

Geotechnics

Curriculum Vita

MARINE WORK RELATED PROJECTS

Who We Are

Geotechnics is a group of engineering consultants specialized in combined **Geotechnical**, **Structural** and **Marine** Projects.



Mission

Our **design philosophy** stand firm on **value engineering**

- ▶ maximize the value of the design through a systematic and rigorous process.
- ▶ Design alternatives are reached through accurate field work, sufficient data collection and employing the most recent and advanced analysis methods
- ▶ Through value engineering the cost components of the design is optimized to provide the required lifetime of the design in the best economic fashion

Scope

Marine Engineering

- Harbor and Terminal planning.
- Design of quay walls, breakwaters and dredging.
- Design of Offshore Structures and facilities.



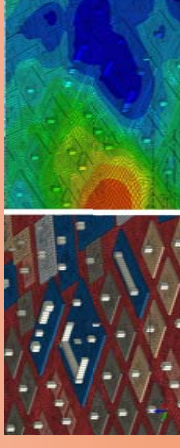
Shore Protection Engineering

- Design of shore protection breakwaters, revetments groins and beach management.
- Monitoring of Wind, Wave and Environmental parameters.



Geotechnical Engineering

- Perform geotechnical testing and investigations.
- Design of foundation systems, retaining systems, deep structures,
- Design of infrastructure, roads and dewatering.



Staff

- ▶ **3** PhD Lead Consultants, (+25 Years Experience)
- ▶ **6** MSc Design Engineers, (+8 Years Experience)
- ▶ **8** Supporting Office Engineers
- ▶ **+10** Field Engineers Team, (+15 Years Experience)
- ▶ **+10** Field Support Team, (+10 Years Experience)

Key Personnel

► Bahaa Eldin Ahmad Alsharnouby, Ph.D. P.E.

Lead Consultant

Professor of Marine Engineering

Transportation Engineering Dept., Alexandria University

PhD, Civil Engineering, May 1996, University of Western Ontario, London, Canada

MSc, Civil Engineering, May 1993, McMaster University, Hamilton, Ontario, Canada

BSc, Civil Engineering, June 1974, Alexandria University, Alexandria, Egypt

Key Positions Held:

Department Head, Transportation Engineering Department, Alexandria University, Egypt

www.geotechnegypt.com

Key Personnel

► **Hassan M Abouseeda, Ph.D. P.E.**

Principal , Geotechnics

Professor of Geotechnical and Marine Engineering

Structural Engineering Dept., Alexandria University

PhD, Civil Engineering, May 1996, Rice University, Houston, Texas, USA

MSc, Civil Engineering, May 1993, Rice University, Houston, Texas, USA

BSc, Civil Engineering, May 1989, Alexandria University, Alexandria, Egypt

Key Positions Held:

Senior Consultant, Fugro McLelland Marine Geosciences, Houston, Texas, USA

Senior Consultant, Mustang Engineering, Houston, Texas, USA



Dr. H. Abouseeda Key Projects

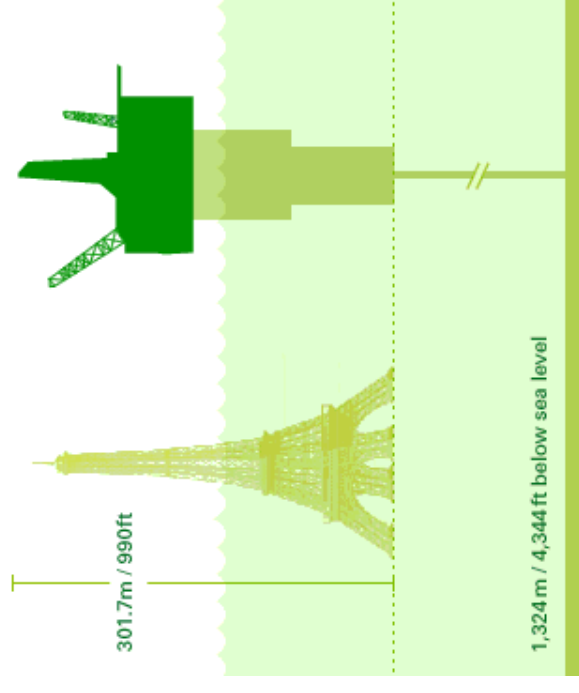
- ▶ Hassan M Abouseeda, Ph.D. P.E.

Key Projects:

BP Holstein, Gulf of Mexico, 2004



BP's Holstein deep-water platform



Dr. H. Abouseeda Key Projects

- ▶ Hassan M Abouseeda, Ph.D. P.E.

Key Projects:

BP Mad Dog, Gulf of Mexico, 2006

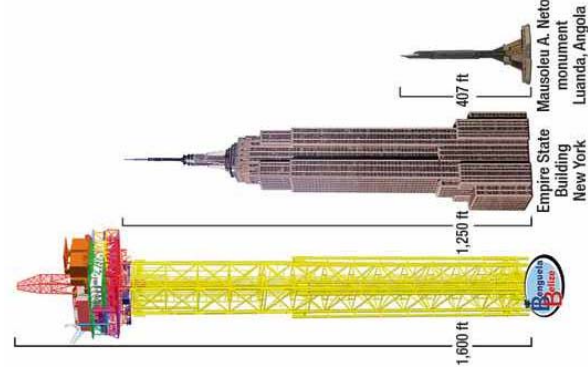


Dr. H. Abouseeda Key Projects

- ▶ Hassan M Abouseeda, Ph.D. P.E.

