# **OUTER RESIDENTIAL AREA INFILL DEVELOPMENT**



# A REVIEW OF THE EFFECTIVENESS OF CURRENT DISTRICT PLAN PROVISIONS

**Prepared for Wellington City Council** 

February 2020



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# 1 EXECUTIVE SUMMARY

Infill housing has an important role to play in providing an ongoing, if gradual, source of supply of residential housing capacity. This is particularly so in a city such as Wellington which is constrained topographically and therefore limited in how and where it can grow on its edges.

Contextually, Wellington City has identified a shortage of available residential development capacity over the 30-year period to 2047 through its Housing and Business Capacity Assessment prepared under the National Policy Statement on Urban Development Capacity.

This report has examined the current District Plan standards related to infill housing in the Outer Residential Area of the Wellington City District Plan, to consider their effectiveness in facilitating good infill housing outcomes. Infill housing for the purposes of this report was defined as one additional dwelling being constructed on a site with an already existing dwelling. Or put another way, the question that this report considers is whether the current District Plan standards relating to infill housing are 'fit for purpose'?

District Plan Change 56, completed in July 2009, appears to have had a significant impact on both the nature, and amount, of infill development occurring in the city. The overall quantity of infill housing has been reduced, and there has been a greater tendency to single storey development. This was principally caused by the introduction through Plan Change 56 of a new height limit for a 'infill housing unit' meaning that one of the two dwellings on a site was limited to be a single storey.

A key finding of this report is that the infill housing unit height limit appears to have had the effect of constraining infill housing development, and as a result constraining the efficient use of land through limitations on site layout and building design. In a worst-case scenario, the standard is precluding development.

As a general statement, and as it was suggested in a number of the interviews undertaken in preparation of this report – "the easy sites are gone". If the Council wishes to see infill development continuing to provide a consistent contribution to residential housing capacity, changes will be required to how the District Plan seeks to control infill housing. For instance, removing the infill housing unit height limit will provide for greater flexibility in site layout – allowing for better integration of car parking, improving open space arrangements or reducing earthworks requirements for instance.

Whilst this report does not detail specific changes to the District Plan, it does indicate more broadly a suggested 'direction of travel' that the Council can develop further through its current work on preparing a Spatial Plan in early 2020, before moving onto the notification of a proposed District Plan.

Broadly, changes in the following areas are recommended for consideration:

- building height;
- car parking;
- controls relating to privacy and overlooking;
- open space requirements; and
- better aligning infill housing with multi-unit development i.e. infill housing could generally be considered to have a lesser effect than multi-unit development, yet often is subjected to greater restrictions from District Plan provisions, such as in the case of the infill housing unit height limit.

In addition, presently infill housing sometimes presents a conflict with the maintenance of existing character and amenity which is a key focus of the District Plan. Indeed, concerns in this regard were the key driver behind the changes brought about by Plan Change 56. Coupled with changes to District Plan standards, the Council will need to consider whether such an approach is sustainable or whether the District Plan should signal a greater expectation of change whilst still ensuring an acceptable level of on-site amenity, if infill housing is to continue providing a meaningful source of residential development capacity.

# 2 INTRODUCTION

Urban Perspectives Ltd has been engaged by Wellington City Council to undertake a review of the operation and effectiveness of the infill housing provisions of the District Plan.

The review will inform a suggested approach to infill housing in the upcoming Spatial Plan being prepared by the Council as part of its 'Planning for Growth' work programme, which in turn will lead to a review of the District Plan.

The scope of this report is limited to the 'Outer Residential Area' only and relates solely to infill development, defined for the purposes of this assessment as one new dwelling being added to a site with an existing dwelling, i.e. 1+1. A third dwelling would elevate a proposal to being considered as a 'Multi Unit' development which is expressly outside of the scope of this report.

#### 2.1 REPORT STRUCTURE

After this introduction, the report is structured as follows:

- Section 3 provides a summary of the existing approach of the Wellington City District Plan to infill housing, and consideration of the changes brought about by Plan Change 56 ("PC56") which created the current rule framework.
- Section 4 sets out an assessment of a selection of other District Plans and the approaches adopted towards infill housing development.
- Section 5 provides an analysis of consent data from the Council related to infill housing. It further provides an assessment of the outcomes of this consent data.
- Section 6 provides details of interviews undertaken with architects, planning consultants, and Council
  planning staff.
- Section 7 draws together and discussed the above threads, provides a conclusion and recommendations to the Council.

#### 2.2 METHODOLOGY

The methodology for the review, as agreed with the Council, has been to:

- understand the existing District Plan approach, with a particular focus on the changes brought about by PC56;
- undertake a comparative assessment of a selection of other District Plans. The other District Plans were selected following a discussion with the Council to undertake a selection that is representative of areas with similar issues to Wellington, of similar metropolitan areas, and seeking best practice in the form of recently prepared District Plans:
- analyse Council consents data a selection of building consents and resource consents for infill
  housing have been reviewed in order to better understand which District Plan rules are being 'tripped'
  by proposals;
- provide urban design commentary on the outcomes achieved through these consents, as well as more general observations around the impacts of the current rules, along with potential changes that could be made:
- undertake interviews with a small selection of architects, planning consultants, and Council staff to
  understand the application of the present District Plan rules from both the perspective of an
  applicant/developer and from the regulatory arm of the Council; and
- provide a summary discussion and recommendations for the Council to consider through it's Spatial Plan development process, and subsequent District Plan development process.

# 3 EXISTING DISTRICT PLAN

# 3.1 DISTRICT PLAN CHANGE 56

Following concerns about the extent and nature of infill development occurring around Wellington, in particular concerns about the impact of infill development on the character of the outer suburban areas, as well as more localised effects such as dominance, overlooking and shading on neighbouring properties, the Council prepared PC56 to the District Plan.

PC56 tackled a number of matters, including some changes relating to multi-unit development, but for the purposes of this assessment the principal changes brought about by PC56 related to:

- inserting a definition of 'infill housing unit' relating to sites of less than 800m² in the Outer Residential Area, an infill housing unit is a new residential unit outside of the footprint of an existing dwelling; or, in relation to a vacant site to contain two new units, whichever unit is nominated as being the second unit.
- capping the maximum height of an 'infill housing unit' to 4.5 metres (or 6 metres depending on the slope of a site);
- inserting a ground floor open space requirement of 50m<sup>2</sup> per household unit with a minimum dimension of 4 metres;
- subdivision providing for subdivision as either:
  - a controlled activity where it creates five or less allotments but that those allotments must be larger than 400m² and be able to contain a circle with a radius of 7 metres. A non-notification statement ensures that subdivision in accordance with this rule will be processed on a non-notified basis; or
  - as a restricted discretionary activity where the subdivision creates less than 5 lots, and those lots don't meet the controlled activity rule i.e. they are under the 400m² threshold and/or don't meet the 7m radius circle requirement; and
- introducing new policies to specifically address the effects of infill housing on streetscape and residential character.

PC56 was made operative in July 2009, meaning it has been in operation for a period of over 10 years and the changes it brought in are now firmly entrenched in the operative District Plan.

#### 3.2 CURRENT DISTRICT PLAN APPROACH

#### 3.2.1 Residential Dwellings

Unlike a number of District Plans, the Wellington City District Plan does not adopt an approach of minimum lot sizes to control density. Rather, density is controlled through other bulk and location standards and open space requirements. Within these parameters, a dwelling can be constructed as a permitted activity. Such an approach can work well, particularly in areas with difficult topography where lot size can be an artificial measure of practical building sites.

The District Plan begins by permitting residential activities (subject to standards)<sup>1</sup> and residential buildings (again, subject to standards). Three or more dwellings on a site<sup>2</sup> are provided for as a 'Multi Unit Development' requiring resource consent.

<sup>&</sup>lt;sup>1</sup> The relevant standards are set out at Appendix 1.

<sup>&</sup>lt;sup>2</sup> In the Residential Coastal Edge, two or more dwellings are considered to be a multi-unit development.

The District Plan permits up to two dwellings on a site, subject to those dwellings complying with relevant standards.

Key standards relevant to an infill development include:

- car parking each dwelling must provide 1 on-site car parking space;
- open Space 50 square metres at ground level with a minimum dimension of 4m;
- building recession plane measured from 2.5m with 45-degree planes;
- setbacks front yard setback only;
- height the height of a second dwelling is capped at 4.5m or 6m dependent on the slope of the site;
   and
- site coverage 35%.

A proposed infill dwelling that does not comply with one or more of the standards will, generally, require resource consent as a restricted discretionary activity:

- a proposal that doesn't comply with standards relevant to residential activities, requires resource consent under Rule 5.3.1. Council's discretion is restricted to the effects generated by the standard not met fixed plant noise, vehicle parking and site access. Rule 5.3.1 contains a non-notification statement with the sole exception being NZTA where it is considered to be affected;
- a proposal that doesn't comply with standards relevant to residential buildings, requires resource consent under Rule 5.3.4. Discretion is generally restricted to the effects generated by the relevant standard that is breached – for instance open space, infill unit height or site coverage;
- Rule 5.3.4 also contains conditions relevant to some standards. For instance, in respect of site coverage it must not exceed 42%, or in respect of building recession planes, they must not be exceeded by a height of more than 3m measured vertically; and
- where one of those conditions is breached, for example if proposed site coverage is proposed to exceed the 42% condition, resource consent is required under Rule 5.5 as a non-complying activity<sup>3</sup>.

