BOARD OF AIRLINE REPRESENTATIVES OF NEW ZEALAND

LAND VALUATION

AUCKLAND AIRPORT - MARKET VALUE ALTERNATIVE USE

MARCH 2013

Property Advisory

TABLE OF CONTENTS

APPENDICES

Property Advisory

Directors:
Dougal Smith Dip Hort, B.Com (VPM), MNZPI
Paul Mills B.Com (VFM), Dip Grad Com, MNZPI
Associates:
Tom Marks Dip VFM, B (Ag) Com, FNZIV, MNZIPIM
Lyndon Matthews B.Com (VFM), ANZPI
David Oxnam B.Com Ag (VFM), ANZPI

16 March 2013

Attention: John Beckett

Board Of Airline Representatives Of New Zealand
PO Box 2779
Auckland 1140
New Zealand

Dear Sir

RE: AUCKLAND AIRPORT LAND VALUATION - MARKET VALUE ALTERNATIVE USE - JULY 2011

1.0 INSTRUCTIONS

1. Further to your instructions to assess the Market Value Alternative Use (MVAU) of the Auckland International Airport (AIA) land, we have inspected the subject land and obtained information necessary to provide you with our opinion of value as at 30 June 2011.

2. We inspected the property on 15 August 2012.

3. We understand that this valuation is required by Board Of Airline Representatives Of New Zealand (BARNZ) and the airlines for provision to the Commerce Commission to assist the Commission in undertaking its report under section 56G of the Commerce Act into the effectiveness of information disclosure regulation on promoting the purpose of Part 4.

4. This valuation of the MVAU of the Auckland Airport land has been undertaken in accordance with Schedule A of the Commerce Commission Input Methodologies for Airport Services, under Part 4 of the Commerce Act. It has also been undertaken in accordance with the Commerce Commission's requirements for the conduct of expert witnesses.

5. To assist in this analysis we have relied on information that has been provided by Zomac Planning Solutions (ZPS), Market Economics Ltd (ME), Colliers International, AIA, Statistics New Zealand and Auckland Regional Council. This information includes property details, Certificate of Title area, land area allocations, resource documentation, supply and demand profiles, historical and projected population and building consent information, plus development costing and alternative use structure planning

information. We have relied on this information and reserve the right to amend our assessment if the information or adopted valuation assumptions prove erroneous.

2.0 PROPERTY REPORT

2.1 GENERAL PROPERTY DESCRIPTION

6. The Auckland International Airport is located approximately 21 kilometres south of central Auckland in the suburb of Mangare. Land uses surrounding the airport comprise commercial and industrial business, plus lifestyle and farming activities to the north, and east. Manukau Harbour flanks the airport to the south and to the west. Figure 1 illustrates the general location of Auckland airport.

Figure 1. Auckland Airport Location Map

7. The airport is operated by AIA, a publicly listed company which has the New Zealand Government and the Auckland Council as its cornerstone shareholders.

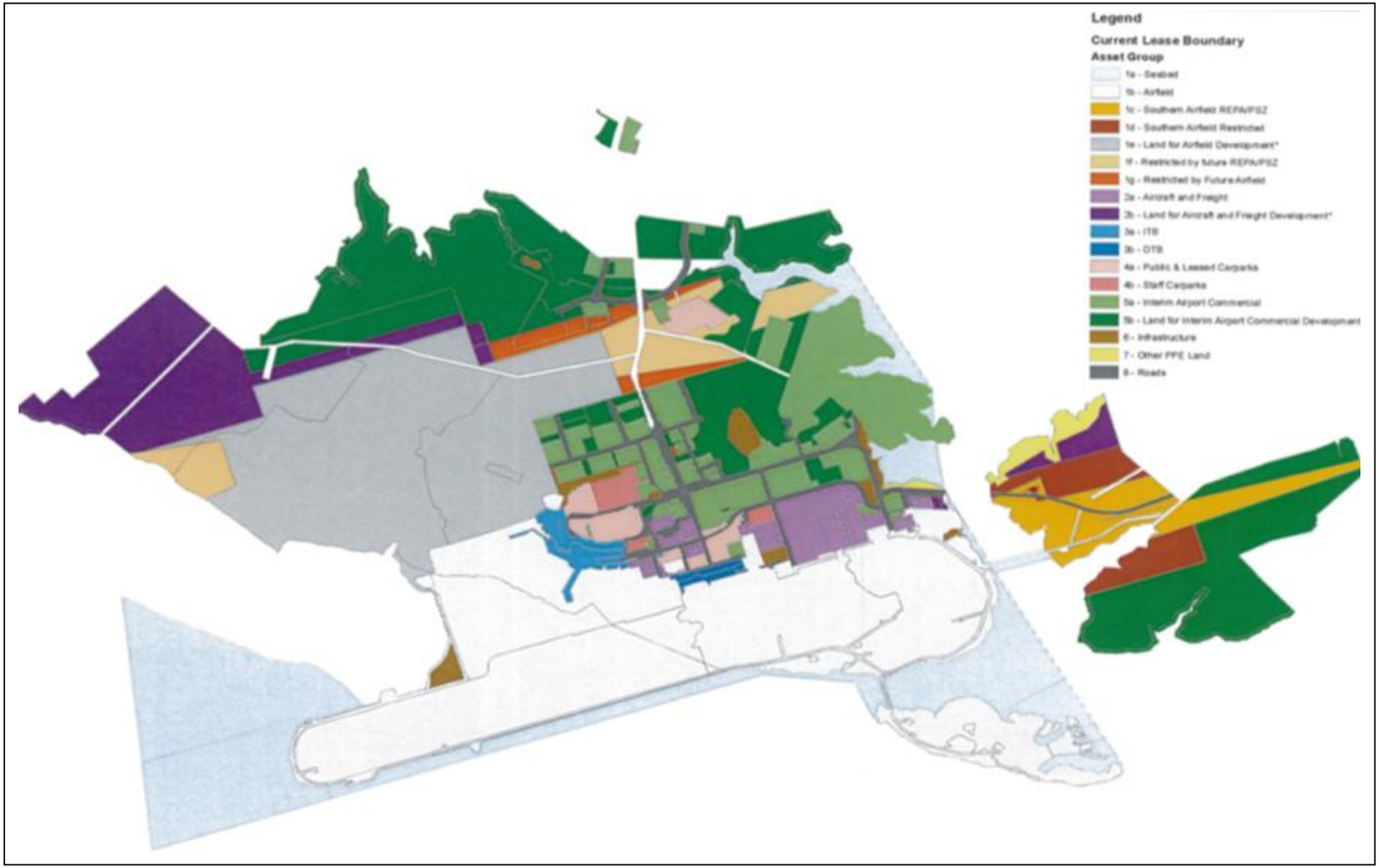
8. Auckland airport is the busiest airport in New Zealand with a total of 31.432m passengers (6.04m domestic and 7.39m international), and 154,290 aircraft movements in the year to 30 June 2011.

9. AIA land holdings encompass approximately 1,552 hectares of land of which approximately 716 hectares is operational airfield, 393 hectares is held for future airfield development, 169 hectares has been developed and / or leased to third parties, and 275 hectares is vacant and held for future commercial development.

10. Land within the Regulatory Asset Base and subject to this MVAU valuation encompasses 1,109 hectares (being the operational airfield plus land held for future development).

11. The current land use configuration of Auckland airport is detailed in Figure 2.

Figure 2. Auckland Airport – Land Use Configuration



Source: Common Ground – Alternative Use Report August 2011

12. The airport currently operates a single concrete runway of approximately 3.635 kilometres in length. The adjoining asphaltic concrete taxiway provides utilization as a runway during emergencies and when the main runway requires maintenance, but is not sufficiently separated from the main runway to operate simultaneously.

13. We note that much of the runway has an elevation of approximately 7 metres above sea level and is situated on land that has been reclaimed from Manukau Harbour. This land has required substantial stabilization and is protected by seawalls.

2.2 LEGAL DESCRIPTION & TENURE

14. We have searched the Land Information New Zealand property database to obtain a schedule of properties held by AIA. In summary our analysis indicates that AIA hold approximately 1551.8209 hectares of land.

15. Table 1 summarises the legal description of land held by AIA.

Table 1. AIA – Certificate Of Title Schedule

CT Ref #	Title	Appellation	Area - Ha
1	219885	Lot 3 Deposited Plan 353776	28.7665
2	474467	Lot 2 Deposited Plan 417367	1.4246
3	NA105D/359	Lot 1 Deposited Plan 144042 and Section 1 Survey Office Plan 67433	20.3965
4	NA106B/643	Lot 1 Deposited Plan 173452	37.5882
5	NA109D/595	Lot 1 Deposited Plan 178161	8.1360
6	NA109D/596	Lot 2 Deposited Plan 178161	2.4980
7	NA1120/171	Lot 2 Deposited Plan 41238	0.0969
8	NA1121/14	Lot 4 Deposited Plan 41238	0.1563
9	NA1138/48	Lot 3 Deposited Plan 41238	0.0943
10	NA1189/51	Lot 1 Deposited Plan 41238	0.0878
11	NA11C/663	Lot 1 Deposited Plan 57642	25.8999
12	NA125B/39	Lot 1 Deposited Plan 196235	0.3233
13	NA125B/98	Lot 2 Deposited Plan 196235	18.4050
14	NA1675/15	Lot 3 Deposited Plan 38518	0.9105
15	NA1691/38	Part Allotment 163 Parish of Manurewa	0.6533
16	NA1B/711	Lot 1 Deposited Plan 51077	6.0703
17	NA24A/830	Lot 2 Deposited Plan 62092	37.8887
18	NA305/113	Lot 15 Deposited Plan 13141	2.0513
19	NA366/26	Part Allotment 89 Parish of Manurewa and Defined On Deposited Plan 13716	31.6464
20	NA47C/137	Part Allotment 163 Parish of Manurewa	19.6196
21	NA47C/82	Allotment 164 Parish of Manurewa	21.8530
22	NA55A/937	Part Allotment 163 Parish of Manurewa	0.3581

Table 1. AIA – Certificate Of Title Schedule - Continued

CT Ref #	Title	Appellation	Area - Ha
23	NA56B/945	Part Lot 2 Deposited Plan 12194	24.7847
24	NA56D/993	Lot 1 Deposited Plan 103178	3.7408
25	NA586/220	Part Allotment 89 Parish of Manurewa and Lot 2 Deposited Plan 125742	44.9201
26	NA586/221	Part Allotment 89 Parish of Manurewa	40.4686
27	NA58D/290	Lot 1 Deposited Plan 94420	10.0219
28	NA62C/558	Lot 1 Deposited Plan 111094	0.5094
29	NA73B/518	Lot 1 Deposited Plan 125742	0.5566
30	NA78D/181	Part Lot 2 Deposited Plan 32275	11.9056
31	NA78D/182	Lot 1 Deposited Plan 36039	0.2982
32	NA78D/183	Part Allotment 179 Parish of Manurewa	0.2024
33	NA78D/185	Part Allotment 179 Parish of Manurewa	2.6133
34	NA78D/186	Allotment 474 and Allotment 476 Parish of Manurewa	170.0600
35	NA78D/187	Allotment 484 Parish of Manurewa	13.9400
36	NA78D/188	Allotment 482-483 Parish of Manurewa	15.4300
37	NA78D/189	Allotment 477-481 Parish of Manurewa	53.5270
38	NA78D/191	Lot 1 Deposited Plan 46409	36.6342
39	NA78D/192	Lot 2 Deposited Plan 46409	36.6089
40	NA78D/193	Allotment 504 Parish of Manurewa	70.4026
41	NA78D/194	Allotment 492 Parish of Manurewa	0.6085
42	NA78D/195	Allotment 508 Parish of Manurewa	36.4260
43	NA78D/196	Allotment 506 Parish of Manurewa	54.6326
44	NA78D/197	Allotment 328 Parish of Manurewa	0.4426
45	NA78D/198	Allotment 470 Parish of Manurewa and Defined On Survey Office Plan 49515	313.9000
46	NA78D/199	Allotment 505 Parish of Manurewa and Defined On Survey Office Plan 52973	0.5975
47	NA78D/200	Allotment 469 Parish of Manurewa and Defined On Survey Office Plan 49514	40.3600
48	NA78D/201	Allotment 494 Parish of Manurewa	2.7290
49	NA78D/202	Allotment 493 Parish of Manurewa and Defined On Survey Office Plan 49184	1.3673
50	NA78D/203	Allotment 182-185 Parish of Manurewa	60.2981
51	NA78D/204	Allotment 497 Parish of Manurewa	0.4047
52	NA78D/205	Part Lot 1 Deposited Plan 13104	19.6273
53	NA78D/206	Allotment 543 Parish of Manurewa and Defined On Survey Office Plan 53644	0.3792

Table 1. AIA – Certificate Of Title Schedule - Continued

CT Ref #	Title	Appellation	Area - Ha
54	NA78D/207	Allotment 565 Parish of Manurewa and Defined On Survey Office Plan 60283	54.2300
55	NA78D/208	Allotment 561 Parish of Manurewa	19.8400
56	NA798/163	Lot 1 Deposited Plan 31279	1.4460
57	NA82C/672	Part Lot 2 Deposited Plan 111094	37.6418
58	NA867/2	Lot 7 Deposited Plan 24346	22.3083
59	NA902/21	Lot 8 Deposited Plan 24346	43.7060
60	NA950/9	Lot 196 Deposited Plan 18037	0.0825
61	NA97D/261	Lot 1 Deposited Plan 162130	0.6984
62	NA985/62	Lot 1 Deposited Plan 28940	38.5463
Total			1,551.8209

16. We note that there are numerous encumbrances registered against the differing Certificates of Title. The effect of these encumbrances has explicitly been accounted for in this valuation.

17. As requested we have not attached copies of the Certificates of Title however they are held on file and are available for reference if required.

18. On review of AIA reports / documentation we note that there is a small discrepancy in our respective assessments of the land area. AIA documentation indicates a total land area of 1,552.7 hectares. We have queried this with AIA and as of writing this report we have not received confirmation as to the correct land area.

19. For valuation purposes we have ignored these differences and adopted a total land area of 1,551.8209ha and a comparable MVAU land area of 1,109.0 hectares. The balance land (as advised by AIA) encompasses existing commercial land that is either rented and leased or held for future development.

20. In accordance with the MVAU methodology this valuation assessment excludes all partial interests that AIA may have granted or hold in leases (ground plus land and buildings) with the airport.

2.3 RESOURCE MANAGEMENT & ZONING

21. AIA land is located within the territorial limits of the Auckland Council, and is governed by the Auckland Council District Plan (Operative Manukau Section), first made operative in October 2002.

22. Our review of Auckland Council documentation indicates the majority of AIA land is within the Airport Activities Zone, with a small portion zoned Mangere Puhinui Rural and Mangare Puhinui Heritage.

23. Designation 231 extends over the majority of the airport land and is divided into two areas – Area A which covers the majority of the airport land to the south, and Area B which covers a smaller northern portion. This designation provides for a wide range of airport related activities which are essential for the provision of airport related services.

24. Area B to the north allows for a wider range of activities including commercial, retail and recreational activities which are not provided for in Area A. Airport operations are recognized in the plan as being significant for the region and the country as a whole. Residential development is generally a non complying activity within this zone.

25. Development controls within the Airport zone govern hours of operation, noise discharge levels, runway operations, various building height limitations, the storage of hazardous substances, and coastal protection measures.

26. The majority of the AIA land is subject to Proposed Plan Change 13 and 14. These Proposed Plan Changes sought to include the AIA land within the Metropolitan Urban Limit and to rezone the airports rural land to Airport Activities. WE understand that all appeals to the Proposed Plan Changes have been resolved and that they will become operative in the near future.