Key Projects:

Chevron Benguela Belize, West Africa, 2007

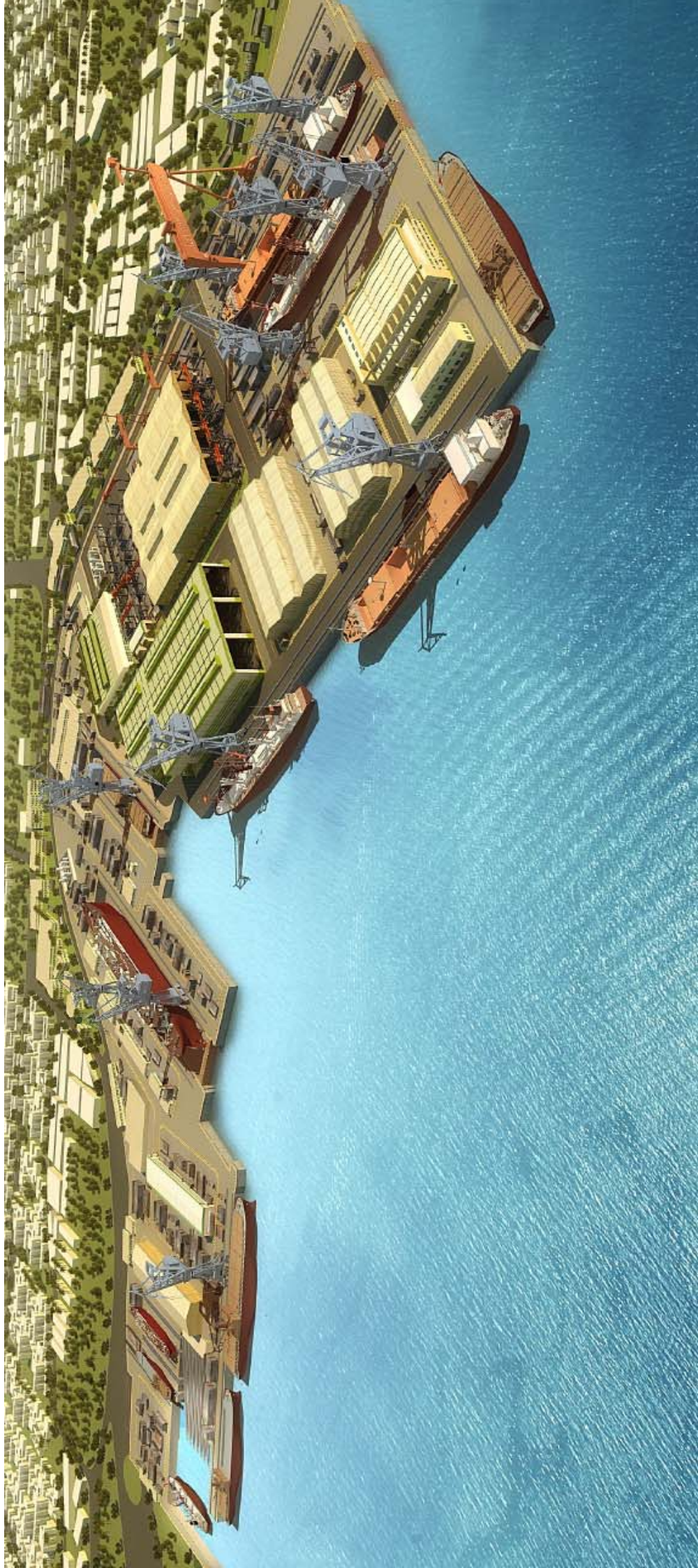


Geotechnics Key Projects

Upgrading Alexandria Shipyard

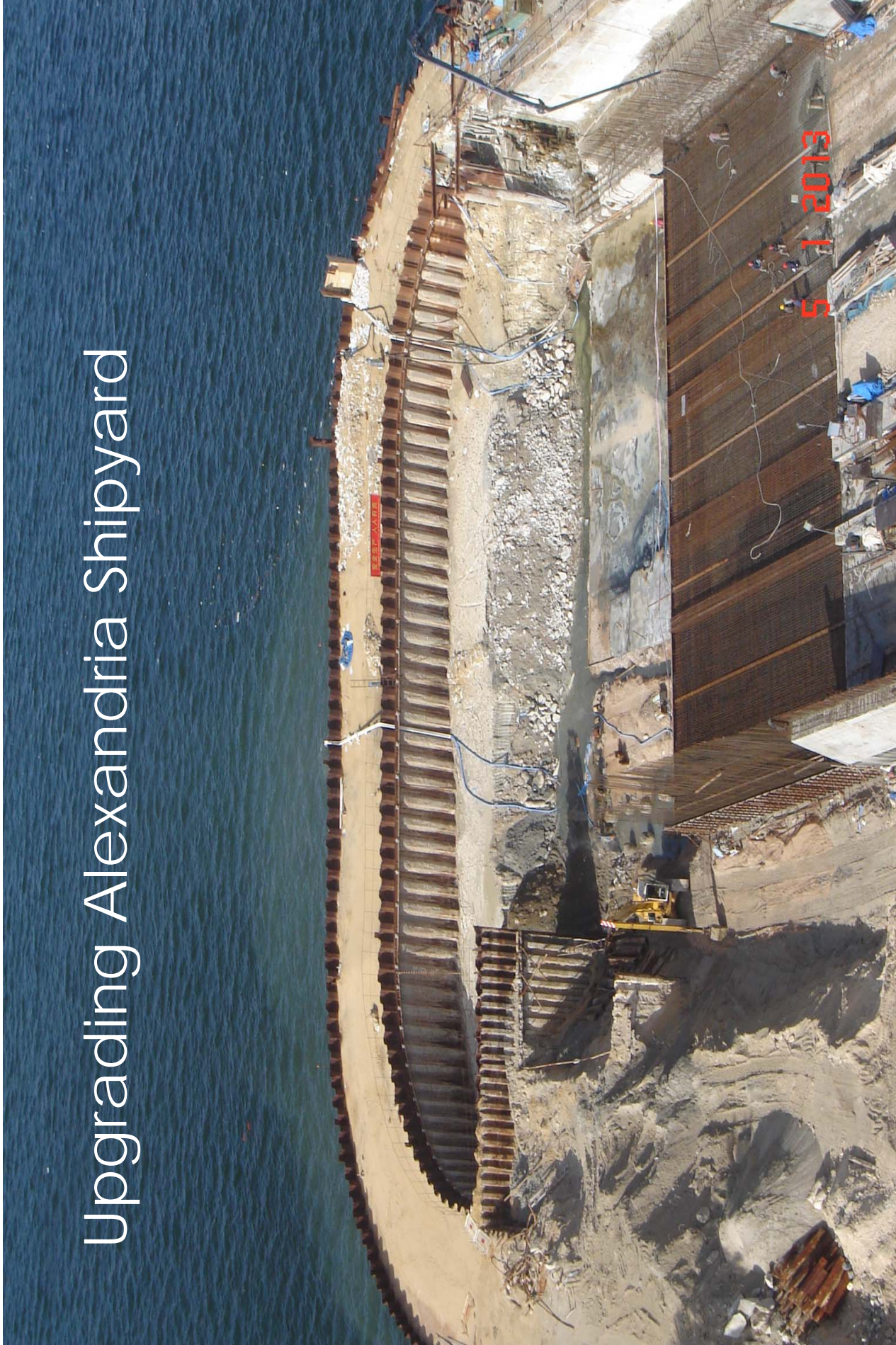
- 2010 – 2013(expected)
- 1.2 Billion EGP
- Design Review, Supervision

