The background of the slide features a photograph of a road winding through a landscape with mountains in the distance. The image is partially obscured by large, overlapping blue geometric shapes (triangles and polygons) that create a modern, architectural feel. The text is overlaid on the lower portion of the image.

GEOHARBOUR AUSTRALIA

GROUND ENGINEERING SPECIALIST



Research. Design. Procurement. Construction.

COMPANY OVERVIEW


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CONTENTS



>30 PATENTS
>10,000 HA
>300 PROJECTS
>15 YEARS EXPERIENCE

OUR PROFILE

GEOHARBOUR GROUP is established in 2000 with significant time of research and development in soft soil treatment method. We are a global professional entity specialising in ground engineering including **soil improvement, foundation, and marine engineering**. Geoharbour Group is a Chief Editorial Unit of *Chinese Standard of Reclamation Soil Treatment* and a Directorate Body of *The Technical Committee of China Soft Soil Treatment*.

GEOHARBOUR AUSTRALIA PTY LTD has been established in 2016 and devoted ourself as an Engineering Procurement Construction (EPC) contractor. We are a member of Geoharbour Group.

Our group owns over 30 patents, is supported by more than 10 geotechnical PhD and has completed over 300 large-scale projects. We have treated soil of over 10,000 hectares including roadways, airport runways, land reclamation, power plants, port stack yards and factory buildings across the world. We are ISO9001, ISO14001, and OHSAS18001 certified.

