Canterbury
District Health Board
Te Poari Hauora ō Waitaha

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9 November 2020

9(2)(a) [redacted]

[redacted]

[redacted]

RE Official information request CDHB 10442

I refer to your email dated 5 October 2020 requesting the following information under the Official Information Act from Canterbury DHB. Specifically:

- **The CDHB 10yr Forecasts Testing Final November 2017 undertaken by PWC and sent to Justine White in November 2017**

Please find attached as **Appendix 1. Note: Appendix 2** (attached) is the letter of engagement referred to at the bottom of the first page in the Final Review.

Please note we have redacted information pursuant to section 9(2)(a) of the Official Information Act i.e. *"…to protect the privacy of natural persons, including those deceased",* and section 9(2)(b)(ii) i.e. *"…to avoid disclosure of a trade secret or to protect the commercial position of the person who supplied the information, or who is subject of the information."*

I trust this satisfies your interest in this matter.

You may, under section 28(3) of the Official Information Act, seek a review of our decision to withhold information by the Ombudsman. Information about how to make a complaint is available at www.ombudsman.parliament.nz; or Freephone 0800 802 602.

Please note that this response, or an edited version of this response, may be published on the Canterbury DHB website after your receipt of this response.

Yours sincerely

R La Salle

Ralph La Salle
Acting Executive Director
Planning, Funding & Decision Support

APPENDIX 1

pwc

Canterbury District Health Board
Justine White
32 Oxford Terrace
Christchurch 8011
New Zealand

16 November 2017

Review of Canterbury District Health Board Ten-Year Plan Assumptions

Dear Justine

Background

Canterbury District Health Board (CDHB) is in the process of finalising it's 2017/18 Annual Plan for submission to the Ministry of Health (the Ministry) and is also updating its ten-year plan (the ten-year plan). An important component of the ten-year plan are financial forecasts for the ten years ending 30 June 2027 (the Forecasts).

We have been engaged by CDHB to undertake certain procedures in relation to the most material assumptions used to develop the Forecasts. Our understanding of the drivers of CDHB's financial performance obtained from working with CDHB during the 2016 Stage Two Financial Review (the Stage Two Review) as well as other involvement with CDHB in recent years has assisted us in undertaking this assignment. The principal output of the Stage Two Review was ten-year forecasts of CDHB's financial performance.

Scope

The scope of our testing of the Forecasts for this (current) assignment has involved comparing the Forecasts to the Stage Two Review forecasts and identifying, in conjunction with CDHB, the key differences in forecast amounts and assumptions, the rationale or reasons for the differences and how the differences have been applied in the Forecasts. This has focused on, but has not been limited to, depreciation policies, efficiency assumptions and cost escalation calculations and inputs.

Our work has not included anything in the nature of a financial audit and we have not verified any assets or liabilities. We have not been required to review the outputs of the Forecasts and accordingly we do not provide anything in the nature of an opinion on the reasonableness or achievability of the Forecasts.

We have not tested that the accounting assumptions used to develop the Forecasts or the Forecasts themselves comply with New Zealand Generally Accepted Accounting Principles (GAAP). Similarly, we have not tested that the taxation assumptions and the Forecasts are in accordance with relevant Income Tax Legislation.

CDHB has used an Excel spreadsheet model to develop the forecasts (the Model). We have not tested the Model for integrity, mathematical accuracy and consistency. We do not provide any form of opinion of the reasonableness and completeness of the Model.

We draw your attention to the important notice in Appendix A. This letter should be read in conjunction with our letter of engagement dated 14 June 2017.

Key observations

Observations on the more significant findings from the testing are presented in this letter. Detailed, line-by-line observations are included in Appendix B.

We discussed our initial findings and recommended changes with your team during the course of this engagement. The key observations presented below are based on the Forecasts after changes were made in response to the matters discussed with your team.

Revenue

The forecast growth in revenue is largely consistent with the FY 2017/18 Population Based Funding (PBF) scenarios provided by the Treasury using the "mid scenario". We used the more conservative low-scenario for the Stage Two Review.

A review of other revenue line items highlighted the following matters:

Table 1 Observations on other revenue assumptions

Revenue Assumptions	Observation
Other Revenues	A number of revenue lines (Other Government Income, Patient Related Revenue, Inter-Provider Revenue and Other Operating Income) are assumed to grow at an annual average rate of 4%. This rate has been derived from trends in prior years. However, historical growth rates have tended to be variable and this makes it difficult to identify a single, appropriate growth rate to apply in the forecasts. A 4% growth rate is higher than the CPI and the PBF assumptions and takes into account a mix of price (CPI) and demand projections. It would be prudent to adopt a growth rate more in line with the longer term CPI and PBF growth rates.
Outsourced food services	Operating income originating from the outsourced food services transferred back in-house is estimated to increase 3% year on year based on the Food Price Index (FPI) growth rate published by Statistics New Zealand. This differs from the more general PBF or CPI related assumptions. Food prices are a key cost driver for this line item, so the FPI provides an applicable basis for growing the related revenue.
Donations	Specific increases have been used to derive the forecast of donation revenue. With a current baseline of around \$2.6m (FY16/17), this is expected to double over the forecast period. This is a significant increase that is attributed to the establishment of a fundraising entity. However, this may be an optimistic estimate. We suggest a more conservative forecast would be appropriate.

Expenditure - General assumptions

Many expenditure items grow in line with the Consumer Price Index (CPI). Where CPI has been used it is consistently at 2% per annum. This is in line with Treasury and RBNZ estimates (1. 3%-2.1% and 2.00% respectively).

Expenditure - Personnel

Personnel expenditure is the largest cost category, with specific modelling and detailed drivers influencing the growth rate assumptions. Personnel assumptions for the Ten Year Plan generally appear to be more conservative than those of the Stage Two Review. Average cost per FTE, growth rates and activity rates are all higher resulting in higher numbers of FTEs than projected in the Stage Two Review.

The opening average $/FTE is $89,900 in FY 16/17. This increases to $115,801 in FY 26/27 at an average annual rate of 2.58%.

Table 2 Observations on personnel expenditure assumptions

Personnel Assumptions	Observation
Outsourced Personnel	The cost of Outsourced Personnel is assumed to grow year on year at CPI (2% per annum).
Employee Cost – MECA and STEP (& Churn Rate)	All of the Average Cost per FTE growth rates except for Support, Management and Administration Personnel are higher than assumed in the Stage Two Review. We understand that this is the result of increasing MECA salary adjustments. The calculation approach is similar to that adopted in the Stage Two Review but with adjusted inputs largely reflecting a change in cost per FTE assumptions
Employee Cost - Activity	• Cost driver activity growth rates for Discharge Activity, Case Weight Activity, Bed Day Activity and Theatre Hours Activity are generally higher than forecast in the Stage Two Review. This results in higher employee numbers and higher costs compared to the Stage Two Review. • In addition to the rate change, one of the outcomes from the recently settled RMO MECA settlement necessitates DHBs to be 'roster compliance' which resulted in a volume adjustment in RMO FTEs.
Employee Cost – Transfer Back In-House (includes ASB Readiness, Outsourced/Outplaced, and Food Service)	Costs begin in FY 17/18 and increase as these services are brought in-house. For the out years these items increase at rates between 2.28% and 6%. This range is greater than the CPI assumption.
Efficiencies	• FTE Efficiencies are assumed to result in year on year cost reductions at rates between 0.2% and 0.8%. • Staff Mix/Model of Care Efficiencies are assumed to result in year on year at reductions of between 0.3% and 0.8%. Outsourced Personnel Efficiencies are assumed to achieve cost reductions of 5% in FY 17/18, 3% annually from FY 18/19 to FY 20/21, and year on year reductions of 2% for the out years. • Combined, these result in large cost savings over the 10-year horizon. These are in line with the required efficiency savings that were identified in the Stage Two Review.

