

C E D D C O N T R A C T
Y L / 2 0 2 3 / 0 3

Hung Shui Kiu/Ha Tsuen New Development Area,

Second Phase Development:
Site Formation and Engineering Infrastructure Works

Smart Hearts, Safe Starts

智愛同行 安全啟程





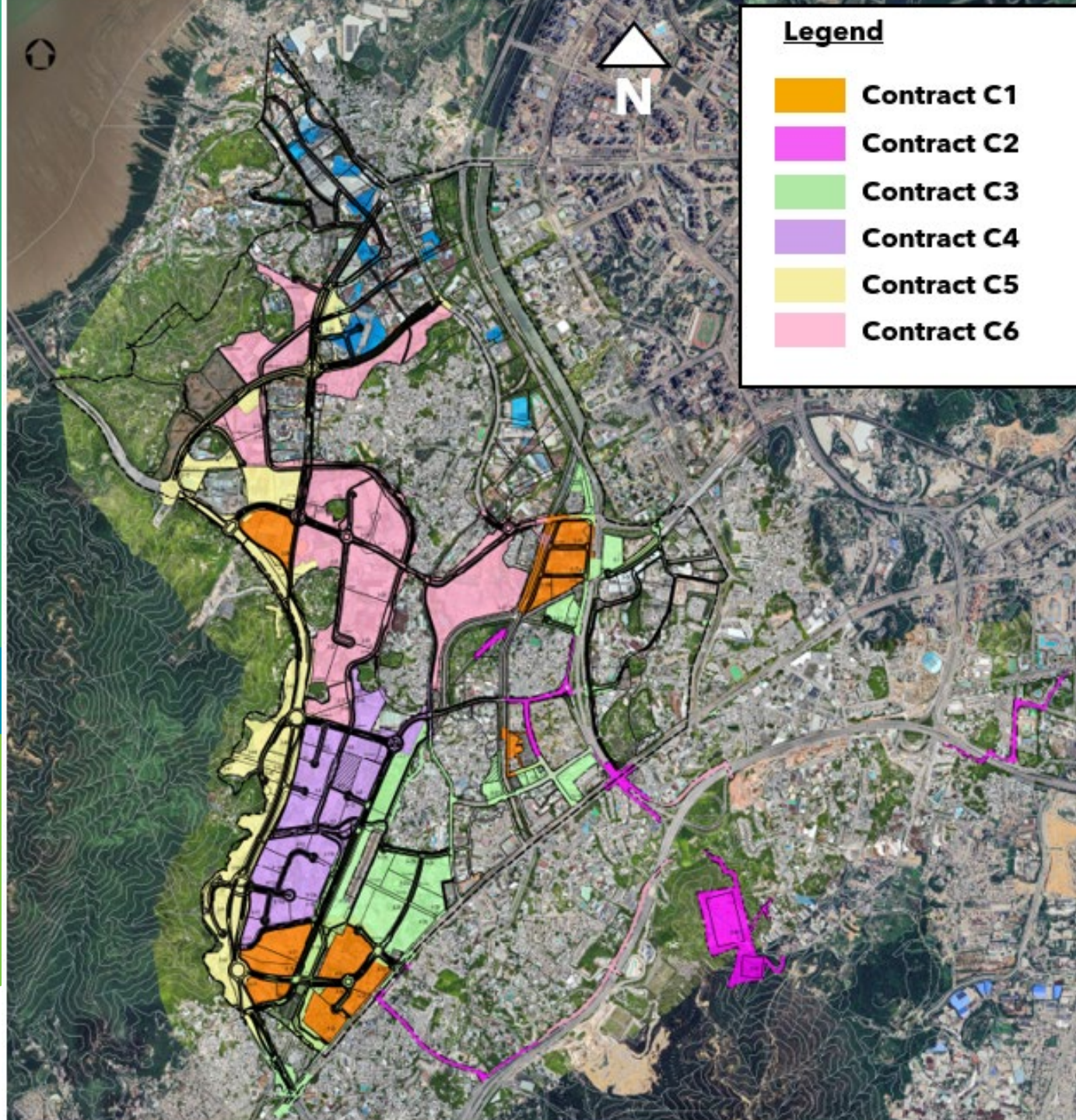
CLIENT : CEDD

Project Manager
Ove Arup & Partners Hong Kong Limited

Type of Contract
NEC4 Option C Target Cost

Construction Period
18 Oct 2024 – 6 Nov 2032 (95 months)