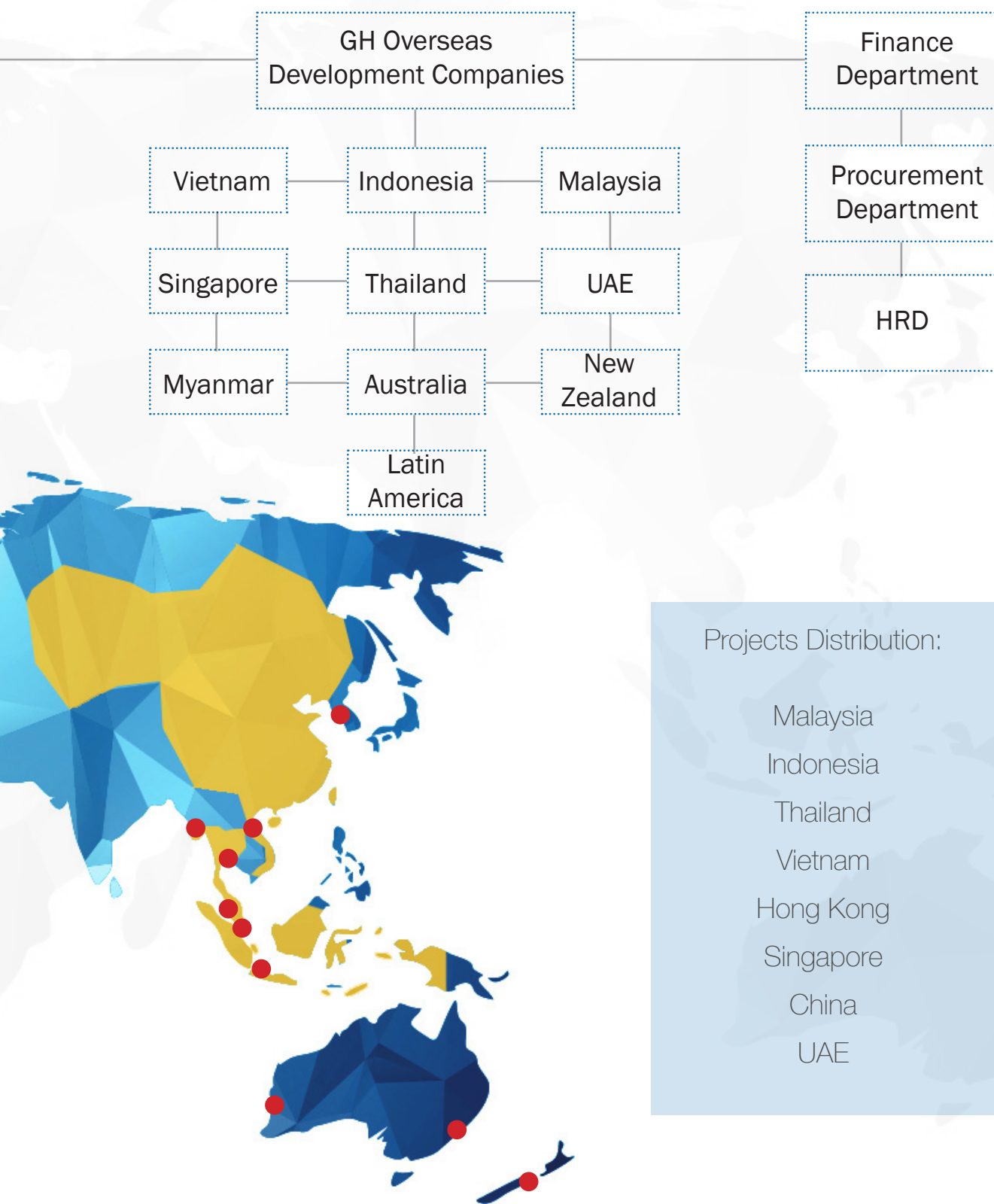
MISSION and VISION

Geoharbour Australia Pty Ltd is always looking forward to develop the most advanced technology in soil improvement and implement them in our projects.

Our office started from Perth and will expand across Australia and New Zealand. With offices in Australia, China, Indonesia, India, Malaysia, Middle East, Myanmar, Singapore, Latin America and Vietnam, we work hard together **to deliver optimum solution and first-rate service** to our clients.