Upgrading Alexandria Shipyard



www.geotechegypt.com

Upgrading Alexandria Shipyard



Upgrading Alexandria Shipyard

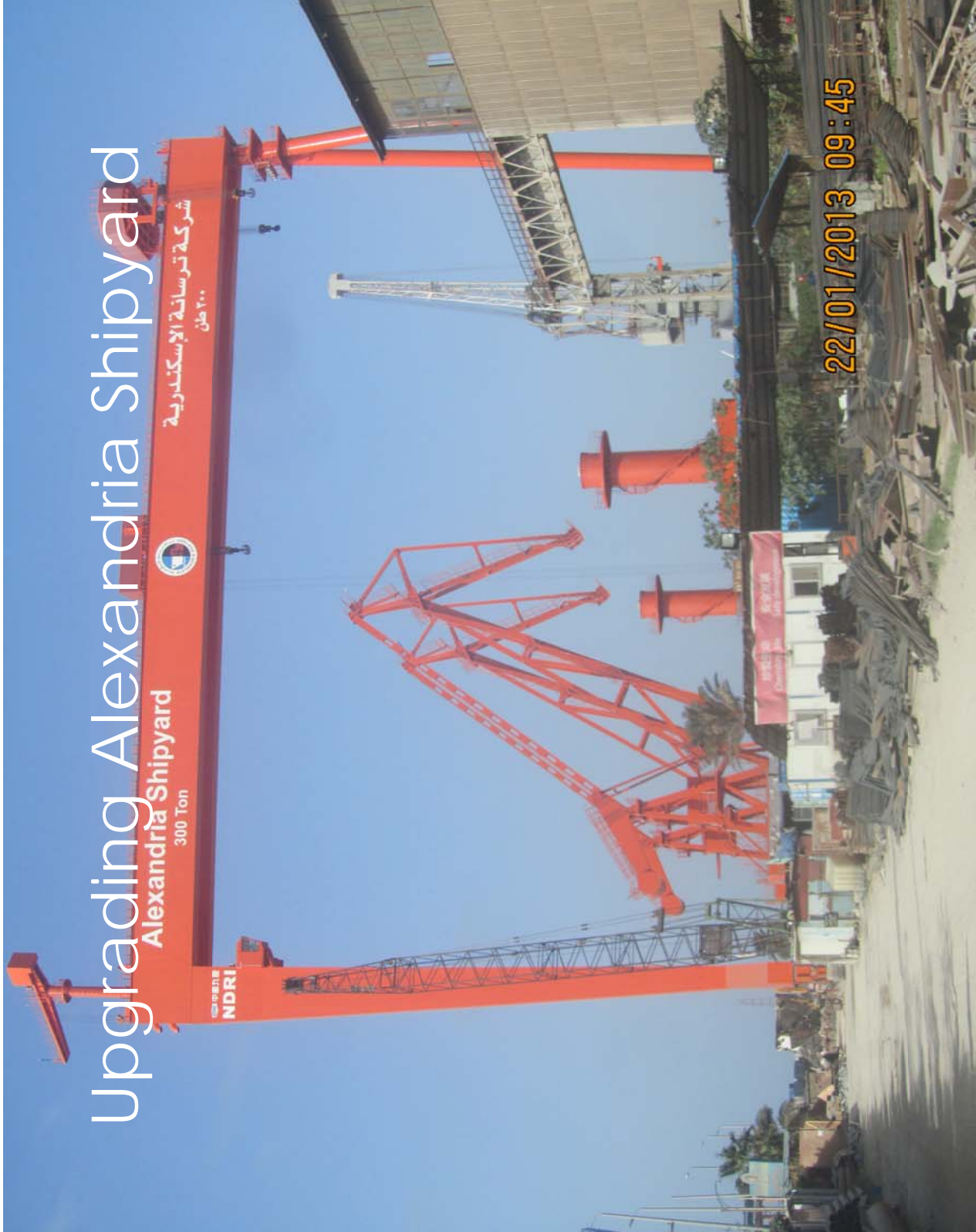


Upgrading Alexandria Shipyard



Upgrading Alexandria Shipyard



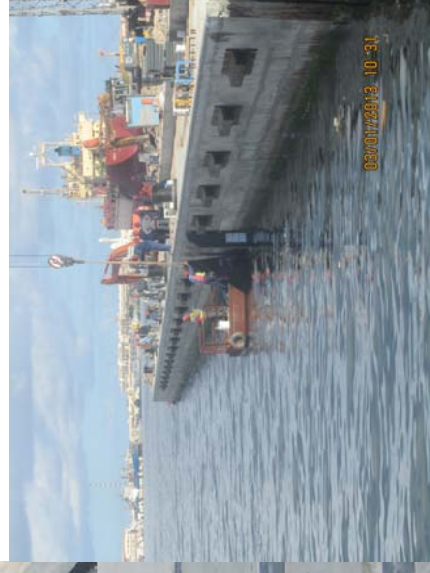




Upgrading Alexandria Shipyard



Upgrading Alexandria shipyard





Upgrading, Alexandria

Upgrading Alexandria Shipyard



8 1 2013

Upgrading Alexandria Shipyard



Upgrading Alexandria Shipyard



Upgrading Alexandria Shipyard

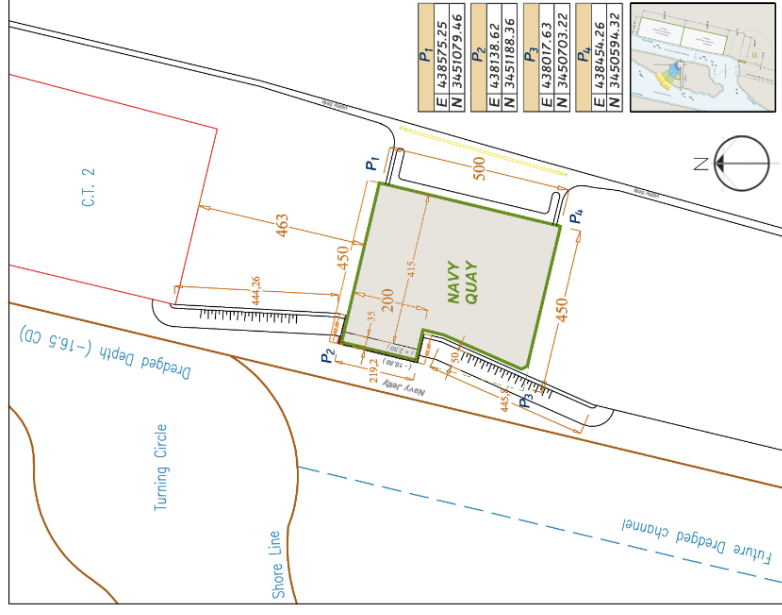