Contract Sum : **\$3,363 million**



Hung Shui Kiu / Ha Tsuen
New Development Area

Hung Shui Kiu / Ha Tsuen New Development Area 2nd Phase Development Contracts



Scope of Works

- Site clearance, land decontamination and formation for about 63 ha, including associated infrastructure works and Tin Sam Channel realignment/revitalisation.
- Construction of district distributor and local roads, a vehicular underpass (UPI), and a pedestrian footbridge (Footbridge 13) linking the Hung Shui Kiu/Ha Tsuen NDA
- Provision of key facilities, including a sewage pumping station (SPS1), and reprovisioned sitting-out area.
- Modification of existing railway facilities, including MTR Light Rail junctions and Tuen Ma Line Emergency Access Point 26.
- Associated utilities, drainage, sewerage, cycle tracks, landscaping, E&M works, and environmental mitigation measures.



Safety Culture

-
-
-
-
-
-



Safety Culture

ENSURING EVERY STAKEHOLDER UNDERSTANDS, OWNS
AND DELIVERS THEIR SAFETY RESPONSIBILITIES

- Client and Project Leadership Demonstrating **Visible Safety Commitment**
- Life First Commitment – **Safety Pledge**
- **Dedicated Duty Holders** Appointed for Critical Safety Functions (e.g. TWC, TWS, Lifting Supervisor)
- Responsibility Matrix Established for Major Work Activities
- Temporary Works **Hold Point Verification by TWC** Prior to Critical Stages
- **Safety Responsibilities Reinforced** Through Daily Morning Assemblies and Task Briefings

Joint Safety Meeting
Conducted by CEDD,
Consultant, GRJV and
Subcontractors

Safety Pledge





• Joint Morning Assembly with CEDD, Arup and GRJV



DAILY MORNING ASSEMBLY

- Pre-Work Exercise
- Accident Case Sharing and Reflection Moment
- Hazard Identification and Risk Assessment through **Gambot2 Platform and i-Dynamic Risk Assessment (iDRA)**
- Task and Site **Specific Field Control Briefing**
- Communication of **Safe Working Procedure and Hold Points**
- Assignment of Responsible Persons for Critical Operations
- Discussion of Key Hazards, **Control Measures** and Precautions
- Active Worker Engagement Through **Two-Way Communication**



