

# PROGRAM

#### SUMMARY

The 2017/18 Program Achievements report demonstrates another successful year for the Minister's Stonework Program (MSP) in conserving the state's heritage significant public stone buildings and structures. The MSP is an ongoing Government Funded Program (GFP) managed by NSW Public Works Advisory (PWA) with construction delivery by Heritage Stoneworks (HSW) and aims to assist state government agencies to meet their asset management obligations.

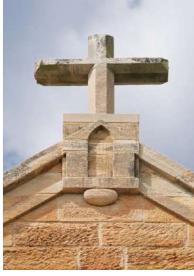
For the 17/18 year the Treasury allocation was \$6,671,864. We worked in funding partnership with the Department of Education, TAFE, Health and NPWS, who contributed \$4,908,362, resulting in a total MSP budget of \$11,580,226.

Fourteen major projects were undertaken to address backlog maintenance that included seven schools, three hospital sites, the State Library NSW and NPWS tourist facilities.

Heritage Asset Advisory (HAA), PWA, collaborated with private sector heritage architects, engineers, historians and consultants to document and strategically prioritise a state-wide forward plan.

Education and training continued with heritage awareness regional workshops for local councils and regional Public Works Advisory staff to improve the practice of heritage and stone conservation.

A major feature of 2017/18 was the (HSW) acquisition of Yellowblock sandstone for the Minister's stockpile to be used as replacement stone for highly weathered and structurally unsound stone. The stone was harvested from a development site in Pyrmont, located close to the original quarry where many of the States public buildings stone was sourced around 150 years ago.



St Bernards Church, Hartley Historic Village

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#### MINISTER'S STONEWORK PROGRAM

#### 2017-18 INITIATIVES & FUTURE PLANNING

# TRAINING

HERITAGE AWARENESS In-house continuing education and training is a key MSP objective to assist in achieving the best conservation and compliance outcomes.

> The Workshops comprised the whole MSP team and included architects, heritage specialists, masons and other specialist tradespeople as well as project managers and tradespeople and project managers.

> Topics included an introduction to the Burra Charter, Heritage Obligations, compliance and approvals, developing a Conservation Approach, Managing Heritage Projects and case studies.

#### REGIONAL HERITAGE WORKSHOPS AND **CLINICS**

Continuing on from 2016/17, HAA held workshops in regional locations with local and state government representatives and interested community groups.

The workshops took place in Dubbo and Newcastle and covered the principles of cultural heritage conservation as well as legislative compliance.

The clinics allowed participants to share their current heritage building challenges and HAA provided practical technical and design options.



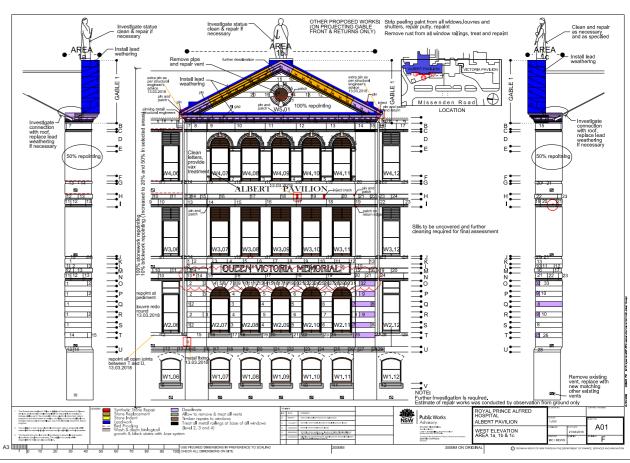


#### FORWARD PLANNING DOCUMENTATION

Documentation of projects included in the MSP forward plan provided essential pre-construction information for strategic planning. Documentation projects in 2017/18 included:

- Fort Denison Barracks
- Schools Forward Planning Report
- State Library NSW bronze
- Berrima Public School
- Brewongle Learning Centre
- Greta Public School
- RPA Hospital Albert Wing measured drawings
- Catherine Hayes Bldg, POW Hospital

- Gardener's Rd Public School seismic stabilisation
- Sydney Hospital Conservation Management Plan
- Philip Fountain, Royal Botanic Gardens
- Ryde Hospital Denistone House & Stables
- Building W Ultimo TAFE



# **NATIONAL TRUST AWARDS**

SHORT LISTED

JERRYS PLAINS PUBLIC SCHOOL

The Jerrys Plains Public School stonework conservation project was shortlisted for a National Trust Award in 2018.