At a policy level, some key themes emerge:

- the District Plan has a theme of residential containment an outcome that can be supported by infill housing development (Policy 4.2.1.1);
- intensification in existing areas must however respect the character of those areas and maintain the amenity of surrounding properties (Policies 4.2.1.5; 4.2.3.1; 4.2.4.1; and 4.2.4.2);
- a requirement to provide ground level open space a measure to enhance visual amenity and aid in the integration of development (Policy 4.2.3.5);

The question that arises is whether such an elevation is beneficial, and therefore warranted, and whether it should be retained going forward. This report does not make a specific recommendation but notes that in terms of an effects assessment, an elevation to a non-complying activity makes little difference. Where such an elevation may have more bearing is in respect of objectives and policies where a proposal as a non-complying activity would need to show that it is not contrary to the objectives and policies. Further consideration should be given to whether retain this change in activity status in developing a new policy framework relevant to residential development.

<sup>&</sup>lt;sup>3</sup> The threshold at which these conditions are set (i.e. 42% for site coverage and 3m for recession planes) are in large part arbitrary i.e. the threshold for site coverage could equally be set at 43% or 45% (it is noted for completeness that the focus of this assessment has been on site coverage and recession planes, but that other conditions exist relevant to other standards). Their purpose is to elevate the consent status from a restricted discretionary activity to a non-complying activity. As a non-complying activity, a consent application needs to pass additional 'gateway tests' under section 104D of the Act. The elevation of activity status that comes from such a breach in practice signals a potential inappropriateness and the need to provide additional scrutiny to a proposal.

- minimising hard surfaces and retaining mature trees and bush (Policies 4.2.3.6 and 4.2.3.7); and
- managing buildings and structures on road reserve (Policy 4.2.3.8).

There is some tension in this policy framework, particularly in the context of a strong focus on urban containment which supports infill development on the one hand, contrasting with other objectives and policies that seek to protect existing character and amenity which potentially inhibit infill development.

Outside of these two directions, the policies are also concerned about ensuring acceptable amenity for the developments themselves.

The role of the Residential Design Guide in considering resource consent applications could be clearer. For instance, Rule 5.3.7 relating to multi-unit development is clearer in is expectation that an assessment against the design guide accompanies the application. Rule 5.3.4 relating to non-compliance with building standards does not. However, the explanation to Policy 4.2.3.1 does provide some clarity, noting:

"Matters to consider when assessing applications for new infill or multiunit developments include:

• the extent to which the proposal fulfils the intent of the Residential Design Guide."

It also specifies the Residential Design Guide as a method to achieve the overarching objective. Policy 4.2.4.2 provides a similar reference in its explanation.

It is accepted that in terms of the structure of the District Plan the Residential Design Guide does have a role, albeit there could be greater clarity in the District Plan. This is addressed further in the subsequent record of the interview with Council planning staff.

#### 3.2.2 Subdivision

Infill development can be undertaken with or without a subdivision occurring, and often a subdivision will be undertaken following the construction of a second dwelling. Subdivision in these instances is provided for as a permitted activity (subject to compliance with the standards in 5.6.4 of the District Plan).

The District Plan provides, as a controlled activity, for small-scale subdivision that creates 5 or less allotments. However, those allotments need to have an area of at least 400m² and be able to accommodate a 7m radius circle. This means that the 'usefulness' of those provisions for infill development is limited, i.e. it might be difficult to create a vacant lot that meets these requirements despite a lot potentially being able to accommodate a complying dwelling, and resultingly the rule tends to push towards a 'build first' approach to infill development through the fact that two dwellings on a site are a permitted activity irrespective of overall lot size (subject to standards). The underlying rationale here is that a lot of 400m² or more is more likely to be able to accommodate a permitted level of residential development.

A subdivision creating a lot of less than  $400m^2$  (up to 5 lots) will be assessed as a restricted discretionary activity under Rule 5.3.12. The Council's discretion is restricted to site design and area, lot size, vehicle access and parking, landscaping, site servicing, protecting any amenity feature and earthworks. Additionally, the proposed allotments must meet the standards for subdivision under Rule 5.6.4.

The Subdivision Design Guide does contain a section on individual site design, and can be brought to bear on the consideration of subdivision consent applications, but in practice this is of little utility in an infill subdivision situation. It is understood that in practice it is not used in these very small-scale two lot subdivisions.

An issue arising, and one that is commented on further below, is that subdivision is an obvious pre-cursor to obtaining a new title which in some instances is a requirement for funding to build a subsequent dwelling. This potentially causes a tension with a discretionary resource consent requirement where a future dwelling may not yet be designed. This is a matter that all of the non-Council interviewees identified as an issue of varying significance.

The non-Council interviewees were of the view that the Council appears to have a preference to a 'build first' approach to infill development. Such an approach has some of positives – principally that it allows the

Council to have a high degree of surety that a given dwelling can be appropriately located on a site. Or put another way, that subdivision isn't creating sites that will later struggle to accommodate a dwelling that complies with the permitted activity standards of the District Plan, such that an 'orphan' lot is created.

The alternative is for Council to grant a subdivision consent for a new lot and to then consider proposals for a new dwelling at a later stage. In this scenario, a dwelling that meets permitted activity standards could be built without a further resource consent. A dwelling that didn't meet a permitted activity standard, or standards, would require a resource consent for that aspect of non-compliance.

An issue that arises is that the creation of a new lot creates an expectation of a development right. A concern for the Council is that having created a new lot, it is then 'on the backfoot' in attempting to resist development proposals that it considers to be inappropriate. It is noted, however, that as a discretionary consent, the application can be declined by the Council. This is a matter identified below as needing further consideration from the Council as it prepares its proposed District Plan.

At a District Plan policy level, the District Plan focusses on managing subdivision to ensure subdivisions are appropriately designed, can appropriately accommodate future development (i.e. a permitted level of development) and can accommodate development in a pattern that is compatible with the character of the surrounding area and maintaining the amenity of adjoining properties (Policies 4.2.6.2 and 4.2.6.3). This mirrors the importance of character and amenity in the policies relevant to buildings.

# 4 COMPARATIVE DISTRICT PLAN ASSESSMENT

Infill development pressures are not unique to Wellington. In order to understand how other parts of the country are managing infill development a review of the approaches in other areas was undertaken.

The following District Plans reviewed:

- Auckland Unitary Plan
- Hamilton City District Plan
- Hutt City District Plan (Plan Change 43)
- Queenstown Lakes District Plan
- Dunedin District Plan
- Tauranga District Plan

#### The following themes emerge:

- only Wellington restricts infill to a single storey height limit as a permitted activity. Queenstown is the next 'lowest' at 5.5m although only in the Lower Density Suburban Zone;
- all of the territorial authorities reviewed, with the exception of Queenstown Lakes, are actively working
  on plan changes allowing greater intensification or have relatively recently completed plan changes;
- there is a clear distinction between old and new plan provisions, with Auckland having the most permissive provisions;
- Hamilton and Tauranga acknowledge infill intensification may be harder to achieve in existing urban areas with an established land-use pattern and focus on greenfield intensification with low lot sizes and, in the case of Hamilton, specifying a maximum lot size. Hamilton also has a modest Residential Intensification zone which discourages infill but encourages redevelopment creating terraces and duplex dwellings; and
- Auckland have additional bulk and location standards which are untypical for New Zealand residential
  areas. This is likely due to the more intensive housing envisaged. The standards relate to outlook
  space and daylight.

Dunedin, Tauranga and Hamilton have all commenced consultation on amending provisions relating to residential development.

Dunedin released the decisions on their full district plan review in November 2018 and numerous appeals were received. Formal consultation is proposed on a variation to encourage intensification of residential development. Dunedin's current provisions are considerably more restrictive than those of the Wellington City District Plan.

Tauranga is planning to amend housing provisions to allow for increased residential intensification in 2020. Detailed provisions are not yet available, but the intention is to establish a framework that appears aimed at terraced housing and allowing duplexes to be a permitted activity. The current rules only allow for a second unit on a site if it is contained within the existing dwelling or is built above a garage. Currently infill is required to have a site of 325m<sup>2</sup> per dwelling.

Hamilton has released draft Plan Change 11 which proposes reducing minimum section sizes down to 300m² for single dwellings and 200m² for duplexes in the General Residential zone. In the Residential Intensification zone (a relatively small area) infill is discouraged because more intensive development is required with density targets included in the District Plan which are derived from the Regional Policy Statement. Single dwellings are a discretionary activity and ancillary residential dwellings are a noncomplying activity in the Residential Intensification zone. Hamilton's approach "...require(s) residential development to occur only in those areas identified. This approach ensures stability for established parts of the City and that higher density will not occur where it is not identified and provided for. "

Queenstown Lakes released the decision on the 2015 review of the District Plan in May 2018. The new provisions allow sites down to 250m² per dwelling in the Medium Density Residential zone along with typical bulk and location rules. Non-compliance with the standards results in a restricted discretionary activity status.

