Earthquake Design Actions

Report for

5995213N 2669698E

Compiled by

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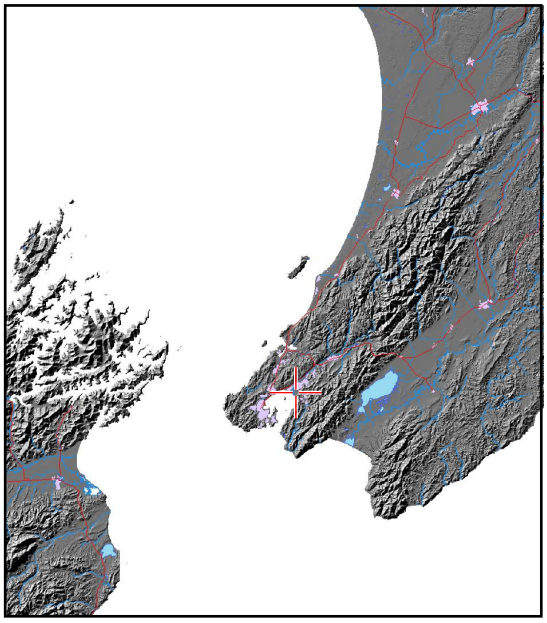
Site properties

Location:	**5995213N 2669698E**
	174.91°E -41.24°S
Soil class:	**C: Shallow soil**
Hazard factor [Z]:	**0.40**
(as part of Hutt Valley)	
Nearest fault:	**Wellington Fault**
Fault distance:	**2.6 km**



Structure properties

Building importance class:	**2**
Design working life:	**25 yrs**
Dominant period X [T]:	**1.5 s**
Dominant period Y [T]:	**1.8 s**

Ultimate Limit State	X	Y
Structural ductility factor[μ]:	**0.90**	**0.90**
Probability of exceedence:	**1/250**	**1/250**
Spectral shape factor [C_h(T)]:	**0.88**	**0.73**
Return period factor [R_u]:	**0.75**	**0.75**
Near fault factor [N(T,D)]:	**1.00**	**1.00**
Elastic hazard spectrum [C(T)]:	**0.26**	**0.22**
Structural performance factor [S_p]:	**0.70**	**0.70**
Inelastic spectrum scale factor [k_μ]:	**0.90**	**0.90**
Minimum base shear	**0.03**	**0.03**
Design Action Coefficient [C_d(T)]:	**0.20**	**0.17**

Servicability Limit State (1)	X	Y
Structural ductility factor[μ]:	**0.85**	**0.85**
Probability of exceedence:	**1/25**	**1/25**
Spectral shape factor [C_h(T)]:	**0.88**	**0.73**
Return period factor [R_s]:	**0.25**	**0.25**
Near fault factor [N(T,D)]:	**1.00**	**1.00**
Elastic hazard spectrum [C(T)]:	**0.09**	**0.07**
Structural performance factor [S_p]:	**0.70**	**0.70**
Inelastic spectrum scale factor [k_μ]:	**0.85**	**0.85**
Design Action Coefficient [C_d(T)]:	**0.07**	**0.06**