

# 21-22

ANNUAL ACHIEVEMENTS

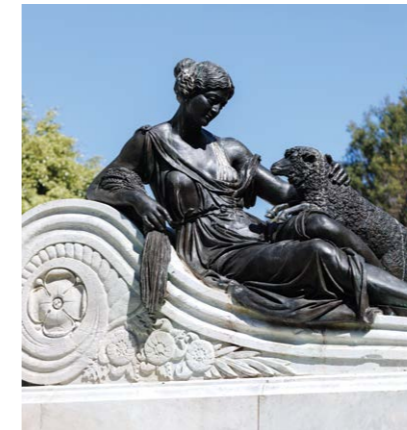
MINISTER'S  
STONEMASONRY  
PROGRAM





## Program Partners

### MESSAGE



Maintenance is an act of care which restores civic pride.

Despite the challenges over the last 12 months of extreme rainfall, supply chain shortages, a new Covid variant and Influenza, the Minister's Stonework Program has delivered its 32nd year of prioritised, restorative repairs to landmark public assets. Many of these assets are still serving the original purpose for which they were built - now a rare category for 19th C buildings. Extending the service life of cultural heritage assets is good for lowering our carbon footprint and for improved wellbeing outcomes. Maintenance is an act of care which restores civic pride. The ritual of care can reveal details and stories that otherwise fade from view and memory - the chequered paint scheme on the dome base of Bathurst Court House, the golden lanterns and carvings on the Callan Park gates, and the coat of arms and convict marks on the walls of the National Art School - inevitably a strong connection forms between the carers and the assets themselves. This is part of what makes this program so special.

**Abbie Galvin**  
NSW Government Architect

**Drew Varnum**  
Executive Director  
NSW Public Works



# Highly Commended National Trust Award

BATHURST COURTHOUSE  
CONSERVATION - BUILT HERITAGE

Completed in 2021 it was the culmination of extensive pictorial and historic research, diagnosis of deterioration causes and the specification of appropriate treatments and scopes of work.

Executed by highly skilled heritage trades (stonemasons, leadworkers, roofers, and carpenters) and overseen by technical heritage specialists to ensure quality outcomes.

Conservation works were carried out on multiple heritage materials, including sandstone, brickwork, render, copper, cast iron, bronze, timber, glazing and the pediment clock.

The conservation works have provided positive protective measures to significant fabric and contributed to the civic pride of this important landmark regional building.

The process of trials, investigations, samples and quality assurance inspections undertaken during this project have contributed to furthering the industries understanding of best practice conservation methods.





# National Trust Lifetime Achievement Award

BRUCE PETTMAN

From conserving major public buildings in South Australia and New South Wales to restoring historic buildings across Southeast Asia, Bruce has enjoyed a vast and varied career.

He worked with NSW Public Works for nearly 21 years and continues to be involved in heritage on the NSW Heritage Approvals Committee and the Board of the National Trust. Many staff of the former NSW Government Architect's Office and heritage practitioners of NSW have greatly valued his expertise and generosity.

The Lifetime Achievement Award recognises individuals who have demonstrated a lifetime of valuable contribution to the field of heritage conservation and management in NSW.





## Inner West Council Built Environment Awards

CALLAN PARK GATES  
MARRICKVILLE MEDAL FOR  
CONSERVATION - COMMENDED



Proud locals stood shoulder to shoulder with state government staff and the Friends of Callan Park to celebrate the grand opening of the conserved Callan Park gates.

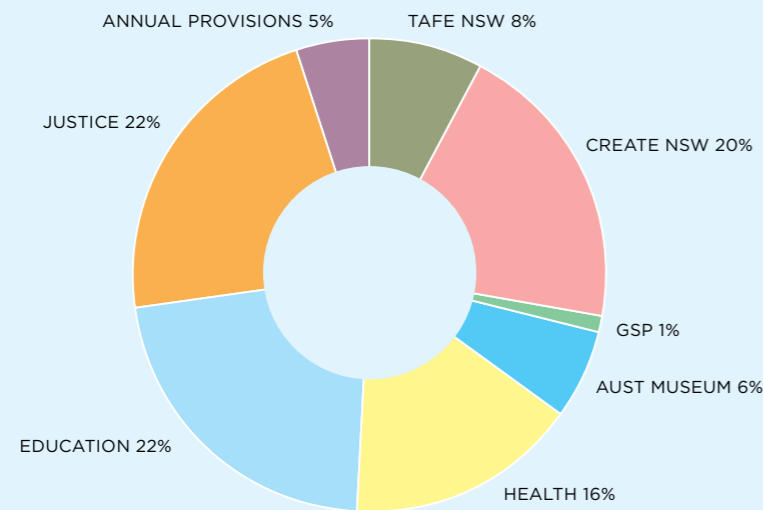
The gates are in a highly visible location and provide the first glimpse into the state significant Callan Park precinct. The Program, in partnership with Greater Sydney Parklands, restored the significant fabric and function of the gates to improve pedestrian amenity and regenerate the original grandeur of the arrival experience.

Alongside the gates, the former 'guardhouse' has also been conserved, lending itself to future use as a kiosk in an enlarged pedestrianised entry plaza.



