

ANNEX A – QUANTITY SURVEYORS (QS) WORKGROUP RECOMMENDATIONS

Background

- 1 Building on the work of the Taskforce for Architectural and Engineering Consultants, BCA established the Quantity Surveyors (QS) Workgroup in February 2026, to strengthen the Quantity Surveying profession's talent pipeline, raise professional standing, and enhance business sustainability of Quantity Surveying firms.
- 2 The workgroup comprises representatives from Quantity Surveying firms, service buyers, Institutes of Higher Learning (IHLs), and relevant Government agencies. The composition of the workgroup is as follows:

Quantity Surveyors (QS) Workgroup	
Chairperson:	Mr <u>Tan</u> Chee Kiat Deputy Chief Executive Officer, Building and Construction Authority
Members (in alphabetical order by surname)	Dr <u>Cheng</u> Zhuoyuan Vice Dean and Head (Building and Project Management Programme), School of Science and Technology, Singapore University of Social Sciences
	Prof Michael <u>Chew</u> Head (Department of the Built Environment), College of Design and Engineering, National University of Singapore
	Sr <u>Hu</u> Kar Keong Group Director (Procurement and Contracts), Housing and Development Board
	Sr Colin <u>Kin</u> President (Quantity Surveying), Singapore Institute of Surveyors and Valuers
	Mr <u>Kwee</u> Ker Wei 1 st Vice President, Real Estate Developers' Association of Singapore

	Sr Elaine <u>Lee</u> Group Director (Contracts and Procurement), JTC Corporation
	Mr <u>Lim</u> Kian Peng Group Director (Procurement and Contracts), Land Transport Authority
	Ms Jane <u>Ong</u> Director (Contracts and Procurement), GuocoLand Singapore
	Mr <u>Oon</u> Sixiang Director (Infrastructure), Ministry of National Development
	Sr <u>Tay</u> Ter Long Chief of Government Procurement and Director (Government Procurement Function Office), Ministry of Finance
	Mr Stephen <u>Wong</u> Senior Vice President (Cost Management), Southeast Asia, Asia Infrastructure Solutions Singapore Pte Ltd
	Sr Natalie <u>Yong</u> Managing Director, LCH Quantity Surveying Pte Ltd

- 3 While Qses play a vital role in helping clients manage contractual and commercial risks, safeguard costs, and make better project decisions, their value is not always well understood. This affects how young people view Quantity Surveying as a career, and how firms are able to attract and retain talent.

- 4 Technologies, such as Artificial Intelligence (AI), present opportunities to transform the profession, with routine tasks such as measurement, quantity extraction, variation assessments and documentation being increasingly augmented or automated by digital tools. As the profession evolves, there are opportunities to enable Qses to create greater value, take on more strategic roles, and strengthen their contributions to successful project delivery.

Key Recommendations

- 5 The QS Workgroup's recommendations are structured around three priorities: (i) attracting talent into the profession, (ii) developing and retaining future-ready professionals, and (iii) enhancing the business sustainability of Quantity Surveying firms.

Priority 1: Attracting Talent into the Quantity Surveying Profession

- 6 To build a stronger talent pipeline, the Workgroup has recommended identifying new opportunities to improve and widen entry pathways for students.

New Curriculum in Institutes of Higher Learning (IHLs)

- 7 To foster early awareness of the Quantity Surveying profession, the Workgroup recommends that Institutes of Higher Learning (IHLs) introduce new QS-related learning opportunities. To this end, the Department of the Built Environment at the National University of Singapore (NUS)'s College of Design and Engineering (CDE) has offered a Specialisation in Contract Management and Cost Engineering under its Bachelor of Engineering (Infrastructure and Project Management) programme, providing undergraduates with a practical grounding in project cost, contract, and procurement management.
- 8 The Singapore Institute of Surveyors and Valuers (SISV) and Singapore Polytechnic are exploring the introduction of a new Quantity Surveying elective module. Together with the current Bachelor of Building and Project Management (BBPM) programme offered by the Singapore University of Social Sciences (SUSS), which provides training relevant to quantity surveying, these new initiatives would broaden talent outreach and further strengthen students' understanding of project procurement and contract management.

