BEFORE THE HEARINGS PANEL

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of proposed Plan Change G: Aokautere Urban Growth to the Palmerston North City Council District Plan

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SECTION 42A TECHNICAL REPORT OF RUTH ALLEN AND GARETH NICHOLL ON BEHALF OF PALMERSTON NORTH CITY COUNCIL

TECHNICAL – FEASIBILITY ASSESSMENTS

Dated 15 September 2023

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY

1. This s 42A technical report outlines the results of modelling that has been undertaken by The Property Group Limited to assess the financial feasibility of medium density residential development within Aokautere as provided for under the proposed Plan Change G (**PCG**) provisions.

2. The assessment has been undertaken to address concerns raised in submissions that the proposed provisions in the medium density village area of the Aokautere Greenfield Residential Area (**GRA**) do not enable a feasible development outcome.

3. The modelling undertaken for a range of density options in PCG demonstrates:

   (a) All development scenarios, being a lower medium-density scenario at 50 dwellings per hectare and a higher medium-density scenario at 80 dwellings per hectare (as provided for under the proposed provisions) and low density (16 dwellings per hectare) under the operative provisions, do not result in a viable development opportunity in current 2023 market conditions.

   (b) While current market conditions in 2023 do not support residential development opportunities in Aokautere, the financial viability of residential development in general is likely to improve over time.

   (c) This is particularly the case for the higher medium-density scenario (80 dwellings per ha) which is likely to become more profitable than the low density scenario over time. The lower medium-density scenario (50 dwellings per ha) will also improve but is not expected to become financially feasible within the timespan of the model (up to 2031).

4. Residential development in Aokautere is challenging in current market conditions. This is not unique to Aokautere and is primarily due to an increase in construction costs and declining residential market values across most areas in New Zealand since 2021.

5. A review of market conditions over the last 10 years (and longer term) indicates that the current relativity between constructions costs and residential market values is disproportionate, i.e. costs have risen quickly and values have fallen sharply.

6. It is anticipated that the market will recover over time, especially in light of the anticipated high demand for new homes into the future. As the market stabilises a balance between development costs and land/house values will establish to enable the delivery of homes.

7. Given the instability of current market conditions, we have considered the viability of residential development as enabled by PCG at three points in time to demonstrate past, present and future financial feasibility.

8. The modelling results are attached to this report as **Attachment A.** Inputs into the modelling and the basis from which the assumptions have been drawn are attached at **Attachments B-D**.

9. These results show that overtime it is anticipated that the feasibility of residential development will improve with higher medium-density development becoming a more profitable option than low density development.

B. INTRODUCTION

Author 1 – Ruth Allen

4. My full name is Ruth Allen. I am the Principal Advisor, Urban Regeneration, at The Property Group Limited (**TPG**).

5. I have 20 years' experience in the fields of urban planning, housing, population growth, and development feasibility. I specialise in planning for housing and urban regeneration at a precinct scale and integrating consideration of development feasibility into the development of planning provisions and is an input into major urban planning studies.

6. I have worked on a wide range of feasibility studies. For example, this includes:

(a) The assessment of the feasibility of high density and medium density development across centres in Christchurch City and preparation of evidence for the Intensification Plan Change 14;

(b) Feasibility assessment of residential medium to high density development in the Whāngarei Centre, Whāngarei District Council 2021;

(c) Residential capacity analysis for the precincts along the proposed Wellington Mass Rapid Transit Route, Let's Get Wellington Moving, 2020; and

(d) Feasibility Assessment of the Medium Density Residential Zone, Porirua City Council, 2020.

7. I have been engaged by Palmerston North City Council (**Council**) since June 2023 to assess the financial feasibility of development within the Medium Density Village area of PCG in response to submissions received. I have not been involved in the plan change process prior to this.

8. In this assessment my role has involved the project management of the financial feasibility assessment and interpretation of the results as they relate to likely take up of development opportunities over time. This has included collating all relevant expert inputs required to undertake the feasibility modelling, including design inputs, market valuation advice and development costings.

Author 2 – Gareth Nicholl

9. My full name is Gareth Nicholl. I am a Senior Property Consultant at The Property Group Limited.

10. I am a former Registered Valuer with 21 years' experience in the fields of valuation and property consultancy including feasibility assessments for residential and other types of property developments.

11. My role in this assessment has involved developing the feasibility models in the form of hypothetical subdivision budgets and establishing the assumptions and inputs (excluding yield and construction costs which were provided by others) to those budgets across the various timepoints.

C. CODE OF CONDUCT

12. Both authors make the confirmation below.

I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical report has been prepared in accordance with that Code. I confirm that I have not omitted to consider material facts that might alter or detract from the opinions that I express. The opinions I express are within my area of expertise, except where I state I am relying on the opinions of other reporting officers.

D. SCOPE

13. This report provides an assessment of the financial feasibility of medium density development potential, as enabled under the proposed provisions of PCG. The assessment is based on a nominal development site located within the proposed Medium Density Village area of the GRA.

14. For the purpose of this assessment, 'feasible' means that development is commercially viable, taking into account the costs, revenue and yield of potential residential development in the GRA.

15. We have tested the feasibility of potential development that may be enabled within the Medium Density Village area of the GRA by adopting a nominal 5,750m^2 site located centrally within the PCG area and testing the following range of densities:

(a) Medium density at 80 dwellings per hectare (referred to as the higher medium-density scenario);

(b) Medium density at 50 dwellings per hectare (referred to as the lower medium-density scenario); and

(c) Low density at 16 dwellings per hectare (as is enabled by the current zoning).

16. The assessment was undertaken at the following timescales:

(a) Past market conditions as of 1 April 2021, being a time when the residential property market was in a growth phase but not 'overheated' and construction costs were not yet rising rapidly;

(b) Current market conditions in 2023, in which construction costs are relatively high and sale prices are relatively low; and

(c) Projected market conditions in 2032 (based on appreciated sales prices and construction costs. The multipliers are based on historic value and cost increases for the nine-year period from 2012 to 2021).

17. The feasibility assessments are based on:

(a) The concept drawings completed by McIndoe Urban, included at **Appendix B.** These drawings have been completed as concepts only for the purpose of modelling only;

(b) Quantity Surveyor costings as at 2023 provided by AECOM, refer **Appendix C**;

(c) TPG's analysis of residential sales in Palmerston North, refer **Appendix D**; and

(d) Quotable Value's House Price Index and CoreLogic's Cordell Construction Index, refer **Appendix D**.

E. METHODOLOGY AND ASSUMPTIONS

18. Three feasibility assessments were completed for each of the three density levels (80, 50 and 16 dwellings per hectare). A copy of the feasibility outputs for each scenario is attached at **Appendix A**.

19. The feasibility assessments are based on hypothetical subdivision budgets for the nominal area of 5,750m^2, as follows:

(a) The anticipated revenue from selling the completed dwellings is calculated based on a review of residential market sales data to establish revenue assumptions. As there is currently limited evidence of medium to high density residential sales in the local area, revenue assumptions were drawn from an

analysis of sales of smaller typologies (residential units) from other areas within Palmerston North and adjusted to align with the relativity of those suburbs to sales evidence in Aokautere.

(b) The following allowances are then deducted from the revenue:

i. GST and selling costs, comprising agent's commission and legal fees;

ii. Profit, set at 20% of total outlay;

iii. Overall project contingency, set at 5% of total outlay;

iv. Direct development costs, comprising the costs to construct dwellings and subdivide the land, including professional fees, physical works and contingencies; and

v. Developers' holding costs for half the project duration, comprising rates and interest payable on the total outlay. The interest rates used vary across the three time points at 4.5% in 2021, 7.5% in 2023 and 6.5% in 2032. To enable a more consistent comparison across the three points in time, we have also run the models at a flat interest rate of 6.5% across all scenarios and time points.

(c) The budget results in a residual land value. Viable development opportunities are reflected in positive residual land values that exceed non-development rural values, as this indicates that residential development is the 'highest and best' use of the land.

