Actuarial and Insurance Consultants

27 January 2016

Mr Peter Rose
Chief Executive Officer
Southern Response Earthquake Services Ltd
10 Show Place
Christchurch 8149
NEW ZEALAND

Dear Peter

Earthquake Claim Liabilities as at 31 December 2015

We have been asked by Southern Response Earthquake Services Limited ("SRES") to make an assessment of its insurance liabilities as at 31 December 2015. SRES is the Crown-owned entity which emerged from a transaction whereby, with effect from 5 April 2012, the ongoing business of AMI Insurance Limited ("AMI") was separated from the existing AMI entity and sold to Insurance Australia Group.

The purpose of this letter is to provide an estimate of the earthquake claim liabilities for Southern Response Earthquake Services Limited ("SRES") as at 31 December 2015. This valuation is predominantly based on a roll forward of our 30 September 2015 valuation with changes to valuation assumptions where emerging experience, or new information in respect of emerging issues, suggests changes are appropriate. We include commentary on the key changes to assumptions later in this letter.

This letter does not deal with the other non-earthquake retained events that were transferred from AMI Insurance Limited to SRES at the close of business on 5 April 2012.

Summary of Results

Table 1 summarises our estimates of SRES' earthquake liabilities at 31 December 2015. The line below the table indicates our estimate of the total amount which will be ultimately paid once all claims are settled (including payments already made but excluding SRES CHE expenses). This represents our central estimate of the ultimate liability. Our recommended provisions incorporate a risk margin which we believe to be consistent with the requirements to establish provisions which incorporate at least a 75% probability of sufficiency.

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Table 1 – Recommended EQ Provisions at 31 December 2015

Provisions for Outstanding Claims as at 31 Dec 2015	Cat 93 4-Sep-10 $m	Cat 106 22-Feb-11 $m	Cat 112 13-Jun-11 $m	Total Major $m	Total Minor $m	Total Overall $m
Gross Incurred Cost in 31 Dec $ before EQC	1,092.0	2,480.6	101.3	3,673.9	41.8	3,715.7
Expected EQC Share	-342.3	-583.5	-39.0	-964.7	-8.0	-972.7
Gross Incurred Cost in 31 Dec $ after EQC	749.7	1,897.2	62.3	2,709.2	33.8	2,743.0
less paid to 31 Dec 2015	-574.8	-1,312.2	-48.3	-1,935.3	-29.6	-1,964.9
Gross Outstanding Claims						
In 31 Dec 2015 Values	174.9	585.0	13.9	773.8	4.2	778.1
Allowance for Future Inflation	7.0	18.4	0.9	26.3	1.2	27.5
Inflated Values	182.0	603.3	14.8	800.2	5.4	805.6
Discount to Present Value	-4.2	-14.0	-0.4	-18.5	-0.1	-18.6
OSC Discounted to 31 Dec 2015	**177.8**	**589.3**	**14.5**	781.6	5.3	786.9
Claims Handling	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gross Central Estimate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Catastrophe R/I Recoveries	-25.1	0.0	-14.5	-39.6	-1.1	-40.7
Aggregate R/I Recoveries	0.0	0.0	0.0	0.0	0.0	0.0
Net Central Estimate	**161.5**	**618.4**	**0.7**	**780.6**	**4.4**	**785.0**
Risk Margin	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Recommended provision	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Inflated Gross Central Estimate (Incl paid to date, excl CHE)	**757**	**1,916**	**63**	**2,735**	**35**	**2,770.5**
Change on 30 Sep 2015 Valuation	**-64**	**96**	**6**	**38**	**3**	**42**
Change on 30 Jun 2015 Valuation	**-45**	**89**	**6**	**50**	**4**	**54**

Our central estimate of the gross inflated ultimate cost at 31 December 2015 is $42 million higher than our 30 June 2015 estimate. The major drivers of the movements in the central estimate are described in Table 2.