Onboarding Firms onto the INSPIRE Internship Programme

- 9 To support students keen to pursue Quantity Surveying as a career, the Workgroup recommends that Quantity Surveying firms be onboarded onto the INSPIRE¹ programme, so

¹ Launched as part of the Taskforce for Architectural and Engineering Consultants recommendations in 2025, INSPIRE is an enhanced internship programme that aims to provide students with structured, meaningful industry experience while strengthening pipeline of industry-ready talent. More info can be found [here](#).

that students from the relevant Quantity Surveying programmes may benefit from the extended internship of at least 30 weeks, dedicated mentoring and meaningful work experience. INSPIRE interns may also receive higher starting salaries when they join their firms full-time after graduation.

- 10 The Workgroup also recommends recognising the INSPIRE internship duration as relevant work experience to meet the Accredited Professional Quantity Surveyor (APQS)² scheme's requirements. This could support eligible graduates to attain accreditation earlier and advance more quickly toward the higher APQS accreditation³ tiers.

Rebranding of the Quantity Surveying Profession

- 11 The Workgroup recommends efforts to strengthen the profession's identity and visibility, among the wider community, including parents and educators. To this end, the various stakeholders are undertaking a rebranding exercise, including reviewing the 'Quantity Surveyor' professional title, to better reflect the profession's key role in cost and contract management. The work of Quantity Surveying professionals and exciting career prospects could also be showcased through student outreach channels, such as career fairs.

Priority 2: Developing and Retaining Quantity Surveying Professionals

- 12 The Workgroup recommends raising the professional standing and uplifting capabilities through recognition and accreditation.

Accelerating Adoption of Professional Accreditation

² The Accredited Professional Quantity Surveyor (APQS) accreditation, aligned with the [Built Environment Skills Framework](#), validates professional competencies of QSEs. It provides progression routes for QSEs from different academic backgrounds to develop their competency levels. More info can be found [here](#).

³ The APQS accreditation comprises four tiers from Tier 1 (most advanced) to Tier 4 (entry level). The tiers and their respective roles are as follows: **Tier 1** - Associate Director or Contracts Director; **Tier 2** - Senior Quantity Surveyor, Senior Contracts Manager or Senior Cost Manager; **Tier 3** - Quantity Surveyor, Contracts Manager or Cost Manager; and **Tier 4** - Assistant Quantity Surveyor or Assistant Cost Manager.

- 13 The Workgroup recommends the wider use of professional accreditation, such as the APQS scheme, because accreditation gives QSes a clearer pathway to demonstrate their competencies and progress in their careers.
- 14 Professional accreditation also serves as useful reference points for service buyers when engaging QSes for more complex projects. Hence, the Workgroup encourages more clients⁴ to specify appropriate accreditation as a tender requirement for key personnel in construction consultancy tenders progressively.

Specifying the Roles of QSes in Contract Forms

- 15 The Workgroup also recommends for the roles and responsibilities of QSes to be formally recognised in standard construction contracts such as the Public Sector Standard Conditions of Contract (PSSCOC)⁵ and other industry contract forms, where applicable. This acknowledges the integral role QSes play in project delivery and provides greater clarity to project stakeholders on their roles and responsibilities.

Career Progression

- 16 To support QSes' career progression, the Workgroup recommends adopting competency-based remuneration. Firms are also encouraged to reference APQS in career development and progression discussions. Over time, wider adoption of accreditation can strengthen professional standards, support better career progression, and make it more worthwhile for QSes to stay and grow in the profession.

Priority 3: Enhancing the Business Sustainability of Quantity Surveying Firms

- 17 Sustainable business operations are fundamental to the long-term viability of the Quantity Surveying profession. Quantity Surveying firms should differentiate themselves through quality, expertise and value-add by expanding beyond traditional services into higher-value areas. Based on the Workgroup's consultations with service buyers, Quantity Surveying firms

⁴ The Workgroup noted that several government agencies including HDB and JTC are already referencing the APQS in their procurement.

⁵ The Public Sector Standard Conditions of Contract (PSSCOC) provides a standardised contract form for all public sector construction projects in Singapore. More info can be found [here](#).

can play a larger role in collaborative contracting and strategic and procurement advisory services, such as early-stage cost advice and risk management. With these, QSEs are engaged earlier and can more meaningfully help clients realise better project outcomes.

Leveraging Technology and AI

- 18 To support this shift, the Workgroup recommends leveraging technology and AI for more efficient cost assessments, and promoting sustainable tendering through defining the scope of services delivered.

