



Building and Construction Authority
We shape a **safe, high quality, sustainable** and **friendly** built environment.

In Celebration of



BCA AWARDS 2015

Recognising Excellence in the Built Environment

GREEN AND GRACIOUS BUILDER AWARD

The Green and Gracious Builder Award (GGBA) was introduced in February 2009 to recognise progressive builders who adopt environmentally friendly practices and minimise the effects of construction for people living close to the worksite. Builders are rated on their performance in adopting best practices in construction site management.

The scheme was enhanced to stay relevant with the dynamics of the industry and to further encourage builders to adopt more of such best practices. This award recognises the conscious effort of builders in implementing environment protection and gracious practices during the construction phase of projects.

The GGBA 2015 will be given to the following ratings:

- STAR
- EXCELLENT

Daewoo Engineering & Construction Co., Ltd.

STAR



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- **8 River Suites at Bendemeer**
- **Echelon Condominium at Alexandra View**
- **Scotts Tower**

KEY FEATURES

- Adoption of hollow column construction method to reduce material.
- Use of rock wool insulation enclosure for concrete station pump to reduce noise.
- Use of alternative proposed soil and waste pipe – Polypropylene (PP) pipe to reduce noise and use of electricity.
- Use of innovative and aesthetically pleasing 12 meter high noise barrier.

Gammon Construction Limited Singapore Branch

STAR



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- **Mayflower MRT**
- **Havelock MRT**

KEY FEATURES

- Use of enhanced design vehicle barriers for improved public safety.
- Extensive use of yellow indication line for footpath with drop in height to increase public safety.
- Innovative in-house water recycling system combined with enhancement of Earth Control Measures (ECM) to facilitate reuse of treated water.
- Launched an in-house system to monitor environment consciousness among employees and projects named ECF.
- Use of inflatable and movable noise barrier.

GS Engineering & Construction Corp.

STAR



GREEN AND GRACIOUS BUILDER AWARD

GS E&C

Their current projects include:

- **Downtown Line 3 Tampines East Station**
- **Ng Teng Fong Hospital**

KEY FEATURES

- “Green Solution System” implemented at all projects to monitor energy consumption and emission of gases.
- Alternate design for river crossing works to enhance public safety and minimise inconvenience to public.
- Additional maintenance and water sampling of Singapore River to ensure cleanliness of water.
- Enhanced Earth Retaining or Stabilising Structure with reduced struts to conserve use of materials and shorten excavation period.
- Enhanced muck pumping system during tunnel boring works to reduce dust and noise generated.

Penta-Ocean Construction Company Limited

STAR



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- Downtown Line 3 Bendemeer Station
- HDB Sengkang N2C45

KEY FEATURES

- Extensive use of noise reducing equipment and technology across all projects.
- Top-down construction during sub-structure works to minimise noise and dust generated.
- Pile head crack inducer system (Qui cutter) used to minimise noise generated during piling work.
- Laundry service provided at the dormitory to enhance living standards of workers staying on-site.
- Wi-fi access provided at on-site dormitory for workers.

Shimizu Corporation

STAR



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- **Mapletree Business City 2**
- **Contract T207 Construction of Tunnel to Springleaf Station for Thomson Line**

KEY FEATURES

- Extensive Building Information Modeling (BIM) implementation across projects.
- Flood sensor installed at public canal to enhance public safety.
- Movable tentage within on-site precast fabrication yard to enhance safety and well-being of workers.
- Partial top-down construction during sub-structure works to minimise noise and dust generated.
- Raft foundation used for sub-structure works to eliminate noise and vibration generated from piling work.

SK E&C (Singapore Branch)

GREEN AND GRACIOUS BUILDER AWARD

STAR



Their current projects include:

- **Design and Construction of East-West Transmission Cable Tunnel @ May Road**
- **Downtown Line at Ubi Station**
- **Downtown Line 2 at Beauty World**

KEY FEATURES

- Dedicated management who provide necessary resources and lead by example through participation in housekeeping of site and area cleaning.
- Considerateness towards the safety of students and residents by requesting for a direct entrance from CTE into site to reduce the number of heavy vehicles passing through the roads of the neighbourhood and a neighbouring school.
- Use of "chemical splitting" method instead of hacking for rocks/boulders to reduce noise.
- Conduct controlled rock blasting activities in shafts with soil and enhanced of tyre Mats and Geo-Textile Sheets are laid over the blast area to reduce noise, dust and debris. Further use of additional metal shaft cover is placed on top of the shaft as an extra protection against and flying debris and to further reduce noise.
- Extensive use of reusable noise barrier with artwork.