Auckland and Hutt City have the most up to date District Plan provisions from those District Plans that were considered in regard to intensification, and both have clear objectives related to increasing the range of housing types and densities.

In Auckland's 'Single House Zone' a minor dwelling (maximum size 65m² excluding decks and garaging) may be established on a site with an existing principal dwelling with only 8m² of outdoor living space required for a minor dwelling with two bedrooms. The other bulk and location standards that need to be achieved are typical with site coverage 35%, 8m height, 2.5m plus 45 degree recession planes from side and rear boundaries, 40% permeable surface area, 3m front yards and 1m side yards, no car parks for single bedroom units and 1 car park required for any other dwelling.

The 'Residential - Mixed Housing Suburban Zone' is the most widespread residential zone in Auckland. The planned character for this zone is predominantly two storeys with a variety of typologies. Up to three dwellings are permitted per site with no minimum site size. Bulk and location standards relate to:

- 40% site coverage;
- 8m height;
- 2.5m plus 45 degrees recession planes from side and rear boundaries;
- 40% permeable surface area;
- 3m front and side yards;
- a minimum amount of 'landscaped area' of 50% of the front yard;
- minimum 'outlook space' and 'daylight' standards;
- 20m² outdoor living space with 4m minimum dimension for ground floor dwellings and 8m2 for above ground two-bedroom dwellings; and
- car parking is required at 0.5m per single bed dwelling with 1 car park required for two or more bedroom units. More than four units becomes a restricted discretionary activity.

Hutt City have removed minimum section sizes in the General Residential Activity Area which is most of the valley floor, but not the hillside suburbs. Most of the bulk and location standards are typical with 8m height, 40% site coverage, 2.5m plus 45-degree recession planes, 1m side and rear yards. Outdoor living space is high at  $50m^2$  with a minimum dimension of 4m although minor additional dwellings only require  $20m^2$ . A minor additional dwelling may be no larger than  $50m^2$ . Stormwater retention is also required.

# 5 CONSENTS ANALYSIS

The Council, as part of its research work relating to the wider 'Planning for Growth' work programme, has undertaken an assessment of all resource consents it has issued in respect of the residential areas of the city (Inner and Outer Residential Areas) from January 2009 to December 2018.

This report has provided some relevant high-level data at a city-wide scale as to what District Plan rules have been triggered by the various resource consents applied for.

Of particular relevance to this work and given the sample timeframe largely coincides with the operability of Plan Change  $56^4$ , is that this research provides an insight into how the rules relating to the capping of height for an 'infill housing unit' have worked - i.e. an indication of the scale of consents being processed under that rule.

For context, the Council processed 5,439 resource consents during this timeframe. Of that total, 610 resource consents were for maximum height breaches, including those for infill housing units. Infill housing unit height breaches made up 17.4% of all maximum height breaches, or 106 instances. This was 1.95% of all resource consent processed. It is understood that all of these consents were granted.<sup>5</sup>

# 5.1 Infill Housing Consents

From this higher-level consent analysis, a more detailed and focussed assessment specific to infill housing was undertaken. Notwithstanding this more targeted analysis, it is highlight again that the sample size was limited and whilst it is considered suitable for the purposes of this exercise, it is not intended to be a comprehensive statistical analysis of consents data. Rather, the purpose has been to obtain an indication on the nature of consents and what rules they will be triggering. The Council may wish to look more closely at a larger sample at a later time should changes be considered to the relevant rules.

To obtain the consent sample, firstly 25 building consents for new infill dwellings were identified from a search of the Council's building consent database. Of these, 4 did not require a resource consent for their establishment - i.e. they were a permitted activity. The other 21 needed a resource consent for one or more District Plan rule breaches.

Secondly, this sample of building consents (for which copies of the relevant resource consent were obtained), was supplemented by selecting a sample of resource consents. These consents were sampled from the aforementioned group of consents that breached the maximum height for infill units. This was used because it picked up on a key change brought about by PC56 – the introduction of a lower height limit for a second infill dwelling unit.

This focus is considered to be appropriate for the purposes of this assessment, and is not considered to overly centre on this one rule. Relevantly it is balanced by the sample of new houses from the building consent selection that do not breach the height rule (but may breach other rules) and those from the selection that have breached the height rule, of which many have also breached other rules.

<sup>&</sup>lt;sup>4</sup> Plan Change 56 became operative in July 2009

<sup>&</sup>lt;sup>5</sup> This is not to say that some proposals did not proceed.

<sup>&</sup>lt;sup>6</sup> Additional to any of the previously identified building consents.

# 5.2 Analysis

Appendix 1 sets out a table of the building and resource consent applications considered by this report, and records the relevant District Plan consent triggers for each of the applications.

Upon closer examination, 7 consents were discarded from the sample. This was for a variety of reasons, but essentially because for a range of reasons the consents did not in fact meet the relevant criteria – they were not for infill development, they were in a different zone, or the consent application was rejected by Council. In all, these were caused by issues relating to data entry that only became apparent on closer inspection. The final sample size is therefore 33 consents.

Building Consents not requiring resource consent

Of the 4 building consents from the sample that did not require a resource consent, two key differences arise. Either:

- the sites were above the 800m² site area threshold for where an infill unit height restriction came into effect: or
- the site was subdivided prior to, or concurrently with, the building consent being applied for meaning that as an individual lot the infill household unit height limit did not apply – though the building consent recorded the dwelling as infill dwelling.

There were no other consent triggers relevant to these building consents.

Whilst hypothetical, it is noted that all of the four houses in this part of the sample would have breached the infill household unit height limit should it have applied.

Resource Consents for Infill Development

The remaining 29 developments considered all required a resource consent for one or more reasons. None of these consents were declined. One was limited notified to one party who did not submit. All others were granted on a non-notified basis.

The infill dwellings that were considered were generally smaller units, with the biggest being 156m². On average, the floor area of the infill units that were considered and for which floor area information was available, was 84.37m², and the median size was 87m².

Predominantly, resource consent was required as a restricted discretionary activity. This is essentially a product of the structure of the District Plan where a breach of either activity standards, or building standards, requires a restricted discretionary consent in the first instance.

On 9 occasions, the activity status of these proposals was for a non-complying activity. In all but one of these instances, it was site coverage exceeding 42% that tripped the proposal into a non-complying activity category. In the one other instance, it was a breach of building recession planes beyond the level anticipated by the restricted discretionary rule, that tripped that consent into a non-complying activity status.

The 29 consents triggered the following rules:

<sup>&</sup>lt;sup>7</sup> 42% site coverage being the threshold under Rule 5.3.4 (5.3.4.15) above which proposals are to be assessed as non-complying.

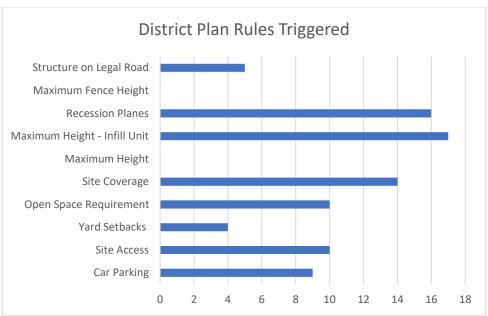


Figure 1. Rules triggered by the sample of building and resource consents considered by this analysis.

The principal standard breached, by 17 of the 29 consents, was the infill housing unit height limit. This was closely followed by breaches of recession plane requirements at 16 instances.

The main breach from the sample was of the infill housing unit maximum height standard at 17 occasions. From the sample, only two of the building consents that also needed resource consent tripped this rule. This may suggest that there is a degree of 'designing to comply' occurring, or it can simply be variance in the sample. A larger sample size would provide greater clarity on this point.

Earthworks can have the effect of 'buying' additional height given that maximum height is measured from existing ground level. Therefore, there may have been additional dwellings that tripped the infill height limit were it not for earthworks.

The next most common breach was of the recession plane standard. Of the 17 infill unit height breaches, 11 of those also breached the recession plane requirements. 16 consents breached this requirement in total.

Site coverage was the third most common breach at 13 instances. Of the 17 consents that triggered the infill unit height rule, 8 also triggered the site coverage rule. Related to site coverage were breaches of the open space requirement at 10 consents.

Car parking and site access are generally technical requirements, with 9 and 10 consent triggers respectively. Of the car parking consents, only in one of those instances was it a consent seeking to not provide car parking at all. In other instances it was for another aspect of non-compliance, for instance not being able to accommodate the car parking space entirely within a site. Site access consents related to the size of vehicle crossings or site line requirements.

In terms of the less frequent breaches, yard setbacks occurred on four occasions. Consents for structures on legal road, not uncommon in Wellington, occurred on 5 occasions. There were no breaches of the overall maximum height limit from the sample. Nor were there any breaches of the maximum fence height.

