or hospitality.

Lining street frontage with retail or individual residential entrances helps create human scale, transparency, and visual interest, and enhances safety by providing 'eyes on the street'.

Furthermore, an attempt should be made to limit the width of garage entrances, and requiring any above ground parking to be wrapped in active uses.⁵¹



Image 22: Example of active and interesting street frontage at base of building

13.4 The Façade

Façade design evolves as a result of a building's overall scale and massing. To achieve visual richness and help viewers 'read' the building and activities within, the design should reflect the different parts of the building.

Further to the articulation of a building's façade, it is important to ensure that all parts of the building, including the roof have been designed together, and so that they have a clear relationship to each other and the local context.



Image 23: Adding interest to the façade with a vertical garden, which also helps to regulate temperature



Image 24: Using different forms to help break long linear façade of a building

⁵¹ (www.liveablecity.org, 2010)

13.5 Context

A building's contextual relationship with how it sits within its immediate and distant surrounds is an important factor in its overall success. A building should take cues from the context of the street and immediate area for the building's overall scale, bulk and appearance of the building.



Image 25: Taking colour and material cues from neighbouring buildings and incorporating into design

13.6 Accessibility

Good urban buildings provide barrier free access for all, both able bodied and those with limited mobility. Integrate the building's access with the general pedestrian access ways (usually the footpath) and ensure that the building's access ways are matched with the wider circulations of the area, and if possible, provide new and enhanced access around the area.⁵²



Image 26: Providing the public with a clear definition of how to access a building with good public amenity

13.7 Orientation

Without good orientation to both its exterior and interior elements, a building will effectively fail in its purpose, as it will not provide enough amenities to its residents and public in general. The front of a building is by definition the public side (to street and shops).

The front of the block will contain living, dining rooms and kitchens (depending on solar orientation). The rear of building is private side (to private and community gardens and play areas)⁵³



Image 27: Angling building to achieve views and/or to allow for greater privacy

⁵² (Ministry for the Environment, 2005)

⁵³ (Cityscope Consultants, 2011)

13.8 Landscaping

Landscaping, including furniture, plants and paving materials is used to enrich space and can help create more pleasant urban environments. Good urban landscape design will allow for a mixture of private, semi-public and public spaces within a new development.

As new buildings are built, expanded, or change use, adjacent streetscapes can be brought up to a higher standard. Towns and cities can strengthen their street design standards through developing strategic street plans, which developers are generally amenable to, since construction work often means streets and pedestrian ways need to be repaired or rebuilt.⁵⁴



Image 28: Internal courtyard landscaping for added amenity for buildings residents

13.9 Materials

Materials are an important element to consider in responding to character and reinforcing or establishing sense of place in a building. By using good quality materials a building will immediately establish itself within its context and have the added benefit of low maintenance requirements and costs, along with longevity.



Image 29: Enhanced streetscape for increased overall public amenity and adding more interest

13.10 Building Roofline

The extent to which the roofline contributes to the overall appearance of a building and a streetscape, and contributes to the broader city skyline is sometimes overlooked. The silhouette of a building's roofline against the sky is a particularly prominent element of a building and when done well can add a point of interest and contribute to a city skyline in a positive manner.⁵⁵



Image 30: Roofline adds interest to building and city skyline plus breaks up overall building massing

⁵⁴ (Ministry for the Environment, 2005)

⁵⁵ (Ministry for the Environment, 2005)

14 CONCLUSIONS AND RECOMMENDATIONS

This report was initiated to act as additional resource borne out of the vision which New Plymouth Central Urban Design Framework established. Fundamental to this report was to examine the Central Area's current state in regards to its built form, investigate possible constraints to growth and then consider new ways that may foster further development that improve it as an entity, whilst still maintaining and/or enhancing those elements that make the area unique and special already.

A significant aspect the Framework promoted was the notion of 'Good Urban Manners', in that any new development should be well designed and contribute positively to the amenity, sense of place and streetscapes. As documented, the relatively slow rate of growth in the Central Area it is important that new developments are done right and seamlessly integrate into the local environment and context.

14.1 New Plymouths current building stock

New Plymouth is a predominantly low rise city of one and two levels and spread over a relatively wide geographic area. Certain locations do have clusters of taller buildings and denser built form. Most of the buildings in the city have evolved with the city, with the city's larger buildings generally appearing in the boom periods of the city's economy in the late 1980's and early 2000's.

