



Queensland Flood Commission of Inquiry

Immediate Impact and Suggested Planning Responses – CBD Hotel Sector

Introduction

The January 2011 flooding of parts of the Brisbane Central Business District (CBD) came towards the end of a very wet spring and extensive prior flooding and inundation in other parts of Central and South Eastern Queensland. Consequently, by the time the serious flooding reached Brisbane around 11 January 2011 and afterwards, the level of awareness of Brisbane CBD leaders and occupants about the potential damaging and harmful effects of flooding had been considerably raised. Notwithstanding this, when the Brisbane River commenced to rise strongly on 10 and 11 January, it is fair to say that the suddenness and extent of the subsequent flooding took many outside the emergency response community by surprise.

It was probably only after the Premier issued a Disaster Declaration for Brisbane on 10 January 2011 that business leaders and site managers began serious, practical preparations for flood response.

The Brisbane CBD Hotel 'scene'

Hotels are categorized as 'accommodation' or 'trading' hotels based on the nature of their business. Although all retail traders in Queensland were adversely affected by the floods, the major impact of the Brisbane floods on CBD hotels was in the accommodation hotel sector. The following hotel properties were directly affected by the Brisbane River flooding of the CBD:

- Stamford Plaza Brisbane, Edward Street – seriously flooded, basement and ground floor flooding, forced to close for more than 100 days;
- Royal on the Park, Alice Street – modest flooding – evacuated and closed for several days;
- Port Office Hotel, Edward Street - very minor flooding, closed for several days due to street closures and electricity grid shut-down;
- Victory Hotel, Edward Street – closed for several days due to street closures and electricity grid shut-down;
- Pig & Whistle (hotel business), Eagle Street – closed for two weeks due to street closures and electricity grid shut-down;
- Marriott Hotel, Queen Street – evacuated and closed for several days due to basement flooding and electricity grid shut-down;

- Fridays, Eagle Street - closed for several days due to street closures and electricity grid shut-down;
- Jade Buddha, Eagle Street - closed for several days due to street closures and electricity grid shut-down.

Almost all other hotels located East of Queen Street experienced significant business disruption associated with a combination of street closures, electricity grid shut-down in the lower CBD, and general suspension of commercial operations in the CBD in the period 11 to 18 January 2011.

Whilst the commercial impact of this flood-related disruption is not able to be accurately quantified, the loss of hotel revenue directly attributable to this early period of the Brisbane CBD floods is in the order of \$20 to \$25 million.

CBD Hotel property damage

Major property damage was suffered by the Stamford Plaza, whilst modest damage was suffered by several other properties including the Marriott and the Royal on the Park.

- Stamford Plaza – the Stamford Plaza was flooded for three days including the basement level car parks and machinery and equipment installations, and the ground level reception area, restaurants, store rooms, and function areas. Kitchen facilities were extensively damaged, as were lift cars and electronics, floor coverings, wall paneling and fittings. The damage forced the evacuation of the hotel, and its temporary closure for 100 days, involving extensive repair and refurbishment works. The direct cost of this refurbishment works was in the region of \$12 million.
- Other hotels – other CBH hotels suffered minor flood damage including: Marriott Hotel basement car park, storage and machinery areas, Royal on the Park flood damage to floor coverings and wall paneling, Port Office Hotel minor damage caused by installation and removal of flood ingress barriers over doors and windows but no direct water damage, Pig & Whistle flood damage to floor coverings.
- Loss of perishable goods – as major providers of food & beverage products, all hotels maintain several days' stock of fresh and perishable foods, and up to two weeks' supply of beverages. Not all, but a major proportion of fresh and perishable food stocks was lost at CBD businesses due to the closure of the local electricity grid in the Golden Triangle area of the CBD, and other areas extending along Elizabeth, Edward, Albert and Alice Streets. Currently, only the larger hotels have emergency generators in place which supply 'emergency' levels of electricity to vital areas such as refrigeration and lighting – more on this shortly.
- General – apart from those hotels listed, the major economic impact of the floods was the disruption to normal and commercial business which effectively closed the CBD for seven days, and which lowered the tempo of commercial activity for several weeks thereafter.

