



SINSW 2020 Delivery Strategy

June 2020

SINSW 2020 Delivery Strategy

School Infrastructure NSW

Committed to providing the best learning environments at public schools across NSW to meet the needs of a growing student population

Since 01 March 2020....



\$20M

in consultant fees awarded or currently being tendered.



\$300M

in construction contracts awarded or currently being tendered, including:

- Chatswood Public & High School Upgrade;
- Bankstown North Public School Upgrade; and
- Young High School Upgrade.



85

procurements awarded or currently being tendered across 40 projects.



SINSW 2020 Delivery Strategy

On the horizon....



SINSW 2020 Delivery Strategy

On the horizon....

By the numbers....



\$1.2B

investment to commence procurement



40+

number of schools being constructed or upgraded



130+

tendering opportunities across multiple disciplines



31 Dec

target date to call identified tenders by



\$460m

investment in bushfire affected communities



14

individual projects that are candidates for DfMA construction



20+

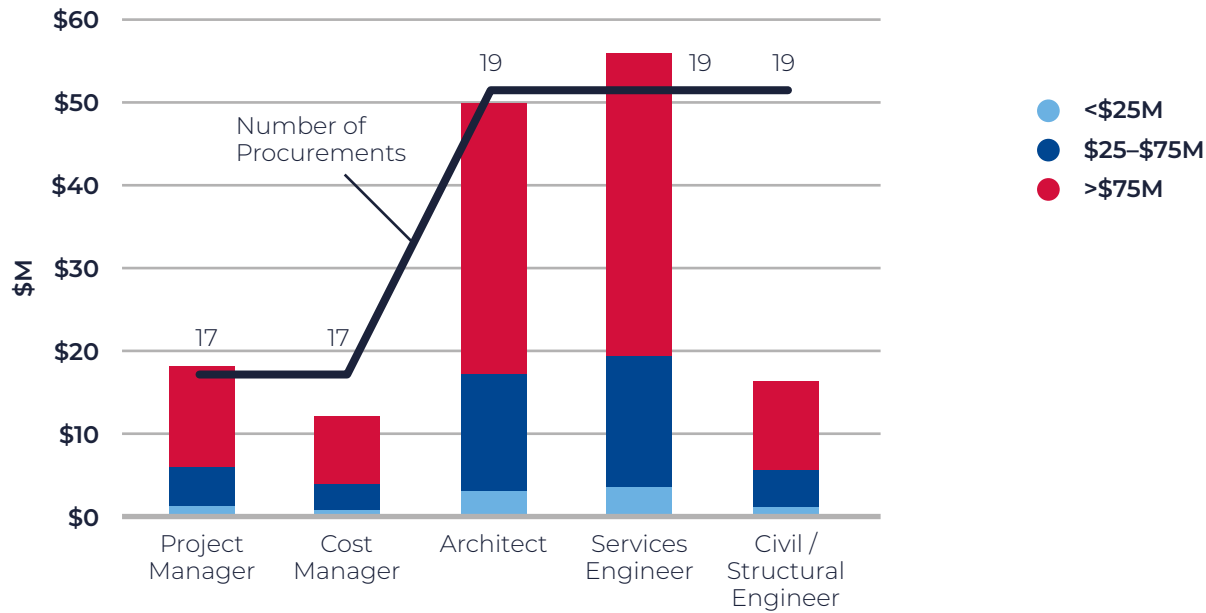
new business cases commencing with a further 100+ business case procurement opportunities