• Gambot2



• iDRA

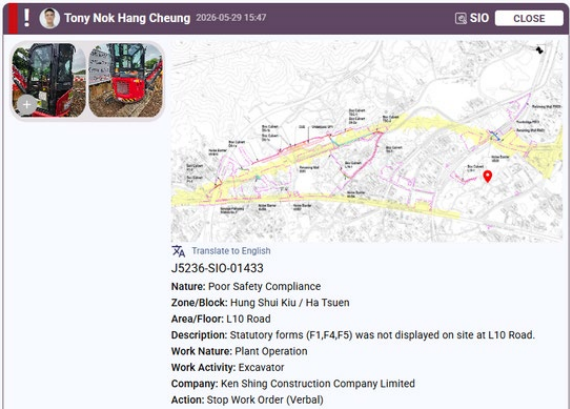


Double Lanyard Safety Harness
Simulation Training

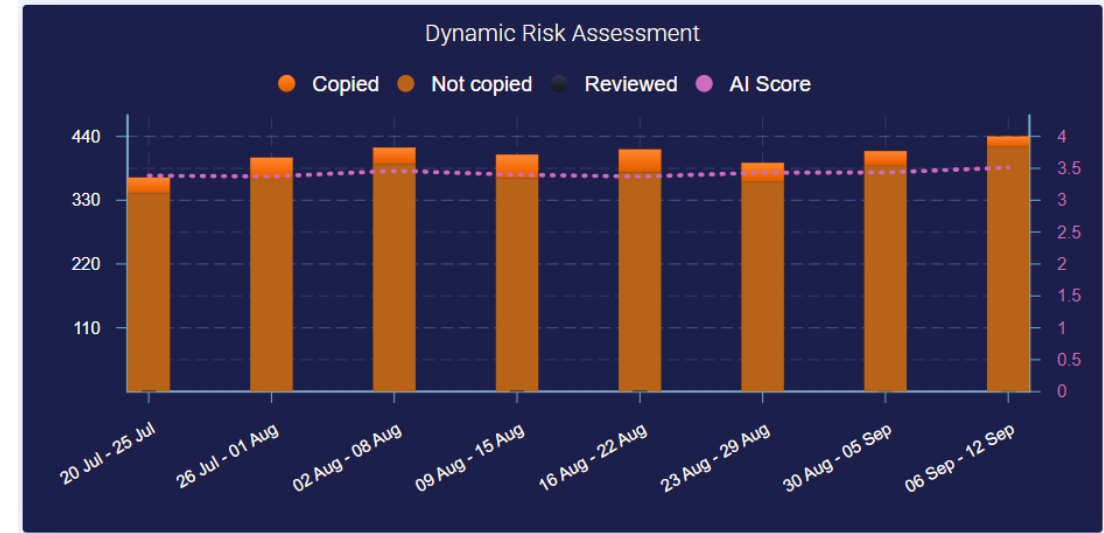
Safety Culture

FRONTLINE PERSONNEL LEADING SAFETY DAILY

- Over 16,000 iDRAs conducted by frontline teams in the past 12 months
- Completed 3 or more iDRAs per workfront daily with average AI score 3.51/4
- Exercised Stop-Work Authority whenever unsafe conditions were identified
- Personally briefed workers on task-specific hazards before commencement
- Led real-time risk reviews when work conditions changed

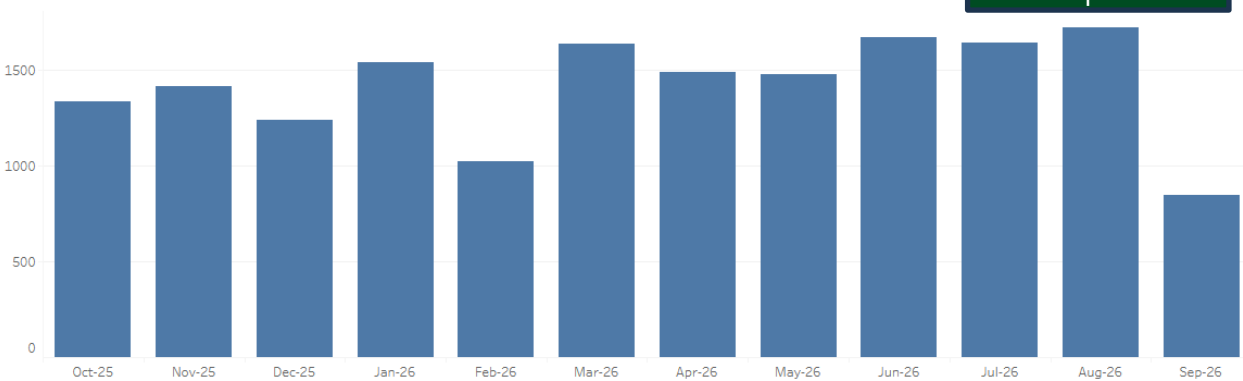


STOP WORK ORDER ISSUED



AVERAGE AI SCORE 3.51/4

H&S18601 iDRA Cases (data source : GamBot)



Last Update:
12 Sep 2026

OVER 16,000 iDRAS CONDUCTED BY FRONTLINE TEAMS
IN THE PAST 12 MONTHS

Effective Site Supervision



Joint Safety Inspections by CEDD, Consultant and GRJV

ENSURING CRITICAL RISKS ARE CONTROLLED THROUGH CONTINUOUS VERIFICATION

- Joint Safety Inspections by CEDD, Consultant and GRJV
- High-Risk Activity Control by **Dedicated Supervisors**
- **Verification of Critical Controls and Hold Points** Before Work Commencement
- **AI-Assisted Monitoring** for Real-Time Risk Detection and Intervention
- Immediate Stop, Rectification and Follow-up of Unsafe Conditions and Behaviours