#### Urban Design

In urban design terms, the success of design outcomes from infill housing can be measured with reference to:

- private open space in terms of usability, relationship to living areas, sun, appropriate size and minimum dimensions relative to the size of the dwelling;
- landscaping and permeable surface areas ensuring sufficient soft landscaping can be undertaken to maintain an acceptable level of amenity:
- privacy overlooking into main indoor and outdoor living areas both from neighbouring properties and any existing 'internal' dwelling;
- integration of car parking and vehicular access to the site and management of any associated effects;
- liveability of an infill dwelling in terms of its footprint size, plan and layout, and sunlight orientation;
- streetscape character with respect to the impact of both buildings and car parking arrangements.

The above outcomes are directly influenced by the following District Plan provisions:

- site coverage;
- height;
- open space;
- minimum landscape/permeable area (if applicable); and
- car parking.

These requirements are inter-related and influence a collective outcome. For instance, outcomes in respect of open space (size, layout and a sense of openness) are directly tied to site coverage, which in turn is influenced by building height (i.e. taller buildings can reduce footprint size). Useable open space and permeable open space areas are directly influenced by vehicle access and carparking requirements, and by the size of the building footprint.

As a general principle, a two-storey height limit (compared to the infill housing unit height limit) will allow for a smaller footprint and therefore allow for greater flexibility in site layout options and open space arrangements. It will also provide opportunities to incorporate garages into the building and therefore reduce hard surfaced areas allowing for greater opportunities for greater soft landscaping<sup>8</sup>. Additionally, a two-storey height limit could be of greater benefit on sloping sites - reducing the need for site excavations, allowing for the building to better 'work with the landform' and allowing for the integration of car parking into the building.

Appendix 2 provides further commentary in respect of site layout.

# Contrast with multi-unit development

It is also instructive to contrast infill development in the Outer Residential Area with multi-unit development (3+ dwellings) which is typically carried out by way of comprehensive site redevelopment.

Multi-unit development, which results in a generally higher density of development as compared to infill development, is itself subject to permitted bulk and location controls, but is a restricted discretionary activity and subject to design guide assessment as a result of it being considered a multi-unit development. Those bulk and location controls are often times the same as those for infill development, but notably the height limit for multi-unit development is for two-storey structures - i.e. it is not capped like that for an infill housing unit.

<sup>&</sup>lt;sup>8</sup> And associated benefits, for instance those relating to stormwater management.

This creates somewhat of a contradiction in how the District Plan manages effects in the Outer Residential Area, with the principal distinction being that multi-unit development is subject to a design guide assessment.

The design guide provides a level of flexibility in how open space is arranged and for the qualitative assessment of privacy effects. For example, with regard to private open space, a number of recent multiunit developments in the Outer Residential Area for 10 or more units have been approved by the Council where usable private open space per unit is in the order of  $20m^2$  or less, in some cases with a split open space arrangement (i.e. front and rear), and in some instances dependant on topography and unit size, open space was limited to  $10\text{-}12m^2$  of decking. This suggests that a focus on usability (rather than simply size) is able to deliver an acceptable standard of outdoor amenity in higher density environments of two storey units

On the other hand, infill development will generally result in smaller-scale change with a lower density of development, but the height of a second unit is capped at a single storey (as a permitted activity). If an infill housing unit involves a second storey, it triggers the need for a resource consent as a restricted discretionary activity. This is the same 'status' of activity as that used for multi-unit development, but without the flexibility regarding open space arrangements which are unchanged for all infill dwellings regardless of size etc.

This means that a smaller-scale form of incremental intensification such as infill development, which is likely to be less impactful and often positive on local character and amenity considerations, has to address the same considerations as larger multi-unit development once it crosses the infill housing unit height limit. However, if the same development were to occur on two individual lots (i.e. the site has previously been subdivided), it becomes a permitted activity regardless of what the actual 'on the ground' environmental effects, including amenity effects, are. This appears to challenge the intent of facilitating the effective use of land through infill development within an existing site and appears to 'burden' the consenting process.

With all of the above in mind, it appears that the current permitted activity status of single-storey infill development does not necessarily support the most effective/sustainable use of land nor facilitate the best amenity outcomes for each site. While the current provisions may be seen as a 'safe approach' it may result in a permitted development coming forward in order to avoid a consent process but may not result in an optimal site outcome. Worse still, it may result in some proposals not coming forward at all.

Conversely, increasing the height of an infill dwelling unit to two storeys and developing it within the same lot can deliver an acceptable, and in some cases, more integrated outcome compared to a single-storey infill unit or a two-storey unit within a subdivided second lot. This observation is supported by the findings of the analysis of resource consent data for two-storey infill units, all of which were approved on the finding that the adverse effects of those developments were acceptable.

#### 5.3 Findings

From the examination of the building and resource consents considered, and the above commentary, the following findings are highlighted:

- Few, if any, infill houses appear to be being constructed as permitted activities. Where
  that is occurring, it occurs on sites greater than 800m<sup>2</sup> or on sites which were
  previously or concurrently subdivided.
- The majority of resource consents processed were for restricted discretionary activities. The most common breaches were for the height of an infill housing unit, building recession plane breaches, and exceeding site coverage.

- Where resource consents were required for non-complying activities, in all but one instance from the sample the 'trigger' was exceeding a site coverage of 42%. The other was a significant breach of a building recession plane.
- All but one of the consents considered were dealt with on a non-notified basis. The sole exception was a consent that was limited notified to one party who did not submit. The consent was granted without a hearing.
- A majority of the resource consents provided written approvals from one or more neighbours.
- For those dwellings that needed resource consent, dwelling sizes were generally smaller, with the largest having a floor area of 156m<sup>2</sup>. The next largest was 124m<sup>2</sup> with an average size of 84.4m<sup>2</sup>.
- Two-storey infill dwelling units can and do deliver acceptable outcomes in terms of usable open space, smaller footprints, the ability to build over existing double garages and providing opportunities for integrated parking solutions in some instances.
- This sample did not include a single infill housing unit consent that was declined resource consent. This included all of the dwellings that breached the permitted infill unit height limit. The majority of applications were accompanied by affected party approvals.
- While not part of this sample, Council staff have advised of instances that applications have been withdrawn before being declined (or notified).

# 6 INTERVIEWS

In order to better understand the operability of the present rules, and to discuss issues of infill development more generally, a small number of interviews with two architectural firms whose practice has an element of infill development work, and two planning consultancies with a similar practice area (one of which also contains a surveying arm), were undertaken.

Additionally, to understand the application of the District Plan from a Council perspective, four Council resource consent staff were also interviewed.

The following non-Council people were interviewed:

- Ian Leary, Consultant Planner and Director of Spencer Holmes Ltd
- Lindsay Daysh, Consultant Planner and Director of Incite (Wellington) Ltd
- Tom Anderson, Consultant Planner and Director of Incite (Wellington) Ltd
- Hannah McCashin, Consultant Planner, Incite (Wellington) Ltd
- Sally Ogle, Architect and Director of Patchwork Architecture Ltd
- Caroline Robertson, Architect and Director of Spacecraft Architects Ltd, and

in respect of Council staff, the following were interviewed:

- Bill Stevens, Team Leader Resource Consents, Wellington City Council
- Hamish Dean, Team Leader Resource Consents, Wellington City Council
- Sally Clarkson, Senior Planner, Wellington City Council
- Laura Brownlie, Senior Planner, Wellington City Council

Included as Appendix 3 are summary notes from the interviews. In terms of the non-Council interviews, comments have been grouped together (organised by themes) such that comments aren't directly attributable to individual interview participants. Similarly, for the Council interview all comments are presented together rather than being attributed to an individual.

#### 6.1 Non-Council Interviews

In terms of the non-Council interviews, the following themes emerged:

#### Building Height

- the 4.5m/6m height limit has had the effect of significantly reducing infill development numbers;
- there is little point to the infill unit height limit has only had the effect of limiting development;
- the infill unit height limit is seen as a blunt instrument used to address a problem that interviewees weren't convinced existed:
- has unintended consequences for example a 'duplex' needing to be stepped where a single house could be built to a similar bulk and to 8m across the entirety of the building i.e. a single dwelling could be built to maximum permitted height, but if that same building were to be proposed to contain two individual dwellings, then to meet permitted activity standards for infill housing unit height, that portion of the building containing a second dwelling would need to meet the infill housing unit height limit;
- a higher height limit would lead to greater inclination to do a smaller building footprint, but taller building;
- height limit works against a greater variety in housing stock coupled with bulk and location controls
  it leads to smaller dwellings;

- interviewees had mixed experience in the impact of breaching the height limit. Some found it was an 'automatic' trigger for neighbour notification, others didn't go so far but did note it required far greater justification, often in reliance on permitted baseline scenarios;
- objectives and policies regarding infill height are directive and are cautiously applied by Council planners leading to heightened risk in seeking a breach of height limit without neighbour approval. This also highlights the critical importance of objectives and policies, and this importance has only increased over time:
- permitted baseline scenarios were identified as a real focus, knowing that consent would be achieved but a perception of "being made to jump through hoops";
- interviewees queried, in the context of Wellington's topography, how many houses are in reality 4.5m or even 6m in height?; and
- height has a strong relationship with site coverage. Capping height has the effect of 'pushing out', but above 42% site coverage is non-complying. This leads to an artificial constraint on dwelling size.