With the exception of Devon Street, and a few minor streets such as Brougham and Currie Streets, there is a relatively low amount of urban design examples. Somewhat disappointingly, many newer buildings have solid walls at street level.

14.2 Barriers to growth in New Plymouth

Key items recognised as barriers to growth were notably, The District Plan environment areas and planning provisions, such as permitted building heights and Urban View Shafts. Interestingly, the District Plan's lack of guidance in regards to urban design could also be seen as a barrier to good design outcomes that enhance the quality of amenity for the districts residents.

Other barriers were namely around limited supply of quantity lots within the Central Area, due to in part it already being largely developed, geographical spread and topographical characteristics of the Central Area and competition from Greenfield development on the city's periphery.

14.3 What case is there for new development and/or increasing the overall height limits for the Central Area?

It is apparent that the current 14 metre building height limit in New Plymouth is as one architect put it 'about right' and there is no real appetite for change from the point of view and of the public and no pressing demand for change from the design or development community. However, there is evidence to suggest that there is a underlying opportunity to utilise taller buildings to generate positive urban developments around specific parts the Central Area.

If New Plymouth does in fact choose to allow buildings taller than 14 metres into the Central Area, there are some over-riding factors that should be respected to ensure the well-being of not only residents but the city itself. The following recommendations are based on the research conducted for this report and address the location and design of new buildings, as well as the removal or re-use of existing buildings.

14.4 The District Plan and Urban Design to ensure an appropriate built environment

To ensure New Plymouth achieves the built environment that complements its outstanding natural environments, the following aspects should be taken into consideration and perhaps written into the District Plan as part of the assessment criteria or Performance Criteria for new buildings overall – not just those that require Resource Consents.

- That additional buildings, especially taller ones should create new landmark structures and make a positive contribution to the city's overall urban form and image along with distinguishing itself on the skyline as something unique to New Plymouth
- Any taller buildings should be clustered in higher parts of the city and be more slender in form and proportion having a vertical emphasis to its overall mass.
- A new building should make a positive contribution to the appearance and activity of the streetscape and not detract from the pedestrian experience at their base, eg: Active retail edge and/or if not entirely suitable for retail, at least an interesting edge that provides a greater sense of street amenity.
- Detailed urban design analysis must be undertaken for each proposal or development site which is under consideration for a new building. This must include a thorough analysis of the siting and design of the building, and its potential impacts in both the immediate and broader contexts. Architectural models and three dimensional drawings should be analysed and assessed through the use of architectural montages and used to gain an accurate understanding of:
 - How the building will appear in the streetscape
 - How it will relate to other structures and landmarks
 - How the building will shape the city's skyline
 - Whether it will impede any important views from, to or within the city centre
- Measure that the impact a new building may have upon adjacent heritage sites and/or natural landscape features, or areas of special urban character.
- The heights of buildings should taper down to the shore-line, following the characteristic pattern and preserving topography and views.

Furthermore, Council should look to encourage a continuing awareness of the long-term effects of growth upon the physical form of New Plymouth. This awareness is healthy and progressive and should be genuinely fostered. Good planning, supported by an interested public, will ultimately ensure growth and good design in the right locations that are appropriate to New Plymouth.



Image 31: Possible locations for getter building heights, broader intensification & coastal height reduction in the central area

Key:



New increased building height zone, say 16 – 24m



Areas for greater intensification up to current 14m height limit

14.5 Areas identified for additional development and/or building height (Also refer image 30)

This report establishes that the area in the vicinity of Gill Street between Liardet and Gover Streets could have further potential for additional height. The rationale for this recommendation to be made is based on the following elements:

- That there is already a cluster of tall buildings within this area, such as Worley Parsons tower, 22 Liardet Apartments, WINZ and PWC towers along with the Top Town Cinema complex, all well in excess of the current 14 metre limit, with the tallest being the Worley Parsons tower at 40 metres.
- Furthermore, some of these existing buildings also penetrate the Victoria Road view shaft, thus it is a reasonable assumption that any new building will be partially or even fully obscured by existing buildings which would greatly reduce any negative effects.
- A significant proportion of this block is not in any identified Viewshaft and thus again, reducing any negative effects of a taller building in this area
- There are portions of the block with large areas of under-developed/utilised space that could be developed further.