AI Cameras to Detect Unsafe Condition with Immediate Audio and Visual Alert

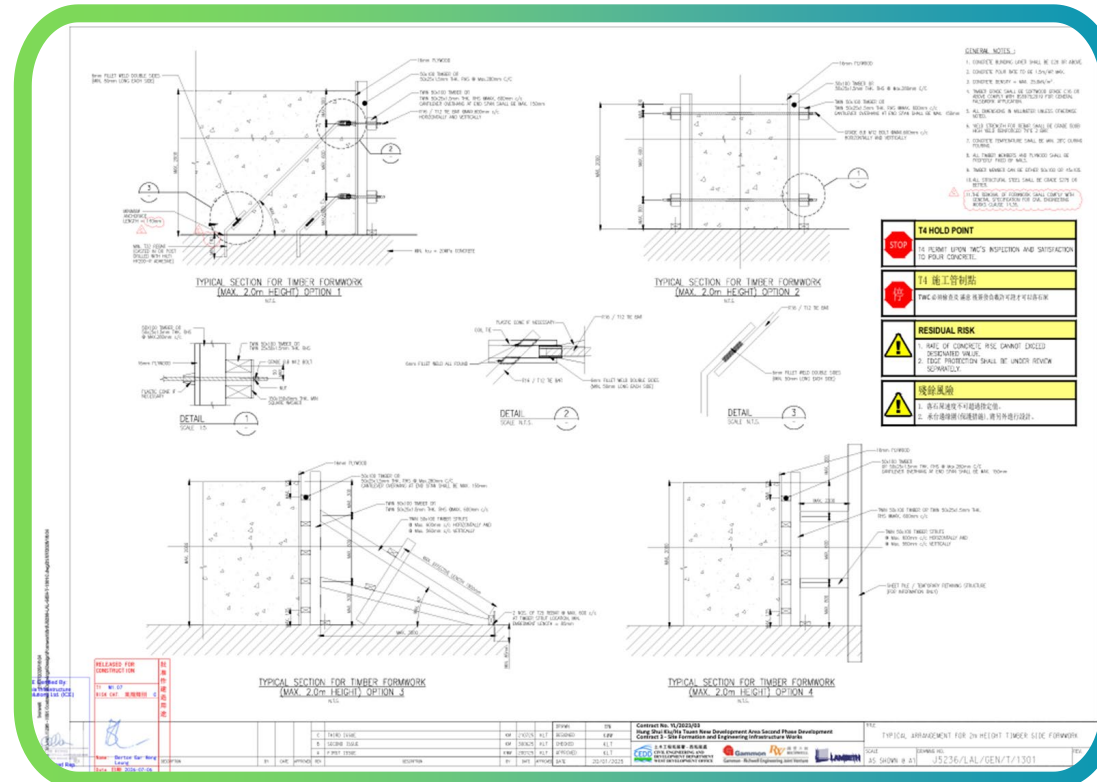


Thorough Checking on LALG with Permit to Lift System Implemented

Temporary Works (TW) Management

ROBUST GOVERNANCE AND INDEPENDENT VERIFICATION
THROUGHOUT THE TEMPORARY WORKS LIFECYCLE

- PDS/05 - Structured Temporary Works Management System Covering Design, Construction, Loading and Removal Stages



Construction Drawings with Hold Points and Endorsement

Project Delivery System Procedure PDS/05

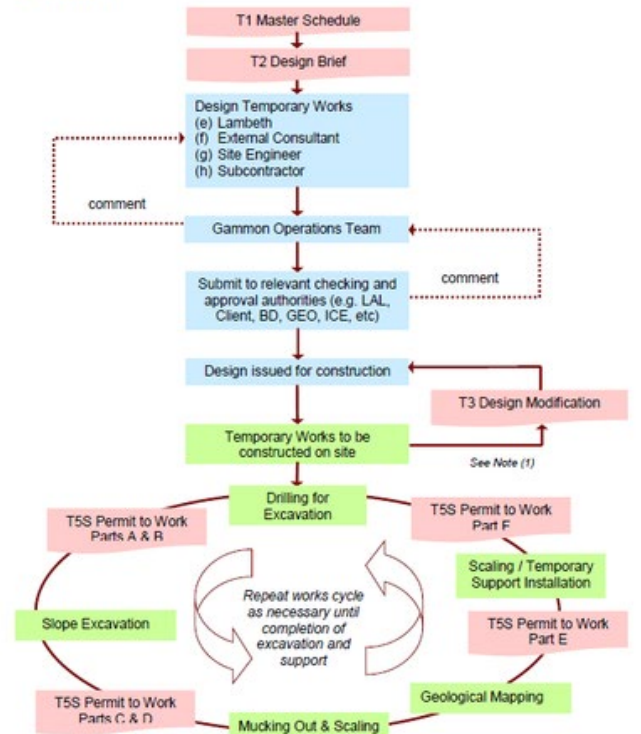
Temporary Works Design and Construction Control

