Reference Number: 2023/995

11 August 2023

[redacted]
Email: [redacted]

Tēnā koe [redacted]

Response - Official Information Request

I refer to your request for information received on 16 July 2023. Your request has been considered under the Local Government Official Information and Meetings Act 1987 (LGOIMA) and I provide the following information.

"Can you please provide the full business case that was submitted to HDC by the FWMHSI? This is for resolution number CO/2023/1."

The full business case that was submitted to Horowhenua District Council (HDC) was received during the in-committee part of the Council meeting, and it is necessary to withhold from public release for the following reasons:

- Section7(2)(h) - to enable the local authority to carry out, without prejudice or disadvantage, commercial activities; and
- Section 7(2)(i) - to enable the local authority to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)

Additionally, the information is not Council's to release. You may want to contact Nola Fox, the Chairperson of the Foxton War Memorial Hall Society Incorporated (FWHMSI) directly.

"And can you please advise who are the members of these committees:
- In-Committee
- FWMHSI"

The meeting you referred to was an In-committee Council meeting. The Mayor and all Councillors are members of the meeting.

The FWMHSI is not a part of Council so your query is best answered by Nola Fox, the Chairperson of Society itself.

"Resolution number CO/2023/2 was carried. What are the known plans at this stage for selling the hall? Is there a preferred buyer or does HDC already have a buyer? Are there going to be specific conditions when selling the building and will the council dictate what can be done to the building if it's demolished?"

Council intends to get the building on the open market by the end of August 2023. Council has no preferred purchaser and has no offers on the building. There are currently no plans to apply specific conditions on the proposed sale of the building. Council will however have evaluation criteria that will be applied to the building by reason of ensuring the 'best fit' scenario for Council and the community. The evaluation criteria have not yet been confirmed.

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www.horowhenua.govt.nz enquiries@horowhenua.govt.nz

"Lastly can you please send me a copy of the most recent earthquake strengthening assessment. This is from Resolution Number CO/2023/1."

The Initial Earthquake Assessment (IEA) and Detailed Seismic Assessment (DSA) are attached.

"What is the current / past marketing strategies for the Foxton Memorial Hall? What are some examples of the strategy implemented."

The Foxton War Memorial Hall is promoted via the HDC website, where people can enquire about booking the venue.

We have marketing strategies for both Horowhenua NZ and HDC, but nothing specific to the Foxton War Memorial Hall.

"How much does HDC spend on marketing for the Foxton Memorial Hall? What's the annual cost for marketing the hall and what's the annual marketing budget for the hall?"

We do not have a dedicated marketing budget for the Foxton War Memorial Hall.

"With the low utilisation of the Foxton Memorial Hall, what efforts have the council made to help improve the utilisation of the venue?"

The venue is available to be booked on Council's web-site and potential users can access the booking forms online.

"What is the NBR rating for the Levin Memorial hall vs Foxton Memorial Hall and other memorial halls in the region?"

Foxton War Memorial Hall and Levin War Memorial Hall have both been assessed as being earthquake prone as they have been rated as less than 33% of the new Building Standard (NBS). Shannon Memorial Hall is not earthquake prone.

You are entitled to seek an investigation and review by the Office of the Ombudsman. Information about how to make a complaint is available at www.ombudsman.parliament.nz or free phone 0800 802 602.

Horowhenua District Council publishes responses to Local Government Official Information and Meetings Act 1987 (LGOIMA) requests that we consider to be of wider public interest, or which relate to a subject that has been widely requested. To protect your privacy, we will not generally publish personal information about you, or information that identifies you. We will publish the LGOIMA response along with a summary of the request on our website. Requests and responses may be paraphrased.

If you have any queries regarding this information, please contact the LGOIMA Officer on LGOIMAOfficer@horowhenua.govt.nz

Ngā mihi

Steve McTaylor-Biggs
Executive Sponsor

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22nd May 2013

5-P0523.00

HDC – Foxton Memorial Hall - Initial Seismic Review.

