Page 1

Initial Evaluation Procedure (IEP) Assessment - Completed for Hutt City Council

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in the "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Street Number & Name:	38 Victoria Street	Job No.:	5-C3957.00
AKA:		By:	GSF
Name of building:	Alicetown Community House	Date:	21/08/2019
City:	Alicetown, Hutt City	Revision No.:	0

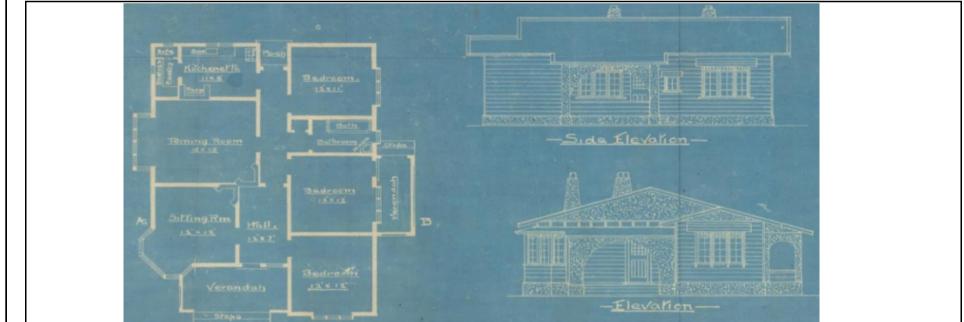
Table IEP-1 Initial Evaluation Procedure Step 1

Step 1 - General Information

1.1 Photos (attach sufficient to describe building)

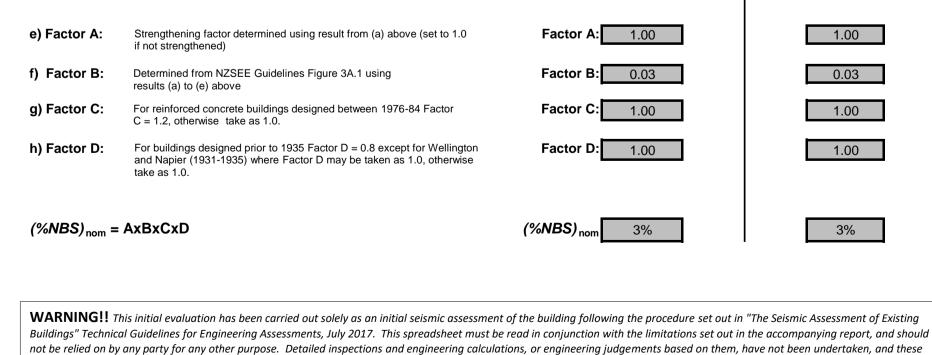


1.2 Sketches (plans etc, show items of interest)



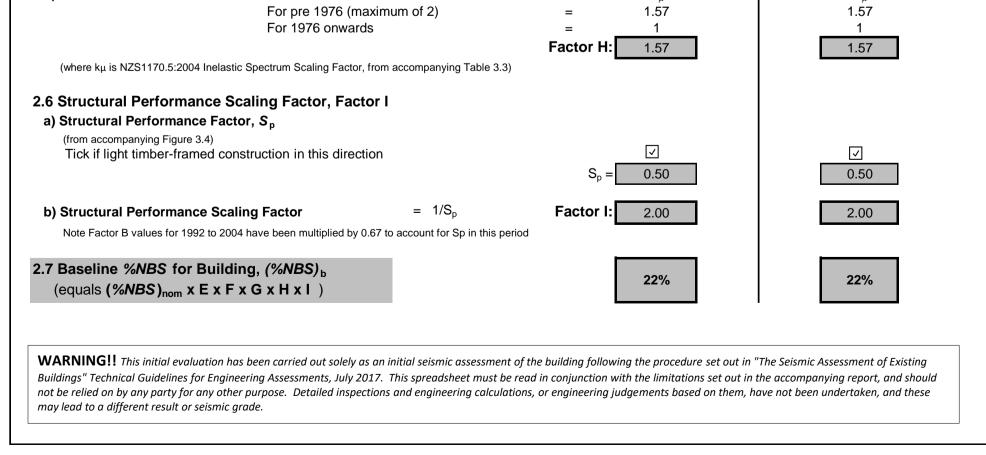
Structure: Timber framed with linec Foundations: Piles - re-plied 1991 Roof: Lightweight timber with 1 incl		ling, letin 1 inch bracing for all walls + linin	ngs
Subsoil: D soft or deep soils - NZS11	70.5:2004 Site Subsoil Classific	ation of Lower Hutt	
Construction Date: 1920			
1.4 Note information sources	Tick as appropriate		

