

MEDIA RELEASE

BCA introduces new Green and Gracious Builder Scheme for Small and Medium Construction Firms

- *Customised Green and Gracious Builder Scheme launched for small and medium builders*
- *Green and Gracious Builder Scheme Version 2 sees increased weightage for gracious best practices*
- *21 firms to receive Green and Gracious Builder Award at the 2014 BCA Awards*

Singapore, 10 April 2014 – To encourage wider adoption of environmentally friendly and gracious practices among builders, Building and Construction Authority (BCA) has introduced a Green and Gracious Builder Scheme (GGBS) for Small and Medium Construction Firms (SMC). Adapted from the Green and Gracious Builder Scheme, the GGBS (SMC) is a voluntary scheme tailored for builders who work on smaller projects. It places greater emphasis on operational and gracious practices that can be easily adopted by smaller builders.

2. BCA has also released an updated version of the Green and Gracious Builder Scheme today. The revised scheme focuses on gracious building practices that help to minimise the impact on site and surroundings, such as improved accessibility, enhanced public safety and better noise and vibration control. In addition, manpower management practices have also been revised to emphasise employee engagement, staff welfare, retention and training.

3. These announcements come just ahead of the BCA Awards scheduled on 22 May 2014, where 21 builders will be conferred the Green and Gracious Builder Award. Five companies have successfully achieved the top ‘Star’ rating, with another eight companies receiving the ‘Excellent’ award. The remaining companies will receive the ‘Merit’ award. Of the 21 companies awarded this year, 13 builders will be receiving the award for the first time.

4. “Given high visibility and impact of construction works in Singapore, it is important for builders to go green and adopt ‘friendlier’ construction practices. We hope to reduce inconvenience and disturbance of noise, dust and accessibility for those living in the vicinity, as well as members of the public. It is heartening to see more green and gracious builders participate in this scheme every year, and how they have found innovative ways to build responsibly. With the new scheme for SMCs, we hope to inspire smaller builders that they

too, can take simple steps to be the change agent contributing to the environment and the community-at-large,” said Dr John Keung, CEO of BCA.

Green and Gracious Builder Scheme (Version 2)

5. The number of buildings being built in Singapore continues to grow. Due to land scarcity, this means that more buildings are being built closer to each other. Therefore, it is increasingly important for builders to adopt ‘friendlier’ and more gracious construction practices to minimise the impact on those living in the vicinity.

6. Given the urban challenge, BCA has taken the initiative to review its Green and Gracious Builder Scheme and revamp the Gracious Practices criteria, placing greater emphasis on noise and vibration, communication and manpower management. The overall weightage for Gracious Practices has been increased from 40 percent to 50 percent¹.

Green and Gracious Builder Scheme (SMC)

7. Designed for contractors managing larger value construction projects², the practices listed under Green and Gracious Builder Scheme may not be entirely relevant for builders managing smaller value projects³. These projects are often located close to existing buildings and it is important for builders to carry out the works in a socially responsible manner.

8. To encourage smaller builders to adopt green and gracious practices, BCA customised the Green and Gracious Builder Scheme for Small and Medium Construction Firms (SMC). The GGBS (SMC) scheme focuses more on the operational and gracious aspects, such as providing good housekeeping, ensuring accessibility and reducing noise and vibration. The GGBS (SMC) scheme is voluntary and has two levels of certification – Merit (75 points and above) and Certified (50 to below 75 points).

9. The SMC scheme will help smaller contractors to identify green practices they can implement in the course of their work. This will align their working procedures with main contractors who are working towards becoming a green and gracious builder as well. We hope to continually bridge the gap between companies who have caught onto green trends and others who may have been left behind. However, while we look forward to an optimistic future of everyone levelling up on the playing field, we must be aware that every change process needs time and investments. Improvement is always good but we need to do it step by step,” said Dr Ho Nyok Yong, President, Singapore Construction Association Ltd (SCAL).

¹ Previously, Green Practices were weighted 50 percent compared to Gracious Practices at 40 percent.

² Typically, builders graded B2 and above in BCA’s Contractors Registration System.

³ Typically, builders graded C1 and below in BCA’s Contractors Registration System.

“Moving forward, SCAL will continue to work closely with BCA and other relevant authorities to ensure the industry becomes more green and gracious, as well as, be more productive and progressive in their works.”

Green and Gracious Builder Award Winners 2014

10. In line with the increased focus on Gracious Practices, this year’s Green and Gracious award winners have not only come up with innovative ways to engage employees but also redesigned their work processes with a green and gracious mind set right from the start.