20. The key assumptions upon which the assessments and findings are made, are listed below:

(a) The market conditions for 2021 are assessed as of 1 April 2021, which is an approximate midpoint in the property market cycle. Refer to **Appendix D** for more information;

(b) The project time horizon is assumed to be nine years, with development commencing in 2032; and

(c) The 2021 revenue and costs are not based on actuals. They have been indexed from 2023 values and costs as detailed in the market review included at **Appendix D**.

(d) The projected 2032 assessments are based on past trends for values and costs for nine years between 2012 and 2021, as follows:

i. The period between 2021 and 2023 has been excluded due to the 'steepness' of recent value and cost increases being 'out-of-step' with longer-term averages;

ii. However, the 2032 value and cost appreciation multipliers have been applied to current 2023 values and costs. This ensures that recent value and cost increases are captured in the 2032 projections without distorting the appreciation multipliers;

iii. Sale price appreciation to 2032 is set at 90% increase on 2023 values, being the approximate increase in average house sale prices from 2012 to 2021; and

iv. Cost appreciation to 2032 is set at 36% increase on 2023 costs, being the approximate increase in residential construction costs from 2012 to 2021.

(e) No contamination is present.

(f) The estimated project durations are 4 years for the higher medium-density scenario (80 dwellings per ha), 3 years for lower medium-density (50 dwellings per ha) and 2 years for low density.

(g) The break-even period is half the project duration.

F. FINDINGS

21. The three feasibility assessments are presented in the summary table included at **Appendix A**. The table presents the feasibility of each density level across the three time points 2021, 2023 and 2032.

22. The modelling results demonstrate that development is not currently feasible for all three density levels when the 2023 values and costs are applied.

23. As at 2021, both the low density and higher medium-density scenarios would have resulted in a viable development opportunity at that time (shown by the positive residual land value) as follows:

    (a) The low-density option (16 dwellings / hectare) results in land value of $127 per square metre, which equates to $1,270,000 per hectare.

    (b) The higher medium-density option (80 dwellings / hectare) results in a land value of $276 per square metre, which equates to $2,760,000 per hectare.

    (c) The 50 dwellings per ha medium density option did not result in a viable development opportunity with a negative land value of -$395 per square metre, which equates to -$3,950,000 per hectare.

24. Projecting out to 2032, profitability of the low and higher medium density scenarios improves due to revenue from sales increasing more than construction costs.

25. For the 2032 projection:

    (a) The low density option (16 dwellings / hectare) results in a land value of $352 per square metre, which equates to $3,520,000 per hectare.

    (b) The higher medium density option (80 dwellings / hectare) results in a land value of $683 per square metre, which equates to $6,830,000 per hectare.

26. While the higher medium-density scenario does show a feasible outcome as at 2021 (i.e. a positive land value), the results demonstrate that the lower density option is more profitable (based on a comparison of the percentage return on investment on cost and land value). This is reflected in market evidence which shows that there is limited evidence of this type of dwelling on the local market at this time.

27. In the 2032 model, the profitability of the higher medium-density scenario increases by a greater proportion from the 2021 model than the low density scenario (when interest rates are kept consistent in the modelling). It is anticipated therefore the development

sector would be inclined to deliver this typology, especially in light of the latent demand identified by Mr Michael Cullen, the urban economics expert, for the Council.[1]

28. For the lower medium-density scenario, whilst feasibility does improve over time, it still results in a negative residual land value across all three assessment years because the yield (dwellings per hectare) is insufficient to offset the costs of construction.

G. ANALYSIS & CONCLUSIONS

29. The modelling undertaken demonstrates that whilst current market conditions in 2023 do not support financially feasible residential development opportunities in Aokautere, the financial viability of medium density development is anticipated to improve over time. This is because, based on a review of past market conditions, it is anticipated that revenue from sales is likely to increase more than construction costs over time.

30. In the shorter term, when the profitability of medium density development is not higher than lower density options, it is anticipated that the development sector is likely to continue to deliver lower density residential development.

31. This is reflected in our review of market evidence which shows that to date there has been limited delivery of medium to high density residential development within Palmerston North and no evidence of this type of development in Aokautere. The need (and demand) for housing diversity to match the City's changing demographics is discussed in the s 42A report of Mr Cullen.[2]

32. As the market changes over time and smaller residential typologies become supported by market demand (as is anticipated by the household projections discussed by Mr Cullen, which indicate a continued significant proportion of smaller household sizes[3]) it is anticipated that higher medium-density development will become a more profitable and feasible development opportunity.

[1] Section 42A Report – Urban Economics, Michael Cullen dated 15 September 2023, paragraph 26.
[2] Section 42A Report - Urban Economics, Michael Cullen dated 15 September 2023, paragraphs 59-69.
[3] At paragraph 1(b).

33. It is considered on this basis that the proposed provisions under PCG support future feasible development opportunities and do not obstruct a competitive land and development market.

Ruth Allen and Gareth Nicholl

15 September 2023

H. REFERENCES

- Corelogic Housing Affordability Report. (2021, Q2).
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I. APPENDICES

- **Appendix A**: Feasibility Summary
- **Appendix B**: Scenarios Tested (Plans)
- **Appendix C**: Cost Assumptions
- **Appendix D:** Market Evaluation

Appendix A - Summary of the results of the feasibility modelling

	Higher medium density Mixed apartments and terrace houses			Medium density Semi-detached houses			Low density Detached houses		
Site area (sqm)	5750			5750			5750		
No of dwellings/units	50			31			9		
Total floor area	4252			5280			2010		
Project duration (years)	4			3			2		
Assessment year	**2021**	**2023**	**2032**	**2021**	**2023**	**2032**	**2021**	**2023**	**2032**
Average value per dwelling/unit	$876,920	$797,200	$1,514,680	$1,277,419	$1,161,290	$2,206,452	$1,474,000	$1,340,000	$2,546,000
Gross Realisation	$43,846,000	$39,860,000	$75,734,000	$39,600,000	$36,000,000	$68,400,000	$13,266,000	$12,060,000	$22,914,000
Net realisation after GST and selling costs	$36,954,000	$33,574,000	$63,841,000	$33,398,000	$30,348,000	$57,692,000	$11,190,000	$10,169,000	$19,330,000
Profit allowance	$5,913,000	$5,372,000	$10,215,000	$5,344,000	$4,856,000	$9,231,000	$1,790,000	$1,627,000	$3,093,000
Construction costs incl contingency	$21,964,000	$25,841,000	$35,143,000	$23,808,000	$28,010,000	$38,093,000	$6,840,000	$8,046,000	$10,944,000
Fees incl contingency	$3,322,000	$3,908,000	$5,315,000	$3,355,000	$3,946,000	$5,366,000	$964,000	$1,082,000	$1,469,000
Finance and rates	$2,690,000	$4,063,000	$6,685,000	$1,825,000	$2,757,000	$4,535,000	$417,000	$627,000	$1,028,000
Total costs	$27,976,000	$33,812,000	$47,143,000	$28,988,000	$34,713,000	$47,994,000	$8,221,000	$9,755,000	$13,441,000
Residual land value	$1,587,000	-$6,953,000	$3,930,000	-$2,270,000	-$10,435,000	-$1,840,000	$731,000	-$1,620,000	$2,023,000
Residual land value per square metre	$276	-$1,209	$683	-$395	-$1,815	-$320	$127	-$282	$352
Residual land value per square metre, with consistent finance costs at 6.5% for comparison purposes	$70	-$1,116	$683	-$534	-$1,751	-$320	$96	-$268	$352

Appendix D – Market Evaluation

Palmerston North Overview

Palmerston North offers affordable housing when compared to the national average.

From 2018 and up to the start of 2022 the city experienced significant house price growth driven by historically low interest rates and a shortage of housing.

Interest rates, underpinned by the Official Cash Rate (OCR), are a key driver of demand, and therefore value, of residential property. In October 2021 the OCR was lifted from the historic low of 0.25%. After a series of raises throughout 2022 and 2023, it now sits at 5.5%.

According to Quotable Value, the market peaked in January 2022. At that time, the Palmerston North average house price was $775,816. As at 1 August 2023 the average is $622,546, a 19.7% drop.