Developing an AI-enabled Cost Intelligence Platform

- 19 The Workgroup recommends that the industry develop an AI-enabled cost intelligence platform to consolidate cost information of project scopes that allows more efficient cost assessments, including for star rate items.⁶ Leveraging AI-powered analytics, the platform could provide firms with insights to support cost assessments, improve operational efficiency and strengthen productivity across the profession. This could enable QSEs to focus on work that requires their professional judgment and experience more, to better benefit project delivery.

Raising Awareness of Digital and AI Tools

- 20 To raise awareness of digital and AI tools among QSEs, the Workgroup recommends developing a listing of digital solutions for Quantity Surveying firms. Industry events could also be leveraged to showcase emerging technologies, promote good practices and highlight solutions that address common pain points.
- 21 Eligible firms can also tap on schemes, such as Enterprise Singapore's Enterprise Development Grant, to defray the cost of projects that upgrade capabilities, drive innovation and improve productivity.

⁶ Star rate items refer to newly negotiated unit rates for extra or variation work not listed in the original contract.

Driving Sustainable Tendering

Supporting Transparent Fee Negotiations through Value Articulation Framework (VAF)

- 22 The Workgroup has also heard feedback from firms on needing a clearer way to explain the scope and value of higher-value Quantity Surveying services to clients. To this end, the Workgroup recommends that the industry develop a Value Articulation Framework (VAF) to define a list of “core” and “value-added⁷” Quantity Surveying services that can be delivered at each project stage.
- 23 This could support Quantity Surveying firms in developing fee proposals commensurate with the scope, complexity and resources required, while enabling service buyers to make more informed evaluations of submitted bids, fostering a more transparent and equitable procurement environment.
- 24 The full list of recommendations can be found here in the [infographic](#) and [report](#).

⁷ Examples of “value-added” services that have been proposed include advising on collaborative project delivery models, sustainability and lifecycle costing, cost benchmarking and providing market intelligence.

ANNEX B – PROJECT OF THE YEAR AND COMPANY OF THE YEAR 2026 AWARD WINNERS

- I. [BCA's Project of the Year Award](#)
- II. [BCA's Company of the Year Award](#)

Project of the Year Award

- 1 The Project of the Year Award recognises building and civil/infrastructure projects that demonstrate a strong commitment to transformation and advancing Singapore's Built Environment (BE) industry. The award aims to spur firms to work collaboratively, drive improvement, and attain impactful outcomes at the project level. There are six Award categories, namely **Residential, Commercial, Mixed-use, Industrial, Institutional and Infrastructure**.
- 2 This year's winners are:
 - (i) **Residential:** Tembusu Grand
 - (ii) **Mixed-use:** Pasir Ris Mixed Use Development
 - (iii) **Industrial:** Bulim Square
 - (iv) **Institutional:** Outram Secondary School (Sengkang Campus)
 - (v) **Infrastructure:** Subsea Water Pipeline Tunnel Connecting Tuas and Jurong Island –

Contract 1

i. **Residential**

Project Name

Tembusu Grand (莉丰嘉园)



Image credit: City Developments Limited & Sunway MCL

Project Team

Developer	City Developments Limited (CDL) and Sunway MCL Ltd (Tembusu Residential Pte Ltd)
Builder	United Tec Construction Pte Ltd
Architect	ADDP Architects LLP
Civil & Structural	TW-Asia Consultants Pte Ltd
Mechanical & Electrical	Rankine & Hill (S) Pte Ltd

Quantity Surveyor	AECOM Cost Consulting and Project Management (Singapore) Pte Ltd
Environmentally Sustainable Design (ESD) Firm	Building System and Diagnostics Pte Ltd

Tembusu Grand is a 638-unit residential development that achieved Temporary Occupation Permit (TOP) within the contractual period despite challenging soil conditions. The project showcases excellence in project delivery through early contractor involvement, advanced construction methods, digital innovation, and strong stakeholder partnerships, enhancing productivity, quality, safety, and delivery certainty.

Project Highlights

Sustainability

- The development achieved the BCA Green Mark Platinum Super Low Energy certification with Health & Wellbeing, Whole Life Carbon and Maintainability Badges for demonstrating strong energy efficiency and environmental performance.
- The building's façade design and optimised unit layouts reduce the amount of heat entering homes, thereby maintaining lower temperatures for residential units.
- Homes and clubhouses use highly energy-efficient air-conditioning and LED lighting, contributing to 62% energy savings compared with the baseline.
- Renewable electricity from solar panels offset 33% of energy usage from shared facilities such as the clubhouse, function rooms, and swimming pool pumps.