Expenditure - Other

Expenditure assumptions (including efficiencies) have been made based on a mix of CPI inflation rates, specific price/demand modelling and estimates. Where CPI has been used it is consistently at 2%. Observations on specific expense categories/lines is outlined below.

Table 3 Observations on other expenditure assumptions

Cost Assumptions	Observation
Clinical supplies	Clinical supplies cost drivers, Total Caseweights and Bed Demand, have either remained unchanged since the Stage Two Review or have increased leading to higher costs. Outside of one-off cost increases for Outsourced Clinical Supplies Costs Transferred In-house (FY17/18 \$560k and FY18/19 \$4.8m), costs increase year on year at CPI (2% per annum). These figures include a 9% reduction of the costs compared to the outsourced expense reflecting the provider's profit margin and other capital related costs which will no longer be incurred.
Food Services	Costs are largely assumed to be steady and increase year on year at CPI (2% per annum). The revenue for Food Services brought in-house is assumed to have yearly increases of 3%. It would be prudent to have the costs of Food Services increase at the Food Index rate of 3%. This would provide a more consistent set of assumptions
Capital related expenditure	• The Capital Charge rate of 6% is in line with Treasury guidelines. Capital charge has not been applied unapproved capital projects, which are assumed to be funded internally. • The treatment of the new loans relating to the ASB using the debt/equity rate of 2.3%, rather than the full capital charge rate, is in line with the guidance noted during the Stage Two Review. • Depreciation is calculated on a straight line basis and includes an estimate of depreciation for new capital spend. The blended depreciation for the new Burwood facility is 3.1% per annum, which is slightly higher than the rate used in the Stage Two Review due to slight differences in asset mix.
Efficiencies (Infrastructure & non-clinical specific))	The general efficiency savings assumption is set at 1% per annum. This is broadly in line with the required annual savings identified in the Stage Two Review of approximately 0.8%. Exceptions to this assumption are: • External Rent and EQ Related Operating Costs, where there are no cost efficiencies assumed (i.e. year on year cost reduction from efficiencies of 0%). • Facilities Related efficiency savings for new buildings (ASB and Burwood), EQ Repairs, and Outpatients are assumed to be 3% in FY 17/18 and 4% for both FY 19/20 and FY20/21. Annual efficiency

	savings of 1% are assumed for FY 18/19 as well as for the out years. These one-off efficiency savings reflect the nature of cost reduction from new facilities with significant savings occurring in a stepwise manner when the new facilities start being used. • Other Operating (Excl. IDCC) include year on year efficiency savings of -2% and a one-off saving of 5% in FY 17/18 from Professional Fees Savings. This reflects a targeted effort to reduce professional fees, and the impact of requiring less engineering services following the impacts of the Earthquake.

Deficit Funding

Table 4 Observations on deficit funding assumption

Assumption	Observation
Deficit is funded via Equity by a capital injection 3 months into the financial year.	The forecast assumes CDHB receives funding for its net operating deficits via equity, which has a flow-on impact to capital charge. This assumption differs to that adopted in the Stage Two Review and has a significant bearing on the net deficit. If it is included it should be either agreed with or clearly signalled to the Ministry.

Reconciliation between the ten year forecasts and the Stage Two Review

A high level reconciliation between the ten-year plan forecast revenues and expenditure was created between PwC and CDHB and has been provided in Appendix C.

General

Please do not hesitate to contact us if you have any questions or require more information.

Yours sincerely

9(2)(a)

[redacted]

Appendix A

This Letter has been prepared solely for the purposes stated herein and should not be relied upon for any other purpose.

This Letter is strictly confidential and (save to the extent required by applicable law and/or regulation) must not be released to any third party without our express written consent which is at our sole discretion.

To the fullest extent permitted by law, PwC accepts no duty of care to any third party in connection with the provision of this Letter and/or any related information or explanation (together, the "Information"). Accordingly, regardless of the form of action, whether in contract, tort (including without limitation, negligence) or otherwise, and to the extent permitted by applicable law, PwC accepts no liability of any kind to any third party and disclaims all responsibility for the consequences of any third party acting or refraining to act in reliance on the Information.

We have not independently verified the accuracy of information provided to us, and have not conducted any form of audit in respect of the CDHB. Accordingly, we express no opinion on the reliability, accuracy, or completeness of the information provided to us and upon which we have relied.

The statements and opinions expressed herein have been made in good faith, and on the basis that all information relied upon is true and accurate in all material respects, and not misleading by reason of omission or otherwise.

The statements and opinions expressed in this letter are based on information available as at the date of the letter.

We reserve the right, but will be under no obligation, to review or amend our Letter, if any additional information, which was in existence on the date of this letter was not brought to our attention, or subsequently comes to light.

We have relied on forecasts and assumptions prepared by the CDHB about future events which, by their nature, are not able to be independently verified. Inevitably, some assumptions may not materialise and unanticipated events and circumstances are likely to occur. Therefore, actual results in the future will vary from the forecasts upon which we have relied. These variations may be material.

This letter is issued pursuant to the terms and conditions set out in our engagement letter and the Terms of Business attached thereto.

Appendix B Detailed observations

Revenue

Line Item	Assumption		Comment
Population Based Funding (MoH)	2017/18 per funding advice and the out years are Treasury's Mid Scenario of funding increases.		This is in line with our approach to modelling for the Stage Two Review.
Population Based Funding (MoH) Adjst – Funding for Pay Equity (DSS)	Increase of $25.2m in 17/18 per funding advice. Out years are Treasury's Mid Scenario of funding increases. Pay equity assumed to be cost-neutral over the long run.		This is line with our approach to modelling for the Stage Two Review.
PBFF (Base) Adjustment post Funding Advice (In Between Travel)	Increase of $5.8m in 17.18 per funding advice plus 16/17 wash up carried forward. Out years use Treasury's mid Scenario		This is based on specific funding advice and the general PBFF growth assumption. .
Population Based Funding (MoH) Adjst – Funding for Debt/Equity Swap = ASB Pre-Approved Debt.	Increase of $8.3m in 19/20 per MoH advice. Debt/Equity Swap assumed to be cost-neutral over the long run.		This is line with our approach to modelling for the Stage Two Review.
MOH – Funding Subcontracts (excl. MH All Right Campaign)	FY 17/18 to FY 20/21 per P&F Advice. These totals are $59.5m, $61.7m, $63.4m, and $66.5m. Out years are Treasury's Mid Scenario of funding increases.		This is line with our approach to modelling for the Stage Two Review.
MOH – Funding Subcontracts – New MH Funding (All Right Campaign) 3-Year Fixed Term	Fixed totals of $5.48m up to and including18/19.		It is assumed the All Right Campaign is fixed term to FY 18/19, as per MOH contract, and ceases after this date.
MOH – Non Devolved Contracts	Out years are Treasury's Mid Scenario of funding increases.		This is line with our approach to modelling for the Stage Two Review.
IDF Inflow – Price Plus	$119.8m in 17/18 to align to		This is line with our approach to

