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:	2 Queens Drive	Job No.:	5-C3957.00
AKA:		By:	GSF
Name of building:	Little Café	Date:	3/09/2019
City:	Hutt Central, 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)

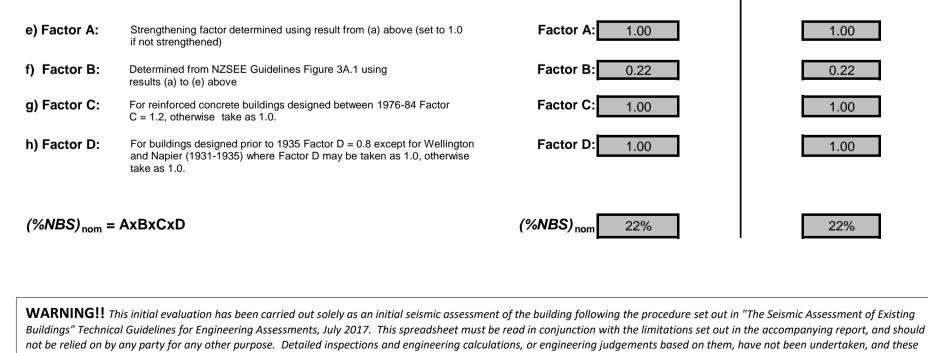


1.2 Sketches (plans etc, show items of interest)



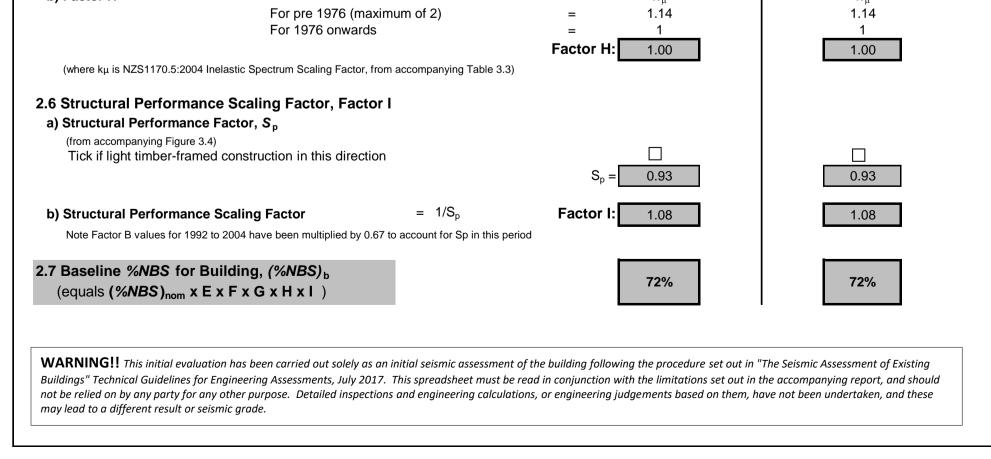
Structure: Main entry reinforced cor Foundations: Concrete slab on grade Roof: Flat roof with undefined roof	e with foundation beams assumed	ise structures are lightweight timber k	oracing walls
Subsoil: Assumed D			
Construction Date: 2000-2001			
.4 Note information sources	Tick as appropriate		
4 Note information sources Visual Inspection of Exterior		Specifications	
	Tick as appropriate ✓ ✓ ✓	Specifications Geotechnical Reports Other (list)	