#### Bulk and Location

- rules encourage "slugs" building pushed to the centre of a site. This is caused by yard setbacks, recession plane requirements. Not necessarily an efficient use of a site and constraining site layout options;
- resultingly, rules work against certain house types courtyard housing for example where outdoor space is central to a site with a dwelling built around this central space;
- building recession planes are designed for flat sites and result in some very strange outcomes on sloping sites such as significant breaches with no effect;
- site coverage is an important control in respect of its relationship with height and other bulk and location controls – i.e. site coverage is an important control for amenity/open space and in some respects addresses the open space requirement itself;
- generally, find that Council is more flexible in its application of the site coverage control but wonder whether that flexibility is misplaced and could be applied elsewhere such as height;
- privacy and overlooking is taken extremely seriously by the Council perhaps overly so;
- while overlooking should be considered, it can also be addressed in other ways rather than simply through a 'crude' height cap; and
- building recession planes are uniform in the Outer Residential Area could consider a more refined approach such as that used in the Inner Residential area.

#### Car Parking

- topography in Wellington is a strong influence with on-site car parking often requiring a car deck or significant earthworks to form an onsite car parking space;
- while car parking is expensive it also adds value. Therefore, it can be assumed that where it can be provided in a cost feasible way, it will be provided on-site;
- the interviewees all had examples of otherwise feasible and positive infill housing developments that did not progress as a result of not being able to provide on-site car parking:
- on-site car parking space competes with valuable site space that may be better used for open space provision, or provide for increased flexibility in site layout and design;
- interviewees had mixed experiences in applying for resource consent to not provide an on-site car parking space. Some simply avoided it while others had had success with such applications.
- it is an irrational outcome to sacrifice an existing on-street car parking space (i.e. a length of kerb) in order to form an on-site car parking space (i.e. creating a driveway);
- parking standards focus overly on large cars;

- experience suggests that there is less flexibility in the Council's application of the car parking rule, certainly as compared to other rules;
- some interviewees considered that an existing car parking provision of two spaces for an existing dwelling should be mean that the standard is achieved for a subsequent dwelling; and
- relationship with encroachment licenses and additional approval required, and the resultant resource consent requirement for structures within roads.

#### Subdivision

- council has a strong preference for build first clients are advised accordingly;
- build first can have financing implications however, as title is a requirement against which financing
  is secured to build the resultant dwelling;
- potentially limits housing supply. Requires an owner to build, subdivide then sell, rather than subdivide, sell and allow a new owner to design and build. Could use consent notices as a tool to manage future development;
- the Council's reservation around build first is misplaced discretion remains to decline dwellings that come forward later were they to be 'incompatible' with surrounding development, the site or lead to overdevelopment;
- under the current approach which prefers build first, the way servicing conditions are written can be problematic where build first isn't undertaken as infrastructure servicing requirements can be predicated on works being undertaken that are tied to building. If someone can't do the servicing works, they can't then have a title issued;
- subdivision process in respect of infill is problematic. An example was offered where the Council required the formation of an 'on-site' car park as part of a subdivision before a dwelling was built on the site. in order to complete the subdivision: and
- shape factor is a useful measure to ensure a site is of a suitable proportion for built development.

# Open Space

- 50m² area requirement and shape requirement have had a similar effect to the infill housing unit height limit in reducing the amount of infill development coming forward; and
- indoor verandahs should count towards open space and possibly not against site coverage.

#### General Comments

- no minimum lot size is an excellent approach;
- two dwellings (i.e. 1+1) as a permitted activity is a positive approach on the Council's part;
- pre-application meetings are, overall, seen as a positive but there is a feeling that it can be somewhat of a "luck of the draw" situation in terms of the consistency of advice received;
- infill development is useful as a source of development supply, but the Council needs to consider how to facilitate it in a manner that doesn't then preclude additional intensification later e.g. moving towards an further density increase such as through multi-unit housing. This needs to consider site layout and relates to bulk and location standards:
- the driver for PC56 was a perceived impact on character. Interviewees questioned how 'strong' the character of Outer Residential Areas was to begin with, as compared with the Inner Residential Area for example;
- the 'easy sites' are gone therefore if infill is to be an ongoing source of regular development capacity, the Council needs to look at some of the standards;
- resultingly, available sites now generally come with "issues" drainage problems, servicing constraints and car parking difficulties;

- notification, or a suggestion of notification, is a "showstopper". This is because the economics of infill
  development are difficult adding significant costs from notification and the resultant uncertainty,
  stops proposals; and
- changes are required to better adapt for the future. Currently planning the suburbs of the 2040's is using a 1990's approach.

#### Potential Changes

- A more nuanced approach to car parking should be considered, in the context of:
  - proximity to public transport;
  - street context what is the existing situation on the street? Is existing garaging being used?;
  - increase in car sharing services;
  - the current approach is blanket. Could consider a standard relating to dwelling size/bedroom numbers; and
  - increase in e-bike use.

#### Height

- remove infill housing unit height cap and revert to normal height;
- look to consider matters relating to privacy and overlooking by way of standards (window positioning, separation, size and treatment, building orientation and screening; and
- o look to apply design guidance in respect of privacy and overlooking rather than capping height.
- Bulk and location standard changes:
  - building recession planes consider a move to Inner Residential Area, or other more bespoke standards. Changes in this regard could look to move buildings away from the centre of a site opening up opportunities for site layout variations; and
  - o change (reduce) open space area requirement and/or dimension.

#### Subdivision:

- keep as restricted discretionary but just a requirement to show that a site can accommodate a building envelope; and
- be more facilitative of subdivide first options.

#### Other:

- make changes around hard surfacing i.e. introduce a permeability standard and consider this
  in the context of car parking and site coverage standards; and
- o increase certainty of permitted baseline application.

# 6.2 Council Interview

And from the interview with Council staff, the following themes emerged:

# Plan Change 56

- PC56 was a response to what was perceived as a significant problem resulting from two-storey infill
  development that was seen as being out of character with existing neighbourhoods;
- Miramar was offered up as an example where an existing pattern or generally low-rise bungalows were being punctuated with two-storey dwellings;
- that effect was compounded by the size of the two-storey dwellings being built which invariably maximised the available building footprint available under permitted activity District Plan settings;

- the interviewees wondered whether the size of dwelling was a product of its time and whether smaller dwellings may be more common now. Noted the inherent desire to maximise development to permitted standards and the underlying economics of development that apply:
- however, interviewees were unsure how significant an issue it really was as a number of these
  dwellings were simply proceeding as a permitted activity by way of a building consent and did not
  need resource consent approval; and
- PC56 had the effect of slowing down infill development, arguably significantly.

#### Height

- a positive of PC56 and the infill housing unit height limit that was introduced, has been that the Council
  now has the ability to influence design outcomes through the consent process. This includes through
  consideration of the Residential Design Guide;
- the 800m² site cut-off for infill housing units is entirely arbitrary. Sloping sites may well comply with this where the only buildable space may be constrained to a much smaller area, effectively meaning the 'site' is in fact much smaller in practice; and
- in respect of sloping sites, recession plane requirements often create situations where the recession planes aren't able to be complied with.

#### Open Space

- open space should be seen as a density control, more so than an as amenity provision; and
- a general feeling that there is some flexibility in how this standard is applied i.e. for non-compliance with this standard.

#### Subdivision

- interviewees did not agree that there was a 'preference' for a build first approach to infill subdivision,
  or that it was as significant an issue as it may be perceived to be. Put another way, it is not the starting
  approach;
- however, there was some agreement that a build first may be turned to by Council staff more often than it needed to be i.e. that other options aren't explored first; and
- maintained that it was important to ensure a new lot could accommodate a level of permitted development, rather than hoping for the best later.

#### Design Guides

- the Subdivision Design Guide, and its individual lot design section, is of little benefit in 1+1 infill subdivision scenarios and is not utilised given the limitations of space to provide varying configurations;
- the Residential Design Guide can be used but is only sporadically applied in a direct sense;
- interviewees agreed that the application of the residential design guide to infill development could be made more explicit; and
- however, the design guide is arguably applied informally through the consideration of every resource consent for an infill dwelling – in terms of general urban design principles. It is more uncommon for a specific assessment to be requested for a Council urban designer.

#### Potential Changes

- consideration of the policy framework is important if changes are going to be made to standards –
   the current focus very much supports maintaining existing character and amenity; and
- there was general agreement that the infill height limit should be removed.

# 6.3 Summary

The interviews that were undertaken were particularly illuminating of the issues being faced by, and driving the design decisions, of applicants, as well as the pressures faced by the Council in its regulatory role.

From the perspective of applicants, the key issues encountered in designing and consenting proposals appear to be:

- the height cap on infill housing units and to a lesser extent the open space standard;
- complying with the on-site car parking standard; and
- some applications encountering a preference at the Council for a 'build first' scenario to subdivision.

There were also positives identified in the existing approach, principally the absence of a minimum lot size requirement and the ability to undertake an infill development as a permitted activity, subject to standards.