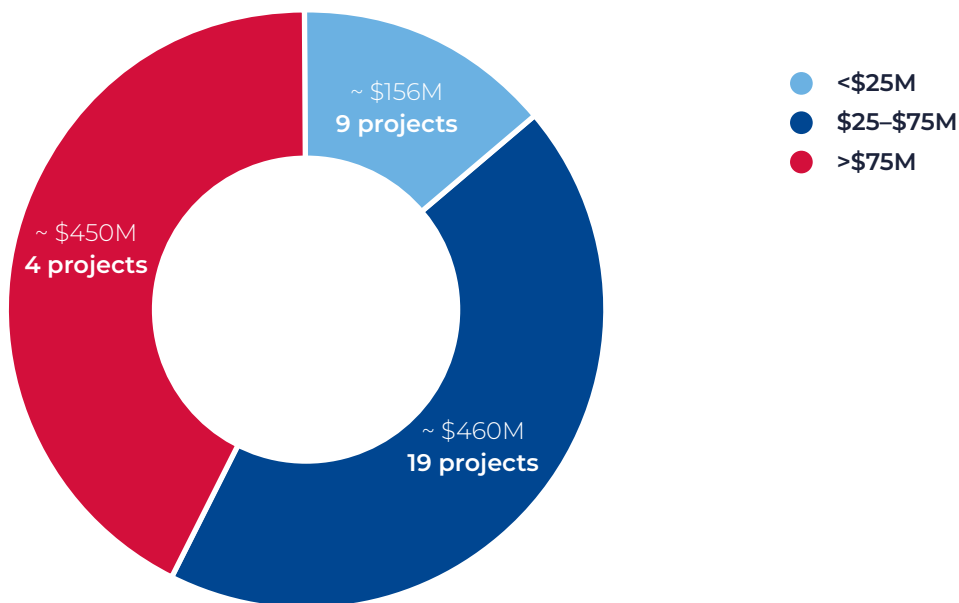
Parramatta Public School

SINSW 2020 Delivery Strategy

Estimated Value of Consultant Procurements vs Project Size (\$M)

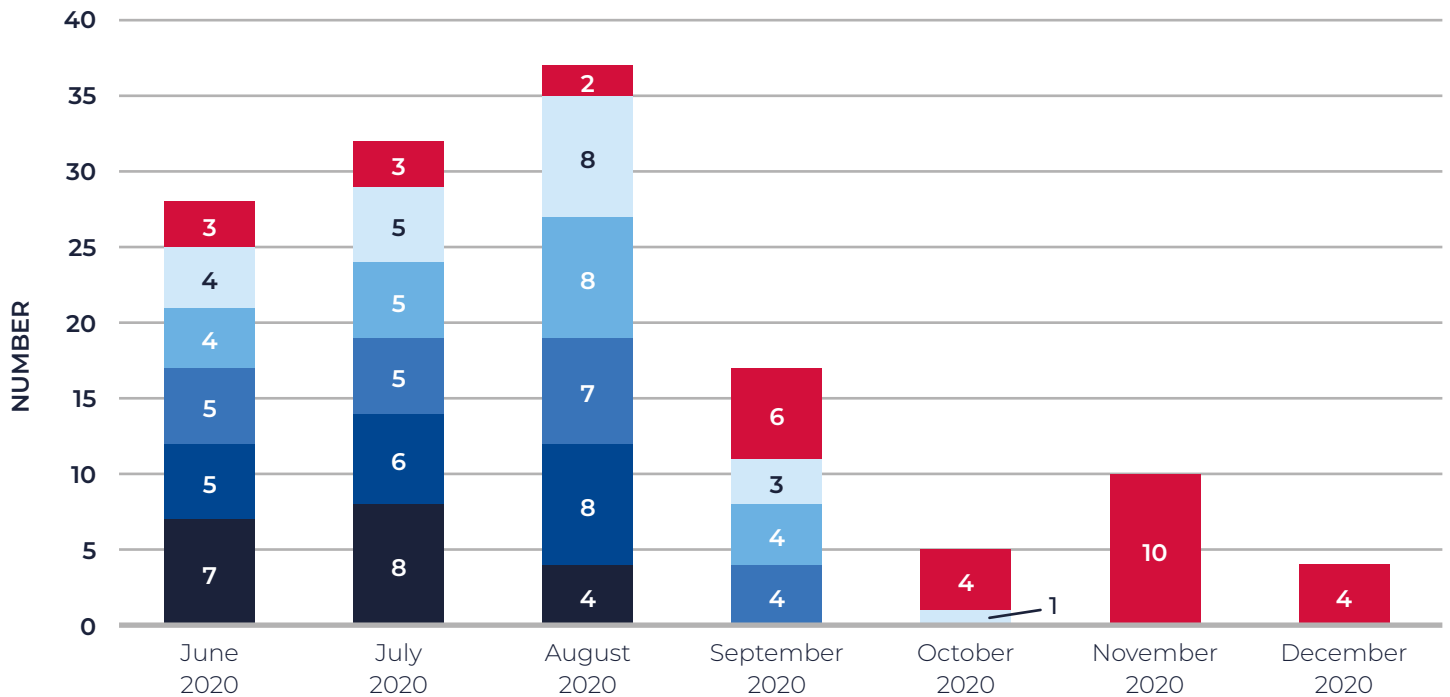


Estimated Value of Building Contractor Procurements vs Project Size (\$M)



SINSW 2020 Delivery Strategy

Anticipated Number & Timing of Procurements by Discipline until Late 2020



- Project Manager
- Cost Manager
- Architect
- Services Engineer
- Civil/Structural Engineer
- Building Contractor



Bolwarra Public School

Engagement with the Market



Committed to developing and promoting a transparent pipeline of projects in line with the '**NSW Government Action Plan: A Ten Point Commitment to the Construction Sector**'.