27. In discussions with council we understand that that there may be some contamination affecting certain sites within the AIA complex. As discussed we have not undertaken a geotechnical or environmental audit of the land, and in accordance with Commerce Commission Decision 709 have excluded the impact of any contamination and remediation in the MVAU valuation.

28. Please note that we have not searched council records nor compiled a list for Resource Consents that support the development of the property in its existing use. Furthermore we have not carried out a survey of the property and assume no responsibility in connection to such matters.

29. Full copies of the planning documentation as they affect the AIA complex are held on file, and are available if required.

3.0 VALUATION OF MVAU LAND

3.1 METHODOLOGY

30. This valuation has been prepared in accordance with the Commerce Commission Decision 709, entitled "Commerce Act (Specified Airport Services Input Methodologies) Determination 2010." Schedule A to Decision 709 sets out the mandatory requirements for a valuer to apply when undertaking a valuation of land held by an airport for specified airport purposes.

31. In summary land valuations are required to be performed as if the specified airport land were to be put to its Highest and Best Alternative Use (HBAU). This is termed Market Value in the Alternative Use (MVAU).

32. The key concept of MVAU, is that it reflects the most probable use of airport land, other than for the supply of specified airport services, or a use that is influenced by specified airport services, which is physically possible, appropriately justified, legally permissible, financially feasible, and results in the highest valuation of the land in question.

33. Section A10 of Decision 709 sets out the mandatory valuation steps that valuers must follow when carrying out an MVAU valuation. The mandatory valuation steps are summarised in Table 2.

Table 2. A10 – Valuation Steps

Valuation Steps - A10	
(a)	Schedule land to be included in MVAU
(b)	Confirm ownership, tenure and aggregated land area
(c)	Determine existing zoning and likely zoning of the land for the HBAU
(d)	Consider and determine the HBAU, which must be - - Physically possible - Appropriately justified - Legally permissible and - Financially feasible
(e)	Consider resource management requirements, amenities in the area and access to services
(f)	For notional subdivision / residual value approaches - Prepare a land development plan (in conjunction with a planner where considered necessary by the valuer). This should demonstrate the valuers view of the likely HBAU development of the land, and provide evidence for the assessment of inputs into the notional subdivision / residual value approaches; - Determine market demand for the proposed development and the time period for the sale or realisation of the developed land in a notional subdivision or development;

Table 2. A10 – Valuation Steps - Continued

Valuation Steps - A10	
	- Determine the direct costs of developing the land, including roading, supply of services, legal, sales costs etc; - Determine any indirect costs of developing the land, including developers holding costs etc;
(g)	Undertake market research and obtain comparable sales information to support the alternate land uses including both block sales and developed land sales if both a direct sales comparison and notional subdivision / residual value approaches are to be used;
(h)	Apply suitable adjusted market evidence to airport land as required and taking account of whether a direct sales comparison and notional subdivision / residual value approaches are to be used;
(i)	Reconcile the results of the valuation approaches used and determine a final value for the HBAU; and
(j)	Prepare a valuation report, incorporating all disclosures required by the relevant valuation standards.

3.2 VALUATION CONSIDERATIONS

34. In practical terms we have undertaken this MVAU valuation in a way that is consistent with the valuation of other development land, ie; we have analysed and considered the prevailing market conditions of supply and demand, population and employment projections, plus cost and required developer returns, as they relate to the subject and comparable development land.

35. In accordance with standard valuation practice it is preferable to assess the value of the identified assets on the basis of comparable sales. Unfortunately however in this instance due to the scale, location and strategic nature of the proposed development, there is a paucity of comparable block sales evidence from which to accurately assess its value.

36. We have therefore used the hypothetical subdivision analysis and discounted cash flow approach as the primary method to assess the MVAU value of the AIA land.

37. The discounted cash flow approach simulates the subdivision and on-sale of land, taking into account all costs associated with the development and sale of lots, including a return to the purchaser for risk and other holding costs. The net present value of the free cash flows represents the price that a prudent purchaser would be prepared to pay for the subject land in its present state (block value).

38. In undertaking the hypothetical subdivision analysis we have taken professional planning and market supply and demand advice from ZPS and ME. As discussed in Section 4 below under the "Highest & Best Alternative Use" assessment, the airport complex has been hypothetically split into ten villages and one residual commercial precinct.

39. Due to the scale of the property we have used a discounted cash flow valuation approach to assess a "baseline" market value for one village precinct. The value benchmarks ($ per lot) from this "baseline" assessment have then been applied to the remaining village

precincts. To account for differences in village precinct aspect, density, yield and projected sell down periods, adjustments have been applied to the "baseline" value benchmarks.

40. As a cross check to the discounted cash flow valuation the block values have been benchmarked against market evidence of block land.

41. The summation value of the component village precincts less planning and rezoning costs reflects the estimated current market value of the MVAU block value.

4.0 DETAILED MVAU VALUATION

42. This MVAU valuation follows the steps outlined in Section A10 of Decision 709 (see Table 2 above).

4.1 (A) & (B) AIAL LAND HOLDINGS

43. In accordance with Section 2.2 above we have adopted an MVAU land area of 1,109.0 hectares.

4.2 (C) & (D) HIGHEST & BEST ALTERNATIVE USE ASSESSMENT

44. Independent planners ZPS were commissioned to assess the HBAU for the AIA land holding. In accordance with Commerce Commission guidelines (to determine what is physically possible, appropriately justified and legally permissible on the AIA land) ME were engaged to undertake a preliminary assessment of the prevailing market conditions, and to look at the current and projected catchment extent and market size, including population and employment projections.

45. This market size assessment then provided the basis from which the planning experts (ZPS and ME), calculated the future demand for a range of different land uses that could be developed on the AIA land.

46. In discussions with the planning experts we have been advised that the key drivers influencing the assessment of the HBAU for the AIA land include:

- In principle the Auckland airport land is an appropriate site for extensive residential and non residential development.
- The adjoining undeveloped areas to the west and south of Mangere through to Wiri would have been developed for urban uses were it not for the presence of the airport, the Mangere Wastewater Treatment Plant and the Wiri Oil Storage terminal.
- ME conclude that the site would allow for a logical extension of the urban residential area with good proximity to SH20 and the metropolitan centre of Manukau.
- Household and population growth projections prepared by Auckland Council anticipate growth of 400,000 households in the Auckland Region between 2012 and 2041, at an average of 14,000 per annum. Council expect 15% of this

growth to happen over the first 10 (10,000 per annum) years, with the strongest rate of growth between 2022 and 2031, at an annual average of 19,000 households per annum. Council also estimate that the southern area of the region will accommodate growth of 145,000 households until 2041 (70,000 in the urban area and 75,000 in the non-urban area).

47. On the basis of this analysis, Tables 3 and 4 schedules the planning experts' assessment of the HBAU land use allocation for the AIA land.

Table 3. ZPS & ME – HBAU Land Use Allocation (ha)

Description	Gross Land Area			Net Land Area -Amount Of Activity		
	Commercial	Residential	Total	Commercial	Residential	Total
Base Residential		641.2	641.2		477.7	477.7
Non-Centre's Based Commercial	9.4		9.4	7.0		7.0
Centre's Based Commercial	26.0		26.0	19.3		19.3
School's	48.3		*48.3*	43.9		43.9
Open Space & Arterial Roading			152.7			152.7
Seabed			231.7			231.7
TOTAL AIA	83.6	641.2	1,109.2	70.2	477.7	932.3

Table 4. ZPS & ME – HBAU Land Use Activity Allocation

Description	Amount Of Activity			
	Commercial Floor Space (GFA m²)	Residential Dwellings	Population	Dwelling Density / ha
Base Residential		16,030	40,075	25
Non-Centres Based Commercial	36,430			
Centres Based Commercial	67,700			
Schools	73,720			
Open Space & Arterial Roading				
Seabed				
TOTAL AIA	177,850	16,030	40,075	25

48. A copy of the ME and ZPS reports detailing the HBAU of the AIA land are attached as Appendices I and II to this report.

4.3 (E) RESOURCE MANAGEMENT / AMENITIES / DEVELOPMENT MIX

49. In accordance with sound development practices it is anticipated that the HBAU development of the AIA land would be undertaken in an integrated and comprehensive manner.

50. The HBAU structure plan / land use allocation prepared by the planning experts proposes to develop an integrated mixed density residential community that offers a high level of amenity, quality community assets, usable green space areas, with commercial, schooling and retail centre activities.

51. Environmental outcomes anticipated include:

- An urban form which creates a sense of place and encourages a community to develop.
- A safe, comfortable and healthy living environment.
- Integration of the roads within the new neighborhood area with existing arterial roads and public transport routes.
- An integrated road network that supports effective and efficient public transport.
- An efficient and effective cycle and pedestrian network that connects with existing and potential facilities.
- Provision of a network of open spaces integrated with cycle and pedestrian facilities.
- Opportunities for a wide variety of residential development forms of low, medium and high residential densities.
- Medium density development offering housing located in conjunction with a core of community facilities and having ready access to public transport.
- Medium density buildings which relate well to each other and to adjoining public and private open space.
- A development that meets City Plan policies to achieve an overall increase in residential density, urban consolidation and a compact urban form.
- Provisions to enable neighborhood retail, community, or medical facilities to be located within walkable distance of any part of the zone, or be within walkable distance of a bus stop within the zone.
- Provision of neighborhood shopping facilities.
- Provision of community footprint and business facilities.
- A sustainable storm water disposal system integrated with open space, reserves, pedestrian and cycle facilities.

- The establishment of an overall development concept that provides a defined basis for integrated development of this area.
- Protection of groundwater resource from contamination.

52. Based on the HBAU structure plan, approximately 16,030 residential dwellings, 104,130m² of net useable commercial space (GFA – Non Centres and Centres based commercial space – Table 4), and 13 schools will be hypothetically developed on the 1,109.2 hectare property.

53. We have been advised by ZPS that it will take between 1.5 to 2 years to obtain the necessary approvals (plan change to convert Airport zone to a Residential zone), to allow the mixed density residential development to occur on the AIA land.

54. As part of the plan change process ME note there is the possibility that Auckland Council may attempt to stage any HBAU development on the AIA in order to mitigate adverse effects on other initiatives outlined in the plan. However, given that the airport land is located within the 'Southern Initiative' zone and can provide for a large tract of residential development in a market that requires capacity for this land use, this may provide support to any Plan Change applications.

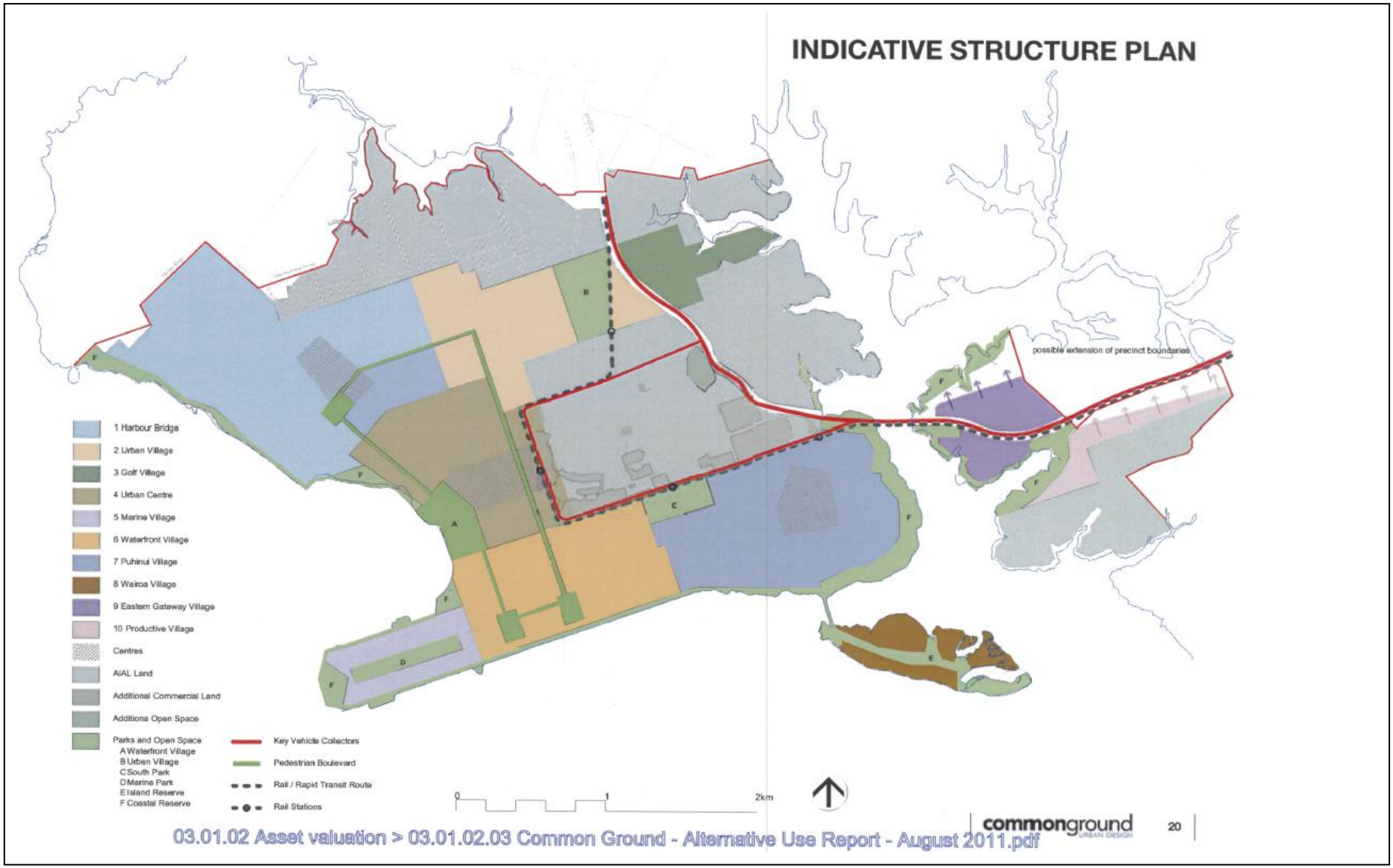
55. ZPS have advised us that it will cost approximately $2.5m to undertake the private plan change. Further from a time perspective once the planning approvals have been obtained it would take approximately 1 year to finalise the design and install all earthworks and infrastructure (water, utilities etc), before titles are able to be issued.

56. Consistent with AIA's planning experts; ZPS recommend that the logical development of the MVAU land would follow a series of residential village precincts.

57. For valuation purposes and subject to changes in the land use allocations ZPS have adopted the Common Ground "Indicative Structure Plan."

58. A copy of the HBAU Indicative Structure Plan is detailed in Figure 3 on the following page.

Figure 3. ZPS / ME – Indicative HBAU Structure Plan For AIA Land



Source: Common Ground – Alternative Use Report August 2011

4.4 (F) & (G) VALUATION INPUTS - NOTIONAL SUBDIVISION APPROACH

59. As detailed in Section 3.2 above due to the scale, location and strategic nature of the proposed HBAU development of the AIA land, there is a paucity of comparable sales evidence from which to accurately assess the block value of the property on a MVAU basis. We have therefore used the hypothetical subdivision analysis and discounted cash flow approach as the primary method to assess the MVAU of the AIA land.

60. Under the hypothetical subdivision valuation approach we have calculated a "baseline" market value for one village precinct (Puhinui Village being approximately 120.9 ha). The value benchmarks ($ / dwelling typology / lot) from this "baseline" assessment have then been applied to the remaining village precincts. To account for differences in village precinct aspect, density, yield and projected sell down periods, adjustments have been applied to the "baseline" value benchmarks.

61. In accordance with standard valuation practice the key inputs to the discounted cash flow approach include:

- Development of a hypothetical development plan,
- Estimation of gross realisations of individual allotments,
- Determination of appropriate realisation periods / market absorption,
- Calculation of development costs, and
- Assessment of an appropriate discount rate.