1. Introduction

Horowhenua District Council commissioned Opus International Consultants Ltd (Opus) to undertake a seismic review of a number of HDC owned buildings and assets. This was to include the following Stages;

1) A review of all available archive information for the building.
2) An Opus Engineer to undertake an initial non-intrusive visual site investigation of the building
3) Undertake an initial evaluation procedure (IEP) if deemed appropriate.
4) Or a undertake a quantitative assessment at a level of complexity sufficient to identify with a reasonable degree of confidence the present seismic rating for the building expressed as a % of new building standard (%NBS).
5) Based upon the findings of the above review, if necessary undertake a more detailed site investigation of the building, including any localised breakouts and material testing required.
6) Produce detailed calculations to confirm each buildings seismic rating (%NBS).
7) The calculations produced are to report not only the overall %NBS for the building but are to identify the failure mechanisms within the building and their relevant %NBS to allow strengthening options to be identified.
8) Provide strengthening options including rough order of costs to achieve the following seismic ratings (if practical) for each building;

    34%NBS
    67%NBS
    100%NBS
    >100%NBS

This report covers the first 6 stages, with recommendations provided on the way forward to the next stage.

Fig 1. Foxton Memorial Hall

2. Archive information available and assumptions made as part of this assessment

Very little archive information relating to this building could be located and the following assessment has been done based solely upon the information obtained and from the visual inspection of the site/building.

A plaque on the building indicated that it was built in 1953.

The seismic assessment has been based upon the following:

- Very limited archive information was available for this structure.
- All dimensions and details used in the assessment were based upon the visual site inspection undertaken by an Opus Structural Engineer.
- Typical material strengths taken from NZSEE document 'Assessment and Improvement of the Structural Performance of Buildings in Earthquakes' used in the assessment;

Concrete:	30Mpa
Reinforcement:	300Mpa

- No archive structural information was available, with the presence of reinforcement in the concrete members identified by the use of a cover member, reinforcement size could not be confirmed.

No record of geotechnical descriptions of the underlying soil profiles could be located for this building and therefore the assessment has been based upon typical geotechnical conditions for the Foxton area.

3) Structural System

The identification of the structural system for this building was made through a visual site inspection undertaken by an Opus Structural Engineer on the 19th March 2013.

The building is a single storey reinforced concrete framed structure with unreinforced masonry (URM) infill panels providing lateral restraint. A lightweight metal clad roof supported off timber purlins and timbers trusses was constructed over the main hall and entrance foyer/offices. A cement board type ceiling was provided throughout the building, however this would not have sufficient strength to restrain the tops of the walls during a seismic event and no other bracing system could be identified within the ceiling and roof to achieve this.

The overall plan measurement of the building is approximately 34.5m long x 14.5m wide and 7.0m to the ridge line.

A suspended timber floor supported off small diameter piles at regular centres was provided throughout the building, with the exception of the small side structure which had a ground bearing concrete slab provided.

The external URM panels were confirmed (by drilling) to be 230mm thick masonry with no cavity, plastered internally and with cement render externally (255mm overall thickness).

A cover meter was used to confirm the presence of reinforcement within the concrete piers, with 8 Number bars identified in the main hall piers and 4 Number bars within the entrance/office area (Bar sizes could not be confirmed).

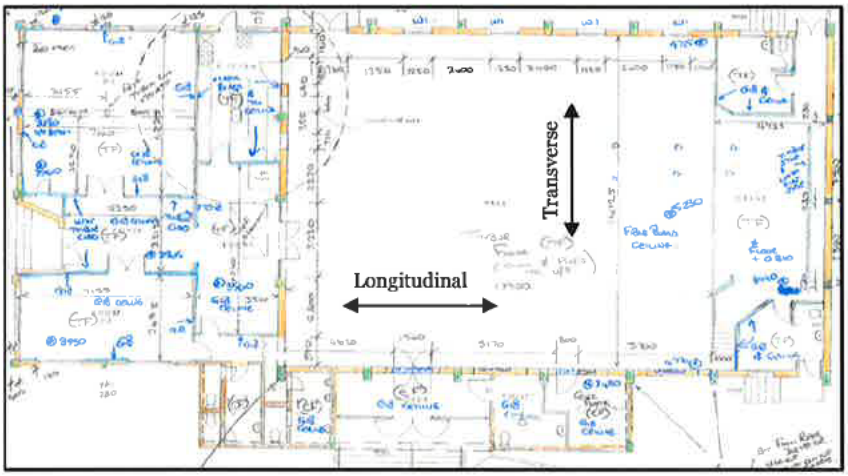

Fig 2. Floor plan.