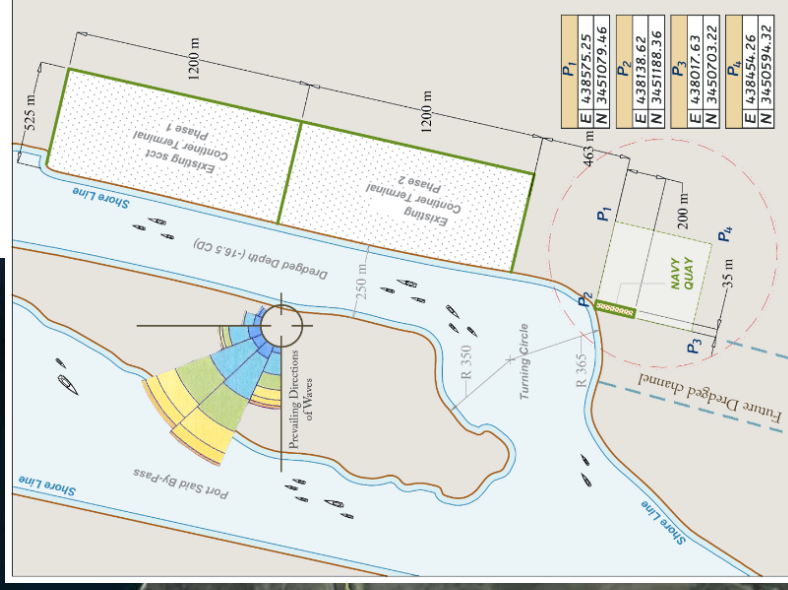


Key Projects

Container Terminal Eastern Channel – Suez Canal

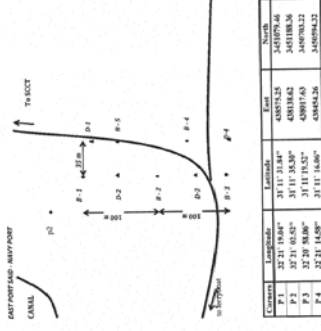
- 2014 (expected)
- 1.5 Billion EGP
- Design, Tendering

Container Terminal - Eastern Channel - Suez Canal



Container Terminal - Eastern Channel - Suez Canal

مشروع إنشاء الرصيف البحرى بميناء شرقى القناة ببيورسعيد

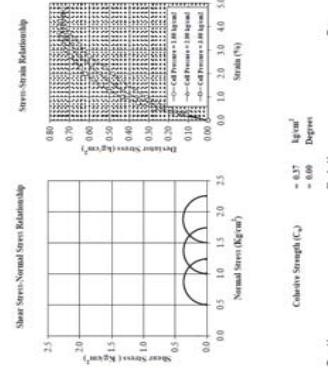


شكل ٣: أماكن الجسات واختبارات المخروط الإستاتيكي

Job No. : S.C. 02/02/07
 Project : New Quay Terminal
 Location : East Port Suez, Egypt
 Description : CH