4.4.1 HYPOTHETICAL DEVELOPMENT PLAN

62. In accordance with advice received from ZPS we have adopted the notional HBAU structure plan and land use allocation as detailed in Section 4.2 above.

63. The HBAU land use activity by type and precinct is scheduled in Table 5 on the following page.

Table 5. HBAU Land Area By Activity Type & Precinct (Ha)

Precincts	Gross Land Area	Internal Roads & Reserves	Net Land Area	Centres Based Commercial NLA	Non Centres Based Commercial NLA	Education NLA	Total Residential NLA
Puhinui Village	120.9	28.2	92.7	1.4		11.0	80.3
Waterfront Village	87.6	22.3	65.3			2.0	63.3
Wiroa Village	25.3	6.6	18.7				18.7
Urban Centre	89.0	20.4	68.6	4.2	6.2		58.1
Marine Village	30.8	7.5	23.3			2.0	21.3
Urban Village	73.3	18.5	54.8			2.0	52.8
Golf Village	28.2	6.8	21.4			2.0	19.4
Harbour Edge	184.5	46.0	138.5	1.4		6.0	131.1
Eastern Centre Gateway	30.2	7.3	22.9			2.0	20.9
Productive Village	18.0	4.2	13.8			2.0	11.8
Other Commercial	37.0	9.0	28.0		13.0	15.0	
Totals	724.8	176.9	547.9	7.0	19.2	44.0	477.7

Net Land Area (NLA)

64. In accordance with planning advice the residential areas have been further apportioned by dwelling typology (detached, urban houses, semi-detached, terraced, and apartments) within each precinct. The average lots sizes adopted in this HBAU analysis include:

- Detached – 600m²
- Urban House – 400m²
- Semi-Detached – 300m²
- Terraced – 200m²
- Apartments – 125m²

65. On the basis of discussions with local industry participants and planning experts the land use allocation for apartments has been further split to allow for high density retirement living. In this analysis we have allowed for 2 x 6 hectare retirement villages to be developed. These units may encompass a combination of independent living units, apartments, and care beds.

66. On the basis of a total residential capacity of 16,030 households (25 dwellings per hectare), the adopted dwelling yield by housing typology and precinct are summarised in Table 6 on the following page.

Table 6. HBAU Residential Land Area - Dwelling Yield By Housing Typology & Precinct

Precincts	Detached		Urban House		Semi Detached		Terraced		Apartments		Retirement Ap.		Indicative Yield	Gross Density
	%	Yield	%	Yield	%	Yield	%	Yield	%	Yield	%	Yield		
Puhinui Village	30.0%	401	30.0%	602	25.0%	669	5.0%	201	2.5%	161	7.5%	482	2,516	23
Waterfront Village	15.0%	158	20.0%	317	30.0%	633	30.0%	950	5.0%	253	0.0%	0	2,312	27
Wiroa Village	50.0%	156	40.0%	187	10.0%	62	0.0%	0	0.0%	0	0.0%	0	406	16
Urban Centre	0.0%	0	0.0%	0	30.0%	581	49.4%	1,434	10.7%	495	10.0%	465	2,976	38
Marine Village	0.0%	0	20.0%	107	45.0%	320	30.0%	320	5.0%	85	0.0%	0	831	29
Urban Village	20.0%	176	30.0%	396	30.0%	528	15.0%	396	5.0%	211	0.0%	0	1,706	24
Golf Village	15.0%	48	15.0%	73	20.0%	129	35.0%	339	15.0%	233	0.0%	0	822	32
Harbour Edge	30.0%	655	40.0%	1,311	20.0%	874	5.0%	328	5.0%	524	0.0%	0	3,691	21
Eastern Centre Gateway	40.0%	139	25.0%	130	35.0%	243	0.0%	0	0.0%	0	0.0%	0	513	18
Productive Village	50.0%	99	40.0%	118	10.0%	39	0.0%	0	0.0%	0	0.0%	0	257	16
Other Commercial		0		0		0		0		0		0	0	
Totals		1,833		3,240		4,079		3,968		1,962		947	16,030	25

4.4.2 GROSS REALISATIONS

67. In assessing the gross realisations under the HBAU structure plan we have researched and analysed sales in greater Auckland, liaised with local industry participants, and have had regard to the current residential, business and retail markets.

68. On the basis of our comparable sales analysis contained in Appendix III to this report we have adopted the following "baseline" gross realisations for the Puhinui Village.

Table 7. HBAU – Gross Realisations – Puhinui Village

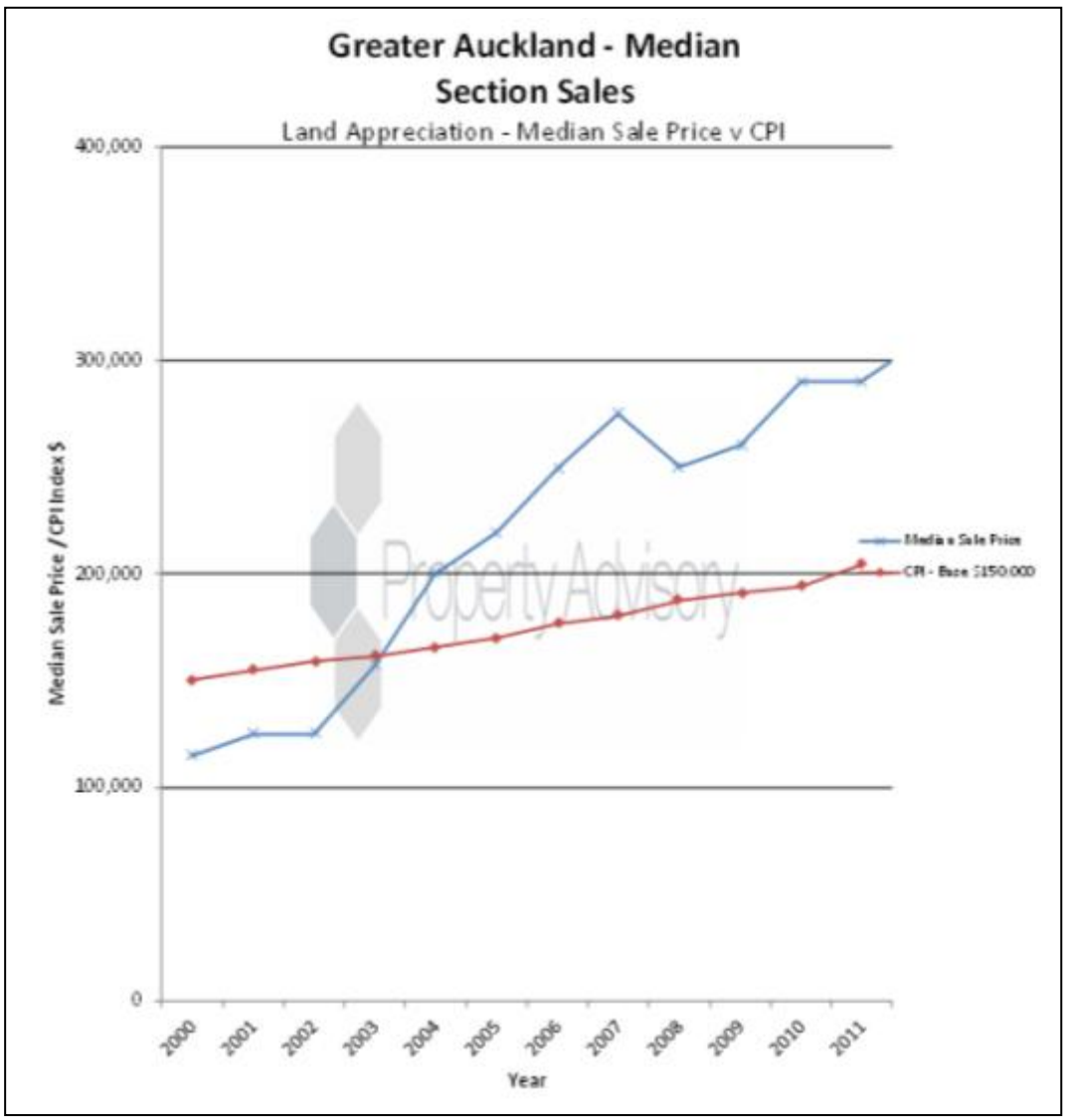
Land Use Allocation		Gross Realisations
Dwelling Type		
(a)	Detached	$350,000 / lot inc GST
(b)	Urban House	$280,000 / lot inc GST
(c)	Semi-Detached	$250,000 / lot inc GST
(d)	Terraced	$185,000 / lot inc GST
(e)	Apartments	$80,000 / lot inc GST
Commercial		$400/m² plus GST
Retirement Village / Apartments		$200 / m² plus GST
Education		$200 / m² plus GST
Other – Roads / Reserves		nil

69. We note that no value has been ascribed to 152.7 hectares of land identified for open space reserves and arterial roading, or the 231.7 hectares of seabed. The value of these land assets is implicitly included in the value of other AIA land (the Village precincts), under the HBAU valuation construct.

70. Our research indicates that over the medium to long term that land values / median section prices have typically increased at a rate in excess of the rate of general CPI inflation. Consistent with our analysis of comparable block sales we have applied an appreciation factor to the base gross realisation scheduled in Table 7.

71. Our analysis of historical land / residential section appreciation in greater Auckland relative to the general CPI is illustrated in Figure 4.

Figure 4. Land Value Appreciation Analysis – Auckland Median Section Price v CPI Index



Source- Real Estate Institute Of New Zealand Statistics

72. Converting this analysis into a tabular format indicates that median section prices in Auckland have increased at an annual rate of approximately 8.78% over the last 10 years, whilst the CPI has increased a rate of 2.82% per annum.

Table 8. Average Land Appreciation Analysis - Median Section Price v CPI Index

Period	Greater Auckland	Manukau City	CPI
5yr Average	3.10%	1.41%	2.55%
10yr Average	8.78%	7.82%	2.82%

73. Due to the current market environment we have adopted a conservative land appreciation / growth rate across all land classes of 2.5% per annum.

4.4.3 REALISATION PERIOD

74. Preliminary analysis on the commercial realities of developing an integrated residential and commercial community on the AIA land has been carried out by ME and ZPS.

75. Key demand and timing recommendations are summarised as follows:

- It will take between 1.5 to 2 years to obtain the necessary approvals (plan change to convert Airport zone to a Residential zone).
- Residential sections (and therefore household growth) will develop at the annual average of 800 households.
- On the assumption that approximately 10,000 new dwelling are required every year to meet population growth it is envisaged that the hypothetical development of the AIA land could obtain a 8% regional market share.
- It is estimated that 13 schools will be required as part of the integrated development - 9 primary, 2 intermediate, and 2 secondary schools. Schools will need to be provided to attract residents.
- Centres-based retail and office space will be provided commensurate with population growth.
- It is envisaged that land for 2 retirement villages will be sold in a block state with base roading and services to the boundary.

76. As a cross check to this analysis, in a residential context we have analysed Statistics New Zealand building consent data to establish historical absorption rates. A summary of this analysis is detailed in Table 9 on the following page.

77. Analysis of Table 9 indicates that over the last ten years there were an average of 6,520 residential dwellings per annum consented in the Auckland Region. As with section sales, we note a high level of activity through the early to mid 2000's, before a decrease in activity due to the global financial crisis.

78. Currently it is well recognised that there is a significant undersupply of houses in the Auckland Region.

Table 9. Statistics New Zealand – Auckland Building Consent Data – Residential Dwellings

Year	Rodney District	North Shore City	Waitakere City	Auckland City	Manukau City	Papakura District	Franklin District	Total Auckland District
2000	812	1,268	1,316	2,077	1,797	275	354	**7,899**
2001	773	1,162	1,177	2,422	2,194	152	310	**8,190**
2002	1,239	1,662	1,537	4,578	2,496	305	463	**12,280**
2003	1,395	1,317	1,542	3,536	2,724	310	610	**11,434**
2004	1,163	1,304	1,025	5,622	2,146	267	760	**12,287**
2005	1,021	1,017	777	2,280	1,863	333	542	**7,833**
2006	821	1,244	843	1,873	1,698	239	623	**7,341**
2007	727	1,049	697	1,747	1,198	126	745	**6,289**
2008	717	430	608	1,438	715	163	349	**4,420**
2009	604	549	514	916	541	199	234	**3,557**
2010	599	569	443	897	623	260	290	**3,681**
2011	598	603	414	1,172	657	191	137	**3,772**
2012	901	545	554	1,246	746	358	231	**4,581**
Totals	**11,370**	**12,719**	**11,447**	**29,804**	**19,398**	**3,178**	**5,648**	**93,564**
5yr Average	684	539	507	1,134	656	234	248	**4,002**
10yr Average	855	863	742	2,073	1,291	245	452	**6,520**

79. In cross check on the supply side equation we usually review vacant land survey data collected by the Local Authority. We have been in discussions with Local Authorities and have requested this information, however as of writing this report this data has not been provided to us.

80. In summary based on the available information, we envisage that the demand for vacant allotments as proposed by ZPS and ME under the HBAU development scenario will attract approximately 8% of the total demand. This equates to sales of approximately 800 residential allotments per annum.

4.4.4 DEVELOPMENT COSTS

81. Development costs include:

- Construction Costs ,
- Resource Management / Consenting Costs,
- Local Authority Fees / Development Contributions,
- Marketing / Legal Costs,
- Local Authority Rates, and
- Management.

CONSTRUCTION COSTS

82. We understand that due to timing constraints BARNZ have been unable to employ the services of a quantity surveyor to prepare detailed construction cost estimates for the hypothetical subdivision of the AIA land.

83. For valuation purposes we have therefore had to estimate the HBAU construction costs with reference to industry benchmarks and valuer observed development costs for other land developments.

84. To confirm or otherwise these cost estimates we recommend that a quantity surveyor be engaged to prepare detailed costings. We reserve the right to amend our assessment if the resultant costs differ materially from our cost estimates.

85. Our estimate of aggregated average development costs includes all civil, earthworks, development contributions, local authority rates, plus a 10% contingency margin, and are summarised as follows:

- Residential lots - $65,000.
- Commercial land - $57 / m².
- Retirement Village land - $57 / m²
- Education land - $40 / m².
- Average rate - $1,164,000 / hectare.

RESOURCE MANAGEMENT / CONSENTING COSTS

86. We have been advised by ZPS that it would take between 18 and 24 months and cost approximately $2,500,000, to obtain the necessary approvals (plan change to convert Airport Precinct zone to a Residential zone), to allow the mixed density residential development to occur on the AIA land.

MARKETING / LEGAL COSTS

87. Selling costs have been calculated on the basis of a 2.0% commission, plus a marketing allowance equaling 1% of the gross realisation.

88. Legal costs of preparing sale and purchase agreements and conveyancing have been set at $1,000 per dwelling unit.

MANAGEMENT

89. A project management allowance has been assessed on a precinct basis. In the baseline assessment for Puhinui Village management costs have been set at $350,000 per annum.

LOCAL AUTHORITY FEES / DEVELOPMENT CONTRIBUTIONS

90. Development contributions have been set at $9,750 per residential dwelling allotment.

LOCAL AUTHORITY RATES

91. A project management allowance has been assessed on a precinct basis. In the baseline assessment for Puhinui Village Local Authority rates have been assessed at $250,000 per annum.

SEA WALL

92. On inspection we identified a number of sea walls fronting Manukau Harbor, which have been developed to protect the airport complex from erosion and support aircraft movements. These protection assets are located on AIA land and are currently maintained by AIA.

93. We have assumed for HBAU valuation purposes that these structures will either redeveloped as beaches or maintained as a seawalls and vested to the Local Authority as public reserve, at no cost.