Volume Net	MoH Funding Advice. Out years are Treasury's Mid Scenario of funding increases.		modelling for the Stage Two Review.
IDF Inflow – Additional Volume post ASB Net	Year on year increase in the range of 0.5% and 1.75% until FY 25/26.		CDHB have assumed an overall increase in IDF due to population changes and short-term increased capacity with the new facilities opening (Burwood, ASB). We understand this is broadly in line with recent regional population changes (2016: 2%)
IDF Inflow – WCDHB SLA Adjustment	Reduction of $1.976m in FY 17/18 to align WCDHB IDF Outflow Expenditure to the CDHB.		Based on specific estimates.
Other Government (not MoH or other DHBs)	Item fluctuates significantly year on year. An indicative annual average increase of 4% was used.		From FY 13/14 Actual Figures to the FY 16/17 Forecast Figures, this item increased annually at rates between -1.1% and 7.9%. These fluctuations make it difficult to project future trends, with the 4% growth assumption being higher than the midpoint change in previous years, but consistent with the Patient Related Revenue assumptions.
Patient Related Revenue	Item fluctuates significantly year on year and an indicative annual average increase of 4% was used.		From FY 13/14 Actual Figures to the FY 16/17 Forecast Figures, this item increased annually at rates between 6.5% and 11.7%. A 4% annual increase is at the lower end of this range.
InterProvider Revenue (Other DHBs)	Item fluctuates significantly year on year and an indicative annual average increase of 4% was used.		From the FY 13/14 Actual Figures to the FY 17/18 Forecast Figures, this item changed annually at rates between -14% and 2%. A 4% is above the upper end of this range.
Interest Income	Estimated by assuming approximately net average two weeks' cash holding between funding and payment to staff and suppliers. Interest rate is Treasury's projection of the		.

	90 day bank bill average.		
Donations	Net incremental on current Donations of $300k in FY 18/19, $400k in both FY 19/20 and 20/21, and net incremental donations of $250k every year for the out years.		With a baseline of $2.6m in FY 18/19, the incremental increases appear significant. At the end of the forecast period, the annual donations are expected to be almost two times greater than FY 16/17. This is attributed to the creation of a fundraising entity, but despite this new function it appears to be a potentially optimistic assumption.
EQ Revenue Draw Down – EQ Opex	As per Programme of Works Schedule.		Approach is consistent with PoW and in line with Stage Two Review.
Other Operating Income - Outsourced Food Transfer Back In-House	FY17/18 is $6m, with assumptions for the out years reflecting the Food Price Index of 3%.		The estimate for the FY 17/18 is based on a specific calculation. The 3% Food Price Index adjustment has been agreed to Statistics New Zealand data.
Other Operating Income	Item fluctuates significantly year on year and an indicative annual average increase of 4% was used.		We have reviewed year on year changes from FY13/14 actuals to the FY 16/17 forecast figures. The annual changes over this period were between 3% and 10%. A 4% annual increase is approximately in the middle of this range.
Other Operating Income – Additional Target	This item includes specific targets and research grants. For FY 17/18 and FY 18/19 there are annual increases of $250k. The period between FY 19/20 and FY 22/23 have annual increments of $200k and it is forecast to be annual increases of $150k in the out years.		With a baseline of $6.2m for Research Grants in FY 16/17, these incremental increases are around 2.5%-4.0%. This could be a slightly optimistic estimate.
Gain on Sale - TPMH	9(2)(b)(ii) [redacted]		This is in line with the Stage Two Review assumptions.

Expenditure – Personnel/Employee Costs

Line Item	Assumption		Comment
Employee Cost - MECA and STEP (& Churn Rate)	Annual after churn cost growth rates of 4.3% for SMO's, 2.8% for RMO's, 3.3% for Allied Health Personnel, 3.5% for Nursing Personnel and 2% for Support, Management and Administration Personnel.		With the exception of Support, Management and Administration Personnel which has remained consistent with the Stage Two Review assumptions, all of these growth rates are higher than previously estimated. This is the result of increasing the MECA salary adjustments. The calculation approach is similar to that adopted in the Stage Two Review, but with adjusted inputs largely reflecting a change in cost per FTE assumptions.
Employee Cost - Activity (exclude Specific)	Cost driver activity growth rates, such as Discharge Activity, Case Weight Activity, Bed Day Activity and Theatre Hours Activity are generally higher than previous forecasts. This produces a more conservative set of assumptions.		CDHB has adopted a similar approach to that undertaken in the Stage Two Review. Compared to the Stage Two Review, Maternity and Medical Discharge activity and Maternity Bed Day activity are initially higher than forecast and then lower from FY 21 and FY 22 onwards. This results in higher FTE numbers to meet the additional demand. The RMO MECA has just been settled 5 months ago resulting in both a rate and volume change. The noncompliance of the roster was treated with a volume adjustment and not a change to the rates. We understand that this reflects the primary outcomes from the settlement.
Employee Cost - Specific (ICU)	Total Cost before Efficiencies begin in FY 17/18 with a figure of $1.26m. This grows by 38.7% in FY 18/19 and then at rates between 6.3% and 5.4% for the out years. Activity increases assumed to be		With the exception of Support, Management and Administration Personnel, which has remained consistent with the Stage Two Review assumptions, all average cost per FTE growth rates for ICU medical personnel are higher than initially forecast due to MECA adjustments. ICU demand is

	the same as Medical activity growth rates.		greater than that indicated in the Stage Two Review. These assumptions are in line with expectations identified during the initial stages of the development of the Christchurch Hospital business case.
Employee Cost - Specific (ASB Readiness & Outsourced/Outplace Transfer Back In-House)	Total Cost before Efficiencies begin in FY 17/18 with a figure of $2.2m in FY17/18. This grows by $5.3m in FY18/19 and $9.8m in FY19/20 in line with projected phased outsourced activities to be transferred back, before growing at rates between 6.3% and 5.2% for the out years.		With the exception of Support, Management and Administration Personnel, which have remained consistent with the Stage Two Review assumptions, all average cost per FTE growth rates for ICU medical personnel are higher than initially forecast. We understand that this is due to MECA adjustments. The calculation approach is similar to that undertaken the Stage Two Review, with volume increases reflecting new facilities coming on board and outsourced services being brought in-house. These volume increases are higher than previously estimated in the Stage Two Review.
Employee Cost - Specific (Food Services Transfer Back In-House)	Total Cost before Efficiencies for FY 17/18 was $9.75m. This grows at rates between 2.28% and 2.31% for the out years. Activity increases assumed to be the same as Admin & Support activity growth rates.		The growth assumptions are broadly in line with other non-medical personnel rates. Due to the size of this line item, any assumption changes will likely have a minor impact.
Employee Cost - FTE Efficiencies	Year on year cost reductions at rates between 0.2% and 0.8% due to FTE Efficiencies		These reductions are in line with the indicative required savings outlined in the Stage Two Review of between 0.4% and 0.8%.
Employee Cost - Staff Mix/Model of Care Efficiencies	Year on year cost reductions at rates between 0.3% and 0.8% due to Staff Mix/Model of Care Efficiencies.		These reductions are in line with the indicative required savings outlined in the Stage Two Review of between 0.4% and 0.8%.
Personnel - Outsourced	CPI of 2% for the out		