There were two key aspects on which all interviewees agreed:

- The height limit standard is inhibitive and should be removed; and
- Changes made to this standard, and others, need to be made in the context of a more fundamental consideration of the relevant objectives and policies and the direction that the policy framework set.

Notwithstanding the above, an acceptable level of amenity still needs to be maintained. Consideration needs to be given to how this is achieved.

# 7 CONCLUSION AND RECOMMENDATIONS

The assessment that has been undertaken has considered the operation of District Plan rules relating to infill housing development in the Outer Residential Area of Wellington City.

From the assessment undertaken, and drawing on the analysis of consent data as well as through discussions with those actively practicing in this area, the following principal conclusions are drawn:

- Plan Change 56 has likely had a negative impact on the delivery of infill housing in the city in terms of quantity;
- the infill unit height limit is the principal consent trigger for infill housing proposals, or proposals are designed to comply to avoid the consent process, potentially leading to sub-optimal outcomes;
- there is little justification for the imposition of the 'infill household unit' height limit; rather it is considered to be a blunt reaction to addressing the impacts of infill housing on existing character and amenity;
- PC56 has likely had the effect of providing greater scrutiny on those proposals that require a resource consent. This is arguably positive, but consideration should be given to the level of intervention this provides balanced against the level of certainty required for some proposals to come forward;
- relatedly, it has been highlighted that potential developments that are likely to be overall positive are not progressing as notification costs and risks are prohibitive;
- issues of privacy and overlooking are important considerations but can be considered in other ways, for instance through standards (see for instance the Outlook Space requirements of the Mixed Suburban Housing Zone of the Auckland Unitary Plan) and/or through a design review process; and
- other bulk and location, and activity standards, are also impactful but to a lesser extent that the infill housing unit height standard. For instance, some proposals have not progressed because the costs of forming an on-site car parking space, in an otherwise suitable proposal, were cost prohibitive and made the development uneconomic.

The primary recommendation arising from the assessment that has been undertaken is that if the Council (in terms of its future strategy to maintain housing development capacity) wants to continue to utilise the capacity of its existing residential areas to accommodate future housing supply, it should review its approach to infill housing development as the current provisions can in our view inhibit appropriate developments from proceeding.

#### Furthermore, it is recommended that the Council:

- maintain the current approach of providing for two dwellings on one site as a permitted activity;
- maintain the current approach of not requiring a minimum 'lot size' per dwelling;
- remove the infill housing unit height limit;
- as a result of the previous recommendation, delete the definition of infill housing unit;
- as an alternative, maintain the infill height limit but expressly deal with applications for breaches on a non-notified basis subject to a design review process;
- review and amend the current policy framework relevant to infill housing to better reflect the Council's desired approach to the role of the Outer Residential Areas as an ongoing source of housing capacity; noting that
- such an approach, in the context of a lack of overall residential development capacity, should have less of a focus on maintaining existing character and amenity;
- review the applicable bulk and location standards, and activity standards, with a particular focus on:

- car parking consider taking a more nuanced approach to car parking with waiving car parking requirements in certain areas and consider greater reliance on on-street parking in suitable areas;
- recession planes consider developing bespoke recession plane standards more relevant a higher density environment. The Inner Residential standard could be used as a useful starting point; and
- review the current open space standard and consider whether the area requirement remains suitable. Also reconsider its current function as primarily a density control and consider a greater focus on the utility of the space relevant to the particular dwelling proposed. Also consider the scaling of open space provision relative to the size of the dwelling unit; and
- consider the role of the Residential Design Guide in the assessment of proposals for infill housing units, and developing thresholds for breaches under which proposals will be considered on a non-notified basis subject to a Design Guide assessment.

# APPENDIX 1-CONSENT SAMPLE

SR Number	Street Number	Street	Suburb	Activity Description	RC Required?	RC SR Number	Car Parking	Site Access	Yard Setbacks	Open Space Requirement	Site Coverage	Maximum Height	Maximum Height - Infill Unit	Recession Planes	Maximum Fence Height	Structure on Legal Road	Overall Activity Status
Building (	Consent On		_														
212340	16A	ALEXANDRA ROAD	ROSENEATH	New single level dwelling to rear of the site. This will include two bedrooms, one bathroom, WC and free standing 'Metro Silver Euro PED Firebox'.	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
288809	10	GLENSIDE ROAD	GLENSIDE	Construction of new detached dwelling to rear of site, 3 bedroom, 1 bathroom with attached single garage.	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
228132	30	ROTHSAY ROAD	NGAIO	New 2 storey dwelling on existing building platform with carport build into bank at front of the section with amendments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
361709	8	OLIVIA CRESCENT	TAWA	New Two storey dwelling with internal garage.	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Building (	Consent and	d Resource Conse	ent														
211893	50	BANNISTER AVENUE	JOHNSONVILLE	Construction of a single level, three bedroom house at the rear of the property. (AKA 50a Bannister Avenue)	Yes	196401	No	Yes - 2 accesses	No	No	Yes - 47.8% for existing dwelling	No	No. But consent notice on future dwelling limiting height	No	No	No	Discretionary (Unrestricted)
237614	1	FISHER STREET	JOHNSONVILLE	Construction of new two storey 3 bedroom dwelling with new pergolas and new crossing to existing dwelling.	Yes	109530	No	Yes - Crossing within 10m intersection	Yes - deck within side yard	No	Yes - 42.5%	No	Yes	Yes	No	No	Non- Complying (site coverage)
263582	14	DEVONSHIRE ROAD	MIRAMAR	New dwelling to back of existing section. Includes 2 bedrooms, laundry, kitchen, living area, mezzanine and storage.	Yes	235512	No	No	No	No	Yes - 39%	No	No	No	No	No	Restricted Discretionary
283648	40	RAROA TERRACE	TAWA	Relocate new Keith Hay home to site (2nd dwelling located at front of site) - timber pile foundations and drainage connections.	Yes	283655	No	No	No	Yes - 42m2	No	No	No	Yes	No	No	Restricted Discretionary

301068	95	HATAITAI ROAD	HATAITAI	Construction of a new two storey dwelling adjacent to an existing dwelling on the same lot.	Yes	47575	Yes - car deck on RR	No	No	No	Yes - 49%	No	No	No	No	No	Non- Complying (site coverage)
209836	109	AKAROA DRIVE	MAUPUIA	Construct new 3 storey residence with 5 bedrooms, 2 bathrooms + 1 ensuite (site rear). Double garage shared by both residences	Yes	382017	No	Yes - sightline breach	No	Yes - 38m2 (existing dwelling)	No	No	Yes	No	No	No	Restricted Discretionary
313170	46	MOXHAM AVENUE	HATAITAI	Construction of 2 new attached dwellings alongside existing semi detatched dwelling.	No	304628	Yes	Yes	Yes	Yes	Yes - 53.6%	No	No	Yes	No	No	Non- Complying (site coverage)
306411	125	GLENMORE STREET	KELBURN	New 3 storey dwelling in front of an existing dwelling on the same site.	Yes	264380	No	No	No	Yes	Yes - 48%	No	No	No	No	No	Non- Complying (site coverage)
342601	36A	RANUI TERRACE	TAWA	Relocate dwelling on to the front of section.	Yes	348864	Yes - provided for not entirely in the site	No	No	Yes	No	No	No	Yes	No	No	Restricted Discretionary
340424	27B	VICTORY AVENUE	KARORI	New infill dwelling at rear of section and standalone carport and timber pole retaining walls.	Yes	323087	No	No	No	No	No	No	No	No	No	No	Restricted Discretionary
357082	302	QUEENS DRIVE	LYALL BAY	Construction of a new two storey, 2 bedroom dwelling on a site with an existing dwelling	Yes	315522	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Restricted Discretionary
316679	12	BANN STREET	SOUTHGATE	Existing residential dwelling converted into two house hold units with new windows in concrete masonry wall, internal alterations to all three floors.	Yes	315207	No	No	No	Yes	No	No	No	No	No	No	Restricted Discretionary
394061	12	SHIRLEY STREET	KARORI	New single bedroom dwelling to site with existing dwelling. With amendment.	Yes	341051	Yes - not provided	No	No	No	No	No	No	No	No	No	Restricted Discretionary
413095	43	ARGENTINE AVENUE	MIRAMAR	New single storey infill unit at back of property.	Yes	410035	No	No	No	No	Yes - 38%	No	No	Yes	No	No	Restricted Discretionary
Resource	Consent	Only	I														
245746	17	TANERA CRESCENT	BROOKLYN	Land Use; 2nd Dwelling			No	Yes - width and sight lines	No	No	Yes - 43.9%	No	Yes	No	No	No	Non- Complying (Site Coverage)
275114	4	ST LOUIS PLACE	BR00KLYN	Land Use: Construction of second household			No	No	No	No	No	No	Yes	No	No	No	Restricted Discretionary