4.4.5 DISCOUNT RATE SELECTION

94. The discount rate reflects the annualised rate of return that an investor would require from undertaking the proposed development. In practical terms profit and risk margins analysed from comparable transactions fluctuate relative to the following factors:

- The size and scale of the development,
- The potential development mix,
- The complexity of design and marketability,
- The consent-ability and level of planning risk involved,
- The state of the market and effective competition,
- The availability and security of investment,
- Comparative returns available from other investments,
- Expectations surrounding future capital appreciation, and
- The weight of capital employed in the development.

95. In summary the greater the risk being carried by the developer, the greater the required return / profit and risk allowance.

96. Due to the unique nature and scale of the proposed HBAU development there is little transactional evidence from which direct comparisons can be made. Our analysis of smaller urban development land transactions indicates that the required return / profit and risk allowances range from 10% to 40% of outlay. This has increased in recent years as the global financial crisis has put pressure on property values and reduced funding liquidity.

97. On the basis of analysis of urban development land transactions and discussions with major property developers, we have assessed the pre-tax nominal discount rate to be 27%.

4.5 (H) & (I) MVAU - DISCOUNTED CASH FLOW VALUATION

98. As discussed above the discounted cash flow approach simulates the subdivision and on-sale of land, taking into account all costs associated with the development and sale of lots, including a return to the purchaser for risk and other holding costs. The net present value of the free cash flows represents the price that a prudent purchaser would be prepared to pay for the subject land in its present state.

99. Under the hypothetical subdivision valuation approach we have calculated a "baseline" market value for one village precinct (Puhinui Village being approximately 120.9 ha), and then applied the value benchmarks ($ / dwelling typology / lot) from this "baseline" assessment to the remaining village precincts.

100. To account for differences in village precinct aspect, density, yield and projected sell down periods, adjustments have been applied to the "baseline" value benchmarks.

101. A summary of the key inputs adopted in the MVAU valuation of the "baseline" Puhinui Village land are contained in Table 10.

Table 10. Baseline MVAU Development Inputs – Puhinui Village

Description	Totals
Revenue	
Detached - 401 lots @ 600m²	157,348,685
Urban House - 602 lots @ 400m²	188,818,422
Semi Detached - 669 lots @ 300m²	186,971,142
Terraced - 201 lots @ 200m²	41,585,010
Apartments - 161 lots @ 125m²	14,386,165
Retirement Apt. – 60,218m² @ 200/m²	12,970,423
Commercial – 14,006m² @ 400/m²	5,961,701
Education – 110,000m² @ 200/m²	24,285,549
Total Revenue - Base	632,327,098

Table 10. Baseline MVAU Development Inputs – Puhinui Village - Continued

Description	Totals
Expenses	
Legal & Sales Expenses	21,003,832
GST	76,840,360
Development Expenses	153,483,557
Total Expenses - Base	251,327,749
Variables	
Pre-Tax Nominal Required Rate of Return	27.00%
Land Appreciation Rate	2.50%
Development Cost Escalation Factor	2.50%
Development Period	9 Years

102. Having regard to the above inputs we have assessed the "baseline" value of the 120.9 hectare Puhinui Village land to be $147,900,000, plus GST.

103. The value benchmarks (by land use and dwelling typology) that have been applied to the other nine village precincts within the airport complex, have been calculated by multiplying the "baseline" value of the Puhinui Village by their gross realisation percentage, and then dividing this figure by either land area or the number residential lots.

104. The allocation of the "baseline" Puhinui Village valuation and resulting value benchmarks are summarised in Table 11.

Table 11. "Baseline" Land Value Apportionment – Adopted Benchmark Values ($ / lot & $ / m²)

Description	Gross Realisation Estimate $	% Allocation Of Gross Realisation	Land Value Apportionment $	Adopted Benchmark Values $ / Lot $ / m²
Detached - 401 lots @ 600m²	136,824,944	24.63%	36,430,049	90,746 / lot
Urban House - 602 lots @ 400m²	164,189,932	29.56%	43,716,059	72,597 / lot
Semi Detached - 669 lots @ 300m²	162,583,602	29.27%	43,288,369	64,698 / lot
Terraced - 201 lots @ 200m²	36,160,878	6.51%	9,627,942	47,966 / lot
Apartments - 161 lots @ 125m²	12,509,709	2.25%	3,330,747	20,742 / lot
Retirement Apt. – 60,218m² @ 200/m²	12,970,423	2.33%	3,453,414	57 / m²
Commercial – 14,006m² @ 400/m²	5,961,701	1.07%	1,587,321	113 / m²
Education – 110,000m² @ 200/m²	24,285,549	4.37%	6,466,100	59 / m²
Total Revenue - Base	555,486,738	100.00%	147,900,000	
			$ / Potential Residential Lot	58,650

	$ Per hectare	1,223,325

105. As part of this valuation adjustments have been made to the "baseline" value benchmarks to reflect aspect, density, and yield etc; plus projected sell down periods and a one off $2.5m adjustment for consenting costs.

106. Table 12 on the following page summarises the MVAU valuation of the AIA land by Village precinct.

Table 12. MVAU – Summation Valuation By Precinct

Precincts	Gross Area	Residential Adjustment Factor %	Indicative Residential Yield	Gross Density	Commercial Land ha	Deferment yrs 1/07/2011	Development Start Date	Notional Value	$/ha	Deferment Value 10%	$/ha
Puhinui Village (Base)	120.9	0%	2,516	23	12.4	2	1/07/2013	147,900,000	1,223,325	122,231,405	1,011,012
Waterfront Village	87.6	5%	2,312	27	2.0	2	1/07/2013	136,811,709	1,561,778	113,067,528	1,290,725
Wiroa Village	25.3	50%	406	16	0.0	6	1/07/2017	47,680,902	1,884,621	26,914,626	1,063,819
Urban Centre	89.0	0%	2,976	38	10.5	6	1/07/2017	131,853,470	1,481,500	74,427,846	836,268
Marine Village	30.8	15%	831	29	2.0	11	1/07/2022	53,524,531	1,737,809	18,760,022	609,092
Urban Village	73.3	0%	1,706	24	2.0	12	1/07/2023	103,358,043	1,410,069	32,933,058	449,291
Golf Village	28.2	30%	822	32	2.0	14	1/07/2025	52,056,798	1,845,986	13,708,182	486,106
Harbour Edge	184.5	0%	3,691	21	7.4	15	1/07/2026	242,833,992	1,316,173	58,132,527	315,081
Eastern Centre Gateway	30.2	20%	513	18	2.0	20	1/07/2031	46,589,225	1,542,690	6,925,191	229,311
Productive Village	18.0	20%	257	16	2.0	21	1/07/2032	25,298,799	1,405,489	3,418,641	189,925
Other Commercial	37.0	0%	0	0	28.0		1/07/2011	23,514,423	635,525	23,514,423	635,525
Open Space & Arterial Roading	152.7										
Seabed	231.7										
Totals	1,109.2		16,030	25	70			136,811,709	1,561,778	113,067,528	1,290,725
								Less Consenting Costs		2,500,000	
								MVAU Estimate		**491,533,450**	**678,164**

107. In assessing the MVAU land value of the AIA complex we have followed the guidelines put forward by the Commerce Commission in Decision 709 and taken professional advice from planners and market economists. In addition we have liaised with the Local Authority and major industry participants to arrive at an independent assessment of the HBAU of the AIA complex.

108. This valuation has also been undertaken in accordance with the Commerce Commission's requirements for the conduct of expert witnesses.

109. As part of this MVAU valuation we have analysed and considered the prevailing market conditions of supply and demand, population and employment projections, plus cost and required developer returns as they relate to the subject and comparable development land.

110. In accordance with standard valuation practice it is preferable to assess the value of the identified assets on the basis of comparable sales. Unfortunately however in this instance due to the scale, location and strategic nature of the proposed AIA development, there is a paucity of comparable sales evidence. We have therefore used the hypothetical subdivision analysis and discounted cash flow approach as the primary method to assess the MVAU value of the AIA land.

111. On the basis of the available information it is our opinion that the MVAU of the 1,109.2 hectare AIA property as at 30 June 2011 was:

Four Hundred & Ninety One Million Five Hundred Thousand Dollars (Plus GST if any)

$491,500,000

112. Table 13 apportions the MVAU valuation within the AIA property.

Table 13. MVAU Apportionment – AIA Land

Description	Gross Area ha	MVAU Value Estimate $	$ / Ha
Precinct Land	724.8	$491,500,000	$678,118
Open Space & Arterial Roading	152.7	$0	$0
Seabed	231.7	$0	$0
Total	1,109.2	$491,500,000	$443,112

113. We refer you to Appendix IV and V which contains our detailed discounted cash flow worksheets and our standard valuation policies upon which this assessment is based.

5.0 COMPLIANCE STATEMENT & DISCLOSURES

- This valuation has been prepared having regard to the High Court Code of Conduct for preparation of expert evidence, plus International Valuation Standard 3 of the Australia and New Zealand Valuation and Property Standards . We confirm the following:
- To the best of our knowledge the statements of fact presented in this report are correct,
- The analysis and conclusions in the report are limited only by the reported assumptions and conditions,
- Property Advisory Ltd has no direct pecuniary or other interest in the property being valued,
- Our fee is not contingent upon any aspect of the report,
- The valuation has been prepared in accordance with the Property Institute of New Zealand / New Zealand Institute of Valuers Code of Ethics, Rules of Conduct and Valuation Standards,
- The Valuer has satisfied professional education requirements,
- The Valuer has experience in the location and category of the property being valued,
- The Valuer has made a personal inspection of the property;
- No one, except those specified in the report, has provided professional assistance in preparing the report.

114. If you have any queries regarding this assessment please do not hesitate to contact us.

Yours faithfully
Property Advisory Ltd

K D Smith
B.Com VPM, MNZPI
Registered Valuer
Director

Attachment I

Market Economic Report

Auckland Airport
Alternative Use Scenario Review

Board of Airline Representatives New Zealand (Inc)
PO Box 2779
Auckland

Attention: Kristina Cooper (Barrister)

12 March 2013

Re: Auckland Airport Alternate Use Review of Colliers and Common Ground Assessments

Dear Kristina

M.E Spatial ("ME") has been asked to review the responses that Common Ground Urban Design ("CGUD") and Colliers have prepared in relation to the submission that BARNZ has made to the Commerce Commission on the review of airport landing fees at Auckland Airport. ME previously prepared a report titled "Auckland Airport Alternate Use Review" (December 2011), which is critiqued in these letters.

Market Economics is an independent consultancy, and we regularly provide expert advice to public and private clients about economic, environmental and resource management issues. This letter provides a response to the concerns raised in the two letters prepared by CGUD and Colliers, and is structured into sections discussing each of the issues. The key issues are:

- Suitability of the Airport site for Urban Development.
- Residential Development – quantity of sections and timing of their release.
- GFA estimates of Non-residential Capacity
- Airport Outline Structure Plan

Suitability of the Airport site for Urban Development

The Airport land is already a highly modified area and we agree that it would be an appropriate site for residential and non-residential activities if the airport were to relocate. The CGUD and Colliers letters rightly point out that the areas that remain relatively undeveloped to the west and south of Mangere through to Wiri would have developed for urban uses if the Airport, Mangere Wastewater Treatment Plant and Wiri Oil Storage terminal were not located there. The site would allow for a logical extension of the urban residential area with good proximity to the State Highway 20 ("SH20") motorway and the sub-regional ("metropolitan") centre of Manukau.

Residential Development

Given that there is consensus between all parties that residential development is an acceptable land use in this location, the main areas of contention in relation to residential development are the timing and marketability of the dwellings. In our 2011 report, we raised concerns with respect to the timing of the development which was considered optimistic, as well as concerns that the planning requirements would take longer to achieve (approximately three years) than is allowed for by the indicative start up timeframe of July 2012. The Colliers letter provides further clarification

about some of the assumptions contained in the assessment with regards to timing and marketability of residential sections.

Quantity and Timing of Residential Development

The Auckland Plan ("The Plan") provides high level objectives for the spatial distribution of anticipated household growth in the region out to 2041. This is the best indication of the planning intentions for accommodation of growth within the region, and major changes to land use would require an application to make changes to the District Plan. The market may respond differently from the objectives set out in this plan, but the overarching principles will need to be considered in any application for a Plan Change. It is our opinion that the beginning year for development would need to be pushed out to account for Plan Change processes which in the current climate could take up to two years to complete. We are currently involved in Plan Change applications which are taking longer than expected, because they are outside the current priority areas of The Plan; the Airport development can be expected to face similar challenges.

The Plan anticipates growth of 400,000 households in the Auckland Region between 2012 and 2041, an average of 14,000 per annum. Approximately 25% of total household growth is expected to happen over the first ten year time period (10,000 households per annum), with the strongest rate of growth between 2022 and 2031, an annual average of 19,000 dwellings.

The CGUD masterplan anticipates 16,260 dwellings at the Airport. The Colliers report expects slightly fewer households (16,214) and that 57.4% of those households (approximately 9,315) will be developed between 2012 and 2021; this will account for 9.3% of Auckland Region growth during that period. The remaining households (approximately 6,899) are expected to be developed between 2022 and 2028, and would account for approximately 4.1% of total Auckland Region growth between 2022 and 2031. The Plan also estimates that the southern area of the region will accommodate growth of 145,000 households until 2041 (70,000 in the urban area and 75,000 in the non-urban area); the alternate use masterplan would cater for approximately 11% of this total growth. These are high shares of expected growth for an area that is currently not intended for residential development.

Residential Timing Comparison Locations

In our 2011 report, we used the Stonefields development at Mt Wellington to compare the projected timing of residential sections at the Airport with the development time path at Stonefields. Colliers have made the following three points about the Stonefields development being used as an indicator of timing:

1. Colliers point out that there aren't any commercial facilities within the Stonefields area and that would be a point of difference between the two areas. We would like to highlight that there are commercial facilities at Lunn Avenue on the edge of the quarry site which do provide amenity to those residents. The marketability of the sections would have been enhanced by this offering (or the potential for this offering at the time the first houses were being built), as well as proximity to Auckland's CBD for employment and other retail centres such as Sylvia Park, and therefore we do not accept this as a valid point of differentiation.

2. Colliers raises a valid point about the contractual arrangements between the developer and Fletchers made prior to the development of the Stonefields sections in Mt Wellington. This is an arrangement that the author of the earlier ME report was unaware of, and we accept that this would have affected the timing and release of land. However, there still remains a possibility that the timing and staging of a future master-planned area could be regulated by provisions set by the Plan Change process.

3. We agree with Colliers' assertion that houses at the Airport development would be valued substantially lower than the upper end house prices of greater than $700,000 in the Stonefields development.

Colliers suggests that the airport location would be more likely to be similar to the Dannemora development than the Stonefields development, which at its peak achieved an average of 600 to 800 consents per annum. Their argument is that because there is now a recognised residential land shortage and increased pressure for housing that a greenfield development would achieve an even greater number of residential sections per annum. This explanation is used to justify the average development rates of an average of 1,000 households per annum across the valuation time frame.

However, when compared against the Flat Bush residential development (approximately 18,000 dwellings) which released land after the Dannemora development was reaching completion and will continue to be developed until 2021, the growth estimate of 800 households per annum is relatively consistent. The Flat Bush development is expected to have a dwelling density of 20 dwellings per hectare across the residential area, whereas the masterplan prepared for the Airport site would see 25 dwellings per hectare for the residential area. In our 2011 report, we accepted that this intensity of development could be achieved, however we do not accept that there is justification for assuming a growth rate of 1,000 dwellings per annum at the Airport. In addition, the Airport development would not operate in isolation and this additional volume of supply would be likely to lower the land prices and redistribute the rate of uptake of residential sections within the South Auckland area, rather than stimulate additional growth.

Sensitivity of Timing Assumptions

A key consideration of the achievability of the timing of the proposed masterplan is whether an application for a greenfield residential site will be straight forward or a lengthy process. There is the possibility that the Council will attempt to stage the development in order to mitigate adverse effects on other initiatives outlined in The Plan. However, there are positive aspects of this proposal that may help to progress the Plan Change faster, such as the area being within the "Southern Initiative" zone and its ability to provide for a large tract of residential development in a market that requires capacity for this land use.