lame of building:			By:	GSF
	Little Café		Date:	3/09/2019
City:	Hutt Central, Hutt City		Revision No.:	0
Table IEP-2 Initial Ev	valuation Procedure Step 2			
Step 2 - Determination of (9				
Baseline (%NBS) for particular bu	- ,			_
.1 Determine nominal (%NBS	\Rightarrow) = (%NBS) _{nom}	Longitudin	al	<u>Transverse</u>
a) Building Strengthening Data	1			
	have been strengthened in this direction			
	-			
n strengthened, enter perce	entage of code the building has been strengthened to	o N/A		N/A
h) Year of Design/Strengthenin	g, Building Type and Seismic Zone			
b) real of Design/Sciengulenin	y, building Type and Seismic Zone	Dro 1025		Dro 1025
		1005 1005	$\sum_{i=1}^{n}$	Pre 1935 O 1935-1965 O
		1005 1070		1935-1965 O 1965-1976 O
		4070 4004	$\tilde{\mathbf{D}}$	1976-1984
			5	1984-1992
				1992-2004 🔘
		0004 0044	$\tilde{\mathbf{D}}$	2004-2011 🔾
		Post Aug 2011	5	Post Aug 2011
	Building Type:	Not applic	able	Not applicable
	Seismic Zone:	Not applic	able	Not applicable
c) Soil Type			_	
From NZS1170.5:20	04, Cl 3.1.3:	D Soft Soil	•	D Soft Soil
From NZS4203:1992	2, CI 4.6.2.2 :			
(for 1992 to 2004 an	d only if known)	Flexible		Flexible
d) Estimate Period, T Comment:		h _n = 6		6 m
Comment.		$A_{c} = 1.00$		6 m 1.00 m ²
		N _c – 1.00	-	1.00
Moment Resisting Concrete	Frames: $T = \max\{0.09h_n^{0.75}, 0.4\}$	\bigcirc		\bigcirc
Moment Resisting Steel Fran		ŏ		ŏ
Eccentrically Braced Steel F	rames: $T = \max\{0.08h_n^{0.75}, 0.4\}$	ŏ		Ō
All Other Frame Structures:	$T = \max\{0.06h_{n}^{0.75}, 0.4\}$			
Concrete Shear Walls	$T = \max\{0.09h_n^{0.75}/A_c^{0.5}, 0.4\}$	۲		۲
Masonry Shear Walls:	<i>T</i> ≤ 0.4sec			0
User Defined (input Period):	the state of the s	0		0
	= height in metres from the base of the structure to the t seismic weight or mass.	T: 0.40		0.40



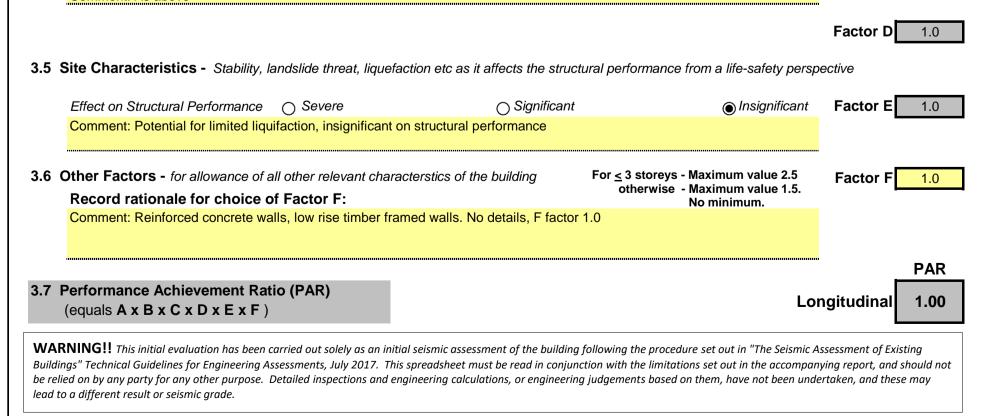
may lead to a different result or seismic grade.

Initial Evaluation Procedu	ire (IEP) Assessment - Comp	eted for Hutt City Council	Page 3
Street Number & Name:	2 Queens Drive	Job No.:	5-C3957.00
AKA:		By:	GSF
Name of building:	Little Café	Date:	3/09/2019
City:	Hutt Central, Hutt City	Revision N	lo.: <mark>0</mark>
Table IEP-2 Initial Eval	uation Procedure Step 2 cont	inued	
2.2 Near Fault Scaling Factor, Fa	actor F		
If $T \leq 1.5$ sec, Factor E = 1			
		Longitudinal	Transverse
a) Near Fault Factor, <i>N(T,D)</i>		N(T,D): 1	1
(from NZS1170.5:2004, Cl 3.1.6)			
b) Factor E	= 1/N(T,D)	Factor E: 1.00	1.00
	= 1/N(1,D)		1.00
2.3 Hazard Scaling Factor, Facto a) Hazard Factor, <i>Z</i> , for site	or F		
Location:	Hutt Valley-south of Taita Gorge	r right for user-defined locations	
Z =	= 0.4 (from NZS1170.5:2004, T	able 3.3)	
Z ₁₉₉₂ =		ctor from accompanying Figure 3.5(b))	
$Z_{2004} =$			
b) Factor F			
For pre 1992	= 1/Z		
For 1992-2011	$= Z_{1992}/Z$		
For post 2011	$= Z_{2004}/Z$		
		Factor F: 3.00	3.00
	ed prior to 1965 and known to be designed as a public I 1965-1976 and known to be designed as a public one B. For 1976-1984 set I value.)	$I = 1$ \blacksquare $R_{o} = 1$	1
c) Return Period Factor, R (from NZS1170.0:2004 Building Importanc	ce Level) <u>Choose Importance</u>	$\frac{Level}{R} \bigcirc 1 \textcircled{0} 2 \bigcirc 3 \bigcirc 4$ $R = \boxed{1.0}$	() 1 (i) 2 () 3 () 4 1.0
d) Factor G	= IR _o /R	Factor G: 1.00	1.00
2.5 Ductility Scaling Factor, Fact a) Available Displacement Ductility			
Comment:		$\mu = 1.25$	1.25
Reinforced concrete walls (timb	per framed walls)		-
b) Factor H			K

