SSH 502 - Design and Construction of Joint-user Government Office Building in Area 67, Tseung Kwan O

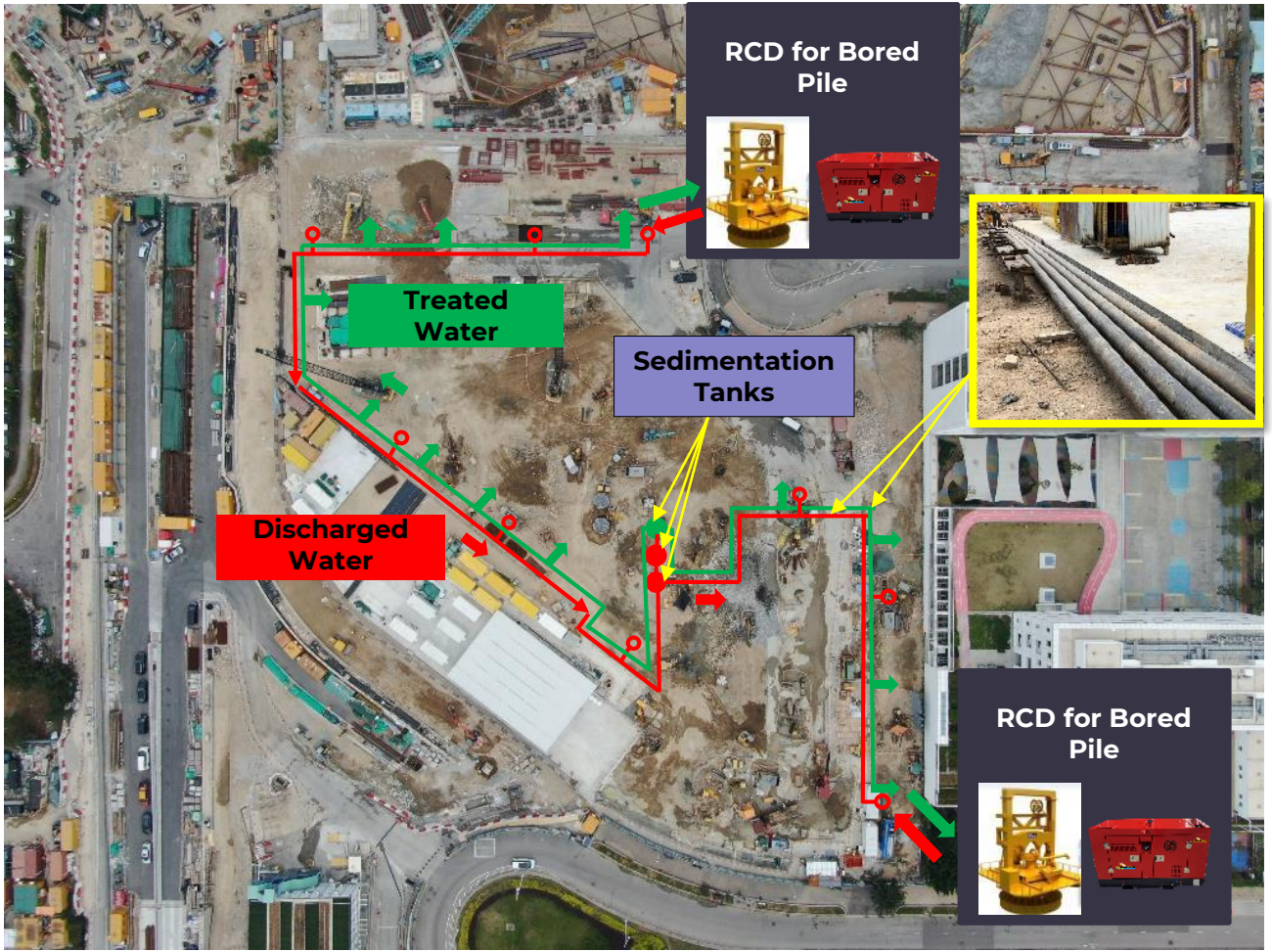
Green Contractor Award 2021

ABLE - PAUL Y. JOINT VENTURE

01 Recycling Water System

Recycling Water System for Bored Pile Construction

Using Re-cycling Water for bored piles construction



Recycling Water System for Bored Pile Construction

RCD

1st Sedimentation

Discharged Water

2nd Sedimentation

3rd Sedimentation

4th Sedimentation

Sedimentation Tank

Sedimentation Tank

Sedimentation Tank

Treated Water

1. Reduction of water usage
2. Reduction of waste water discharge

02 Noise Pollution Mitigation

Retractable Noise Barriers

1. Re-schedule of Noisy Works
2. Noise Barrier
3. Alternative measures

SilentUP® Retractable Noise Barrier **Noise Berries** were erected

“SilentUP” Retractable Noise Barrier

CITF 建造業創科基金

CITF Pre-approved Product

Product Specification

STC	18
Insertion Loss*	22 dB(A)
Modular Weight	5kg
Maximum Height	7m
Modular Size	1m(H) x1.35m(W)
Standard Colour	Grey
Panel Thickness	100mm on edges