Personnel CPI	years.		
Personnel - Outsourced Personnel Efficiencies	Reduction of 5% in FY17/18. Year on year reduction of 3% assumed for the out years.		The 3% year on year reduction reflects a targeted approach to reduce the fees of remaining outsourced personnel and professional services.
Outsourced Clinical Services CPI	CPI of 2%.		
Outsourced Clinical Services - Efficiencies/Managed In house	Reduction of $300k from FY 17/18 to FY 19/18. Reductions in FY 20/21, FY 21/22 and FY 22/23 of $250k, $200k and $100k respectively.		These efficiency targets do not appear aggressive.

Expenditure – Clinical Supplies

Line Item	Assumption		Comment
Clinical Supplies Costs (incl. Outsourced Clinical) - General	CPI of 2% for the out years.		
Clinical Supplies - Activity (exclude Specific)	Total Cost increases year on year at rates between 3% and 4.6%. This can be broken down into price increases at a CPI assumption of 2% and volume increases at rates between 1.9% and 2.6%.		Total Caseweights is the main cost driver. The Total Caseweight volume is unchanged since 2016 review. Both do not include additional Burwood volume
Clinical Supplies - Specific (ICU)	Increase of $100k in 17/18 and an increase of $300k in 18/19. CPI of 2% for the out years.		ICU bed demand and clinical activity exceeded the assumptions used in Stage Two Review. A CPI Assumption of 2% is reasonable.
Clinical Supplies Costs - Specific (e.g. Outsourced Transfer In-House)	No change in 17/18, an increase of $560k in 18/19 and a further increase of $4.8m in 19/20. CPI of 2% for the out years.		The FY18/19 and FY19/20 increases reflect outsourced activities being brought back in house. These figures have assumed that bringing these outsourced costs in-house reduces CDHBs net cost by 9% reflecting the provider's profit margin and CDHB using existing overhead and infrastructure rather than having a suppliers cost for these items

		incorporated into the costs.
Clinical Supplies Costs - Efficiencies	Reduction of 0.6% in FY 17/18 and FY 18/19. A year on year reduction of 0.5% is assumed for the out years.	Efficiency target is in line with the indicative required savings outlined in the Stage Two Review.

Expenditure – Infrastructure * Non Clinical

Line Item	Assumption	Comment
Hotel Services, Laundry & Cleaning - General	CPI of 2% for the out years.	
Hotel Services, Laundry & Cleaning - Specific (e.g. Outsourced Electives Transfer In-House)	Nothing in 17/18, an increase of $140k in 18/19 and another increase of $1.2m in 19/20. No further increases, CPI or otherwise, after 19/20.	These are one-off changes reflecting costs being transferred back in house. In out-years, these cost increases are reflected in the line item above.
Facilities and Utilities (excl. EQ Repairs Opex) - General	CPI of 2% for the out years.	
Facilities and Utilities - EQ Repairs Opex	As per PoW Schedule.	
Facilities and Utilities – Approved Business Cases (ASB and Outpatients)	Increase of $120k in FY 17/18, increases to $720k in FY 18/19 and levels off at $2.04m from FY 19/20 onwards.	Costs are in line with new facilities coming on board.
Transport	CPI of 2% for the out years.	
IT Systems & Telecommunications - General	CPI of 2% for the out years.	
IT Systems & Telecommunications - Specific (e.g. NIP etc.)	$200k in 17/18 and $200k in 18/19. CPI of 2% for the out years.	In the short run the forecast includes an ongoing incremental cost of $1m for moving I.T. infrastructure into the cloud. This has been offset by a slight decrease in depreciation relating to the existing assets.

Professional Fees & Expenses	CPI of 2% for the out years.	
Other Operating Expenses (excl. Depreciation)	CPI of 2% for the out years.	
Democracy	$600k every three years.	This reflects a charge from Christchurch City Council for board elections and is based on previous election costs.
Other Operating Expenses – Specific One-off Non Personnel Relocation Expenses (ASB & Outpatients).	A one-off expense of $300k in FY 18/19.	One-off estimated expenditure that is immaterial.

Expenditure – Infrastructure * Non Clinical (Efficiencies)

Line Item	Assumption	Comment
Hotel Services, Laundry and Cleaning	Cost reduction of 1% year on year.	A 1% efficiency target is in line with our indicative required savings in the Stage Two Review.
Facilities Related (except Utilities, Ext Rent & EQ Repairs Opex)	Cost reduction of 3% in FY 17/18, 1% in FY 18/19 and 4% for both FY 19/20 and FY 20/21. Annual cost reductions of 1% assumed for the out years//	The decreases of 4% in FY 19/20 and FY 20/21 are due to expected savings in repairs and maintenance costs as the new ASB facilities opens. Overall the general assumption of decreases of 1% year on year with larger decreases coinciding with new facilities coming online is broadly in line with the indicative required savings in the Stage Two Review.
Utilities	Cost reduction of 1% year on year.	A year on year cost reduction of 1% was based on the use of more efficient facilities. We noted that there was no additional change with the introduction of ASB, which we would have assumed would have had further benefits. By not including additional efficiency savings CDHB has

			forecast higher costs than included in the Stage Two Review.
External Rent	No year on year change assumed.		This is in line with increasing trends for market rents.
EQ related operating costs	No year on year change assumed.		The EQ programme is reducing.
Transport	Cost reduction of -1% year on year.		A 1% efficiency target is in line with the indicative required savings in the Stage Two Review.
ITS&T	Cost reduction of -1% year on year.		A 1% efficiency target is in line with the indicative required savings in the Stage Two Review.
Other Operating (excl. IDCC)	Cost reduction of 5% in 17/18, 4% in 18/19 and 2% year on year for the out years.		Reduction of 5% in 17/18 includes $600k removal of a one-off Board Election Cost in FY16/17 and in consultancy expenses (primarily relating to professional services post EQ). Ongoing savings of 3% per annum could be optimistic but CDHB has significant control over this cost category and the baseline cost is high at the outset. So reasonably substantial reductions may not be unreasonable.

Expenditure – Food Services Transfer Back In-House

Line Item	Assumption		Comment
Food Services Transferred Back In-house	An increase in costs of $4.13 in FY 17/18 as Food Services are brought in-house. CPI of 2% for the out years		It would be prudent to have the costs of Food Services increase at the Food Price Index rate of 3%. This would be consistent with the Revenue assumptions for the same category. The impact of this change would be immaterial.
Hotel and Laundry Expenses	Decrease of $6.4m in 17/18 as per Business Case. CPI of 2% for the out years.		In line with an internally developed business case.
Transport and Travel	Increase of $70k in 17/18 as		In line with an internally developed

	per Business Case. CPI of 2% for the out years.		business case.
ITC Expenses	Increase of $90k in 17/18 as per Business Case. CPI of 2% for the out years.		In line with an internally developed business case.
Other Operating Expenses	Increase of $500k in 17/18 as per Business Case. CPI of 2% for the out years.		In line with an internally developed business case.