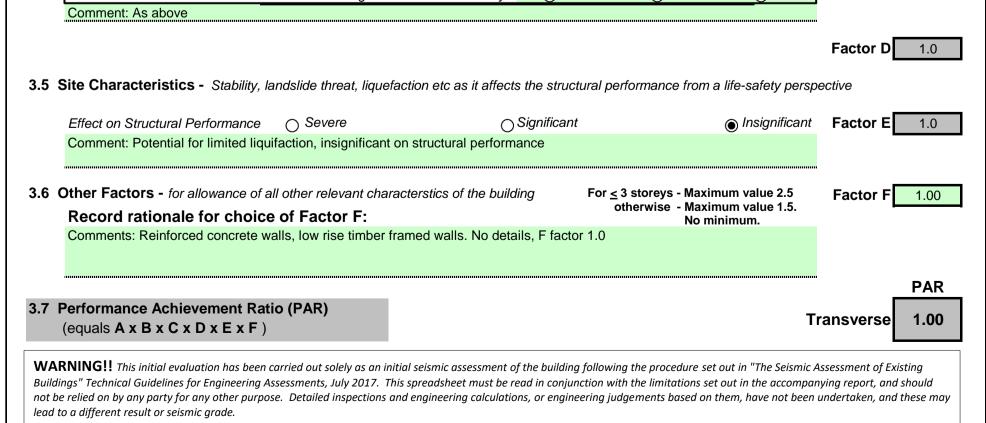


eet Number & Name:	2 Queens Drive		Job No.:	5-C3957.00	
A:			By:	GSF	
ame of building: Little Café			Date:	3/09/2019	
ty:	Hutt Central, Hutt City		Revision No.:	0	
able IEP-3 Initial Ev	valuation Procedure Step 3				
ep 3 - Assessment of Pe efer Appendix B - Section B3.2)	rformance Achievement Ratio (PAR)				
Longitudinal Direction					
potential CSWs		ctural Performance - Do not interpolate)		Facto	
Plan Irregularity	(,			
Effect on Structural Performa	<u> </u>) Significant	Insignificant	Factor A 1.0	
Comment: Present, but sma	all single level structure with well arranged brac	ing			
2 Vertical Irregularity					
Effect on Structural Performa	ance 🔿 Severe 🔿	Significant	Insignificant	Factor B 1.0	
Comment: Insignificant					
3 Short Columns					
Effect on Structural Performa	ance 🔿 Severe 🔿	Significant	Insignificant	Factor C 1.0	
Comment: Nil					
Pounding Potential	D = the lower of the two or 1.0 if no potenti	ial for nounding or cor	sequences are considered	d to be minimal)	
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the	e building has a frame structure. For stiff bu ng the coefficient to the right of the value ap Fa	uildings (eg shear walls oplicable to frame build netor D1 For Longitud Severe Sig	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of	et e building has a frame structure. For stiff buing the coefficient to the right of the value ap Fa f Factor D1 Separatio	uildings (eg shear walls oplicable to frame build nettor D1 For Longitud Severe Sig on 0 <sep<.005h .005<<="" td=""><td>s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H</td><td></td></sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of	e building has a frame structure. For stiff building has a frame structure. For stiff building the coefficient to the right of the value ap Factor D1 Alignment of Floors within 20% of Storey Heigh	uildings (eg shear walls oplicable to frame build actor D1 For Longitud Severe Sig on 0 <sep<.005h .005<<br="">ht 0 1</sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H () 1 () 1		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of Alig	et e building has a frame structure. For stiff building has a frame structure. For stiff building the coefficient to the right of the value ap Factor D1 Separation Alignment of Floors within 20% of Storey Heigh	uildings (eg shear walls oplicable to frame build actor D1 For Longitud Severe Sig on 0 <sep<.005h .005<<br="">ht 0 1</sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of Alig	e building has a frame structure. For stiff building has a frame structure. For stiff building the coefficient to the right of the value ap Factor D1 Alignment of Floors within 20% of Storey Heigh	uildings (eg shear walls oplicable to frame build actor D1 For Longitud Severe Sig on 0 <sep<.005h .005<<br="">ht 0 1</sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H () 1 () 1		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of Alig	et e building has a frame structure. For stiff building the coefficient to the right of the value ap Fa of Factor D1 Separatio Alignment of Floors within 20% of Storey Heigh gnment