Located in the Hunter Region, the project demonstrated a high degree of technical skill in addressing long term rising damp damage and poor site drainage. Extra care was required to match the original stone pointing, made from local sands.

Repairs included seismic stabilisation, replacement of deteriorated sandstone, maintenance of rainwater goods and improved site drainage.



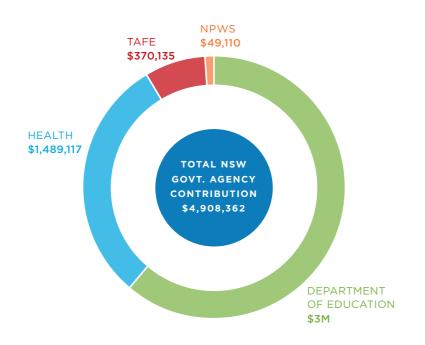




#### **WORKING IN**

#### **PARTNERSHIP**

The Minister's Stonework Program coordinates stonework conservation works with state government agencies to increase cost and time efficiencies by also undertaking associated façade repairs. Agency co-contributions in 2017/18 totalled \$4,908,362. The Part-nership Funding Agreements provided external building repairs in addition to stonework, such as roofing, rain water goods, timber repairs, painting and seismic stabilisation. This collaboration was further enhanced by the 'do and charge' non-profit construction delivery provided by Heritage Stoneworks.





#### MANAGING

#### **PUBLIC SAFETY RISK**

Sandstone building façade elements such as high gable copings, overhanging cornices and string courses are vulnerable to deterioration caused by environmental factors including coastal salt laden air and rain, and wind erosion. Poor maintenance practices such as faulty rain water goods and repointing mortar joints in cement rich mixes accelerate masonry deterioration.

Many public stone heritage buildings have had little maintenance in over 100 years and managing risk of falling stone is a priority for the Minister's Stonework Program. During a safety audit the facades are inspected from an elevated working platform by an experienced team of heritage architects and consultants, stonemasons and structural engineers. Loose and potentially dangerous stone is removed as a temporary measure to reduce the public safety risk. The scope of repairs are documented and cost estimates are prepared for forward planning.

The budget for the 2017/18 safety audits was \$164,152 and comprised six sites; Darlinghurst Public School, Croydon Public School, Green Square School, Gardeners Rd Public School, National Art School and Ultimo TAFE Building W.



Removal of loose stone during a Safety Audit



Temporary stabilisation of upper areas at risk of falling, Newcastle TAFE Hunter St Campus



A selection of the MSP 2017/18 projects are featured in the following project sheets:

Bega Public School

Bowral Public School

Erskineville Public School

Gladesville Hospital, Building 38

Gladesville Hospital, Punt Rd Gateway

Glebe Public School, Stage 1

Hartley Village

Newcastle TAFE, Stage 1

Royal Prince Alfred Hospital

Sydney Hospital, North Block Area 9

Woollahra Public School, Final Stage

the former Trades Hall building provides a rare example of a polychrome brickwork facade with a nineteenth century classical ornate cement render decorative trim



## **BEGA** PUBLIC SCHOOL



Bega Public School has a group of three buildings which retain their character as a 1880-1890s Victorian School complex. The buildings provide a picturesque and unified streetscape and the school is listed as a heritage item on the Bega Valley Local Environmental Plan. Block C is a one storey brick and stone building designed by William Kemp. The building has a symmetrical façade with forward projecting end wings and a central seven bay loggia. A tall belltower surmounts the central entrance. Building C was identified as a Priority 1 building in the Minister's Stonework Program 2013 'Schools Stonework Strategy', based on the potential risk to public safety in the event of seismic activity (Australian Standard 1170.4 - 2007).