Street Number & Name:	38 Victoria Street		Job No.:	5-C3957.00
AKA:	Alicetown Community House		By: Date:	GSF
Name of building: City:	Alicetown Community House		Revision No.:	21/08/2019 0
				<u>.</u>
Table IEP-2 Initial Ev	valuation Procedure Step 2			
Step 2 - Determination of (%NBS) _b			
Baseline (%NBS) for particular bu	-			
2.1 Determine nominal (%NB	S) = (%NBS) _{nom}	Longitudina	<u>il</u>	<u>Transverse</u>
a) Building Strengthening Dat	a			
	have been strengthened in this direction			
	-	_	_	
If strengthened, enter perc	entage of code the building has been strengthened	to <mark>N/A</mark>		N/A
b) Year of Design/Strengthenir	ng, Building Type and Seismic Zone			
by real of beolgh/odiologilioni		Pre 1935		Pre 1935 🔘
		Pre 1935 (1935-1965 (-	Pre 1935 ● 1935-1965 ─
		1965-1976		1965-1976
		4070 4004		1976-1984
		1976-1984 C 1984-1992 C		1984-1992
		1992-2004	·	1992-2004
				2004-2011
		2004-2011 C Post Aug 2011 C		Post Aug 2011
	Building Type:	Others - Wellington		Others - Wellington
	Seismic Zone:	Not applica	ible	Not applicable
c) Soil Type From NZS1170.5:20	004 CI 3 1 3 ·			
		D Soft Soil		D Soft Soil
From NZS4203:199 (for 1992 to 2004 a	•	Not applica	ıble	Not applicable
d) Estimate Period, T				
Comment:		h _n = 5		<u> </u>
		A _c = 1.00		1.00 m ²
Moment Resisting Concrete	Frames: $T = \max\{0.09h_n^{0.75}, 0.4\}$	\circ		\circ
Moment Resisting Steel Fra		0		0
Eccentrically Braced Steel F		$\widetilde{\mathbf{C}}$		č
All Other Frame Structures:	$T = \max\{0.06h_n^{0.75}, 0.4\}$	$\widetilde{\bullet}$		$\widetilde{\bullet}$
Concrete Shear Walls	$T = \max\{0.09h_n^{0.75}/A_c^{0.5}, 0.4\}$			
Masonry Shear Walls:	$T \leq 0.4 \sec$	Ŏ		ŏ
User Defined (input Period)		ŏ		ŏ
Where h	$_{\rm s}$ = height in metres from the base of the structure to the		_	
	t seismic weight or mass.	T: 0.40		0.40



may lead to a different result or seismic grade.