# Client Relationships

## PROGRAM BUDGET

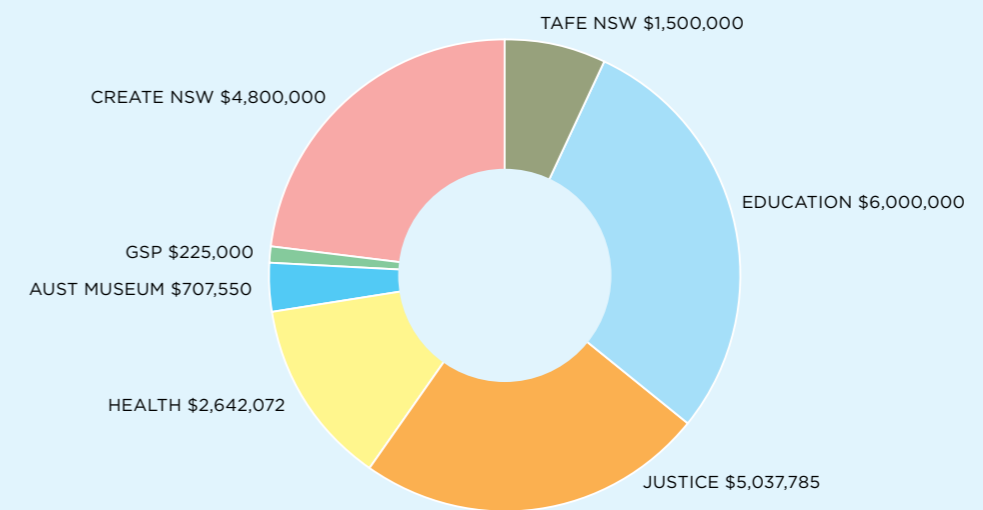


**TOTAL \$28,856,650**

Managing built heritage assets requires specialist expertise. NSW state agencies rely on the reputable advice the MSP provides on active government owned heritage assets. The program's depth of understanding and documentation has been developed over 3 decades - undertaking prioritised condition assessments, diagnosing causes, undertaking research, scoping repairs and providing costed strategies to enable forward programming of conservation projects.

Ongoing co-funding partnerships have allowed essential associated external repairs, beyond sandstone conservation, such as roofing, timberwork, drainage upgrades, strengthening, stabilisation and painting. The building envelope is a system, when stonework is repaired, all the other interconnected facade components that impact it must also be in good order. The reliability and durability of MSP repairs has resulted in cost and time efficiencies for government.

## PARTNERSHIPS CONTRIBUTIONS



**TOTAL NSW AGENCY CONTRIBUTION \$20,912,407**

Partnership funding agreements between the MSP and state agencies allow forward planning for condition audits, facade condition assessments, cost estimates, the purchase and processing of stone and the delivery of conservation projects as part of long-term cyclic maintenance strategies and rolling stonework maintenance programs over multiple years.

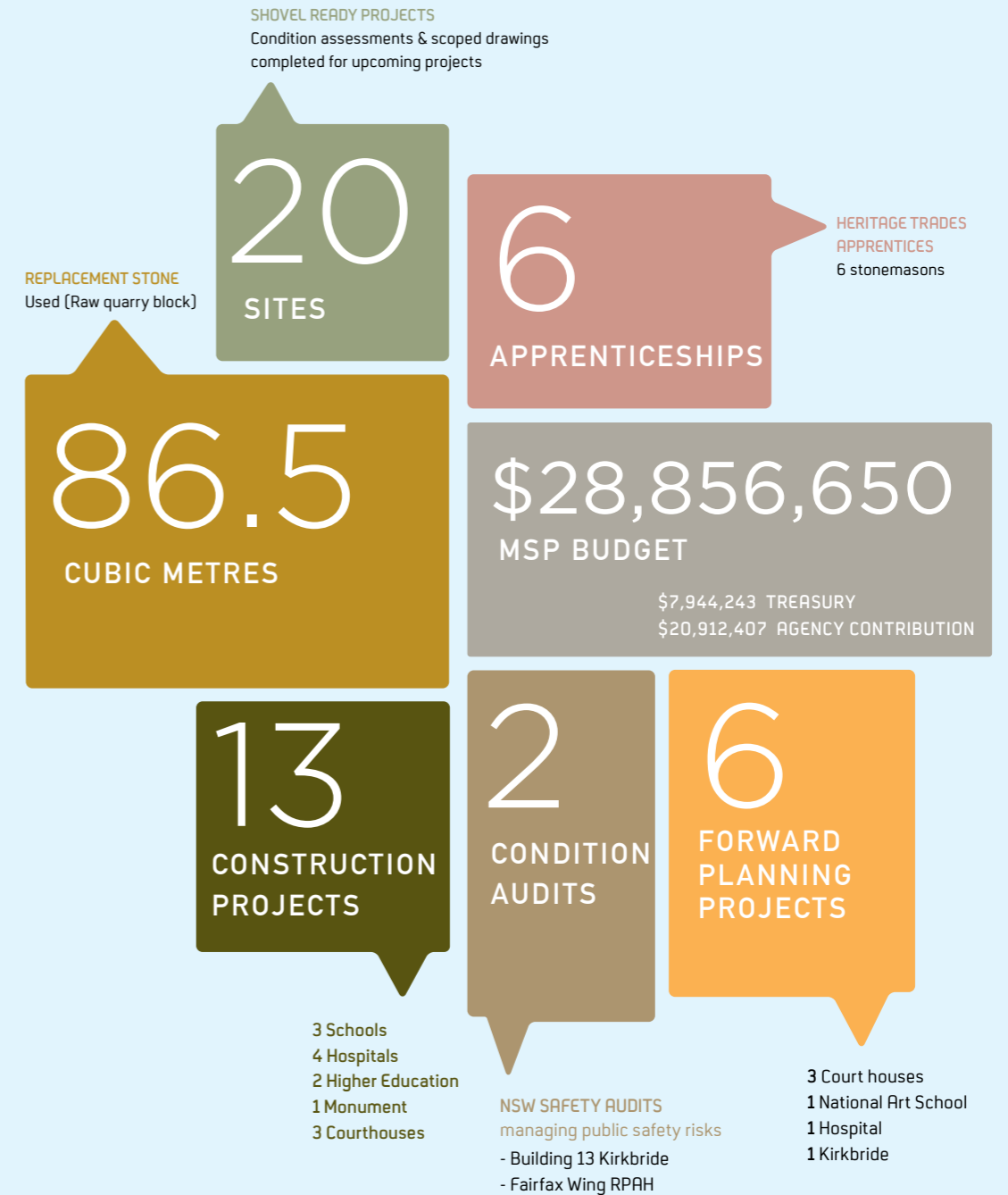
Ongoing co-funding allows MSP to efficiently and effectively facilitate staged projects on significant operational sites such as hospitals and direct resources to undertake urgent assessments and essential repairs across the state.