\$6.7 billion investment to deliver more than **190 new and upgraded schools**.



Significant investment in **planned maintenance** on **over 2,200 schools and programs** such as \$500m for Cooler Classrooms to provide sustainable air conditioning in more than **900 schools** across NSW.



Following consultation with the market and advice from Subject Matter Experts, we have proposed:

- Single team of consultants be appointed where the schools are geographically close and have similar programs.
- Early Contractor Involvement contracts where considered appropriate for the project to be delivered using Design for Manufacture & Assembly or we wish to commence construction as soon as is appropriate.
- A diverse and wider range of contract sizes and opportunities by a mixture of bundling and individual procurements.
- To limit the number of tenders per discipline to no more than ten per month so as not to overwhelm the market and to enable feedback to be utilised in subsequent tenders.

SINSW will continue to:

- Liaise with potential tenderers before finalising the tender list to ensure those invited have the appetite and capacity to be part of the team that will successfully deliver the project.
- Monitor performance, using our performance management process, and based on this, reward high performance with the opportunity to tender for other opportunities.
- Invite companies on our own and the whole of Government Panels to express their interest in a particular project(s); which will be taken into consideration as part of the process to develop an appropriate tender list for each opportunity.
- Invite three tenderers so evaluations are quicker and there are only two unsuccessful tenderers.
- Look for appropriate opportunities to appoint companies that are:
 - ▶ Located in a bushfire affected areas;
 - ▶ Aboriginal-owned businesses; and/or
 - ▶ Able to provide a skills legacy.

June 2020...

- The SINSW Delivery Strategy is 'launched';
- Market notified of our Delivery Strategy via the SINSW website, email to companies on our and NSW Government Panels, our Communities of Practice and social media; and
- Virtual Industry Briefing on our Delivery Strategy.

SINSW 2020 Delivery Strategy

Project Manager & Cost Manager

All projects are school upgrades unless noted otherwise

Project	Procurements commencing from	Project size
North Coast Cluster: Bangalow PS, Bexhill PS, Teven-Tintenbar PS Hall	June 2020	\$
Mosman HS	June 2020	\$\$
South Cluster: Engadine HS Hall, Jannali East PS Hall, Milperra PS Hall, Stanwell Park PS Hall, Queanbeyan West PS Hall, Yass HS Hall	June 2020	\$\$
North-West Cluster: Glenmore Park HS Performing Arts & Learning Centre, Jamison HS, Nepean Creative & Performing Arts HS	June 2020	\$\$
Minor Upgrades: Brooke Ave PS & Cranebrook HS	June 2020	\$
Northern Suburbs Cluster: Epping West PS & Epping South (new) PS	June 2020	\$\$\$
Penrith Lakes (new) Environmental Education Centre	June 2020	\$
Hastings Secondary College, Port Macquarie Campus	July 2020	\$\$
Budawang School, SSP in Milton	July 2020	\$\$
Murwillumbah East PS and Murwillumbah HS	July 2020	\$\$\$
Mona Vale PS	July 2020	\$\$
Pendle Hill HS	July 2020	\$\$
Greater Western Sydney Cluster: Tallawong (new) PS, Mulgoa & Glenmore Park (new) PS, (new) Centre of Excellence Hawkesbury, Richmond HS	July 2020	\$\$\$
Hurlstone Agriculture HS	July 2020	\$\$
Monaro Cluster: New HS in Bungendore, New HS in Jerrabomberra	July 2020	\$\$\$
Muswellbrook South PS	August 2020	\$
Southern Suburbs Cluster: Liverpool West PS & Liverpool (new) PS	August 2020	\$\$\$
Sydney Olympic Park (new) HS	August 2020	\$\$\$