- This block is very central and only one block back from the coastal edge with its seaside and walkway amenity
- Outstanding sea views from any taller buildings in this area can be achieved, which is a key selling point for developers
- This is a block within the Central Area that is relatively unattractive, and injection of new buildings that are designed in accordance with good urban design principles, could add a new vitality and sense of place to this area.
- This block is at a relatively elevated part of the Central Area in that which could enhance the natural topography and sight lines of the area.
- By establishing this area as a taller building area (say between 16 – 24 metres) would also provide developers with a definitive location to look to if they did feel that there was demand for a taller building in the city as long as they chose to do so with good urban manners in mind, which would circumvent a Resource Consent process which is to their benefit, but ultimately the result is a building that works for the city as a whole.
- A key recommendation would be that any design for a significant tall building be peer reviewed or put to a design panel established solely for the purposes of a development there, (if there is not one already in place by that time?)
- A developer may still choose to do a building elsewhere and thus initiate a Resource Consent process, whereas in this location they would have more certainty around the outcome.

Further to this potential block, there is also the Gill Street block to the other side of Gover St, to Eliot Street which is currently utilised as a light semi industrial area. There is a latent opportunity for more intensive residential development on this block, but perhaps within the existing 14 metre context. Taking into account the proximity to town/walkway, this area to the east of Gover St has relatively older buildings and provides future brownfield development opportunities as existing business within the area relocate to more suitable premises in the developing modern industrial areas of the city.

There is also a more muted opportunity for buildings over 14 metres around the vicinity of Egmont Streets where there is also relatively large amount of 'under-developed' sites. This area, along with King & Queen Streets, has excellent potential for more intensive development. However this would be more in keeping with current height limit and is more about utilising those sites that are not so well developed/utilised around this area. Consideration could be given to perhaps two metres higher, say to 16 metres again with key urban design principles a mitigating factor for additional building heights. There is an excellent opportunity to replicate (but not imitate) some of the key features that make European cities so user friendly and interesting. By taking into account the unique heritage qualities of the existing buildings in this area, and along with providing a vibrant user friendly cosmopolitan environment, this area could be as cosmopolitan as any metropolis, but in a uniquely New Plymouth context.

APPENDIX A: New Plymouth District Plan Environmental Areas Height Rules

Business A

Areas located centrally within New Plymouth, Waitara, and Inglewood retail areas. They are pedestrian orientated with premises located up to the street, and generally provide no parking on site. Most tend to be two story buildings with verandas and retail display windows. Advertising signs provide vitality to these areas and are an important and accepted component of these central business and commerce areas.

Rule Bus12: Maximum height of buildings 14m, or a Restricted Discretionary Activity, if over 14m.

Business B

Areas characterised by larger scale, bulky buildings (such as warehouses), orientated towards the motorised customer, with parking usually provided on-site. Some of these buildings are set back from the road with car parking provided in front of the building while others are positioned up to the street with parking areas provided at the side or the rear of the building. Advertising is generally through signs rather than window displays, and generally no weather protection is provided.

Rule Bus13: Maximum height of buildings 10m, or a Restricted Discretionary Activity, if over 10m.

Business C

Areas of suburban business that are smaller in scale in terms of individual shops and number of buildings. Because they are designed to serve the local catchment, both pedestrian and motorised patrons are catered for with limited parking available, usually in the road reserve. This zoning covers both shopping centres, and small clusters of shops. The specific character of these individual areas may differ but generally they comply with the descriptions above.

Rule Bus14: Maximum height of buildings 8m or, a Restricted Discretionary Activity, if over 8m.

Business D

Areas that are in transition from residential to business uses or contain business uses which are located in buildings which are residential in scale and character. Generally businesses in these areas are providing a service and many of them are offices. Sites tend to be small in scale, well landscaped and provide on-site parking. They are generally found on the fringes of central retail areas.

Rule Bus11: Maximum height of buildings 8m, or a Restricted Discretionary Activity, if over 8m.

Residential A

Areas representative of the allotments found in developed residential areas where connection to reticulated sewerage is available. Many homes are set back from boundaries, well landscaped and are one or two storeys in height.