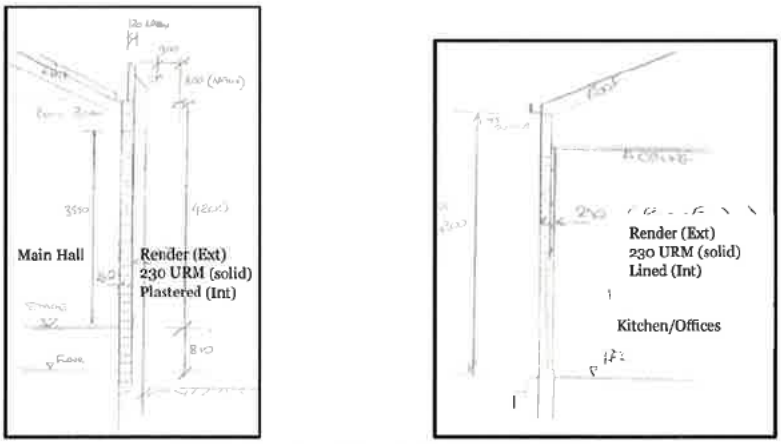

Fig 3. Sections through external walls.

The foundation type could not be confirmed during the visual inspection however it is likely that the URM walls and concrete piers were built off the ground bearing foundations with thickenings/pads provided at the pier locations.

3.1 Building Condition

Generally the visible parts of the structure would appear to be in good condition for the age of the building with no obvious signs of movement or distress identified. However due to a recent refurbishment and redecoration having been undertaken on the building any existing cracking/movement would likely have been filled and painted over, both internally (plastered finish) and externally (rendered finish).

Fig 4. External View.

Fig 5. Roof over Hall.

Fig 6. Main Hall – toward stage.

Fig 7. Main Hall toward kitchen/offices.

Fig 8. External walls under stage area.

Fig 9. Rear wall of stage area.

4 Assessment

An Initial Evaluation Procedure (IEP) was not thought appropriate for this building due to its age and type of construction and with the obvious lack of an adequate bracing system within the roof/ceiling it would most certainly report a %NBS<33%.

Consequently a quantitative assessment of the building elements have been undertaken to examine in more detail the potential overall seismic rating which could be achieved for this building, assuming an adequate bracing system had been provided within the ceiling/roof of sufficient strength to transmit the lateral forces to the relevant shear walls.

4.1 Assessment Findings

A summary of the structural performance of the building is shown in Table 1: Summary of Seismic Performance. Note that the values given represent the worst performing elements in the building as these effectively define the building's capacity.
The reported values in Table 1. are based upon the assumption that an adequate bracing system had been provided within the ceiling/roof, which from our visual inspection is not the case.

Table 1: Summary of Seismic Performance.

Structural Element/System	Failure Mode, or description of limiting criteria.	%NBS based on calculated Capacity
Roof/ceiling Bracing system.	None provided.	<33%
Longitudinal Shear Walls	In-plane action: *shear* *flexure*	39% 39%
Transverse Shear Walls	In-plane action: *shear*	23%
Shear Walls	Out-of-plane action: *flexure* * *generally with the exception of the Main Hall wall with high level windows.*	38%* <33%

5) Conclusions and Recommendations

The calculated seismic rating for this building is <33 percentage of New Building Standard (%NBS) due to a lack of any adequate bracing system provided within the roof or ceiling. A quantitative assessment of the building elements was undertaken to examine in more detail the potential overall seismic rating which could be achieved for the other elements of the building, assuming the bracing system provided in the ceiling/roof was of sufficient strength to transmit the lateral forces to the relevant shear walls (i.e. strengthening had been provided). This concluded that the building would still achieve a %NBS < 33% due to in-plane shear failure of the URM walls in the transverse direction and out-of-plane failure on a number of URM panels in Main Hall (i.e. the panels with high level windows).

The quantitative assessment undertaken has highlighted that the following (but not limited to) issues, would need to be resolved to bring the building's seismic rating to >67%NBS:

The provision of a bracing system in the ceiling/roof.

Investigate the practicality of providing either steel bracing or plywood diaphragms to the roof/ceiling of the Main Hall and the foyer/office area.

Increasing the in-plane capacity of the URM shear walls.

Investigate the practicality of either infilling a number of windows/doors, the provision of steel bracing, or the use of surface bonded fibre reinforced polymer systems etc. or a combination of systems to provide sufficient lateral restraint to the building in both the longitudinal and transverse directions.