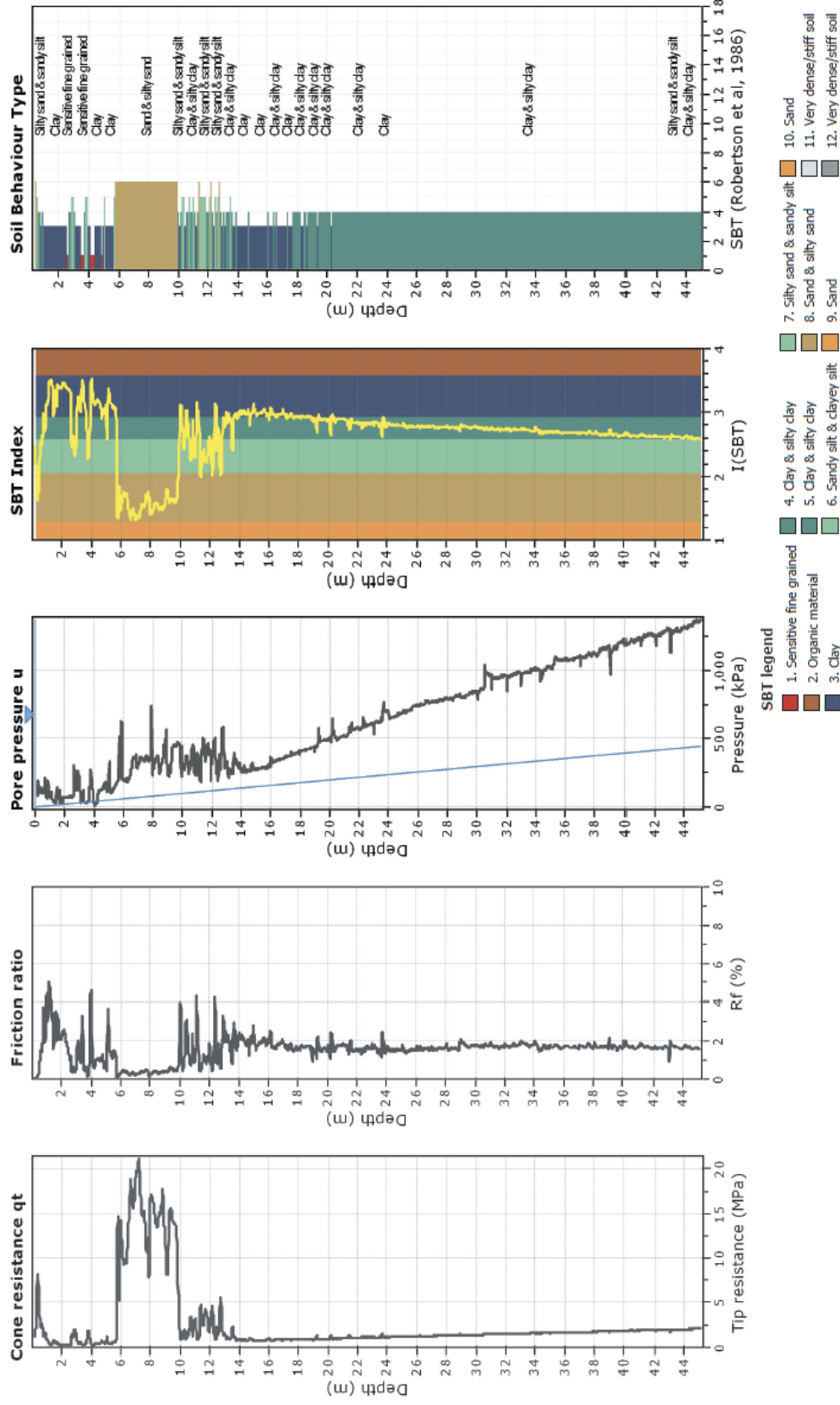
UNCONSOLIDATED UNDRAINED TRIAXIAL
 SOILS STRENGTH TEST (SU, SU, SU, SU)

Test No.	Vertical Stress (kN/m²)	Horizontal Stress (kN/m²)	Peak Shear Stress (kN/m²)	Post-Peak Shear Stress (kN/m²)
1	2.20	2.20	49.22	41.57
2	2.20	2.20	49.22	41.57
3	2.20	2.20	49.22	41.57
4	2.20	2.20	49.22	41.57
5	2.20	2.20	49.22	41.57
6	2.20	2.20	49.22	41.57
7	2.20	2.20	49.22	41.57



Shear Strength (C)
 = 8.37 kPa
 = 6.08 Degree
 Checked by: Dr. Tarek Inayat Allahy
 Date: 8/12/2011