of Floors not within 20% of Storey Heigh structures are nominally ductile stiff structures	uildings (eg shear walls oplicable to frame build actor D1 For Longitud Severe Sig on 0 <sep<.005h .005<<br="">ht 0 1</sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H () 1 () 1		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of Alig Comment: Present but both	et e building has a frame structure. For stiff building the coefficient to the right of the value ap Factor D1 Alignment of Floors within 20% of Storey Heigh gnment of Floors not within 20% of Storey Heigh structures are nominally ductile stiff structures Difference Effect	uildings (eg shear walls oplicable to frame build actor D1 For Longitud Severe Sig on 0 <sep<.005h .005<<br="">ht 0 1</sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H 0 1		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of Alig Comment: Present but both	et e building has a frame structure. For stiff building has a frame structure. For stiff building the coefficient to the right of the value ap Fa of Factor D1 Separatio Alignment of Floors within 20% of Storey Heigh gnment of Floors not within 20% of Storey Heigh structures are nominally ductile stiff structures Difference Effect Fa	uildings (eg shear walls oplicable to frame build Severe Sig on 0 <sep<.005h .005<<br="">ht 0 1 ht 0 0.4</sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H () 1 () 1 () 0.7 () 0.8 dinal Direction: 1.0 nificant Insignificant		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of Alig Comment: Present but both b) Factor D2: - Height	et e building has a frame structure. For stiff building the coefficient to the right of the value ap factor big the coefficient to the right of the value ap Factor D1 Separation Alignment of Floors within 20% of Storey Heigh gnment of Floors not within 20% of Storey Heigh structures are nominally ductile stiff structures Difference Effect Factor D2	uildings (eg shear walls oplicable to frame build actor D1 For Longitue Severe Sig on 0 <sep<.005h .005<<br="">ht 0 1 ht 0 0.4 actor D2 For Longitue Severe Sig 0<sep<.005h .005<<="" td=""><td>s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H 0 1</td><td></td></sep<.005h></sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H 0 1		
(Estimate D1 and D2 and set) Factor D1: - Pounding Effect Note: Values given assume the may be reduced by takin Table for Selection of Alig Comment: Present but both b) Factor D2: - Height	et e building has a frame structure. For stiff building has a frame structure. For stiff building the coefficient to the right of the value ap Fa of Factor D1 Separatio Alignment of Floors within 20% of Storey Heigh gnment of Floors not within 20% of Storey Heigh structures are nominally ductile stiff structures Difference Effect Fa	uildings (eg shear walls oplicable to frame build severe Sig on 0 <sep<.005h .005<<br="">ht 0 1 ht 0 0.4 ector D2 For Longitud Severe Sig 0<sep<.005h .005<<br="">xs 0 0.4</sep<.005h></sep<.005h>	s), the effect of pounding ings. dinal Direction: 1.0 nificant Insignificant Sep<.01H Sep>.01H () 1 () 1 () 0.7 () 0.8 dinal Direction: 1.0 nificant Insignificant		