KA: Same of building: Alicetown Community House Date: 2/108/2019 Date: 2/108/2019 Particle IEP-2 Initial Evaluation Procedure Step 2 continued 2.2 Near Fault Scaling Factor, Factor E If $T \leq 1.5$ sec, Factor E = 1 NTLD: 1 (run M251170.5000, Cl3.1.0) b) Factor E = 1/N(T,D) NTLD: 1 (run M251170.5000, Cl3.1.0) b) Factor F a) Hazard Scaling Factor, Factor F b) Factor F For pre1992 = 1/2 For post 2011 = 2/1002 For post 2010 For post 2012 For post 2011 = 2/1002 For post 2012 For Post 2012 For Post 2012 For post 2014 For post 2012 For Post 2	Street Number & Name:	38 Victoria St	reet		Job No.:	5-C3957.00	
City: Alicetown, Hutt City Revision No.: 0 Table IEP-2 Initial Evaluation Proceedure Step 2 continued 2.2. Near Fault Scaling Factor, Factor E Image: Construct of the state of the s					-		
Table IEP-2 Initial Evaluation Procedure Step 2 continued 2:2 Near Fault Scaling Factor, Factor E If $T \le 1.5 \sec$, Factor E = 1 If $T \le 1.5 \sec$, Factor E = 1 Initial Evaluation a) Near Fault Factor, N(T,D) 1 b) Factor E = 1/N(T,D) coation: Image: State Sta				1			
2.2 Near Fault Scaling Factor, Factor E If $T \leq 1.5 \sec$, Factor E = 1 (norm NZS1170 5:2004, C13.16) (norm NZS1170 5:2004, C13.16) b) Factor E = 1/N(T,D) Factor E: 1.00 1	Jity:	Allcelown, Hu			Revision No.:	0	
If $T \leq 1.5 \operatorname{sec}$, Factor E = 1 Interview 1 and the function of the functi	Fable IEP-2 Initial Ev	aluation Proce	dure Step 2	2 continued			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Factor E					
(trom NZS1170.5.2004, Cl 3.1.8) b) Factor E = 1/N(T,D) Factor FE 1.00 1.00 3. Hazard Scaling Factor, Factor F a) Hazard Factor, Z, for site Location: Hut Valley-south of Tatle Gorge Refer right for user-defined locations $ Z = \underbrace{0.4}{0.4} (\text{trom NZS1170.5.2004, Table 3.3}) (\text{trom NZS1170.5.2004, Packar F = 1.2, (\text{trom NZS1170.5.2004, Building importance Level}) (trom NZS1170.5.2004$	If $T \leq 1.5$ sec, Factor E = 1			Longitudinal	I.	Transverse	
(rtom NZS1170.5.2004, Cl 3.1.6)) b) Factor E = 1/N(T,D) Factor E = 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	a) Near Fault Factor $N(T,D)$,		
b) Factor E = $1/N(T,D)$ Factor E 1.00 1.00 3.3 Hazard Scaling Factor, Factor F a) Hazard Factor, Z, for site Location: Hutt Valley-south of Tails Gorge Refer right for user-defined locations Z = 0.4 (from NZS1170.52004, Table 3.3) $Z_{1092} = 0.4$ (from NZS1170.52004, Table 3.3) b) Factor F For pre 1992 = $1/Z$ For pre 1992 = $1/Z$ Factor F: 2.50 2.5				N(1,D):		1	
2.3 Hazard Scaling Factor, Factor F a) Hazard Factor, Z, for site Location: μ_{utt} Valley-south of Taila Gorge Refer right for user-defined locations $Z_{102} = 0.4$ (from NZ51170.5.2004, Table 3.3) b) Factor F For pre 1992 = 1/Z For pre 1992 = 1/Z For post 2011 = Z_{102}/Z For post 2011 =			– 1/N(T D)	Factor E: 1 00		1.00	
a) Hazard Factor, Z, for site Location: Hutt Valley-south of Taita Gorge \checkmark Refer right for user-defined locations $Z = \underbrace{0.4}_{1.2}$ (NZ5403.1992 Zone Factor from accompanying Figure 3.5(b)) $Z_{2004} = \underbrace{0.4}_{1.2}$ (NZ5403.1992 Zone Factor from accompanying Figure 3.5(b)) $Z_{2004} = \underbrace{1/Z}_{2004}$ (irrom NZ51170.52004, Table 3.3) b) Factor F For pre 1992 = $1/Z$ For post 2011 = Z_{1902}/Z For post 2011 = Z_{1902}/Z Factor F: 2.50 2.5			= 1/N(1,D)			1.00	
Location:Hutt Valley-south of Taita GorgeRefer right for user-defined locations $Z = 0.4$ $Z_{1092} = 1.2$ $Z_{1092} = 0.4$ (from NZS1170.52004, Table 3.3) $Z_{1092} = 0.4$ $Z_{2004} = 0.4$ (from NZS1170.52004, Table 3.3)b) Factor F For pre 1992= 1/Z $Z_{2004} = 2$ For jore 1992.011= Z_{1062}/Z For post 2011= Z_{200}/Z For post 2011= Z_{200}/Z For post 2011= Z_{200}/Z For jost 2011= Z_{200}/Z Settor IF2.502.502.50Commonic Level, I (set to 1.01 other than 1976-2004, or not known)B) Design Importance Level, I (from NZS1170.02004 Building importance Level)I = 1c) Return Period Factor, R (from NZS1170.02004 Building Importance Level)Choose Importance Level () 1 $R_0 = 1$ c) Return Period Factor, R (from NZS1170.02004 Building Importance Level)Choose Importance Level () 1 $R_0 = 1$ c) Return Period Factor, R (from NZS1170.02004 Building Importance Level)Choose Importance Level () 1 $R_0 = 1$ c) Return Period Factor, R (from NZS1170.02004 Building Importance Level)Choose Importance Level () 1 $R_0 = 1$ c) Staticity Scaling Factor, Factor H a) Available Displacement Ductility Within Existing Structure Comment: $\mu = 2.00$ 2.00	<u> </u>	ctor F					
I = I $I = I$ $I =$	•	DD: Hutt Valley-south of T		Refer right for user-defined locati	ons		
			_				
$Z_{2004} = 0.4 \text{(from NZS1170.5:2004, Table 3.3)}$ b) Factor F For pire 1992 = 1/Z For post 2011 = Z_{1969}/Z For post 2011 = Z_{2004}/Z For post 2011 = Z_{2004}/Z Factor F: 2.50 2.5							
b) Factor F For pre 1992 = 1/Z For 1992-2011 = Z_{1992}/Z For post 2011 = Z_{2000}/Z Factor F: 2.50 2.00 2.00							