Revision No. : 10

12 Jan 2015

Attachment 1

Summary Control Framework for Design and Implementation of Temporary Support of Rock Slope Works



Notes: (1) If required, a T3 Design Modification request may also be raised during execution of the works cycle documented using the T5S forms (e.g. due to a significant change in ground or groundwater conditions).

47

Summary Temporary Works
Control Framework

Hold Point Verification by TWC

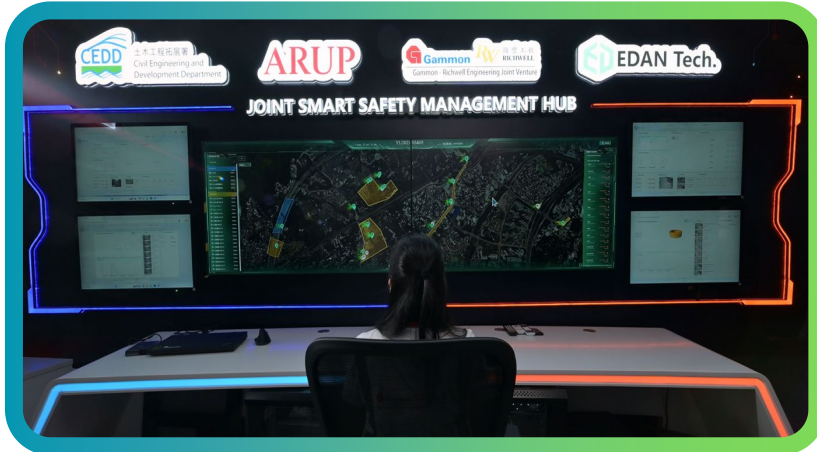
Safety Performance

NUMBER OF REPORTABLE
ACCIDENTS THROUGHOUT
THE CONTRACT PERIOD

0



Merit Winner in
British Safety
Council 2026
International
Safety Award

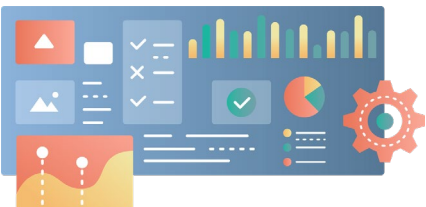


Joint Smart Safety Management Hub



Merit Award in
2026 International Design for Safety Award

8 Awards out of 20 Awards
in The 4th Construction Safety Incentive Scheme for
Construction Practitioners of Diverse Race



Safety Performance

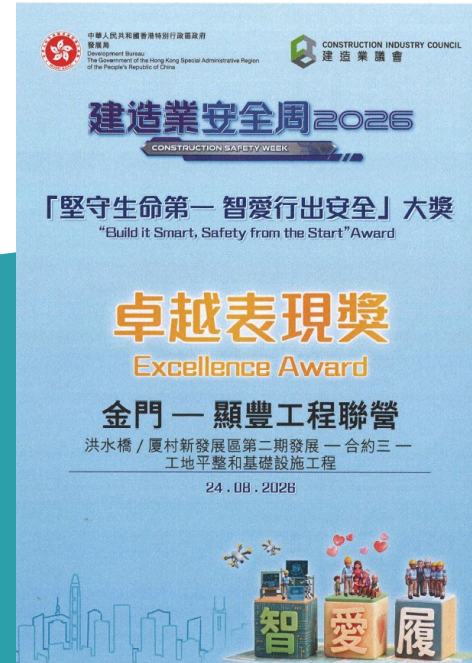
LIFE FIRST 2026



EXCELLENCE AWARD
Frontline Team Safety
Performance Award



GOLD AWARD
"Construction Safety – Innovative
Technologies" Competition



EXCELLENCE AWARD
"Build it Smart, Safety
from the Start" Award

Safety Performance

32nd CCSA SCHEME



- The Considerate Contractors Site Award (CCSA) – **Gold**
- The Outstanding Environmental Management & Performance Award (OEMPA) – **Silver**
- Innovation Award for Safety and Environmental Excellence – **Bronze**
- Model Project Leader – HO Brian Kwok Chee
- Model Worker – LIU Jingbin
- Model Frontline Supervisor – NG Chi Wa
- Model Subcontractor Award – **Merit** (Teng Mao Engineering Limited)