Comment: As above



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			By:	GSF	
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	Hutt Central, Hutt City		Revision No.:	0	
ole IEP-3 Initial Evalua	ation Procedure Step 3				
p 3 - Assessment of Perform er Appendix B - Section B3.2)	nance Achievement Ratio (PAR)				
Fransverse Direction				-	
potential CSWs		Ictural Performanc		Fact	
Plan Irregularity	(Choose a value	e - Do not interpolate	<i>;</i>)		
Effect on Structural Performance	∩ Severe ∩	Significant	Insignificant	Factor A 1.0	
	le level structure with well arranged bracing				
Vertical Irregularity					
Effect on Structural Performance		Significant	Insignificant	Factor B 1.0	
Comment: Insignificant		Signinoari			
3 Short Columns					
Effect on Otherstein Destant					
Effect on Structural Performance Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th	⊖ Severe ∩	Significant for pounding, or co	Insignificant Insequences are considered		
Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl	for pounding, or co dings (eg shear walls icable to frame build	nsequences are considered s), the effect of pounding lings.	to be minimal)	
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Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl Fa	for pounding, or co dings (eg shear walls icable to frame build <u>ctor D1 For Transv</u> Severe Sig	nsequences are considered s), the effect of pounding lings.	to be minimal)	
Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Fact	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl Fa	for pounding, or co dings (eg shear walls icable to frame build <u>ctor D1 For Transv</u> Severe Sig	nsequences are considered s), the effect of pounding lings. verse Direction: 1.0 unificant Insignificant	to be minimal)	
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Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Fact Alignmen	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl Fa tor D1 Separation	for pounding, or condings (eg shear walls icable to frame build ctor D1 For Transv Severe Sig 0 <sep<.005h .005<<="" td=""><td>nsequences are considered s), the effect of pounding lings. verse Direction: 1.0 nificant Insignificant :Sep<.01H Sep>.01H</td><td>to be minimal)</td></sep<.005h>	nsequences are considered s), the effect of pounding lings. verse Direction: 1.0 nificant Insignificant :Sep<.01H Sep>.01H	to be minimal)	
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Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Fact Alignmen Comment: Present but both struct	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl Fa tor D1 Separation ment of Floors within 20% of Storey Height at of Floors not within 20% of Storey Height sures are nominally ductile stiff structures ence Effect	for pounding, or condings (eg shear walls icable to frame build ctor D1 For Transv Severe Sig 0 <sep<.005h .005<<="" td=""><td>nsequences are considered s), the effect of pounding lings. Verse Direction: 1.0 phificant Insignificant Sep<.01H Sep>.01H 0 1</td><td>to be minimal)</td></sep<.005h>	nsequences are considered s), the effect of pounding lings. Verse Direction: 1.0 phificant Insignificant Sep<.01H Sep>.01H 0 1	to be minimal)	
Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Fact Alignmen Comment: Present but both struct	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl Fa tor D1 Separation ment of Floors within 20% of Storey Height t of Floors not within 20% of Storey Height tures are nominally ductile stiff structures ence Effect	for pounding, or condings (eg shear walls icable to frame build ctor D1 For Transv Severe Sig 0 <sep<.005h .005<<br="">0 1 0 0.4 ctor D2 For Transv Severe Sig</sep<.005h>	nsequences are considered s), the effect of pounding lings. verse Direction: 1.0 gnificant Insignificant Sep<.01H Sep>.01H 0 1	to be minimal)	
Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Fact Alignmen Comment: Present but both struct b) Factor D2: - Height Differe	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl Fa tor D1 Separation ment of Floors within 20% of Storey Height t of Floors not within 20% of Storey Height ures are nominally ductile stiff structures ence Effect Fa tor D2	for pounding, or con- dings (eg shear walls icable to frame build severe Sig 0 <sep<.005h .005<<br="">0 1 0 0.4 ctor D2 For Transy Severe Sig 0<sep<.005h .005<<="" td=""><td>nsequences are considered s), the effect of pounding lings. verse Direction: 1.0 gnificant Insignificant Sep<.01H Sep>.01H 0 1 0.7 0.8 verse Direction: 1.0 gnificant Insignificant Sep<.01H Sep>.01H</td><td>to be minimal)</td></sep<.005h></sep<.005h>	nsequences are considered s), the effect of pounding lings. verse Direction: 1.0 gnificant Insignificant Sep<.01H Sep>.01H 0 1 0.7 0.8 verse Direction: 1.0 gnificant Insignificant Sep<.01H Sep>.01H	to be minimal)	
Comment: Nil Pounding Potential (Estimate D1 and D2 and set D = th) Factor D1: - Pounding Effect Note: Values given assume the build may be reduced by taking the Table for Selection of Fact Alignmen Comment: Present but both struct b) Factor D2: - Height Differe	he lower of the two, or 1.0 if no potential ding has a frame structure. For stiff build coefficient to the right of the value appl Fa tor D1 Separation ment of Floors within 20% of Storey Height t of Floors not within 20% of Storey Height tures are nominally ductile stiff structures ence Effect	for pounding, or condings (eg shear walls icable to frame build ctor D1 For Transv Severe Sig 0 <sep<.005h .005<<br="">0 1 0 0.4 ctor D2 For Transv Severe Sig</sep<.005h>	nsequences are considered s), the effect of pounding lings. verse Direction: 1.0 gnificant Insignificant Sep<.01H Sep>.01H 0 1	to be minimal)	