Teambuild Engineering & Construction Pte. Ltd.

STAR



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- **Haite @ Changi Business Park**
- **Rivervale Delta**

KEY FEATURES

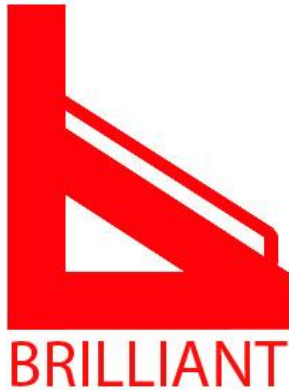
- Use of grout mix pile which temporary wall acting as retaining wall to reduce the resources as no struts were needed during excavation.
- Use of container to enclose generator to cuts off the noise emitted.
- Use of mobile Quality, Environmental and Safety (QES) system which reduces paper work for inspection.
- Alternate use of 2 ring water tank which could be lifted by tower crane instead of the conventional 1 ring water tank which requires mobile crane to enhance worker and public safety.

Brilliant General Building Construction Pte Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- Construction of Production Facility at Seletar Aerospace

KEY FEATURES

- Use of recycled Pre-cast slab for project flooring.
- Extensive greenery and use of left over BRC for plants and creeps support.

Dredging International Asia Pacific Pte Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



**Dredging
International**

ASIA PACIFIC

Marine & Waterway Solutions

KEY FEATURES

- Traffic diversion at rock sorting and stockpile area as a one-way vehicular access to minimise traffic disruptions.
- Extensive of rainwater harvesting for site activities.
- Use of drones to survey rocks before disposal.



Their current projects include:

- Improvement to Geylang River
- Sewerage Scheme to serve Jurong Eastern Catchment

KEY FEATURES

- Provided weekly complimentary English lessons for workers to improve their literacy.
- Hospitalisation and Surgical (H&S) insurance policy extended to staff and family members.
- Comprehensive accident reporting and work injury management system implemented across projects.

Greatearth Corporation Pte. Ltd.

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- Waterwoods EC

KEY FEATURES

- Use of green wall at site office to reduce the heat transmission and enhance aesthetic appearance.
- Provision of ventilators installed in site office to improve indoor air quality.
- Use of noise meter with real-time LED display that allows site personnel to take note of the noise level and react immediately.
- Use of online server system for document transmission to reduce paper usage.

Hytech Builders Pte Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Hytech Builders Pte Ltd
高技建设私人有限公司

Their current projects include:

- **Addition & Alteration Works at Balestier Road for the New Northlight School**

KEY FEATURES

- Established good public relation and communication with the residents of nearby blocks and the community of Hong Wen School.
- Extensive reuse of steel and concrete, and recycled water for their site.
- Conservation of existing trees, plants and shrubs within the site.



Their current projects include:

- Neighbourhood Renewal Programme at Jurong West JW33
- Improvement works to Hougang, Serangon North and Paya Lebar HG80

KEY FEATURES

- Use of thermal plaster screed to roof of container office to reduce heat from sun.
- Use of nano smart coating for better finishing of public common area.

Kuan Aik Hong Construction Pte Ltd

GREEN AND GRACIOUS BUILDER AWARD

EXCELLENT



廣益豐建築私人有限公司
KUAN AIK HONG CONSTRUCTION PTE LTD

Their current projects include:

- HDB Choa Chu Kang N8C8

KEY FEATURES

- Initiate turn off time for the use of electricity in worker quarter.
- Use of solar powered temporary lightings.

Leighton Contractors (Asia) Limited (Singapore Branch)

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- **Contract C935 Sungei Road Station and associated Tunnels for Downtown Line 3**

KEY FEATURES

- Use of Wire Saw for demolition of D-Wall panel to reduce noise and vibration.
- Provision of noise enclosure logistic building and acoustic noise barriers on BC cutter and de-sander to reduce noise.
- Use of mechanical sweeper for housekeeping and dust control.

Lian Ho Lee Construction (Private) Limited

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- Building Works at Bukit Batok N4C13

KEY FEATURES

- Considerateness to the students through proposal to LTA to remove road divider to prevent heavy vehicle from turning in front of the school gate next to the site.
- Use of recycled glass to construct part of site office wall for a transparent office concept to monitor site progress.
- Use of E-Form Fiberglass formwork instead of timber formwork.

Master Contract Services Pte Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



KEY FEATURES

- Extensive use of platform system to reduce use of scaffoldings for Lift Upgrading Programme works.
- Widely use of safety nettings for public safety.