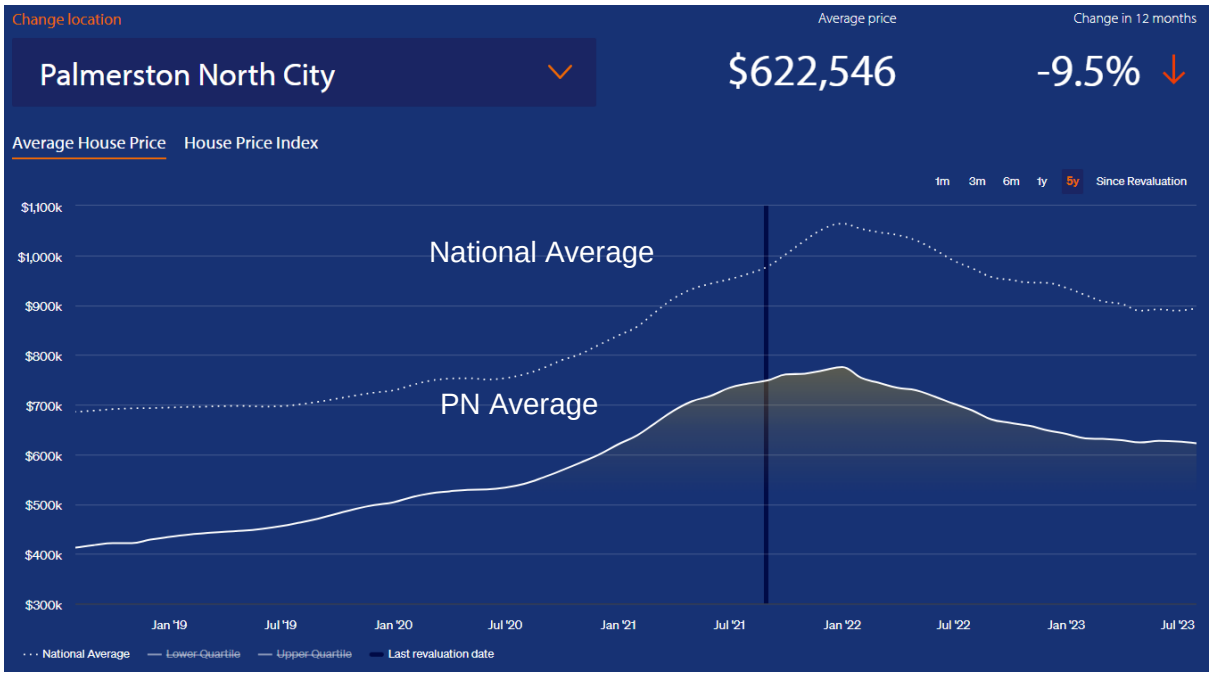

Image 1. QV House Price Index showing the average house prices for Palmerston North and nationwide between August 2018 and August 2023 (QV House Price Index)

Aokautere Overview

Aokautere is one of the higher value suburbs within Palmerston North. The QV House Price Index shows that the upper quartile average house price in Palmerston North is $910,529, as at 1 August 2023.

Currently, Aokautere comprises relatively few properties and therefore few sales of properties occur each year. Therefore, the sample size for Aokautere is too small to gauge any meaningful information. However, the adjoining suburb of Fitzherbert is more established, with comparable amenities and semi-rural ambience. According to Opes Partners the average price in Fitzherbert as at June 2023 was $903,250.

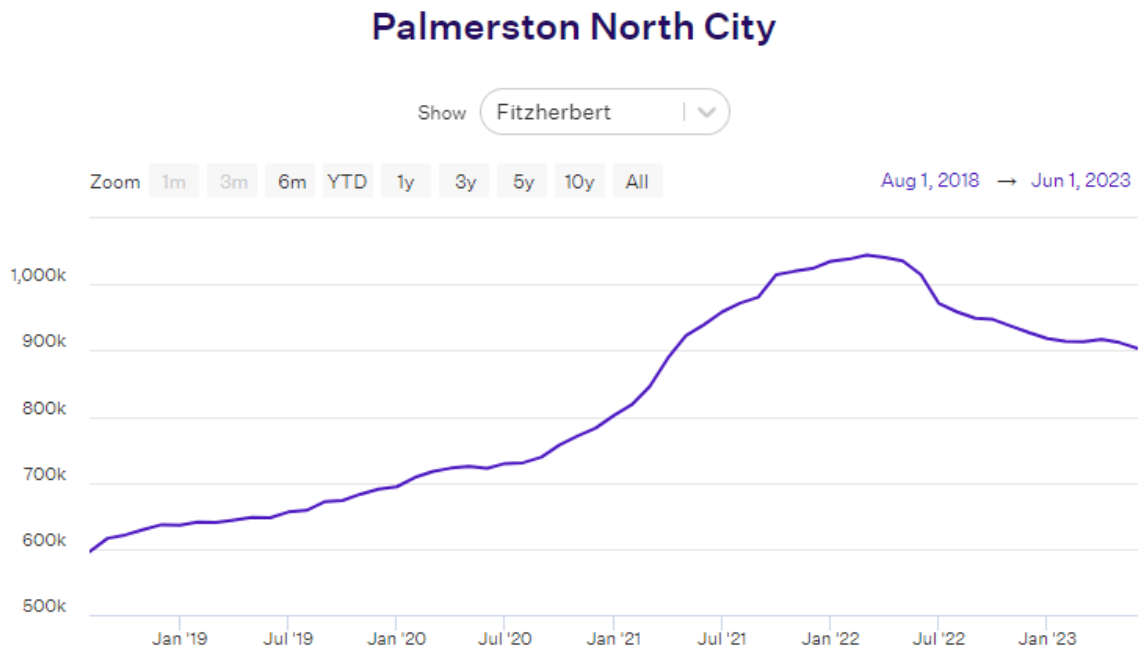

Image 2. Graph from Opes Partners showing the average house prices for Fitzherbert between August 2018 and June 2023 (🏠 Manawatu-Whanganui House Prices (2023) | Manawatu… | Opes Partners)

Medium and High Density Residential

Currently there is no medium or high-density residential development in Aokautere.

There have been a small number (less than 20) of medium density type residential properties sell in Palmerston North in last 12 months. These properties typically comprise two to three

bedroom units constructed within the past 20 years, with floor areas ranging 86 to 143 square metres.

Those sale prices ranged from $4,300 to $8,300 per square metre depending on location, size, age and quality of the dwelling. Aokautere is a relatively high-value suburb and any new medium or high-density development in the suburb would likely achieve values towards the upper end of the range, say $7,000 to $8,000.

Residential Construction Costs

Increasing construction costs are another macro-economic factor that has significantly affected the local and national residential property market.

According to CoreLogic's Cordell Construction Index (**CCCI**), residential construction costs have generally increased about 2% to 4% per annum between 2012 and 2021. However, a strong pipeline of consented works and shortages of labour and building materials following the COVID-19 lockdowns resulted in significant cost increases. From mid-2021 costs were rising in excess of 5% per annum with a peak of 10.4% in December 2022. Cost now appear to be stabilising with quarterly rises of 0.6% for each of the first two quarters of 2023 and the year-on-year increase being 6.4% as at June 2023.

Residential Development Market

The volatility of construction costs over the past two years, coupled with falling house prices, has resulted in disproportionate relatively between cost and value compared to historic trends. This has resulted in the market for development land largely going into 'hibernation'.

Nationwide, many residential developments have been halted and very few sales of development land are occurring. However, there are signs of activity returning to the development sector as developers start to position themselves for the next upswing in the residential property market.

Market Cycle

Currently the residential property market in Palmerston North and nationwide is at a low point in the market cycle with relatively low demand and falling prices.