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Table 2 - Explanation of Movements in Inflated Gross Central Estimate

	Traffic Light	NOtes	Mov't from Sep-15
New Overcaps (Numbers)		85 new overcaps have been reported in the quarter out of the 270 outstanding SRES properties that EQC has finalised. This proportion is slightly higher than expected and has resulted in an additional 30 ultimately overcap properties being expected.	$7M
New Overcaps Mix		A higher proportion of non-multi rebuilds for future DRA's has been selected • giving consideration to the experience in the last year. This has increased our expected size of future DRA's.	$6M
Rebuild Size		Rebuild scope change at RFP has been higher in the latest quarter following 18 months of stable experience. This has been mostly driven by high scope increases on Design and Builds.	$4M
Repair Size		Repair scope change at RFP stage has been higher overall in the latest quarter, however jobs with Pre-RFP's done post April 2015 have seen significantly lower increases. This is likely due to the new repair process where design and engineering is being done upfront-which results in a higher Pre-RFP size. The net effect of the higher Pre-RFP size and lower RFP cope changes is that the ultimate expected cost of these jobs is in line with similar profile jobs on the old process.	$7M
Repairs to Rebuilds		It was previously expected that the number of properties switching from Repair to Rebuild would begin to tail off by the end of 2016, but we have continued to see a healthy volume of these coming through and it is now expected that these will continue into the future. We are now expecting 120 extra properties to switch [redacted]	$17M
Cash Settlement Sizes		There has been a slight increase in the average cash settlement size relative to ORA in the latest quarter - likely driven by SRES meeting additional costs above what was in the ORA during the cash settlement process.	$3M
"Other Insurer" Multi-Units		Multi-Unit properties completed by other insurers on behalf of SRES have cost 20% more than their SRES ORA.	$4M
Out of Scope		Properties currently still open or left to be assessed are projects which are on-hold or more difficult claims, thus incur higher than expected costs. However most of the OOS projects remaining are in the tail end of completion.	$5M
Minor Classes		In the September valuation we increased the future Contents claim lodgements due to observed recent experience. However we discovered a majority of these were actually Temporary Accomodation claims (coded as Contents), which have been separately accounted for already, hence decreasing the liabilities by around $6.5M. There were also less than expected Temporary Accomodation claim lodgements arising from Over Cap claims.	-$9M
Other Movements		Mostly driven by no escalation reported in the quarter ($-4M). Other small offsetting contributions from Throughput, EQC contributions, Enhanced foundations, customers changing build decision and project management costs	-$3M
		Total Inflated Ultimate Cost	$42M

Table 3 shows the main components of cost underpinning our overall estimate of SRES' ultimate earthquake liabilities.

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Table 3 – Estimated Ultimate EQ Liabilities at 31 December 2015

	30 Sep 15 $m	31 Dec 15 $m	Mov't Sep15 to Dec15 $m	Outstanding 31 Dec 15 $m
Ultimate Outflows				
Over Cap	3,026	3,074	48	936
Out of Scope	314	319	5	33
Other	162	153	-9	18
Claims Cost (Excl PM Cost)	3,502	3,546	44	988
Project Management Costs	[redacted]	[redacted]	[redacted]	[redacted]
SRES Claims Handling	[redacted]	[redacted]	[redacted]	[redacted]
Ultimate Inflows				
EQC Contributions	971	975	3	243
Reinsurance Recoveries	1,246	1,253	7	41
	2,217	2,228	10	284
Net Outflow (net of RI)	[redacted]	[redacted]	[redacted]	[redacted]
Cum. Paid Net of EQC (excl CHE)	1,791	1,965	174	
Discounted Net Liability				
Central Estimate	886	785	-101	
Risk Margin	[redacted]	[redacted]	[redacted]	
Recommended Provision	[redacted]	[redacted]	[redacted]	

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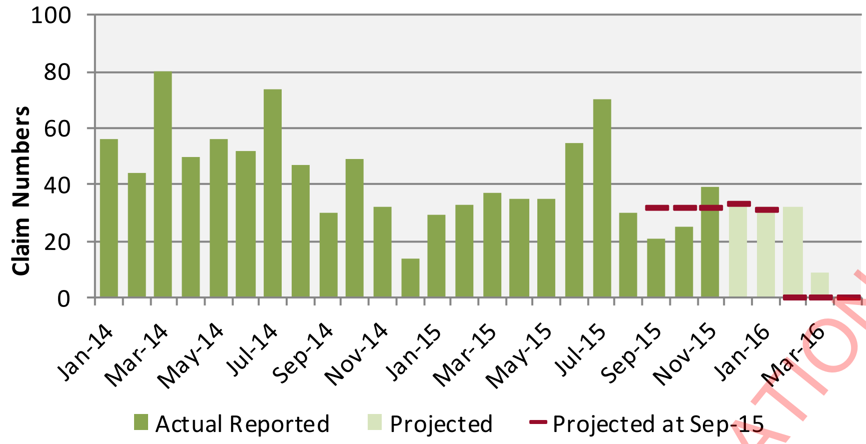
Key Observations