11. This year’s ‘Star’ award winner, **Straits Construction Singapore Pte Ltd**, has truly gone the extra mile to improve employee welfare. At its residential project, Kovan Regency, the company used excess construction materials to build recreational facilities for its workers. It has built a multi-purpose court, table tennis table, and gym equipment with pre-fabricated concrete planks, timber materials and surplus recycled concrete respectively. The project site even boasts a vegetable planting patch, which is collectively cared for by the workers. To minimise dust and noise for neighbours in the estate, the builder planted bamboo trees at the borders of the site to act as natural barriers, creating a more conducive worksite and living environment for the workers, as well as the community in the vicinity.

12. **Singapore Piling and Civil Engineering Pte Ltd** and **Singa Development Pte Ltd** are the first two companies to be assessed and awarded under the revised Green and Gracious Builder Scheme. Both builders have been given the ‘Star’ award for their use of advanced technology and innovative processes to improve productivity, conserve materials and enhance public safety.

13. For its Galaxis project, Singapore Piling and Civil Engineering Pte Ltd adopted a top-down construction method, where it built the basement levels and upper levels simultaneously. This not only improves productivity, but also helps to reduce the noise and dust generated during the construction process by having the upper levels shield the basement excavation work. In addition, the company designed its own unique underground support structure (One Layer Earth Retaining Stabilisation Structure (ERSS) Strut system) to help speed up basement construction and reduce vibration, noise and dust pollution.

14. Proving that smaller builders can also achieve green and gracious practices is **Pal-Link Construction Pte Ltd**. A Grade C1 “General Building” BCA registered contractor, Pal-Link has been awarded ‘Merit’ for its approach to piling which reduced the number of piles used. This helped to reduce noise pollution at its Millage Condominium site. To further

reduce noise and dust pollution, the company also replaced the temporary retaining wall with diaphragm wall which also acts as a permanent structure and eliminates the need for hacking.

15. First launched in February 2009, BCA's Green and Gracious Builder Scheme and Green and Gracious Builder Award aims to raise the environmental consciousness and professionalism of builders. The award acts as a benchmark of a builder's corporate social responsibility to the environment and the general public, and sets standards for green and gracious practices that builders can implement to address environmental concerns and mitigate possible inconveniences to the public caused by construction works. Both the revised Green and Gracious Builder Scheme and GGBS (SMC) scheme were developed in close consultation with Singapore Contractors Association Limited (SCAL) and other builders. To date, a total of 74 builders have been certified under the Green and Gracious Builder Scheme.

End

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About BCA

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore. BCA's mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has a significant influence. In doing so, it aims to differentiate Singapore's built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, its vision is to have "a future-ready built environment for Singapore". Together with its education arm, the BCA Academy of the Built Environment, BCA works closely with its industry partners to develop skills and expertise that help shape a future-ready built environment for Singapore. For more information, visit www.bca.gov.sg.

GREEN AND GRACIOUS BUILDER AWARD WINNERS 2014

SUMMARY

STAR (Above 90 points)

1. Guan Ho Construction Co. Pte. Ltd.
2. Shanghai Tunnel Engineering Co. Ltd
3. Singapore Piling and Civil Engineering Pte Ltd
4. Singa Development Pte Ltd
5. Straits Construction Singapore Pte Ltd

EXCELLENT (76-90 points)

6. Jurong Primewide Pte Ltd
7. Koon Construction & Transport Co Pte Ltd
8. Kwan Yong Construction Pte Ltd
9. Obayashi Corporation
10. Qingjian International (South Pacific) Group Development Co., Pte. Ltd
11. Qingdao Construction (Singapore) Pte. Ltd
12. Wee Poh Construction Co. (Pte) Ltd
13. YTL Construction (S) Pte. Ltd.

MERIT (61-75 points)

14. CMC Construction Pte Ltd
15. Incorporated Builders Pte Ltd
16. Kienta Engineering Construction Pte Ltd
17. Pal-Link Construction Pte Ltd
18. Rich Construction Co Pte Ltd
19. Sanchoon Builders Pte Ltd
20. Wan Chung Construction (Singapore) Pte Ltd
21. Zheng Keng Engineering & Construction Pte Ltd

STAR CATEGORY

1. **Guan Ho Construction Co. Pte. Ltd.** is a Grade A1 “General Building” BCA registered contractor. Their current projects include:

- Upgrading works at existing Fengshan, Gan Eng Seng, and Townsville Primary Schools
- Proposed upgrading to Nanyang Primary School
- Upgrading Works at Existing Telok Kurau, Temasek and, White Sands Primary Schools
- Proposed additions and alterations to existing Fairfield Methodist School (Primary).

Key Features

- Extensive use of advanced technology to enhance productivity and reduce vibration and noise pollution.
- Extensive use of noise barriers at sites.
- Wide usage of recycled materials on site for various construction activities
- Use of Erosion Control Blanket Cover at the site to reduce noise and dust generation.
- Use of bio-metric system for management of site personnel.