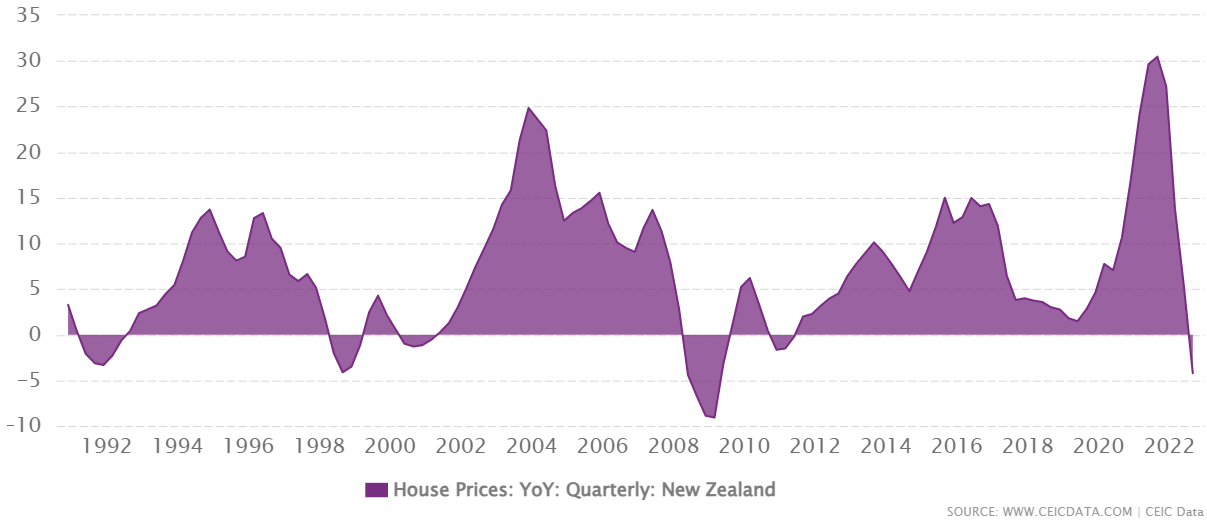

Image 3. Graph from CEIC Data showing NZ's house price growth between 1992 and 2023 (New Zealand House Prices Growth | Economic Indicators | CEIC (ceicdata.com))

Historically, house prices in NZ, excluding Auckland, have averaged growth of approximately 6% per annum.

Residential developments typically occur when the market is in a growth phase. Looking at the above graph, the most recent growth phase where values were increasing more in line with the long-term average was between early 2020 and early 2021. Of course, 2020 was severely disrupted by COVID-19 lockdowns so it is not prudent to use 2020 as a reliable baseline. The first half of 2021 appears to be a more useful comparison.

From the CCCI, the increasing constructions costs began to accelerate in the second quarter of 2021. Therefore, we consider the states of the property market and construction sector between January and April 2021 are a better representation of a positive, but not 'overheated' residential development market. We currently recommend adopting 1 April 2021 for feasibility assessments for proposed residential developments.

2021 Construction Costs

The CCCI records that quarterly cost increases between 2012 and 2021 ranged 0.3 to 1.9%, with most quarters in the 0.6 to 1.3% range.

The three months from April to June 2021 saw a 2.2% increase followed by 1.6% from July to September.

At the end of March 2021, the index figure was 136.2, 15% lower than the latest index figure of 159.5 as at June 2023.

Therefore, as of 1 April 2021, residential construction costs were approximately 15% less than 2023 costs.

2021 House Prices

In 2021 interest rates were rising, following lifts in the OCR. As at April 2021 floating mortgage rates were in the order of 4.5%, rising to 7.5% or more in 2023. Historically, interest rates average about 6.5%.

Sales evidence for Aokautere indicates that current values are at a similar level to those seen in early 2021. However, the sample sizes for both time periods are small and therefore unreliable.

Therefore, we have considered the wider Palmerston North residential market. The QV House Price Index shows that as of 1 April 2021 the Palmerston North index was 2,418 compared to 2,729 at the peak (January 2022) and 2,190 at 1 August 2023.

Therefore, values in April 2021 were approximately 10% higher than they are now.

Looking Forward

We understand development under Plan Change G may have a time horizon of 5 to 10 years before it commences.

To forecast possible cost and value appreciation, we have adopted historic trends, excluding the period 2021 to 2023 due to the 'steepness' of recent value and cost changes being somewhat 'out-of-step' with longer term averages.

The CCCI records data since 2012, so we have adopted the nine-year period from 2012 to 2021 and replicated that period from 2023 and 2032.

The CCCI shows that residential construction costs increased approximately 36% between 2012 and 2021.

Data on the Opes Partners website indicates that values at Fitzherbert increased 90% between 2012 and 2021.

Therefore, we recommend using multipliers between 2023 and 2032 of 190% for revenue and 136% for both direct and indirect development costs.

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Residual land value per square metre	$276	-$1,209	$683	-$395	-$1,815	-$320	$127	-$282	$352
Residual land value per square metre, with consistent finance costs at 6.5% for comparison purposes	$70	-$1,116	$683	-$534	-$1,751	-$320	$96	-$268	$352

Appendix B

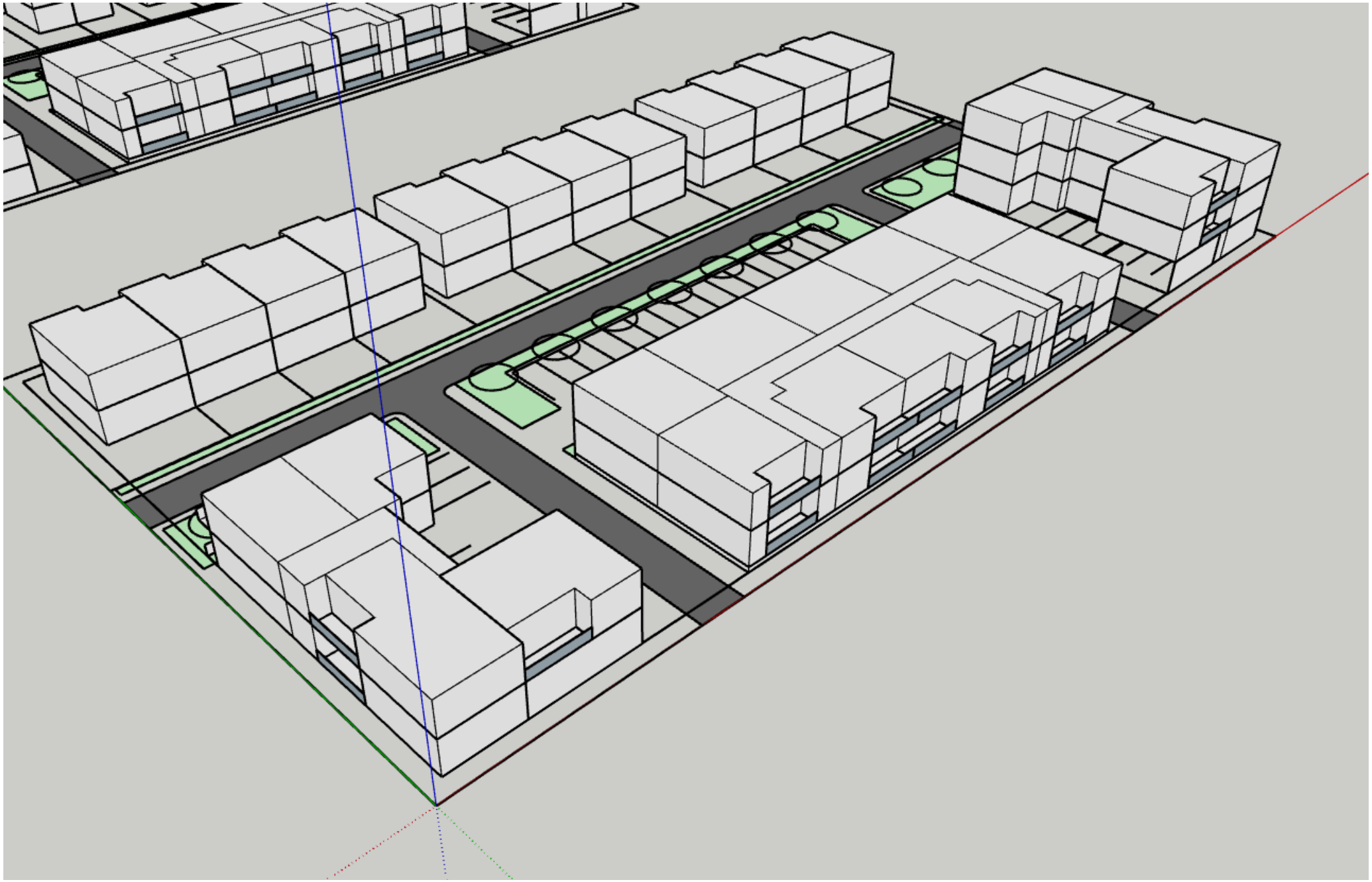
80 dwellings per ha – scenario for modelling