Container Terminal - Eastern Channel – Suez Canal



Container Terminal - Eastern Channel – Suez Canal

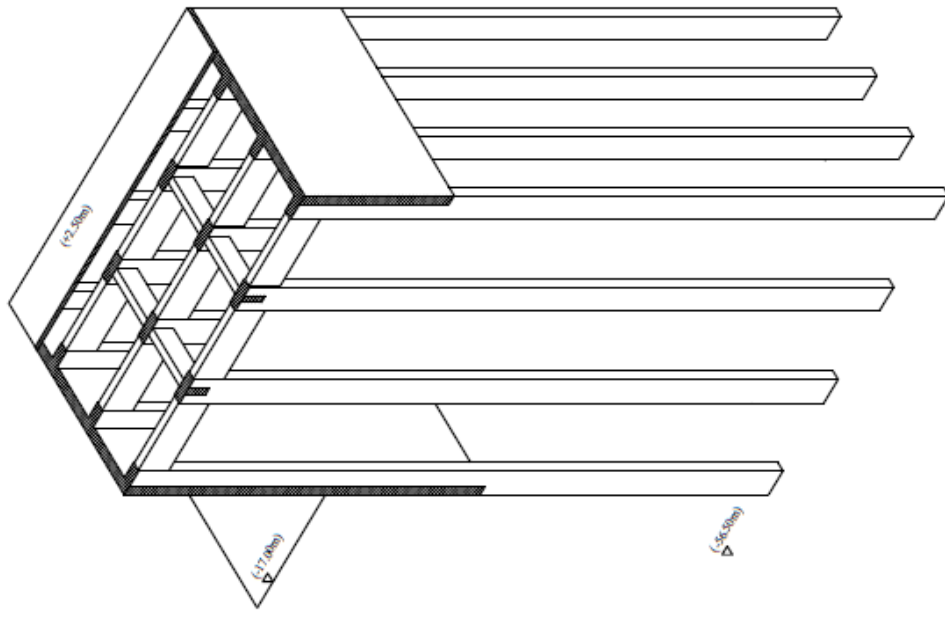
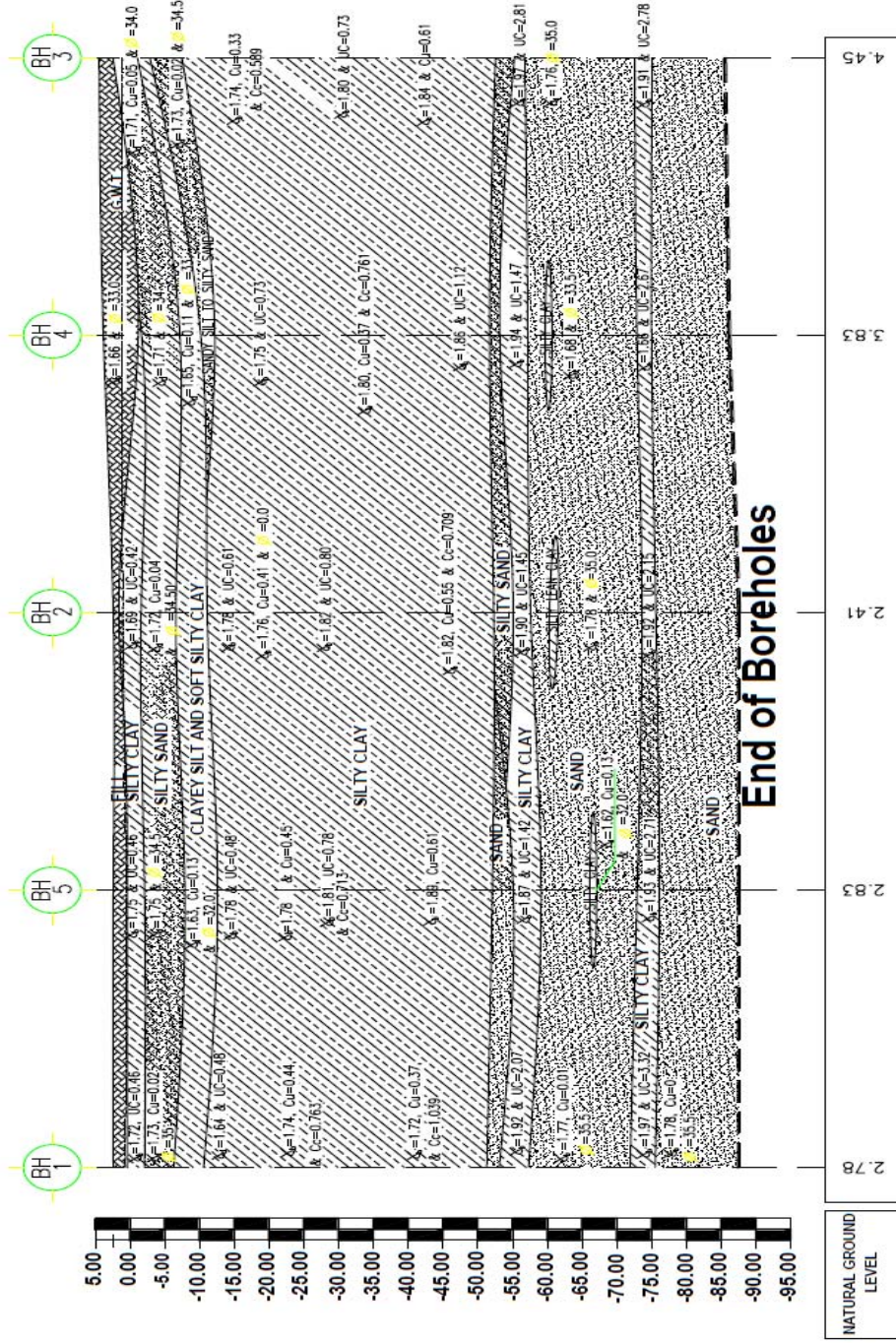
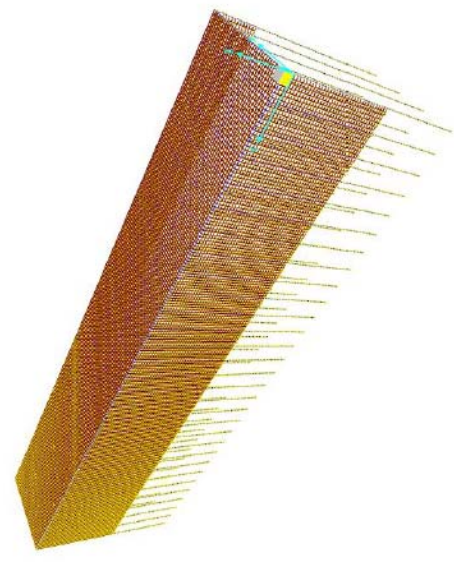