ORGANISATION





OUR SERVICES

INFORMATIVE
CONSTRUCTION

CONSULTING

RESEARCH

Soil Improvement

DESIGN

Geotechnical
Package Solution

Foundation
Engineering

Municipal
Engineering

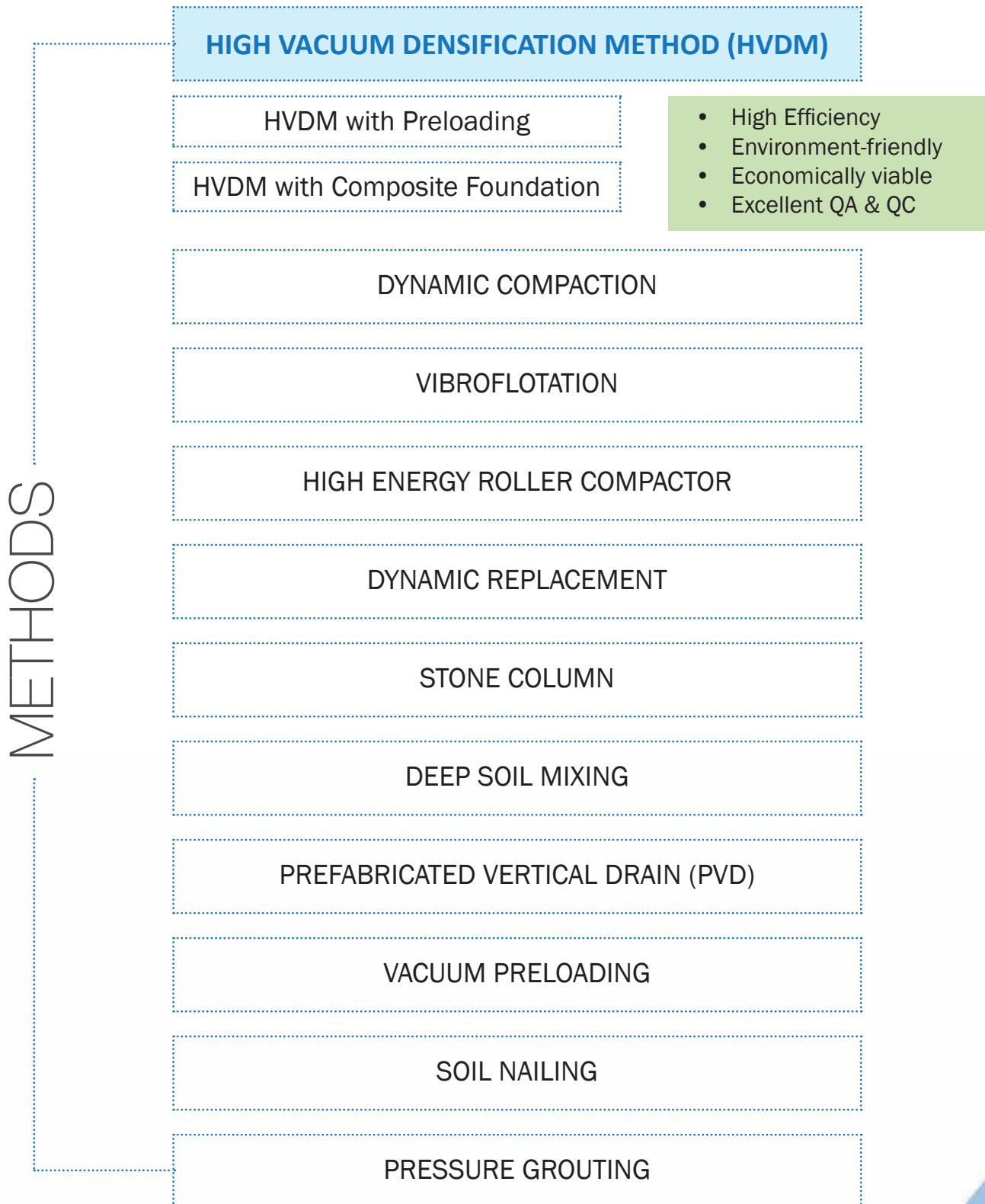
INVESTIGATION

Geotechnical
Design,
Investigation, and
Consulting

Dredging and
Reclamation



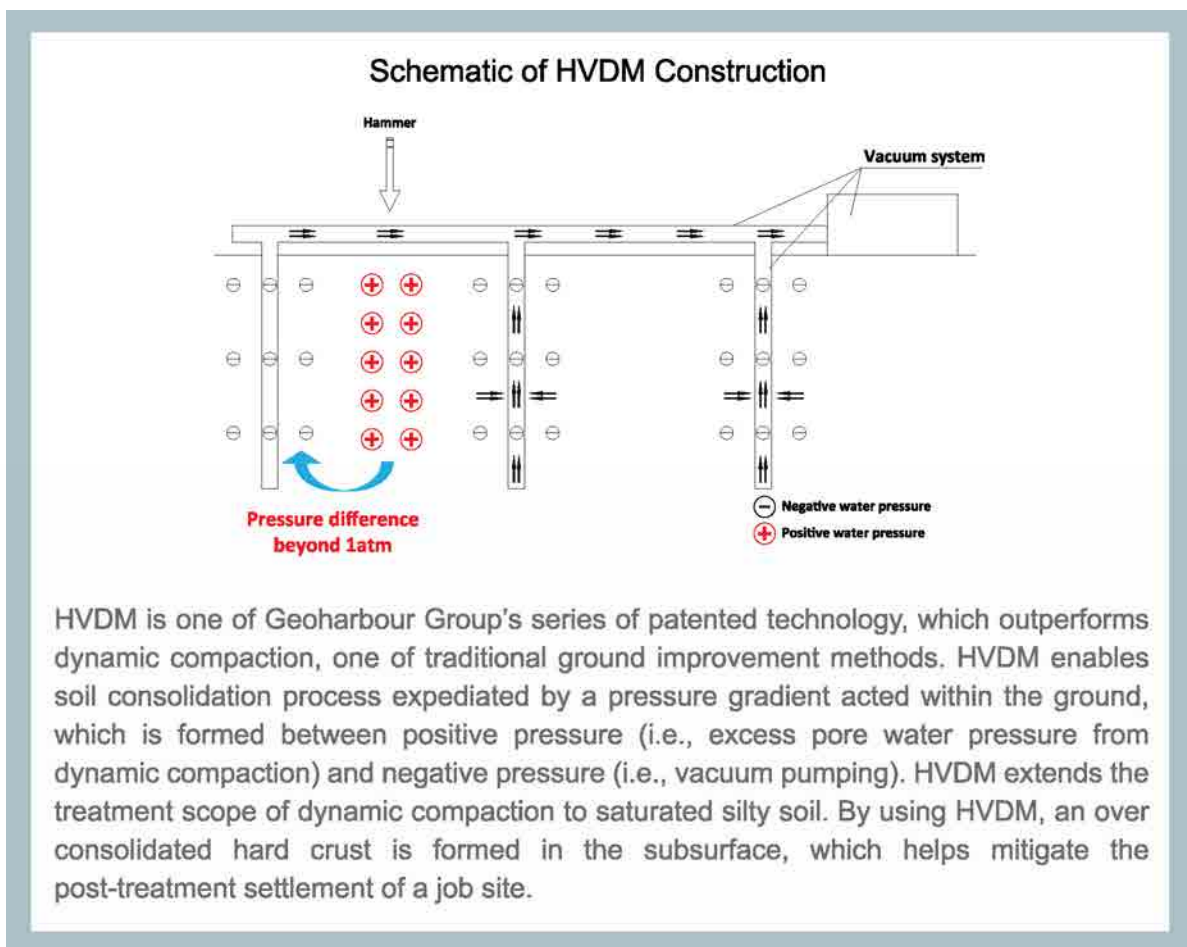
SOIL IMPROVEMENT METHODS



Geoharbour is the patent(s) holder of HVDM(s), which are Surcharge Preloading Combining HVDM Patent No. ZL200410014257.9 and Composite Foundation Combining HVDM Patent No. ZL200510134966.5

High Vacuum Densification Method (HVDM)

HVDM is a fast soft soil treatment method. The method combines efforts of vacuum drainage and dynamic compaction in designated cycles, which leads the jobsite dewatered, densified and improved. The post-treatment (differential) settlement is thus mitigated.



Fast "HVDM" (High Vacuum Densification Methods) Series of new technology compared with conventional technologies has 4 advantages

**High Efficiency
Environment-friendly
Economically Viable
Excellent QA & QC**



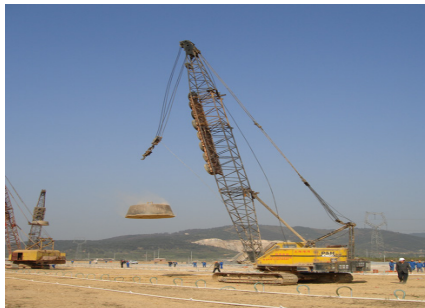
Pipe Installation



PVC layout



Vacuum dewatering



Dynamic Compaction



Vibration Compaction



Pipe Installation, Palembang Indralaya Tollroad Project.

The background of the cover features a landscape with mountains and a road, overlaid with large, semi-transparent blue geometric shapes (triangles and polygons).