Increasing the out-of-plane capacity of the URM panels.

Investigate the practicality of providing sufficient lateral restraint to the URM panels to resist out-of-plane failure, or consider the use of surface bonded fibre reinforced polymer systems etc. (or a combination of systems).

Prepared By.	***Reviewed By***
Darren Harpur **Senior Structural Engineer**	Dave Dekker **Principal Structural Engineer, CPEng**
.....	.....

Appendix A: Structural Analysis – Methodology

A.1. Analysis Parameters

Table A1: Assumed Earthquake Action Parameters

Parameter	Value	Comments
Site Subsoil Class	D	Deep or soft soil
Z	0.36	Seismic hazard factor for Foxton/Foxton Beach
R	1.0	Importance level 2, Normal structure
N(T,D)	1.0	Greater than 20 km from nearest major fault
T_1	0.4s	1st period of structural vibration

Table A2: Assumed Structural Displacement Ductility Factors

Component	Criteria
URM walls – in Plane forces	$\mu = 1.00$
URM walls – Out of Plane Bending	$\mu = 1.25$

A.2. Material Properties

The following material properties were used in the analyses:

Table A3: Assumed Material Properties

Material	Nominal Strength
Concrete	$f'_c = 30MPa$
Reinforcement	$f_y = 300MPa$

The following criteria from the earthquake loadings standard NZS 1170.5 were used to determine the site loading spectrum:

A.3. Design methodology and assumptions

Seismic forces were applied using the Equivalent Static Method as outlined in NZS 1170.5.

The structural qualitative analysis was carried out using the two predominant directions of the building.

Based on the actions determined from the analysis, an assessment of the building capacities was made and the percentage of new building standard (%NBS) was calculated.

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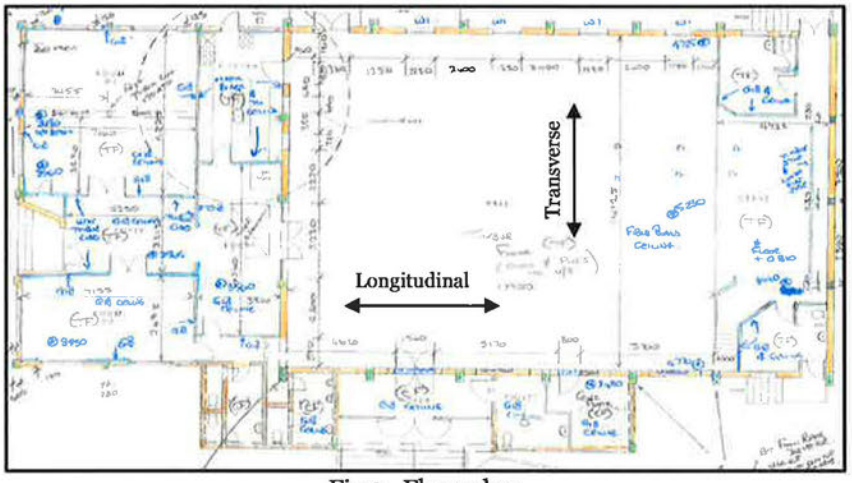

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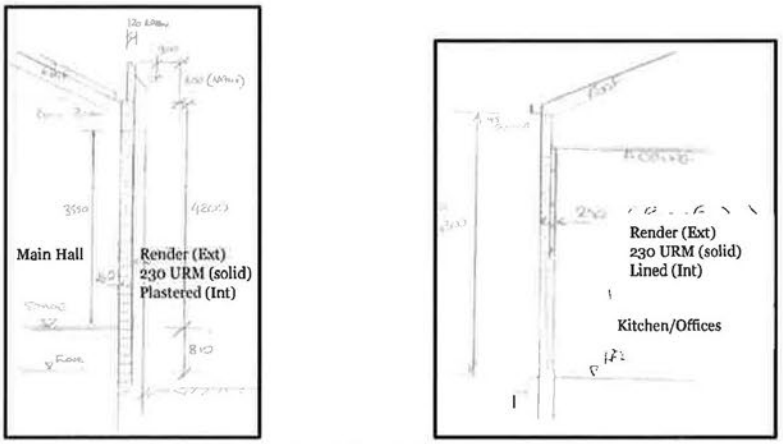

