

## **TARPS AND TILES AND THE FATE OF SLATE:**

### ***THE HERITAGE IMPACT OF THE 1999 SYDNEY HAIL STORM***

#### ***ON THE CITY OF SYDNEY***

## **INTRODUCTION**

“On 14 April 1999, Sydney experienced arguably the most expensive hazard event ever to have occurred in Australia. A supercell thunderstorm traveling up to 44km/hr took 20 minutes to pass at 7:30pm and produced the largest hailstones ever recorded in the Sydney region ... and caused approximately \$1.7 billion in insured loss. A total of 32,000 houses and 43,000 cars were damaged. The SES recorded 25,301 calls for assistance and the Rural Fire Service received 19,437 calls.”<sup>1</sup>

“Major hail damage occurred across 85 suburbs with building windows, roofs and skylights extensively damaged.....

Hail size: The largest official recorded size was 9cm (measured in Surry Hills); various reports ranged in size from cricket ball to much larger; and an EMA staff member reported seeing isolated hailstones up to grapefruit size and there were at least two reports of rock melon size...

The storm produced gales gusting up to 85km/h .....

Approximately 200,000 tarpaulins (worth \$10m), 9,600km of rope and 280,000 sandbags were fitted to roofs of buildings as a temporary repair measure by almost 15,000 volunteers & emergency workers over the period of the emergency response operation which lasted for over a month. Over \$2m was spent on hire of hardware tools and equipment and estimates put the total number of tiles requiring replacement at 20,000,000.”<sup>2</sup>

The hailstorm occurred when South Sydney City Council existed as a separate entity (later amalgamated into the City of Sydney). The area covered by the then South Sydney City Council was the worst affected area – in this area over 6,274 households were affected, primarily through roof damage. The Council’s main administration office building’s roof was badly damaged and the building was unusable (note: this building was later demolished), and 43 Council-owned buildings including town halls, libraries, child care and community centres sustained damaged with repair bills ranging up to \$71,000 per building.<sup>3</sup>

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<sup>1</sup> Australian Government Geoscience Australia website  
<http://www.bom.gov.au/weather/nsw/sevwx/14april1999.shtml>

<sup>2</sup> <http://www.ema.gov.au/ema/emaDisasters.nsf>

<sup>3</sup> Costing from Council file

In fact, many buildings still remained with tarps on their roofs, waiting for slate, at the end of 1999, particularly in the Centennial Park area. A few buildings, such as Ashton<sup>4</sup>, remained for years with tarps on their roofs.



6 Martin Road, Centennial Park  
(December 1999 photo from Centennial Park Conservation Areas Study)

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<sup>4</sup> Ashton, 102 Elizabeth Bay Road, Elizabeth Bay, listed as a heritage item on the local LEP and also on the State Heritage Register, remained with tarps on its roof until this year, its roof only now being repaired, 8 years on.



No. 8 Martin Road, Centennial Park  
(December 1999 photo from Centennial Park Conservation Areas Study)

The Sydney City Council area contains a total of 2934 heritage items and 54 conservation areas. Of the heritage items, 391 are on the NSW State Heritage Register (which is 26% of all buildings listed on the State Heritage Register, in a single Council area).

The three suburbs which this paper looks at in some detail are Centennial Park, Surry Hills and Redfern. These suburbs are largely covered by conservation areas and contain, respectively, 62, 260 and 126 heritage items.

## **HERITAGE AND THE RECOVERY EFFORT – THE OFFICIAL ACCOUNT**

On 23 April 1999 the NSW Minister for Emergency Services established The Southern Sydney Recovery Task Force, which was set up “as a joint State Government/private sector organization”<sup>5</sup> to co-ordinate and manage the recovery works for all properties damaged by the hailstorm, following the emergency response period. The Taskforce set itself a six-month target of completing all repair works by 12 November 1999. The six-month target was considered to be achieved, and “In fact, 90% of all roofs were repaired by the end of August 1999.”<sup>6</sup>

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<sup>5</sup> Page 15, The 1999 Sydney Hailstorm: the work of the Southern Sydney Recovery Task Force, Southern Sydney Recovery Task Force, December 1999

<sup>6</sup> Page 6, *ibid*

The Taskforce produced a report at the conclusion of its work in December 1999, outlining its work and making recommendations for the future management of similar disasters.<sup>7</sup>

The Task Force included representatives of government and industry groups, including the then Dept of Public Works & Services (DPWS), Dept of Community Services (DOCS), Dept. of Housing, Dept. of Fair Trading, WorkCover, the insurance industry, Master Roof Tilers Association.

Notably, the Taskforce did not include any specific heritage representatives – for example any representative from the NSW Heritage Council - though it should be noted that some of the then DPWS people had heritage conservation experience.

The Taskforce co-ordinated repair of public buildings and assisted in coordination of repair of some residential properties, depending on insurance status of the properties: the Taskforce coordinated repairs to uninsured properties, but had difficulty coordinating repairs with insurance companies with regard to insured properties.