Digitalisation

- The project team used FulcrumHQ as a centralised Common Data Environment – a shared digital platform where the project team could access the latest project information in real time.
- This helped the team resolve issues faster and mitigate downtime from the overall duration of the programme.

Workforce Transformation

- A digital work-permit system reduced paperwork and administrative work, allowing safety coordinators to spend more time on-site identifying potential safety risks.

- Structured training and capability development programmes were conducted for value chain partners, including contractors, suppliers and consultants.

ii. Mixed-use

Project Name

Pasir Ris Mixed Use Development



Image credit: Woh Hup (Private) Limited

Project Team

Developer	Allgreen Properties Limited & Kerry Properties Limited (Phoenix Commercial Pte Ltd & Phoenix Residential Pte Ltd)
Builder	Woh Hup (Private) Limited
Architect	DCA Architects Pte Ltd
Civil & Structural	Mott MacDonald Singapore Pte Ltd
Mechanical & Electrical	J Roger Preston (S) Pte Ltd
Quantity Surveyor	Threesixty Cost Management Pte Ltd

Environmentally Sustainable Design (ESD) Firm	Building System and Diagnostics Pte Ltd
Landscape Architect	Shma Company Limited

Pasir Ris Mixed Use Development is a landmark integrated development and the first of its kind in Pasir Ris, bringing together homes, retail, essential services, transport and community spaces in one connected destination. Delivered for Allgreen Properties Limited and Kerry Properties Limited, the project exemplifies sustainable, technology-driven construction through low-embodied-carbon design, high-performance energy management and industry-leading Design for Manufacturing and Assembly (DfMA) outcomes — reflecting how collaboration and innovation can deliver a vibrant, future-ready development.

Project Highlights

Value Chain Transformation

Developer's Initiatives

- Early Contractor Involvement (ECI) – the builder was brought into the project during the design stage to give suggestions on site planning, share utilisation plans, and suggest practical or cost-effective solutions before work began.
- Throughout construction, the different project partners continued to jointly assess proposed changes, including their cost and schedule implications.
- The team leveraged data to decide whether potential design improvements were worth the impact on the construction schedule.

Builder's Initiatives

- Internal training programmes were extended to subcontractors.
- The company recognised suppliers and subcontractors for good performance across all projects.
- Annual safety campaigns also recognised individuals and teams that demonstrated good safety practices.

Workforce Transformation

- The project adopted the BE CARE Charter⁸. DCA is also one of the early adopters of the BE CARE Charter and INSPIRE Internship Programme.
- Woh Hup worked with BCA to support students through the MOE-Singapore-Industry Scholarship.

iii. Industrial

Project Name

Bulim Square



Image credit: JTC

Project Team

Developer	JTC Corporation
Builder	Rich Construction Company Pte Ltd
Architect	SAA Architects Pte Ltd

⁸ The BE CARE Charter is an initiative for the built environment sector that spells out best practices that project teams or firms can adopt when interacting with colleagues and other project parties.

Civil & Structural	T.Y.Lin International Pte Ltd
Mechanical & Electrical	Beca Carter Hollings & Ferner (S.E.Asia) Pte Ltd
Quantity Surveyor	Asia Infrastructure Solutions Singapore Pte Ltd
Environmentally Sustainable Design (ESD) Firm	Building System and Diagnostics Pte Ltd

Bulim Square is connected to Jurong Innovation District (JID)'s underground District Logistics Network (DLN), enabling more efficient goods deliveries through dedicated underground routes. Designed to support future electric Automated Guided Vehicles, the network advances the vision of a cleaner and more car-lite district.