# Program Expertise

## 2021-2022 MINISTER'S STONEWORK PROGRAM

The Minister's Stonework Program provides a state-wide prioritised strategic approach to the conservation of state government heritage sandstone assets. The Program achieves this objective by:

- coordinating a Condition Audit Program to minimise exponential escalation in cost, public safety risk and impacts to heritage significance.
- ensuring heritage legislation compliance is addressed as required under the NSW Heritage Act (1977) and the ICOMOS Burra Charter, the nationally accepted and adopted principles for heritage conservation practice.
- undertaking stonework conservation research and testing to achieve best practice conservation industry standards.
- increasing industry and agency expertise through workshops, tours and technical guidelines.
- preparing agency portfolio assessments to develop state-wide prioritised maintenance strategies and establish agency partnership funding.
- collaborating with a multidisciplinary team of government and private sector architects, historians, engineers, materials conservators, and traditional tradespeople to ensure diagnosis of issues and proposed solutions are well informed, considered, and achievable to result in a high standard of built work.
- delivering built work through Heritage Stoneworks ensuring the fostering of traditional trades development including apprenticeships and career pathways so that a sustainable, skilled workforce for maintaining government owned stone heritage assets is available.
- advocating on behalf of the state's heritage assets for a stockpile of suitable stone to match the Program forecast needs across the state.



Ultimo TAFE Building C

Highly decorative  
timber windows  
required intensive  
conservation repairs



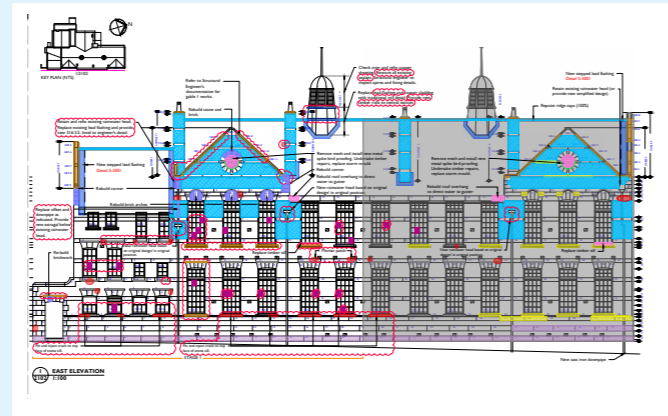


# NSW Public Works

## PROFESSIONAL SERVICES

### Construction Documentation

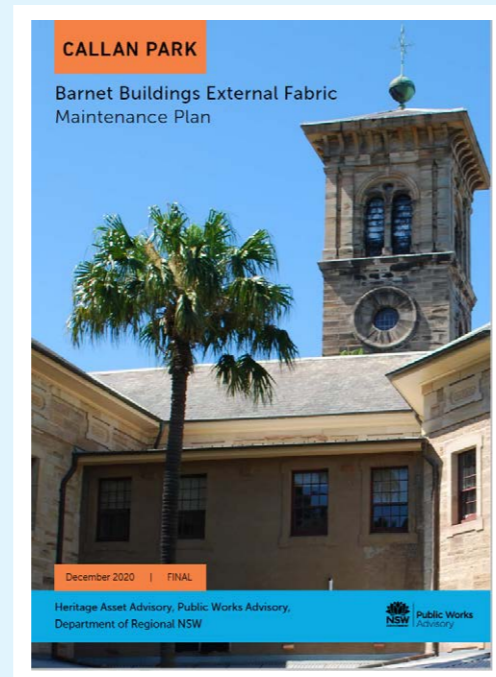
The detailed scoped drawings prepared by the Program provide a basis for costing and executing essential repairs. These documents assist agencies to prioritise work strategies to fit financial year budget cycles i.e. the prioritised, proactive forward planning provides documentation for agencies to substantiate a Treasury funding request.



### Heritage Management Documentation

Our team prepare heritage documentation for all MSP projects. These documents outline not only the conservation works required but also detailed work methodologies and technical specifications to ensure high quality results.

These documents also form the basis for heritage and planning approvals and assist in the ongoing management of state government assets. Services include Heritage Asset Management Reports, Condition Assessments and Audits, Forward planning and strategic documentation, Review of Environmental Factors, Statement of Environmental Effects, Conservation Management Plans, Statement of Heritage Impact and prioritisation of work according to condition, risk and significance across asset class, portfolio, and site.



### Heritage Awareness

The Program provides interactive insights into the hands-on side of restoration, including masonry tool displays and live demonstrations of stone masonry. This unique opportunity allows the public to see some key masonry techniques in action, talk directly with the Heritage Stoneworks stonemasons and carvers involved with the restoration works. The Program has hosted display tables with stonemasonry demonstrations at a number of heritage significant locations including Tempe House and Thomas Walker Hospital open days.





**Former William Street National School**

Gothic sandstone voussoirs on completion. Later painted finish was left due to concerns removal would damage significant masonry.

A selection of MSP 2021/22 projects are featured in the following project sheets:

**EDUCATION | MSP EXPENDITURE \$6,377,700**

Darlinghurst Public School  
Fort Street High School

**TAFE NSW | MSP EXPENDITURE \$2,368,238**

Ultimo TAFE, Building C

**JUSTICE | MSP EXPENDITURE \$6,451,535**

Bathurst Courthouse and Clock Repair  
Darlinghurst Courthouse, Courts 1 & 2  
Katoomba Courthouse, Stage 1

**HEALTH | MSP EXPENDITURE \$4,508,346**

Callan Park, South Gate, Stage 2  
Gladesville Hospital, Building 30  
Royal Prince Alfred Hospital – Missenden Road Wall

**CREATE NSW | MSP EXPENDITURE \$5,667,863**

National Art School, Building 24

**AUSTRALIAN MUSEUM | MSP EXPENDITURE \$1,658,586**

Former William Street National School Building

**GREATER SYDNEY PARKLANDS | MSP EXPENDITURE \$404,449**

Callan Park Gates and Guardhouse

**MONUMENTS | MSP EXPENDITURE \$41,004**

Governor Phillip Fountain, Royal Botanic Garden



## DARLINGHURST PUBLIC SCHOOL



At **Darlinghurst Public School** two of the three original entrances had been closed from use due to the poor condition of the stairs and gates. The gates were part of the original 1882 design of the school.