Given that the rate of development that CGUD assume would be contingent upon attracting such high shares of regional growth, we think that the valuation assessment is for an optimistic rather than realistic assessment of growth. In our 2011 report we stated:

> *"The one concern we have with the residential component of the land is that releasing 16,260 dwellings to the market over the course of 17 years represents an average market share of all new residential housing of nearly 10%, which is a very high proportion of growth for AIA to capture. In our opinion 17 years would be a minimum timeframe that should be adopted as the sell-down period, and in reality it may be 20-25 years before 16,260 new dwellings would be sold on AIA land" (ME Report, 2011, p23).*

This is especially true considering that Auckland Council do not believe that there is currently a significant shortage of residential land. Our recent involvement with Plan Change applications seeking to develop land that has not been considered available in the Auckland Plan indicates that it can take approximately two years to get a final favourable decision. On this basis, we estimate that residential development could not begin on the Airport site for approximately three years taking into account work programmes prior to applying for a Plan Change. For valuation purposes we recommend using the annual average uptake of 800 dwellings per annum which signals a 20 year development timeframe for the residential development after the Plan Change application is confirmed (23 years in total).

GFA estimates of Non-Residential Capacity

There is an inconsistency between the CGUD Report estimates of non-residential GFA and the non-residential estimates that Colliers have used for valuation purposes. The CGUD Report makes provision for 259,841 sqm GFA on the 37.1 ha commercial area in the urban part of the development and allows for a further 259,000 sqm GFA on the 37.0 ha of commercial space in the non-urban part of the development (CGUD Report, p23)[1]. This makes the total for both areas equivalent to 518,841 sqm GFA. A key outcome highlighted on page 23 of their report is that provision will be made for "Over 500,000 m² commercial GFA for mixed use development".

On page 4 of their letter, Colliers state that for the valuation assessment, they have considered that the 259,841 sqm is a *net land area* rather than a *gross floor area* for the precincts in addition to the net land area in the existing commercial area. The valuation is then calculated by applying land values to the net land areas. This highlights that the estimates of non-residential GFA sqm in the Common Ground report are over-stated. At reasonable site coverage rates of 35% of net land area, the quantity of gross floor area (sqm) that would be available from the total of 518,841 sqm net land area (across the precincts and existing area) would be 181,600 sqm GFA.

In our 2011 Report, we estimated that the quantity of floorspace that would be sustainable for commercial and non-commercial activities would by approximately 204,000 to 263,000 sqm. If the space required for schools is excluded from the estimate, the Airport would require 111,000 to 147,000 sqm GFA. On this basis we concluded that CGUD had overstated the commercial land in their report by a significant amount (372,000 to 408,000 sqm). We stand by this assertion and highlight the confusion between the GFA estimates contained in the CGUD report which have been assumed to be net land area in the Colliers valuation approach, indicating that the CGUD Report has significantly over-stated the level of sustainable non-residential floorspace.

[1] CGUD and Colliers provide the following examples of the types of activities that would be permitted in these areas; visitor accommodation, medical centres, hospitals, schools, technical institutes, universities, churches, retirement complexes, childcare facilities, sports facilities, movie theatres, offices, retail, showrooms, service stations and wholesale premises

Airport Structure Plan Outline

Our 2011 report provided an indication of the quantity of centre (retail and office), business and education floorspace that would be supported by the 16,260 households. We have subsequently undertaken an assessment that converts the GFA sqm non-residential floorspace from that Report into net land area and gross land area using the development efficiencies and site coverage rates outlined in the letter dated 19 October 2011 from CGUD. We consider these conversion rates to be reasonable.

Our assessment has identified that the CGUD Structure Plan does not make adequate provision for space to accommodate the levels of non-residential land that we estimate the household base will require. For this reason, we have revised the quantity of residential land down (and applied an average density of 25 households per ha to that land) and re-evaluated the quantity of non-residential land required by the adjusted households (Figure 1). This is an iterative process which involves model re-calibration as the non-residential space required is linked to the estimated number of households, and each activity needs to be accommodated within the available space.

The CGUD Structure Plan allowed for 724.8 ha gross land area for residential (650.7 ha) and non-residential (74.1 ha) activities. We estimate that approximately 99% of the 16,260 households can be accommodated within the total area (16,030), in a revised residential area of 641.2 ha. The non-residential space required to cater for this level of residential intensity will be 83.6 ha. The following sections of this letter describe the underlying modelling assumptions for each non-residential component of the Structure Plan.

Figure 1: Airport Structure Plan by Activity Type

Land Use Activity	Households	Employees (MECs)	Floorspace (GFA sqm)	Net Land Area (Ha)	Gross Land Area (Ha)	CGUD Gross Land Area (Ha)	Gross Land Area Difference
Residential	**16,030**	***n/a***	***n/a***	**477.7**	**641.2**	**650.7**	**- 9.5**
Non Residential							
Centres Based Retail (Ground Floor)	*n/a*	780	19,400	5.5	7.4		
Centres Based Retail (Above Ground)	*n/a*	-	-	-	-		
Centres Based Retail (Total)	*n/a*	*780*	*19,400*	*5.5*	*7.4*		
Centres Based Office (Ground Floor)	*n/a*	200	5,110	1.5	2.0		
Centres Based Office (Above Ground)	*n/a*	480	11,920	-	-		
Centres Based Office (Total)	*n/a*	*680*	*17,030*	*1.5*	*2.0*		
Business (Ground Floor)	*n/a*	1,930	67,700	19.3	26.0		
Schools (Ground Floor)	*n/a*	*n/a*	73,720	48.9	48.3		
Total Non Residential	***n/a***	**3,390**	**177,850**	**70.2**	**83.6**	**74.1**	**9.5**
Total Residential and Non Residential				**547.9**	**724.8**	**724.8**	**0.0**
Total Open Space, Coastal Margin, Seabed, Arterial Roads					384.4	384.4	-
Total Structure Plan					**1,109.2**	**1,109.2**	**- 0.0**

Centres-based Floorspace and Land Area

The resident population will need to have a range of shops located within the Structure Plan area to help cater for day to day needs. Other local employment opportunities (offices and business activity) will also need to locate within the Structure Plan area to provide some of the resident population's needs to be met locally.

Our 2011 Report estimated that the development of 16,260 households would support between 30,500 and 43,200 GFA sqm of centres-based space, with a midpoint of 36,850 GFA sqm. We have revised that estimate down to between 30,150 and 42,710 GFA sqm of centres-based space (Figure 2), **99%** of our previous estimate. To understand the land area requirements, we have allowed for the midpoint of these two estimates (**36,430 sqm**).

Figure 2: Airport Structure Plan Sustainable Centre Space (GFA sqm)

	No. of Centres in Auckland	Hhlds served per centre	Indicated for AIA hMVAU	AIA Centres Indicated	MECs (at regional average rates)	GFA Indicated (sqm) Low (GFA/MEC)	High (GFA/MEC)	Midpoint (GFA/MEC)
Abbreviated Table 4.5 ME 2011 Report								
Suburban Centre Role	33	15,500	1.05	1	803	15,600	22,100	18,850
Local Centre Role	50	10,200	1.58	2	704	11,200	15,800	13,500
Minor Centre Role	97	5,300	3.07	3	294	3,700	5,300	4,500
Total Commercial Space				6	1,801	30,500	43,200	36,850
Revised Sustainable Commercial Space								
Total Commercial Space						30,150	42,710	36,430
Share of ME Report Estimate						99%	99%	99%
Total Retail Floorspace (GFA sqm)						15,520	23,270	19,400
Retail Share of Total Commercial (GFA sqm)						51%	54%	53%
Total Office Floorspace (GFA sqm)						14,630	19,440	17,030
Office Share of Total Commercial (GFA sqm)						49%	46%	47%

For valuation purposes it is important to make the distinction between 'Retail', encompassing retail, hospitality and services floorspace, and 'Office' space, and for this reason we have estimated separately the quantity of retail and office floorspace that will be sustained by the development's households. We have applied an Auckland Region average retail, hospitality and services floorspace per household ratio of 4.6 sqm per household to estimate the quantity of retail floorspace required. It is expected that **53%** of centres-based space will accommodate retail activity (**19,400 GFA sqm**). The balance of centres-based space (**17,030 GFA sqm**) will be occupied by office activity.

Not all the centres-based space will be located on the ground floor, as office activity is suited to premises on levels above ground floor. To quantify the net and gross land area that will be required to accommodate this activity we have assumed that **100% of retail** and **30% of office** activity will locate on the ground floor, with the remaining 70% of office activity locating on levels above the ground floor retail and office activity. We have allowed for development intensity rates of 74% of gross land area to estimate net land area, and site coverage rates of 35% as assumed by CGUD.

Figure 3 shows our estimates for ground floor net land area (ha) and gross land area (ha) for the retail, office and total centres-based space that would be sustainable for the Airport location. With 19,400 GFA sqm of ground floor retail activity, the site would require **7.4 ha gross land area (ha)** for retail. The 5,110 GFA sqm of office activity expected to locate on the ground floor would require a further **2.0 ha of gross land area**. This means that in total, centres-based activity would require **9.4 ha gross land area**.

Figure 3: Airport Structure Plan Sustainable Centres Based Space (GFA sqm, Ha)

	Floorspace (GFA sqm)	Net Land Area (Ha)	Gross Land Area (Ha)
Retail Ground Floor	19,400	5.5	7.4
Retail Above Ground	-	-	-
Total Retail	19,400	5.5	7.4
Office Ground Floor	5,110	1.5	2.0
Office Above Ground	11,920	-	-
Total Office	17,030	1.5	2.0
Centres Based Ground Floor	24,510	7.0	9.4
Centres Based Above Ground	11,920	-	-
Total Centres Based	36,430	7.0	9.4

Business Floorspace and Land Area

Our 2011 Report estimated that the development of 16,260 households would support locally between 46,960 and 93,900 GFA sqm of business space, with a midpoint of 68,480 GFA sqm. We have revised that estimate down to between 46,430 and 92,830 GFA sqm of business space (Figure 4), **99%** of our previous estimate. To understand the land area requirement, we have allowed for the midpoint of these two estimates (**67,700 sqm**). We have allowed for development intensity rates of 74% of gross land area to estimate net land area, and site coverage rates of 35% as assumed by CGUD. We estimate that this level of floorspace will require 19.3 ha net land area and **26.0 ha gross land area.**

Figure 4: Airport Structure Plan Sustainable Business Space (GFA sqm)

	GFA Indicated (sqm)		
	Low ($20m^2$/MEC)	High ($30m^2$/MEC)	Midpoint ($25m^2$/MEC)
Table 4.6 ME 2011 Report			
In any Auckland Bus. Area	234,800	313,000	
Supported locally:			
20%	46,960	62,600	54,780
30%	70,440	93,900	82,170
Midpoint	58,700	78,250	68,480
Revised Sustainable Business Space			
Supported locally:			
20%	46,430	61,890	54,160
30%	69,640	92,830	81,240
Midpoint	58,040	77,360	67,700
Total Business			67,700
Share of ME 2011 Report			99%

Education Floorspace and Land Area

Such a large scale development will generate need for education space (primary, intermediate and secondary schools). The CGUD Report estimated that there would be 7,850 school aged residents. We have revised this estimate to 7,760 school aged residents, approximately 99% of the CGUD estimates.

Our 2011 Report estimated that the development of 16,260 households would require between 62,700 and 86,200 GFA sqm of education space. We have revised that number down to between 62,080 and 85,360 GFA sqm of education space (Figure 5), **99%** of our previous estimate.

Figure 5: Airport Structure Plan Sustainable Education Space

	Primary	Intermediate	Secondary	Total School	Total Population
Table 4.7 ME 2011 Report					
Auckland Region Population	115,000	40,000	100,000	255,000	1,321,000
Share	9%	3%	8%	19%	100%
AIA MVAU Popn.	3,539	1,231	3,077	7,847	40,650
Average Roll	400	600	1,500	2,500	
Expected Schools	9	2	2	13	
GFA (@8sqm/pupil)	28,400	9,700	24,600	62,700	
GFA (@11sqm/pupil)	39,000	13,400	33,800	86,200	
GFA Midpoint	33,700	11,550	29,200	74,450	
Revised Sustainable Education Space					
AIA MVAU Popn.	3,500	1,220	3,040	7,760	46,120
Average Roll	400	600	1,500	2,500	
Expected Schools	9	2	2	13	
GFA (@8sqm/pupil)	28,000	9,760	24,320	62,080	
GFA (@11sqm/pupil)	38,500	13,420	33,440	85,360	
GFA Midpoint (sqm)	33,250	11,590	28,880	73,720	
Share of ME 2011 Report Estimate	99%	100%	99%	99%	
Average Auckland Region Net Land Area (Ha)	2	4	9		
Net Land Area Required (Ha)	17.5	8.1	18.2	43.9	

To estimate the net land area (hectares) that will be required for schools, we have measured the net land area for a sample of thirty primary, intermediate and secondary schools in the Auckland Region and estimated average net land area. Primary schools are generally approximately 2 ha, and intermediate schools are approximately 4 ha. There is a wide divergence in land area for secondary schools, ranging between 8 ha (Sir Edmund Hillary Senior School) and 14 ha (Auckland Grammar). For this exercise we have assumed that over time secondary schools will become more intensive as land constraints mean that schools need to build more multi-storey formats, and applied an average of 9 ha[2] for secondary schools. The outcome is for a total requirement of **43.9ha net land area** for school space, **or 48.3 ha gross land area** allowing for a development intensity of 90%.

Other Commercial Floorspace and Land Area

In our 2011 Report we allowed for 40,000 sqm GFA to be provided for other activities that are not directly linked to household growth, for example healthcare providers, retirement villages, and paid accommodation. The 2011 Report stated *"we would not anticipate a large amount of additional space to be required by activities in the miscellaneous category over and above the education uses"* (ME 2011 Report, p18).

Our assessment has shown that balancing the residential housing requirements with the sustainable schools, retail and office and other business activity has proven difficult, and therefore there is no

[2] This is in-line with the recent purchase of 9ha site for a secondary school for years 7-13 students in Flagstaff, Hamilton (NZ Herald, 8 March 2013)

available space for these more footloose activities unless the amount of residential gross land area is reduced even further. These types of activities might occur as a minority share of the business activity gross land area or residential gross land area (for retirement villages) but it is not possible to make provision for these activities in their own dedicated space within the space indicated available for residential and non-residential activities.

Given the tight balance between demand and supply for residential and non-residential activities, the other activities that the CGUD and Colliers letter suggest might be attracted to the area would not be able to be accommodated easily.

Residential Dwelling Typologies by Precinct

To guide the valuation process, we have provided an indicative estimate of the location of all non-residential and residential activity using the precincts defined by CGUD (Figure 6). We have assumed that there will be three centres, and that all the centres-based activity (7.0 net land area ha) will locate within the urban area precincts. The schools have been allocated across the precincts and those that would not fit easily within the precincts (one primary, intermediate and secondary school) have been allocated into the existing commercial area. Based on these assumptions, approximately 33% of the business activity will locate within the urban area adjacent to the main centre with the remaining 66% in the existing commercial area.