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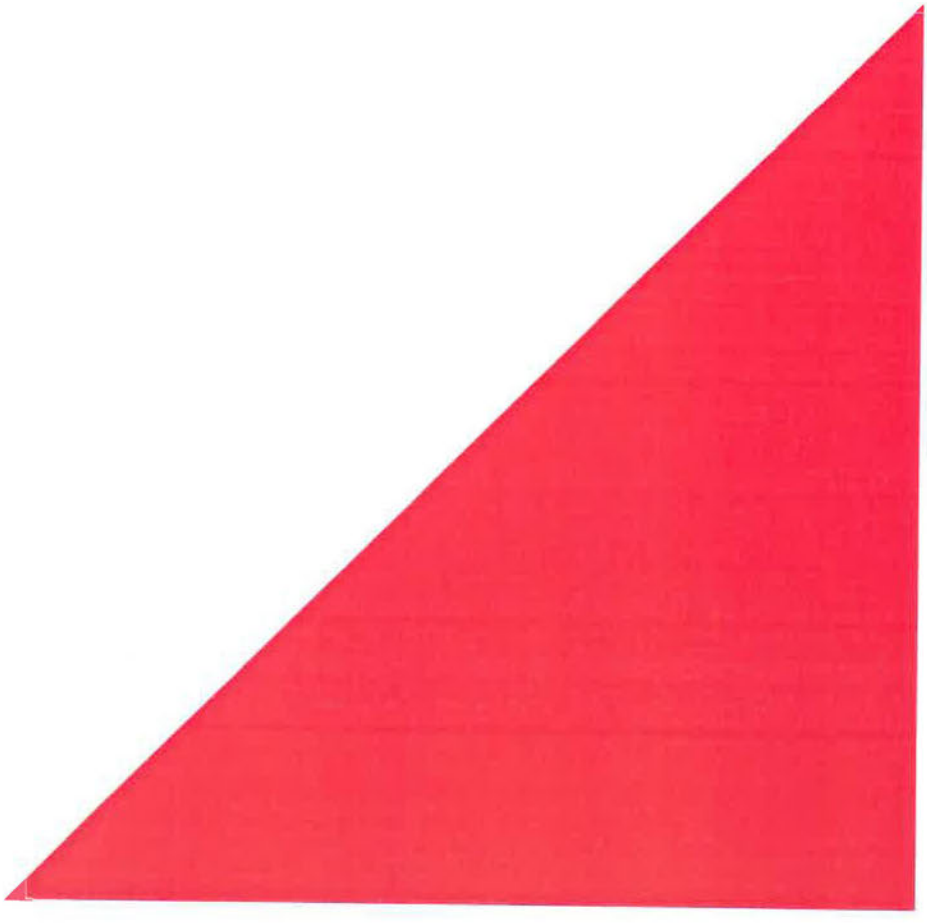
Based on the actions determined from the analysis, an assessment of the building capacities was made and the percentage of new building standard (%NBS) was calculated.

OPUS

Seismic Review of Horowhenua District Council owned Buildings and Assets

Foxton Memorial Hall Concept Seismic Retrofit Scheme



Seismic Review of Horowhenua District Council owned Buildings and Assets

Foxton Memorial Hall

Concept Seismic Retrofit Scheme

Prepared By:

Darren Harpur
Senior Structural Engineer

Reviewed By:

Dave Dekker
Principal Structural Engineer

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Date: 10-04-14
Reference: 5-P0523.01
Status: FINAL

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Contents

1 Introducton

Horowhenua District Council (HDC) commissioned Opus International Consultants Ltd (Opus) to provide concept seismic retrofit schemes including rough order of costs (ROC) as part of the seismic review of HDC owned buildings and assets.

This report should be read in conjunction with the "Foxton Memorial Hall – Initial Seismic Review" dated 22nd May 2013 by Opus. The detailed seismic assessment undertaken as part of this seismic review confirmed that the building achieved a rating of less than 33%NBS (Percentage of New Building Standard) and was classified as "Earthquake Prone" in accordance with the Building Act. The assessment identified significant deficiencies in the roof bracing, in-plane shear and out-of-plane bending failure on the longitudinal and transverse walls of the main hall and kitchen/office area.