The project began as a simple sandstone gate pier repair (stone delamination was a safety risk) and conservation project. The inter-connected elements of the gates and stairs increased the scope and original intent to encompass all aspects of the three original entrances to Darlinghurst Public School.

Conservation works were undertaken by a team of heritage architects and heritage trades specialists and include replacement of deteriorated sandstone gate piers, repairs to the metal gates, repointing, repairs to original metal stair balustrade, repairs to broken and cracked stairs and thresholds. The height of the balustrade on the main entrance bridge was increased and a grab rail installed to the separate stairs from Womerah Avenue.

Works carried out to the gate piers, stairs and main entrance have enhanced safety, condition, appearance and longevity to ensure this significant cultural asset is conserved for future generations.

At the completion of these works, all entrances have become operational for school users.

Agency | Department of Education / School Infrastructure NSW

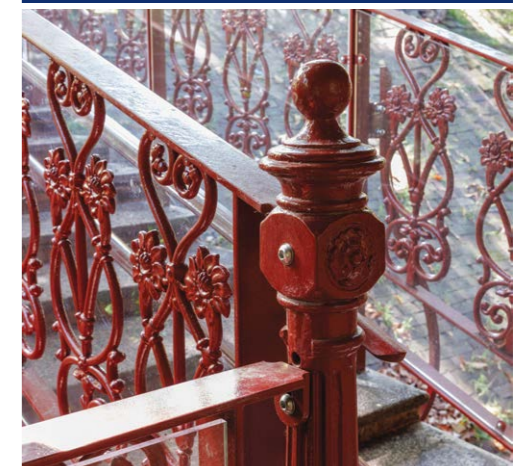
Location | Womerah Street, Darlinghurst

2021/22 Expenditure | \$2,000,000

Replacement Stone Source | Harris Street Pyrmont

Designer | Charles Ernest Mayes, alterations by Walter Liberty Vernon

Date of Original Construction | 1882 alterations 1910



**Top image:** Before and after images of sandstone gate piers to Womerah Avenue

**Lower image:** Repaired metal balustrade to main entrance



## FORT STREET HIGH SCHOOL



The William Wilkins Building was constructed in 1916 at the new Petersham site of Fort Street High School. The building is named after the pioneer administrator of the NSW Colonial education system, who was headmaster of Fort Street School from 1851. The building is of aesthetic significance as a substantial, finely detailed inter-war Romanesque style building on a prominent site, which retains much of its original setting to Parramatta Road.

In May 2020, an initial inspection, from the ground, was undertaken to provide updated condition information to SINSW. During this inspection, there was evidence of fallen stone on the north main entry stairs. A closer inspection from an elevated work platform identified additional safety risks posed by loose stone and brickwork in the two front gables. Three exclusion zones were established until onsite works were commenced in the 2021-22 financial year.

Stage 1 works included structural stabilisation of the two gables and chimney No1. Traditional lead flashings to the gables and chimney No1 replaced defective roof flashings. Replacement of deteriorated sandstone commenced and protective lead weatherings were installed over the stone gable copings.

Additional works included stone and brickwork repointing, stone desalination and patching. Deteriorated copper window awning roofs were replaced in lead to match the original detailing.

Agency | Department of Education / School Infrastructure NSW

Location | Fort Street, Petersham

2021/22 Expenditure | \$1,677,700

Replacement Stone Source | 1 Alfred Street Circular Quay, Sydney

Designer | Richard Seymour Wells

Date of Original Construction | 1916



**Top image:** Lead weathering was introduced to protect and shed water away from significant fabric below.

**Lower image:** Desalination works to sandstone



## ULTIMO TAFE



The former Technological Museum (Building C) has historical significance as the first purpose-built technological museum in Australia and one of the first technological museums in the world. The Museum was built in 1892-1893 as part of the new Sydney Technical College complex, to a design by the NSW Department of Public Instruction's architect, William Kemp.

The building is an outstanding example of Federation Romanesque architecture and a well-known Sydney landmark. The scale of the complex and the widespread use of Australian motifs, materials and timbers in the original campus buildings designed by Kemp is unprecedented in Australia and reflects the focus of the teaching and the teaching collection of the Institution in its first few decades.

The purpose of the works is to prolong the life of significant building fabric and ensure the building's long term conservation. This was achieved by repairing and conserving significant building fabric and replacing defective fabric which had reached the end of its functional life. The proposed work was developed and scoped to retain as much of the existing exceptionally significant fabric as possible.

Roofing works were completed in the 20-21 financial year. Stage 2 works, this financial year, included synthetic stone repairs to cracked/damaged stone retained in situ, repair of stone lintels, repointing of sandstone and brick joints, re-grout terracotta tiles, repairs to highly weathered timber windows and doors, external cleaning to remove biological growth, bird droppings and dirt, provide new mesh to wall vents, and installation of bird proofing.

Agency | TAFE NSW,

Location | Harris Street, Ultimo

2021/22 Expenditure | \$2,368,238

Replacement Stone Source | 1 Alfred Street Circular Quay, Sydney

Designer | William Kemp

Date of Original Construction | 1892-93



**Top image:** Completed external conservation works

**Lower image:** NSW Public Works staff undertaking technical inspections during construction



## BATHURST COURTHOUSE & CLOCK REPAIR



**Bathurst Courthouse** was completed in 1880 and is listed as an item of State significance on the State Heritage Register. The building is of exceptional significance as an outstanding example of Colonial Architect James Barnet's work and is the largest Victorian-era regional courthouse in NSW. By 2019 the facades and roof were in need of backlog maintenance with cracked chimneys, deteriorated high level stone and rotten timbers being of concern.