Project Highlights

Sustainability

- The development achieved the BCA Green Mark Platinum.
- Real-time energy monitoring and optimisation: Bulim Square's Open Digital Platform draws real-time data from building systems and sensors into its Digital Twin, giving operators a virtual view of building performance, allowing them to monitor energy use and identify opportunities to optimise consumption. A Common Data Environment also provides the project team with a shared digital platform to access and coordinate project information.
- Energy-efficient district cooling: An on-site district cooling system serves Bulim Square's four towers and is designed with excess capacity to support future neighbouring developments. The system enables greater energy efficiency and helps reduce carbon emissions.
- Integrated stormwater management: Bulim pond, a stormwater detention and cleansing pond at Bulim Park collects rainwater from the surrounding area and cleanses it through a rain garden. By centralising stormwater detention for multiple land plots, the pond eliminates the need for individual developments to build their own detention facilities, freeing up space traditionally used for stormwater detention tanks and transforming Bulim Park into a recreational space for the community.
- Connected to JID's car-free Sky Corridor: Bulim Square's Sky Corridor Plaza connects to JID's 11km car-free Sky Corridor. The Sky Corridor, set to be

Singapore's longest when completed, will connect the district for walking, cycling, and autonomous shuttles. This creates a sustainable transportation hub that reduces dependence on carbon-intensive transport while promoting active mobility and urban heat mitigation.

Advanced Manufacturing and Assembly⁹

- Prefabricated Mechanical, Electrical and Plumbing (MEP) modules: More than 12,000 sqm of MEP components were pre-assembled off-site into modules before being installed at Bulim Square, reducing the amount of work required on site. Together with the use of drilling and anchoring robots, this achieved 40% higher productivity compared with manual methods and reduced installation time by 50%.

Digitalisation

- Digital modelling to enhance design and construction processes: 3D/4D/5D/6D Building Information Modelling (BIM) brought architectural, civil and structural, and mechanical and electrical designs together in a shared digital model. This allowed the project team to coordinate designs and identify potential clashes before construction, contributing to 50% faster progress claims as well as an average of 40% fewer clashes and 80% fewer disputes.
- Faster and more accurate quality inspections: Digital quality management tools were used to track and manage inspections, enabling an average of 40% faster inspections and 20% fewer defects.
- Digital tracking of prefabricated components: RFID tags and barcodes were used to track components that were manufactured or assembled off-site (DfMA components) contributing to an average of 30% fewer installation errors and 15% faster assembly.
- Digital monitoring of construction progress: Drones and 360-degree cameras were used to capture the construction site's progress, giving the project team a more comprehensive and up-to-date view of works on the ground. This supported progress reporting and helped the team identify potential schedule overruns early.

⁹ Advanced Manufacturing and Assembly refers to automating fabrication in factories to improve productivity, quality, and work environment, in addition to driving co-location of synergistic construction activities.

iv. **Institutional**

Project Name

Outram Secondary School (Sengkang Campus)



Image credit: Bai Jiwen, courtesy of Kwan Yong Construction Pte Ltd

Project Team

Developer	Ministry of Education
Builder	Kwan Yong Construction Pte Ltd
Project Manager	PM Link Pte Ltd
Architect	DP Architects
Civil & Structural	CPG Consultants Pte Ltd
Mechanical & Electrical	Meinhardt Singapore Pte Ltd
Quantity Surveyor	CPG Consultants Pte Ltd
Specialist	DP Sustainable Design

Project Highlights

Sustainability

- This is the first BCA Green Mark Platinum Zero Energy Ministry of Education (MOE) School, meaning it generates enough renewable energy on-site to offset the energy it uses. Additionally, it also has three badges: Whole Life Carbon, Health & Wellbeing and Maintainability.
- Its solar panels generate about 1,034 MWh of electricity a year — enough to power around 250 four-room HDB flats.
- Energy-efficient air-conditioning, LED lighting and smart sensors help ensure that lights and other systems operate only when they are needed.
- Courtyards, gardens and landscaped areas provide outdoor learning and social spaces for students while supporting biodiversity.
- The greenery also helps cool the school environment, manage rainwater naturally and make the campus more resilient to climate change.

Advanced Manufacturing and Assembly

- Large parts of the building structure were manufactured off-site and assembled on-site, reducing the amount of work that had to be carried out manually.
- This approach saved about three days of construction time per floor and reduced manpower needs by 30% for the precast works.

Digitalisation

- Project information and digital building models were brought together on a Common Data Environment, allowing teams to identify potential conflicts before they became construction problems.
- Weekly clash detection resolved 57% of issues resolved each week and reduced rework by 30%.
- IoT sensors also provided real-time information about environmental conditions on the construction site.