Rule Res7: Maximum height of buildings 9m, or a Restricted Discretionary Activity, if over 9m

Residential B

Areas identified as having a more dense character, capable of absorbing and integrating denser development without adversely affecting their existing residential amenity. These areas are predominately located close to local shopping areas and the central business district. Again, sites tend to be landscaped and of a consistent height.

Rule Res7: Maximum height of buildings 9m, or shall a Restricted Discretionary Activity, if over 9m

Residential C

Areas 'characterised by those existing residential areas where there is a need to ensure that there is sufficient space available for the on-site treatment of sewerage effluent. This includes areas such as Oakura, Lepperton, Onaero, Urenui, Okato and Egmont Village. The built form and scale of the dwellings in these areas are very similar to those located within the Residential A Environment Area.

Rule Res7 states that the maximum height of buildings shall be 9m, or shall be a Restricted Discretionary Activity, if over 9m

APPENDIX B

New Plymouth Urban Viewshafts

Within the District Plan, an 'overlay' recognises that views from particular public places, such as roads, or reserves, are a valuable community asset. The rules around the Urban Viewshafts control the height of structures so that they do not detract from, or reduce the visual amenity of these such views.

There are several Urban Viewshafts that overlay the central area and potentially affect the construction of buildings over a certain height, dependent on what section of the viewshaft a building may be in. The five Urban Viewshafts and their corresponding District Plan overlay rule are:

<i>Overlay Rule</i>	<i>Viewshaft</i>	<i>Max Height</i>
OL Rule 63	Cameron Street	Section 1: 5.5m Section 2: 14m Section 3: 10m
OL Rule 64	Carrington Street	Section 1: 8m Section 2: 14m
OL Rule 65	Churchill Heights	Section 1: 10m Section 2: 14m
OL Rule 68	Eliot Street	Section 1: 5.5m Section 2: 18m Section 3: 10m
OL Rule 69	Gover Street	Section 1: 5.5m Section 2: 14m Section 3: 10m
OL Rule 71	Marsland Hill	Section 1: 5.5m Section 1A: 7.5m Section 2: 10m Section 3: 14m
OL Rule 75	Victoria Road	Section 1: 8m Section 2: 14m



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	IMAGE	AUTHOR/PHOTOGRAPHER	SOURCE
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2	Coastal Walkway	New Plymouth District Council	New Plymouth District Council
3	Devon Street	New Plymouth District Council	New Plymouth District Council
4	Devon Street	New Plymouth District Council	New Plymouth District Council
5	Carrington Map	Fredrick Carrington	Teara.govt.nz
6	Central Area Terrain	New Plymouth District Council	New Plymouth District Council
7	Buildings on hill	Sheffield City Council	Sheffield City Council
8	Map – District Plan Zones	New Plymouth District Council	New Plymouth District Council
9	Map – Buildings over 14m	New Plymouth District Council	New Plymouth District Council
10	Central Area buildings over 14m	New Plymouth District Council	New Plymouth District Council
11	Central Area buildings between 9 and 14m	New Plymouth District Council	New Plymouth District Council
12	Central Area Buildings under 9m	New Plymouth District Council	New Plymouth District Council
13	New Plymouth's Built Heritage	New Plymouth District Council Keteneuplymouth.peoplesnetwork.info	New Plymouth District Council Keteneuplymouth.com.peoplesnetwork.info
14	Local Urban Design Examples	New Plymouth District Council	New Plymouth District Council
15	Resource Consent Application Examples	Glenn Brebner & Murali Bhaskar, Architects	Boon Goldsmith Bhaskar Brebner Team Architects
16	Vancouver	geographyjobs.com	geographyjobs.com
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19	Paris, Barcelona & Dublin	unknown	Tripwov.tripadvisor.com, thinkparisian.wordpress.com
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21	Building Setback	Unknown	Urbandesign.org.nz
22	Active Edges	Meridian Ios Architects	Meridian Ios Architects
23	Interesting Façade	Elenburg Fraser Architecture	Archello.com
24	Angled Façade	MPR Design Group	Architonic.com
25	Context	Unknown	Pomeroy Pacific Developments
26	Accessibility	Unknown	Piper Property Group
27	Orientation	Smart Design Studio	Smart Design Studio
28	Landscaped Courtyard	Jasmx Architects	Auckland City Council
29	Streetscape Scene	FDR Architects	Fdr.com
30	Roofline	Martin Friedrich Architects	Mfa.com.au
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