		# Floors	Unit Size (m2)	Combined GFA (m2)	# Units
Building A	A1	2	56	112	7
	A2	2	58	116	
	A3	2	76	152	
	A4	1	68	68	
	Building A GFA			448	
Building B	B1	2	63	126	20
	B2	2	88	176	
	B3	2	72	144	
	B4	2	72	144	
	B5	2	81	162	
	B6	2	81	162	
	B7	2	46	92	
	B8	2	64	128	
	B9	2	61	122	
	B10	2	55	110	
	Building B GFA			1,366	
Building C	C1	3	56	168	11
	C2	3	58	174	
	C3	3	76	228	
	C4	2	68	136	
	Building C GFA			706	

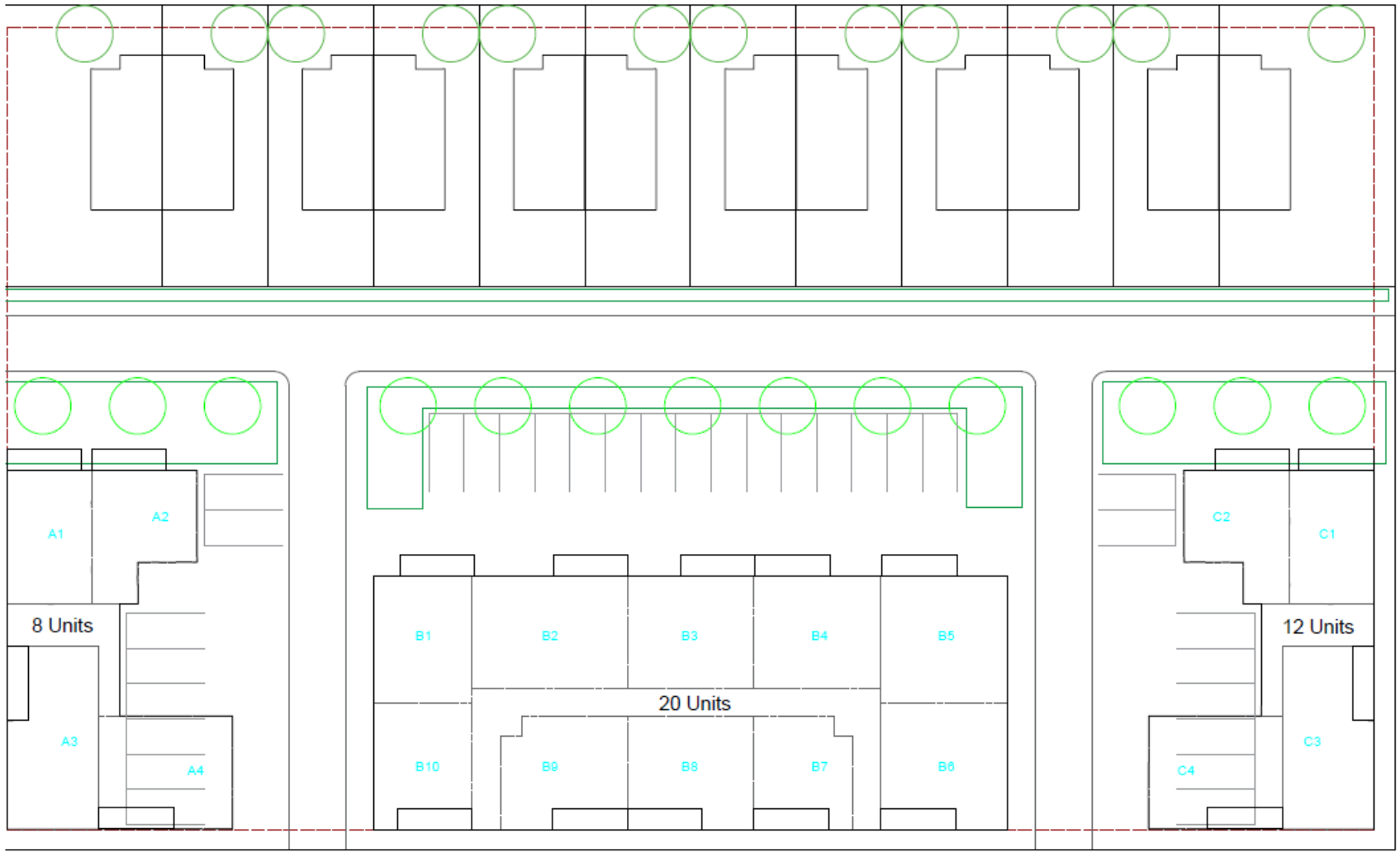
1 Bed Units	14	37%
2 Bed Units	18	47%
3 Bed Units	6	16%
Apartments	38	100%

Total GFA	2,520
Total Site Area	4,000
Floor Area Ratio (FAR)	0.63

		# Units	Floors	footprint	Unit GFA	Total GFA	
Lots Testing	Terrace-2st	12	2	72	144	1,728	
	Semi Det-2st	12	2	53	106	1,272	
	Terrace-3st	12	3	72	197.4	2,369	+ int garage
	Semi Det-3st	12	3	53	140.4	1,685	+ int garage