Workforce Transformation

- The implementation of the BE CARE Charter resulted in strong safety performance and positive workforce outcomes across the project.
- The project recorded no Stop Work Orders, no demerit points and zero fatal, major or minor injury cases per 100,000 workers.

Project Name

Subsea Water Pipeline Tunnel Connecting Tuas and Jurong Island – Contract 1



Interior of 6m diameter subsea tunnel

Image credit: PUB, Singapore's National Water Agency

Project Team

Developer	PUB
Builder	Shanghai Tunnel Engineering Co (Singapore) Pte Ltd
Consultant	Ch2m Hill Singapore Private Limited
Architect	NA
Civil & Structural	Arup Singapore Pte Ltd
Mechanical & Electrical	NA
Quantity Surveyor	NA
Specialist	NA

The project involved the construction of a 1.6km subsea tunnel of 6m diameter, enclosing two 2.2m diameter and 1.2m diameter pipelines each. These will convey NEWater from

the future Tuas Water Reclamation Plant to Jurong Island to serve growing demand from industries located on the island.

Project Highlights

Sustainability

- The project used a type of concrete – Steel Fibre Reinforced Concrete (SFRC) – that requires much less steel reinforcement than conventional concrete while still maintaining material strength.
- This significantly reduced the amount of steel required from 180kg to 38kg per cubic metre of concrete.
- Across the entire project, this is estimated to have avoided approximately 2,980 tonnes of carbon emissions (comparable to electricity used by roughly 550 average Singaporean households over a year) — a 76% reduction compared with conventional reinforced concrete tunnel segments.

Advanced Manufacturing and Assembly

- Automated welding robots were successfully deployed inside the confined tunnel environment.
- They welded 60% faster, while achieving almost no rejected welds.
- The robots were powered using the tunnel boring machine's electricity supply instead of diesel, eliminating the need for diesel in the welding process.
- The new SFRC system also reduced the need to manually assemble conventional steel reinforcement cages, cutting the manpower hours required for reinforcement work by 75%.
- Instead of using water, steam was used to help concrete harden faster, allowing tunnel sections to be produced and moved to storage more quickly. This also reduced the potential environmental impact risks associated with conventional water-curing of concrete.

Digitalisation

- Critical approval and permit processes were moved onto a digital platform, cutting approval times by 20% and eliminating paper permits entirely.
- AI-enabled cameras were used to monitor safety conditions deep underground.

Value Chain Transformation

- During tunnelling, large pieces of excavated rock repeatedly blocked the system used to transport excavated material, causing delays.
- The team tested several improvements before redesigning part of the rock-crushing equipment to prevent oversized pieces from entering the system.
- The final solution completely eliminated the blockage problem and significantly reduced downtime due to this issue.

Company of the Year Award

3 The Company of the Year Award recognises BE firms that have gone beyond project-level initiatives to achieve outstanding business and workforce transformation across their entire operations. In line with the BuildSG movement, the award showcases firms leading the way in transforming Singapore's BE sector.

4 This year's winners are:

(i) Large Firms:

- a. Arup
- b. Woh Hup (Private) Limited

(ii) Small Firms: DP Architects Pte Ltd

(i) Large Firms

a) Company: Arup

Arup is a global built environment consultancy delivering work in more than 130 countries. Established in Singapore in 1968, Arup brings over five decades of local experience, combining technical excellence and strategic advisory expertise to plan, design, and deliver the future of the built environment.

Highlights

Using AI to improve design and project delivery

- Uses AI to help design low carbon and high performing buildings and infrastructure
- Uses data to understand how developments can contribute to the Urban Heat Island effect — where built-up areas become hotter — and help planners, architects and engineers design healthier and more resilient environments.
- Integrates AI, satellite imagery, machine learning and digital twin solutions to improve design and project delivery through predictive, data-driven insights that reduce months of manual inspections, accelerate decision-making, and strengthen urban governance.
- Uses AI tools to help employees understand tender requirements, check Singapore engineering requirements, find information faster and automate repetitive work.

- Develops enterprise-scale AI platforms that embed institutional intelligence directly into workflows to streamline research and compliance checks, saving hundreds of man-hours while maintaining technical rigour and quality assurance.

Helping employees use new technology

- Provides funding for employees to experiment, prototype and scale innovative ideas
- Runs coding clubs and specialised digital design training so employees can become more confident using technology.