In this section we provide further detail around the key movements in the valuation during the quarter.

New Over Caps

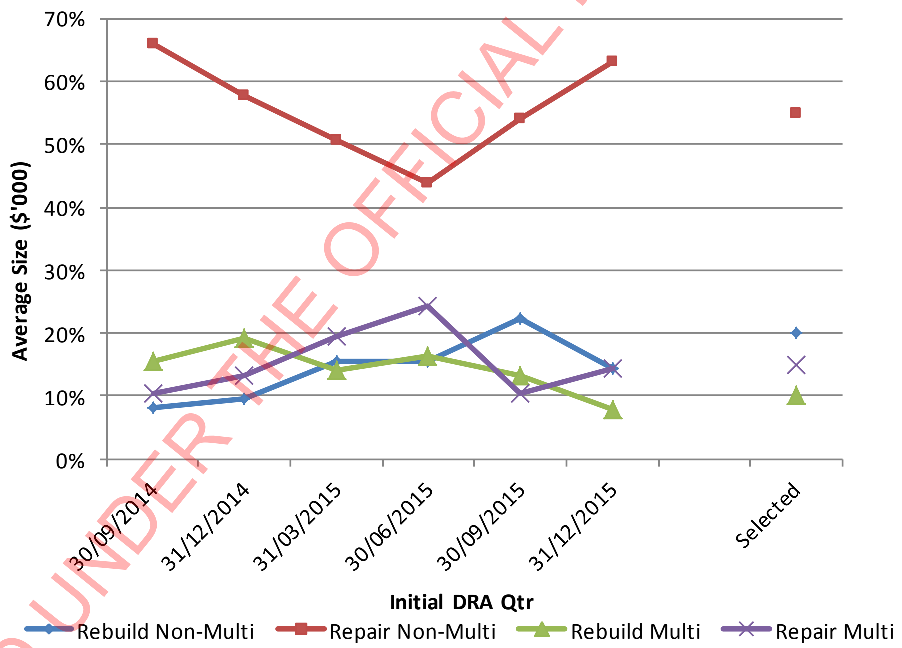
Figure 1 shows the recent pattern of new over cap reports and our assumed pattern for the future. 85 new properties have been reported in the quarter out of the 270 outstanding SRES properties that EQC has finalised. This proportion is slightly higher than previously expected and as a result we have added 30 claims to our expected number of ultimately over cap properties. This has increased the gross ultimate cost by $10 million and increased EQC contributions by $3 million – resulting in a net increase in SRES' liability of $7 million.

Figure 1 – New Over Cap Reports



A higher proportion of non-multi rebuilds for future DRA's has been selected – in this valuation we have considered experience in the last year (as shown in Figure 2) rather than looking at a longer term average. This has increased our expected size of future DRA's.