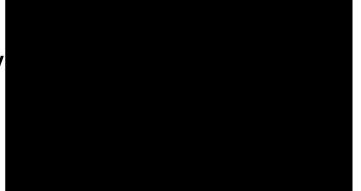


Imme of building: Little Café Date: 309/2019 ty: Hutt Central, Hutt City Revision No.: 0 able IEP-4 Initial Evaluation Procedure Steps 4, 5, 6 and 7 ep 4 - Percentage of New Building Standard (%NBS) Longitudinal Transverse 1 Assessed Baseline %NBS (%NBS) _b 72% 72% (from Table IEP - 1) 72% 72% 72% 2 Performance Achievement Ratio (PAR) (from Table IEP - 2) 1.00 1.00 1.00 3 PAR x Baseline (%NBS) _b 70% 70% 70% 4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) NO NO ep 5 - Is %NBS < 34? NO NO NO ep 7 - Provisional Grading for Seismic Risk based on IEP Seismic Grade B	treet Number & Name:	2 Queens Drive	Job No.:	5-C3957.00
ty: Hutt Central, Hutt City Revision No.: 0 able IEP-4 Initial Evaluation Procedure Steps 4, 5, 6 and 7 ep 4 - Percentage of New Building Standard (%NBS) Longitudinal Transverse 1 Assessed Baseline %NBS (%NBS), (from Table IEP - 1) 72% 72% 2 Performance Achievement Ratio (PAR) (from Table IEP - 2) 1.00 1.00 3 PAR x Baseline (%NBS), 70% 70% 4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) 70% 70% ep 5 - Is %NBS < 34? NO NO NO ep 7 - Provisional Grading for Seismic Risk based on IEP Seismic Grade B				
able IEP-4 Initial Evaluation Procedure Steps 4, 5, 6 and 7 ep 4 - Percentage of New Building Standard (%NBS) Longitudinal 1 Assessed Baseline %NBS (%NBS) _b (from Table IEP - 1) 72% 2 Performance Achievement Ratio (PAR) (from Table IEP - 2) 3 PAR x Baseline (%NBS) _b 4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) ep 5 - Is %NBS < 34? NO ep 7 - Provisional Grading for Seismic Risk based on IEP Seismic Grade	-			
ep 4 - Percentage of New Building Standard (%NBS) Longitudinal 1 Assessed Baseline %NBS (%NBS), (from Table IEP - 1) 2 2 Performance Achievement Ratio (PAR) (from Table IEP - 2) 3 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 PAR x Baseline (%NBS), (Tom Table IEP - 2) 3 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) ep 5 - Is %NBS < 34? NO ep 6 - Potentially Earthquake Risk (is %NBS < 67)? NO geismic Grade B				
1 Assessed Baseline %NBS (%NBS) _b 72% 72% 2 Performance Achievement Ratio (PAR) 1.00 1.00 2 Performance Achievement Ratio (PAR) 1.00 1.00 3 PAR x Baseline (%NBS) _b 70% 70% 3 PAR x Baseline (%NBS) _b 70% 70% 4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) 70% 70% ep 5 - Is %NBS < 34?		•		
(from Table IEP - 1) 1.00 1.00 2 Performance Achievement Ratio (PAR) (from Table IEP - 2) 1.00 1.00 3 PAR x Baseline (%NBS) _b 70% 70% 4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) 70% 70% ep 5 - Is %NBS < 34?			Longitudinal	Transverse
(from Table IEP - 2) 70% 3 PAR x Baseline (%NBS) _b 70% 4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) 70% ep 5 - Is %NBS < 34?		BS (%NBS) _b	72%	72%
4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3) 70% eep 5 - Is %NBS < 34?		ent Ratio (PAR)	1.00	1.00
(Use lower of two values from Step 4.3) tep 5 - Is %NBS < 34? tep 6 - Potentially Earthquake Risk (is %NBS < 67)? NO tep 7 - Provisional Grading for Seismic Risk based on IEP Seismic Grade B	3 PAR x Baseline (%NBS)	Ъ	70%	70%
ep 6 - Potentially Earthquake Risk (is <i>%NBS</i> < 67)? NO ep 7 - Provisional Grading for Seismic Risk based on IEP Seismic Grade B	-			70%
ep 7 - Provisional Grading for Seismic Risk based on IEP Seismic Grade B	ep 5 - Is <i>%NB</i> S < 34?			NO
Seismic Grade B	ep 6 - Potentially Earthqu	uake Risk (is <i>%NBS <</i> 67)?		NO
	ep 7 - Provisional Gradin	g for Seismic Risk based on IEP		
Additional Comments (items of note effecting IED based esignic reting)			Seismic Grade	B
Additional Comments (items of note affecting IEP based seismic rating)		ns of note affecting IEP based seismic rating)		