Developing and retaining talent

- Runs a structured 20-month development programme that equips graduates with the technical expertise, commercial awareness, and collaborative skills needed to navigate the complexities of modern built environment projects.
- Dual career pathways giving employees the choice of progressing as either technical specialists or business and people leaders
- Developed “The Leadership Academy” which equips all employees across seniority and roles with on-demand leadership development content and tools, embedding leadership behaviours alongside technical excellence for career progression.
- Offers flexible working arrangements and internship opportunities through BCA's INSPIRE internship programme.

b) **Company:** Woh Hup (Private) Limited

An established pioneer of more than 99 years in Singapore’s construction and civil engineering industry, Woh Hup remains at the forefront of shaping the nation’s urban landscape by consistently delivering high quality, innovative building solutions.

Highlights

Using technology to build more efficiently and safely

- Uses digital technology throughout the construction process to help teams plan, coordinate and track projects more efficiently.
- Deploys robots for jobs such as tile grouting, concrete levelling, ceiling drilling, and adopts remote crane operation.

- Conducts remote supervision through using AI-enabled cameras, wearable cameras and conducts virtual Temporary Occupation Permit inspections.

Building a pipeline of future talent

- Has supported 122 scholars since 1977, as well as eight scholars under the MOE-Singapore-Industry Scholarship programme.
- Introduces younger students to construction through Primary and Secondary school site visits, and sponsored University participants for summer camp.
- Recorded a 74% employee engagement score in 2025, compared with the stated Singapore average of 60%.

Finding better ways to work

- Encourages teams to regularly examine how work is being done and identify waste, inefficiencies and opportunities for improvement.
- Works closely with clients and project partners through collaborative contracting.
- Proactively positions its workforce and processes for CORENET X, Singapore's new digital regulatory submission system.

Building more off-site

- Uses prefabrication, where parts of a building are manufactured in a controlled environment before being brought to the construction site for installation.
- Examples include entire room-sized building modules (Prefabricated Prefinished Volumetric Construction), bathrooms (Prefabricated Bathroom Units), building services (Mechanical, Electrical and Plumbing Risers), lift modules and 3D staircases.

R&D Initiatives

- Developing technology in 3D concrete printing.
- Conducts research into lower-carbon and carbon-capturing concrete.

(ii) Small Firms

Company: DP Architects Pte Ltd

DP Architects (DPA) is a leading Singaporean multidisciplinary design practice with over 1,000 staff in 17 global offices and 8 architecture-related specialist companies – DP Consultants, DP Design, DP Engineers, DP Façade, DP Green, DP Lighting, DP Sustainable Design and DP Urban. Its design practice was founded on a deep concern for the built environment and the need for architectural excellence that enriches the human experience, harnessing the capacity of design to translate community aspirations and transform spaces into loveable and inclusive places.

Highlights**Smarter Operations, Stronger Business**

- Specialist expertise is organised and shared across projects and markets, while dedicated taskforces drive sustainability, digitalisation and innovation.
- At the same time, DPA continues to diversify into high-growth sectors such as data centres – through anDPlus, a specialised data centre company offering technical services and management consultancy – as well as expand its capabilities internationally, strengthening both competitiveness and long-term business resilience.

From Research to Real-World Impact

- DPA is also committed to research and innovation, intensified through the adoption of a practice-led research approach where research is not treated as an independent supplementary activity, but is integrated with project delivery through experimentation, evidence-gathering and evaluation.
- This has resulted in the design and implementation of projects as testbeds to advance sectoral agendas and address BE challenges, yielding practice-based insights for deeper investigation into each typology.
- Its dedicated Smart Sustainability Unit (SSU) develops digital tools that help project teams evaluate and optimise building performance, turning research into practical solutions that can be deployed on live projects.
- Partnerships with Institutions of Higher Learning (IHLs) and researchers further accelerate the translation of new knowledge into scalable applications for the built environment.
- The result is a virtuous cycle: research informs projects, projects generate knowledge, and knowledge strengthens the entire practice.

Technology and AI as Enablers of Better Architecture

- The firm's strategic Green-Well-Tech (GWT) thrust is operationalised through its Attributes of Purposeful Design (APD) framework and digital tool, embedding both

social and environmental sustainability in projects from the design phase for over a decade.