For pre 1992 = $1/Z$ For 1992-2011 = Z_{1900}/Z For post 2011 = Z_{2000}/Z Factor F: 2.50 2.50 4. Return Period Scaling Factor, Factor G a) Design Importance Level, I (Set to 1.3 for Zone A or 1.2 for 2006/E91796 and known to be designed as a public building set to 1.33 for Zone A or 1.2 for Zone B. For 1976-1984 set I value.) b) Design Risk Factor, R _o (set to 1.0 if other than 1976-2004, or not known) Choose Importance Level 0 1 $@ 2 0 3 0 4$ R = 1.0 d) Factor G = IR_0/R Factor G: 1.00 for the sign factor, Factor H a) Available Displacement Ductility Within Existing Structure Comment: $\mu = 2.00$ 2.00		J4 – 0.1	(
For post 2011 = Z_{200}/Z Factor F: 2.50 2.50 4.4 Return Period Scaling Factor, Factor G a) Design Importance Level, I (Set to 1.1 frot known. For buildings designed prior to 1965 and known to be designed as a public building set to 1.25. For buildings designed moments on the designed as a public building set to 1.33 for Zone A. or 1.2 for Zone B. For 1976-1984 set I value.) b) Design Risk Factor, R (set to 1.0 if other than 1976-2004, or not known) (set to 1.0 if other than 1976-2004, or not known) c) Return Period Factor, R (from NZS1170.0:2004 Building Importance Level) c) Return G = IR ₀ /R factor G = IR ₀ /R Factor G: 1.00	•	=	1/ <i>Z</i>				
Factor F: 2.50 2.4 Return Period Scaling Factor, Factor G 2.50 a) Design Importance Level, I (Set to 1 if not known. For buildings designed prior to 1965 and known to be designed as a public building set to 1.33 for Zone A or 1.2 for Zone B. For 1976-1984 set I value.) I = 1 b) Design Risk Factor, Ro I = 1 I (set to 1.0 if other than 1976-2004, or not known) Ro = 1 I c) Return Period Factor, R I = 1.0 I (from NZS1170.0:2004 Building Importance Level) Choose Importance Level I = 2.03 4 d) Factor G = IRo/R I.00 I.00 2.5 Ductility Scaling Factor, Factor H a) Available Displacement Ductility Within Existing Structure $\mu = 2.00$ 2.00	For 1992-2011	=					
2.4 Return Period Scaling Factor, Factor G a) Design Importance Level, I (Set to 1 if not known. For buildings designed prior to 1965 and known to be designed as a public building set to 1.33 for Zone A or 1.2 for Zone B. For 1976-1984 set I value.) I = 1 b) Design Risk Factor, R ₀ (set to 1.0 if other than 1976-2004, or not known) I = 1 c) Return Period Factor, R (nm NZS1170.0:2004 Building Importance Level) Choose Importance Level 1 • 2 • 3 • 4 d) Factor G = IR ₀ /R I.0 2.5 Ductility Scaling Factor, Factor H a) Available Displacement Ductility Within Existing Structure $\mu = 2.00$ 2.00	For post 2011	=	Z_{2004}/Z				
a) Design Importance Level, I (Set to 1 if not known. For buildings designed prior to 1965 and known to be designed as a public building set to 1.25. For buildings designed 1965-1976 and known to be designed as a public building set to 1.33 for Zone A or 1.2 for Zone B. For 1976-1984 set I value.) b) Design Risk Factor, R (set to 1.0 if other than 1976-2004, or not known) (set to 1.0 if other than 1976-2004, or not known) Choose Importance Level (from NZS1170.0:2004 Building Importance Level) Choose Importance Level (from NZS1170.0:2004 Building Importance Level) Choose Importance Level (a) Factor G = IR _c /R Factor G: 1.00 1.00 1.00 2.00				Factor F: 2.50		2.50	
(set to 1.0 if other than 1976-2004, or not known) $R_{o} = 1$ $R_{o} = 1$	a) Design Importance Level, I (Set to 1 if not known. For buildings design building set to 1.25. For buildings design	igned prior to 1965 and kno ned 1965-1976 and known t	o be designed as a p	public .]	1	
(set to 1.0 if other than 1976-2004, or not known) $R_{o} = 1$ $R_{o} = 1$	b) Design Risk Factor, R _o						
c) Return Period Factor, R (from NZS1170.0:2004 Building Importance Level) d) Factor G = IR_0/R E.5 Ductility Scaling Factor, Factor H a) Available Displacement Ductility Within Existing Structure Comment: $\mu = 2.00$ $\mu = 2.00$		not known)			,		
$(\text{from NZS1170.0:2004 Building Importance Level}) \qquad Choose Importance Level 1 \\ 0 \\ 1 \\ 0 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 1 \\ 0 \\ 0$				$R_o = 1$		1	
$\frac{(\text{from NZS1170.0:2004 Building Importance Level})}{(\text{from NZS1170.0:2004 Building Importance Level})} \qquad Choose Importance Level 1 \text{ e}_2 _3 _4 _R = 1.0 R = 1.0$	c) Return Period Factor. R						
Factor G: 1.00 1.00 2.5 Ductility Scaling Factor, Factor H 1.00 a) Available Displacement Ductility Within Existing Structure $\mu = 2.00$ 2.00	•	tance Level)	<u>Choose Imp</u>		O 4 O		
2.5 Ductility Scaling Factor, Factor H a) Available Displacement Ductility Within Existing Structure Comment: μ = 2.00 2.00	d) Factor G	=	IR₀/R				
a) Available Displacement Ductility Within Existing Structure Comment: $\mu = 2.00$ 2.00				Factor G: 1.00		1.00	
<i>Comment:</i> $\mu = 2.00$ 2.00			Structure				
Lightweight timber, diagonal braced		-		$\mu = 2.00$		2.00	
	Lightweight timber, diagonal	braced			·		
	b) Factor H			$m{k}_{\mu}$		k_{μ}	