Figure 6: Airport Structure Plan Land Area by Activity Type and Precinct (Ha)

Precinct	Gross Land Area (Ha)	Internal Roads & Reserves	Net land Area (Ha)	Centres Based NLA (Ha)	Business (Non Centres Based NLA (Ha)	Education NLA (Ha)	Total Non-Residential NLA (Ha)	Total Residential NLA (Ha)
Harbor Edge	184.5	46.0	138.5	1.4	-	6.0	7.4	131.1
Urban Village	73.3	18.5	54.8	-	-	2.0	2.0	52.8
Golf Village	28.2	6.8	21.4	-	-	2.0	2.0	19.4
Urban Centre	89.0	20.4	68.6	4.2	6.2	-	10.5	58.1
Marine Village	30.8	7.5	23.3	-	-	2.0	2.0	21.3
Waterfront Village	87.6	22.3	65.3	-	-	2.0	2.0	63.3
Puhinui Village	120.9	28.2	92.7	1.4	-	11.0	12.4	80.3
Wiroa Village	25.3	6.6	18.7	-	-	-	-	18.7
Eastern Centre Gateway	30.2	7.3	22.9	-	-	2.0	2.0	20.9
Productive Village	18.0	4.2	13.8	-	-	2.0	2.0	11.8
Total Precincts	687.8	167.8	520.0	7.0	6.2	29.0	42.3	477.7
Other Commercial	*37.0*	*9.0*	*28.0*	-	*13.0*	*15.0*	*28.0*	-
Total Residential & Non-Residential	724.8	176.9	547.9	7.0	19.2	44.0	70.2	477.7

For the residential areas, we have estimated the number of dwellings by typology (detached, urban houses, semi-detached, terraced, and apartments) for each precinct, ensuring that the total residential capacity is 16,030 households (25 dwellings per hectare) (Figure 7). For this assessment, we have assumed the following average lot sizes:

- Detached – 600 sqm
- Urban House – 400 sqm
- Semi-Detached – 300 sqm
- Terraced – 200 sqm
- Apartments – 125 sqm

The resultant composition of the Airport Structure Plan is that 32% of dwellings will be on larger section sizes (5,074 dwellings); this compares with 43% in the CGUD Structure Plan. Approximately 50% of dwellings will be of a semi-detached or terraced format (8,047 dwellings). The remaining dwellings (2,909) will be apartment style living; this provides for a much higher share of apartment dwellers (18%) than the CGUD Structure Plan assessment (8%). There needs to be a higher share of apartment living in order to fit the number of households within the available space, and retirement complexes could potentially suit this level of high-density accommodation.

Figure 7: Airport Structure Plan Dwelling Yield by Housing Typology and Precinct

Precinct	Detached		Urban House		Semi Detached		Terraced		Apartments		Indicative	Gross
	%	Yield	%	Yield	%	Yield	%	Yield	%	Yield	Yield	Density
Harbor Edge	30%	655	40%	1,311	20%	874	5%	328	5%	524	3,691	21
Urban Village	20%	176	30%	396	30%	528	15%	396	5%	211	1,706	24
Golf Village	15%	48	15%	78	20%	129	35%	339	15%	233	822	32
Urban Centre	0%	-	0%	-	30%	581	49%	1,484	21%	960	2,975	38
Marine Village	0%	-	20%	107	45%	320	30%	320	5%	85	881	29
Waterfront Village	15%	158	20%	317	30%	633	30%	950	5%	253	2,312	27
Puhinui Village	30%	401	30%	602	25%	669	5%	201	10%	642	2,516	23
Wiroa Village	50%	156	40%	187	10%	62	0%	-	0%	-	406	16
Eastern Centre Gateway	40%	139	25%	130	35%	243	0%	-	0%	-	513	18
Productive Village	50%	99	40%	118	10%	39	0%	-	0%	-	257	16
Total Residential		1,833		3,240		4,079		3,968		2,909	16,030	25

Development Timing

We disagree with the proposed timing of the development at the Airport contained in the Colliers and CGUD Reports. A key consideration will be whether an application for a greenfield residential development with supporting commercial and industrial development through a Plan Change process will be a straight forward or a lengthy process. Our recent involvement with Plan Change applications that are seeking to develop land that has not been considered available in the Auckland Plan indicates that it can take approximately two years to get a final favourable decision. On this basis, we estimate that residential development could not begin on the Airport site for three years taking into account work programmes prior to applying for a Plan Change.

Other key assumptions for the development timing (Figure 6) are:

1. Residential sections (and therefore household growth) will develop at the annual average of 800 households. While it is more likely that development will start off slowly and reach a development peak later, to be conservative, we have allocated households evenly across each year.
2. Schools will need to be provided to attract residents. While full intermediate and secondary schools will not be required for approximately 10 years, we have allowed for the intermediate to develop in year 1 (along with a primary school) and the secondary school to be developed in year 4. All other schools are allocated to lead household growth.
3. Centres-based retail and office space will be provided commensurate with population growth. The scale of activity that we have estimated is appropriate for the local population base and therefore it is important that the development does not provide for too much

space before it is required. We have allowed for some retail and office space initially to help attract residents to the location.

4. While the estimates of business space required to allow for a reasonable level of self-sufficiency have been estimated based on the population base, some types of business activity are much less reliant on population growth than retail and office (for example industrial or site specific activities). For this reason we have allowed for the business development to occur over the first 15 years of the project.

We believe that this a reasonable and defensible approach that takes into account the current climate; planning obstacles and market demand. We have provided more detail on the breakdown of land use activities across the non-residential area than contained in the CGUD Structure Plan because we believe that valuing each component of the Structure Plan will provide a more accurate assessment of the potential land value than simply applying an average mixed use valuation across the total area set aside for non-residential activity.

The Colliers valuation of the commercial area is based on applying an average $/sqm value across the non-residential area. The average of $300/sqm that is applied is based on assessing similar areas elsewhere in Auckland. We would expect an approach that provided more detail about what proportions of the non-residential space would be expected to be taken up by different types of activity (such as schools, retail, office space, industrial, etc.) and that the average market value for those activities would be applied to each land area or floorspace. Our experience has shown that different land activities or zoning generate different land values, and we would expect schools for example to have a lower land value than commercial retail space. We think this distinction needs to be made clearer in the valuation assessment, along with detail about the build-out timeframes.

Figure 8: Airport Structure Plan Development Timing

Summary

The key points from this review of the supplementary information provided to us are:

1. The valuation of the residential sections is sensitive to the timing of the development. We believe that the residential development would be unlikely to begin for three years and would develop at a rate of 800 households per annum across 20 years (23 year development timeframe in total) to reach a total of 16,030 households.

2. The CGUD GFA estimate over-states the requirements and capacity for non-residential activities significantly. We estimate that 177,850 GFA for non-residential will be sustainable, and this is 34% of the 518,841 GFA sqm reported by CGUD. The Colliers valuation assessment has assessed the 518,841 sqm as net land rather than gross floor area allowing for a development intensity of 75%. We believe that this approach is more appropriate and then allowing for a site coverage rate of 35%, the CGUD gross floor area estimate would be 181,600 sqm. This figure is 2% higher than the floorspace estimate we estimate is sustainable and would fit within the available space.

3. Our modelling has shown that of the 724.8 ha that is available for residential and non-residential space within the Structure Plan area that approximately 88% of gross land area will accommodate residential activity (641.2 ha) and the remainder (83.6 ha) will cater for centres based (7.4 ha), business (26.0 ha) and education (48.3 ha) activities. This reflects a reduction in the area available for residential activity of 9.5 ha when compared to the CGUD Structure Plan and an adjustment to the quantity of households able to be developed on this land (16,030) and an increase in the land available for non-residential activities (+9.5 ha).

4. For the valuation exercise, we believe that there needs to be more distinction made between the categories of different land uses rather than simply residential and non-residential. We would expect some land uses to have a higher value than others and the valuation methodology should reflect these differences.

If you have any queries regarding this letter, please do not hesitate to contact me.

Yours sincerely,

Rebecca Foy
Consultant

Attachment II

Zomac Planning Solutions

Auckland Airport
Alternative Use Evaluation
Assessment

ZOMAC
Planning Solutions Ltd
Resource Management & Planning Consultants

17 March 2013

Board of Airline Representatives of New Zealand (Inc)
P O Box 2779
AUCKLAND

Attention: Kristina Cooper (Barrister)

Dear Kristina

AUCKLAND AIRPORT: ALTERNATIVE USE REVIEW OF COLLIERS & COMMON GROUND ASSESSMENTS

Zomac Planning Solutions Ltd (Zomac) has been asked to review the responses that Common Ground Urban Design and Colliers have prepared in relation to the Peer Review undertaken by Property Advisory Ltd and the economic analysis by Market Economics which BARNZ made available to the Commerce Commission for use in its review of Auckland Airport pricing and conduct under section 56G of the Commerce Act.

In reviewing the Common Ground response dated 9 November 2012 and the Colliers response dated 7 November 2012, Zomac has prepared its advice in accordance with the Rules for the Conduct of Expert Witnesses. Zomac's initial review concluded that the Common Ground response was unhelpful and lacking in statistical rigour while the Colliers response was more measured and reasonable to the extent that Zomac does not believe that there are any particular flaws in the Colliers response.

Zomac continues to consider that the 518,000m^2 of GFA commercial space included by Common Ground in their alternative land use plan is significantly too much commercial land. However, the further material provided by Colliers appears to indicate that Colliers has not applied the GFA estimates recommended by Common Ground, but has instead utilised a net land area. In my view, the non-residential net land allowed by Colliers is not over-stated, and even appears to fall short of providing sufficient land for the long term schooling needs of the development.

Zomac then worked in a collaborative manner with Market Economics with respect to the planning matters and views expressed in their report dated 14 March 2013. Zomac concludes that the Market Economics summary of findings of their review of the likely mix, areal extent and composition of land uses set out on page 13 of their review complies with the requirements in Schedule A of the Commerce Commission input methodologies for Airports.

In our opinion the overall land use plan as now described in the Market Economic's Figure 6 is feasible and reasonable. Further, Zomac reaffirms its previous advice dated 20 October 2011 that the village precinct concept developed by Common Ground is appropriate.

Yours faithfully
Zomac Planning Solutions Ltd

M J Foster
DIRECTOR

Jane Douglas
jane@zomac.co.nz

PO Box 103 Whangaparaoa 0943
Ph +64 9 428 2101 Fax +64 9 428 2102

Mike Foster
mike@zomac.co.nz

P O Box 103
Whangaparaoa 0943
Ph 09 428 2101
Fax 09 428 2102

Zomac Planning Solutions Ltd

Memorandum via email

STATUS: FINAL

To: Kristina Cooper

From: Mike Foster

CC: John Beckett, BARNZ

Date: 20 September 2011 (updated 20 October 2011)

Re: AUCKLAND AIRPORT ALTERNATIVE LAND USE PLAN: INITIAL PLANNING OVERVIEW

Further to instructions from BARNZ, I have read the Auckland Airport Alternative Land Use Plan prepared by Common Ground and have a number of initial observations to make, as follows:

- The Plan correctly excludes the commercial / mixed use / bulk storage area as this is already developed and would not directly serve the day to day needs of a 40,000 residential population except in part from an employment perspective.

- The Plan develops a credible and logical approach to the development of a series of residential precincts to cater for up to 40,000 people and I have no issue with the author's assumptions. I agree with the view that *"approximately 70% of the residential product are already widely accepted by todays market"*.

- The idea that the residential area would need a CBD type of facility is less credible. Advice from Market Economics (refer email dated 19 September 2011, Derek Foy) is that a township of 40,000 people would usually support between 95,000 and 155,000m^2 of commercial / retail space means that the proposed provision of 500,000m^2 is manifestly in excess of what is likely to be realistically sustainable. Notwithstanding the clarification by Common Ground dated 14 October 2011 of what 'commercial' means, that is, non residential activities excluding offices and retail, I continue to hold serious reservations as to whether between 58 and 74ha is required for such uses. Further the Alternative Land Use Plan and its supporting documentation now needs to be substantially amended to remove the confusion around the meaning of commercial and by association any reference to a CBD type facility.

- I would expect that the core of a town centre for a 40,000 population would realistically be anchored around the existing Countdown / The Warehouse complex which appears to be excluded from the theoretical subdivision of the air side land.

- This means that the so-called CBD core is incorrectly positioned and significantly oversized.

- Further, I consider that the concept of a CBD type of environment on airport land takes no account of the spread of subregional centres within the Auckland region. Manukau "City Centre" is the logical and predominant sub-regional centre in South Auckland. I seriously doubt that Auckland Council would countenance a new major centre to rival the role of Manukau Centre and, by association, undermine its viability / vitality.

- In addition the AIA site is on the edge of the existing South Auckland urban conurbation. As MEL correctly point out, a 500,000m^2 centre would require a *"very large net inflow of retail space and office employment"*, a possibility that would significantly distort the current distribution of activities across the South Auckland area.

- Overall while Common Ground's approach to residential precinct development is realistic and rational its approach to the need for commercial floorspace is grossly overstated and insufficient regard has been given to the employment and commercial service functions that the existing mixed use development area to the north of the airside land (excluded from the valuation area) may have on the commercial space requirements needed to service a population of 40,000 people. Unfortunately the overstatement by Common Ground of commercial floorspace needs by 3 to 5 times casts serious doubt on the balance of their report findings and tends to suggest that the underlying driver behind their report is to maximise the $ value of the alternative land use scenario. In my view such an approach does not reflect the underlying philosophy of the "Input Methodology Determination" where the emphasis is upon a . . *"predictable set of alternative uses due to existing and possible zoning and district plan requirements, contour and land area, surrounding land uses, as well as existing linkages and current market supply and demand."*

Attachment III

Auckland Sales Analysis

COMPARABLE SALES ANALYSIS

116. In assessing the gross realisations under the HBAU structure plan we have researched and analysed sales in greater Auckland and have liaised with local industry participants.

117. The following paragraphs summarise our comparable sales analysis:

RESIDENTIAL

Table 1. Residential Allotment Sales

Location	Sale Date	Sale Price	Land area	Rate per m²
Dannemora				
16 Lucca Cres	May-10	$299,000	449	$666
7 Agapanthus Pl	May-10	$170,000	206	$825
19 Agapanthus Pl	May-10	$170,000	230	$739
2 Michael Richard Pl	May-10	$536,000	750	$715
11 Bejoy Rise	Nov-10	$500,000	714	$700
8 Verley Rise	Mar-11	$430,000	765	$562
25 Woolaston Pl	Mar-11	$400,000	747	$535
East Tamaki Heights				
11 Bushpark Pl	Jun-10	$155,000	200	$775
33 Erica Rd	Jun-10	$195,000	384	$508
Lot 43 Ravello Rise	Jun-10	$290,000	538	$539
6 Ravello Rise	Aug-10	$370,000	901	$411
4 Ravello Rise	Sep-10	$380,000	1037	$366
8 Ravello Rise	Nov-10	$360,000	1192	$302
2 Ravello Rise	Mar-11	$349,000	1300	$268
5A Kinmont Rise	Mar-11	$435,000	1021	$426
93 Gracechurch Dr	Jun-11	$420,000	771	$545
Flat Bush				
Lot 7 Aviano Cl	Feb-11	$286,957	519	$553
3 Coolaghy Dr	Feb-11	$271,000	474	$572
73 Killarney St	Mar-11	$245,000	452	$542
Lot 13 Coolaghy Dr	Mar-11	$290,000	420	$690
Lot 25 Silvana Dr	Apr-11	$260,000	465	$559
7 coolaghy	May-11	$315,000	498	$633
2 Creeve	May-11	$303,000	434	$698
4 Alexia Pl	May-11	$295,000	556	$531
14b Ravello Rise	May-11	$329,000	461	$714
17 Alexia Pl	May-11	$212,500	547	$388