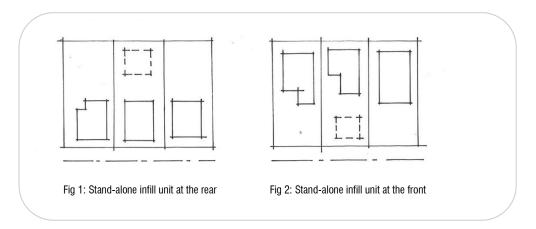
				unit at rear of existing dwelling											
231789	55	JACKSON STREET	ISLAND BAY	Land Use; 2nd Dwelling	Yes - provided but not to standard	No	No	No	Yes - 43%	No	Yes	Yes	No	No	Non- Complying (Site Coverage)
377642	175	MELBOURNE ROAD	ISLAND BAY	Subdivision and Land Use: Two lot fee simple and new dwelling	No	No	No	No	Yes - 38%	No	Yes	No	No	No	Restricted Discretionary
399155	100	CLYDE STREET	ISLAND BAY	Land Use: Second dwelling	No	No	No	No	No	No	Yes	No	No	No	Restricted Discretionary
228931	16	QUEBEC STREET	KINGSTON	Subdivision and Land Use: Two lot fee simple subdivision and restrospective land use for second household unit	No	No	No	Yes - dimension, area okay	No	No	Yes	Yes	No	No	Discretionary (Subdivision), RD Land Use
193224	16	COLVILLE STREET	NEWTOWN	Land Use Consent for a second residential dwelling.	Yes - provided but not to standard	Yes - second crossing	No	No	No	No	Yes	Yes	No	No	Restricted Discretionary
260519	55	HUNGERFORD ROAD	HOUGHTON BAY	Subdivision and Land Use: Tow lot fee simple subdiviion and a new dwelling and earthworks	No	Yes - location of crossing	No	No	Yes - 37.3%	No	Yes	Yes	No	Yes	Non- Complying (Site Coverage)
216079	119	HOBART STREET	MIRAMAR	Land Use: Second (infill) dwelling	No	No	No	No	Yes - 38.67%	No	Yes	Yes	No	No	Restricted Discretionary
273102	26	WILBERFORCE STREET	MIRAMAR	Land Use: New second dwelling.	Yes - related to structure in legal road i.e. not entirely contained in the site	No	Yes - deck	Yes - dimension, area okay	No	No	Yes	Yes	No	Yes	Non- Complying (Recession Plane)
237734	30	SEATOUN HEIGHTS ROAD	SEATOUN	Land Use;2nd Dwelling & Residential Additions	No	Yes	No	No	Yes - 41.5%	No	Yes	Yes	No	No	Restricted Discretionary
281645	7	CHAMBERLAIN ROAD	KARORI	Land Use: New dwelling	No	No	No	No	No	No	Yes	No	No	No	Restricted Discretionary
332920	25	QUETTA STREET	NGAIO	Land Use: Construction of a second residential dwelling in front of the existing	Yes - insufficient size	No	No	Yes	No	No	Yes	Yes	No	No	Restricted Discretionary
395612	149	WADESTOWN ROAD	WADESTOWN	Land Use: Garage with second dwelling above	No	Yes - size of crossing and more than one	No	No	Yes - 42.85%	No	Yes	Yes	No	Yes	Non- Complying (Site Coverage)
370375	9	BOUNDARY ROAD	KELBURN	Land Use: Second household unit	No	No	No	No	No	No	Yes	Yes	No	Yes	Restricted Discretionary

# APPENDIX 2-URBAN DESIGN

# **INFILL HOUSING TYPOLOGIES**

Infill dwelling typologies (based on the reviewed sample) fall into four basic categories:

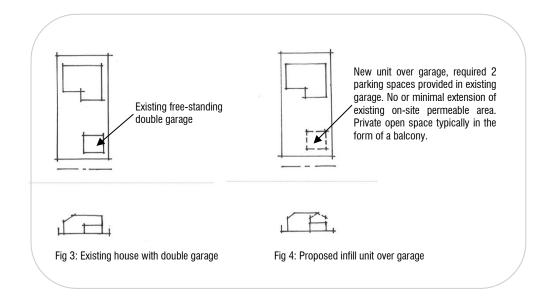
#### Stand-along houses (the predominant typology)



#### New units built over existing garages

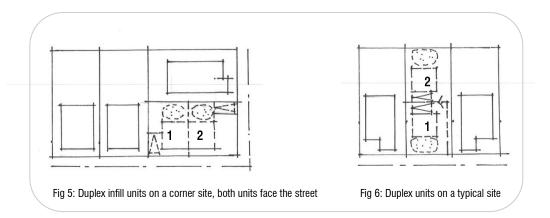
Recurring issues: breaching the infill household unit height limit although being a single level unit and non-compliance with ground level open space requirements.

This typology produces relatively small dwellings. It tends to work well in streetscape terms and potentially provides integrated garaging for both dwellings without the need to significantly extend existing impermeable on-site area.



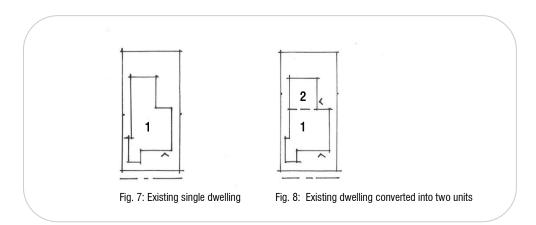
#### Duplexes / semi-detached units

This typology occurs when both units are new and built at the same time. It allows for a comprehensive approach to addressing carparking and private open space requirements and resolving privacy issues.



#### Conversion of existing large dwellings into two self-contained units

The conversion can occur either horizontally or vertically for 2-storey dwellings. Recurring issues: providing the required private open space and to a lesser extent car parking.



# TYPICAL SITE LAYOUTS

Typical site layouts (based on the reviewed sample) and associated issues include:

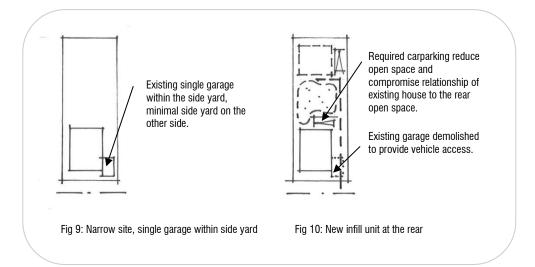
Generally flat sites with a regular shape, new unit located either in front or at the rear of the existing house

Recurring issues:

• difficulty in providing on-site parking - this results in either using road reserve for carparking (if available) or compromising open space arrangements and limiting site planning options in order to allow for vehicle manoeuvring/carparking space. This sometimes occurs even when the new unit is two-storey (i.e. with a smaller footprint, albeit requiring a consent). In this sense, vehicle

access/carparking provisions become a primary consideration for the viability of new infill housing;

providing on-site parking is a particular issue for new units on long but narrow sites where in
many cases the garage of the existing unit needs to be demolished to allow for vehicle access to
the new unit, while still needing to find space and provide a carpark for the existing unit;



- providing the required ground level open space due to limitations imposed by the location of the existing house and car parking/vehicle access requirements;
- breaching the height limit existing infill household unit height limit promotes single-storey units as a permitted activity. However, larger infill units (3+ bedrooms) require larger footprints, i.e. greater site coverage. This limits the available area for open space and/or vehicle movement/parking, as well as preventing more effective parking solutions (e.g. ability for an 'integrated garage' outcome). Hence, considering the alternative of a two-storey unit with a smaller footprint, which, in turn requires a consent. In many respects the height limit in the context of permitted development provisions is most suitable primarily for smaller dwelling units;

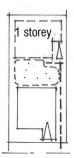


Fig 11: Large single-storey infill units (higher site coverage and difficulty in addressing open space and carparking requirements)

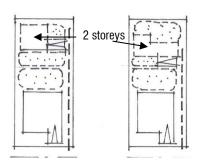
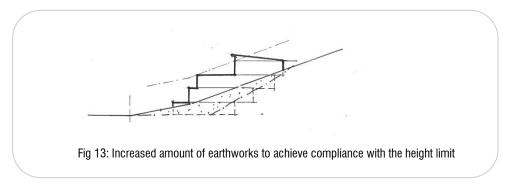


Fig 12: Two storey infill units allow for alternative site layout options with larger open space

#### Sloping and generally irregular in shape sites, new unit typically 2+storeys

#### Recurring issues:

- limited ability to provide required ground level open space. Typical outcome is providing decks with a smaller but highly usable area;
- breaches of recession planes;
- actual height of new units is typically 3 + storeys as seen from the street (but in some cases still closely complying with the height limit). This is achieved by increasing the amount of excavations to fit in as much as possible within the height limit while allowing for an integrated garage and a larger gross floor area;



difficulty in providing on-site carparking due to site slope/configuration or providing it at the expense of greater earthworks and/or using road reserve.

### **GENERAL OBSERVATIONS**

- Many sites can potentially accommodate an infill unit. However, often the location of existing dwellings affects site planning options for new units an issue that is sometimes exacerbated by the site's topography and/or configuration. This, coupled with the current permitted infill development provisions (which promote single storey dwellings), affects the ease of site redevelopment.
- In many respects the current height limit in the context of permitted development provisions is most suitable primarily for smaller dwelling units.
- In most cases, infill developments which breach District Plan provisions (re height, recession planes, opens space and/or carparking) result in acceptable outcomes, albeit requiring a resource consent.
- 'Relaxing' height provisions and providing a greater level of flexibility in addressing open space and
  car parking requirements would help to expressly promote infill development, particularly on the not
  'so easy' and more challenging sites that nevertheless could be suitable for redevelopment.