Façade repairs commenced in 2016/17 and were completed in 2017/18. Works included seismic stabilisation of 3 chimneys, 4 gables and the bell tower. Highly weathered sandstone window sills, corbels and chimney caps were replaced. The masonry was cleaned using low pressure water and protective lead weatherings were installed over the stone cornice. Open and eroded brickwork mortar was repointed, timber windows were repaired and repainted. Stormwater lines were unblocked and roof drainage improved to protect the masonry from future water damage. Metalwork repairs were carried out on the bell and its hanging mechanism.

Agency | Department of Education

Location | 27 Auckland St, Bega NSW

2017/18 Expenditure | \$611,688

(\$311 MSP/ \$300,000 DoE)

Replacement Stone Source | Appin Sandstone, quartz rich



**Top image:** Bega PS during facade and chimney repairs **Lower Image:** Replacement of damaged stone window sill



## **BOWRAL PUBLIC SCHOOL**



Bowral Public School is listed on the Wingecarribee LEP as a heritage item. Cricketer, Donald Bradman, attended this school from 1913 to 1922. Building No.2 was constructed of brickwork with sandstone detailing in 1893. The building was identified in the Minister's Stonework Program 2013 'Schools Stonework Strategy' as a Priority 1 project based on the poor condition of the sandstone above the entry and the risk to public safety.

The primary cause of sandstone deterioration was due to water damage caused by deteriorated roofing and associated flashings and rainwater goods. This caused the stone to deteriorate and erode the mortar from the joints. The Department of Education replaced the roof in 2016.

Repairs to the building included replacement of deteriorated cornice stones over the main portico entry, installation of protective lead weatherings, repointing of mortar joints and desalination.

Works carried out at Bowral Public School have enhanced the stability, condition, appearance and civic pride of the school and ensure the building is conserved for future generations. Agency | Department of Education

Location | Bendooley St, Bowral NSW

2017/18 Expenditure | \$311,928
(\$121,928 MSP/ \$190,000 DoE)

Replacement Stone Source | Appin Sandstone, quartz rich (2.4m³ gross)



**Top image**: The sandstone entry was originally sourced from a local quarry **Lower Image**: Detail of the stone entry

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## **ERSKINVILLE PUBLIC SCHOOL**



Erskineville Public School was established in 1882 and is the oldest and largest public building in the area. It was one of the first large schools built as a result of the Public Instruction Act 1880 and designed to be an expression of the status and value of government education. It is a good example of a Victorian Free Classical style school, and is a local landmark and important streetscape element.

The MSP carried out a safety audit in 2017 and 50kg of deteriorated sandstone at risk of falling was removed from Block B. Identified as a Priority 2 school in 2013, the school was raised to a Priority 1 for urgent work, including removal of unstable heavy steel grilles and serious deterioration of the brickwork.

Conservations works included replacement of stone window sills at ground and upper levels, repointing of open and eroded masonry joints and stone desalination. The embedded metal wall ties within the brickwork were corroded and causing movement and cracking. Substantial remedial works were required to dismantle brickwork, renew the wall ties and re-build. Repairs to internal brick skin and finishes were also required.

The scaffold was utilised to carry out associated façade repairs including refurbishment of the original sash windows and repainting.