Electricity Supply

As a safety and maintenance issue, electricity providers cut mains electricity and shut down a number of electricity sub-stations in the CBD as the flooding arrived and intensified. Generally speaking, this was well controlled, and any business staff on the ground were able to receive advice as to the nature, extent and timeframe for such shut-downs from a combination of telephone, Internet, or personal advice from liaison staff on the ground. These electricity shut-downs were the main reason for hotel businesses closing their doors, evacuating and relocating guests, and losing perishable goods under refrigeration. The QHA is not able to make an expert assessment of the relative merits of this grid management, save to say that it appeared to be competently managed, and held in place for only the minimum time required, given the extent of the wider city disruption. In a 'perfect world', electricity grid arrangements could be re-designed such that properties immediately adjacent to the river (and subject to flooding) could be isolated from the grid, thus enabling non-flooding properties (such as the Hilton Brisbane, Quay West, etc) to remain on mains power throughout a flood event which affects only those properties in the 'lower' CBD.

Lessons learned and suggestions for change

It is axiomatic that commercial properties located immediately adjacent to the Brisbane River will be flooded from time to time. This reality is accepted by property owners, who assess that the advantages of the location outweigh the disadvantages. The only practical way to reduce the future impacts of such flood-prone areas is through clever design, and use of flood-resistant building materials, including brick, cement, stone and natural surfaces (there has been some positive publicity about the 'cleverness' of Comalco Place due to design changes triggered by the floods of '74). The hotel sector offers the following observations:

- **Emergency generators and fuel supplies** – the availability of organic emergency electricity generators is seen as essential for large accommodation hotels, and most have them. However, due to their mechanical nature, their noise and fumes signature, and the desirability of a proximate fuel supply, such generators are generally located in the basement or car park areas of commercial properties, or outside, at ground level. This is not smart. When basements and underground car parks were flooded, the generators became unserviceable and suffered damage, and the fuel supply was contaminated with flood water and, in turn, polluted the water. On the other hand, one large hotel in South Brisbane has its emergency generator located on the 18th level, with a fuel tank which holds two hours worth of fuel. Unfortunately, the emergency generators are not powerful enough to supply power to the lifts, with the consequence that, during an extended mains power interruption, straws are drawn to see which staff member will carry the fuel jerrycans up the 18 levels of stairs! It is recommended that emergency generators in flood prone areas be located above the record flood level,

together with sufficient fuel supply to meet the requirements of an extended electricity interruption.

- **Lifts and lift cars** – most lifts become inoperable once mains power is lost. Consequently, prior to this time, lift cars need to be located and locked onto upper floors such that they avoid being damaged in any subsequent flooding. In order to do this, some form of notice or advice in relation to planned and scheduled electricity disconnection is required.
- **Chemical storage and pollutants** – on at least one occasion, a chemical store containing hazardous chemicals was flooded, as was a fuel storage tank used to supply fuel to an emergency generator. In flood-prone areas, these storage facilities should be located above the record flood level.
- **Underground car parks and machinery areas** – these are the areas most prone to flooding. Where feasible, emergency equipment, stores areas, and fuel supplies should not be located in underground car parks which have the potential to flood.
- **Building materials** – although flooding can and does wreck conventional building materials including wood, plaster board, chip board and insulation materials, natural and compacted building materials such as stone, brick, and glass are largely flood-proof and can survive in inundation without major damage. Accordingly, the use of natural and water resistant materials should be encouraged in commercial areas vulnerable to flooding.

Finally

The QHA and its members have been generally impressed by the response of public institutions to the January 2011 floods in Brisbane city. Police, council, emergency services and the SES, and support services such as electricity and gas suppliers, seemed to respond to the emergency and meet their obligations in an orderly, professional and sympathetic manner. In this brief submission we have made a number of cursory and simple observations and recommendations. However, when a major flood occurs in a 'river city' such as Brisbane, preventative measures such as building practices and flood mitigation will only be of limited effect.

Should the Commission wish to seek advice from the hotelier most badly impacted by the Brisbane floods in January 2011, you should contact:


 General manager
 Stamford Plaza Brisbane


For general input or clarification, please contact:

[REDACTED]
Chief Executive
Queensland Hotels Association
[REDACTED]