“Often the most time consuming aspect of the facilitation and co-ordination work which the Task Force performed on insured properties was that of resolving problems before the repair could commence. These problems were many and varied, ranging from disputes over the assessed damage to disputes over the degree of cover that the insurance policy provided through to problems with material and labour supply and difficulties with tradesmen.”<sup>8</sup>

### **Heritage roofing issues**

In terms of property damage, “The primary damage done by the hailstorm was to the roof structures of residential properties and public buildings....A compounding factor was the age of many of the properties in the hailstorm affected area.”<sup>9</sup> In the then South Sydney Council area the Taskforce estimate was 6,274 households affected (of a total of 20,590 residential properties affected overall). A South Sydney City Council “Fact Sheet” estimated that 92% of households affected were insured and that 112,000 insurance claims were lodged.

One of the roles of the Taskforce, with particular relevance to heritage issues, was in ensuring supply of appropriate roofing materials, most particularly

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<sup>7</sup> The 1999 Sydney Hailstorm: the work of the Southern Sydney Recovery Task Force, Southern Sydney Recovery Task Force, December 1999

<sup>8</sup> Page 29, *ibid*

<sup>9</sup> Page 12, *ibid*

terracotta tiles and slate. The Taskforce determined that of roofs damaged roofing materials requirements fell into the following percentages<sup>10</sup>:

Terracotta roof tiles	70%
Concrete roof tiles	13%
Metal roofs	12%
Slate	5%

The Taskforce held meetings with terracotta roof suppliers and arranged for roof tiles to be brought in from Western Australia and Italy to supplement local supplies. The Taskforce subsidised non-local tiles to ensure price parity.

The Taskforce determined that “most of the damaged slate on roofs was originally sourced from Penrhyn Quarry in Wales....replacement and repair using the same Penrhyn Quarry was the only acceptable solution in the majority of cases. ..As a result of the [Taskforce] work on slate, ultimately sufficient supplies of slate, mainly from Penryhn in Wales, were identified and started to enter the supply pipeline...Also though the situation would be tight, there would be sufficient slate fixers available, particularly as 12 slate fixers travelled from the U.K. to Australia to participate in hailstorm repair work.”<sup>11</sup>

## **HERITAGE & THE RECOVERY EFFORT – MATERIAL IMPACT, 8 YEARS ON**

An interview with John Poulton, then Heritage Planner at South Sydney City Council, revealed that the two Heritage Planners at the Council in the aftermath of the hail storm concentrated on heritage items and that they looked at hundreds of properties to advise owners with regard to roof repairs (note not thousands). Council resources were clearly an issue here.

The Council letterboxed an emergency flyer in April 1999 (n.d., presumably the week following the hailstorm). This flyer included a section titled “Special information for roof repairs and replacements”. This section stated: “If your property is not a heritage item or is not in a conservation area the replacement or repair of existing roofs will not require Council approval...For properties that are heritage items or within conservation areas you may not require Council approval for minor repairs, if repaired in the same material. Any change in the roof material or replacement of the existing roof will require Council approval...Any works which involve an extension to a roof or a change in the form or shape of a roof, irrespective of whether or not you are a in a conservation area, will require Council approval”<sup>12</sup>

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<sup>10</sup> Page 22, *ibid*

<sup>11</sup> page 25, *ibid*

<sup>12</sup> April 1999 South Sydney City Council flyer titled “Council severely affected by storm damage”



Within hailstorm affected conservation areas, particularly in Surry Hills and Redfern, this advice does not appear to have prevented loss of slate roofs, loss of roofing details, re-roofing in inappropriate roofing materials, and even, in some cases, illegal roof extensions undertaken as part of “roof repair” work.



**25 Robertson Road, Centennial Park  
(1999 Photo from Centennial Park Conservation Areas Study)**

In December 1999 many roofs in the Centennial Park Conservation Areas remained to be repaired. Many of these presumably fully insured homeowners, in one of the wealthiest areas of Sydney, were still waiting for Penhryn slate from Wales and the availability of slate roof repairers.

However in Surry Hills and Redfern, by comparing aerial photos from 1998 and 2003, and contemporary photos, a loss of slate and terracotta roofing and roofing detail, including separate verandah and balcony roofs is evident on terrace housing within the Surry Hills and Redfern conservation areas. There is, conversely, now a much greater prevalence of corrugated metal roofing, and also more disparate roofing materials within what were uniform rows of terraces.

Examples of this are:

115-135 Arthur Street Surry Hills – loss of slate roofing, now corrugated metal roofing

23-31 Arthur St Surry Hills – loss of uniformity of unglazed terracotta roofing in the terrace row

406-416 and 418-428 Riley St Surry Hills – loss of unglazed terracotta tile roofing

29-47 Nobbs St Surry Hills, unglazed terracotta tile roofing replaced with disparate roofing materials  
1-33 Richards Avenue Surry Hills – unglazed terracotta tile roofing replaced with disparate materials  
40-54 Baptist Street, Redfern – replacement of roofing with corrugated metal  
Nos. 40-58 Marriott Street Redfern – replacement of roofing with corrugated metal  
Nos. 38-52 Telopea St Redfern – replacement of roofing with corrugated metal  
56-70 Boronia St Redfern – replacement of slate, mostly with corrugated metal roofing

Slate roofs on terrace houses in Surry Hills and Redfern conservation areas are now rare, in contrast to, for example Ultimo/Pymont conservation areas which were not affected by the hailstorm, where slate roofs are still quite evident among the mix of terrace house roofing materials.

