

Updated economic analysis of Plan Change 58

Report for Warwick and Marion Steffert

23 November 2023

Project team

Kevin Counsell, Director

Asahi Koizumi, Associate Analyst

Contents

1.	Introduction and summary	2
2.	Background to PC58	4
3.	Findings of the Market Economics BDCA	6
4. 4.1. 4.2.	Demand for Industrial-zoned land Comparison of WISE and Statistics New Zealand data Estimates of demand for Industrial-zoned land in Morrinsville	9
5.	Supply of Industrial-zoned land	
5.1.	Base case assessment of supply	
5.2.	Alternative scenario to account for undeveloped land that is already sold	
5.3.	Summary of supply scenarios	16
6.	Sufficiency of Industrial-zoned land	17
7.	Benefits and costs of PC58	19
7.1.	Introduction	
7.2.	Benefit of lower prices and more choice	19
7.3.	Proximity/clustering benefits	21
7.4.	Infrastructure and other costs	22
7.5.	Summary of benefits and costs	22
Appe	endix A. Monocle memo to MPDC with updated supply	•
	assessment	24

1. Introduction and summary

- 1. Warwick and Marion Steffert are the owners of approximately 14.2 hectares (**ha**) of Rural-zoned land in Morrinsville, in the Matamata-Piako District. The Stefferts are seeking a private plan change (Plan Change 58, **PC58**) for approximately 13.4ha of the land to be rezoned to General Industrial, to provide for industrial development.
- 2. In respect of PC58, we have previously prepared a report, dated 6 October 2022 and filed with the Matamata-Piako District Council (**MPDC**). This report analysed industrial land supply and demand in Morrinsville, and the benefits and costs of PC58. We have been asked to update that report, particularly in light of:
 - a. An updated Business Demand and Capacity Assessment (**BDCA**) prepared for MPDC by Market Economics in 2023;¹ and
 - b. The National Policy Statement for Highly Productive Land (**NPS-HPL**), which came into effect on 17 October 2022, after our earlier report was completed.
- 3. In respect of the NPS-HPL, we have been asked to focus specifically on clause 3.6(4)(a), which specifies that urban rezoning on highly productive land may be allowed if "the urban zoning is required to provide sufficient development capacity to meet expected demand for housing or business land in the district". The NPS-HPL *Guide to implementation* specifies that a test for "sufficient development capacity" should be done over the short-term (the next three years) or medium-term (the next ten years).² Our main focus is therefore on the short-term and medium-term, although for completeness we also present results of industrial land supply and demand over the longer-term.
- 4. In summary, our conclusions are as follows:
 - a. The Market Economics BDCA shows that there is sufficient industrial land supply in Morrinsville to meet demand in the short-term (three-year) and medium-term (ten-year) scenarios. It is only when considering a longer-term period (from 2023 to 2054) that there is insufficient industrial land supply in all scenarios assessed by Market Economics;
 - b. However, the BDCA demand assessment is based on employment projections which are now relatively dated, having been released in March 2021, and which we show to be an underestimate relative to more recent projections from December 2022. Furthermore, on the supply side, the BDCA does not capture some recent changes in the extent of vacant Industrial-zoned land in the Morrinsville township;
 - c. In undertaking our own analysis of supply and demand to address these issues, we find that there is a shortfall of Industrial-zoned land in Morrinsville in the medium-term (the next ten years), in a scenario with a high employee density ratio, at -13.0ha without applying the competitiveness margins set out in the National Policy Statement on Urban Development (NPS-UD) and -18.0ha with NPS-UD margins added. There is also a shortfall, of -3.7ha, on even the most conservative scenario that we assess (with a low employee density ratio with no NPS-UD margins added);
 - d. Some of the vacant and undeveloped Industrial-zoned land in Morrinsville has already been sold by developers into private ownership, and therefore reflects actual demand that has already been realised, rather than future demand. In an alternative scenario where this sold land is excluded from the supply estimates, there will be material shortfalls in the medium

¹ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC.

² Ministry for the Environment (2022), "National Policy Statement for Highly Productive Land: Guide to implementation", December, at p.42.

term with no NPS-UD margins added (-10.2ha or -19.5ha using the low and high employee density ratios respectively), and in the high employee density ratio scenario a -2.2ha shortfall in Industrial-zoned land in the short-term (the next three years). The shortfalls will be higher if NPS-UD margins are added: -13.3ha or -24.5ha in the medium-term using the low and high employee density ratios respectively;

- e. On this evidence, there is a strong economic case for additional Industrial-zoned land to be made available in Morrinsville through PC58, to meet a shortfall in the medium-term and potentially even in the short-term. We therefore consider that PC58 meets the requirements of clause 3.6(4)(a) of the NPS-HPL, in that it is required to provide "sufficient development capacity" to meet expected demand for Industrial-zoned land in the medium-term and potentially even in the short-term;
- f. The NPS-HPL also specifies that, if development capacity is required, "[t]he minimum amount of HPL should be lost to provide that capacity".³ An updated soils assessment by AgFirst finds that part of the PC58 site is no longer considered highly productive land, and the area of highly productive land in PC58 is 8.27ha. In all but the two most conservative scenarios we analyse, at least 8.27ha of Industrial-zoned land will be required to provide sufficient development capacity in Morrinsville in the medium-term. That is, the full spatial extent of the highly productive land in the PC58 site will be necessary to provide the required development capacity;
- g. Regarding the benefits and costs of PC58, the proposed plan change will expand the supply of Industrial-zoned land and release the supply constraint, benefiting purchasers of this land through lower prices and more choice, and bringing new businesses and employees to Morrinsville. It will also result in more businesses being located in close proximity to each other. This clustering effect can generate productivity benefits, allowing both new and existing businesses to increase their sales, and providing workers with access to more productive and better paid jobs;
- h. PC58 will allow for the earlier realisation of these benefits, compared to a hypothetical alternative block of land in Morrinsville that has yet to be identified and re-zoned as Industrial. The PC58 site also has locational advantages, by being adjacent to existing Industrial-zoned land and within the Morrinsville township. Accordingly, we would expect these benefits to be greater in respect of the PC58 site than an alternative Industrial site elsewhere in Morrinsville; and
- i. Our analysis of the benefits and costs is relevant to clause 3.6(4)(c) of the NPS-HPL which requires consideration of whether the benefits of rezoning outweigh the costs associated with the loss of highly productive land for land-based primary production. We consider that the economic benefits of PC58 will outweigh the economic costs of the loss of 8.27ha of highly productive land.
- 5. The remainder of this report is structured as follows:
 - a. In section 2 we outline the relevant background to the proposed rezoning;
 - b. In section 3 we summarise the findings of the Market Economics BDCA;
 - c. In sections 4 and 5 we set out our assessment of, respectively, the demand and supply for Industrial-zoned land in Morrinsville;
 - d. In section 6 we assess the sufficiency (supply minus demand) of Industrial-zoned land; and
 - e. In section 7 we analyse the benefits and costs of PC58.

³ Ministry for the Environment (2022), "National Policy Statement for Highly Productive Land: Guide to implementation", December, at p.51, in relation to clause 3.6(5) of the NPS-HPL.

2. Background to PC58

6. PC58 seeks to rezone approximately 13.4ha of Rural-zoned land to a General Industrial zone. The land is located within the Morrinsville township, with the proposed site shown as the red outlined area in Figure 1. The proposed rezoning site is located adjacent to existing Industrialzoned land in the Morrinsville township, including Avenue Business Park (Stage 1), which is an adjacent Industrial-zoned and consented site (also owned by Warwick and Marion Steffert) that is in the process of being developed.

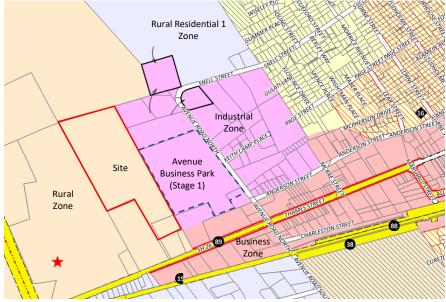


Figure 1: Proposed rezoning site and adjacent Industrial-zone

Source: provided by Monocle, base map from Matamata-Piako District Plan

- 7. Figure 2 below shows all the existing Industrial-zoned land in or near Morrinsville:
 - a. The red circle is the same block of Industrial-zoned land within the Morrinsville township shown in Figure 1. This land has a total area of approximately 38ha. We refer to this as the **Avenue Rd Industrial Area**;
 - b. The green circle covers two distinct Industrial-zoned areas (totaling approximately 12ha) located within the Morrinsville township, occupied by Fonterra and Greenlea Meats respectively (the **Fonterra and Greenlea Industrial Sites**); and
 - c. The blue circle is a large Industrial-zoned area located south of the Morrinsville township (of approximately 51ha), on Morrinsville-Walton Rd, occupied by various industrial users including Ballance Agri-Nutrients and Evonik Industries (the Morrinsville-Walton Rd Industrial Area).