The façade and roof conservation works were undertaken in 2021-2022 and are the culmination of research and planning, multi-disciplinary heritage trades (stonemasons, leadworkers, roofers, and carpenters), and technical heritage specialists. Conservation works were carried out on multiple heritage materials, including sandstone, brickwork, render, copper, cast iron, bronze, timber, glazing and the pediment clock.

The objective of the project was to undertake catch-up maintenance to best practice conservation standards and provide quality long term repair solutions (60+ yrs). The conservation approach was to replace 'like for like' where possible, record all interventions and retain as much of the original fabric as possible. Historical research was undertaken to ensure the reconstruction of missing details, such as the tri-spoke finial, was accurate and based on documentary evidence. Likewise, a paint colour analysis was carried out to provide a historically accurate colour scheme.

Restoration of the original Tornaghi clock mechanism and bell were also undertaken in conjunction with a Master Clockmaker.

Agency | **Department of Communities & Justice**

Location | **Russell St, Bathurst**

2021/22 Expenditure | **\$2,635,377**

Replacement Stone Source | **Harris Street, Pyrmont**

Designer | **James Barnet**

Date of Original Construction | **1880**



**Top image:** Completed external conservation works

**Lower image:** A new cornice stone being lifted into place



## DARLINGHURST COURTHOUSE



**The 1964 extension (Courts 1 & 2) of the Darlinghurst Courthouse** sits within the SHR boundary of the historic courthouse and adjoining pavilions, which were constructed between 1836-1886 by Colonial Architects Mortimer Lewis and James Barnet. The 2 storey extension was built to the east of the main court complex with a separate entrance and orientation towards Darlinghurst Road. Accommodation provided by these additions comprised two new Courtrooms (currently Courts 1 and 2) with associated facilities for judges, juries and police.

The symmetrical Darlinghurst Road elevation with its central entrance and regular, repetitive structural bays is characteristic of the late Twentieth Century Stripped Classical architectural style. The sandstone facade panels are a considered response to the surrounding heritage buildings.

Condition assessment carried out in 2018 revealed a range of failures that included:

- natural weakness of the sandstone due to the panels being placed perpendicular to the natural bedding
- inadequate fixing to the masonry substrate.
- exfoliation of the surface of the stone likely from the application of a sealant and/or inappropriate high-pressure water cleaning.
- misalignment of the sandstone panels due to thermal expansion.

The repair works to address the defects included:

- temporary fixing of cracked panels until funding for the works was obtained
- replacement of deteriorated and failed sandstone panels like for like
- a new, more secure fixing system was developed by project engineer
- 100% repointing of stone joints
- application of biocide to prevent biological growth.

Agency | **Department of Communities & Justice**

Location | **Darlinghurst, Sydney**

2021/22 Expenditure | **\$1,935,163**

Replacement Stone Source | **1 Alfred Street, Circular Quay, Sydney**

Designer | **Peter Hall under supervision of EH Farmer of the Government Architect**

Date of Original Construction | **1964**



**Top image:** Completed external conservation works

**Lower image:** Delaminating sandstone panels were replaced and a new more secure fixing system was introduced by the Heritage structural engineer



## KATOOMBA COURTHOUSE



**Built in 1887, Katoomba Courthouse** is in the Federation Romanesque style. The use of this architectural style is of note for the fact it is an early example and rare among courthouses of New South Wales. The building is a fine example of the work of two government architects, Walter Liberty Vernon and Richard Wells.

The conservation works to the Katoomba Courthouse façades began in the financial year 2020 and were completed in 2021/22. The work included facade cleaning, stone replacement, the addition of lead weatherings, repointing of the unusual ribbon pointing, repair of the lead light feature window, timber repairs and repainting. The works also included the strengthening and stabilisation of the tall slender chimneys, restraint of the gables and front portico feature.

The slate roofing tiles had failed and required full replacement. The Penrhyn Welsh Slate tiles were replaced to match existing and complete the high-quality conservation project. Along with new roofing some undersized stormwater elements were increased to accommodate increased water discharge loads and will ensure the ongoing protection of this significant heritage building.

Agency | **Department of Communities & Justice**

Location | **Civic place, Katoomba**

2021/22 Expenditure | **\$1.44M**

Replacement Stone Source | **1 Alfred Street, Circular Quay, Sydney**

Designer | **Walter Liberty Vernon & Richard Seymour Wells**

Date of Original Construction | **1887**



**Top image:** Completed external conservation works

**Lower image:** Full slate roof replacement and installation of new lead weathering to front portico



## CALLAN PARK SOUTH GATE - STAGE 2



**The two gates to the Kirkbride complex** were constructed in 1882-3. The northern gate provided access to the female wards whilst this south gate provided access to the male wards. Both gates have a high degree of integrity and have been identified as being exceptionally significant.

The condition of the South Gate was assessed from an elevated work platform in 2020.

Cracks were visible from ground level along the upper sandstone moulding which could potentially dislodge without warning causing injury.

Conservation works, to the entrance gates, including repair of deteriorated, damaged stone and offsite repair and re painting of the original metal gates. The primary purpose of these works was to conserve as much original fabric as possible and safeguard the significance of the gates for future generations by improving their condition, function and setting. The Ministers Stonework team worked with contractors who improved the electronic functioning of the gates whilst minimising physical and visual impacts posed by remote operation.

The gates play an important role in allowing the community and curious passers by a glimpse into the walled complex which is currently off limits to the public.