In Surry Hills and Redfern the loss of roof detailing is also evident, with the existence and original shape of separate verandah or balcony roofs often only being evident via evidence on fin walls and sometimes through a single terrace in a row retaining the original details.

### **POSSIBLE REASONS FOR DIFFERENCES BETWEEN CENTENNIAL PARK CONSERVATION AREAS AND THE REDFERN & SURRY HILLS CONSERVATION AREAS**

Redfern and Surry Hills conservation areas have high numbers of rental households, where the Centennial Park conservation areas are virtually exclusively owner-occupied. Houses in Centennial Park, even in 1998, were already worth over \$2 million. It is clear that in Centennial Park there was greater attention to repair details by owners to ensure the best outcomes. This is illustrated by the photos taken in late 1999 evidencing Centennial Park owners patiently waiting for slate to arrive, and ensuring, for example, that terracotta shingles were used where they were the original roofing material.

In Redfern and Surry Hills many investors were motivated to ensure secure waterproof roofs at the lowest cost as quickly as possible to minimise inconvenience to tenants. Owner-occupiers in these areas may also have been under-insured, though the extent of this is uncertain.

### **CONCLUSION: LESSONS FOR FUTURE DISASTERS AFFECTING BUILT ENVIRONMENTS OF HERITAGE SIGNIFICANCE**

The Taskforce's Recommendations for further disaster management included the following:

- Any future similar Taskforce be established immediately to allow data collection during the initial emergency response period before the Taskforce was to become fully operational
- The Taskforce name, location and telephone numbers should ensure easy access and no public confusion
- The Operating Model used by the Taskforce should be the benchmark for future disaster taskforces
- Need for an Integrated Communications Plan
- The Insurance Industry should give “unmistakable priority to people’s personal needs over the technical merits of the insurance claims management process.”<sup>13</sup>
- The Insurance industry should “approach the thousands of simultaneous claims generated by a natural disaster as if they were a single, large claim. This would require early adoption of a set of guidelines which essentially mean all claims are dealt with uniformly – almost as a single large claim – rather than micro-assessed on an individual basis. The latter approach frustrates customers and works totally against any effort to co-ordinate and project manage repairs on a large scale, cost-saving basis.”<sup>14</sup>
- “The insurance industry broaden the claims management process into one of delivering customer satisfaction that does not end until the repair is completed and the customer is satisfied. The practise of issuing cheques and thereby deeming a claim closed reflects badly on insurance companies when things go wrong before the repair is completed to the policy holder’s satisfaction. The insurance industry should remain involved until the repair is complete and their customer is completely satisfied.”<sup>15</sup>
- Building contractors need to improve their relationship with the insurance industry, and should work in partnership with the insurance industry to affect repairs

In relation to natural disasters affecting areas of heritage significance, the following recommendations should also be made:

- Any Recovery Taskforce needs to include Heritage experts, for example, from a State-level heritage body;

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<sup>13</sup> Page 8, *ibid*

<sup>14</sup> page 9, *ibid*

<sup>15</sup> page 9, *ibid*



- Clear information and guidance about the retention/replacement/repair of heritage buildings needs to be disseminated not only to homeowners, but also to the building industry and the insurance industry. The insurance industry should have a role, with homeowners, in ensuring that repairs are affected adequately and without unnecessary damage to original detailing.
- In the case of the 1999 Sydney hailstorm, the local Councils in the worst affected area, particularly the South Sydney City Council area, would have been assisted by the temporary secondment of heritage experts from state level bodies to assist in providing heritage advice to home owners and the building and insurance industries.

It is clear that the hailstorm recovery effort was exemplary in terms of securing roof repairs to virtually all affected buildings within 6 months of the disaster, and also in terms of the care taken with the retention, repair or appropriate replacement of the heritage fabric of the roofing of public and institutional buildings. However, it appears that private terrace housing did not receive adequate attention in terms of heritage advice. This inadequacy is evidenced by the effect on terrace house roofing in the Surry Hills and Redfern conservation areas.

It also appears clear that the insurance industry needs to pay attention to the recommendations from the Recovery Taskforce, to co-ordinate its approach to such disasters, not to microassess every individual claim, but to treat claims arising from such disasters in a consistent, uniform manner, and hopefully also in a manner that recognises the heritage significance of particular materials and the need for repair or replacement using appropriate materials, despite the extra cost that this may involve.

## **REFERENCES**

### **Written**

The 1999 Sydney Hailstorm: The Work of the Southern Sydney Recovery Task Force, December 1999

South Sydney City Council flyer "Council severely affected by storm damage" April 1999

### **Interviews with people involved in post-hailstorm recovery**

John Poulton, Heritage Specialist, City of Sydney  
Leon Martens, NSW Dept of Commerce