Expenditure IDCC

Line Item	Assumption		Comment
Interest & Financing Charges	Capital Charge excludes unapproved capital projects which are assumed to be funded internally. Capital Charge rate from FY 17/18 onwards is 6%. Interest income from cash on hand is estimated by assuming approximately a net average of two weeks' cash holding between funding and payment to staff and suppliers with an interest rate which is Treasury's projection of the 90 day bank bill average. Average interest rate on existing debt is 3.8% and new loans relating to the ASB have and average interest rate of 2.3%.		The capital charge rate is in line with Treasury guidelines. The assumption around the requirement to funding treatment for strategic unapproved projects internally is in line with MoH and Treasury expectations. The treatment of the ASB debt/equity rate, rather than the full capital charge rate, is in line with the guidance noted during the Stage Two review.
Depreciation	Annual Depreciation Expense is calculated by taking the book value of assets in the FAR and dividing them individually by each of their remaining useful life Future depreciation calculated as per the Programme of Works. The depreciation rates for new		We have assumed that the PoW is a fair reflection of future capital spend. The depreciation rates are in line with the Stage Two Review. The blended depreciation for the new Burwood facility is 3.1% is slightly higher than the assumption for the Stage Two review due to differences in the asset mix.

	assets are as follows: Office and Other Equipment 10%; Clinical Equipment 8%, Motor Vehicles 10%; IT Hardware, PCs and Comms 20%; IT Software (excl. New PICS, EMEDS & ICT Strategic) 20%; IT Software (New PICS, EMEDS) 8%. The depreciation rate on new facilities (a mix of structure, plant and FF&E) is 3.1%.		

External Service Providers

Line Item	Assumption		Comment
Personal Health & PHO Capitated (excl. Electives, Community Pharmacies and Pharmacy Rebates)	Revenue figures submitted by service provider. Revenue of \$243m in 17/18, \$248.4m in 18/19, \$248m in 19/20 and \$254.3m in 20/21. A CPI range 2% to 2.5% is used for the out years.		This is a mix of specific costs submitted by a provider and a growth assumption. For the latter, an escalation assumption of 2.0%-2.5% is slightly higher than the CPI forecasts.
Personal Health - Outsourced & Outplaced Electives	Revenue figures submitted by service provider. Revenue of \$34m in 17/18, \$35.9m in 18/19, \$18.7m in 19/20 and \$22.2m in 20/21. A CPI range of 2% to 2.5% is used for the out years.		Figures taken from outsourced forecasts. FY 19/20 has a total of \$18.7m representing disciplines that will not be brought in house to ASB. FY 20/21 is the same as the previous year with an electives uplift. It is expected that this will be the year when ASB no longer has capacity to complete all of Health Target and Uplift discharges, and outsourcing will once again be required.
Personal Health - Community Pharmacies	Revenue figures submitted by service provider. Revenue of \$150.7m in 17/18, \$157.6m in 18/19, \$163.9m in 19/20 and \$170.4m in 20/21. A CPI range of 2%-2.5% is used for the out years.		Based on latest PHARMAC forecast (released April 2017), and also include CDHB PBFF share of Government funding boost announced May 2017, fully offset by additional revenue.

Personal Health - Pharmacy Rebates	Figures submitted by service provider. Rebates of $20.9m in 17/18, $24m in 18/19, $24.9m in 19/20 and $26m in 20/21. A CPI range of 2%-2.5% is used for the out years.		FY17/18 and FY18/19 are based on the latest PHARMAC forecast (released April 2017), thereafter, a 4% increase is applied year on year. This is based on historical increases.
Mental Health	Revenue figures submitted by service provider. Revenue of $46.2m in 17/18, $46.7m in 18/19, $44.3m in 19/20 and $44.8m in 20/21. A CPI range of 2%-2.5% is used for the out years.		This is a mix of specific costs submitted by a provider and a growth assumption. For the latter, an escalation assumption of 2.0%-2.5% is slightly higher that the CPI forecasts.
Public Health	Revenue figures submitted by service provider. Revenue of $4.5m in 17/18, $4.7m in 18/19, $3.6m in 19/20 and $3.63m in 20/21. A CPI range of 2%-2.5% is used for the out years.		This is a mix of specific costs submitted by a provider and a growth assumption. For the latter, an escalation assumption of 2.0%-2.5% is slightly higher than the CPI forecasts.
Disability Support	Revenue figures submitted by service provider. Revenue of $224.7m in 17/18, $227.3m in 18/19, $229.97m in 19/20 and $232.75m in 20/21. A CPI range of 2%-2.5% is used for the out years.		FY 17/18 expenditure includes an increase of $25.2m compared to FY16/17 reflecting the impact of the recent Terranova pay equity settlement. This is a mix of specific costs submitted by a provider and a growth assumption. For the latter, an escalation assumption of 2.0%-2.5% is slightly higher than the CPI forecasts.
Hauora Maori	Revenue figures submitted by service provider. Revenue of $2m in 17/18, $1.92m in 18/19, $1.94m in 19/20 and $1.96m in 20/21. A CPI range of 2%-2.5% is used for the out years.		This is a mix of specific costs submitted by a provider and a growth assumption. For the latter, an escalation assumption of 2.0%-2.5% is slightly higher than the CPI forecasts.
Mental Health - ALL RIGHT CAMPAIGN Reduction	Cost reduction of $5.48m in 21/22 as All Right Campaign ceases.		All Right Campaign may be renewed and this ongoing cost of $5.48m may continue.

Deficit Funding

Line Item	Assumption		Comment
Deficit Funding.	Assume deficit funding is net operating deficit and via equity. Payment three months post balance date.		This assumption differs to that adopted as part of the Stage Two Review. This will have a significant bearing on the net deficit and cash flows, and if included should be either agreed with, or clearly signalled to the Ministry.

Appendix C Reconciliation between the ten-year plan and the Stage Two Review

BUDGET FORECAST OPERATING SUPLUS/DEFICIT RECONCILIATION - LIKE FOR LIKE PWC STAGE 2 VERSUS CDHB

INDICATIVE 'LIKE FOR LIKE' VIEW AFTER ADJUSTMENTS FOR KEY ASSUMPTION DIFFERENTIALS

Period Ending June	2016/17 $M	2017/18 $M	2018/19 $M	2019/20 $M	2020/21 $M	2021/22 $M	2022/23 $M	2023/24 $M	2024/25 $M
Surplus/ (Deficit) per CDHB	(51.8)	(53.7)	(74.5)	(81.5)	(79.6)	(64.3)	(50.4)	(34.7)	(15.4)
Surplus/ (Deficit) per PwC	(38.4)	(35.4)	(39.8)	(57.0)	(64.6)	(60.8)	(59.2)	(58.5)	(57.5)
GROSS DIFFERENCE	(13.4)	(18.3)	(34.7)	(24.5)	(15.0)	(3.5)	8.8	23.8	42.1
Adjustments To Enable 'Like for Like' Comparison									
Key Factors/Assumption Differentials									
Revaluation Depreciation Differential		6.6	8.2	9.7	9.7	9.7	9.7	9.7	9.7
Capital Charge Rate Change - Funding Reduction Omitted		6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Differential		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
PBF Funding Differential		(5.0)	(5.2)	(5.3)	(16.2)	(27.6)	(39.7)	(52.4)	(65.8)
Base Wage Rate Differential		7.0	7.2	7.5	7.8	8.1	8.3	8.5	8.7
Provider Arm Activity Growth Differential		2.6	5.2	6.4	7.1	8.4	6.5	5.3	4.8
NET INDICATIVE 'LIKE FOR LIKE' - SURPLUS/(DEFICIT) DIFFEREN	(13.4)	1.1	(11.0)	2.1	1.8	3.3	1.8	3.1	7.7