Agency | Department of Education

Location | Swanson St, Erskineville NSW

2017/18 Expenditure | \$311,928
(\$121,928 MSP/ \$190,000 DoE)

Replacement Stone Source | Yellowblock

Sandstone (200 George St), (8.63m<sup>3</sup> gross)



**Top image**: Block B following facade renairs

**Lower Image**: deteriorated high level stone window sill prior to repairs



## **GLADESVILLE HOSPITAL BUILDING 38**



Building 38 at Gladesville Hospital is a state significant building designed by Colonial Architect Mortimer Lewis and constructed in 1839. The south stone portico is believed to be the first use of the ionic capital in the colony. The Minister's Stonework Program has worked in funding partnership with the Department of Health since 2015/16 on a rolling program of repairs to Building 38. The focus of the 2017/18 scope of works was to achieve a secure, water tight and structurally sound building, with external repairs planned for 2018/19.

This year stormwater and drainage investigations were undertaken to address basement flooding and damp problems. Copper gutter and downpipe repairs were undertaken. Redundant basement services were removed and sympathetically designed security bars were installed.

Many of the sash timber windows were rotten and extensive repairs and repainting was carried out. Additional works included timberwork painting and glazing repairs. A structural assessment of the internal floors and stability of the stone walls was completed.

Agency | Department of Health

Location | Victoria Rd, Gladesville NSW

2017/18 Expenditure | \$656,501

Replacement Stone Source | Appin Sandstone, quartz rich

(\$313,596 MSP/ \$342,905 Health)



**Top image**: South elevation during facade repairs

**Lower Image**: Facade windows prior to prepairs

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## **GLADESVILLE HOSPITAL PUNT ROAD GATEWAY**



The Gladesville Hospital complex is a site of exceptional heritage significance. Punt Road Gate 1 was once the main entrance to Gladesville Hospital. Constructed in 1872, the gateway contributes to the overall heritage significance of the hospital and is listed as a heritage item on the Local Environment Plan.

The gateway is made up of four sandstone decorative piers. The wrought iron gates consist of two pedestrian gates and two larger vehicular gates. Following years of repeated damage caused by vehicular impact, a wider configuration was designed to safeguard the stone piers from future damage.

Works commenced in 2016/17 and included relocation of the existing piers to provide a slightly widened entry, sandstone repair and replacement of damaged stone and conservation of the existing wrought iron gates. The gates were extended to allow for the wider entrance and associated metal support posts, hinges and locking mechanism were fabricated and installed.

The roots of adjacent casuarina trees were causing damage to the stormwater system and potential movement of pier footings and the trees were removed. Poor quality guttering and stormwater pits were ungraded and new pipes installed to connect with street stormwater pits. Adaptation of the Punt Rd entry has provided long term protection of the significant heritage fabric and enhanced the practical use of the gateway.

Agency | Department of Health Location | Victoria Rd, Gladesville NSW 2017/18 Expenditure | \$322.028 (\$210.808 MSP/ \$111.220 Health) Replacement Stone Source | Yellowblock Sandstone (200 George St)



following repairs

# **Top image**: Punt Road Gateway Lower Image: Punt Road Gateway stone pier prior to repairs



## **GLEBE PUBLIC SCHOOL STAGE 1**



Glebe Public School is listed as a heritage item on the City of Sydney Local Environmental Plan. The School is located in the Glebe Point Road Heritage Conservation Area. Block B is a two storey brick and sandstone building designed by William Kemp, the Department of Public Instruction Chief Architect, in the "Simple Classic Style" and constructed in 1884.

A Safety Audit was carried out on Block B by the MSP in June 2017, where 30kg of deteriorated, loose and potentially dangerous stone was removed from high wall areas located over playgrounds and public areas.

Stage 1 façade conservation works commenced in 2017/18 and will be completed in 2018/19. The scope of works included replacement of deteriorated high level stone façade elements such as the string course and decorative carvings.

Poor quality downpipe detailing was causing damp damage to the lower stone walls and drainage repairs were carried out prior to stone repair and replacement. To maximise the use of scaffold access, timberwork repairs were carried out on all windows, doors, gable bargeboards, eaves and soffits. Additional works included stonework desalination, synthetic stone patching, installation of bird proofing and biocide treatment. The cement rich mortar was carefully removed and stone and brick walls were repointed with a more permeable mix to allow the joints to breath and prolong the life of the stone and bricks.