12 Units



12 Semi units
38 Units
31 CP

50 dwellings per ha – scenario for modelling

Lots

31 Lots Total

27 Lots @ 160sq.m

4 Lots @ 240sq.m

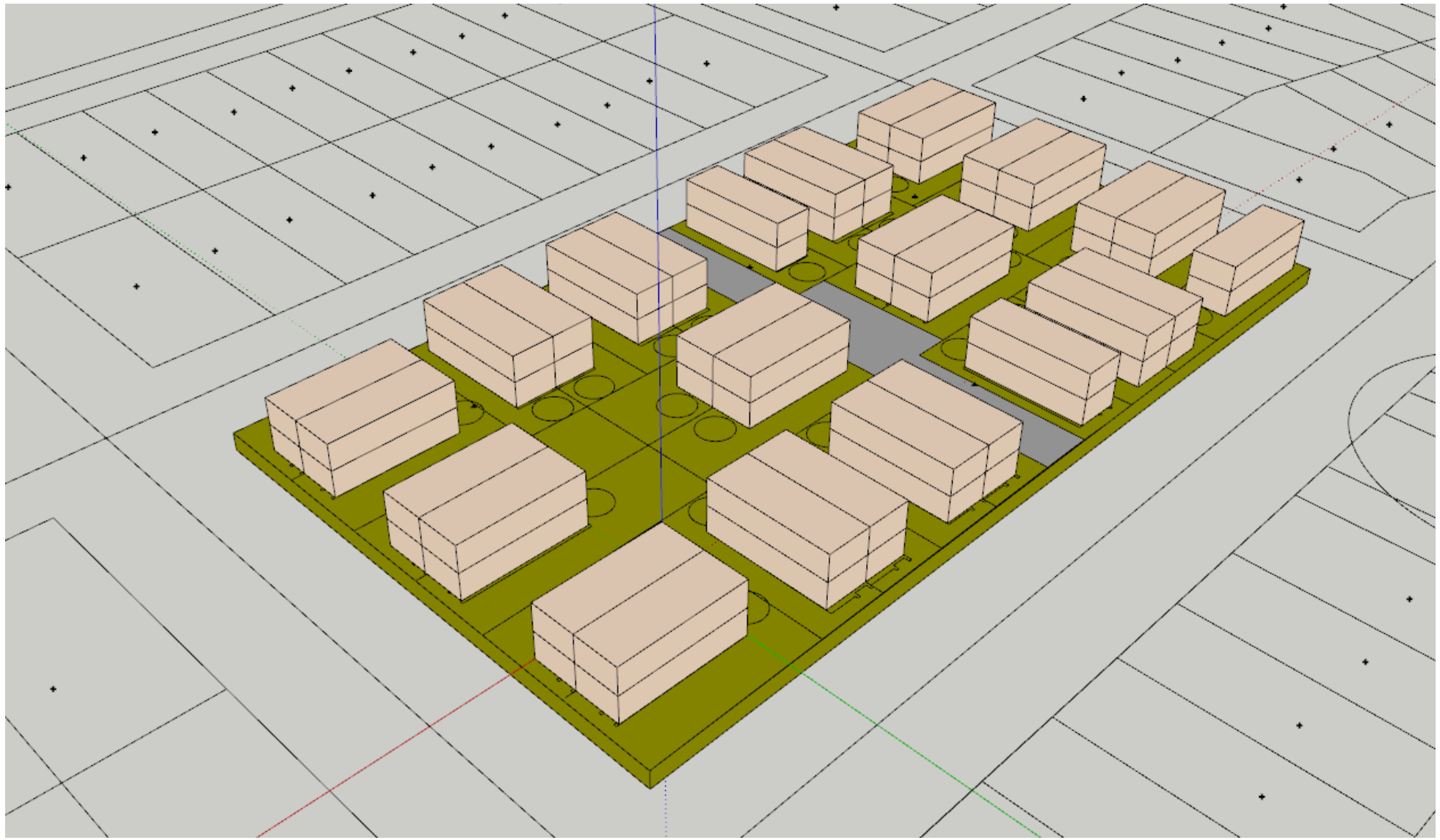
Access lane @ 405sq.m

Dwellings

31 dwellings – 2 Storey / 3 Bed

70sq.m footprint

140sq.m GFA per unit



Appendix C

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14 June 2023

The Property Group
PO Box 49
NAPIER 4140

ATTENTION: Ms. Hayley Brownlie

RE: PNCC – AOKAUTERE, PALMERSTON NORTH

DEVELOPMENT COSTS

Further to the receipt of your correspondence of the 1 June 2023, we include following our estimate of the range of costs for the items listed in your schedule for further discussion.

It is worth noting that there are some significant challenges in the construction industry at the present time, with both access to materials and skilled resources a risk to both programme and subsequently cost. The market pricing is extremely volatile, and although the economic and political forecasters suggest a recession, the construction sector workload in the short to medium term is extremely busy. This should be considered when reviewing the following estimate of costs.

Residential and commercial building rates ($/m2 GFA)

Item	Building Type	Levels	Use	Typology	Affordable	Market	Premium	Notes
1	Low Rise	Level 1-3	Residential - Terrace	2brm	$4,200 - $4,700	$4,700 - $5,200	$6,000 - $7,000	3604 timber framed structure. Excludes lift, siteworks.
				3brm	$4,500 - $5,000	$4,700 - $5,200	$6,000 - $7,000	3604 timber framed structure. Excludes lift, siteworks.
			Residential - Walk-up	Studio	$4,700 - $5,200	$5,250 - $5,750	$6,500 - $7,500	3604 timber framed structure. Excludes lift, siteworks.
				1brm	$4,700 - $5,200	$5,250 - $5,750	$6,500 - $7,500	3604 timber framed structure. Excludes lift, siteworks.
				2brm	$4,500 - $5,000	$4,700 - $5,200	$6,200 - $8,000	3604 timber framed structure. Excludes lift, siteworks.
				3brm	$4,500 - $5,000	$4,700 - $5,200	$6,200 - $7,500	3604 timber framed structure. Excludes lift, siteworks.
			Balcony		$1,500	$2,500	$3,500	
			Commercial office	A-Grade	N/A	$5,500-$6,500	$6,500-$10,000	Excludes Tenant Fitout. Fitout $2,200/m2 - $4,500/m2
			Retail	Shell only	$4,200 - $4,700	$4,500 - $5,000	$5,500 - $6,500	3604 timber framed structure. Excludes lift, siteworks.
2	Low rise	Level 1-6	Residential - Apartments	Studio	$5,500 - $6,000	$6,500 - $7,500	$7,000 - $9,000	Specific structural design. Includes lift. Excludes siteworks
				1brm	$5,500 - $6,000	$6,500 - $7,500	$7,000 - $9,000	Specific structural design. Includes lift. Excludes siteworks
				2brm	$5,000 - $6,000	$5,500 - $6,500	$6,500 - $8,500	Specific structural design. Includes lift. Excludes siteworks
				3brm	$5,000 - $6,000	$5,500 - $6,500	$6,500 - $8,500	Specific structural design. Includes lift. Excludes siteworks
			Balcony		$1,500	$2,500	$3,500	
			Commercial office	A-Grade Prime	N/A	$5,500-$6,500	$6,500-$10,000	Specific structural design. Includes lift. Excludes siteworks
			Retail	Shell Only	$4,500 - $5,500	$5,500 - $6,500	$6,000 - $8,000	Specific structural design. Includes lift. Excludes siteworks

Assumptions for the above pricing.

- Rates exclude consultant fees. We could assume 12%-14% for the low rise (Level 1-3), assuming traditional procurement, although developers using design and construct will be in a much lower range, 8%-12%. The Level 1-6 buildings would require specific structural design, so we would suggest fees, likely to be in the range of 14%-20%. Any design and construct procurement scenario would likely see a lower range for consultant's fees.
- The low-rise Level 1-3 buildings are assumed to be NZS 3604 construction, with no allowance for lift or external works.
- The studio and 1 bed apartments will generally be more expensive, on a cost/m2 comparison due to the additional amenities required for kitchens and bathrooms per m2 of GFA.

- The Terrace buildings, we expect to be more cost effective, on a cost/m2 comparison, to the Walk-up design due to the increased external wall/façade area expected in the Walk-up style design.
- The Level 1-6 buildings are assumed to be specific design and will require lift for access. Rates exclude siteworks. The Level 1-6 buildings will be heavier and will therefore require more specialized foundations.

Traditional residential development ($/m2)

- The starting point would be $3,000/m2 with Affordable in the range of $2,800-$3,200/m2, Market $3,500-$4,500/m2 and Premium $5,500 and upwards. No allowance for additional landscaping costs, or site development costs.

Car parking ($/m2)

- At Grade: $450/m2-$550/m2. To include preparation, asphalt finish, stormwater drainage, lighting, minimal planting / soft landscaping, and carpark furniture. Landscaping costs largely dependent on the consultant.
- Under croft. This is difficult to assess, as would form part of the building structure and foundations. If the building structure was assumed to be $1,800/m2-$2,200/m2, we would expect the rate for the carparking only including finishes, access control, lighting, minor façade screening requirements, to be in the range of $2,700/m2 to $4,000/m2.
- Basement. $5,000/m2 - $6,000/m2. Dependant on existing ground conditions, and the design of the building that sits above it, the existing site conditions, and the site-specific conditions (sloping site etc).

Seismic Resilience ($/m2 or % of build cost)

- This is a site-specific condition and cannot be classified by applying a rate per square metre. Expect that the buildings will be designed to 100%-120% (or higher) of IL2 standard, however the added cost for seismic resilience would be determined by the ground conditions. The other cost factor would be any low damage design (LDD) elements that were added to the structural design to improve the likelihood of a building surviving an event and being able to be reused afterwards. However, the inclusion and implementation of LDD elements are incorporated within the structural design, and therefore difficult to assess what the cost uplift might be.

Civil Works ($/m2)

- The civil works costs, including enabling, civil, transport, are very hard to ascertain without completing investigation works on the site. However, for a new development it would be reasonable to expect $50,000 - $70,000 per house (or unit) for the associated development civil works. This rate is based on an assume flat site, without allowance for pumping stations for sewer and stormwater infrastructure.