treet Number & Nam	e: 38 Victoria Str	eet		Jo	ob No.:	5-C3957.00
KA:				B	-	GSF
ame of building:		Alicetown Community House Date:				21/08/2019
ity:	Alicetown, Hu	Alicetown, Hutt City			evision No.:	0
able IEP-3 Ini	itial Evaluation Procee	dure Step 3				
t ep 3 - Assessmen Refer Appendix B - Secti	t of Performance Achieve on B3.2)	ement Ratio (PAR)				
Longitudinal Dire	ction					
potential CSWs		Effect on Struct (Choose a value -				Facto
1 Plan Irregularity		·				
Effect on Structural	Performance 🔿 Severe	OS	ignificant		Insignificant	Factor A 1.0
Comment: Nil						
2 Vertical Irregulari	ty					
-	Performance 🔿 Severe	OS	ignificant		Insignificant	Factor B 1.0
Comment: Nil	Ŭ	Ŭ			U	
3 Short Columns						
	Porformanco - Sovera					Easter C 10
Effect on Structural Comment: Nil 4 Pounding Potenti	al		ignificant		● Insignificant	Factor C 1.0
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi	al and set D = the lower of the tw			or consequence		
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given as:	al and set D = the lower of the tw	vo, or 1.0 if no potential structure. For stiff build e right of the value appl	for pounding, dings (eg shea icable to fram	er walls), the effe	es are considered	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced	al and set D = the lower of the tw ing Effect sume the building has a frame	vo, or 1.0 if no potential structure. For stiff build e right of the value appl	for pounding, dings (eg shea icable to fram	nr walls), the effe	es are considered	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced	al and set <i>D</i> = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation	for pounding, dings (eg shea icable to fram	er walls), the effe e buildings. ngitudinal Dire	es are considered ect of pounding ection: 1.0	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced	al and set <i>D</i> = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact	for pounding, dings (eg shea licable to fram tor D1 For Lo Severe	nr walls), the effe e buildings. ngitudinal Dire Significant	es are considered ect of pounding ection: 1.0 Insignificant	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced	al and set <i>D</i> = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation hin 20% of Storey Height	for pounding, dings (eg shea icable to fram tor D1 For Lo Severe 0 <sep<.005h< td=""><td>nr walls), the effe e buildings. Ingitudinal Dire Significant .005<sep<.01h< td=""><td>es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H</td><td></td></sep<.01h<></td></sep<.005h<>	nr walls), the effe e buildings. Ingitudinal Dire Significant .005 <sep<.01h< td=""><td>es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H</td><td></td></sep<.01h<>	es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced	al and set D = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the lection of Factor D1 Alignment of Floors with	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation hin 20% of Storey Height	for pounding, dings (eg shea icable to frame cor D1 For Lo Severe 0 <sep<.005h< td=""><td>nr walls), the effe e buildings. Ingitudinal Dire Significant .005<sep<.01h< td=""><td>es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H () 1</td><td></td></sep<.01h<></td></sep<.005h<>	nr walls), the effe e buildings. Ingitudinal Dire Significant .005 <sep<.01h< td=""><td>es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H () 1</td><td></td></sep<.01h<>	es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H () 1	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced Table for Set	al and set D = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the lection of Factor D1 Alignment of Floors with	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation hin 20% of Storey Height	for pounding, dings (eg shea icable to frame cor D1 For Lo Severe 0 <sep<.005h< td=""><td>nr walls), the effe e buildings. Ingitudinal Dire Significant .005<sep<.01h< td=""><td>es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H () 1</td><td></td></sep<.01h<></td></sep<.005h<>	nr walls), the effe e buildings. Ingitudinal Dire Significant .005 <sep<.01h< td=""><td>es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H () 1</td><td></td></sep<.01h<>	es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H () 1	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced Table for Sel Comment: Nil b) Factor D2: -	al and set D = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the lection of Factor D1 Alignment of Floors with Alignment of Floors not with Height Difference Effect	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation hin 20% of Storey Height	for pounding, dings (eg shea icable to frame cor D1 For Lo Severe 0 <sep<.005h 0 1 0 0.4</sep<.005h 	nr walls), the effe e buildings. ongitudinal Dire Significant .005 <sep<.01h 0 1 0 0.7</sep<.01h 	es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H ① 1 ② 1 ② 0.8 ection: 1.0	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced Table for Sel Comment: Nil b) Factor D2: -	al and set D = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the lection of Factor D1 Alignment of Floors with Alignment of Floors not with	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation hin 20% of Storey Height	for pounding, dings (eg shea icable to frame tor D1 For Lo Severe 0 <sep<.005h 0 1 0 1 0 0.4</sep<.005h 	nr walls), the effe e buildings. ngitudinal Dire Significant .005 <sep<.01h 0 1 0 0.7</sep<.01h 	es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H ① 1 ② 1 ③ 0.8 ection: 1.0 Insignificant	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced Table for Sel Comment: Nil b) Factor D2: -	al and set D = the lower of the tw ing Effect sume the building has a frame by taking the coefficient to the lection of Factor D1 Alignment of Floors with Alignment of Floors not with Height Difference Effect	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation hin 20% of Storey Height hin 20% of Storey Height Fact	for pounding, dings (eg shea icable to frame cor D1 For Lo Severe 0 <sep<.005h 0 1 0 0.4</sep<.005h 	nr walls), the effe e buildings. ngitudinal Dire Significant .005 <sep<.01h 0 1 0 0.7 ngitudinal Dire Significant .005<sep<.01h< td=""><td>es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H ① 1 ② 1 ② 0.8 ection: 1.0 Insignificant Sep>.01H</td><td></td></sep<.01h<></sep<.01h 	es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H ① 1 ② 1 ② 0.8 ection: 1.0 Insignificant Sep>.01H	
Comment: Nil 4 Pounding Potenti (Estimate D1 and D2 a) Factor D1: - Poundi Note: Values given ass may be reduced Table for Sel Comment: Nil b) Factor D2: -	al and set D = the lower of the twing Effect sume the building has a frame by taking the coefficient to the lection of Factor D1 Alignment of Floors with Alignment of Floors not with Height Difference Effect lection of Factor D2 Height	wo, or 1.0 if no potential structure. For stiff build e right of the value appl Fact Separation hin 20% of Storey Height	for pounding, dings (eg shea icable to frame tor D1 For Lo Severe 0 <sep<.005h 0 1 0 1 0 0.4</sep<.005h 	nr walls), the effe e buildings. ngitudinal Dire Significant .005 <sep<.01h 0 1 0 0.7</sep<.01h 	es are considered ect of pounding ection: 1.0 Insignificant Sep>.01H ① 1 ② 1 ③ 0.8 ection: 1.0 Insignificant	