2. **Shanghai Tunnel Engineering Co. Ltd** is a Grade A1 “Civil Engineering” registered contractor. Their current projects include:

- Contract 920 Design and Construction of Station and Tunnel at Newton for Downtown Line

Key Features

- Use of organic food waste recycling machine to convert food waste into compost as fertilizers for plants on site.
- Extensive use of enhanced hoardings and noise barriers to reduce noise pollution.
- Extensive use of greeneries around site to improve aesthetics and air quality.
- Innovative use of “dust-eater” machine for tunnel works to reduce dust pollution.
- Use of vertical green wall at the site office to cool the office and improve aesthetics.

3. **Singapore Piling and Civil Engineering Pte Ltd** is a Grade A1 “General Building” and “Civil Engineering” BCA registered contractor. Their current projects include:

- Galaxis

Key Features

- Adoption of top-down construction method to enhance productivity and mitigate impact of noise generated in conventional bottom-up construction.
- Innovative design of One Layer Earth Retaining Stabilising Structure (ERSS) Strut system to speed up basement construction and reduce vibration and noise and dust pollution.
- Use of Contiguous Bored Pile (CBP) Wall instead of Diaphragm Wall for substructure works within Railway Protection Zone to reduce vibration.

4. **Singa Development Pte Ltd** is a Grade A2 “General Building” BCA registered contractor. Their current projects include:

- Public Housing Development at Compassvale Crescent
- Sengkang N2C43B

Key Features

- Use of automated wheel washing machine with recycled treated water to conserve water consumption.
- Tree conservation at site.

5. **Straits Construction Singapore Pte Ltd** is a Grade A1 “General Building” BCA registered contractor. Their current projects include:

- Sea Esta
- Kovan Regency

Key Features

- Use of silent piler instead of conventional piling method during piling stage to enhance productivity and reduce noise and vibration generated.
- Use of hydraulic lift platform system in place of safety barricade to increase productivity while provide a safety and dust screen.
- Initiated time-out for construction site water and light usage to inculcate save water and electricity usage.
- Use of plants as screen wall to reduce dust and noise to surrounding neighbourhood.
- Extensive recycling of construction materials for various works.

EXCELLENT CATEGORY

6. **Jurong Primewide Pte Ltd** is a Grade A1 “General Building BCA registered contractor. Their current projects include:

- Home Team Tactical Centre
- LTA Contract C1685 Tuas Depot.

Key Features

- Extensive reuse of demolition materials.
- Alternate design using bolt and nut in lieu of welding during installation of steel roof structure to help reduce noise.
- Introduction of precast anchorage for removal of lifting point after hoisting of precast components

7. **Koon Construction & Transport Co Pte Ltd** is a Grade A1 “Civil Engineering” BCA registered contractor. Their current projects include:

- Construction of Container Berths P31-P33 and Stacking Yards at Pasir Panjang Terminal
- Construction of Roads, Drains, Sewers and Vehicular Bridge at Ayer Merbau Road
- Construction of Roads, Drains, Culverts and Drainage Outfall at Tuas South Boulevard, Tuas South Avenue 5, 7 and 16.

Key Features

- Extensive reuse of recycled materials for projects.
- Re-engineering of bridge design to minimise concrete waste.
- Value engineering provided through reuse of beams from temporary bridge as part of the permanent bridge structure.

8. **Kwan Yong Construction Pte Ltd** is a Grade A2 “General Building” BCA registered contractor. Their current projects include:

- Ngee Ann Polytechnic Campus Expansion
- Specialised Secondary School at Woodlands Drive 64.

Key Features

- Extensive use of greeneries around site to improve aesthetics and air quality.
- Provision of air-conditioning units to neighbouring school to minimise the impact of noise generated by construction works.
- Innovative use of smart phone application to manage CCTV monitoring on site.

9. **Obayashi Corporation** is a Grade A1 “General Building and “Civil Engineering” BCA registered contractor. Their current projects include:

- Halliburton Phase II
- Microsoft APAC SG2

Key Features

- Adoption of advanced technology such as Qui Cutter during piling to minimise vibration and noise and dust pollution.
- Use of Balloon Lights to provide brighter and omni-directional lighting and conserve electricity consumption.
- Construction of tower crane foundation at mid-floor to conserve materials and optimise working space.

10. **Qingjian International (South Pacific) Group Development Co., Pte. Ltd** is a Grade A1 “General Building” BCA registered contractor. Their current projects include:

- Public Housing Development at Sengkang N4C24, Sengkang N2C43A, HG N4C18, TP N4C28
- RiverSound Residence
- Waterbay.