- Engineered fill. Typically, we expect $30/m3 - $60/m3 for bulk excavation and removal of clean material, range dependant on quantity. Removal of contaminated materials noted below. Imported hardfill would range from $120/m3 to $160/m3, range dependant on volume, and location of fill.
- Allowances for sloping site. Dependant on eventual design of buildings, whether retaining walls can be incorporated into the building's substructure and structure. Potentially could apply a range of $100/m2 - $300/m2 over the site, however, is dependent on severity and is a site-specific cost. Estimating the allowances for a sloping site would require a specific assessment of the proposed site.

Public Open Space ($/m2)

- Soft & Hard Landscaping. Would be assumed to be included in the rate above of circa $50,000 per property for the development.

  However, for an isolated estimate of costs for Public Open Space we estimate a range of $200/m2 (Light) - $600/m2 (Heavy) is reasonable.

Demolitions ($/m2)

- Light duty. $120/m2-$150/m2, excluding removal of contaminated material. This is a building specific cost. Allowances should be considered for salvage of existing materials, adjacency to existing buildings and site access.
- Heavy duty. $250/m2 - $350/m2, excluding removal of contaminated material.

Contingency Allowances

- Cost escalation range. The following link provides a copy of our Forecast Report No. 104. Page 18 includes the Non-residential building cost index, from NZIER.

  https://s31756.pcdn.co/oceania/wp-content/uploads/sites/1/2023/05/RLB-Forecast-Report-104.pdf

  The current reporting is indicating an Index in June 2023 of circa 1048, with annual change forecast to reduce from 5%-6% in 2023, to 4%-5% in 2024 and 3%-4% in 2025.

  * It is worth noting that the Stats NZ has reweighted and rebased capital goods price indexes in the December 2022 quarter. The update includes structural changes to better align with the national accounts. As a result, there has been historical revisions to the index levels. This does not affect the percentage changes each quarter.

  It is worth noting that the NZIER figures indicated in the report, represent New Zealand national average numbers, therefore consideration of local market conditions is required when considering escalation allowances.

- Contingency. The view on contingency is project specific and should consider the level and completeness of the design documentation, the known site-specific project risks, and the type of construction project.

  Generally, for current construction (vertical build) projects at Rough Order of Cost or Concept Design stage, we would be including the following.

  - Design Contingency 5%-10%. Range dependent on the type of building, and the amount of design information provided.
  - Design and Construction Phase Escalations. As noted above. Time related.
  - Market Volatility Contingency. We have applied 1%-2.5% to some projects through estimating phases in the past 12 months, however we would suggest that this is not currently required in the local market.

  - Construction Contingency. We suggest 7.5%-10% should be included.
  - Project Contingency. 5%-10%. Range dependant on understanding of project risk profiles.

Please feel free to contact the undersigned if you have any queries.

Kind regards
Rider Levett Bucknall Wellington Ltd

Cameron Whyte
Principal, MNZIQS
cameron.whyte@nz.rlb.com

Appendix D – Market Evaluation

Palmerston North Overview

Palmerston North offers affordable housing when compared to the national average.

From 2018 and up to the start of 2022 the city experienced significant house price growth driven by historically low interest rates and a shortage of housing.

Interest rates, underpinned by the Official Cash Rate (OCR), are a key driver of demand, and therefore value, of residential property. In October 2021 the OCR was lifted from the historic low of 0.25%. After a series of raises throughout 2022 and 2023, it now sits at 5.5%.

According to Quotable Value, the market peaked in January 2022. At that time, the Palmerston North average house price was $775,816. As at 1 August 2023 the average is $622,546, a 19.7% drop.

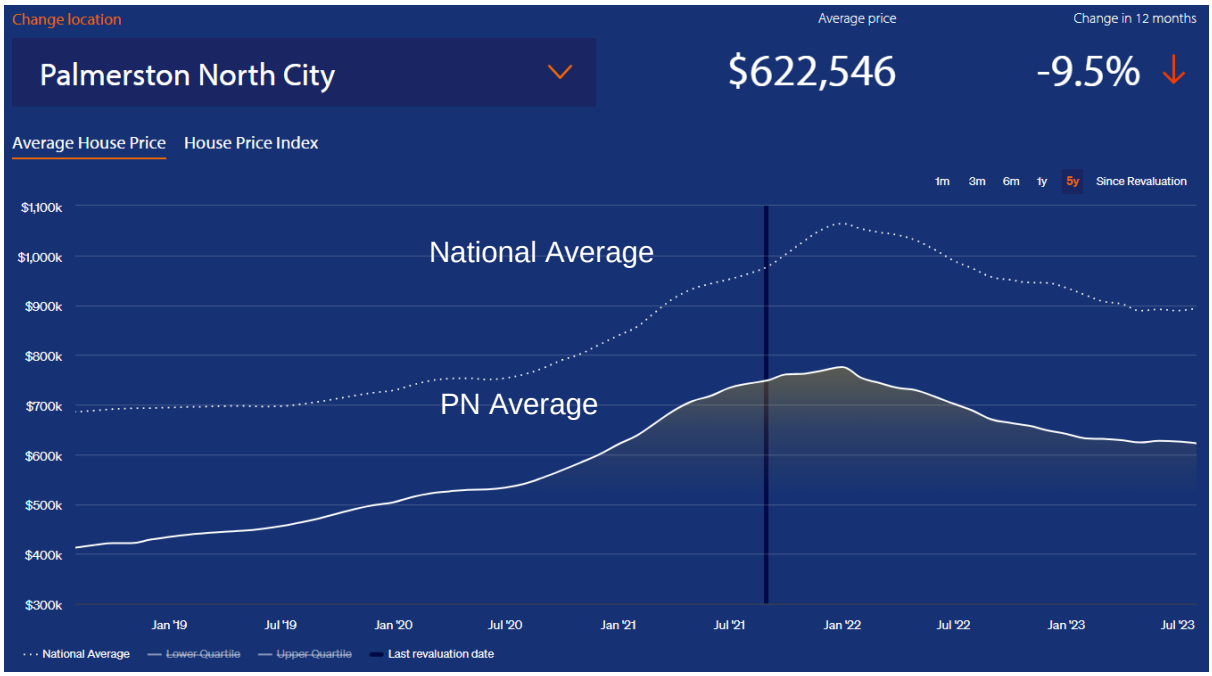

Image 1. QV House Price Index showing the average house prices for Palmerston North and nationwide between August 2018 and August 2023 (QV House Price Index)

Aokautere Overview

Aokautere is one of the higher value suburbs within Palmerston North. The QV House Price Index shows that the upper quartile average house price in Palmerston North is $910,529, as at 1 August 2023.

Currently, Aokautere comprises relatively few properties and therefore few sales of properties occur each year. Therefore, the sample size for Aokautere is too small to gauge any meaningful information. However, the adjoining suburb of Fitzherbert is more established, with comparable amenities and semi-rural ambience. According to Opes Partners the average price in Fitzherbert as at June 2023 was $903,250.