Project Size \$ < \$25m \$\$ \$25m to \$75m \$\$\$ > \$75m

SINSW 2020 Delivery Strategy

Architects, Service Engineer & Civil/Structural Engineer

All projects are school upgrades unless noted otherwise

Project	Procurements commencing from	Project size
Far North Cluster: Kingscliff PS, Kingscliff HS, Tweed River HS & Tweed Heads South PS	June 2020	\$\$\$
Mosman HS	June 2020	\$\$
North Coast Cluster: Bangalow PS, Bexhill PS, Teven-Tintenbar PS Hall	June 2020	\$
Penrith Lakes (new) Environmental Education Centre	June 2020	\$
North-West Cluster: Glenmore Park HS Performing Arts & Learning Centre, Jamison HS, Nepean Creative & Performing Arts HS	June 2020	\$\$
Hastings Secondary College, Port Macquarie Campus	July 2020	\$\$
Minor Upgrades: Brooke Ave PS & Cranebrook HS	July 2020	\$
South Cluster: Engadine HS Hall, Jannali East PS Hall, Milperra PS Hall, Stanwell Park PS Hall, Queanbeyan West PS Hall, Yass HS Hall	July 2020	\$\$
Budawang School, SSP in Milton	July 2020	\$\$
Murwillumbah East PS and Murwillumbah HS	July 2020	\$\$\$
Monaro Cluster: New HS in Bungendore, New HS in Jerrabomberra	July 2020	\$\$\$
Northern Suburbs Cluster: Epping West PS & Epping South (new) PS	August 2020	\$\$\$
Muswellbrook South PS	August 2020	\$
Mona Vale PS	August 2020	\$\$
Central West Cluster: Bletchington PS, Millthorpe PS	August 2020	\$\$
Sydney Olympic Park (new) HS	August 2020	\$\$\$
Greater Western Sydney Cluster: Tallawong (new) PS, Mulgoa & Glenmore Park (new) PS, (new) Centre of Excellence Hawkesbury, Richmond HS	September 2020	\$\$\$
Pendle Hill HS	September 2020	\$\$
Hurlstone Agriculture HS	September 2020	\$\$
Southern Suburbs Cluster: Liverpool West PS & Liverpool (new) PS	September 2020	\$\$\$

Project Size \$ < \$25m \$\$ \$25m to \$75m \$\$\$ > \$75m

SINSW 2020 Delivery Strategy

Building Contractor

Legend ECI: Early Contractor Involvement
 D&C: Design & Construct
 DfMA Project

All projects are school upgrades unless noted otherwise

Project		Procurements commencing from	Project size
D&C	Lindfield Learning Village	June 2020	\$\$\$
D&C	Kingscliff PS & Kingscliff HS	June 2020	\$\$
D&C	Tweed River HS & Tweed Heads South PS	June 2020	\$\$
D&C	Passfield Park School	July 2020	\$
D&C	Darlington PS	July 2020	\$\$
ECI	Mosman HS	July 2020	\$\$
D&C	Brooke Ave PS	August 2020	\$
D&C	Cranebrook HS	August 2020	\$
ECI	Budawang School, SSP in Milton	September 2020	\$\$
ECI	Monaro Cluster: New HS in Bungendore, New HS in Jerrabomberra	September 2020	\$\$\$
ECI	Murwillumbah East PS and Murwillumbah HS	September 2020	\$\$\$
D&C	Bangalow PS & Bexhill PS	September 2020	\$
D&C	Teven-Tintenbar PS Hall	September 2020	\$
D&C	Muswellbrook South PS	September 2020	\$
ECI	Central West Cluster: Bletchington PS, Millthorpe PS	October 2020	\$\$
ECI	Greater Western Sydney Cluster: Tallawong (new) PS, Mulgoa & Glenmore Park (new) PS, (new) Centre of Excellence Hawkesbury, Richmond HS	October 2020	\$\$\$
D&C	Hastings Secondary College, Port Macquarie Campus	October 2020	\$\$
D&C	Pendle Hill HS	October 2020	\$\$
D&C	Penrith Lakes (new) Environmental Education Centre	November 2020	\$
D&C	Glenmore Park HS Performing Arts & Learning Centre	November 2020	\$\$
D&C	Nepean Creative & Performing Arts HS Hall	November 2020	\$\$
D&C	Jamison HS Hall	November 2020	\$\$

Project Size \$ < \$25m \$\$ \$25m to \$75m \$\$\$ > \$75m

SINSW 2020 Delivery Strategy

Building Contractor (continued)

