



**SY036-04/17
APPENDIX A**



Our Ref: 24933; 17/027156
Your Ref:

SHIRE OF YORK	
FILE	<i>R.S. FES.4</i>
OFFICER	INITIALS
<i>PAUL M</i>	
30 MAR 2017	
<i>1159544</i>	
REFERRED TO COUNCIL	
DATE	INITIALS

Mr Paul Martin
Chief Executive Officer
Shire of York
1 Joaquina Street
YORK WA 6302

Dear Mr Martin

**EARTHQUAKE MITIGATION OF WA REGIONAL TOWNS –
CASE STUDY OF YORK**

Thank you for your time on the 27 October to discuss a potential research project centred on the town of York. The project has been proposed by the Bushfire and Natural Hazards Cooperative Research Centre and is supported by the WA Department of Fire and Emergency Services (DFES) who manage the consequences of earthquake events. Your heritage listed town with its well preserved masonry buildings located in an area with the highest seismic activity in Australia would provide an excellent focus for exploring how the current Bushfire and Natural Hazards Cooperative Research Centre research could be applied in older regional towns to reduce earthquake risk. By this letter we wish to give the Council further background on the proposed research project and to seek its in-principle agreement to engage in this work.

Within the Bushfire and Natural Hazards Cooperative Research Centre is a project entitled “Cost-Effective Mitigation Strategy Development for Building Related Earthquake Risk” which has been running for 3 years. It is developing information to inform economic decisions concerning the retrofit of existing reinforced concrete and unreinforced masonry buildings. As part of this, the project is developing practical approaches for reducing the vulnerability of masonry buildings to earthquake through retrofit. The research outcomes, if applied, will enable the progressive address of community buildings most at risk to earthquake ground shaking. As this research matures the Bushfire and Natural Hazards Cooperative Research Centre and DFES wish to explore how community risk, emergency response and recovery efforts following a severe earthquake can be reduced through a range of mitigation implementation strategies.

The project will run for approximately 12 months commencing in January 2018 and will involve the following key activities:

- Development and dissemination of information in consultation with the York Shire Council to publicise the project and its forward activities with the York community (January 2018)
- Field survey of the older masonry buildings in the town of York and the development of a building database (February to May 2018)
- Survey of the nature of community businesses to enable the assessment of the economic activity disruption that would occur due to an earthquake event (February to May 2018)
- Assessment of the reduced economic losses and benefit versus cost for a staged implementation of mitigation in the context of a range of programs aimed at incentivising building owner investment in reducing earthquake vulnerability (June to Aug 2018)
- Development of scenarios to assist DFES and the Shire of York with emergency management planning (Sept to Oct 2018)
- Briefing the York Shire Council on the outcomes of the project

The project requires no financial support from the Shire of York and aims to minimise any other resource requirements from the council in support of the project. The Bushfire and Natural Hazards Cooperative Research Centre and DFES are seeking council endorsement of the project, council input on any communication with the community and access to any building or business activity data it may hold. Please also note that the research would not impose mitigation investment upon property owners in York. The various retrofits virtually applied in the research are to illustrate the typical effectiveness of such measures if applied in older regional towns throughout Australia with similar older buildings constructed with no consideration of earthquake hazard. However, the outcomes of the research will be freely available to the Shire of York for it to use as it sees fit. In particular, the databases developed will be provided and the earthquake scenario outcomes will be shared.

The town of York is an excellent example of the many older Australian towns that presently have a significant proportion of highly vulnerable buildings. The information developed from this project will be useful to many similar community councils across Australia. For this reason we seek your support and engagement in this case study.

Yours sincerely



**WAYNE GREGSON APM
COMMISSIONER**

23 March 2017

**DR RICHARD THORNTON
CHIEF EXECUTIVE OFFICER
BUSHFIRE AND NATURAL HAZARDS CRC**

March 2017