Comment: Nil

E	ffect on Structural Performance	⊖ Severe	⊖ Significant	Insignificant	Factor E	1.0
С	omment: No impact on performa	nce				
	her Factors - for allowance of a secord rationale for choice o			reys - Maximum value 2.5 vise - Maximum value 1.5. No minimum.	Factor F	2.5
С	omment: lightweight timber, re-pi	led, lightweight roof with	sarking and well braced walls			
Pe	rformance Achievement Rat	io (PAR)		Lor		PA

	38 Victoria Street		Job No.:	5-C3957.00	
:			By:	GSF	
e of building:	Alicetown Community House	Date:	21/08/2019		
	Alicetown, Hutt City		Revision No.:	0	
ble IEP-3 Initial Evalu	ation Procedure Step 3				
o 3 - Assessment of Perfor er Appendix B - Section B3.2)	nance Achievement Ratio (PAR)				
ransverse Direction				Fact	
potential CSWs		uctural Performance le - Do not interpolate)		Facto	
Plan Irregularity					
Effect on Structural Performance	⊖ Severe ⊖	Significant	Insignificant	Factor A 1.0	
Comment: Nil					
Vertical Irregularity					
Effect on Structural Performance	∩Severe	Significant	Insignificant	Factor B 1.0	
Comment: Nil	0	0			
Short Columns					
Effect on Structural Performance Comment: Nil	⊖ Severe ⊖	Significant	Insignificant	Factor C 1.0	
	the lower of the two, or 1.0 if no potentia	l for pounding, or consequ	uences are considered	l to be minimal)	
Estimate D1 and D2 and set D = Factor D1: - Pounding Effect Note: Values given assume the buil may be reduced by taking the	ding has a frame structure. For stiff bui e coefficient to the right of the value app Fa	ldings (eg shear walls), the licable to frame buildings. actor D1 For Transverse	e effect of pounding	l to be minimal)	
Estimate D1 and D2 and set D = Factor D1: - Pounding Effect Note: Values given assume the built	ding has a frame structure. For stiff bui e coefficient to the right of the value app Fa	ldings (eg shear walls), the licable to frame buildings. actor D1 For Transverse Severe Significa	e effect of pounding Direction: 1.0 nt Insignificant	l to be minimal)	
Estimate D1 and D2 and set D = Factor D1: - Pounding Effect Note: Values given assume the buil may be reduced by taking the Table for Selection of Fac	Iding has a frame structure. For stiff bui e coefficient to the right of the value app Factor D1	Idings (eg shear walls), the licable to frame buildings. actor D1 For Transverse Severe Significa 0 0 <sep<.005h .005<sep<.<="" td=""><td>e effect of pounding Direction: 1.0 nt Insignificant</td><td>l to be minimal)</td></sep<.005h>	e effect of pounding Direction: 1.0 nt Insignificant	l to be minimal)	
Estimate D1 and D2 and set D = Factor D1: - Pounding Effect Note: Values given assume the buil may be reduced by taking the Table for Selection of Fac Align	Iding has a frame structure. For stiff bui e coefficient to the right of the value app Factor D1 Separation	Idings (eg shear walls), the licable to frame buildings. actor D1 For Transverse Severe Significa 0 <sep<.005h .005<sep<.<br="">1 0 1 0 1</sep<.005h>	e effect of pounding Direction: 1.0 nt Insignificant 01H Sep>.01H Image: 1 1	l to be minimal)	
Estimate D1 and D2 and set D = Factor D1: - Pounding Effect Note: Values given assume the buil may be reduced by taking the Table for Selection of Fac Align	Iding has a frame structure. For stiff bui to coefficient to the right of the value app F actor D1 Separation Separation oment of Floors within 20% of Storey Height	Idings (eg shear walls), the licable to frame buildings. actor D1 For Transverse Severe Significa 0 <sep<.005h .005<sep<.<br="">1 0 1</sep<.005h>	e effect of pounding Direction: 1.0 nt Insignificant 01H Sep>.01H Image: 1 1	I to be minimal)	
Estimate D1 and D2 and set D = i Factor D1: - Pounding Effect Note: Values given assume the bui may be reduced by taking the Table for Selection of Fac Alignmen	Iding has a frame structure. For stiff bui e coefficient to the right of the value app Finite D1 Separation oment of Floors within 20% of Storey Height ant of Floors not within 20% of Storey Height	Idings (eg shear walls), the licable to frame buildings. actor D1 For Transverse Severe Significa 0 <sep<.005h .005<sep<.<br="">1 0 1</sep<.005h>	e effect of pounding Direction: 1.0 nt Insignificant 01H Sep>.01H () 1	to be minimal)	
Estimate D1 and D2 and set D = i Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Factor Alignment Comment: Nil b) Factor D2: - Height Differ	Iding has a frame structure. For stiff built e coefficient to the right of the value app Finance Filosof Storey Height Int of Floors not within 20% of Storey Height Int of Floors not within 20% of Storey Height Filosof Storey Height	Idings (eg shear walls), the Idings (eg shear walls), the Idicable to frame buildings. actor D1 For Transverse Severe Significa 0 <sep<.005h< td=""> .005<sep<.< td=""> 1 1 1 1 0.4 0 actor D2 For Transverse</sep<.<></sep<.005h<>	Direction: 1.0 nt Insignificant 01H Sep>.01H () 1 7 () 0.8 Direction: 1.0	I to be minimal)	
Estimate D1 and D2 and set D = i Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Fact Alignment Comment: Nil	Iding has a frame structure. For stiff built e coefficient to the right of the value app Finance Filosof Storey Height Int of Floors not within 20% of Storey Height Int of Floors not within 20% of Storey Height Filosof Storey Height	Idings (eg shear walls), the Ilicable to frame buildings. actor D1 For Transverse Severe Significa 0 <sep<.005h< td=""> .005<sep<.< td=""> 1 1 1 0 1 0 1 0 1 0 2 0.4 0 0.4 <t< td=""><td>effect of pounding Direction: 1.0 nt Insignificant 01H Sep>.01H Image: The set of the set o</td><td>I to be minimal)</td></t<></sep<.<></sep<.005h<>	effect of pounding Direction: 1.0 nt Insignificant 01H Sep>.01H Image: The set of the set o	I to be minimal)	
Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Face Align Alignmen Comment: Nil b) Factor D2: - Height Differ	Iding has a frame structure. For stiff built e coefficient to the right of the value app Finance Filosof Storey Height Int of Floors not within 20% of Storey Height Int of Floors not within 20% of Storey Height Filosof Storey Height	Idings (eg shear walls), the Idicable to frame buildings. actor D1 For Transverse Severe Significa 0 <sep<.005h< td=""> .005<sep<.< td=""> 1 1 1 0 0 0.4 0.0 actor D2 For Transverse Severe Significa Severe Significa 0.0 0 0.4 0.0</sep<.<></sep<.005h<>	Direction: 1.0 nt Insignificant 01H Sep>.01H ① 1 7 0.8 Direction: 1.0 nt Insignificant 01H Sep>.01H	I to be minimal)	