Manakau City - 1/1/09 - 1/1/13 Residential Sections - Valbiz

Average of Net$		Land m					
Year	Locality	-250	250 - 375	375 - 500	500 - 850	850+	Grand Total
2010	EAST TAMAKI	194,000	260,839	280,408	359,514	296,419	294,480
	EAST TAMAKI/WIRI			230,000	315,000		251,250
	GOODWOOD/TOTARA HEIGHTS			250,000	242,417		243,500
	HIGHLAND PARK			170,000			170,000
	HILL/ALFRISTON ROAD			250,000	280,833		273,125
	HOWICK (OLD)		525,000	264,607	448,478	465,833	423,594
	MANGERE		1,283,191	196,333	120,000	2,386,382	1,126,878
	MANGERE ASCOT PARK			284,000	650,000		558,500
	MANGERE BRIDGE			194,125	271,200		236,944
	MANGERE EAST			145,000			145,000
	MANUREWA NORTH OF WEYMOUTH RD				151,750		151,750
	MANUREWA SOUTH OF WEYMOUTH RD			181,500			181,500
	MANUREWA, HILL PARK		501,800		108,000		304,900
	OTARA				304,000		304,000
	PAKURANGA SOUTH			238,000	187,778	200,000	198,444
	PAPATOETOE			408,333	241,000	441,250	359,455
	REDOUBT ROAD			221,500	324,250		303,700
	WEYMOUTH			60,000	194,500		149,667
	WHITFORD/CLEVEDON				309,714	334,000	318,545
2010 Total		194,000	326,219	261,503	324,818	888,578	365,819
2011	EAST TAMAKI	267,000	251,811	286,245	323,071	346,396	291,532
	EAST TAMAKI/WIRI			161,000	169,667	467,500	267,500
	GOODWOOD/TOTARA HEIGHTS		327,500	227,899	262,233	269,130	260,042
	HILL/ALFRISTON ROAD				275,000		275,000
	HOWICK (OLD)				480,833	286,500	432,250
	MANGERE		299,250	189,783	149,275	163,116	184,029
	MANGERE BRIDGE		270,000		328,000		313,500
	MANGERE EAST			161,500			161,500
	MANUREWA NORTH OF WEYMOUTH RD			295,000	61,000		236,500
	MANUREWA SOUTH OF WEYMOUTH RD			154,000			154,000
	MANUREWA, HILL PARK					387,500	387,500
	OTARA/DINGWALL		496,859	230,000		589,824	472,017
	PAKURANGA NORTH			276,500	335,000		305,750
	PAKURANGA SOUTH					240,000	240,000
	PAPATOETOE			207,214	212,500	212,000	208,750
	REDOUBT ROAD			132,608	286,513		278,818
	SOMMERVILLE-DANNEMORA				537,000		537,000
	WATTLE DOWNS				231,696	222,608	229,598
	WHITFORD/CLEVEDON				576,084	415,480	478,574
2011 Total		267,000	274,704	263,892	330,355	347,526	303,111
2012	EAST TAMAKI	235,000	297,739	332,633	400,140	483,596	346,853
	EAST TAMAKI/WIRI				320,000		320,000
	GOODWOOD/TOTARA HEIGHTS			242,681	310,761	242,935	299,797
	HIGHLAND PARK				470,000		470,000
	HILL/ALFRISTON ROAD				287,971	285,000	287,228
	HOWICK (OLD)			515,000	562,062	625,000	563,054
	MANGERE			378,800	427,000	453,000	417,750
	MANGERE BRIDGE			205,000	260,000		232,500
	MANUREWA NORTH OF WEYMOUTH RD				167,000		167,000
	MANUREWA SOUTH OF WEYMOUTH RD			179,000	250,000		214,500
	MANUREWA, HILL PARK					540,000	540,000
	OTARA			120,000	275,000		197,500
	OTARA/DINGWALL			110,000			110,000
	PAKURANGA NORTH			485,000			485,000
	PAKURANGA SOUTH			335,000	318,000		326,500
	PAPATOETOE			299,907	249,000		295,279
	REDOUBT ROAD		540,250	166,878	253,829	273,768	285,944
	SOMMERVILLE-DANNEMORA				380,000		380,000
	WATTLE DOWNS				342,914		342,914
	WHITFORD/CLEVEDON				330,000	384,000	363,750
2012 Total		235,000	326,270	315,703	360,497	415,095	346,855

Table 2. Residential Section Sales Summary 2009 - 2011

Count of Land m		Land m					
Year	Locality	-250	250 - 375	375 - 500	500 - 850	850+	Grand Total
2010	EAST TAMAKI	4	35	60	37	9	145
	EAST TAMAKI/WIRI			3	1		4
	GOODWOOD/TOTARA HEIGHTS			1	6		7
	HIGHLAND PARK			1			1
	HILL/ALFRISTON ROAD			1	3		4
	HOWICK (OLD)		1	3	10	3	17
	MANGERE		2	9	2	8	21
	MANGERE ASCOT PARK			1	3		4
	MANGERE BRIDGE			4	5		9
	MANGERE EAST			1			1
	MANUREWA NORTH OF WEYMOUTH RD				4		4
	MANUREWA SOUTH OF WEYMOUTH RD			2			2
	MANUREWA, HILL PARK		1		1		2
	OTARA				1		1
	PAKURANGA SOUTH			1	4	2	7
	PAPATOETOE			3	4	4	11
	REDOUBT ROAD			1	4		5
	WEYMOUTH			1	2		3
	WHITFORD/CLEVEDON				7	4	11
2010 Total		4	39	92	94	30	259
2011	EAST TAMAKI	3	54	74	41	24	196
	EAST TAMAKI/WIRI			1	3	2	6
	GOODWOOD/TOTARA HEIGHTS		2	6	14	3	25
	HILL/ALFRISTON ROAD				2		2
	HOWICK (OLD)				12	4	16
	MANGERE		1	9	3	3	16
	MANGERE BRIDGE		1		3		4
	MANGERE EAST			1			1
	MANUREWA NORTH OF WEYMOUTH RD			3	1		4
	MANUREWA SOUTH OF WEYMOUTH RD			1			1
	MANUREWA, HILL PARK					1	1
	OTARA/DINGWALL		5	1		1	7
	PAKURANGA NORTH			1	1		2
	PAKURANGA SOUTH					1	1
	PAPATOETOE			7	2	1	10
	REDOUBT ROAD			1	19		20
	SOMMERVILLE-DANNEMORA				1		1
	WATTLE DOWNS				10	3	13
	WHITFORD/CLEVEDON				11	17	28
2011 Total		3	63	105	123	60	354
2012	EAST TAMAKI	2	30	63	23	10	128
	EAST TAMAKI/WIRI				2		2
	GOODWOOD/TOTARA HEIGHTS			3	26	2	31
	HIGHLAND PARK				1		1
	HILL/ALFRISTON ROAD				3	1	4
	HOWICK (OLD)			1	14	1	16
	MANGERE			5	2	5	12
	MANGERE BRIDGE			1	1		2
	MANUREWA NORTH OF WEYMOUTH RD				1		1
	MANUREWA SOUTH OF WEYMOUTH RD			1	1		2
	MANUREWA, HILL PARK					1	1
	OTARA			1	1		2
	OTARA/DINGWALL			1			1
	PAKURANGA NORTH			1			1
	PAKURANGA SOUTH			1	1		2
	PAPATOETOE			10	1		11
	REDOUBT ROAD		4	5	12	3	24
	SOMMERVILLE-DANNEMORA				2		2
	WATTLE DOWNS				18		18
	WHITFORD/CLEVEDON				6	10	16
2012 Total		2	34	93	115	33	277

118. Our analysis of vacant residential section sales in Manukau City indicates that top prices are being achieved within the seaside settlement such as Half Moon Bay or Bucklands Beach, where waterfront sites are selling between $600,000 and $1,200,000 depending upon the section size and degree of views.

119. New residential suburbs in East Tamaki and Flat Bush attract a lower development mix with sections ranging in size from 175m² to 600m², with average prices ranging between $180,000 and $450,000+ (including GST).

120. We note that the majority of high density land suitable for terraced housing or apartment development is generally sold on builders terms in developers or the units are constructed by the land developer and sold into the market as a completed product. This is due to the inseparable nature of the high density / apartment construction process and the inability to sell apartment land and improvements separately.

COMMERCIAL

121. Overall the commercial property market is steadily recovering from the significant decline following the global financial crisis. General indications are positive with industrial vacancy rates observed to be stabilizing at between 3 – 8% across the major precincts, while anecdotal evidence indicates industrial rents and yields are stabilizing and leasing activity is up.

122. Vacant industrial land take up remains significantly down from the mid 2000's. Total take up of industrial land has averaged 33 hectares per annum over the past 3 years, well down from the 2006 – 2008 period where over 80 hectares were taken up per annum.

123. The majority of vacant industrial land take up continues to occur in the South Auckland locality, which on average has accounted for approximately 60% of annual industrial land take up since 2006.

124. Our analysis of the industrial / commercial land market in Auckland indicates that there is currently approximately 1,148 hectares of vacant land throughout Auckland presently zoned for commercial development. Including airport land, approximately 59% (677 hectares) of this land is located in Southern Auckland.

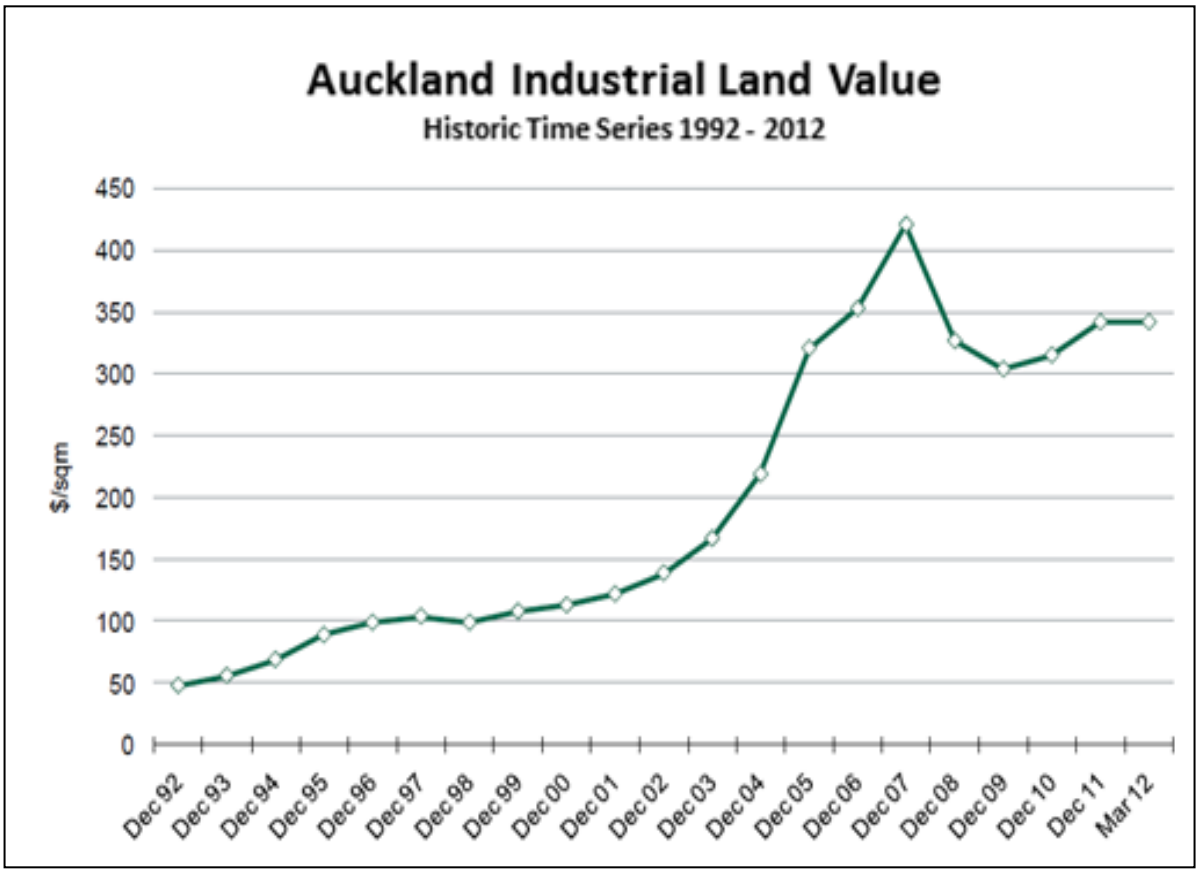
125. There are a number of factors which continue to restrict the commercial land market and new development activity. These include a subdued economic recovery, volatile business confidence, lending / finance controls, varying levels of tenant demand and vacancy risks.

126. New industrial building consents in the greater Auckland region have averaged 68 per annum over the 2009 – 2011 period, a significant fall from the 2006 – 2008 period where they averaged 116 per year.

127. Market commentators are indicating that industrial land values are on a path to recovery after the significant declines in 2008 / 2009. The recovery has been spatially uneven and largely driven by industrial precincts on the Isthmus and the South.

128. These movements in land values are detailed in Figure 1 below.

Figure 1. Auckland Industrial Land Value



Source: CB Richard Ellis – Market View Auckland Industrial

129. A summary of recent vacant industrial land sales from Manukau City are scheduled in Table 3 on the following page.

Table 3. Industrial Land Sales

Address	Date	Net Sale Price	$/m²
54 Richard Pearse Dr	Jun-11	1181500	372
50 Richard Pearse Dr	Jun-11	1,183,500	300
61 Lambie Dr	Jun-11	8,930,000	343
28 Smales Rd	May-11	4,950,000	349
55 Stonedon Dr	40638	1174750	370
93 Pavilion Dr	Mar-11	2,041,200	338
124 Favona Rd	Oct-10	2,150,000	138
154 Wiri Station Rd	Oct-10	2,786,420	260
154 Wiri Station Rd	Aug-10	2,000,000	187
33 Ha Cr	Jun-10	4,334,770	275
22 Airpark Dr	May-10	2,900,000	245
50 Ormiston Rd	40305	1650000	395
34 Ormiston Rd	Apr-10	3,653,350	310
124 Favona Rd	Mar-10	755,556	48
12 Pavilion Dr	Mar-10	720,000	315
29 Bishop Dunn Pl	Mar-10	1,113,420	330
19 Ryan Pl	Feb-10	800,000	343
138 Wiri Station Rd	Dec-09	1,640,000	205
11 Bolderwood Pl	Aug-09	800,000	278
65 Cryers Rd	Jun-09	1,460,000	324

BLOCK LAND SALES

130. In terms of the direct comparison approach, we have considered block land sales throughout the Greater Auckland area.

131. This includes land already zoned for urban development activities and land requiring a plan change.

132. Within the greater Auckland area there has been a range of land purchased for urban development. From our research the following sales have been analysed:

Table 4. Block Sales

Property	Sale Date	Price	Area (ha)	Price /m²	Zoning
Favona Rd	Jul 11	$7,000,000	6.2952	$111.20	Favona
Large parcel of vacant land located between Manukau Harbour and Favona Rd. Land was rezoned from Future Urban Development to Favona Special Policy Area which provides for medium to light industry uses, excluding offices and retail					
Wainui Rd	May 11	$8,500,000	52.2338	$16.27	Knowledge Economy
This property comprises the Silverstream Business Park. Adjoining the Northern Motorway this greenfields property sold under Mortgagee sale conditions in May 2011. The property was purchased by a local construction firm. The property was originally purchased in Dec 2005 for circa $50m. The proposed development mix on the property incorporated a range of residential, offices, retail, warehousing, and freight forwarding activities. Excluding reserves the net developable area on the property was approximately 36 hectares. Analysis at the time indicated development costs were in excess of $85 / m² and the projected internal rate of return was approximately 22%. As latest transaction indicates an effective land value of $23.61 / m².					
110 Hobsonville Rd	Aug 10	$10,000,000	19.5000	51.82	Special Centre
High profile site located \along the Hobsonville corridor. Land is subject to the Hobsonville Centre Special Area Proposed Plan Change 14 that will facilitate the development of the land for industrial and retailing activities.					
297 Ormiston Rd	Mar 10	$12,000,000	8.8193	$136.06	Residential 1
Greenfield residential development land located close to Flat Bush.					
295 Murphy Rd	Feb 10	$3,500,000	3.1204	$112.16	Residential 1
Greenfield residential block located at Flatbush					
431 Ormiston Rd	Sept 10	$5,200,000	4.0539	$122.10	Residential
Greenfield residential block located at Flatbush					
200 Flat Bush School Rd	Mar 10	2,980,000	2.0371	$116.83	Residential 1
Greenfield residential block located at Flatbush					
146 Flat Bush School Rd	Nov 09	$7,400,000	4.0689	180.68	Residential 1
Greenfield residential block located at Flatbush					
Sturges Rd	Mar 11	$6,200,000	10.9136	56.81	Living Environment
Medium density residential block located at Henderson. Resource consent in place for 93 residential lots at an average of 450 – 550m² plus one larger site. Implied block value of approximately $66,000 / lot.					