- The firm also sees AI as an enabler, elevating innovation through deeper insights and empowering teams to focus on higher-value work and the uniquely human dimensions of design – empathy and imagination.
- DPA is integrating generative AI and advanced digital tools across the architectural workflow – from design exploration and optimisation to documentation, regulatory compliance and building-area verification.
- In line with the encouragement to adopt innovative technology to serve people, strengthen communities and improve lives, DPA has not only used AI but developed tools for the BE industry that have increased productivity by up to 80%.
- Through Sid, the firm’s technology business unit, DPA develops AI-enabled solutions tailored to the BE sector, translating deep architectural knowledge into tools that positively augment design capability and productivity.

Investing in People to Drive Transformation

- Through strategic talent development, continuous learning and an inclusive culture of collaboration, DPA empowers individuals to learn, grow, lead – equipping them for change and to shape it with confidence, creativity and purpose.
- DPA’s talent strategies and initiatives include:
 - Talent management frameworks for mid-career and senior employees;
 - Scholarships and talent development initiatives for young talent;
 - Internship programmes with IHLs;
 - Annual remuneration benchmarking exercises.

ANNEX C – QUALITY EXCELLENCE AWARD (QEA) 2026 AWARD WINNERS

- 1 The Quality Excellence Award (QEA) is BCA's premier accolade which recognises developers and builders for their commitment and achievement in consistently delivering high quality private residential buildings. It serves to:
 - Raise the profile of exemplary developers and builders who have embraced workmanship excellence and consistently delivered high quality buildings,
 - Recognise firms' adoption of exemplary quality system and best practices that led to sustained delivery of high quality projects, and
 - Encourage more developers and builders to set high quality standards for their projects and achieve **CONQUAS Band 1**¹⁰, thereby uplifting the quality standards of the industry.
- 2 This year's winners are:
 - (i) **Developer:** City Developments Limited
 - (ii) **Builders:**
 - a. China Construction (South Pacific) Development Co Pte Ltd (CCDC)
 - b. Woh Hup (Private) Limited

(i) **Developer**

City Developments Limited

Highlights

- Award winner since 2013
- CONQUAS Band 1 developer
- Achieved multiple Band 1 projects, including Irwell Hill Residences and Penrose, with more than 1,700 dwelling units delivered during the qualifying period
- CDL recognises the importance of creating developments that remain durable, functional and sustainable for generations to come. By embracing innovative construction strategies, CDL strives for building excellence at every stage. Its dedication to quality also extends to homeowners, with a dedicated app that keeps residents informed, ensuring that their concerns are addressed.

¹⁰ The list of CONQUAS Band 1 developers and builders is published in BCA's website under the [Quality Housing Portal \(QHP\)](#).

- Examples of outstanding quality system, best practices and applications in qualifying projects include:
 - Rigorous multi-tier inspection processes, performance incentives for project teams to meet strict quality targets, and a final internal audit prior to homeowner delivery.

(ii) Builder

a) China Construction (South Pacific) Development Co Pte Ltd (CCDC)

Highlights

- CONQUAS Band 1 builder
- Achieved multiple Band 1 projects, including Sengkang Grand Residences and Guoco Midtown & Midtown Bay, with more than 800 dwelling units delivered during the qualifying period
- CCDC embraces digitalisation across the project lifecycle to raise quality standards, achieving greater consistency, productivity and quality. Their robotics programme spans multiple trades and projects, such as deploying Wall Plastering, Spray Painting, and Floor Screeding Robots to reduce workmanship variability and raise the quality bar at every stage of construction
- Examples of outstanding quality system, best practices and applications in qualifying projects include:
 - AI camera and 360-degree camera systems enabling real-time site monitoring, virtual quality inspections, and automated defect tracking.

b) Woh Hup (Private) Limited

Highlights

- CONQUAS Band 1 builder
- Achieved multiple Band 1 projects, including The Reef at King's Dock, One Holland Village, Irwell Hill Residences and Pasir Ris 8, with more than 1,700 dwelling units delivered during the qualifying period

- Woh Hup pursues quality excellence through continuous improvement and innovation, finding better ways to reduce defects and rework, improve efficiency and strengthen project outcomes. Their active R&D programme brings new construction technologies to life and this includes the deployment of robotics across the entire project, from structural construction to architectural finishing works.
- Examples of outstanding quality system, best practices and applications in qualifying projects include:
 - Real-time defects management system providing transparency between owners, developers, and subcontractors, with data analysed to identify common and major defects for future improvement.