Comment: Nil

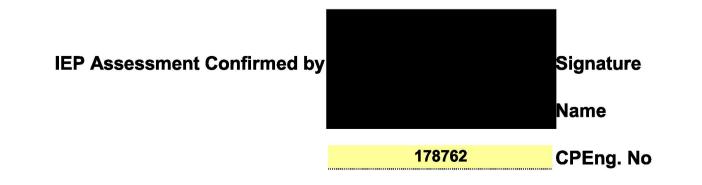
Effect on Structural Performance	○ Severe	─ Significant	Insignificant	Factor E	1.0
Comment: No impact on performan	V	(
Other Factors - for allowance of a Record rationale for choice Comment: lightweight timber, re-pi	of Factor F:	otherwi	eys - Maximum value 2.5 se - Maximum value 1.5. No minimum.	Factor F	2.50
					PAF
Performance Achievement Rat (equals A x B x C x D x E x F)	io (PAR)		т	ransverse	2.50

eet Number & Name:	38 Victoria St	reet			Job Ne	D.:	5-C3957.00	
KA: ame of building: ity:		Alicetown Community House Alicetown, Hutt City			By: Date: Revision No.:		GSF 21/08/2019 0	
able IEP-4 Initial E	valuation Proce	dure Steps	4, 5, 6 and	7				
tep 4 - Percentage of Nev	v Building Standar	d <i>(%NBS)</i>						
				Long	itudinal		Transverse	
1 Assessed Baseline %N (from Table IEP - 1)	BS (%NBS) _b			2	22%		22%	
2 Performance Achievem (from Table IEP - 2)	ent Ratio (PAR)			2	2.50		2.50	
3 PAR x Baseline (%NBS) _ь			5	55%		55%	
4 Percentage New Buildi (Use lower of two value		5) - Seismic Ra	ating				55%	
tep 5 - Is <i>%NB</i> S < 34?							NO	
tep 6 - Potentially Earthq	uake Risk (is <i>%NB</i>	S < 67)?					YES	
tep 7 - Provisional Gradir	ng for Seismic Risl	k based on IE	P					
					Seism	ic Grade	C	
Additional Comments (ite Comment: Original chimne		EP based seism	ic rating)					
	,							
Relationship betw	een Grade and	% NBS :						
Grad	e: A+	A	В	С	D	E	1	
%NB	S: > 100	100 to 80	79 to 67	66 to 34	< 34 to 20	< 20		

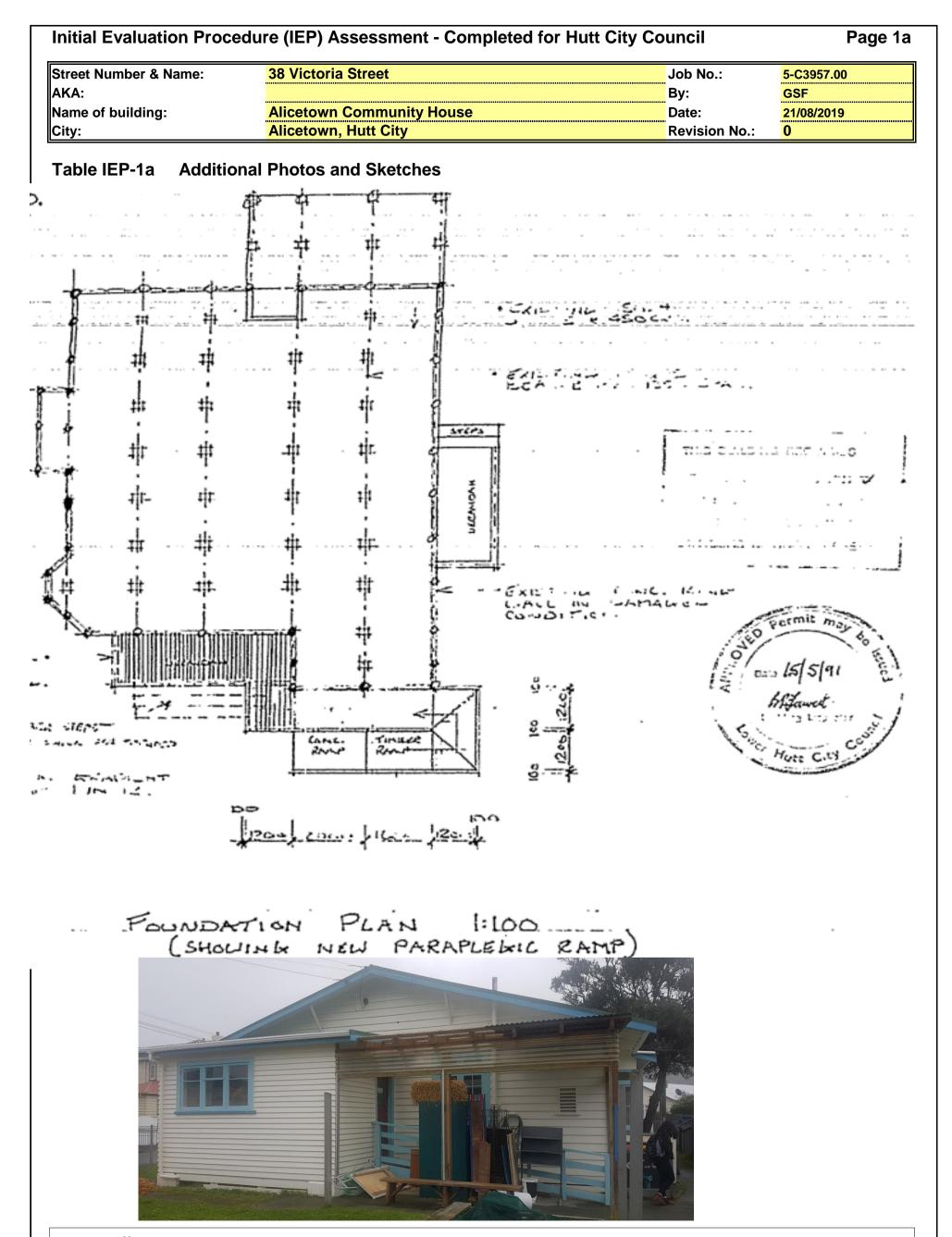
Grade:	A+	A	В	С	D	E
%NBS:	> 100	100 to 80	79 to 67	66 to 34	< 34 to 20	< 20

