Note

This statement has been redacted to remove certain personal information and information that is not relevant to the land planning terms of reference.

QUEENSLAND FLOODS COMMISSION OF INQUIRY

STATEMENT OF IAN WHITEHEAD

- I, IAN JAMES WHITEHEAD, of c/- Street Brisbane in the State of Queensland, Acting Chief Executive, Stadiums Queensland, solemnly and sincerely affirm and declare:
- 1. I am currently the Acting Chief Executive, Stadiums Queensland.
- 2. My usual role is the General Manager, Operations.
- 3. I have provided a response to the Commission's Requirement dated 29 August 2011 below.

Expert reports regarding flood risk

3. The QTC was built on a site known to be at risk of flooding. As such, the centre was designed and constructed to be generally above the 1 in 100 year flood level (Q100) of 7.9m AHD. Areas of the centre below this level were designed to be flood resistant by way of removable flood barriers which can be easily installed in the event of an impending flood.

Plans and maps regarding flood risk

4. Project documentation for the QTC includes architectural and engineering drawings which detail the arena design including elements relating to flood control. This includes elements such as landscaping and site works, the location of critical infrastructure and the design of the flood wall and flood gates.



Information provided to Stadiums Queensland by the Mirvac Group, the State of Queensland or the Brisbane City Council or any consultant engaged by any of them regarding flood risk

6. The concept and design of the QTC was initially undertaken by the Mirvac Group in conjunction with the former Sport and Recreation Queensland (SRQ). Stadiums Queensland (then the Major Sports Facilities Authority) became involved in the project in 2007 after construction had already commenced, following a decision by then Premier Peter Beattie that the Major Sports Facilities Authority should ultimately own and manage the facility on behalf of Government. At that time, copies of relevant documentation were handed over to SQ. SRQ maintained an involvement in the project until its completion in December 2008 when the QTC land was transferred from SRQ to SQ. Documentation relating to decision-making prior to SQ assuming control is the responsibility of Sport and Recreation Services within the Department of Communities.

Any information gained by independent investigation by Stadiums Queensland.

7. Marsh Pty Ltd was engaged by Stadiums Queensland in 2009 to develop a site-specific Flood Emergency Response Plan (FERP) for the QTC. This involved a flood risk assessment and identified the building levels compared to the predicted flood levels in the local area. The FERP also contains procedures for preparing for and minimising the impact of a flood. A Risk Report and Underwriting Report were also prepared as noted in paragraph 5 above.

Flood related plans or procedures put in place by Stadiums Queensland to deal with the flood risk at the Queensland Tennis Centre, including plans related to a potential flood which occurs during the Brisbane Internationals tournament.

8. Given the risk associated with flood at the QTC and to maintain appropriate insurance cover for flooding, a site-specific Flood Emergency Response Plan (FERP) was developed for the Queensland Tennis Centre in October 2009. The FERP describes the potential hazard, training and preparation requirements, procedures to be undertaken by key centre staff in the event of a flood and a flood recovery plan. The FERP also contains a copy of the Brisbane City Council Floodwise Property report, Venue Flood Level Plan, a Flood Checklist and a manual for the use of the flood barrier system. The FERP is a general flood response plan relating to flooding at any time and does not contain any specific procedures regarding a potential flood during the Brisbane International tournament event.

What parts of the Tennis centre that were inundated with flood waters

- 9. Water inundated the following areas of the QTC:
 - (a) All of level 1 of the Pat Rafter Arena building to a depth of approximately three to four metres to the underside of the level 2 podium slab. Rooms on level 1 that were inundated include Change Rooms, Gymnasium, Doping Room, Maintenance Workshop, Communication Room, Store Rooms, Cleaners' Room, Chemical Store, Maintenance Office, Centre Court, Lower Tier of the Arena seating, Tournament Control, Multi-Purpose Room, Two Lifts, Main Refrigeration Plant Room, Undercroft areas and various Amenities;
 - (b) Lower level grass courts (x2) and clay courts (x4);
 - (c) Podium level hard courts (x 9);
 - (d) Car park;
 - (e) Grounds maintenance shed and compound;
 - (f) Pump shed.

10. Although the flood barriers were installed prior to the flood, water initially entered the facility by way of backflow from the river via the facility's drainage network before ultimately flowing over the flood barriers. The flood barriers were constructed to a height of 8.6m AHD, 700mm above the Q100 level (7.9m AHD). The flood reached a level of 9.1m across the site.