Planar One & Associates Pte Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Their current projects include:

- Erection of 4-Sty Vehicle Storage and Workshop at Choa Chu Kang Way
- Guillemard Contract 1 at Guillemard Road Cassia Link

KEY FEATURES

- Relocation of tower crane to facilitate tree conservation.
- Use of covers for hoarding lights to reduce glare for lower floor resident.
- Initiated cut-off for construction site water to prevent over usage of water.
- Provision of lifebuoy at ECM holding pit for workers' safety.

Prelim Construction Pte Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Prelim Construction Pte Ltd

Their current projects include:

- DownTown East Redevelopment – Phase 1

KEY FEATURES

- Use of recycled materials to make weight lifts and table tennis table for workers' recreation.
- Considerateness to public safety by providing additional barrier between the pedestrian footpath and the main road at the location in front of the main site gate.



Their current projects include:

- Neighbourhood Renewal Programme at Tampines T512

KEY FEATURES

- Use of Radio-frequency Identification (RFID) to manage workers on site.
- Introduction of plastic bags into paint drums so that the drums would not be contaminated with paint and can be reuse.

Rich-Link Construction Pte. Ltd.

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



KEY FEATURES

- Introduce natural lighting into sheltered area and walkway through use of transparent roof tile and bottled lights.
- Adopt innovative work sequence management and planning to create safer working environment for workers and reduce material usage, waste and re-works.
- Use of zinc sheet attached to framework system for hoarding and enclosure for storage and quarters to reduce noise during installation and removal.

Their current projects include:

- Sennett Residence
- White Haven

SembCorp Design and Construction Pte. Ltd.

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Sembcorp Design and Construction Pte Ltd

KEY FEATURES

- Provision of bicycle and bicycle parking area to promote green transportation.
- Provision of Automated External Defibrillator (AED) for emergency Cardiopulmonary Resuscitation (CPR) rescue on site.

Sim Lian Construction Co. (Pte.) Ltd.

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Their current projects includes:

- **A Treasure Trove**
- **Hillion Residences**

KEY FEATURES

- Adoption of top down construction to mitigate noise generated in bottom-up construction.
- Use of recycled water bottles for lights
- Painted "STOP, LOOK, GO" prominently on the floor at the gateway to increase public safety by alerting public, who uses mobile phone while walking, of the entrance.

Sumitomo Mitsui Construction Co Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



Their current projects includes:

- **Robertson Quay Hotel and Residence mixed development**
- **Leng Kee Road light industries development**

KEY FEATURES

- Use of Mist Fan to reduce dust generated during grinding works.
- Innovative use of Transformer Benches which could convert from canteen table and benches into a flat platform for resting purpose.

TOA Corporation

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



KEY FEATURES

- Use of mechanised dust control system to reduce dust.
- Use of Sand Pile, Stabilized Dredged Fill (SDF) and Deep Cement Mixing (CDM) works to reduce sand usage and generation of dredged material.

Wai Fong Construction Pte Ltd

EXCELLENT



GREEN AND GRACIOUS BUILDER AWARD



KEY FEATURES

- Use of panel type portable fencing for ease of reuse and reduce of material.
- Provision of AED on site for worker welfare.

Their current projects include:

- Construction of Mt Pleasant Station & Tunnels for Thomson Line T215
- Punggol Field & Sumang Walk Extension including Trunk Sewer 20A & Earthwork

Green and Gracious Builder Award

STAR



ORGANISATION NAME

Daewoo Engineering & Construction Co., Ltd.

Gammon Construction Limited Singapore Branch

GS Engineering & Construction Corp.

Penta-Ocean Construction Company Limited

Shimizu Corporation

SK E&C (Singapore Branch)

Teambuild Engineering & Construction Pte. Ltd.

Green and Gracious Builder Award

EXCELLENT



ORGANISATION NAME

Brilliant General Building Construction Pte Ltd

Dredging International Asia Pacific Pte Ltd

Eng Lee Engineering Pte Ltd

Greatearth Corporation Pte. Ltd.

Hytech Builders Pte Ltd

ISO-Team Corporation Pte Ltd

Kuan Aik Hong Construction Pte Ltd

Leighton Contractors (Asia) Limited (Singapore Branch)

Lian Ho Lee Construction (Private) Limited

Master Contract Services Pte Ltd

Planar One & Associates Pte Ltd

Prelim Construction Pte Ltd

Raymond Construction Pte Ltd

Rich-Link Construction Pte. Ltd.

SembCorp Design and Construction Pte. Ltd.

Sim Lian Construction Co. (Pte.) Ltd.

Sumitomo Mitsui Construction Co Ltd

TOA Corporation

Wai Fong Construction Pte Ltd