Agency | Department of Education Location | 9-25 Derwent St, Glebe NSW 2017/18 Expenditure | \$1.304.281 (\$204.281 MSP/ \$1.100.000 DoE)

Replacement Stone Source | Yellowblock Sandstone (200 George St), (41.85m<sup>3</sup> gross)



Top image: Façade following completion of repairs Lower Image: Detail of damaged stone prior to repairs



## HARTLEY HISTORIC VILLAGE



Located on the western edge of the Blue Mountains, Hartley is a highly intact nineteenth century village that consists of a fine ensemble of government, church, hotel and residential buildings. The Hartley Historic Site is listed on the State Heritage Register and is highly significant for its close association with early settlement west of the Blue Mountains, for its role as an early government administrative centre and for its having been a wayside service centre over a lengthy period. The village has an extremely high level of intactness and it contains a rich range of building forms, materials and architectural styles. The MSP received a National Trust award for the Hartley Court House conservation works completed in 2011.

In 2016/17 MSP completed a condition assessment and documentation on three buildings; St Bernard's Presbytery (c.1845), The Royal Hotel (1846) and Church (c.1842). Conservation works commenced in 2016/17 and were completed in 2017/18. The scope of works included replacement of deteriorated sandstone, repointing of eroded and cementrich mortar joints with a permeable lime based mortar and structural stabilisation of stone walls and structural timber members.

Hard cement render had trapped moisture and salts and caused the stone to decay. The render was removed and the stone desalinated. The hotel had long term rising damp problems which caused stonework deterioration and this was addressed with extensive site drainage improvements.

Agency | NPWS

Location | The Old Bathurst Rd, Hartley NSW

2017/18 Expenditure | \$409,272

(\$409,272 MSP)

Replacement Stone Source | Appin Sandstone, quartz rich



**Top image**: Hartley Presbytery **Lower Image**: St Bernards Church following repairs



## **NEWCASTLE TAFE STAGE 1**



The Newcastle Technical College site in Hunter Street is of state significance. The former Trades Hall (1895) and Technical College (1895) represent two of the most important institutions to develop in the late nineteenth century - the trade union movement and state-sponsored technical education. These institutions played a significant role in the life of Newcastle and their impact extended to the state as a whole.

William Kemp designed the Technical College, in the Federation Romanesque style with Romanesque arches, polychrome brick-work, terracotta tiled gables and sandstone carved Australian flora and fauna. The former Trades Hall building was designed by Ernest Yeomans, adopting a free interpretation of classical composition and decoration. Its polychrome brick façade features richly moulded cement render.

Little maintenance had been carried out on the façade over the life of the buildings. Major seismic strengthening was undertaken following the 1989 Newcastle earthquake. A MSP Safety Audit was completed in 2012 where 30kg of high level loose stone was removed from the facades. An additional 50 kg of potentially dangerous stone was removed during the July 2017 MSP Safety Audit.

Due to funding constraints façade conservation works have been staged over three years, commencing in 2017/18. This year's scope of works included replacement of deteriorated sandstone, installation of protective lead weatherings, repairs to rotten timber joinery, restoration of the decorative terracotta tile panels and repointing of stone and brick mortar joints.