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

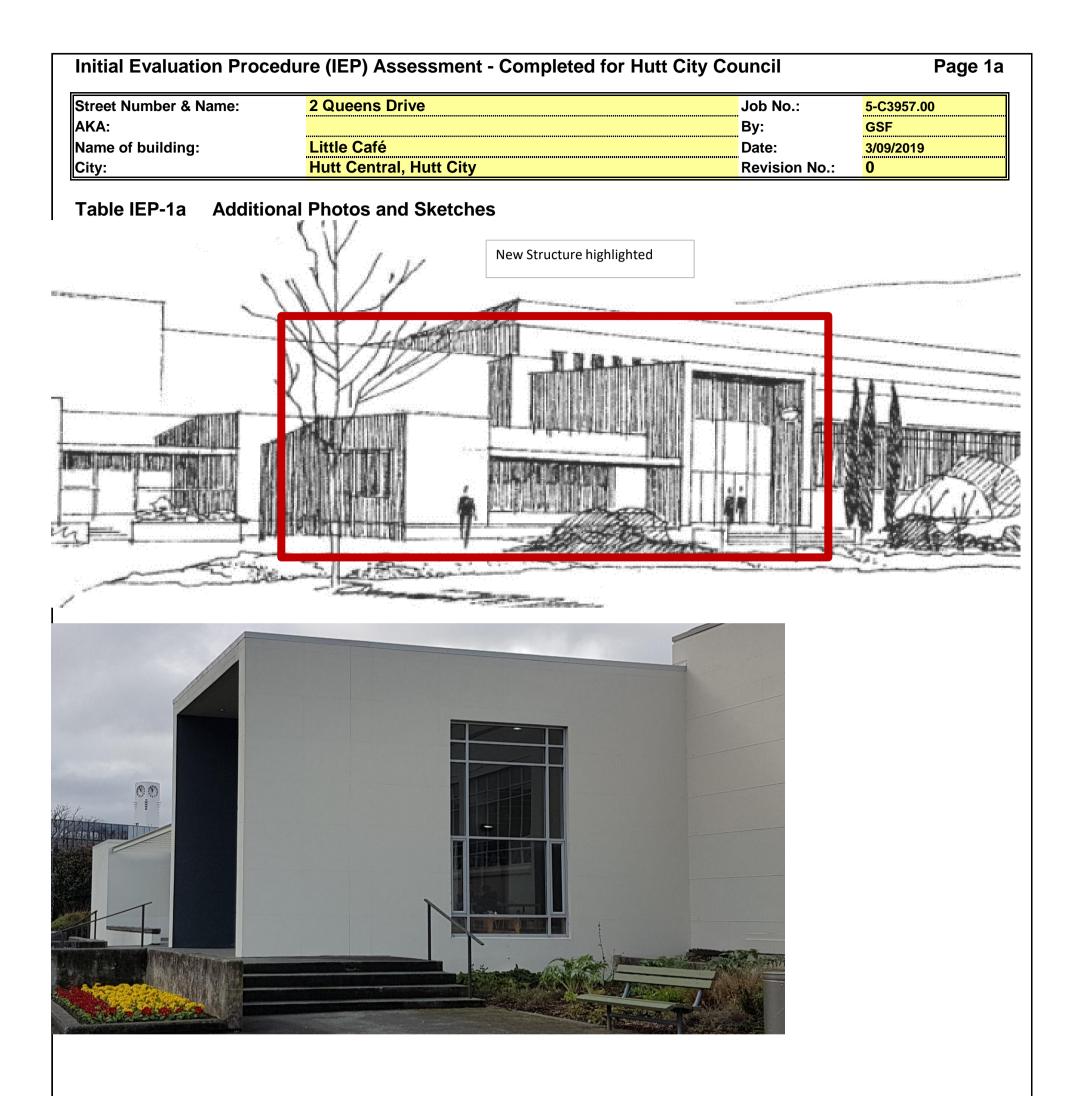
WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with 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	re (IEP) Assessment - Complete	ed for Hutt City Council	Page 7
AKA	e of building:	2 Queens Drive Little Café Hutt Central, Hutt City	Job No.: By: Date: Revision No.:	5-C3957.00 GSF 3/09/2019 0
	o 8 - Identification of poter	uation Procedure Step 8 ntial Severe Structural Weaknesses (gnificant number of occupants	SSWs) 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 o	tructural Weaknesses (SSM ut are not applicable and need not be considere red to be significant - no further consi e significant - no further consideration	ed. sideration required	
	The following potential \$	Severe Structural Weaknesses (SSWs d result in significant risk to a signific	s) have been identified	
	1. None identified			
	2. Weak or soft storey (e	xcept top storey)		
		beam-column joints the deformation ner structural elements	ns of which are	
	4. Flat slab buildings wit connections	h lateral capacity reliant on low duct	ility slab-to-column	
	5. No identifiable connec	tion between primary structure and	diaphragms	
	6. Ledge and gap stairs			