Key Features

- Innovative use of customised noise barrier for generator to reduce noise pollution.
- Temporary L-shaped Precast reduces the slope needed for shoring, thus helping to reduce noise and dust generated from construction.
- Use of bio-diesel for construction equipment as part of environment sustainability.

11. **Qingdao Construction (Singapore) Pte. Ltd** is a Grade B2 “General Building” BCA registered contractor. Their current projects include:

- Nin Residence
- RiverParc Residence
- Ecopolitan

Key Features

- Conservation of trees at project site and man-made fish tank and water landscaping at the site office for workers and staff to de-stress.
- Use of modified truck to dampen road surfaces at site to reduce dust pollution.

12. **Wee Poh Construction Co. (Pte) Ltd** is a Grade B2 “General Building” BCA registered contractor. Their current projects include:

- Heron Bay Executive Condominium.

Key Features

- Extensive use of greeneries around site to improve aesthetics and air quality.
- Alternate use of grout mixed piles in lieu of bored piles to reduce noise and vibration caused during piling works.
- “Screedless floor” design to reduce consumption of water and construction materials.

13. **YTL Construction (S) Pte. Ltd.** is a BCA registered contractor. Their current projects include:

- 3 Orchard by the Park.

Key Features

- Tree conservation at site.
- Use of top-down construction method to enhance productivity and reduce noise and dust generated by construction works.

MERIT CATEGORY

14. **CMC Construction Pte Ltd** is a Grade A2 “General Building” BCA registered contractor. Their current projects include:

- 7-Storey Nursing Home at Bukit Batok Street 52

Key Features

- Use of portable noise barriers to mitigate the impact of noise generated during piling works.
- Extensive conservation of trees at site and accommodated growth of mature trees using well-designed hoardings.

15. **Incorporated Builders Pte Ltd** is a Grade A2 “General Building” BCA registered contractor. Their current projects include:

- Proposed Development of Interpol Global Complex
- Proposed addition and alteration at Temasek Polytechnic
- Proposed Extension of Existing 11-Storey Multi-User Light Factory Building from 11 units to 30 units.

Key Features

- Use of wooden/timber block and plastic water bottle to displace the flush water to WC, thus reducing water consumption.
- Noise barrier at site is movable, thus allowing the project to place the barrier at the location where the noise exceeds the allowable limit.

16. **Kienta Engineering Construction Pte Ltd** is a Grade A1 “General Building” BCA registered contractor. Their current projects include:

- Bideford Hotel
- Addition & Alteration works at Heeren Shopping Centre
- Project G12B at Bedok Bedok North Street 3

Key Features

- Extensive reuse of recycled materials for non-structural usage.
- Use of vented drywall in lieu of masonry works as a temporary element to conserve the use of materials and improve productivity.

17. **Pal-Link Construction Pte Ltd** is a Grade C1 “General Building” BCA registered contractor. Their current projects include:

- Millage Condominium

Key Features

- Value engineering introduced during piling to reduce number of piles used which reduce noise pollution.
- Alternate design to replace temporary retaining wall with diaphragm wall to eliminate hacking that cause noise and dust pollution.

18. **Rich Construction Co Pte Ltd** is a Grade A1 “General Building” BCA registered contractor. Their current projects include:

- The Lanai
- HDB Punggol East C38

Key Features

- Use of plastic formwork which is highly recyclable to replace timber formwork.
- Consideration for motorists and pedestrians by replacing metal hoarding with full height safety netting to improve visibility.

19. **Sanchoon Builders Pte Ltd** is a Grade A1 “General Building” BCA registered contractor. Their current projects include:

- CleanTech 2

Key Features

- North-South orientation of site office to reduce the air-conditioning cooling load required.
- Value engineering provided through sheet pile design without strutting to conserve use of materials and enhance productivity.

20. **Wan Chung Construction (Singapore) Pte Ltd** is a Grade A2 “General Building” BCA registered contractor. Their current projects include:
- Public Housing Development at Seng Kang Neighbourhood 4 Contract 12
 - Private residential at Asimont Lane

Key Features

- Recycling of re-bar by making 'S' hooks with insulation which is used for hanging electrical wires and recycling of aircon condensate water for site use.
- Conducting health screening program for workers and staff and providing fruits once a month to all employees.

21. **Zheng Keng Engineering & Construction Pte Ltd** is a Grade B1 “General Building” BCA registered contractor. Their current projects include:
- 7-Storey Student Hostel at NTU
 - Expansion project at Singapore Polytechnic.

Key Features

- Conservation of trees at site.
- Considerateness towards the safety of students and public by constructing sheltered walkway along perimeter of site.