Retractable Noise Barrier to reduce 22dB (A) in noise level

Retractable Noise Barriers

Noise Barrier was installed on Hoarding

Adoption of Hydraulic Concrete Crusher

(For Previous Site Activity)

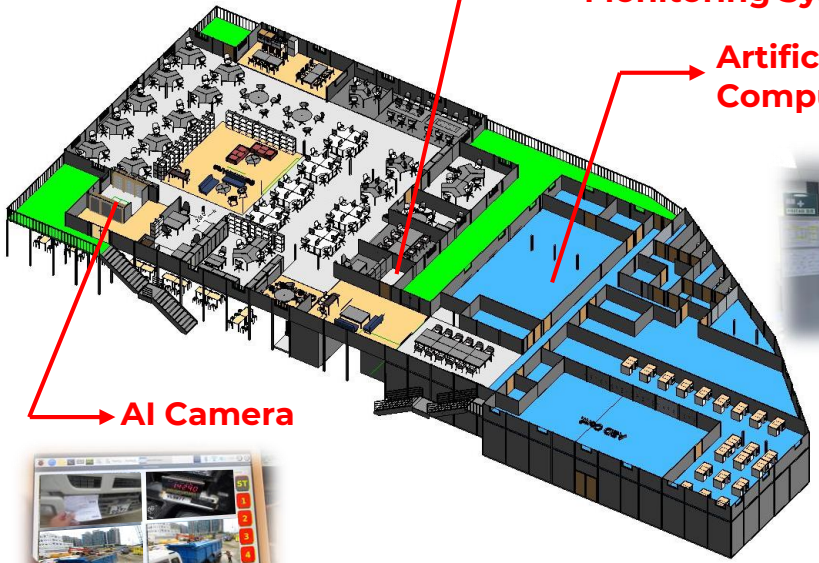
Concrete breaking by using
Hydraulic Concrete Crusher

03 Innovative Measures

Smart & Environmental Friendly Site Office

IoT Smart Environmental Monitoring System

Artificial Intelligence Computing Device



AI Camera

First Floor 1/F

Water Station

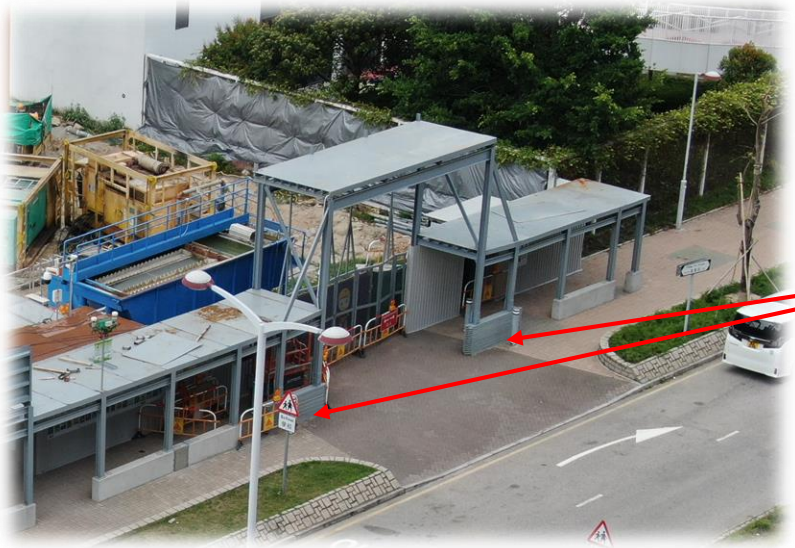
Smart Sensor (Gas Detector)

Ground Floor G/F

Sustainable Steel Hoarding Plinths

Use of Environmental-friendly Materials for Hoarding
- **Selection and Reuse of Material**
- **Reduce waste generation**

Design Origin by Able - Paul Y.



Reuse of Steel Plate

Sustainable Steel Hoarding Plinths

Design Principles:

1. How to reuse the hoarding plinth in future?
2. How to facilitate the re-usage, e.g. ease to store and install?
3. How to minimize the potential nuisances caused to the public by the construction of hoarding?

Solutions:

1. Choose steel, instead of concrete, as the material of plinth;
2. Plinth consists of multiple slices, each of which is designed available for manual handling;
3. Easy to install; avoid formwork and concreting; smaller in size due to higher density of steel.

THANKS!