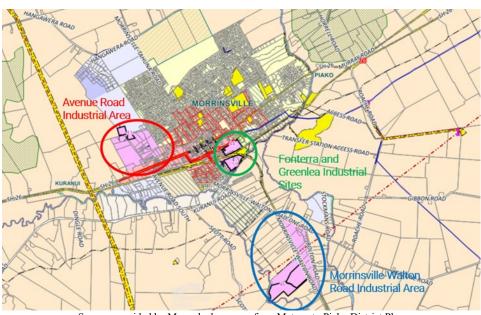


Figure 2: Morrinsville Industrial-zoned land

Source: provided by Monocle, base map from Matamata-Piako District Plan

3. Findings of the Market Economics BDCA

- 8. MPDC recently commissioned Market Economics to update a previous business demand and capacity assessment that had been undertaken for the Matamata-Piako District. The updated BDCA includes an analysis of the supply and demand of industrial land in the Morrinsville township and the Morrinsville-Walton Rd Industrial Area (which is referred to in the BDCA as Morrinsville South).
- 9. The BDCA also assesses supply and demand in aggregate for the "Northern townships" of the Matamata-Piako District, which covers Morrinsville and Te Aroha together. In our view, it is arguable whether these two townships should be aggregated together to assess supply and demand. It is not clear that those who demand industrial land in Morrinsville would consider Te Aroha to be sufficiently substitutable (and vice versa), when (for example) the townships are located approximately 20km from each other, have quite different population bases,⁴ and have differing proximity to infrastructure.⁵
- 10. In any case, the BDCA identifies that there is currently no vacant Industrial-zoned land in Te Aroha.⁶ Thus, any assessment of the sufficiency of Industrial-zoned land supply to meet demand will rely entirely on vacant land supply in Morrinsville to meet demand across both Morrinsville and Te Aroha. An assessment of supply and demand in Morrinsville only is therefore conservative, in the sense of showing lower demand relative to supply, compared with an assessment across both Morrinsville and Te Aroha. Accordingly, we focus only on supply and demand in Morrinsville in the remainder of this report.
- 11. In broad terms, the approach taken by Market Economics to assess the demand for Industrialzoned land in Morrinsville is as follows:
 - a. Using data from the Waikato Integrated Scenario Explorer (WISE),⁷ Market Economics determines projected employment for industries that broadly correspond to Industrial-zoned land. The WISE data provides employment projections (i.e., forecasts), for three different scenarios: low; medium; and high. Market Economics uses the high growth projections, as requested by MPDC to ensure consistency with previous business and housing capacity assessments, which Market Economics notes reflect a "prudent approach" to addressing issues such as the high price of industrial land;⁸
 - b. Market Economics then convert the employment projections to industrial land requirements, using two different conversion ratios of employee density, of 500m² per employee and 800m² per employee; and
 - c. As a final step, Market Economics increase the projected industrial land requirements by applying the competitiveness margins set out in the NPS-UD.⁹ These margins are 20% in the short-term and medium-term (the next 3 years and 3-10 years respectively) and 15% in the

⁴ Statistics New Zealand's population estimate in 2023 for Morrinsville is 8,960, while for Te Aroha the estimated population in 2023 is 4,670. Data sourced from NZ.Stat.

⁵ For example, Morrinsville is located closer to the Ruakura Inland Port and the recently completed Hamilton Section of the Waikato Expressway. Consistent with this, a memo from Steffert Property to be filed with MPDC notes feedback from commercial real estate agents in the Waikato regarding the strategic location of Morrinsville within the Waikato as an attractive option for businesses seeking Industrial land.

⁶ See Table 5-1 of the BDCA.

⁷ WISE an online simulation tool developed through the Waikato Regional Council's Creating Futures research project, see http://www.creatingfutures.org.nz/

⁸ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.27.

⁹ Clause 3.22 of the NPS-UD.

long-term (10-30 years). While the NPS-UD does not require these margins to be applied for a Tier 3 authority such as MPDC, Market Economics was requested by MPDC to apply these as a sensitivity test "to reflect a range of potential future outcomes".¹⁰

- 12. On the supply-side, Market Economics undertook a GIS-based assessment to determine the extent of vacant Industrial-zoned land in Morrinsville. Market Economics included within the vacant capacity any land that had been sold by the developer but not yet developed, or that was under construction or pending a code compliance certificate. Market Economics also undertook a verification process on the GIS-based assessment, to identify whether vacant capacity has in fact become occupied or if there are any constraints on these sites limiting their development.
- 13. In Table 1 below we have set out the supply and demand results of the Market Economics BDCA for Morrinsville. These results cover both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area. We have shown the demand results both with and without the NPS-UD margins applied.
- 14. Table 1 shows that, in both the low and high employee density ratio scenarios, and with/without NPS-UD margins, there is sufficient Industrial-zoned land supply to meet demand in the short-term (three-year) and medium-term (ten-year) scenarios. It is only when considering a longer-term period (from 2023 to 2054) that there is insufficient Industrial-zoned land supply in all scenarios.

	Low ratio (500m ² per employee)			High ratio (800m ² per employee)		
Metric	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long-term: 2023-2054
Industrial land demand (without NPS- UD margins)	4.0ha	11.8ha	27.2ha	6.4ha	19.0ha	43.6ha
Industrial land demand (with NPS-UD margins)	4.8ha	14.2ha	31.9ha	7.7ha	22.7ha	51.0ha
Industrial land supply		23.6ha				
Sufficiency (supply minus demand) without NPS- UD margins	19.5ha	11.7ha	-3.7ha	17.1ha	4.6ha	-20.0ha
Sufficiency (supply minus demand) with NPS-UD margins	18.7ha	9.3ha	-8.3ha	15.8ha	0.8ha	-27.5ha

Table 1: Market Economics BDCA results Morrinsville Industrial Land Supply/Demand

Source: Market Economics BDCA 2023, Tables 4-4, 5-1, and 6-2

¹⁰ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.70.

- 15. The Market Economics BDCA provides a starting point for assessing supply and demand for Industrial-zoned land in Morrinsville, and indeed it formed the basis for the supply-demand assessment in our 6 October 2022 report. However, given the time that has passed since that report, we now have two key concerns with applying the BDCA to PC58:
 - a. On the demand side, the BDCA is based on WISE employment projections which are now relatively dated, having been released in March 2021, and which we show later in this report to be an underestimate relative to more recent projections; and
 - b. On the supply side, the BDCA does not capture some recent changes in the extent of vacant Industrial-zoned land in the Morrinsville township.
- 16. We elaborate on these two aspects in sections 4 and 5 respectively.

4. Demand for Industrial-zoned land

4.1. Comparison of WISE and Statistics New Zealand data

- 17. The Industrial-zoned land projections in the Market Economics BDCA are based on WISE employment projections which are now relatively dated, having been released in March 2021.
- 18. The implications of this can be seen by comparing the WISE projections with a more recent set of projections, prepared by Statistics New Zealand (Stats NZ), with the most up-to-date Stats NZ projections released in December 2022. While Stats NZ does not prepare forecasts of employment, it does prepare population forecasts, and it is these population forecasts that serve as a basis for comparing against WISE population forecasts.
- 19. We analyse the population projections at the geographic area level defined by Stats NZ as "Statistical Area 2" (SA2). We analyse population projections for two SA2s: Morrinsville East and Morrinsville West, (which we refer to collectively as "Morrinsville" when we analyse data from these SA2s). When combined, the Morrinsville East and Morrinsville West SA2s are broadly comparable to the Morrinsville township.
- 20. This means that the Morrinsville-Walton Rd Industrial Area is excluded from our analysis of demand. This area is covered by the Tahuroa and Tatuanui SA2s, which are relatively large areas that extend well beyond Morrinsville. By excluding these SA2s from our analysis, we avoid the risk of capturing areas of employment that are far from Morrinsville, albeit that we may also exclude some demand for the Morrinsville-Walton Rd Industrial Area specifically. Nonetheless, as we discuss in section 5 of this report, there is no remaining undeveloped Industrial-zoned land supply in the Morrinsville-Walton Rd Industrial Area. Therefore, any demand for the Morrinsville-Walton Rd Industrial Area. Therefore, any demand for the morrinsville-Walton Rd Industrial Area specifically would likely be captured by growth in existing industrial businesses in this area, to the extent that this occurs.¹¹
- 21. We start by analysing what we refer to as **old Stats NZ** population projections. These projections were released in March 2021, so are comparable in timing to the WISE projections. In Figure 3 we have compared the Morrinsville population projections in the low, medium and high scenarios for the old Stats NZ projections with the WISE projections. The old Stats NZ projections run from 2018 through to 2048 (at five-year intervals), and we have shown the WISE projections over the same time period.¹² It can be seen from Figure 3 that the WISE projections are broadly similar to the old Stats NZ projections for the high scenario, while the WISE projections tend to be more optimistic for the medium and low scenarios.