Property damage caused by flood waters

- 11. Property damage at the QTC totalled approximately \$6 million. Damage caused by flood waters include:
 - (a) All Electrical Services including the External switchboard in the Eastern Car Park, Hydraulic Services, Mechanical Services, Refrigeration, Fire Services, Communication Systems, Security System, IT Infrastructure, Irrigation System and two Lifts;
 - (b) All Level 1 finishes including partitions, doors, walls, ceilings, carpets, tiles;
 - (c) All Level 1 fittings, fixtures and equipment (FF&E) including furniture, gym equipment, tennis equipment, grounds maintenance equipment, audio equipment, IT equipment and communications equipment.
- 12. For insurance purposes SQ engaged the services of a Quantity Surveyor to detail the damages throughout the QTC. A copy of this detailed report can be provided if required.

Effect on access routes (including period of time access was cut)

13. The road to the north of the QTC, King Arthur Terrace was inundated with flood water between Fairfield Road and the QTC for approximately one day until flood water receded. The site remained accessible from the western end of King Arthur Terrace during the flood.

Effect on structural integrity of any buildings or other items at the centre

14. The flood did not have an impact on the structural integrity of any buildings or structures on the site as the facility is constructed on pile foundations. A survey was taken of the levels across the centre court in Pat Rafter Arena to determine if any building movement occurred, but no structural movement was found to be evident.

Closure of the centre

15. Due to the extent of damage and loss of critical services, such as electrical, mechanical and fire services, the QTC was closed immediately following the flood and all tenants vacated the centre until temporary electrical and fire services could be installed to their tenancy areas. Following cleaning of the court surfaces and testing for biological contaminants, the outdoor hard courts, along with the Tennis Qld offices and UQSport Pro Shop and Court Hire services, reopened for public use on 7 February 2011. The four clay courts and two grass courts are still closed due to the extensive damage sustained. Centre Court on level 1 of the Pat Rafter Arena has also not been reopened due to reconstruction works in the immediate vicinity.

Clean-up efforts required

16. The clean-up process commenced as soon as the flood water receded and was in full operation within two to three days. The clean-up involved numerous contractors and approximately 20 to 30 QBuild staff and lasted for approximately three weeks. A significant amount of building debris and damaged equipment was dumped off site and cleaning staff were hired in to pressure clean large areas of the Arena including the fixed seating that went under water. The clean-up phase cost approximately \$750,000.

Remediation works required

17. Substantial remediation and reconstruction works are required at the QTC following the flood and is expected to cost approximately \$5 million. All internal fitout of level 1 of the Pat Rafter Arena has been removed and needs to be rebuilt, including all walls, ceilings, floor treatments, electrical, mechanical, communication and fire services, security infrastructure, IT infrastructure, built in joinery, furniture, plant and equipment. Significant portions of landscaping and irrigation also required replacement. The majority of horticultural equipment and workshop tools were also replaced. Lift services required extensive reinstatement works. Four clay courts and two grass courts are yet to be completely resurfaced. The Quantity Surveyor's report noted in 3b above provides full detail of the works required.

Any additional mitigation works proposed to protect the centre

- 18. Measures will be taken during the reconstruction of the damaged areas of the QTC to assist in mitigating the potential damage from future flood events. These measures include the protection of electrical switchboards by raising above the flood level or bunding their enclosures, the construction of new partitions with flood resilient materials such as concrete blockwork and moisture resistant wall linings and the use of tiles and painted membrane floor finishes. The air conditioning plant will be raised to the extent possible to provide a greater level of flood resistance. Amendments will also be made to the FERP regarding procedures for a greater extent of relocation of furniture and equipment to higher levels of the centre in the event of a major flood.
- 19. The immediate priority for SQ is to oversee the reconstruction of the QTC in time for the 2012 Brisbane International Tournament.

Any long term impacts on the site.

20. There are no long term impacts on the site. All damage caused by the 2011 flood event can be rectified.

Any further investigations, reports or advice received regarding the flood risk of the Queensland Tennis Centre or the effect of flood on the Queensland Tennis Centre since the January 2011 floods.

21. No further investigations, reports or advice have been commissioned or received by Stadiums Queensland regarding flood risk/effect at the QTC since the January 2011 flood. The consultant team involved with the reconstruction of the centre is considered to have sufficient expertise to ensure that all measures considered prudent to avoid or minimise the effect of future flood events will be implemented during the reconstruction.

I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the *Oaths Act 1867*.

Signed Ian James Whitehead

day of Settles 2011.

Taken and declared before me, at Brisbane this

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Solicitor/Barrister/Justice of the Peace/Commissioner for Declarations