Fig 1. Foxton Memorial Hall

2 Archive Information and Assumptions

No archive information relating to this building could be located and the following retrofit design was based solely upon the information obtained from the visual inspection of the site/building.

A plaque on the building indicated that it was built in 1953.

The concept seismic retrofit design was based upon the following:

- Dimensions and details from a the visual site inspection undertaken by an Opus Structural Engineer.

- Typical material strengths taken from NZSEE document 'Assessment and Improvement of the Structural Performance of Buildings in Earthquakes' used in the assessment;

  Concrete: 30Mpa
  Reinforcement: 300Mpa

- No archive structural information was available, with the presence of reinforcement in the concrete members identified by the use of a cover member. The reinforcement sizes could not be confirmed but where based upon typical size and arrangement (conservative rebar sizes used) used at the time of construction.

No record of geotechnical descriptions of the underlying soil profiles could be located for this building and therefore the design was based upon typical geotechnical conditions for the Foxton area.

3 Structural System

The identification of the structural system for this building was made through a visual site inspection undertaken by an Opus Structural Engineer on the 19th March 2013.

The building was a single storey reinforced concrete framed structure with unreinforced masonry (URM) infill panels providing lateral restraint. A lightweight metal clad roof supported off timber purlins and timbers trusses was constructed over the main hall and entrance foyer/offices. A cement board type ceiling was provided throughout the building, however this would not have sufficient strength to restrain the tops of the walls during a seismic event and no other bracing system could be identified within the ceiling and roof to achieve this.

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A cover meter was used to confirm the presence of reinforcement within the concrete piers, with 8 Number bars identified in the main hall piers and 4 Number bars within the entrance/office area (Bar sizes could not be confirmed).

The foundation type could not be confirmed during the visual inspection however it is likely that the URM walls and concrete piers were built off the ground bearing foundations with thickenings/pads provided at the pier locations.

4 Concept Seismic Retrofit Design

A series of 2 & 3D computer models of the building were created and analysed under loads applied in accordance with the recommendations of NZSEE 'Assessment and Improvement of the Structural Performance of Buildings in Earthquake' and NZS1170 with the proposed strengthening measures added and analysed as part of the concept seismic retrofit design.

Strengthening measures were designed for the failure mechanisms that were identified in the detailed seismic assessment with a strengthening targets of >34%NBS, >67%NBS, 100%NBS, or as high as practicable.

A summary of the proposed seismic retrofit measures are listed in Table 1. below:

Location	Proposed seismic retrofit	Achievable %NBS
Main Hall	Install new structural steel plan bracing above the existing ceiling level *(see sketches SK/01, 02 & 05 for details).* *(some breakout of the existing ceiling will be required).*	100%
Kitchen/offices	Removal of existing ceiling and the construction of a plywood ceiling diaphragm throughout *(see sketch SK/03 for details).*	100%
Main Hall Internal & external walls	Install a number of structural steel members and plates to restrain the unreinforced masonry infill panels from out-of-plane failure *(see sketches SK/04, 06-08 for details).*	48%
Kitchen/offices External walls	Install a number of structural steel members and plates to restrain the unreinforced masonry infill panels from out-of-plane failure *(see sketches SK/04, 07-08 for details).*	55%
Foyer/toilets	Install vertical structural steel braced frames *(see sketches SK/04 & 09 for details).*	100%
Main Hall/kitchen/offices Longitudinal walls	Infill a number of small windows with concrete to improve in-plane capacity of the walls *(see sketch SK/06 for details).*	44%
Main Hall/kitchen/offices Transverse walls	No strengthening proposed.	55%

Table 1.

The seismic rating achievable for this building following the installation of the proposed seismic retrofit was >44%NBS. This was limited by in-plane and out-of-plane failure in the unreinforced masonry infill panels provided throughout the building.

To increase the achievable %NBS to >67% would require substantial modifications to the building including but not limited to;

- Installation of FRP strengthening, the partial demolition and use of reinforced shotcrete, or the complete removal and replacement with reinforced concrete to a significant number of the unreinforced masonry panels including the construction of associated foundations and modifications to the timber floor throughout the building.

- The provision of a significant number of additional structural steel restraints (structural members and plates etc.) to any remaining unreinforced masonry panels.

While a %NBS > 67% is achievable it would involve the partial demolition/alteration of a significant part of this building with the subsequent cost implications. At this stage the final design and costing for this option has not been considered.