¹¹ This is why we have not made any adjustment to allocate a share of industrial demand to these areas, as was done by Market Economics in the BDCA (see footnote 11 of the BDCA).

¹² The WISE population projections are at ten-year intervals from 2025 onwards. Figure 3 is a line graph, so it connects population projections between intervals by a straight line. We note that there are also WISE population projections for 2055 and 2065, but we have not shown these on the graph as there are no corresponding projections in the Stats NZ data for these years.

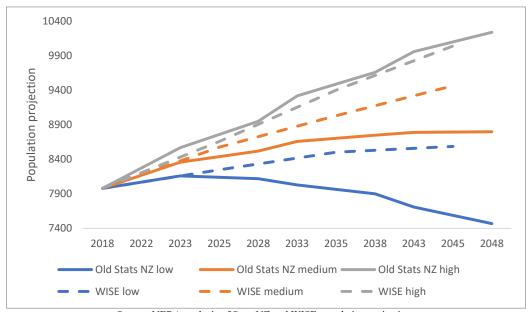
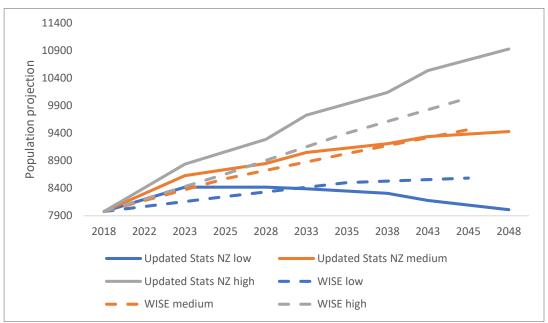


Figure 3: Comparison of old Stats NZ and WISE population projections for Morrinsville, 2018-2048

Source: NERA analysis of Stats NZ and WISE population projections

22. However, Stats NZ has updated these population projections, which as noted above were released in December 2022. In Figure 4 we have graphed these **updated Stats NZ** projections for Morrinsville against the WISE projections (which remain unchanged from those shown in Figure 3). Figure 4 shows that the updated Stats NZ population projections for the high scenario are now materially above the WISE high scenario projections over the entire 2018 to 2048 time period shown. The updated Stats NZ projections are also above the WISE projections in the low scenarios through to around 2033, and above the WISE projections in the medium scenarios through to around 2043.

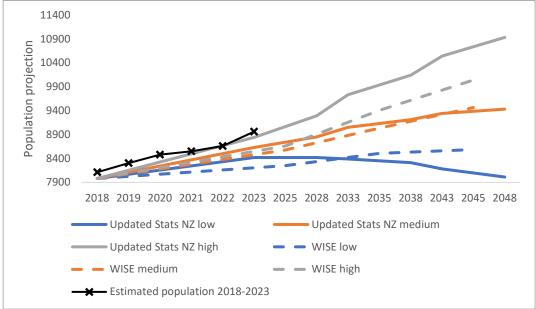
Figure 4: Comparison of updated Stats NZ and WISE population projections for Morrinsville, 2018-2048



Source: NERA analysis of Stats NZ and WISE population projections

- 23. The key conclusion that can be drawn from the above analysis is that the WISE population projections are an underestimate relative to the more recent updated Stats NZ projections. It is also reasonable to infer from this that the WISE *employment* projections are an underestimate, compared to what they would likely be if a more recent update to these projections were undertaken. Accordingly, we consider that there is a strong basis for using the more recent updated Stats NZ projections to estimate demand for Industrial-zoned land in Morrinsville, rather than the WISE projections as is used in the Market Economics BDCA.
- 24. We have also compared the updated Stats NZ population projections with Stats NZ's population *estimates*. The population estimate is an estimate of the (historical) population of an area, as at 30 June of each year. In Figure 5 below we have replicated Figure 4 above, but we also show Stats NZ's population estimates for Morrinsville (the black line).¹³ It can be seen that the estimated population is tracking at or above the updated Stats NZ high scenario population projections.

Figure 5: Comparison of updated Stats NZ and WISE population projections for Morrinsville, 2018-2048, and Stats NZ population estimates for 2018-2023



Source: NERA analysis of Stats NZ and WISE population projections and Stats NZ population estimates

25. Lastly, as a further sense test of the updated Stats NZ and WISE population projections, we have compared the rate of historical population growth in the last ten years (from 2013 to 2023), with that implied by the updated Stats NZ and WISE population projections over a forthcoming tenyear period (we use 2023-2033 from the Stats NZ data and 2025-2035 from the WISE data). The results of this analysis are shown in Table 2 below, which shows that the projected rate of future population growth in the updated Stats NZ and WISE projections is low by historical standards. Even the highest growth rate in the population projections, of 1.0% per annum in the updated Stats NZ high scenario, is low relative to the recent growth in Morrinsville's historical population of 2.0% per annum (the grey shaded row).

¹³ For the population estimates, Stats NZ has reconfigured the boundaries of the SA2s. For the population estimates, there are now three SA2s (Morrinsville North, Morrinsville East and Morrinsville West) which cover the Morrinsville township. These three SA2s cover a very similar area to what was covered in the two SA2s (Morrinsville East and Morrinsville West) used in the Stats NZ population projections.

Population scenario	Average annual population growth over ten- year period
Stats NZ population estimates 2013-2023	2.0%
Updated Stats NZ low scenario 2023-2033	-0.04%
Updated Stats NZ medium scenario 2023-2033	0.5%
Updated Stats NZ high scenario 2023-2033	1.0%
WISE low scenario 2025-2035	0.3%
WISE medium scenario 2025-2035	0.5%
WISE high scenario 2025-2035	0.8%

Table 2: Morrinsville average annual population growth by ten-year period

Accesses an annual manufation and with accession

Source: NERA analysis of Stats NZ and WISE population projections, and Stats NZ population estimates. Growth rates are compound annual growth rates.

26. Based on (a) the estimated population in Morrinsville tracking at or above the updated Stats NZ high scenario population projections; and (b) those updated Stats NZ high scenario projections having a growth rate that is low by historical standards, we consider that there is a strong basis for using the updated Stats NZ high scenario projections in our analysis of demand for Industrialzoned land. Doing so would also be consistent MPDC's request of Market Economics in the BDCA to use the high scenario in the WISE data, to reflect a prudent approach to addressing issues such as the high price of industrial land.¹⁴

4.2. Estimates of demand for Industrial-zoned land in Morrinsville

- 27. Based on the analysis in the previous section, we use the updated Stats NZ high scenario population projections as a means of proxying the demand for Industrial-zoned land in Morrinsville.
- 28. Population data can be a useful indicator in an assessment of the demand for industrial land, because a higher population can imply higher employment, and there is likely to be a positive relationship between the number of industrial employees and demand for industrial land. To convert population projections to industrial land demand projections, a first step is therefore to assess how the population projections convert to employee projections.
- 29. Unfortunately, as noted earlier, Stats NZ does not prepare employee projections. However, we can use the relationship between population and employee projections in the WISE data to determine the implied employee projections from the Stats NZ data.
- 30. In particular, in Table 3 we set out the industrial employee projections, as calculated by Market Economics in the BDCA using the WISE data.¹⁵ We also show, for the same years, the WISE high scenario population projections.¹⁶ From this data, we have determined the ratio of industrial employees to population in each year, which is approximately 0.35 (with the exception of 2054, where the ratio is 0.33).

¹⁴ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.27.

¹⁵ We have derived these numbers from Table 4-3 of the Market Economic BDCA, which gives figures for the area of Industrial-zoned land in Morrinsville for a given ratio of land area to employees. Using these ratios, we can derive the number of industrial employees underlying the land area figures.

¹⁶ The WISE population projections are only available for 2018, 2025, 2035, 2045, 2055 and 2065. To determine the population in each year shown in Table 3 we have assumed a linear increase in population between the years for which the WISE projections are available.

	2023	2026	2033	2054
WISE/Market Economics projection of number of industrial employees	2,958	3,040	3,196	3,504
WISE high scenario population projections	8,465	8,733	9,254	10,711
Ratio of industrial employees to population	0.35	0.35	0.35	0.33

Table 3: Comparison of Market Economics industrial employee projections (fromWISE data) and WISE population projections for Morrinsville

Source: NERA analysis, including of Market Economics and WISE data

- 31. We have therefore applied a ratio of 0.35 to the updated Stats NZ population projections for the high scenario, with these projections only going out to 2048.¹⁷ That is, we multiply the updated Stats NZ population projection in each year by 0.35, to determine the implied industrial employee projection in each year, based on the Stats NZ data.
- 32. We then converted the number of industrial employees in each year to a measure of industrial land demand using a measure of employee density i.e., the ratio of land area to employee. We use the two employee density scenarios used in the Market Economics BDCA, of 500m² of industrial land per employee and 800m² of industrial land per employee.
- 33. Employee densities are likely to vary depending on factors such as the location of the industrial land, the intensity of land use, and the type of industrial activity. Indeed, the ratio may even vary at a relatively disaggregated level, on a site-by-site basis within a particular industrial area. Accordingly, there is an element of uncertainty in choosing an appropriate employee density ratio from which to convert employee numbers to industrial land demand. In the BDCA, Market Economics reports finding ranges across New Zealand of 350-1,000m² per industrial employee for outdoor yard-based activities and 500-600m² per industrial employee for warehouses and factories. Based on this, Market Economics chooses the two scenarios of 500m² and 800m² per industrial employee.
- 34. The preparation of our own rigorous assessment of employee densities is beyond the scope of this report. We have therefore applied the two Market Economics employee densities, and in recognition of the aforementioned uncertainties, we present results for both the 500m² and 800m² per employee ratios, without seeking to identify a preferred ratio. The resulting estimates of the demand for Industrial-zoned land in Morrinsville are shown in Table 4.