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Init	ial Evaluation Procedu	ire (IEP) Assessment - Complete	d for Hutt City Council	Page 7
AKA	e of building:	38 Victoria Street Alicetown Community House Alicetown, Hutt City	Job No.: By: Date: Revision No.:	5-C3957.00 GSF 21/08/2019 0
	o 8 - Identification of pote	uation Procedure Step 8 ntial Severe Structural Weaknesses (S gnificant number of occupants	SWs) that could result in	
8.1	Number of storeys above (ground level		1
8.2	Presence of heavy concret	e floors and/or concrete roof? (Y/N)		N
	Note: Options that are greyed of Occupancy not consider	tructural Weaknesses (SSW ut are not applicable and need not be considered red to be significant - no further consi be significant - no further consideratio	deration required	
		Severe Structural Weaknesses (SSWs) d result in significant risk to a signific		
	1. None identified			
	2. Weak or soft storey (e	xcept top storey)		
		r beam-column joints the deformation ner structural elements	s of which are	
	4. Flat slab buildings wit connections	h lateral capacity reliant on low ductil	ity slab-to-column	
	5. No identifiable connec	tion between primary structure and d	liaphragms	
	6. Ledge and gap stairs			



WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.



WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

1. Building Information	n
Building Name/ Description	Alicetown Community House
Street Address	38 Victoria Street, Alicetown
Territorial Authority	Hutt City Council
No. of Storeys	1
Area of Typical Floor (approx.)	110 sqm
Year of Design (approx.)	1919
NZ Standards designed to	ΝΑ
Structural System including Foundations	Timber framed structure with lined and diagonal timber braced walls with weatherboard cladding, letin 1 inch bracing for all walls. Sarked timber framed roof and piled foundation.
Does the building comprise a shared structural form or shares structural elements with any other adjacent titles?	Νο
Key features of ground profile and identified geohazards	Flat even ground profile, subsoil D, variable potential for liquefaction
Previous strengthening and/ or significant alteration	Re-piled in 1991
Heritage Issues/ Status	Nil
Other Relevant Information	Original chimneys removed

2. Assessment Information		
Consulting Practice		
 CPEng Responsible, including: Name CPEng number A statement of suitable skills and experience in the seismic assessment of existing buildings¹ 		
 Documentation reviewed, including: date/version of drawings/ calculations² previous seismic assessments 	Original blue prints dated 1919 Original Specifications dated 1919 Re-piling plan dated 1991 Small extension drawings dated 1957	
Geotechnical Report(s)	NA – assumed based on local knowledge refer to section 3	
Date(s) Building Inspected and extent of inspection	21 August 2019	
Description of any structural testing undertaken and results summary	None	
Previous Assessment Reports	ΝΑ	
Other Relevant Information	Nil	

¹ This should include reference to the engineer's Practice Field being in Structural Engineering, and

commentary on experience in seismic assessment and recent relevant training

² Or justification of assumptions if no drawings were able to be obtained

3. Summary of Engineering Assessment Methodology and Key Parameters Used			
Occupancy Type(s) and Importance Level	Importance Level 2		
Site Subsoil Class	D assumed based on local knowledge and NZS1170.5:2004 Site Subsoil Classification of Lower Hutt http://nzsee.org.nz/db/2011/013.pdf		
For an ISA:			
 Summary of how Part B was applied, including: Key parameters such as μ, S_p and F factors Any supplementary specific calculations 	Ductility – 2.0 lined and braced timber framed walls Sp Factor – 0.5 for lightweight timber structure F Factor – 2.5 both directions (maximum) based on the arrangement and length of the bracing walls, sarked roof with lightweight cladding and re-piled foundations.		
For a DSA:			
Summary of how Part C was applied, including: • the analysis methodology(s) used from C2 • other sections of Part C applied	NA		
Other Relevant Information	NA		

4. Assessment Outcomes				
Assessment Status (Draft or Final)	Final			
Assessed %NBS Rating	55%NBS IL2			
Seismic Grade and Relative Risk (from Table A3.1)	C - 5 – 10 times greater			
For an ISA:				
Describe the Potential Critical Structural Weaknesses	None identified			
Does the result reflect the building's expected behaviour, or is more information/ analysis required?	Yes – the ISA is sufficient			
If the results of this ISA are being used for earthquake prone decision purposes, <u>and</u> elements rating <34%NBS have been identified:	Engineering Statement of Structural Weaknesses and Location NA	<i>Mode of Failure and Physical</i> <i>Consequence</i> Statement(s)		
For a DSA:		L		
Comment on the nature of Secondary Structural and Non-structural elements/ parts identified and assessed				
Describe the Governing Critical Structural Weakness				
If the results of this DSA are being used for earthquake prone decision purposes, <u>and</u> elements rating <34%NBS have been identified (including Parts) ³ :	Engineering Statement of Structural Weaknesses and Location	Mode of Failure and Physical Consequence Statement(s)		
Recommendations (optional for EPB purposes)				

³ If a building comprises a shared structural form or shares structural elements with other adjacent titles, information about the extent to which the low scoring elements affect, or do not affect the structure.