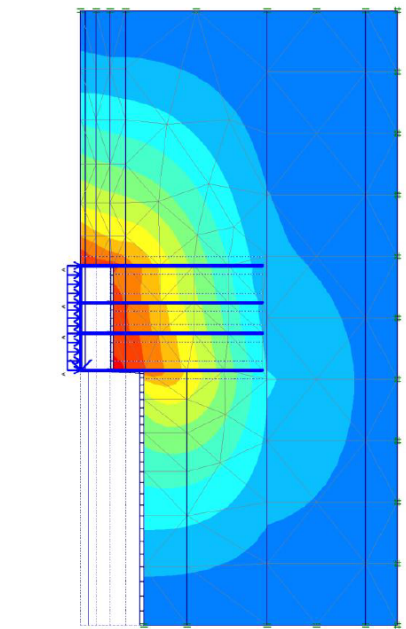
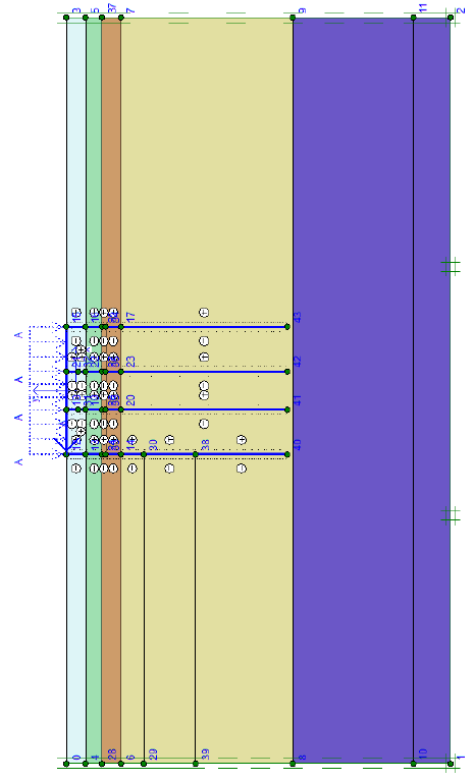
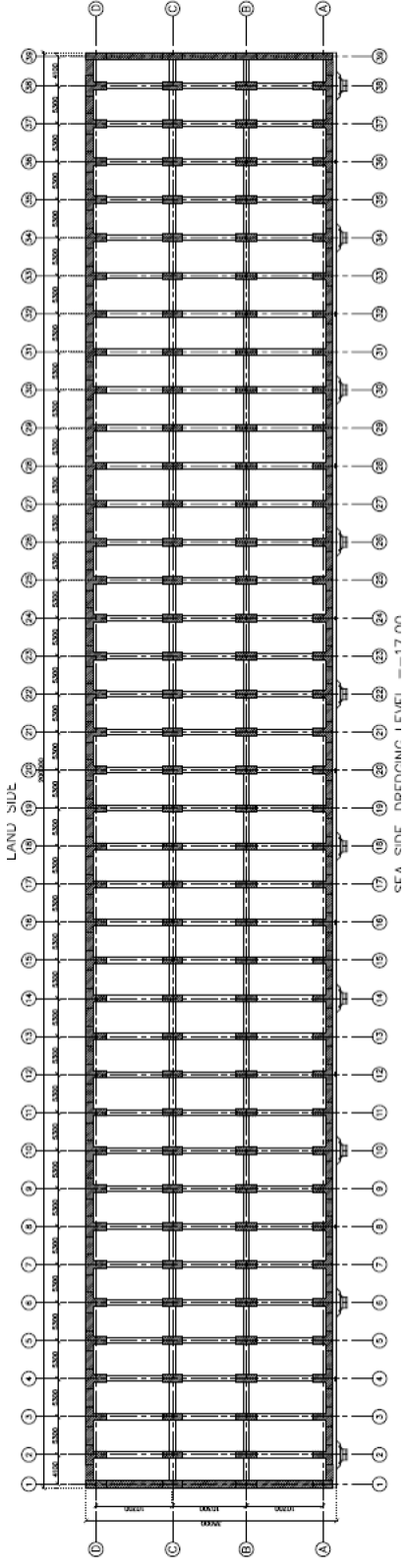
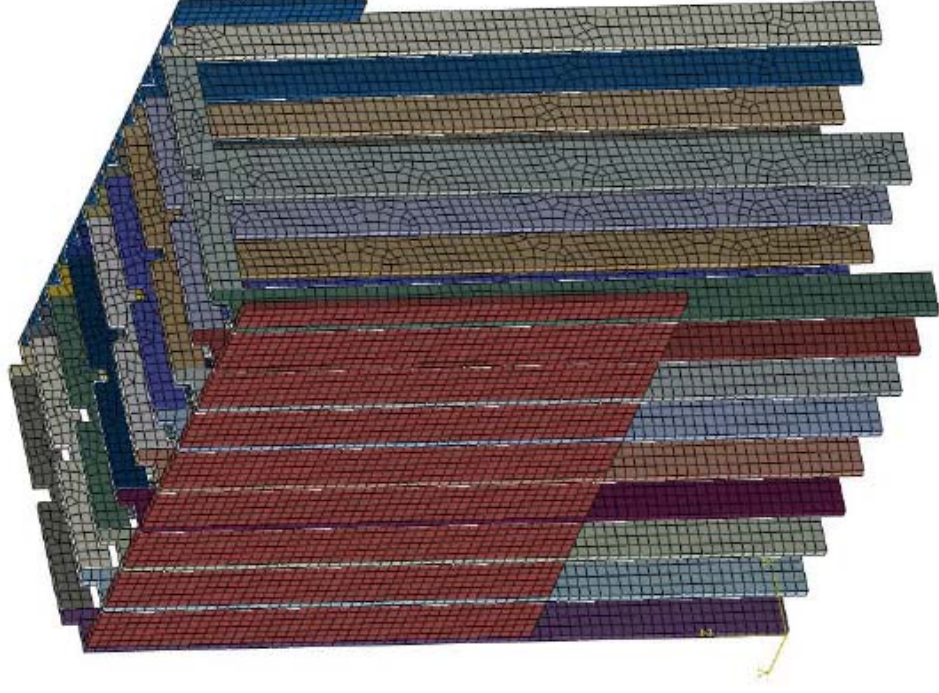
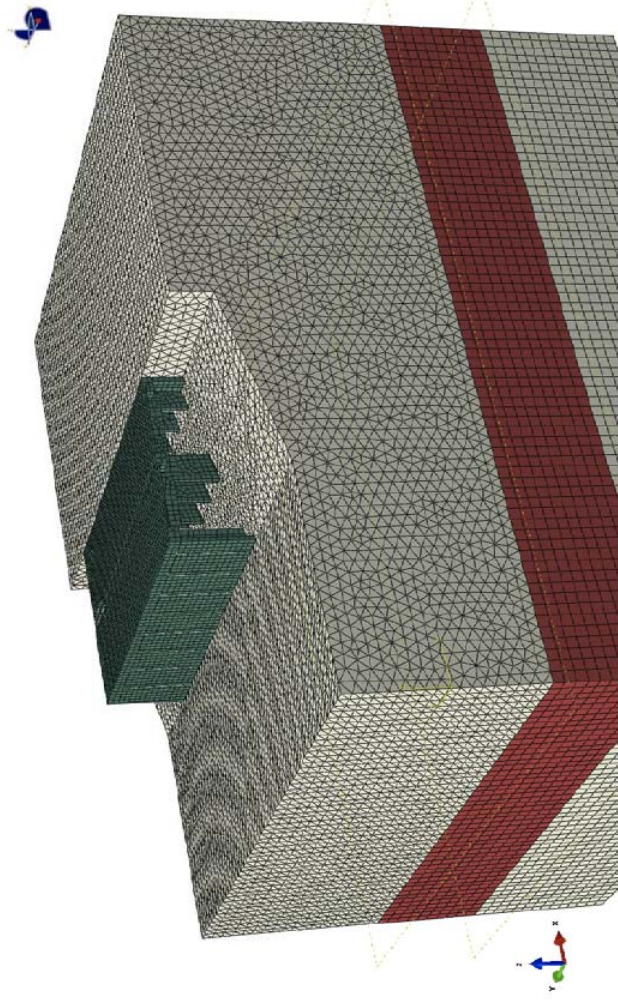