¹⁷ We applied this ratio in the years of the Stats NZ population projections i.e., 2018, 2023, 2028, 2033, 2038, 2043 and 2048. It is also useful to make this calculation in 2026, to allow us to determine industrial land demand over the next three years (2023 to 2026). To determine the 2026 Stats NZ population projection, we assume a linear increase in population between the 2023 and 2028 projections.

	Estimate of Industrial-zoned land demand				
	2023	2026	2033	2048	
500m ² per employee	155ha	159ha	170ha	191ha	
800m ² per employee	248ha	255ha	272ha	306ha	

Table 4: Estimated Industrial-zoned land demand in Morrinsville, 2023-2048

Source: NERA analysis, including of Stats NZ, Market Economics and WISE data

35. As the last step in our analysis, in Table 5 below we calculate the net change in the Industrialzoned land demand estimates across three different time periods. We use a short-term timeframe of three years (from 2023 to 2026), and a medium-term timeframe of ten years (from 2023 to 2033), consistent with the definitions of short-term and medium-term in the NPS-UD. While the NPS-UD defines the long-term as 30 years, we use a long-term timeframe of 25 years (from 2023 to 2048) because the Stats NZ population projections only go as far as 2048. Table 5 also shows the net change in Industrial-zoned land demand both excluding and including the NPS-UD margins. As noted earlier, these margins are 20% for the short-term and medium-term, and 15% for the long-term.

Table 5: Net change in estimated Industrial-zoned land demand in Morrinsville, 2023-2048

	Short-term 2023-2026	Medium-term 2023-2033	Long-term 2023-2048
		No NPS-UD mar	gin
500m ² per employee	4.7ha	15.6ha	36.6ha
800m ² per employee	7.6ha	24.9ha	58.5ha
		Including NPS-UD n	nargin
500m ² per employee	5.7ha	18.7ha	42.1ha
800m ² per employee	9.1ha	29.9ha	67.3ha

Source: NERA analysis, including of Stats NZ, Market Economics and WISE data

5. Supply of Industrial-zoned land

5.1. Base case assessment of supply

- 36. The Market Economics BDCA calculates that there is 23.6ha of vacant Industrial-zoned land available across the Morrinsville township and Morrinsville-Walton Rd industrial area. This is the same area of vacant land identified in an earlier (2022) BDCA.¹⁸
- 37. However, recent analysis by Monocle has shown that the Market Economics supply assessment is based on out-of-date assumptions. A memo from Monocle to MPDC, dated 23 November 2023, sets out an updated assessment of vacant Industrial-zoned land supply in Morrinsville that memo is provided in Appendix A of this report.
- 38. The key differences between the Monocle assessment and that of the Market Economics BDCA are:
 - a. The BDCA identifies part of the Bowers Concrete site and another site on Avenue Rd North as undeveloped, when development of both of these sites has subsequently occurred;
 - b. The BDCA identifies 5.2ha of undeveloped land in the Morrinsville-Walton Rd industrial area, when Monocle's analysis shows that there is no remaining undeveloped capacity in this area; and
 - c. The BDCA does not appear to account for stream and drainage limitations on vacant land on Snell St, which when accounted for in the Monocle analysis reduce the area of vacant land on this site.
- 39. When the above adjustments are accounted for, the Monocle assessment identifies 11.9ha of vacant Industrial-zoned land supply in Morrinsville.
- 40. The Monocle assessment is a more up-to-date supply assessment than is presented in the BDCA, and seeks to rigorously verify vacant supply based on, for example, recent aerial photography. For these reasons, we consider it appropriate to adopt the 11.9ha supply figure in our base case analysis.

5.2. Alternative scenario to account for undeveloped land that is already sold

- 41. In our October 2022 report, we identified some vacant Industrial-zoned land in Morrinsville that, while yet to be developed, has been sold by the developer to purchasers likely seeking to use the land for industrial development. In this section, we set out an alternative supply scenario that seeks to account for this sold-but-undeveloped land.
- 42. Before setting out the results of this scenario, it is useful to take a step back and explain the basis for considering sold-but-undeveloped land in a supply-demand assessment. "Demand" is typically defined as the willingness and ability to purchase a particular good or service.¹⁹ In the case of demand for Industrial-zoned land, projections of employment can provide an indication of future demand i.e., will there be, looking forwards, potential buyers with a willingness and ability to purchase Industrial-zoned land?
- 43. However, an analysis of sold-but-undeveloped land provides evidence of where *actual* demand has already occurred. If existing undeveloped Industrial-zoned land has been sold into private ownership, then this is strong evidence of actual demand being realised. That is, a buyer has

¹⁸ Market Economics (2022), "Business Development Capacity and Demand Assessment 2022: Matamata-Piako District", Final report, prepared for MPDC, 16 May.

¹⁹ See, for example, N. Gregory Mankiw (2016), *Principles of Microeconomics*, Eighth Edition, Cengage Learning, at p.67.

indicated that they have a willingness and ability to purchase Industrial-zoned land, because that purchase has already been executed. Since demand has already been realised, these sold-butundeveloped properties would no longer be available to future purchasers of industrial land, and therefore can be removed from the area of vacant supply.

- 44. We recognise that a private owner of industrial land may not necessarily develop the land for their own purposes, but rather on-sell it to another future potential buyer. It is for this reason that we run this as an alternative to the base case supply scenario i.e., it is effectively a sensitivity test. Nonetheless, purchase by a private owner is likely to represent a strong intention to develop the land for their own purposes. Indeed, in respect of a number of sold-but-undeveloped lots in the Avenue Business Park (Stage 1) development, a memo from Steffert Property to be filed with MPDC shows that all of the lots already sold will have at least commenced development, and in some cases completed it, by 2026.
- 45. The Steffert Property memo also notes that there was strong demand for the lots in the Avenue Business Park (Stage 1) development that have already been sold. All of these lots were pre-sold by word-of-mouth, without any external marketing or engagement of real estate agents. This corroborates our finding of strong demand for Industrial-zoned land in Morrinsville in section 4 of this report.
- 46. For Industrial-zoned land in Morrinsville, of the 11.9ha of vacant supply identified in the previous section, this includes 6.5ha of sold-but-undeveloped land in the Avenue Business Park (Stage 1) development.²⁰ By deducting this 6.5ha from the 11.9ha vacant supply, we calculate the resulting supply figure of 5.4ha in this alternative scenario to account for sold-but-undeveloped land.

5.3. Summary of supply scenarios

47. The results of the two scenarios for the supply of Industrial-zoned land are shown in Table 6.

Table 6: Estimated Industrial-zoned land supply in Morrinsville

Scenario	Vacant supply	
Base case	11.9ha	
Alternative scenario removing sold-but- undeveloped land	5.4ha	

²⁰ Described further in the memo from Monocle to MPDC, dated 23 November 2023, in Appendix A of this report.