Agency | **Ministry of Health**

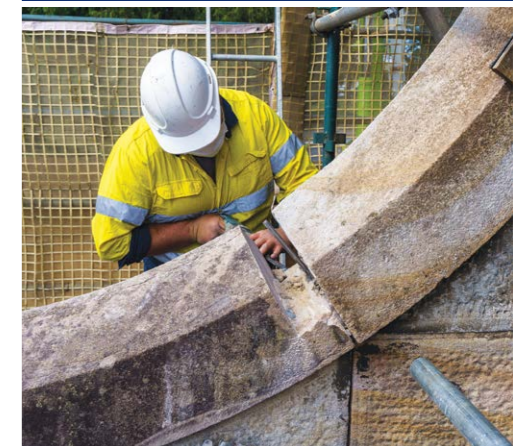
Location | **Callan Park, Balmain Road Rozelle**

2021/22 Expendituree | **\$525,919**

Replacement Stone Source | **Appin**

Designer | **James Barnett**

Date of Original Construction | **1882-83**



**Top image:** Completed external conservation works

**Lower image:** Removal of deteriorated sandstone ready for indenting of new stone



## GLADESVILLE HOSPITAL B30



**Built in 1838, Gladesville Hospital**, was the first purpose-built asylum in the colony, and the oldest remaining asylum in Australia. Building 30 was designed by James Barnet and constructed around 1874 as a store for the hospital. Building 30 was located in the centre of the service precinct adjacent to the Kitchen, boiler house, wood store and stabling yard close to the Punt Road entrance. In 1911, Vernon made extensive alterations to the interior of Building 30, to convert it from workshops to an administration centre.

Further external alterations and additions to Building 30, mimicking Vernon's stuccoed finish on Building 26, were made in 1933. These layers have diminished the full appreciation of the beauty of the original design.

After being installed almost 150 years ago the condition of much of the high-level exposed sandstone on Building 30 had deteriorated and reached the end of its life. The stone also posed a safety risk and was no longer protecting the stone and other building elements below.

Whilst the scaffold access to the upper levels of the building was in place, other maintenance works were carried out so the building will not require further serious maintenance works for several decades.

The works included replacement of weathered overhanging stonework at risk of failing, repointing, cleaning, desalination, biocide and patch repairs on all stonework, repairs and painting to the timber eaves and windows and slate roof replacement.

*Agency* | Ministry of Health

*Location* | Victoria Road, Gladesville

*2021/22 Expenditure* | \$2,115,415

*Replacement Stone Source* | 1 Alfred Street, Circular Quay, Sydney

*Designer* | James Barnet with alterations by Walter Liberty Vernon

*Date of Original Construction* | 1874



**Top image:** Completed external conservation works

**Lower image:** Open, missing joints in the pediment caused water and salt damage to the significant stonework



## ROYAL PRINCE ALFRED HOSPITAL MISSENDEN ROAD



The Missenden Road wall project is a part of the extensive suite of conservation works undertaken at Royal Prince Alfred Hospital. The Precinct is of high historical and architectural significance. The buildings and landscaping have high streetscape value.

The present stone wall formed the base of the original 1891 stone and iron palisade fence. Alterations to the wall have occurred since 1907 including a height reduction, the substantial redesign of the garden, the creation of the main pedestrian entrance from Missenden Road (1938) and the addition of the present gatehouse (1960s).

The pathways to the front of the Victoria and Albert Pavilions served as the route for visitors when visiting hours were strictly regimented. This original pathway is now blocked by the gatehouse.

The stone units of the wall were in poor condition with significant cracking and extensive cement patch repairs. Majority of the coping stones and 3 piers were replaced. Additional works included full cleaning, repointing, synthetic stone repairs and biological treatments.

Conservation works also included weld repairs, corrosion removal, protective treatment and repainting to 11 lamp pillars and associated straps.

Agency | Sydney Local Health District

Location | Missenden Road, Camperdown

2021/22 Expenditure | \$1,861,750

Replacement Stone Source | Clean Appin

Designer | Mansfield Brothers, alterations by Walter Liberty Vernon

Date of Original Construction | 1891



**Top image:** Ambulance bay entrance with restored lamp pillars

**Lower image:** View of completed wall along Missenden Road



## NATIONAL ART SCHOOL BUILDING 24



Building 24 of the National Art School, former Darlinghurst Gaol, holds significant heritage value and plays an important role in allowing the public to interpret the conditions and functionality of the penal system in the early days of the NSW colony. The original building was built in 1839 and was significantly remodelled in 1929, it still plays a vital contributory role in the significance of the state heritage listed site.

By repairing and conserving significant building fabric and replacing defective fabric which has reached the end of its functional life, the conservation work ensures the longevity and ongoing safe use of the building.

A high-level safety audit was undertaken in 2017 to confirm the current façade condition and to develop the scope of conservation works. These works included:

- replacement of deteriorated rainwater goods in copper to match original
- repair and maintenance of existing slate roof
- removal of redundant ferrous metal fixtures
- replacement of old vermin screens to slit windows
- window and door joinery repairs, including replacement of rotten glazing bars, sill boards, beads and mouldings to match the existing
- glazing repairs including replacing missing panes
- cleaning and desalination of soiled masonry
- stone repairs including indenting of decayed stone units
- synthetic stone repairs and
- repointing of degraded joints using traditional mortar.

Agency | Create NSW

Location | 156 Forbes Street, Darlinghurst

2021/22 Expenditure | \$5,667,863

Replacement Stone Source | 1 Alfred Street, Circular Quay

Designer | Mortimer Lewis

Date of Original Construction | 1839 – 49, raised and remodelled 1929 – 30



**Top image:** Completed external conservation works

**Lower image:** Works completed include; stone cleaning, new copper rainwater goods, new vermin mesh to vents and render repair to the 1929 addition





## CALLAN PARK GATES & GUARDHOUSE



The conservation objective of this project was to restore the original dignity, landmark potential and purpose to the languishing Callan Park entrance gates. The gates had been locked closed for decades – the driveway was a car park and an illegal dumping site. Garbage and overflowing clothing bins leaned against the inside and outside of the gates. The glass in the lanterns was smashed and metalwork was corroded and exposed, paintwork was faded and peeling and the monolithic stone piers had been broken and rotated on their bases by repeated knocks from garbage trucks reversing into them. Pedestrians looking to enter the park, often laden with prams, dogs and bikes, were forced to navigate a narrow footpath around the closed gates to the road entrance. Our solution included the creation of a car free plaza in front of the gates, removal of bins and repairs to the guardhouse to enable it's adaptive reuse, potentially to a kiosk. By improving the gate's setting and fabric, it's landmark qualities have been restored and a second stage of work – creating an activated pedestrian plaza inside the gates can now be realised.