Figure 2 – New DRA Mix

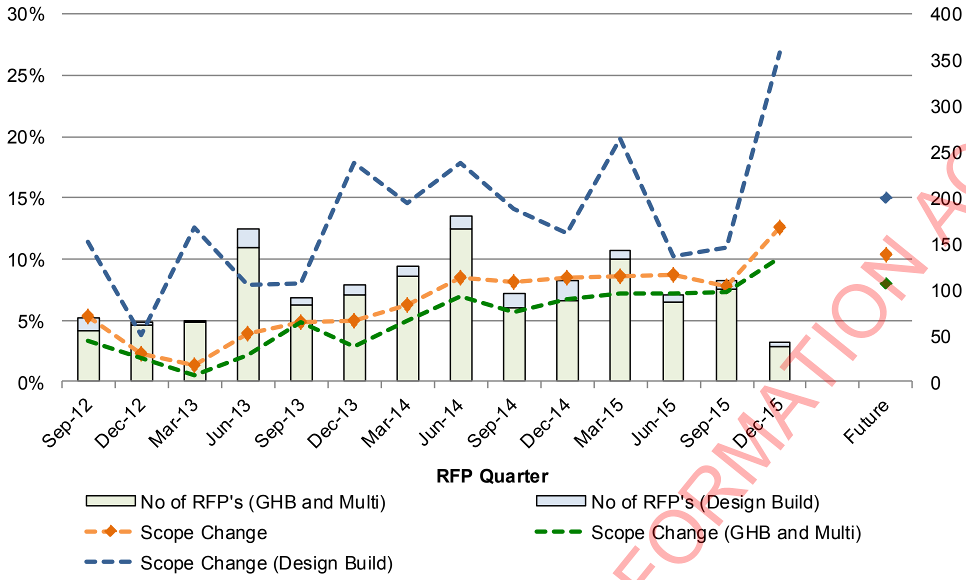


Rebuilds

Our assessment of Over Cap average claim size is based primarily on Arrow's assessed costs. We then assess the adequacy of the DRA estimates against the emerging experience to make adjustments to the DRA estimates where appropriate. For the details of this process we refer the reader to our 30 June 2015 valuation report.

Rebuilds have had higher scope change at RFP stage in the most recent quarter as shown in Figure 3.

Figure 3 – Scope Change at RFP DRA for Rebuilds

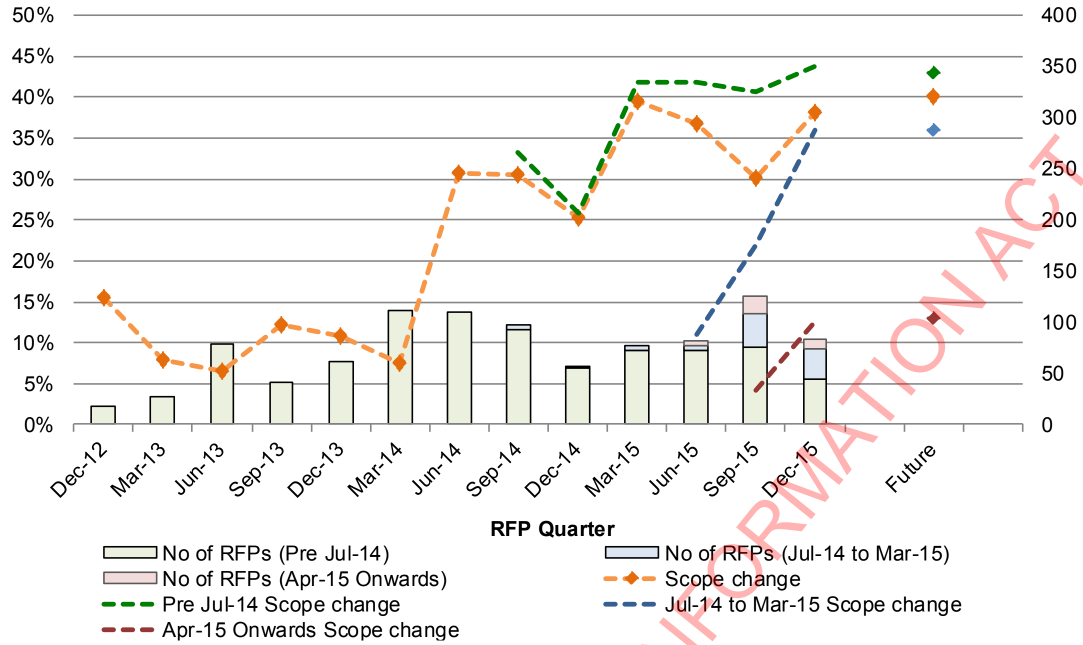


The Design and builds in particular have had a large spike in scope change (on a handful of properties), but GHB's and Multi-Units scope change has also increased after 18 months of stable experience. We have assumed future scope change would be in line with experience over the last three quarters.