6. Sufficiency of Industrial-zoned land

- 48. Building on the analysis of demand and supply in sections 4 and 5 respectively, in Table 7 below we set out our results showing the overall sufficiency (supply minus demand) of Industrial-zoned land in Morrinsville.
- 49. Focusing on the short- and medium-term, our key takeaways from Table 7 are as follows:
 - a. Across all scenarios considered there is a shortfall of Industrial-zoned land in the mediumterm (the next ten years);
 - b. With a high employee density ratio, there is a shortfall of Industrial-zoned land of -13.0ha over the next ten years in the base case supply scenario (which assumes land that has been sold is available supply) and with no NPS-UD margins. This shortfall increases to -18.0ha when NPS-UD margins are added;
 - c. Even on the most conservative scenario (low employee ratio with the base case supply scenario and no NPS-UD margins), there is a shortfall of Industrial-zoned land in the medium-term, of -3.7ha over the next ten years;
 - d. In an alternative supply scenario where sold-but-undeveloped land is excluded from the supply estimates, there will be material shortfalls in the medium-term with no NPS-UD margins added (-10.2ha or -19.5ha using the low and high employee density ratios respectively). The shortfalls will be higher if NPS-UD margins are added: -13.3ha or -24.5ha in the medium-term using the low and high employee density ratios respectively; and
 - e. Of the eight different scenario combinations, three show a shortfall in Industrial-zoned land in the short-term (the next three years).
- 50. On this evidence, there is a strong economic case for additional Industrial-zoned land to be made available in Morrinsville via PC58, to meet a shortfall in the medium-term and potentially even in the short-term.
- 51. PC58 also meets the requirements of clause 3.6(4)(a) of the NPS-HPL, in that it is required to provide "sufficient development capacity" to meet expected demand for Industrial-zoned land in the medium-term and potentially even the short-term.
- 52. Also of note is clause 3.6(5) of the NPS-HPL, which states that "the spatial extent of any urban zone covering highly productive land is the minimum necessary to provide the required development capacity while achieving a well-functioning urban environment." The NPS-HPL *Guide to implementation* clarifies that, if development capacity is required, "[t]he minimum amount of HPL should be lost to provide that capacity".²¹ An updated soils assessment by AgFirst finds that 4.2ha of the PC58 site is no longer considered highly productive land due to modification of soils. The assessment notes that once factors such as earthworks and drains are deducted, this will reduce the area of highly productive land to 8.27ha.²² In all but the two most conservative scenarios shown in Table 7, at least 8.27ha of Industrial-zoned land will be required to provide sufficient development capacity in Morrinsville in the medium-term. That is, in these scenarios the full spatial extent of the highly productive land in the PC58 site will be necessary to provide the required development capacity.

²¹ Ministry for the Environment (2022), "National Policy Statement for Highly Productive Land: Guide to implementation", December, at p.51.

²² Agfirst (2023), "Avenue Business Park (Private Plan Change 58)", prepared for Warwick and Marion Steffert, November

Table 7: NERA results for Morrinsville Overall Balance of Industrial-zoned Land
Demand and Supply

	Low ratio (500m ² per employee)		High ra	High ratio (800m ² per employee)		
Metric	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2048	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long-term: 2023-2048
		B	ase case sup	ply scenari	0	
Sufficiency (supply minus demand) without NPS- UD margins	7.2ha	-3.7ha	-24.7ha	4.3ha	-13.0ha	-46.6ha
Sufficiency (supply minus demand) with NPS-UD margins	6.2ha	-6.8ha	-30.2ha	2.8ha	-18.0ha	-55.4ha
	Alterr	ative supply sce	enario (exclu	ding sold-b	ut-undevelope	ed land)
Sufficiency (supply minus demand) without NPS- UD margins	0.7ha	-10.2ha	-31.2ha	-2.2ha	-19.5ha	-53.1ha
Sufficiency (supply minus demand) with NPS-UD margins	-0.3ha	-13.3ha	-36.7ha	-3.7ha	-24.5ha	-61.9ha

Source: NERA analysis

7. Benefits and costs of PC58

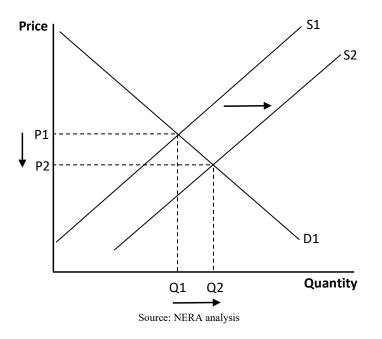
7.1. Introduction

- 53. In this section we set out a qualitative discussion of the benefits and costs of PC58.
- 54. There are two ways to assess the benefits and costs in this particular case. One is to consider the benefits and costs of an expansion in Industrial-zoned land in Morrinsville *in general*. That is, the benefits and costs, relative to an alternative scenario where there is no such expansion in industrial land. The second approach is to consider the benefits and costs of PC58 *in particular*. That is, the benefits/costs of PC58, relative to a hypothetical alternative industrial expansion in another Morrinsville location, and presumably also at a later time (given the time lag that would be required to implement a plan change).
- 55. In our analysis below we start by assessing the benefits and costs of an increase in the supply of Industrial-zoned land in general. We then assess, in respect of each benefit and cost, the extent to which these apply to the particular case of PC58. This allows for an assessment of whether PC58 is beneficial, compared to rezoning an equivalent block of land elsewhere in Morrinsville at a later date.
- 56. The benefits and costs that we assess are as follows:
 - a. An expansion in Industrial-zoned land will release the supply constraint, offering lower prices and more choice, thereby bringing new businesses and employees to Morrinsville;
 - b. There are productivity benefits that can arise when more businesses locate in close proximity to each other. This will allow both new and existing businesses to increase their sales, and provide workers with access to more productive and better paid jobs; and
 - c. There will be some infrastructure costs, but these are incurred by developers and it is reasonable to assume that the benefits that developers receive will exceed these costs. There will also be a cost associated with the loss of the productive capacity of the land.
- 57. We elaborate on these benefits and costs in more detail in the following sections.

7.2. Benefit of lower prices and more choice

58. An important benefit of an expansion in industrial land arises on the demand-side i.e., to purchasers of Industrial-zoned land in Morrinsville. An increase in the supply of Industrial-zoned land will benefit those purchasers by lowering prices and providing them with more choice. This follows from the standard economic framework of supply and demand, shown in Figure 6, with an upward sloping supply curve ("S1") representing the supply of industrial land. The market price ("P1") and quantity ("Q1") are given by the point at which these supply and demand curves intersect. An expansion of industrial land would lead to an increase in the supply of land – that is, an outwards shift of the supply curve, leading to the new supply curve "S2". With this additional supply in the market, the market adjusts so that prices fall to P2, and market quantity increases to Q2. The lower prices and increased quantity provide a benefit to the demand-side.

Figure 6: Supply and demand framework for assessment of supply increase



- 59. The increase in supply from re-zoning more Industrial land can be thought of as releasing a binding supply constraint. The evidence outlined in section 6 of this report shows that the future demand for Industrial-zoned land in Morrinsville is likely to be greater than the supply in the medium-term in all scenarios assessed. If the supply of Industrial-zoned land were to remain unchanged at its current level, then continued increases in demand would result in continued price increases for the existing Industrial-zoned land.
- 60. However, by expanding the supply of Industrial-zoned land, this constraint can be released, allowing for industrial land demand to be met at lower prices. This in turn brings new businesses to Morrinsville, along with new employees and/or enhanced employment opportunities for existing employees.
- 61. By expanding supply, this benefit facilitates the operation of a competitive land market, which is consistent with the NPS-UD. In particular, Policy 1(d) of the NPS-UD is as follows:

Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

•••

(d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets.

- 62. We note, however, that the benefit of lower prices and increased choice to purchasers would be achieved regardless of whether the new Industrial-zoned land is that provided by PC58, or whether it is an equivalent block of land elsewhere in Morrinsville. That is, it is the supply increase in Morrinsville *per se* that provides for these benefits, rather than the specific location of the supply increase.
- 63. Nonetheless, the advantage that PC58 has over other potential Industrial-zoned land in Morrinsville is one of timing. In particular, PC58 will allow for the earlier realisation of this benefit, compared to an alternative block of land. That alternative would need to go through the process of being identified and re-zoned as Industrial, which would be a time-consuming process.

In contrast, PC58 has already begun this process, which will allow for the benefits to be realised earlier than they otherwise would be.

64. The earlier realisation of this benefit is particularly important in a situation where there is a binding supply constraint. If there was a substantial lag between when new Industrial-zoned land can be made available and when the supply constraint binds, then the increasing demand for Industrial-zoned land will push up land prices to those buyers that would have otherwise wanted to purchase Industrial-zoned land in Morrinsville. This situation can be avoided with PC58, as it contributes to the release of this constraint sooner rather than later.

7.3. Proximity/clustering benefits

- 65. A benefit that is often analysed in cost-benefit assessments is the benefit that arises from the clustering of economic activity. When people and businesses locate in close proximity to each other, it can generate benefits from increased productivity. These benefits arise because the clustering of activity strengthens links between businesses, providing for increased specialisation, better matching of skills between employers and employees, and enhanced knowledge spillovers.²³
- 66. An increase in the supply of Industrial-zoned land in Morrinsville would provide for new industrial businesses to enter the area, allowing for a greater clustering of such businesses, which can result in productivity benefits. The benefits that arise from this clustering fall into two categories:
 - a. Benefits arising from the general proximity of industrial businesses to the wider population and other (non-industrial) businesses of Morrinsville. Economists refer to such benefits as "urbanisation economies"; and
 - b. Benefits arising from the proximity of industrial businesses to businesses in the same, or similar, industries. These are referred to as "localisation economies".
- 67. New and existing businesses within Morrinsville will benefit from the increased productivity that arises from these clustering effects, because it allows them to deliver the same level of sales output using fewer inputs, or greater sales output for the same inputs. Increased productivity is also beneficial to employees within Morrinsville, as they are able to access more productive and better paid jobs.
- 68. While these benefits would arise for an increase in Industrial-zoned land in Morrinsville regardless of its location, we would expect them to be greater in respect of PC58 in particular. This is because the PC58 site:
 - a. Is directly adjacent to the approximately 38ha of existing Industrial-zoned land in Morrinsville (the Avenue Rd Industrial Area). The localisation economies are therefore likely to be greater in this area, compared to if new Industrial land was zoned somewhere else in Morrinsville that is further away from the existing cluster; and
 - b. Is located within the Morrinsville township, which will lead to greater urbanisation economies compared to if new Industrial land was zoned in the Morrinsville-Walton Rd Industrial Area outside of the Morrinsville township.
- 69. Consistent with this, the submission of Bowers Brothers Concrete Limited in respect of PC58 notes that it could expand its operations if PC58 was approved, but such an expansion would be limited for Industrial land located elsewhere in Morrinsville.²⁴ The benefits of any such

²³ See G. Duranton and D. Puga (2004), "Micro-foundations of urban agglomeration economies", in J.V. Henderson and J-F. Thisse (eds.), *Handbook of regional and urban economics*, Vol 4, Elsevier.