Legend ECI: Early Contractor Involvement
 D&C: Design & Construct
 DfMA Project

All projects are school upgrades unless noted otherwise

Project		Procurements commencing from	Project size
D&C	Queanbeyan West PS Hall	November 2020	\$\$
D&C	Yass HS Hall	November 2020	\$\$
D&C	Engadine HS Hall	November 2020	\$\$
D&C	Jannali East PS Hall	November 2020	\$\$
D&C	Stanwell Park PS Hall	November 2020	\$\$
D&C	Milperra PS Hall	November 2020	\$\$
ECI	Northern Suburbs Cluster: Epping West PS & Epping South (new) PS	December 2020	\$\$
ECI	Southern Suburbs Cluster: Liverpool West PS & Liverpool (new) PS	December 2020	\$\$
D&C	Mona Vale PS	December 2020	\$\$
ECI	Sydney Olympic Park (new) HS	December 2020	\$\$
D&C	Hurlstone Agriculture HS	Post 2020	\$\$

Project Size \$ < \$25m \$\$ \$25m to \$75m \$\$\$ > \$75m



What is Design for Manufacture & Assembly....?

Volumetric DfMA

Mostly finished modules including:

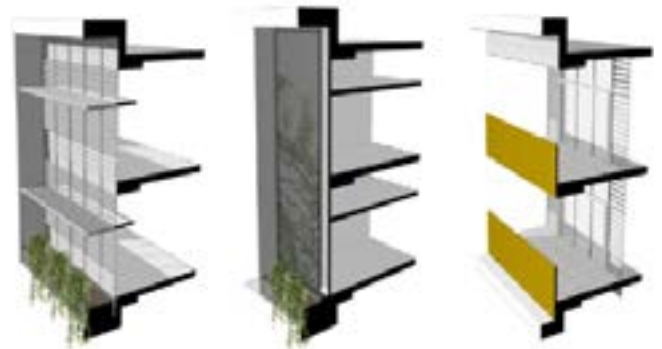
- Structure;
- External Finishes;
- Services; and / or
- Internal Finishes.



'Kit of Parts' DfMA

Manufactured building components such as:

- Columns & Beams;
- Wall & Floor Panels; and / or
- Facade Panels & Trusses.



Hybrid DfMA

A combination of both such as:

- Amenity/core modules;
- Post and beam structure;
- Floor & roof panels; and / or
- Facade panels.

or

- Bathroom pods;
- Services riser pods;
- Precast lift and stair cores;
- Post and beam structure;
- Floor & roof panels; and / or
- Facade panels.

DfMA Benefits

DfMA has Benefits in Time, Sustainability & Minimising Disruption



Time savings

DfMA can reduce on-site construction time by up to 50%, reducing impacts to school operations



Minimises impact on school operations

Reduced program & vehicle movements; peak construction activity during school holidays



Improved health, safety & productivity

DfMA improves health & site safety, productivity & output in construction



Upskills the workforce

Upskilling opportunities for the supply & manufacturing workforce



Improved sustainability

DfMA reduces material & waste by ~70% & CO₂ emissions by ~50%



Opportunity to reduce cost

Over time, design & standardisation reduces cost

DfMA Procurement Strategy

Strategic Objectives: Develop Industry DfMA Capability & Increase Manufacturing Capacity



14 projects selected with a specific DfMA procurement focus to foster investment and improve industry DfMA capability.



These projects are intended to be grouped into six geographical clusters to maximise bulk purchasing and achieve economies of scale.



Development of a panel of specialist DfMA Building Contractors & a separate panel of approved DfMA Manufacturers.



Following separate procurements, the successful Building Contractor and Manufacturer will be engaged through an ECI delivery method. Limits may be placed to the number of tender opportunities panelists are invited to in order to maximize industry capability.



Panels refreshed in 2021 based on performance and innovation.

DfMA procurement steps



Further market sounding to Building Contractors and Manufacturers

Call separate EOIs for Building Contractors and for Manufacturers

Contractor Panel and Manufacturer Panel list selected

Potential DfMA ECI contracts start being tendered

Award ECI contract

DfMA Procurement Strategy

Proposed Roadmap to Procurement of DfMA Partners



1. Next steps are to continue market sounding to ensure market readiness.

2. DfMA procurement & delivery will be managed as a single program by SINSW.



3. Partners will be tendered and evaluated against the below:

- **Cluster approach:** Programme management principles apply in addition to core PM skills (depth of resource, range of personnel & roles)
- **DfMA focused:** Tracked record with DfMA desirable given this is the first wave and success must be guaranteed
- **BIM:** Proven track record with the use of BIM for 4D & 5D schedule management or similar