# APPENDIX 3-INTERVIEW NOTES

#### Wellington City Council - Hamish Dean, Bill Stevens, Laura Brownlie and Sally Clarkson

#### Plan Change 56

- Plan Change 56 a response to what was perceived as a significant problem resulting from two storey infill development that was seen as being out of character with the existing neighbourhood(s). Miramar was offered up as an example with an existing pattern of low rise bungalows being punctuated by 'large' two-storey dwellings.
- Effect was compounded by the two-storey infill that was occurring being generally for larger houses of 120+m².
- The interviewees wondered whether that was a product of its time and whether smaller dwellings may become more common now. Noted the inherent desire to maximise development to permitted standards and the underlying economics relevant here.
- However, unsure how significant an issue it was as a number were simply progressing with a building consent and not needing a resource consent.
- PC56 had the effect of slowing down infill development, arguably significantly.

#### Height

- A positive of PC56 and the infill height limit has been that Council has had the ability to influence outcomes through the consent process. This includes through the consideration of the Residential Design Guide.
- 800m<sup>2</sup> site cut-off for infill housing units is entirely arbitrary. Sloping sites may well comply
  with this where the only buildable space may be constrained to a much smaller area, effectively
  meaning the 'site' is in fact much smaller in practice.
- Concerns around building height are in fact often tied to concerns around decks and overlooking from them, less so concerns about bedroom windows for instance.

#### Open Space

- Should be seen as a density control more so than an on-site amenity control.
- General feeling that there is some flexibility in how this standard is applied i.e. for noncompliance with the standard.

#### Car Parking

- Agreement that it is not uncommon for applicants to approach regarding not providing an onsite car park.
- Agreement that there is often a resistance to street parking from a traffic safety perspective.
- Existing off-street parking is often going unused with residents parking on-street.

#### Subdivision

- Did not agree that 'build first' was as significant an issue as it may be perceived to be i.e. it is not necessarily the starting point.
- Agreed that maybe it be turned to more often than it could be however i.e. that other options
  aren't explored first.
- Maintained that it was important to ensure a new lot could accommodate a level of permitted development, rather than hoping for the best later.

#### Design Guide(s)

- Subdivision design guide of little benefit in 1+1 scenarios and not utilised.
- Residential design guide can be used but is used sporadically.
- Agreed that the application of the residential design guide to infill development could be clearer
  in the plan.

 Residential design guide arguably applied informally through the consideration of any resource consent proposal – in terms of general urban design principles. Rarer for a specific assessment to be requested from an urban designer.

#### Potential Changes

- Consideration of the policy framework is important if changes are going to be made to standards – the current focus very much supports maintain existing character and amenity.
- Remove infill height limit.

#### Incite, Spencer Holmes, Patchwork Architecture and Spacecraft Architecture

Interviewees – Lindsay Daysh, Hannah McCashin, Tom Anderson, Ian Leary, Sally Ogle and Caroline Robertson

#### **Positives**

- No lot size minimum is excellent.
- 2 dwellings (i.e. 1+1) as a permitted activity is positive.
- Pre-application meetings are generally useful.

#### Plan Change 56

- 50m² open space requirement, coupled with 4.5/6m height cap had the effect of significantly reducing infill development numbers.
- Better to apply design guidance (and design review) regarding privacy and overlooking.
- Notwithstanding the above, historically infill wasn't as significant as was perceived PC56 driven by a NIMBY reaction, and not a proliferation of development.

#### Height

- The height limitation is key:
  - Height restriction unjustified a blunt instrument.
  - 4.5m would work for a minor unit.
  - Perverse effects e.g. need to 'split' a duplex in height, where one unit could have the same effects.
  - Breaching infill unit height limit requires greater justification (often a PB argument)
     but not an automatic limited notification trigger.
  - Real focus is on PB knowing you will likely achieve consent, but made to jump through hoops.
  - Justification in PC56 was around character in large part is character really that strong in Outer Residential area as compared to say Inner Residential?
  - How many Wellington houses are actually 4.5m in reality?
- Strong relationship with site coverage. Capping height has the effect of pushing out…but above 42% is a non-complying activity. Artificial constraint on dwelling size.
- Overlooking should be taken seriously, but can be addressed in other ways rather than just a crude height cap.
- Recession planes think about applying inner residential standard in outer residential rather than just a blanket 2.5m 45 degree.
- Infill height is strictly applied vis-à-vis objectives and policies and therefore notification.
- Objectives and Policies are incredibly important now.
- Look to adopt specific rules/standards around overlooking and privacy window positioning/size/treatment, building orientation, screening – there are various methods.
- 4.5m/6m is now a universal cap even where there might be no to negligible effects, and leads to likely notification to neighbours.
- The infill height limit has little point has impact of reducing infill potential.
- Works against site coverage.
- A higher height limit (i.e. 8m) more inclination to do smaller footprint but taller.

- Height works against greater variety in housing stock it makes it smaller, when coupled with setbacks and other standards.
- Site coverage is an important control in respect of its relationship with height and other bulk and location controls i.e. site coverage important for amenity/green space.
- Generally, find that Council is more flexible with site coverage, but wonder if that flexibility is misplaced and greater flexibility could be achieved elsewhere.
- Privacy and overlooking is taken very seriously by the Council perhaps overly so.

#### Bulk and Location (Excluding Height)

- Rules encourage buildings ('slugs') in the centre of a site (setbacks, recession planes).
- Push to boundaries, particularly southern, allowing for more usable space in desirable part of the site
- Rules work against a courtyard house typology setback and access to the rear.
- Indoor verandahs should count towards open space and possibly not against site coverage.
- Recession planes are designed for flat sites. Weird outcomes occur with topography. Should be looked at. Has a relationship with earthworks which should also be considered.
- Move on hard surfacing i.e. reduce/introduce a permeability standard considering this vis-à-vis
  car parking and site coverage.

#### Car Parking

- 2 car parks for an existing single dwelling should mean standard achieved (i.e. 1 per) for a second dwelling.
- Move to remove car parking requirements all together? Or a more nuanced approach?
- Has a strong relationship with encroachment licenses and related RC requirement.
- Problematic often hard to fit entirely within a site and brings costs.
- Not as concerned as others about applying for an on-street solution.
- Car parking is the single biggest issue:
  - Topography in Wellington is a critical impediment. On site car parking often requires a car deck, or excavation. Both have significant impacts on costs, driving up house price, driving down feasibility.
  - Car parking is expensive. Car parking also adds value, therefore it is safe to assume that where it can be economically provided, it will likely be provided.
  - Examples of otherwise good infill house developments that are difficult to progress as parking is prohibitive. Parking survey done and unlikely to be supported by Council.
- A more nuanced approach is required, considering:
  - Proximity to public transport
  - Street context what is the existing situation on the street? For example, do a lot of houses have 1 or 2 car garages that aren't being used? Why should that punish on street parking by others?
  - Increase in car sharing services.
  - Current approach is blanket = 1 car park per dwelling. Infill housing can be anything from 3 to 4 bedrooms, to a sleepout. Could tie car parking requirement to dwelling size by bedroom number. Auckland Plan (Mixed Housing Suburban Zone) provides useful approach.
  - Bike parking (e-bikes being a game changer) as a driver of modal change.
- It is a silly outcome to sacrifice an existing on-street car park, simply to create an off-site car
- Feeling that parking is designed for large cars.
- Experience is that there is little flexibility in the Council's application of the car parking rule, certainly as compared to other rules.
- On-site car parking requirement competes with valuable site space that affects site layout options, open space and amenity space.

#### Subdivision

- Build first is Council protecting themselves.
- · Subdivide first should be more accessible.
- Relationship with car parking example of Council requiring a formed car parking space as part
  of a subdivision (i.e. without development).
- Build first can be difficult for applicants in respect of funding.
- Build first employed because it is convenient for the Council.
- Restricted discretionary but just need to show a 'feasible' dwelling.
- Shape factor a more useful standard than minimum lot size.
- Moving away from build first, may increase the amount of land supply being made available –
  i.e. people undertaking subdivision but not building, and simply selling their site could tie in
  with consent notices restricting future development.
- Always advise clients to build first.
- However, that can have financing implications.
- Servicing can be problematic without a build first. Where servicing works are conditional on building works being undertaken and to avoid doubling up on costs.

#### Other

- No experience of design guide being applied.
- Infill section of subdivision design guide not really used.
- · Design guide currently used where non-complying.
- Subdivision design guide of little use in 1+1 scenarios.
- Infill is useful as a source of housing supply, but its design (and bulk and location controls are important) needs to consider future proofing – i.e. upping density again.
- Residential design guide never had it applied to an outer residential area 1+1 situation.

#### Potential Changes

- Change height and open space requirement (and/or dimension).
- Site coverage addresses open space requirement.
- But design guide could be amended to address other requirements privacy, overlooking, sunlight access coupled with performance standards.
- Increase certainty of permitted baseline application.