²⁴ Bowers Brothers Concrete Limited (2023), "Submission on Private Plan Change 58", July.

expansion (in terms of increased productivity and employment opportunities) would therefore not be realised for Industrial land other than that provided by PC58.

7.4. Infrastructure and other costs

- 70. A new industrial land development in Morrinsville (whether PC58 or an alternative development) will involve some costs related to the provision of infrastructure e.g., water and wastewater, electricity, roading, etc. The infrastructure costs that relate to the development site itself will be incurred by the developer. Given that a developer is willing to invest to undertake a development, it is reasonable to assume that the benefits that developers receive will exceed these costs, so that there is an overall net (private) benefit. This follows from a common principle in economics that individuals and businesses will make decisions that are in their own best interests. That is, in making a choice, an economic agent will choose a course of action that makes them better off, rather than worse off.
- 71. There may also be circumstances in which an industrial land development in Morrinsville requires an expansion of the infrastructure capacity not on the development site. However, in these instances the local authority can levy development contributions on the developer to reflect the costs of new or upgraded infrastructure. Again, because these contributions are borne privately by the developer, we can assume that there is no net cost arising from any required infrastructure expansion, given a developer's willingness to undertake the development.
- 72. In addition, it may be that PC58 is better able to utilise the existing (off-site) infrastructure relative to an alternative site elsewhere in Morrinsville. This is likely to be the case if an alternative site is located further away from existing zoned land or the Morrinsville town centre, so requires additional off-site infrastructure connections. In contrast, due to its locational advantages adjacent to existing Industrial-zoned land, the PC58 site would require (relatively) less in the way of new/upgraded off-site infrastructure.
- 73. To the extent that PC58 does involve better utilising existing infrastructure relative to an alternative site, this is a benefit of PC58. The benefit arises because the PC58 site would avoid the costs that might be incurred at an alternative site. As above, these costs are private costs that are incurred by the developer. Nonetheless, if the Stefferts' costs for PC58 are lower than those of a developer at an alternative site, then we might expect these lower costs to be passed-through to lower prices for new purchasers seeking to buy Industrial-zoned land.
- 74. Lastly, there will also be a cost associated with the loss of the productive capacity of the land by converting the PC58 site from Rural-zoned to General Industrial-zoned. This cost has been assessed in more detail in the versatile soils assessment prepared in respect of PC58,²⁵ and a key finding is that the productive capacity of the land in a rural use is restricted. This is due to factors such as the limited productive capacity and small scale of the PC58 site, the poor quality soils (poorly drained), and the inability to amalgamate the PC58 site with the surrounding land uses. On this basis, the cost of the lost productive capacity of the land is unlikely to be material.

7.5. Summary of benefits and costs

- 75. In summary, the benefits and costs are as follows:
 - a. In general, an expansion in Industrial-zoned land will release the supply constraint, which will benefit purchasers of Industrial-zoned land in Morrinsville through lower prices and more choice, and bring new businesses and employees to Morrinsville. For PC58 in particular, this benefit will be realised earlier relative to an alternative block of land which is yet to go through the process of being identified and re-zoned as Industrial;

²⁵ Agfirst (2023), "Avenue Business Park (Private Plan Change 58)", prepared for Warwick and Marion Steffert, November

- b. For a general expansion in Industrial-zoned land, there are productivity benefits that can arise when more businesses locate in close proximity to each other. This will allow both new and existing businesses to increase their sales, and provide workers with access to more productive and better paid jobs. For PC58 in particular, these benefits are likely to be greater due to the locational advantages relative to other possible sites in Morrinsville, with the PC58 site adjacent to existing Industrial-zoned land and within the Morrinsville township;
- c. For both a general expansion in Industrial-zoned land and PC58 in particular, there will be some infrastructure costs. However, these costs are incurred by developers and it is reasonable to assume that the benefits that developers receive will exceed these costs, so there is no net cost associated with infrastructure;
- d. For PC58 in particular, there will be a benefit if PC58 can better utilise existing infrastructure relative to an alternative site, allowing lower costs to be passed through to lower prices for new purchasers seeking to buy Industrial-zoned land; and
- e. For PC58 in particular, there will be a cost associated with the loss of the productive capacity of the land for land-based primary production, although this cost is unlikely to be material. Based on our assessment outlined in this section, we consider that the economic benefits of PC58 will significantly outweigh the economic costs of this loss.

Appendix A. Monocle memo to MPDC with updated supply assessment

Memo AVENUE BUSINESS PARK PLAN CHANGE (PC58)

MORRINSVILLE INDUSTRIAL LAND SUPPLY

Warwick and Marion Steffert

TO:	Matamata-Piako District Council		
FROM:	Ben Inger (Senior Planner/Director)	DATE:	23 November 2023

1.0 Introduction

The purpose of this memo is to provide an overview of industrial land supply in Morrinsville. The memo is intended to assist in informing the assessments of land supply for Plan Change 58 (**PC58**) to the Operative Matamata-Piako District Plan which seeks to rezone approximately 13.4ha of land near the western edge of Morrinsville from Rural to General Industrial Zone. PC58 would add approximately 10.1ha of net developable land to the industrial land supply for Morrinsville once expected non-developable areas such as roads, stormwater and wastewater infrastructure are excluded.

2.0 Review of Industrial Land Supply in Morrinsville

2.1 PC58 Plan Change Request

Section 2.4 of the Plan Change Request for PC58 includes a summary of Industrial zoned land in Morrinsville. It identifies that approximately 16.2ha of the total Industrial zoned area in Morrinsville was undeveloped as of December 2022 when the Plan Change Request was lodged. The undeveloped land which was identified consisted of Avenue Business Park's Stage 1 subdivision which is approximately 10.7ha, another industrial subdivision on Keith Camp Place which is approximately 2.84ha and approximately 2.66ha of remaining undeveloped Industrial zoned land on Snell Street and south of Stage 1 of the Avenue Business Park. These are gross land area figures, meaning they do not exclude land required for roads and reserves. The areas are shown in **Figure 1** below.

An updated assessment of industrial land supply in Morrinsville is provided in the sub-sections which follow. The updated assessment provides further details on each of the areas identified in **Figure 1**, including up to date information related to development which has occurred, is underway or planned. Details are provided for net developable land area (excluding roads, reserves and other infrastructure) where this information is known. The assessment also covers an Industrial zoned area which is located approximately 2km south of the township on Morrinsville-Walton Road and Bolton Road (referred to as Morrinsville South).



Figure 1: Industrial zoned locations (Source: Google Earth, December 2022)

2.2 Bowers Concrete Site

Bowers Brothers Concrete Ltd has made a submission in support of PC58 which confirms that their 7.6ha site is now fully developed (also refer to **Figure 2**). The submission expresses interest in expanding onto the adjoining land within the PC58 site.



Figure 2: Bowers Concrete Site and Avenue Business Park – Stage 1 (flown July 2023)

2.3 Avenue Business Park (Stage 1)

The Avenue Business Park (Stage 1) development occupies a site of approximately 10.7ha. Resource consent was granted by MPDC to subdivide the site in 2022 and civil construction is now well advanced (refer to **Figures 2 and 3**). Titles for the subdivision will be created in two sub-stages, as follows:

- (a) Construction of the first sub-stage is nearing completion, with titles expected to issue in December 2023. This sub-stage consists of 10 industrial lots which total 4.75ha in area, a drainage reserve to vest which is 6,111m², road to vest which is 6,616m² and a lot which is 2,098m² (Lot 9) which has been sold to Powerco for an electricity substation. All industrial lots within the first sub-stage have been sold.
- (b) The second sub-stage is also under construction but has been delayed due to bad weather over late-2022 and early-2023 and the need for an extended dry period to complete the necessary works. Titles are expected to issue in mid-2024. This sub-stage consists of eight industrial lots which total 3.42ha in area and road to vest which is 4,591m². Three industrial lots within the second sub-stage have been sold. The remaining five lots, which total 1.67ha of land, have not been put on the market for sale yet.