- Model Subcontractor Frontline Supervisor – KWAN Tsz Kin



Innovation

-
-
-
-
-
-



Creative and Innovative Safety and Environmental Strategies

VACUUM EXCAVATOR TECHNOLOGY

「吸泥大笨象」

8,000 m³/h airflow capacity

vacuum system extracts soil without damaging underground utilities

Air lance loosens soil

vacuum extraction

zero contact with fiber optics, cables, pipes



FIRST TESTED IN HONG KONG AT HUNG SHUI KIU/HA TSUEN PHASE II PROJECT

Replaces risky manual digging near critical infrastructure



A photograph of three construction workers wearing yellow hard hats, safety glasses, and high-visibility vests, standing in front of a large yellow vacuum excavator. The machine has a large yellow hopper and a black body. A thick orange hose is visible on the right side of the machine. The background shows a construction site with a white wall and some trees under a cloudy sky.

吸泥大笨象

Vacuum Excavator

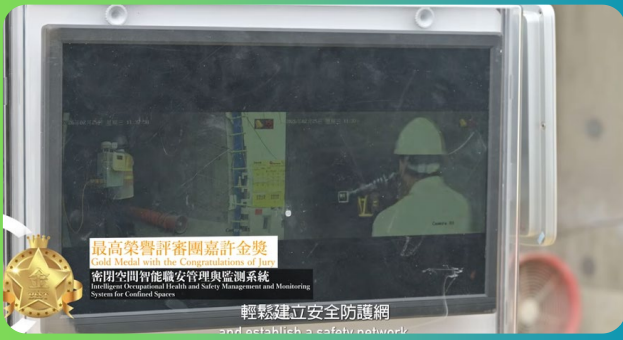
1117-1

吸泥大笨象

Adoption of Innovative Technologies

AWARD-WINNING TECHNOLOGIES IN 51st INTERNATIONAL EXHIBITION OF INVENTIONS OF GENEVA

- Gold Medals with the Congratulations of Jury * 2
- Gold Medal * 1
- Silver Medal * 1
- Bronze Medal * 1



Caring Culture

-
-
-
-
-
-



Site Caring Culture



PEOPLE
& WELLNESS

PROVISION OF HIGH-QUALITY WELFARE FACILITIES FOR WORKERS

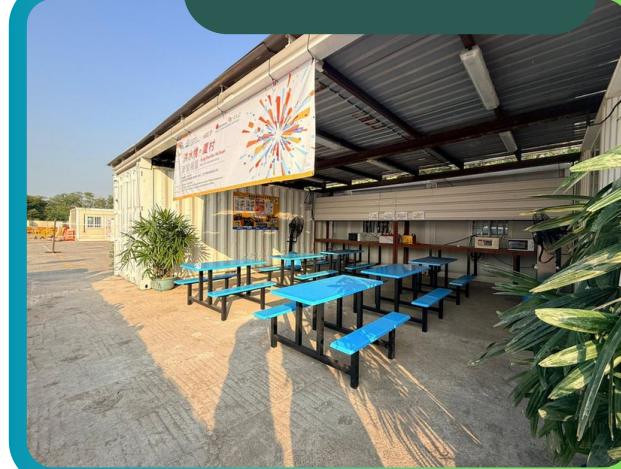


- Good Indoor & Outdoor Resting Area & Pantry
- Sufficiency Recycling Bin
- Recreation Facility
- Indoor & Outdoor Golf Course
- Shower room with Cold and Hot Water
- Female and Male Changing Room
- Phone Charging Point
- Vending Machine
- Ice Maker