Period Ending June	2016/17 $M	2017/18 $M	2018/19 $M	2019/20 $M	2020/21 $M	2021/22 $M	2022/23 $M	2023/24 $M	2024/25 $M
Surplus/ (Deficit) per PwC	(38.4)	(35.4)	(39.8)	(57.0)	(64.6)	(60.8)	(59.2)	(58.5)	(57.5)
Favourable Movements (increase in revenue/decrease in expenditure)									
PBF Base	1.4	11.2	11.7	12.3	22.7	34.7	47.5	60.9	75.2
IDF revenue	7.3	8.1	10.4	11.0	18.9	24.0	29.0	33.9	38.7
Other Revenue	0.7	9.2	12.5	13.8	17.4	21.6	25.0	27.5	29.7
EQ Draw Down - Revenue	(1.6)	4.0	19.4	17.2	5.5	10.9	1.4	0.2	0.2
MOH - non-devolved contracts	4.4	4.5	4.7	4.8	5.4	6.0	6.6	7.3	8.1
Other Operating Expenditure (Incl Food Services and PM Transition)	2.9	8.1	10.6	7.5	6.8	8.3	9.3	11.5	13.1
Sub Contracts (Funder)	2.6	(0.8)	(0.3)	(0.2)	1.1	1.6	2.2	2.8	3.4
Total	17.8	44.4	68.9	66.3	77.8	107.2	121.0	144.1	168.5
Unfavourable Movements (decrease in revenue/increase in expenditure)									
Other Community Based External Providers (incl ARRC)	16.1	18.4	32.5	12.7	16.2	14.1	11.1	8.1	4.1
Personnel Costs (incl Outsourced)	9.2	20.8	28.3	32.4	42.0	49.2	55.9	64.0	71.9
Clinical Supplies (incl Outsourced)	5.4	4.9	5.1	9.0	10.7	12.8	15.1	18.0	20.8
EQ related Opex	(0.2)	4.0	19.4	17.2	5.5	10.9	1.4	0.2	0.2
Capital Charge	(5.7)	3.5	3.0	3.4	4.6	7.6	10.7	12.7	14.7
Depreciation	(2.0)	8.1	12.9	14.2	12.7	15.2	17.7	17.6	15.3
Interest Expense	4.1	-	-	-	-	-	-	-	-
Other Govt	3.7	3.1	2.4	1.8	1.2	0.6	(0.1)	(0.9)	(1.7)
IDF Outflows	0.8	(0.0)	0.0	(0.0)	(0.1)	0.2	0.4	0.7	1.0
Total	31.2	62.7	103.6	90.8	92.8	110.7	112.2	120.3	126.4
Surplus/ (Deficit) per CDHB	(51.8)	(53.7)	(74.5)	(81.5)	(79.6)	(64.3)	(50.4)	(34.7)	(15.4)

APPENDIX 2

pwc

Justine White
Canterbury District Health Board
32 Oxford Terrace
Christchurch 8011
New Zealand

14 June 2017

Review of Ten-Year Plan

Dear Justine

This letter confirms that we have been retained by the Canterbury District Health Board to provide the services (the Services) set out below. This is based on our discussion with you on 9 May 2017. This letter outlines the services to be provided, the approach, timetable, personnel involved, our fee basis and Terms of Business.

Background

CDHB is in the process of finalising its 2017/18 Annual Plan for submission to the Ministry of Health (the Ministry) and is also updating its ten year plan. The principal output from the ten year plan will be financial forecasts for the ten years ending 30 June 2027.

The ten-year financial forecasts will provide a comprehensive view of CDHB's long term financial performance with a particular focus on the impact of its capital expenditure programme on its operating performance and its net surplus/deficit. This will involve incorporating all required capital expenditure into the forecasts.

In 2016, we undertook work involving consideration of ten-year financial forecasts for CDHB (the 2016 forecasts). This had a particular focus on understanding the impact of CDHB's capital expenditure programme on its net surplus/deficit.

You require us to undertake independent testing of certain assumptions underpinning your ten-year financial forecasts. To do this, we will draw on our knowledge and understanding of the drivers of CDHB's financial performance gained from the 2016 work and other involvement we have had with CDHB.

We understand that the ten-year forecasts will be used by CDHB to assist with its long term planning. They will also be provided to the Ministry to provide it with a longer term perspective of CDHB's financial performance and its funding requirement given its proposed capital expenditure programme.

Scope of services

The current ten-year forecasts will be produced by an Excel spreadsheet model prepared by CDHB.

The scope of our work will be confined to testing:

1. Comparing the current ten-year forecasts to the 2016 forecasts and identifying, in conjunction with CDHB, the key differences in forecast amounts and assumptions between the two sets of forecasts. This will focus on, but not be limited to, depreciation policies, efficiency assumptions and cost escalations calculations and inputs.

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2. Testing that the changes to assumptions giving rise to the differences noted in Step 1 are reasonably based and have been appropriately applied by CDHB in developing the current ten year forecasts. This testing will be based on our experience in delivering the Detailed Business Case, the Stage Two Review, and the Christchurch Hospital business case that is currently underway.

Our work will not include anything in the nature of a financial audit and we will not verify any assets or liabilities. We will not review the outputs produced by the Model and we will not provide any form of opinion on the reasonableness or achievability of the ten-year financial forecasts.

We will not check whether the accounting assumptions and outputs from the Model are in accordance with New Zealand Generally Accepted Accounting Principles (GAAP) or that the income taxation assumptions and outputs from the Model, if any, are in accordance with the relevant Income Tax Legislation.

Reporting

The final output of our work will be a brief report setting out the scope of the work that we have completed and our findings, confirming whether or not, based only on the testing carried out, anything has come to our attention to suggest that the Model may not be mathematically reliable.

Our report is not intended for general publication or circulation and should not be copied to other parties without our prior written consent. In any event, we will not accept responsibility to any party other than yourselves in respect of our work and we will not accept responsibility to any party if our work is used by any party including yourselves in breach of the terms of this letter.

Timetable

You have indicated that you require us to complete our procedures as soon as possible. We will liaise with you as to this timetable. We will notify you as soon as reasonably practicable in the event that the timetable cannot be met to agree an adjusted timetable.

Fees

Our fees will be based on time spent, charged at our standard hourly rates for work of this nature, reflecting the relative experience and specific expertise of the personnel involved. These rates have been set out in the table below:

Name	Position	Hourly rate
9(2)(a) [redacted]	Partner	9(2)(a) [redacted]
	Director	
	Senior analyst	

Any specific disbursements such as out of town travel and accommodation will be charged in addition.