PROJECT PORTFOLIO

SOIL IMPROVEMENT | AIRPORT CHANGI TERMINAL 5

Scope	: PVD Installation Works, Deep Soil Mixing, and Vacuum Consolidation Works
Year	: 2014 - present
Location	: Singapore



1



2



3

- 1 PVD installation rig
- 2 Construction site
- 3 Covering site using membrane

SOIL IMPROVEMENT | POWER PLANT PLTU JAWA 7

Scope	: Vacuum Consolidation
Year	: 2016 - present
Location	: Java, Indonesia
Area	: 27 Ha

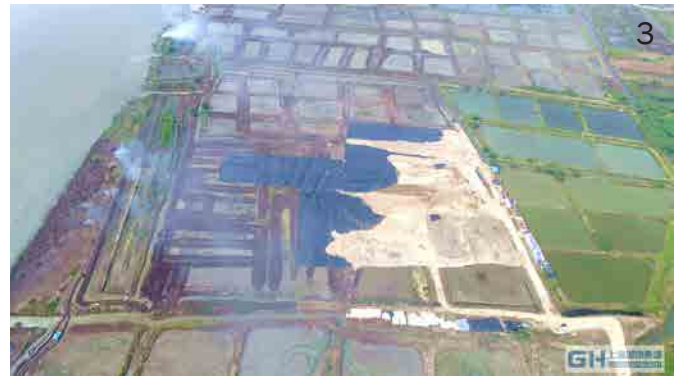




1



2



3



4

- 1 Material storage
- 2 Sand platform construction
- 3 Aerial view of Jawa 7 Project
- 4 Sealing trench construction of trial area

SOIL IMPROVEMENT | ROAD & HIGHWAY PALEMBANG-INDRALAYA TOLL ROAD

Scope	: Vacuum Consolidation
Year	: 2015 - present
Location	: Sumatra, Indonesia
Area	: 85 Ha





1



2



3



4

1,2,3 Aerial views of Palembang-Indralaya Toll Road
4 Site visitation of Jokowi, President of Indonesia

SOIL IMPROVEMENT | ROAD & HIGHWAY NORTH-SOUTH EXPRESSWAY

Construction Project HCMC-Dau Giay Section, Package no.3

Client	: Vietnam Expressway Corporation (VEC)
Scope	: Vacuum Consolidation and Surcharge Loading
Year	: 2011 - 2013
Location	: Vietnam

1



2



- 1 Site
- 2 Horizontal drains
- 3 Membrane Placement
- 4 Membrane sealing in cut-off wall
- 5 Connection of PVD and horizontal drains