CONTAINER VILLAGE

WORKFRONT



- Enough Drinking Water Facilities
- Resting Area with Shelter
- Fire and Heat Stroke Prevention Notice Board
- Solar Panel Fan, Mosquito Trap, and CCTV
- Phone Charging Facility

ESG AND DEI INITIATIVE

- Promote an inclusive and respectful working environment for all site personnel.
- Lactation Room
- Free Sanitary Napkin
- Prayer Rooms



Provide Safety Training Facilities



**"Safety on Wheels" – BIM Cave Training Truck
for Frontline Workers and the General Public Education**



**Training Room with
VR Technology**

Provide Heat Prevention Facilities and Measures on Site



Distribution of Healthy Fruits, Cold Drinks, Portable Fans, Neck Shades and Arm Sleeves



**Site-Wide Health Stand Down
chaired by Project Director**



Regular Heat Stroke Drill



Heat Stroke Prevention Health Talk

Provide Heat Prevention Facilities and Measures on Site



Prominent Banner for Resting Arrangement



On-site Fans, Hot / Cold Water Dispenser, Ice Machine, Shelter and Resting Container



LED Board showing adverse weather warning



Self-developed AI-bot for adverse weather notification

Other Caring Measures

Smoking cessation
programme
“Build Health Quit”



Regular Health
Check by Nurse



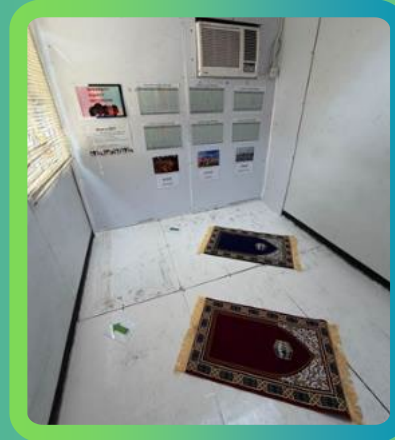
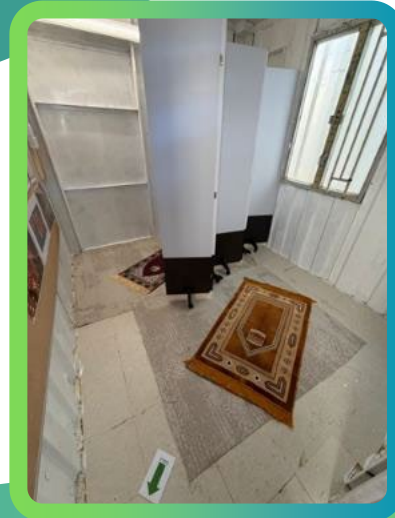
Health Talk –
Mental Health
and Stress
Management



Other Care Measures Diversity, Equity and Inclusion (DEI)



Multi-faith Prayer Room



Free Sanitary Napkin



Lactation Rooms

Other Care Measures Diversity, Equity and Inclusion (DEI)



Career Talk for TWGHs Sun Hoi Directors' College



Career Talk for Poly U



Cultural Appreciation

Other Caring Measures To Neighborhood



↓
**Joint Planter
Event with CEDD,
Arup, HKIC and
Schools**



↓
**Major Warehouse Fire
in Ha Tsuen, Tin Shui
Wai: Emergency
Response and
Aftermath**



↓
**Joint Promotion Video –
CEDD, Arup and GRJV
Legislative Council
General Election**



↓
**Emergency Response
to Fallen Trees onto
LRT railway and
power cable due to
Typhoon**

Other Caring Measures To Neighborhood



↓
**Mid-Autumn Joy:
A Celebration of
Family &
Togetherness**

GRJV Holds
Game Booth in
Construction
Workers
Carnival



Tin Hau Festival Parade with Baduanjin Qigong



Flower Donation to Rural Committee

Other Caring Measures To Neighborhood



Kindergarten Visit
with Dancing Lion and
Robot Dog



T Park Visit
with HKFYG



Fai Chun and Red
Envelope Distribution



Assist in Cultural
and Ecological
Education
Carnival