Repairs

Arrow has changed their approach to assessing repair properties over the past 18 months by completing engineering scoping upfront (implemented towards the end of 2014) and then additionally completing design upfront (from April 2015). We expect the scope changes on these cohorts to be materially different and have analysed experience accordingly. Properties revised after April2015 (red line) have had lower scope changes than properties last revised on the older processes. In response to this, we have reduced our expected revision for future properties under the new process, but increased our expected revisions for properties done under the older processes as the amount of scope change on these has continued to increase. Figure 4 shows the experience and our assumptions for the future.

Figure 4 – Scope Change at RFP DRA for Repairs



Although properties revised under the new process are receiving lower scope changes, they have larger pre-RFP DRA's as the cost is built into the DRA earlier. The net effect of the higher Pre-RFP size and lower scope change is an expected ultimate size that is in line with similar profile jobs on the old process.

Repairs to Rebuilds

We have significantly increased our allowance for properties to 'switch' from a repair to a rebuild as shown in Figure 5. We had previously expected the numbers of properties 'switching' to tail off towards the end of 2015 in line with anecdotal evidence and experience in July2015 and August2015. However, the number has picked up again over the most recent quarter and is now expected to continue into the future. We are now expecting 120 extra properties to 'switch' [redacted]

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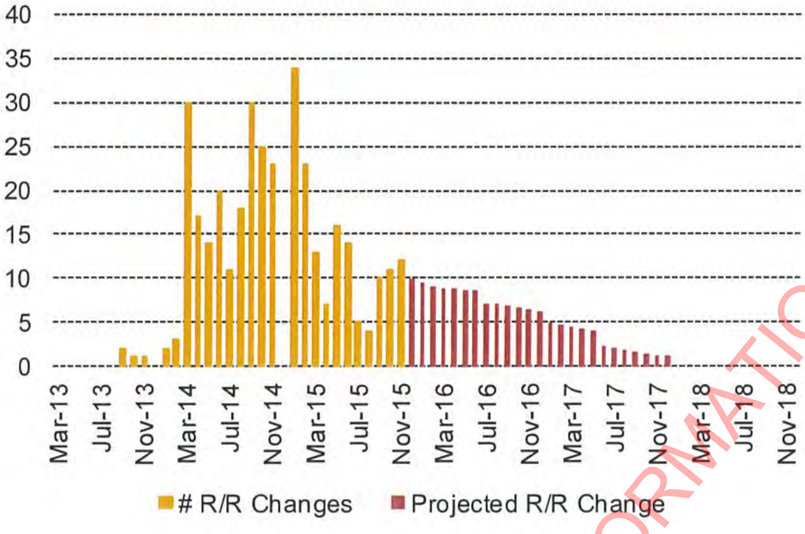
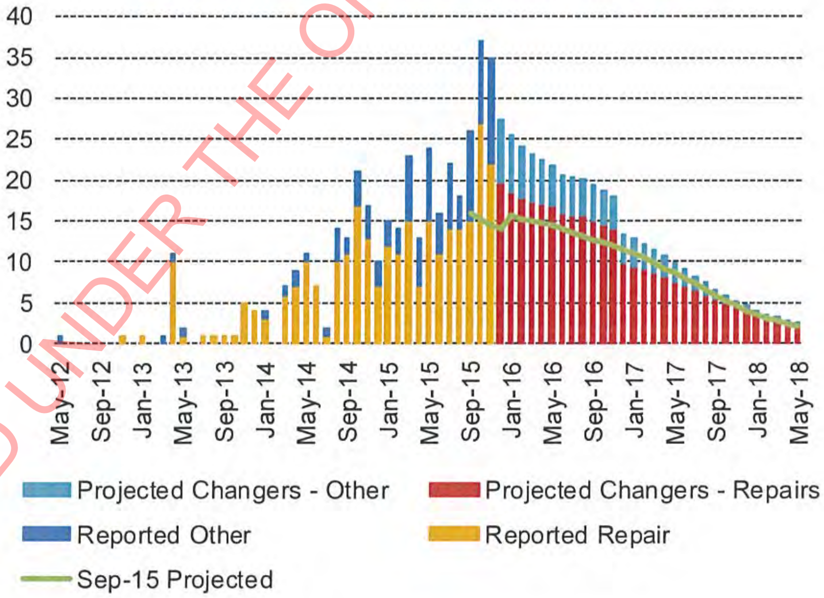
Figure 5 - Projected future Repairs to Rebuilds



Cash Settlements

Following the 'Avonside' decision, there has been an increased proportion of customers choosing a cash settlement decision and changing from an Arrow managed rebuild or repair to a cash settlement option during the documentation process. As a result, we have further increased our expectations for future election changers as shown in Figure 6.