IEP Assessment Confirmed by

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.



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ISA

1. Building Information	n
Building Name/ Description	Little Cafe
Street Address	2 Queens Drive, Hutt Central
Territorial Authority	Hutt City Council
No. of Storeys	1
Area of Typical Floor (approx.)	180 sqm
Year of Design (approx.)	2000
NZ Standards designed to	NZS 4203:1992
Structural System including Foundations	Concrete slab on grade with assumed foundation beams Reinforced concrete and lined timber framed walls
Does the building comprise a shared structural form or shares structural elements with any other adjacent titles?	Not with other titles, but does share structure with the original building. Little Café was constructed into the original structure, Little Theatre.
Key features of ground profile and identified geohazards	Flat profile, some potential for liquefaction and lateral spread toward the Hutt river.
Previous strengthening and/ or significant alteration	None known
Heritage Issues/ Status	None for this building but the area that encompasses the building is identified: <u>https://www.heritage.org.nz/the-list/details/7520</u>
Other Relevant Information	Nil

2. Assessment Informa	ition
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 	Minor design notes and drawings showing arrangement of primary structure. Job 734, drawings ST– 06A, ST- 11, ST- 12, ST- 13
Geotechnical Report(s)	NĀ – assumed based on local knowledge refer to section 3
Date(s) Building Inspected and extent of inspection	3 September 2019
Description of any structural testing undertaken and results summary	Nil
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 Enginee	ering 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 – 1.25 applied to reinforced concrete walls, timber framed walls have higher ductility. Sp Factor – 0.93 F Factor – Reinforced concrete walls, low rise timber framed walls. No construction details available to review, F factor 1.0
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	

4. Assessment Outcomes		
Assessment Status (Draft or Final)	Final	
Assessed %NBS Rating	70%NBS IL2	
Seismic Grade and Relative Risk (from Table A3.1)	B, 2 to 5 times the Risk of a comparable to new building	
For an ISA:		
Describe the Potential Critical Structural Weaknesses	None	
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	Mode of Failure and Physical Consequence Statement(s)
For a DSA:		
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	<i>Mode of Failure and Physical</i> <i>Consequence</i> 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.