SOIL IMPROVEMENT | AIRPORT SHANGHAI PUDONG 2ND RUNWAY

Scope	: HVDM
Year	: 2003
Location	: Shanghai, China





2



1



3



4

1,2 Aerial views of Shanghai Pudong Airport

3 Dredging and reclamation

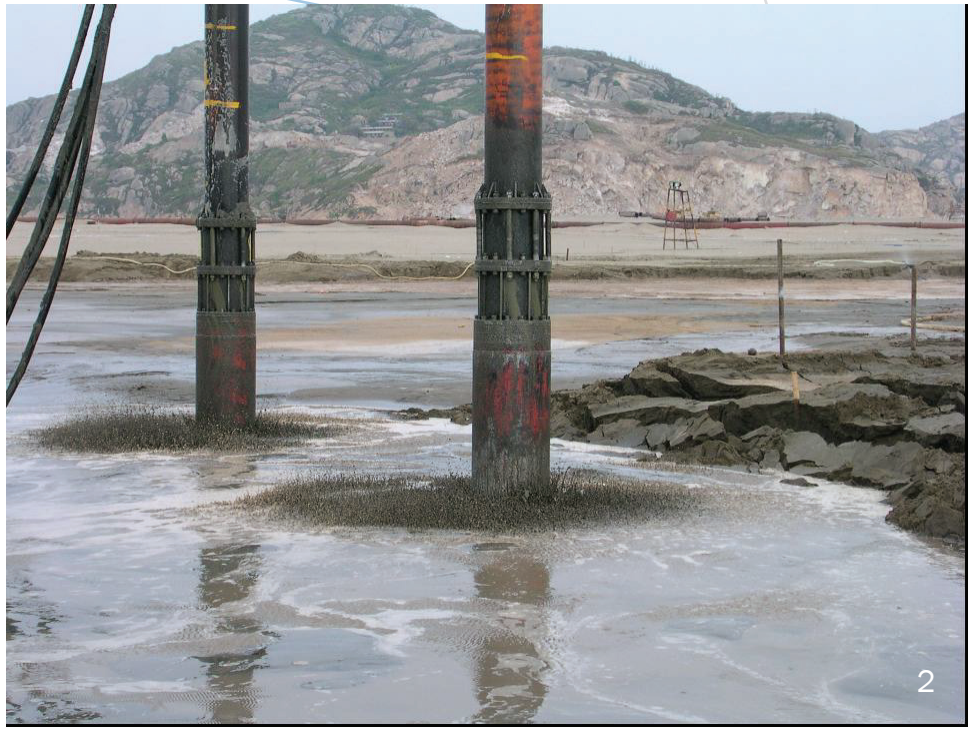
4 Drainage pipes

SOIL IMPROVEMENT | PORT YANGSHAN DEEP WATER PORT

Scope	: Vibroflotation
Year	: 2003
Location	: Shanghai, China
Area	: 170 Ha



- 1 Aerial View
- 2 Vibroflotation



2



1

SOIL IMPROVEMENT | RECLAMATION

DEIRA ISLAND A DEVELOPMENT

Client	: Nakheel
Scope	: Reclaimed area improvement by Vibroflotation
Status	: Completed
Year	: 2014 - 2016
Location	: Dubai, UAE

Construction site



BORED PILE | COMMERCIAL BUILDING CADANGAN MEMBINA

Client	: MCC Overseas (M) Sdn Bhd
Scope	: Bored Pile
Year	: 2016 - present
Location	: Pulau Pinang, Malaysia



1,2 Construction site



RESEARCH

SHANGHAI HARBOUR SOFT SOIL DESIGN & RESEARCH INSTITUTE

The Group founded Shanghai Harbour Soft Soil Design & Research Institute, with two academicians and more than a dozen professors from Tongji University, Hohai University, Zhejiang University, and PLA Logistics University, which is committed to elaborate the design concepts, specification and construction guidelines of current inventions. To further delve the mechanism of HVDM and advance complicated soft soil treatment, the company set up a scientific research base of 2 hectares to conduct pilot scale researches on development of HVDM and its equipments.



Australian Government
Australian Research Council



**UNIVERSITY
OF WOLLONGONG
AUSTRALIA**

AUSTRALIAN RESEARCH COUNCIL LINKAGE PROJECT (LP160101254)

Geoharbour Australia, as a major Industry Partner, is working in collaboration with University of Wollongong, Infra Tech, the Australasian Centre for Rail Innovation (ACRI), Coffey Geotechnics and SMEC, on the ARC Linkage Project focusing on “Rail track stability - examine causes of ‘mud pumping’ and effectiveness of drainage”. Through an experimental program and field study, the mechanisms of mud pumping will be studied, and the role of vertically installed drains will be quantified for improved practical design. The project aims to contribute on improving track longevity and reducing maintenance costs, with a corresponding boost in rail productivity.

CERTIFICATIONS



ISO9001



ISO14001



OHSAS18001



AUS Patent Registry
Patent no: 2007327261



China Patent Registry
Patent no:
WO 2008/064550 A1

AWARDS



The Second Prize of Shanghai Invention Patent Award



Significant Innovative Enterpriser of Top 50 in China



Scientific and Technological Prize of China Harbor and Port Association



Shanghai Independent Innovation Top 10



Shanghai Science and Technology Medal



The World 10th Bogsch Memory Medal 2012



The WIPO Award for Inventors 2012



The Green Invention Glory Medal 2012
(for fast processing method of HVDM)



The Gold Award for the Best International Invention, Special Prize, The Leading Innovation Award - Thailand Inventor's Day 2014 (issued by NRCT & IIPNF)



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