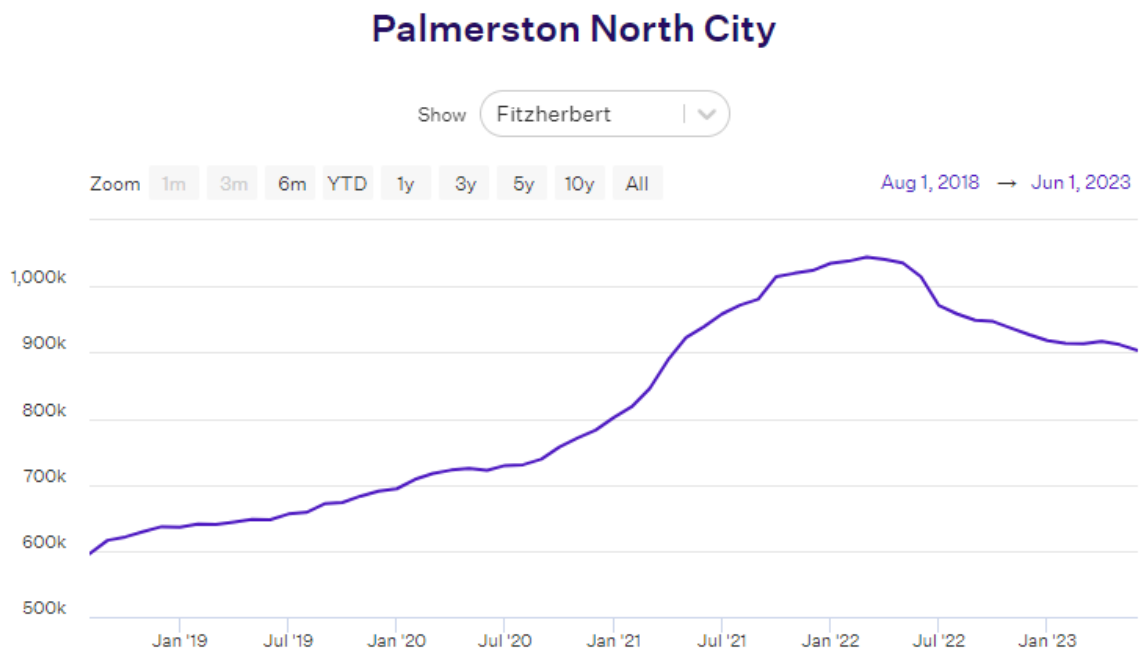

Image 2. Graph from Opes Partners showing the average house prices for Fitzherbert between August 2018 and June 2023 (🏠 Manawatu-Whanganui House Prices (2023) | Manawatu… | Opes Partners)

Medium and High Density Residential

Currently there is no medium or high-density residential development in Aokautere.

There have been a small number (less than 20) of medium density type residential properties sell in Palmerston North in last 12 months. These properties typically comprise two to three

bedroom units constructed within the past 20 years, with floor areas ranging 86 to 143 square metres.

Those sale prices ranged from $4,300 to $8,300 per square metre depending on location, size, age and quality of the dwelling. Aokautere is a relatively high-value suburb and any new medium or high-density development in the suburb would likely achieve values towards the upper end of the range, say $7,000 to $8,000.

Residential Construction Costs

Increasing construction costs are another macro-economic factor that has significantly affected the local and national residential property market.

According to CoreLogic's Cordell Construction Index (**CCCI**), residential construction costs have generally increased about 2% to 4% per annum between 2012 and 2021. However, a strong pipeline of consented works and shortages of labour and building materials following the COVID-19 lockdowns resulted in significant cost increases. From mid-2021 costs were rising in excess of 5% per annum with a peak of 10.4% in December 2022. Cost now appear to be stabilising with quarterly rises of 0.6% for each of the first two quarters of 2023 and the year-on-year increase being 6.4% as at June 2023.

Residential Development Market

The volatility of construction costs over the past two years, coupled with falling house prices, has resulted in disproportionate relatively between cost and value compared to historic trends. This has resulted in the market for development land largely going into 'hibernation'.

Nationwide, many residential developments have been halted and very few sales of development land are occurring. However, there are signs of activity returning to the development sector as developers start to position themselves for the next upswing in the residential property market.

Market Cycle

Currently the residential property market in Palmerston North and nationwide is at a low point in the market cycle with relatively low demand and falling prices.

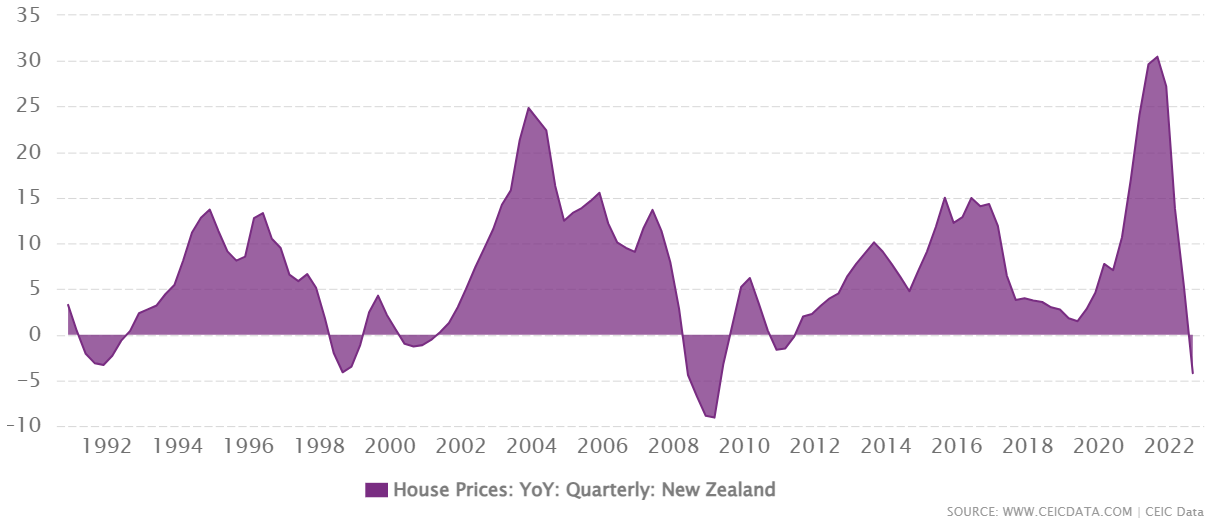

Image 3. Graph from CEIC Data showing NZ's house price growth between 1992 and 2023 (New Zealand House Prices Growth | Economic Indicators | CEIC (ceicdata.com))

Historically, house prices in NZ, excluding Auckland, have averaged growth of approximately 6% per annum.

Residential developments typically occur when the market is in a growth phase. Looking at the above graph, the most recent growth phase where values were increasing more in line with the long-term average was between early 2020 and early 2021. Of course, 2020 was severely disrupted by COVID-19 lockdowns so it is not prudent to use 2020 as a reliable baseline. The first half of 2021 appears to be a more useful comparison.

From the CCCI, the increasing constructions costs began to accelerate in the second quarter of 2021. Therefore, we consider the states of the property market and construction sector between January and April 2021 are a better representation of a positive, but not 'overheated' residential development market. We currently recommend adopting 1 April 2021 for feasibility assessments for proposed residential developments.

2021 Construction Costs

The CCCI records that quarterly cost increases between 2012 and 2021 ranged 0.3 to 1.9%, with most quarters in the 0.6 to 1.3% range.

The three months from April to June 2021 saw a 2.2% increase followed by 1.6% from July to September.

At the end of March 2021, the index figure was 136.2, 15% lower than the latest index figure of 159.5 as at June 2023.

Therefore, as of 1 April 2021, residential construction costs were approximately 15% less than 2023 costs.

2021 House Prices

In 2021 interest rates were rising, following lifts in the OCR. As at April 2021 floating mortgage rates were in the order of 4.5%, rising to 7.5% or more in 2023. Historically, interest rates average about 6.5%.

Sales evidence for Aokautere indicates that current values are at a similar level to those seen in early 2021. However, the sample sizes for both time periods are small and therefore unreliable.

Therefore, we have considered the wider Palmerston North residential market. The QV House Price Index shows that as of 1 April 2021 the Palmerston North index was 2,418 compared to 2,729 at the peak (January 2022) and 2,190 at 1 August 2023.

Therefore, values in April 2021 were approximately 10% higher than they are now.

Looking Forward

We understand development under Plan Change G may have a time horizon of 5 to 10 years before it commences.

To forecast possible cost and value appreciation, we have adopted historic trends, excluding the period 2021 to 2023 due to the 'steepness' of recent value and cost changes being somewhat 'out-of-step' with longer term averages.

The CCCI records data since 2012, so we have adopted the nine-year period from 2012 to 2021 and replicated that period from 2023 and 2032.

The CCCI shows that residential construction costs increased approximately 36% between 2012 and 2021.

Data on the Opes Partners website indicates that values at Fitzherbert increased 90% between 2012 and 2021.

Therefore, we recommend using multipliers between 2023 and 2032 of 190% for revenue and 136% for both direct and indirect development costs.