Figure 6 – Projected future election changers



This has resulted in a higher number of properties ultimately choosing a cash settlement option.

Table 4 shows the effect of the higher number of people changing their build decision on ultimate property types. There has been a significant reduction in the number of repairs and an increase in the number of cash settlements and rebuilds.

Table 4 – Ultimate Claim Numbers Breakdown

	All Events Combined		
Properties with Buildings Claims	**Sep-15**	**Dec-15**	**Movt from Sep15**
Ultimate No with Over cap damage	7,785	7,815	30
Arrow Managed			
- Rebuild	1,987	2,072	85
- Repair	1,539	1,301	-238
	3,526	3,373	-153
Cash Settlements	4,259	4,442	183

Enhanced Foundation Costs

The allowance in DRA estimates for enhanced foundation costs has been higher than the contracted enhanced foundation cost experience. In this valuation, we have adjusted DRA estimates to reflect this - leading to a reduction in the ultimate expected cost of rebuilds of $6 million. This has been offset by SRES' latest view that the likelihood of land remediation recoveries from the EQC is lower than previously thought. As a result, we have reduced our allowance for such recoveries by $10 million (from $15 million to $5 million). The net effect of these adjustments for enhanced foundations is an increase of $4 million.

Uncertainty of our Estimates

It should be noted that considerable uncertainty still surrounds the projection and valuation of SRES' EQ liabilities. While SRES has progressed most of the way through the damage assessment phase, a large proportion of the overall incurred cost is yet to be settled. In addition, the run-off is exposed to a higher level of variability in claims experience than a typical residential property run-off portfolio. As the claim settlement process has progressed, a greater proportion of outstanding claims liability relates to more complex claims, meaning the uncertainty around future settlement outcomes for outstanding claims is magnified (as compared to 'normal' residential property claims).

Our view on the key areas of uncertainty is unchanged from our September valuation. There are four areas where we believe there is a higher than normal level of uncertainty attaching to the assumptions underpinning our valuation:

- Repair Costs – High levels of volatility in scope creep over the past year and the increased complexity of jobs yet to be completed mean there is a reasonable risk the average repair size could continue to change

- Multi-Unit Buildings – With only a handful of these properties completed to date, there is little information on which to base our average size assumption
- Throughput Delays – There is a risk that the recent deterioration in delays will continue into the future as the outstanding jobs increase in complexity
- Enhanced Foundations – there remains some uncertainty as to the eventual cost of enhanced foundations in TC3 and TC2 properties, and the potential for land remediation compensation from the EQC in respect of these issues.

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In response to the inherent uncertainties, we have maintained our risk margin at [redacted]% of the estimated liability (net of EQC contributions but gross of reinsurance recoveries). Under accounting standards, in response to the inherent uncertainty, it is expected that provisions will contain a margin sufficient to produce at least a 75% probability of sufficiency.

While the unique nature of the Canterbury events makes it impossible to derive with any accuracy a precise probability for various levels of risk margin, we are of the view that the margin adopted is sufficient to produce a probability of sufficiency of at least 75%.

Reliances and Limitations

This letter has been prepared for the use of SRES for the stated purpose. We understand that a copy of the letter may be provided to the Board of SRES. No other use of, nor reference to, our letter other than as required by the Crown, should be made without prior written consent from Finity, nor should the whole or part of our letter be disclosed to any unauthorised person.

Third parties, whether authorised or not to receive this letter, should recognise that Finity will not be liable for any losses or damages howsoever incurred by the third party as a result of them receiving, acting upon or relying upon any information or advice contained in the report.

Our letter should be considered as a whole. Members of Finity staff are available to answer any queries, and the reader should seek that advice before drawing conclusions on any issue in doubt.

Yours sincerely

[redacted] [redacted]

[redacted] [redacted]

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