Fabric repairs to the gates included the replacement of one cracked stone pier and three crumbling stone caps at the end of their service life, patch repair of stone bases, corrosion treatment and repainting of metalwork informed by historic paint layer analysis, restoration of the lanterns and the operating mechanisms of the gates. The adjacent guard house received a new slate roof, gutters and downpipes, timber repairs and re painting, and the brickwork walls and chimney were revealed and repointed. Four bollards were placed at the end of the driveway entrance. Statutory approvals for this work were enabled by the Callan Park Barnett Buildings Maintenance Plan, by NSW Public Works, 2021 which allows maintenance works to proceed on all the stone buildings and structures associated with the original James Barnett designed Asylum.

After completion the project team established that the waratah carved onto the piers in 1878, is the earliest known emblematic carving of a single species (the waratah) to denote the NSW Government

Agency | Department of Planning – Greater Sydney Parklands

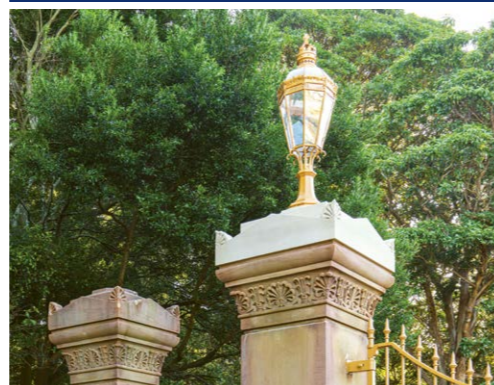
Location | Balmain Road, Rozelle

2021/22 Expenditure | \$372,000

Replacement Stone Source | No.1 Alfred Street Circular Quay

Designer | James Barnett

Date of Original Construction | 1872



**Top image:** Completed conservation works

**Lower image:** Completed conservation works to lanterns



## FORMER WILLIAM ST NATIONAL SCHOOL BUILDING



The Former National School located at the Australian Museum, was designed by Henry Robertson and constructed in 1850 as a single storey brick building with sandstone quoins and window surrounds. The second storey featuring carved sandstone details and terracotta tiles, was designed by William Kemp in the Victorian Gothic style and constructed in 1892.

The school is significant as the earliest extant purpose-built National School in greater Sydney. It's operation between 1851 and 1951 reflects evolving attitudes to public education over a century. Changes to the building reflect changes to educational philosophy and reform during that period.

Following several 'make safes' to remove loose stone from high areas and with a Colourbond roof that had reached the end of its life, the Minister's Stonework Program, in partnership with the Australian Museum, carried out external conservation works which were completed in March 2022.

The aim of the works was to provide durable conservation solutions. The scope of works included replacement and patching of deteriorated stone, removal of paint from stone sills, replacement of the Colourbond roof with galvanised steel sheeting and reinstatement of the original colour scheme.

The work involved the replacement of heavily deteriorated sandstone boss stones to the hood moulds. Due to the deteriorated condition the exact design of the moulds could not be seen and replicated. The conservation approach to these elements was therefore to create new stones in the style of those that had deteriorated, thus allowing the masons to contribute to the continuous and layered history of the building with their own artistic touches.

Agency | Australian Museum Trust

Location | Australian Museum William Street, Sydney

2021/22 Expenditure | \$1,658,586

Replacement Stone Source | 1 Alfred Street, Circular Quay

Designer | Henry Robertson, later additions by William Kemp

Date of Original Construction | 1850



**Top Image:** Completed external conservation works

**Lower image:** Project team during on site technical inspection



## GOVERNOR PHILLIP FOUNTAIN



**The Governor Phillip Fountain** at the Royal Botanic Gardens commemorates the first Governor of New South Wales, Captain Arthur Phillip. The ornate fountain was created by Italian born sculptor, Achille Simonetti. The bronze was cast in Florence, Italy in 1895 and the fountain was unveiled in June 1897. The fountain forms part of the state listed Royal Botanic Gardens and Domain and is significant for being the only example of a large neo-classical style fountain in Sydney.

Over the years the bronze statues had developed green and black surface corrosion, and the marble had extensive, deeply engrained green staining caused by copper corrosion with water run-off from the bronze (copper alloy) sculptures. The last conservation works to the bronze works was carried out in 2000, which did not satisfactorily address the green copper staining in the marble.

As part of the Minister's Stonework Program, NSW Public Works was engaged by the Royal Botanic Gardens in 2019 to undertake the conservation treatment of the Governor Phillip Fountain.

A specialist conservator was commissioned to undertake conservation works on the fountain which included conservation works of all thirteen bronze elements, waterproofing of the marble basins, repointing and trialling of marble cleaning techniques to remove the green copper staining.

Public Works provided recommendations for the treatment of the staining to the white marble based on international research on a highly effective method of cleaning copper-stained calcareous stone. A recent internationally developed poultice mix was used to draw out the green copper staining without the look of being over-cleaned. The poultice delivered fantastic results and has removed almost all the staining, resulting in a clean marble finish while retaining the patina of the historic fabric.

Agency | Royal Botanic Gardens and Domain

Location | Macquarie Street, Sydney

2021/22 Expenditure | \$41,004

Designer | Achille Simonetti

Date of Original Construction | 1897



**Left image:** Bronze sculpture of Cyclops (Mining)

**Top image:** Completed conservation works

**Lower image:** Bronze sculpture of Neptune (Navigation)

# Condition Audit Program

## MINISTER'S STONEMASONRY PROGRAM INSPECTIONS

Managing public safety is a priority for the Program and the annual Condition Audit Program carries out inspections of external facades to assess the condition of the stonework and remove the immediate risk of falling stone, often located over playgrounds, entrances and public spaces. The Condition Audit Program is fully funded by the Program and precedes repairs. The condition audits are carried out by an experienced multidisciplinary team which consists of heritage specialists, stonemasons and structural engineers.