The net developable land supply within Stage 1 of the Avenue Business Park is therefore approximately 8.17ha (excluding roads, reserves and the substation) of which 6.5ha has been sold and only 1.67ha remains unsold. Our understanding is that this supply is likely to be largely consumed within the short-term (1-3 years) as titles are issued and development on each lot commences. Sales plans are included in **Attachment 1**. Further details of the Stage 1 development are provided in a memo by Steffert Property dated 10 November 2023.



Figure 3: Avenue Business Park – Stage 1 (flown July 2023)

2.4 Keith Camp Place Development

The Keith Camp Place development site is approximately 2.84ha in area. Resource consent was granted by MPDC to subdivide the site in around 2021. The subdivision consists of six industrial lots with a total net developable area of 1.94ha (excluding road to vest and flood reserves). Civil construction is substantially complete and titles are in the final stages of being issued. One of the industrial lots, which is approximately 3,400m², has been sold and development of that site has already commenced (prior to issue of title). The remaining five lots are currently for sale (refer to **Figure 4**).



Figure 4: Keith Camp Place Development (Source: Bayleys)

2.5 Remaining Vacant Land

The remaining vacant Industrial zoned land in Morrinsville consists of two separate sites. One of the sites is located on Snell Street (1.53ha) and the other site is located south of Avenue Business Park (1.13ha).

The land south of the Avenue Business Park is likely to be available for industrial development in the future so it should be considered as part of the vacant industrial land supply.

The land on Snell Street (which also adjoins the Keith Camp Place Development) is known to be susceptible to flooding and its suitability for industrial development is therefore uncertain. A recent draft report by Market Economics identifies that the land may be partly constrained due to a stream along the western boundary. There is also a large drain that bisects the property (refer to **Figure 4**). The Keith Camp Place Development involves a total of approximately 6,000m² of land being set aside as 'flood reserves' which is approximately 25% of the total area of the industrial lots. A reasonable assumption is therefore that the Snell Street development may contribute approximately 1ha to the vacant industrial land supply.

2.6 Morrinsville South

The Plan Change Request for PC58 identifies that there is limited additional capacity in the Industrial zoned land which is located approximately 2km south of the township on Morrinsville-Walton Road and Bolton Road (referred to as Morrinsville South). **Figure 5** is a relatively recent (December 2022) aerial photograph of the Morrinsville South land and **Figure 6** is a drone image flown in August 2023.

The land west of Morrinsville-Walton Road is occupied by two large industrial operations, being Evonik Industries (Hydrogen Peroxide plant) and Balance Agri-nutrients. There is no vacant land supply in this area.

The only land east of Morrinsville-Walton Road which is vacant of development is a narrow triangular shaped site (1.1ha) at the southern end which is classified as Maori Freehold Land and a small rectangular site (0.33ha) immediately to the north of that which is owned by MPDC. Other sites east of Morrinsville-Walton Road are substantially developed. It is highly uncertain whether the vacant industrial land east of Morrinsville-Walton Road would be capable of development due to land ownership and the unusual shape. As such, it would be appropriate and prudent to assume there is no vacant industrial land supply available in the Morrinsville South area to meet future industrial demand.

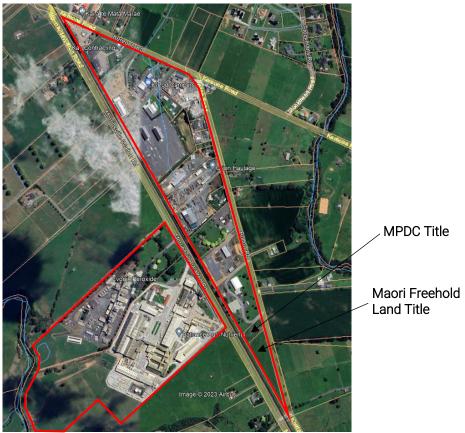


Figure 5: Morrinsville South industrial area (Source: Google Earth, December 2022)



Figure 6: Morrinsville South industrial area (flown August 2023)

2.7 Summary

The vacant industrial land supply in Morrinsville is therefore comprised of land in Stage 1 of the Avenue Business Park, the remaining undeveloped lots in the Keith Camp Place Development and two undeveloped sites which are located on Snell Street and south of the Avenue Business Park. There is no vacant industrial land supply in Morrinsville South or elsewhere in Morrinsville. Based on the analysis above, the total area of the vacant industrial land supply is 11.9ha. This is summarised in **Table 1** which follows:

Area	Net Developable Land
Avenue Business Park – Stage 1	8.17ha ¹
Keith Camp Place Development	1.6ha ²
Morrinsville South	Oha
Remaining Vacant Land	2.13ha ³
Total	11.9ha

Table 1: Summary of vacant industrial land supply in Morrinsville

¹ Includes lots sold but awaiting titles to enable development to commence. 6.5ha has been sold and only 1.67ha remains unsold.

 $^{^{\}rm 2}$ Excludes lot which has been sold which development has already commenced on.

³ Assumes 1ha for Page Street site to account for stream and drain limitations.



3.0 Business and Development Capacity Assessment

An updated BDCA has recently been prepared by Market Economics for MPDC. The updated BDCA, which is dated 16 October 2023, identifies there is demand for 19.0ha of industrial land in Morrinsville in the medium-term (2023-2033) which increases to 22.7ha when competitiveness margins are added under the NPS-UD. These figures are in a high employee density ratio scenario.

The BDCA considers the sufficiency of industrial land supply which is provided in the Morrinsville township and in Morrinsville South for meeting this demand. The assessment concludes that there is 18.3ha (net) of industrial land capacity within the north-western area of Morrinsville (i.e. in the vicinity of Avenue Road North). It also concludes that there is capacity for an additional 5.2ha of industrial land use in the Morrinsville South area east of Morrinsville-Walton Road. The total industrial land supply which the BDCA assumes is available in Morrinsville is 23.6ha. This supply figure is unchanged from the earlier version of the BDCA which was dated 16 May 2022.

The BDCA includes two figures (Figure 5.4 and Figure 5.5) which identify the 'undeveloped' and 'partially developed' areas that make up the assumed land supply. These figures are included in **Attachment 2** of this memo, together with annotated comments which identify incorrect or out-of-date assumptions. A key difference is that the BDCA identifies that part of the Bowers Concrete site and another site on Avenue Road North are undeveloped. Development of both of those areas has subsequently occurred. The BDCA also assumes there is 5.2ha of undeveloped land in Morrinsville South, whereas the analysis in Section 2.6 above demonstrates that there is no remaining undeveloped capacity. The BDCA also does not appear to account for the stream and drainage limitations of the vacant land on Snell Street.

We consider that the analysis in Section 2 of this memo is a more reliable assessment of industrial land supply than the assessment in the BDCA. It is also more recent given that the supply assessment in the updated BDCA is unchanged from the earlier version of the BDCA.

4.0 Industrial Land Supply Sufficiency

The following table provides and comparison of the assessed demand in the updated BDCA based on the high employee density ratio scenario to the updated industrial land supply assessment in this memo. This confirms that PC58 is required to ensure that sufficient supply of industrial land exists in Morrinsville to meet demand in the medium-term. That is the case with or without competitiveness margins being applied to the demand assessment, although the shortfall is obviously more significant if the competitiveness margins are applied. This is summarised in **Table 2** which follows.

	Medium Term Demand (high employee ratio, updated BDCA)	Current Industrial Land Supply (Monocle assessment)	Sufficiency without PC58	Industrial Land Supply with PC58 (additional 10.1ha developable land)	Sufficiency with PC58
Without competitiveness margin	19.0ha	11.9ha	-7.1ha	22.0ha	3.0ha
With competitiveness margin	22.7ha	11.9ha	-10.8ha	22.0ha	-0.7ha

Table 2: Morrinsville industrial land sufficiency based on the updated BDCA by Market Economics and Monocle's industrial land supply assessment

An Economic Assessment prepared by Nera Consulting, which is dated 23 November 2023, concludes that the updated BDCA underestimates the demand for industrial land in Morrinsville. As a result, the shortfall of industrial land supply in Morrinsville would be even greater than the figures which are set out in **Table 2**. Even with the additional supply that PC58 would provide, a shortfall would remain in a high employee density ratio scenario with or without competitiveness margins being applied to the demand assessment. This is summarised in **Table 3** which follows.

	Medium Term Demand (high employee ratio, Economic Assessment)	Current Industrial Land Supply (Monocle assessment)	Sufficiency without PC58	Industrial Land Supply with PC58 (additional 10.1ha developable land)	Sufficiency with PC58
Without competitiveness margin	24.9ha	11.9ha	-13.0ha	22.0ha	-2.9ha
With competitiveness margin	29.9ha	11.9ha	-18.0ha	22.0ha	-7.9ha

Table 3: Morrinsville industrial land sufficiency based on the Economic Assessment by Nera Consulting and

 Monocle's industrial land supply assessment

It is likely that much of the vacant industrial land supply will be consumed quickly. The largest source of industrial land supply is Stage 1 of the Avenue Business Park. Our understanding is that development is likely to have either commenced or be completed on all lots within the first sub-stage within the next 3 years. That would result in 4.75ha of the current supply being consumed within the short-term. Some of the development within the second sub-stage, of which 1.75ha has already been sold, is also likely to occur within the short-term timeframe. Only 1.67ha within the Stage 1 development is unsold by the developer so most of the land is unlikely to be available to others seeking to purchase industrial land in Morrinsville.