Standard Terms of Business

The Terms of Business attached to this letter as Appendix A set out the obligations and duties of each party in respect of the Engagement. The Terms of Business provide that, amongst other things, you will indemnify us against claims brought by any third party. The Terms of Business also exclude our liability in certain circumstances and in other circumstances limit our aggregate liability whether in contract, tort or otherwise to a maximum amount of five times fees paid.

This letter and the Terms of Business comprise the entire agreement (the Contract) for the Engagement to the exclusion of any other express or implied term, whether expressed orally or in writing, including any conditions, warranties and representations. The Contract shall supersede all previous letters of engagement, undertakings, agreements and correspondence regarding the Engagement. The Terms of Business should, therefore, be read in full.

The Terms of Business will also apply to any work which we subsequently carry out which arises out of this assignment.

Confirmation

Please acknowledge your acceptance of the Contract by signing the confirmation below and returning a copy of this letter and the Terms of Business.

If you have any questions regarding this letter or the Terms of Business, please call me.

Yours sincerely
PricewaterhouseCoopers

9(2)(a)
[redacted]

Acknowledgement and acceptance

I confirm that I have read and accept the above letter and the Terms of Business in Appendix B on behalf of Canterbury District Health Board

Signed

Justine White.

Title/Name

26 June 2017

Date

Appendix A

Introduction

These Terms of Business and the attached engagement letter together form the entire agreement (the Contract) between the New Zealand Firm of PricewaterhouseCoopers (PwC) and all addressees of the engagement letter. If there is any conflict between these terms and the engagement letter, the engagement letter will prevail. Unless otherwise agreed in writing, any further work we may carry out in connection with this service will be carried out as part of this Contract.

1. Services

1.1. We will provide the services described in the engagement letter (the services).

1.2. You are responsible for determining that the scope of the services is sufficient to meet your needs.

1.3. Unless specifically stated to the contrary in the engagement letter:

(i) we may allocate appropriate partners and staff to perform the services and may replace any personnel named in the engagement letter with personnel of similar skill;

(ii) timetabled dates are intended for planning and estimating purposes only and are not contractually binding;

(iii) the services do not involve an audit or examination conducted in accordance with New Zealand auditing standards and we will not express an opinion on any financial statements or information taken as a whole, nor provide any opinion on the achievability of prospective financial information;

(iv) we will rely on the information that you provide and will not verify that information;

(v) the services do not include the provision of legal advice or legal due diligence services;

(vi) if the services or your reliance on the services depend upon laws, regulations or interpretations by the Courts or Government agencies, we are not responsible for any changes in those laws, regulations or interpretations (whether or not having retrospective effect) which occur after the date of our report and are not required to notify you of such changes;

(vii) the services are not designed to reveal fraud or misrepresentation. Accordingly, we do not accept responsibility for detecting fraud or misrepresentation whether by directors, management, staff or external parties;

(viii) we are not responsible for the work of any other person who you engage to perform work in conjunction with our services;

(ix) where the services are for appointment as Statutory Auditor, Receiver or Liquidator these have the meaning in statute law;

(x) where the words Examination, Compilation, Review, Opinion, Assurance or Agreed Upon Procedures are used to specify any services those words have the meanings assigned to them in professional standards issued by either the New Zealand Institute of Chartered Accountants (now trading as Chartered Accountants Australia and New Zealand) or the External Reporting Board.

2. Client responsibilities

2.1. You agree that you will:

(i) provide, in a timely fashion, all information, assistance and facilities that we require to enable us to provide the services;

(ii) provide information that is true, accurate and not misleading;

(iii) use the results of the services only for the purpose for which the services are provided;

(iv) advise all of our personnel who visit your premises of what is required of them in relation to health and safety, including location and use of safety equipment, emergency evacuations, and the reporting procedures for accidents and hazards and other matters.

3. Reliance on our work

3.1. Our final written report or other final product of the services will identify the persons to whom the report is addressed. Any oral comments or drafts of written reports or any other communications made prior to the final written report or other final product of the services do not represent our final conclusions and should not be relied upon.

3.2. Our report or other final product of the services should not be relied upon by management of the addressee of our report, or advisers to the addressee, in their personal capacities.

4. Disclosure of our work

4.1. The services are provided for your use only and we accept no responsibility or liability to any other person other than those who have engaged us and to whom we report.

4.2. You must not disclose any report or other information provided as part of the services to any other person without our prior written consent.

4.3. You must not use our name in connection with any prospectus, information memorandum or other offer or marketing document, whether public or private, without our prior written consent.

5. Fees and disbursements

5.1. Unless otherwise agreed, our fees are calculated on the basis of time spent and on the level of skill and responsibility involved in providing the services.

(i) In addition to our fees, a charge of 5% of the fees will be added to cover disbursements.

(ii) Goods and services tax will be added where applicable.

(iii) You also agree to pay reasonable professional fees and expenses, including legal fees and expenses, in complying with or challenging any legally enforceable notice or demand issued by a third party including any government department or any court or tribunal in relation to or in connection with the services.

5.2. Our invoices are due for payment upon receipt. If payment is not received within 14 days we reserve the right to suspend provision of the services and/or charge interest on the outstanding amount at a rate of 3% above the current 90 day bank bill rate.

5.3. Any fee estimate is given in good faith but is not contractually binding.

6. Liability limitation

6.1. Our liability for any loss or damage that you suffer caused by our breach of contract, tort (including negligence), breach of fiduciary duty or other actionable wrong of any kind shall be limited as follows:

(i) we shall have no liability for any consequential or indirect loss or loss of profit;

(ii) our liability will be reduced to take into account any contributory negligence on your part pursuant to the Contributory Negligence Act 1947;

(iii) in the event that more than one person caused or contributed towards your loss, our liability to you will be limited to the proportion of the loss that the Court would apportion to us under section 17 of the Law Reform Act 1936, based on an assessment of our degree of responsibility and the responsibility of the others who contributed to the loss (whether or not those other persons are able to meet any liability they may have);

(iv) notwithstanding the foregoing, our liability for loss shall in no circumstances exceed the amount of 5 times the total fees paid in the case of non-recurring work or 5 times the annual fees paid in the case of recurring work (the liability cap) or such other amount specified as the liability cap in the engagement letter.

6.2. Where there is more than one addressee to the engagement letter, the amount of our liability as derived from clause 6.1 above is a total limit to be allocated between addressees, such allocation being entirely a matter for the addressees, who will be under no obligation to inform us of it.

7. Time limit for claims

7.1. No legal proceedings may be commenced later than two years after the date on which the party bringing the claim became aware or ought reasonably to have become aware of the facts giving rise to the claim.

7.2. In any event, no legal proceedings may be commenced more than four years after the date on which the facts giving rise to the claim occurred.

8. Indemnity

8.1. To the maximum extent permitted by law, you agree to indemnify PwC, its partners and staff, and other PricewaterhouseCoopers firms and their partners and staff, and to hold each harmless against any liabilities, losses, expenses and other costs, including legal costs and the cost of PwC professional time reasonably incurred in connection with any claims, inquiries, investigations or similar matters whether made against them or you by any third party arising out of or in any way connected with the services.