Table 4. Block Sales - Continued

Property	Sale Date	Price	Area (ha)	Price /m²	Zoning
Bannings Way	Oct 10	$3,000,000	6.7347	103.92	Living Environment
Consented development block located at Hobsonville. 88 lot subdivision with an implied block value of approximately $79,500 / lot.					
Kensington Park	Jun 09	$20,000,000	12.7300	$157.11	Residential H / M
Mortgagee sale of a partially completed master planned development at Orewa.					
Stanley Rd	Feb 12	$2,565,217	1.0974	233.75	
Post dated sale of land transaction purchased for the development of aged care facilities. Adjoining the sports grounds of Glenfield College development plans are for 92 apartments and 38 bed care facilities. A heritage house is located on the property and will be refurbished as a focal point for the village. The analysed land value per equivalent unit was approximately $23,000					
Unsworth Dr	Sept 12	10,939,250	4.4650	245.00	Business 2
Post dated sale of land purchased for the development of a retirement village. Transaction included consent for a 171 unit which the purchasers are looking to increase to 140 independent living units, 60 apartments, and 40 care beds. The analysed land value per equivalent unit was approximately $49,700.					

ADOPTED LOT REALISATIONS

133. On the basis of our sales analysis above we have adopted the following lot realisations.

Table 5. HBAU – Gross Realisations

Land Use Allocation		Gross Realisations
Dwelling Type		
(a)	Detached	$350,000 / lot inc GST
(b)	Urban House	$280,000 / lot inc GST
(c)	Semi-Detached	$250,000 / lot inc GST
(d)	Terraced	$185,000 / lot inc GST
(e)	Apartments	$80,000 / lot inc GST
Commercial		$400/m² plus GST
Retirement Village / Apartments		$200 / m² plus GST
Education		$200 / m² plus GST
Other – Roads / Reserves		nil

Appendix IV

Valuation Worksheets

MVAU – Summation Valuation By Precinct

	Precincts	Gross Area	Indicative Residential Yield	Gross Density	Commertcial Land ha	Deferment yrs 1/07/2011	Start Date	2011 Value	$/ha	10% Deferment Value	$/ha
Base	Puhinui Village	120.9	2,516	23	12.4	2	1/07/2013	147,900,000	1,223,325	**122,231,405**	1,011,012
	Waterfront Village	87.6	2,312	27	2.0	2	1/07/2013	136,811,709	1,561,778	**113,067,528**	1,290,725
	Wiroa Village	25.3	406	16	0.0	6	1/07/2017	47,680,902	1,884,621	**26,914,626**	1,063,819
	Urban Centre	89	2,976	38	10.5	6	1/07/2017	131,853,470	1,481,500	**74,427,846**	836,268
	Marine Village	30.8	831	29	2.0	11	1/07/2022	53,524,531	1,737,809	**18,760,022**	609,092
	Urban Village	73.3	1,706	24	2.0	12	1/07/2023	103,358,043	1,410,069	**32,933,058**	449,291
	Golf Village	28.2	822	32	2.0	14	1/07/2025	52,056,798	1,845,986	**13,708,182**	486,106
	Harbor Edge	184.5	3,691	21	7.4	15	1/07/2026	242,833,992	1,316,173	**58,132,527**	315,081
	Eastern Centre Gateway	30.2	513	18	2.0	20	1/07/2031	46,589,225	1,542,690	**6,925,191**	229,311
	Productive Village	18	257	16	2.0	21	1/07/2032	25,298,799	1,405,489	**3,418,641**	189,925
	Other Commercial	37	0	0	28.0		1/07/2011	23,514,423	635,525	**23,514,423**	635,525
	Totals	724.8	16,030	25	70			1,011,421,893	1,395,450	**494,033,450**	681,613
								Less Consenting Costs		2,500,000	
								MVAU		**491,533,450**	**678,164**

AIAL Valuation - MVAU

Input Summary - "Baseline" - Puhinui Village

Input Assumptions

Valuation / Start Date		30-Jun-11			
Non Concurrent Events				**Start**	**End**
Planning & Approval Date		0	Months	30-Jun-11	30-Jun-11
Start Design / Concept Planning	Concurrent	0	Months	30-Jun-11	30-Jun-11
Detailed Design		0	Months	30-Jun-11	30-Jun-11
Procurement		0	Months	30-Jun-11	30-Jun-11
Construction					
Earthworks / Infrastructure		12	Months	30-Jun-11	30-Jun-12
		0	Months	30-Jun-12	30-Jun-12
		0	Months	30-Jun-12	30-Jun-12
DCF Period Starting		1-Jul-11			

Discount Rate Analysis			
Target Pre Tax Nominal Required Rate of Return		27.00%	
Pre Development Holding Returns			
Goods & Services Tax		15.00%	
Land Appreciation - Residential		2.50%	per annum
Land Appreciation - Commercial		2.50%	per annum
Development Cost Escalation Factor	0.00%	2.50%	per annum
Base Scaling Factor - Build Costs		0.00%	
Base Scaling Factor - Revenue		0.00%	

Title Area Reconciliation

Legal Description	Certificate Of Title	Area - Ha
MVAU Area		120.90
Total		120.90

Land Use Allocation - Ha

Detached	20%	24.09
Urban House	20%	24.09
Semi Detached	17%	20.07
Terraced	3%	4.01
Apartments	2%	2.01
Retirement Apt.	5%	6.02
Commercial	1%	1.40
Schools	9%	11.00
Other Commercial	0%	0.00
Internal Rds & Reserves	23%	28.21
Total	100%	120.90

Land Use Categories / Development Mix

Development Stage		Area			Net Realisations		Sales Details				
		# Lots	Lot m²	Net Area	$/m²	$ / Unit	Pre Sales	Sales / Period	Sales Start Date	Sales End Date	Period Yrs
A)	Detached	401	600	240,870	583	350,000		50	30-Jun-12	30-Jun-21	9.00
B)	Urban House	602	400	240,870	700	280,000		75	30-Jun-12	30-Jun-21	9.00
C)	Semi Detached	669	300	200,725	833	250,000		85	30-Jun-12	30-Jun-20	8.00
D)	Terraced	201	200	40,145	925	185,000		25	30-Jun-12	30-Jun-21	9.00
E)	Apartments	161	125	20,073	640	80,000		20	30-Jun-12	30-Jun-21	9.00
F)	Retirement Apt.	482	125	60,218	200	25,000	482	0	30-Jun-14	30-Jun-15	1.00
G)	Commercial	4	3,501	14,006	400	1,400,571		1	6-Jul-05	6-Jul-09	4.00
H)	Schools	2	55,000	110,000	200	11,000,000		2	1-Jul-15	1-Jul-16	1.00
I)	Other Commercial	0	0	0	0	0					
J)	Internal Rds & Reserves	0	0	282,094	0	0					
Sub-Totals		2,522		1,209,000		566,013,693	482	258	30-Jun-11	30-Jun-21	
Check				1,209,000							

AIAL Valuation - MVAU DCF Summary - "Baseline" - Puhinui Village

Description / Developmental Period					Totals	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Gross Realisation		Net															
A) Detached		350,000			157,348,685		17,938,730	18,387,199	18,846,879	19,318,051	19,801,002	20,296,027	20,803,428	21,323,513	633,857		
B) Urban House		280,000			188,818,422		21,526,476	22,064,638	22,616,254	23,181,661	23,761,202	24,355,232	24,964,113	25,588,216	760,629		
C) Semi Detached		250,000			186,971,142		21,782,744	22,327,313	22,885,495	23,457,633	24,044,074	24,645,176	25,261,305	22,567,403			
D) Terraced		185,000			41,585,010		4,740,950	4,859,474	4,980,961	5,105,485	5,233,122	5,363,950	5,498,049	5,635,500	167,519		
E) Apartments		80,000			14,386,165		1,640,112	1,681,115	1,723,143	1,766,222	1,810,377	1,855,637	1,902,028	1,949,578	57,953		
F) Retirement Apt.		25,000			12,970,423				12,970,423								
G) Commercial		1,400,571			5,961,701		1,435,684	1,471,576	1,508,366	1,546,075							
H) Schools		11,000,000			24,285,549					24,285,549							
I) Other Commercial		0			0												
J) Internal Rds & Reserves		0			0												
Total Sales					632,327,098	0	69,064,698	70,791,315	85,531,521	98,660,675	74,649,777	76,516,021	78,428,922	77,064,211	1,619,958	0	0
Legal Expense	1,000	/ lot	0.32%	GR	2,034,014	0	(255,000)	(255,000)	(255,000)	(255,000)	(255,000)	(255,000)	(255,000)	(244,083)	(4,930)	0	0
Marketing & Commissions - Residential	0	/ lot +	3.00%	GR	17,673,283	0	(2,028,870)	(2,079,592)	(2,131,582)	(2,184,872)	(2,239,493)	(2,295,481)	(2,352,868)	(2,311,926)	(48,599)	0	0
Marketing & Commissions - Commercial		/ lot +	3.00%	GR	1,296,536	0	(43,072)	(44,148)	(434,365)	(774,952)	0	0	0	0	0	0	0
Less GST					76,640,360	0	(8,821,176)	(9,041,705)	(9,267,748)	(9,499,441)	(9,736,927)	(9,980,351)	(10,229,859)	(10,051,854)	(211,299)	0	0
Net Realisations					534,482,906	0	57,916,580	59,370,870	73,442,827	85,946,410	62,418,356	63,985,190	65,591,195	64,456,348	1,355,131	0	0
Less Development Expenses		Start Date		Base	Base $ / Lot												
1 - Detached	0	30-Jun-12		26,067,695	64,934	28,479,932		3,246,692	3,328,088	3,411,290	3,496,572	3,583,987	3,673,586	3,765,426	3,859,562	114,728	
2 - Urban House	0	30-Jun-12		39,101,543	64,934	42,719,898		4,870,039	4,992,132	5,116,935	5,244,859	5,375,980	5,510,380	5,648,139	5,789,343	172,093	
3 - Large Format Retail	0	30-Jun-12		43,446,159	64,934	47,378,180		5,519,377	5,657,750	5,799,193	5,944,173	6,092,777	6,245,097	6,401,224	5,718,589		
4 - Terraced	0	30-Jun-12		13,033,848	64,934	14,239,966		1,623,346	1,664,044	1,705,645	1,748,286	1,791,993	1,836,793	1,882,713	1,929,781	57,364	
5 - Apartments	0	30-Jun-12		10,427,078	64,934	11,391,973		1,298,677	1,331,235	1,364,516	1,398,629	1,433,595	1,469,435	1,506,170	1,543,825	45,891	
6 - Retirement Apt.	0	30-Jun-14		3,429,960	7,120	3,603,849				3,603,849							
7 - Commercial	0	6-Jul-05		797,759	199,440	828,233		199,453	204,440	209,551	214,789						
8 - Schools	0	1-Jul-15		4,385,883	2,192,941	4,841,526					4,841,526						
9 - Other Commercial	0					0											
10 -	0					0											
Total Expenses					153,483,557	0	16,757,584	17,177,688	21,210,979	22,888,835	18,278,332	18,735,291	19,203,673	18,841,098	390,076	0	0
Gross Margin (Revenue Less Expenses)					380,999,349	0	41,158,996	42,193,181	52,231,848	63,057,576	44,140,024	45,249,900	46,387,522	45,615,249	965,054	0	0

Present Value Of Development		
Pre-Tax Required Rate of Return		27.0%
Present Value of Development @	30-Jun-11	147,911,080

Appendix V

Valuation Policies

Valuation Policies

The following are the general policies upon which our appraisals and reports are normally prepared. These apply unless specifically mentioned otherwise in the body of the report. These policies form part of the report.

1. Property Description

The appraisal is based on the property description included in this report including any undertakings given by the owner and defined in the report.

2. New Zealand Institute of Valuers Asset Valuation Standards

The appraisal has been prepared in accordance with the IVSC standards.

3. Appraisal Basis

No allowances are made in our appraisal for costs of realisation or to reflect any outstanding debt including accrued interest.

4. Information Supplied

Where stated in the report that another party has supplied information to us, the information is believed to be reliable however we accept no responsibility should it prove not to be so. Where information is given without being attributed directly to another party the information has been obtained by our search of records and examination of documents or by inquiry from Government or other appropriate sources.

5. Title

Unless specifically stated in the report, we assume that:

- all improvements lie within the title boundaries;
- the subject property has a good and marketable title free from any pending litigation.

We also assume that all documentation is satisfactorily drawn and that there are no unusual or onerous easements, restrictions, covenants or other outgoings which would adversely affect the value or negotiability of the relevant interest(s). Such registrations may include Wahi Tapu and Historic Places Trust Registrations.

6. Inspections

We undertake such inspections and conduct investigations as are, in our opinion, correct, appropriate and possible in the particular circumstances.

7. Building Act 1991, Health and Safety in Employment Act 1992, Resource Management Act 1991

- Fire Safety and Evacuation of Buildings Regulations 1992
- Disabled Persons Community Welfare Act 1975

Unless otherwise stated in our report, our appraisal is on the basis that the subject property complies with this legislation or it has no significant impact on the value of the business. In particular, our appraisal assumes all necessary resource consents have been obtained for the proposed water and irrigation development.

8. Site Conditions

We do not carry out investigations on site in order to determine the suitability of ground conditions and services, nor do we undertake environmental or geotechnical surveys. Unless notified to the contrary, our appraisal is on the basis that these aspects are satisfactory and also that the site is clear of underground mineral or other workings, methane gas or other noxious substances.

In the case of properties that may have redevelopment potential, we assume that the site has a load bearing capacity suitable for the anticipated form of development without the need for additional expensive foundations or drainage systems.

9. Environmental Contamination

Our appraisal assumes that no contaminative or potentially contaminative use is, or ever has been, carried out on the property. Unless specifically instructed, we do not undertake any investigation into the past or present uses of either the property or any adjoining or nearby land, to establish whether there is any potential for contamination from these uses and assume that none exists.

10. Taxation – GST / VAT

In preparing our appraisal, no allowances are made for any liability which may arise for payment of income tax or any other property related tax, whether existing or which may arise on development or disposal, deemed or otherwise. We also specifically draw your attention to the fact that our appraisal is exclusive of any Goods and Services Tax that may be incurred.

11. Confidentiality and Disclaimer of Liability

Our appraisal and report is strictly confidential to the party to whom it is addressed and is prepared solely for the specific purpose to which it refers. No responsibility whatsoever is accepted for reliance on the appraisal report for other purposes. Furthermore, no responsibility whatever is accepted to persons other than the party to whom the appraisal and report is addressed for any errors or omissions whether of fact or opinion.

The valuer(s) accept no responsibility whatsoever for the accuracy of the statements and opinions expressed in the report and that the report is prepared as an employee of and on behalf of Property Advisory Ltd and only Property Advisory Ltd accepts responsibility for its contents.

12. Publication

Neither the whole nor any part of our reports, nor any reference thereto, may be included in any published document, circular or statement, nor published in any way without our written approval of the form and context of such publication or disclosure. Such approval is required whether or not Property Advisory Limited is referred to by name and whether or not the reports are combined with others.