Agency | TAFE

Location | Hunter St, Newcastle NSW 2017/18 Expenditure | \$1.171.885

(\$811,885 MSP/ \$360,000 TAFE)

Replacement Stone Source | Yellowblock
Sandstone (200 George St), (19.16m³ gross)



**Top image**: Completed Hunter Street facade

**Lower Image**: Stone and terracotta tiled gable during repairs

brick mortar joints



## ROYAL PRINCE ALFRED HOSPITAL



The Victoria and Albert Pavilions The Victoria and Albert Pavilions form part of the Royal Prince Alfred (RPA) Hospital Precinct. These three storey buildings are located on either side of the Administration Building in Missenden Road, Camperdown. Designed by the Government Architect Walter Liberty Vernon in the Federation Free Classical style, the buildings are listed on the State Heritage Register and are of high historical and architectural significance. Both pavilions have a projecting bay with tall sandstone pediments surmounted by a copper clad statue of Queen Victoria (southern pavilion) and Prince Albert (northern pavilion). Constructed 1901–1904 of load bearing red brick walls with sandstone dressings, the elevations are punctuated by regular banks of timber louvred windows.

The MSP carried out a Safety Audit of the Victoria Pavilion in 2009 and 40kg of loose and potentially dangerous stone was removed. Conservation works commenced in 2016/17 and this year extensive repairs were undertaken on the two stone pedimented gables and the Victoria Pavilion wings. Over 60 timber bifold window louvres had significant rot and were repaired and repainted. Works also included sandstone replacement, stone and brick repointing, and cleaning, synthetic stone repair, protective lead weatherings and installation of bird proofing.

To utilise the scaffold access and maintain the significance of the buildings the Queen Victoria and Prince Albert copper statues were conserved. The large façade bronze lettering was treated and the gold leaf lettering was re-gilded.

Agency | Department of Health
Location | 50 Missenden Rd,
Camperdown NSW

2017/18 Expenditure | \$1,498,435 (\$748,435 MSP/ \$750,000 Health)

Replacement Stone Source | Yellowblock sandstone (200 George St), (27.32m³ gross)



**Top image**: Victoria Pavilion **Lower Image**: conservation of the copper Queen Victoria statue



## SYDNEY HOSPITAL NORTH BLOCK AREA 9



Sydney Hospital is located within one of Australia's most significant public precincts. and is considered to be of national and state heritage significance. In funding partnership with the Department of Health, a rolling program of façade repairs was undertaken from 2002 – 2009 and 2015 – present. Previous stages of conservation work carried out by the MSP have included the Macquarie Street elevation of the Administration Building (WA 11), the courtyard elevations of the North and Centre Block (WA 7 and WA 5), south elevation of the South Block (WA 1a) and the south kiosk building on Macquarie Street.

Conservation works commenced on the North Block Macquarie St façade in 2016/17 and continued in 2017/18. Tall sash windows are an important feature of the Hospital design and many original window frames survive. This year timber joinery repairs and painting were completed on the north tower (Area 8c, 9a & 9b). Replacement of deteriorated high level stone units was completed on Area 9c and protective lead weatherings were installed on overhanging cornices.

The cast iron balustrades are a major element of the facades and there was evidence of corrosion which has led to paint failure and damage to stone where the metal fixings have expanded and caused the stone to crack. The balustrade was removed and treated off-site in 2016/17 and reinstalled in 2017/18.

Agency | Department of Health

Location | Macquarie St, Sydney NSW

2017/18 Expenditure | \$1,249,522

(\$999.522 MSP/ \$250.000 Health)

Replacement Stone Source | Yellowblock Sandstone (200 George St), (0.85m³ gross)



**Top image**: Sydney Hospital North Block Macquarie Street façade following conservation works

**Lower Image**: Damaged high level stone prior to repairs

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# WOOLLAHRA PUBLIC SCHOOL FINAL STAGE



Woollahra Public School is one of the oldest public schools in Sydney and opened in 1878. The school is listed as a heritage item on the Woollahra Council Local Environmental Plan 2014 and three of the buildings, the Barton Building (1877), Chisholm Building (1899) and the Centenary Building (1977), have sandstone features.

The 2013 'Schools Stonework Program' report identified the Barton Building as being a Priority 1 school with highly deteriorated stone at risk of falling from the façade. Following this a MSP Safety Audit was carried out in 2014 and 35kg of loose stone and potentially dangerous stone was removed from the upper cornice Façade conservation works commenced in 2016/17 and were completed in 2017/18.