8.2. Clause 8.1 is for the benefit of PwC's partners and staff, and other PricewaterhouseCoopers firms and their partners and staff who may enforce this clause under the Contracts (Privity) Act 1982.

9. Contract solely with PwC

9.1. You agree that in relation to the services and the Contract the client relationship is solely with PwC. Accordingly, you agree not to bring a claim of any nature against any partner, employee, contractor or sub-contractor of PwC or against any other member firm of the global network of PricewaterhouseCoopers firms.

9.2. Clause 9.1 is for the benefit of PwC's partners, employees, contractors, sub-contractors, and other PricewaterhouseCoopers firms and their employees, contractors and sub-contractors who may enforce this clause under the Contracts (Privity) Act 1982.

10. Confidentiality and Privacy

10.1. Subject to any need to make disclosures required by law or professional ethical obligation, both parties agree that information or documents received by or provided to the other for the purposes of the Contract and provision of the services, or are marked confidential or are manifestly confidential (confidential information) will be treated as confidential, except if the information:

- (i) is or becomes generally available to the public other than by a breach of the obligations under the Contract,
- (ii) is known to the parties prior to entering into the Contract, or
- (iii) is received from a third party who owes no obligation of confidence in respect of the information.

10.2. You agree that PwC may disclose confidential information:

- (i) for the purpose of providing the services and on a "need to know" basis, to our personnel (including contractors and sub contractors) and other PricewaterhouseCoopers firms involved in the provision of the services, and to our insurers or legal advisors;
- (ii) to the Financial Markets Authority, or any party appointed by the Financial Markets Authority to undertake reviews on its behalf in relation to quality control reviews performed in accordance with the Financial Markets Authority Act 2011, or any quality review completed by the New Zealand Institute of Chartered Accountants (now trading as Chartered Accountants Australia and New Zealand) as part of its quality review process defined in the New Zealand Institute of Chartered Accountants Rules;
- (iii) once a completed transaction is no longer confidential, we may cite the performance of the services to clients and prospective clients as an indication of our experience;
- (iv) to other PricewaterhouseCoopers firms involved in engagement quality reviews, management of our client relationship systems, or maintenance of our computer services; or
- (v) if necessary to meet any legal request from a New Zealand or overseas governmental agency.

10.3. PwC uses contractors or suppliers located in New Zealand and overseas to assist us in providing services to our clients and in our internal functions. You agree that PwC may transfer information provided to us by you or on your behalf (including personal information and confidential information) to those contractors and suppliers, provided they are bound by confidentiality obligations.

10.4. Our approach to privacy is set out in our Privacy Policy, available on www.pwc.co.nz/privacy. You agree to comply with the New Zealand Privacy Act 1993 and with any legislation governing the use of the information, when providing us with such information. We agree to cooperate with each other in addressing our respective privacy obligations in connection with the services.

10.5. We each agree to take reasonable precautions to protect our own information technology systems, including implementing reasonable procedures to guard against viruses and unauthorised interception, access, use, corruption, loss or delay of electronic communications.

11. Ownership and destruction of working papers

11.1. The working papers that we produce in the course of performing the services are our property and we have no obligation to disclose our working papers to you or to any other person.

11.2. You acknowledge that we may, after a period of time, destroy our working papers, reports and other records relating to the services, including any of your documents that have come into our possession, in accordance with our standard procedures relating to document retention.

12. Intellectual property rights

12.1. Intellectual property rights in all documentation, systems, materials, methodologies and processes (tools) brought to and utilised by PwC in relation to the services or created in the course of providing the services, and in all working papers and reports, remain vested in PwC.

12.2. Subject to the requirement to treat confidential information as confidential any spreadsheet, database, system, technique, methodology, idea, concept, information or know - how developed in the course of the Contract may be used in any way we deem appropriate, including by or for our clients, without any obligation to account to you.

12.3. In the case of documentation or software prepared by PwC for you we may, on termination or completion of the Contract, retain one copy of such information as a professional record of our involvement.

13. Other Engagements

13.1. Nothing in this Contract prevents PwC from providing services to other clients provided that we take reasonable steps to ensure that each client's confidential information is not disclosed to other clients.

13.2. This Contract is separate from other engagements that we may perform for you or for other clients and we have no obligation to utilise knowledge gained from such other engagements when performing the services under this Contract.

13.3. By entering into this Contract and providing the services, we do not assume a responsibility to you in relation to any reports or opinions that we may have provided under separate engagements, including statutory audit reports, or in relation to any other work that we may have performed for any other client, whether or not that client is the subject of the services.

14. Circumstances outside the Parties control

14.1. Neither party will be liable to the other for any failure to fulfil obligations caused by circumstances outside its reasonable control.

15. Assignment

15.1. Neither party may assign, transfer, charge or otherwise deal with its rights or obligations under the Contract without the prior written consent of the other party, except that each may transfer its respective rights and obligations to a partnership or legal entity authorised to take over all or part of its business.

16. Termination of Contract

16.1. The Contract may be terminated by either party by written notice.

16.2. You will pay PwC for all services provided up to the date of termination.

16.3. Where you terminate the Contract before we have completed the services, you will pay any additional costs that we incur in connection with the early termination.

16.4. The provisions of the Contract which expressly or by implication are intended to survive its termination or expiry will survive and continue to bind both parties.

17. Entire agreement

17.1. The Contract forms the entire agreement between the parties.

17.2. To the extent permissible by law all warranties, conditions, representations and liabilities or terms other than those expressly stated are excluded.

17.3. If any term of the Contract is held to be invalid the enforceability of the remainder of the Contract will not be affected.

18. Resolving disputes

18.1. The Contract is governed by New Zealand law.

18.2. Should any dispute arise, the parties will attempt to resolve it in good faith by senior level negotiations (this may include mediation using the services of an agreed mediator).

18.3. If the dispute is not resolved through negotiation or mediation the New Zealand Courts will have exclusive jurisdiction, over all claims that may arise out of or in connection with the Contract.

18.4. Each party hereby irrevocably waives any claim that an action is brought in an inconvenient forum, or that the New Zealand Courts do not have jurisdiction.

19. Sub-contractors selected by you

19.1. Where you are using third parties in connection with the Services to be provided in accordance with this Contract, you will ensure that you have appropriate agreements with them. Unless agreed otherwise in the Engagement Letter, you will be responsible for the management of those third parties and the quality of their input and work.

19.2. Where you require PwC to contract the services of a sub-contractor specified by you, you will accept responsibility for the work to be performed by such sub-contractor. PwC will not be responsible or liable to you or to any other person for the work performed by, or for any act, omission, default or neglect of, such sub-contractor. In the above circumstances, you will be responsible and liable for, and will indemnify PwC against and from, any liability which PwC may incur to any person and against all claims, demands, proceedings, damages, losses, costs and expenses made against, suffered or incurred by PwC, directly or indirectly as a result of or in connection with the work performed by any such sub-contractor.

20. Employment

20.1. During the term of this Contract or within 12 months of its termination or completion, neither party will directly or indirectly solicit for employment any of the other party's employees who have been providing Services or otherwise connected with this Contract without the other party's prior written consent.