The condition of the facades is assessed from an elevated work platform or crane and loose and potentially dangerous stone is removed during the inspections, where possible. It is important to note that stone removed during a condition audit is a temporary safety measure only. The rate of stone deterioration will continue to increase, and follow-up repairs are essential in managing the risk of falling stone.

**Condition audits & forward planning documentation undertaken this financial year:**

- Callan Park, Kirkbride Building 13
- Moss Vale Courthouse
- Royal Prince Alfred Hospital, Fairfax Pavilion
- Maitland East Courthouse and
- Former Darlinghurst Police Station (pictured)





Royal Prince Alfred Hospital

Completed conservation works on the Missenden Road Wall project

# Non MSP Sandstone Projects

## TARPEIAN WAY 2021-2022

Tarpeian Way Stage 2 works focussed on the stairs from the Sydney Opera House forecourt to the Royal Botanic Gardens and the associated palisade fence.

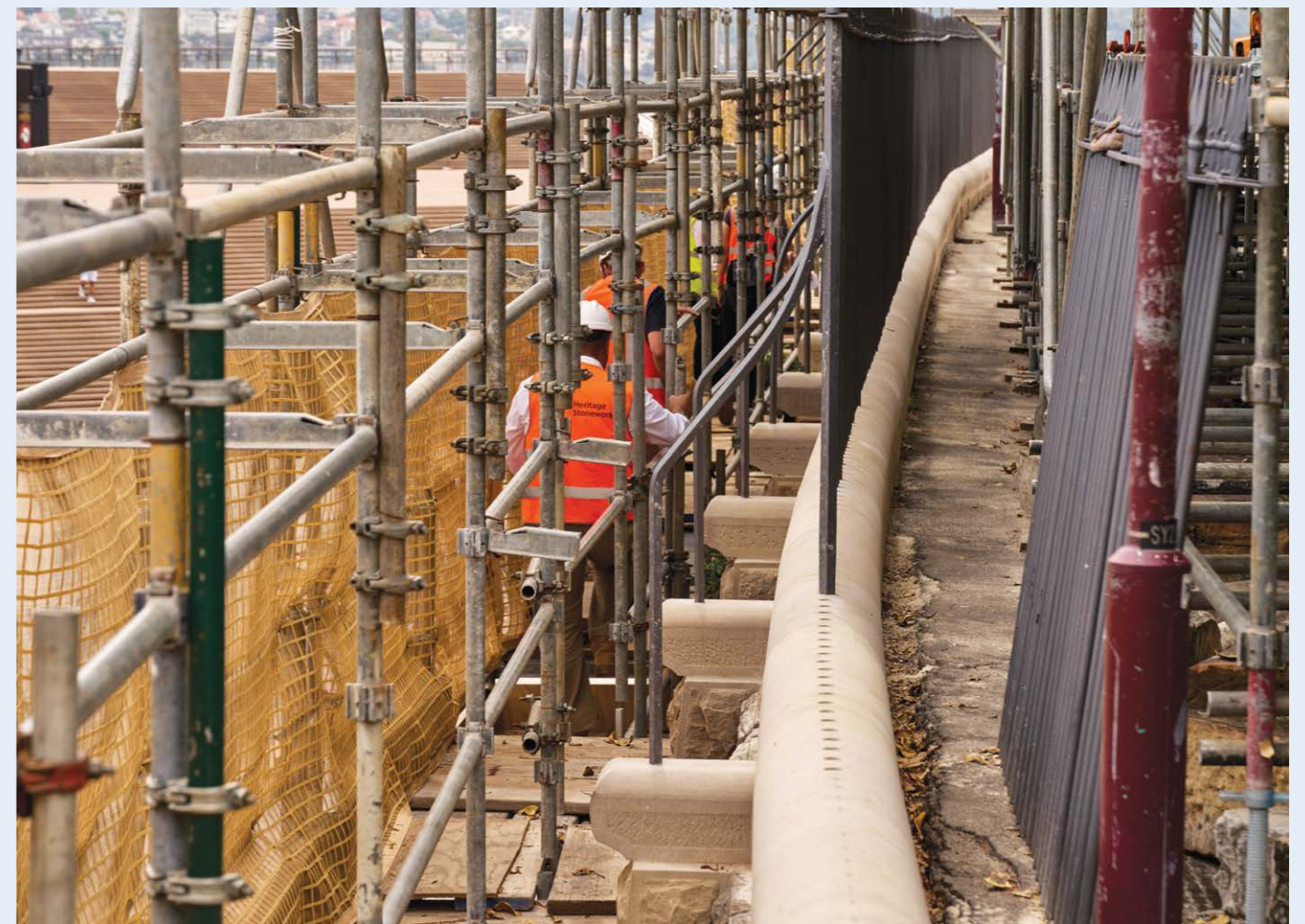
There was evidence of at least two previous stages of repairs to the sandstone coping of the palisade fence which compromised its visual appearance and structural integrity. The highly exposed site close to Sydney Harbour exacerbated rust expansion of the iron railings at the joint with the sandstone coping, causing ongoing movement and cracking of the stonework. This is a typical weak and subsequent failure point for these fences.

Due to the poor condition of the stonework, most of the coping blocks were replaced. The metalwork was treated and painted off site, with stainless steel ends added to the base of each railing to prevent future expansion and damage to the stonework caused by rust action.

Works to the bedrock and blockwork stairs was minimal and aimed to level off uneven surfaces to improve serviceability.

Other projects receiving support through the Program this financial year included:

- Convalescent Cottages & Callan Park  
*Provision of minimum standards of safety and repair documentation*
- Hornby Lighthouse & South Head  
*Research project into the detrimental effects of non-breathable paint systems on sandstone*
- Greenway Wall & Macquarie Lighthouse, Vacluse  
*Provision of Structural Engineering and Architectural repair documentation*



# We are MSP

Approximate number of jobs supported by the Program through COVID-19

# 250

JOB

Government staff  
40%

Specialist trades, consultants and contractors  
40%

Support staff and services  
20%





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