This year the final stage of works were carried out on the north and west elevations. The works included replacement of deteriorated stone, repointing of brick and stonework and installation of protective lead weatherings.

By utilising the scaffold access, associated façade repairs were carried out effectively and efficiently. Timber sash windows were repaired and repainted. Poor quality rainwater goods were replaced and repaired. The scope and quality of works has provided a long term, cost effective durable solution and enhanced civic pride for the school and local community.

Agency | Department of Education

Location | Forth St, Woollahra NSW

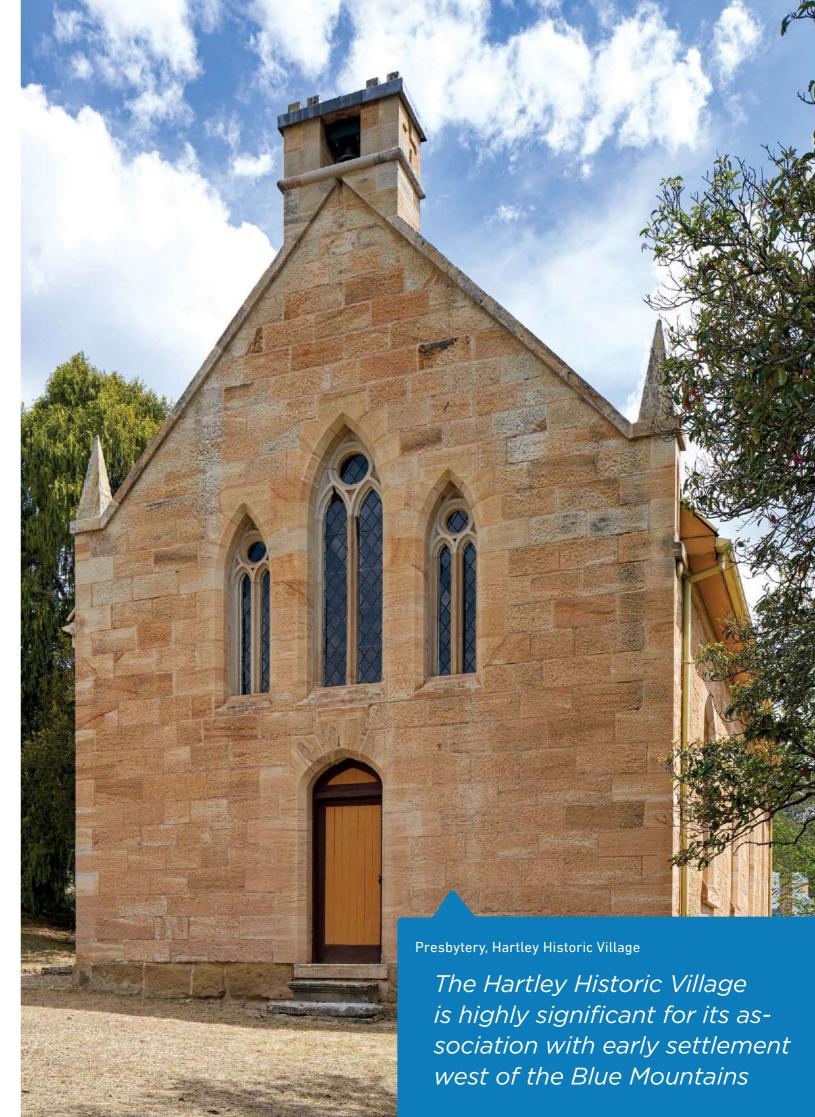
2017/18 Expenditure | \$1,090,155
(\$790,155 MSP/ \$300,000 DoE)

Replacement Stone Source | Yellowblock
sandstone (200 George St)



**Top image**: Barton Building, Woollahra Public School

**Lower Image**: deteriorated upper facade stones before repairs



MSP TEAM EFFORT