Attachment 1

Avenue Business Park (Stage 1) Sales Plans



SUBDIVISION APPLICATION PLAN



Applicant/s: Avenue Industrial Park Limited RT: 998719 Local Authority: Matamata-Piako District Council

Total Area: 10.1182ha

Stage 1

Proposed Subdivision of

Lot 2 DP 562628

Avenue Road North, Morrinsville

SCHEDULE OF EXISTING EASEMENTS TO BE CANCELLED

SCHEDULE OF EXISTING EASEMENTS TO BE CANCELLED							
Purpose	Burdened Land	Shown	Document Number				
	Lot 6	B					
Right to Drain Water	Lot 100	CP	EI 12121788.6				
Easement Instrument 121217888.6 is over area A on DP 562628, and this easement will be replaced with an easement in favour of the Matamata-Piako District Council over areas B, C and P on the Stage 1 plan.							
SCHEDULE OF PROF	POSED EASI	EMENTS	IN GROSS				
Purpose	Burdened Land	Shown	Grantee				
	Lot 4	A	Matamata-Piako District Council				
Right to Drain Sewage	Lot 6	Ō					
	Lot 5	E					
Right to Drain Water	Lot 6	B	Matamata-Piako District Council				
	Lot 100	Ô					
	Lot 4	Ē	Matamata-Piako District Council				
Right to Drain Water	Lot 3	G					
and Sewage	Lot 2	\oplus					
	Lot 1	$\check{\mathbb{O}}$					
	Lot 3	\bigcirc					
Right to Drain Water and Sewage and Right to Convey Water	Lot 100		Matamata-Piako District Council				
Right of Way and Right to Drain Water	Lot 100	(a)	Matamata-Piako District Council				
Right to Convey Electricity and Telecommunications	Lot 3	20	PowerCo. Limited				



Note: Areas and dimensions are subject to final field Survey. COPYRIGHT:

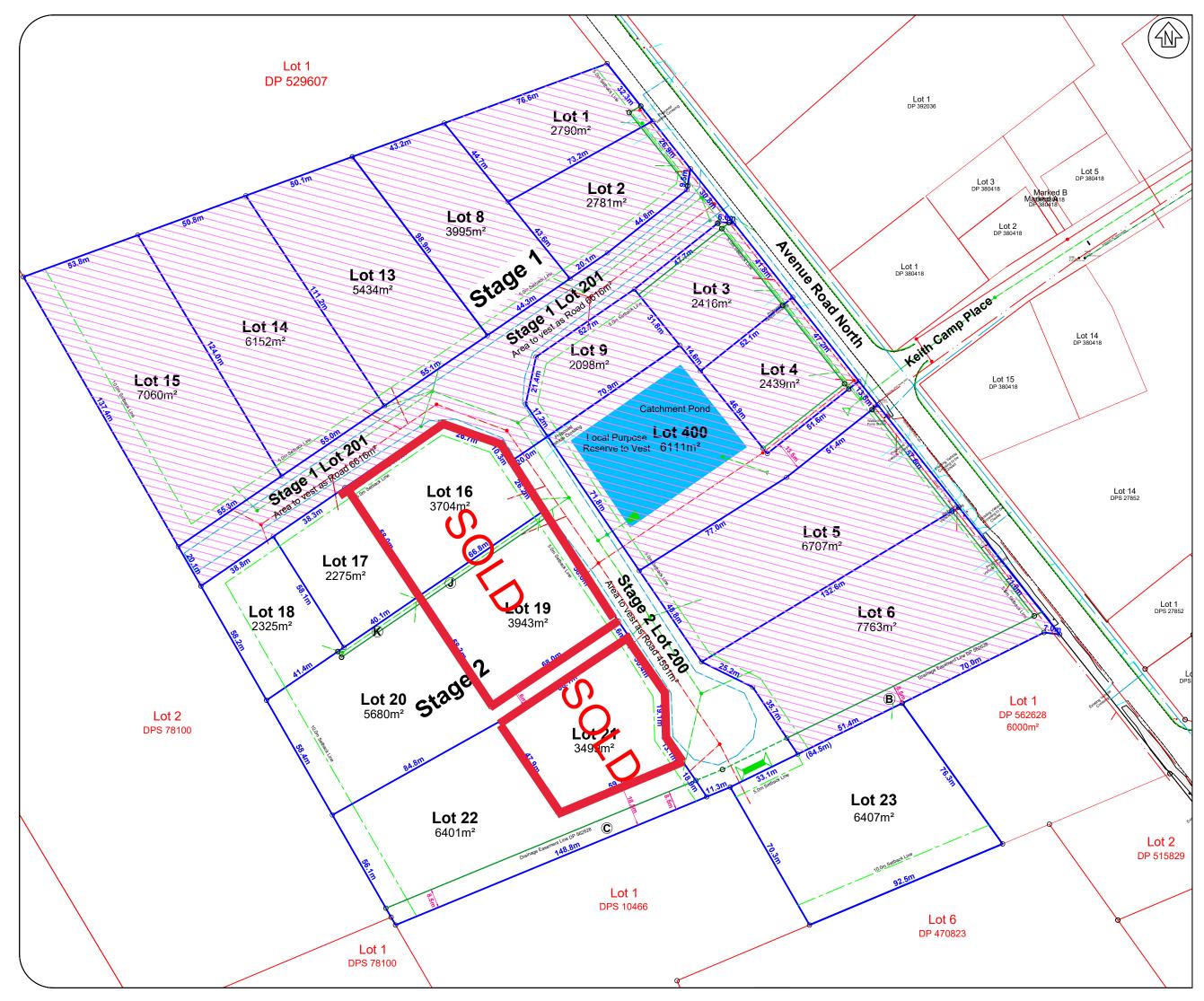
The copyright and intellectual property rights of the information shown on this plan remain the property of, and may not be reproduced without the prior consent of LANDFORM SURVEYS LTD.

Survey/Des: fjk

Date: 04.07.2023

Scale(A3) 1:1500

Page No: 1 of 1



SUBDIVISION APPLICATION PLAN

Job No. 22106

Applicant/s: Avenue Industrial Park Limited RT: 998719 Local Authority: Matamata-Piako District Council Total Area: 10.1182ha

Stage 2

Proposed Subdivision of

Lot 2 DP 562628

Avenue Road North, Morrinsville

SCHEDULE OF EXISTING EASEMENTS TO BE CANCELLED						
Purpose	Burdened Land	Shown	Grantee			
Right to Drain Water and Sewage and Right to Convey Water	Lot 100	l P	Matamata-Piako District Council			
Right of Way and Right to Drain Water	Lot 100	M	Matamata-Piako District Council			
SCHEDULE OF EXISTING EASEMENTS IN GROSS						
Purpose	Burdened Land	Shown	Document Number			
Right to Drain Water	Lot 6 Lot 22	B C	Matamata-Piako District Council			
SCHEDULE OF PROPOSED EASEMENTS IN GROSS						
Purpose	Burdened Land	Shown	Grantee			
Right to Drain Water	Lot 19 Lot 20	\bigcirc	Matamata-Piako District Council			



PO Box 4264 Ph: 07 856 4955 Hamilton East 3217 Email: dan@landformsurveys.co.nz

Note: Areas and dimensions are subject to final field Survey. COPYRIGHT:

The copyright and intellectual property rights of the information shown on this plan remain the property of, and may not be reproduced without the prior consent of LANDFORM SURVEYS LTD.

Survey/Des: fjk

Date: 04.07.2023

Scale(A3) 1:1500

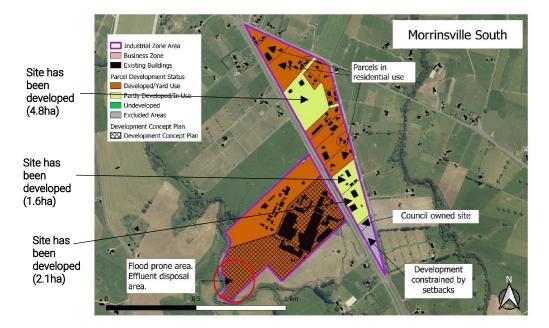
Page No: 1 of 1

Attachment 2

BDCA Land Supply Figures (Annotated)



Figure 5.5: Morrinsville South Existing Industrial Zone Area and Development Status





NERA Economic Consulting 20 Customhouse Quay Wellington, New Zealand 6011 www.nera.com