Figure No.(3) Lithological Soil Profile Through the Conducted Boreholes

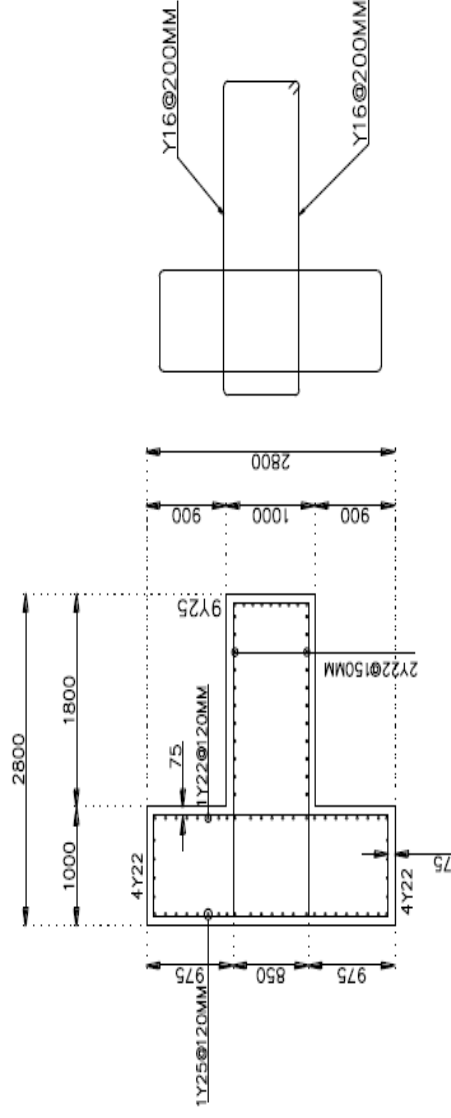
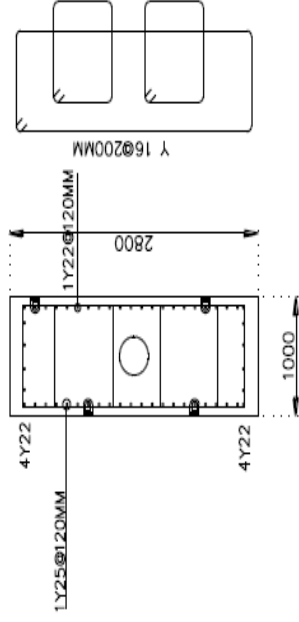
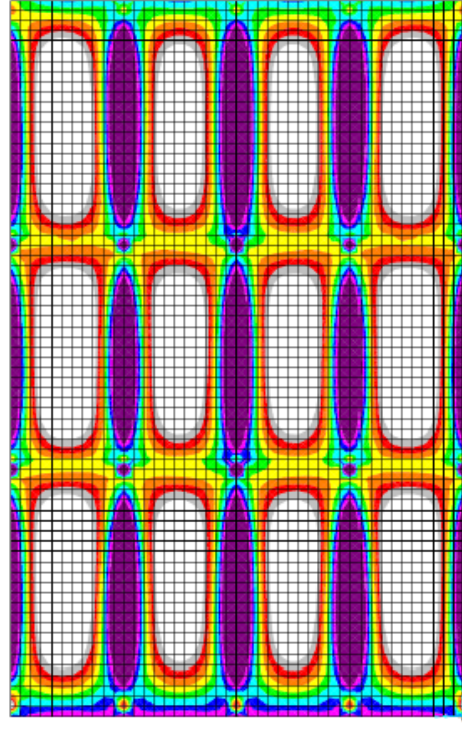
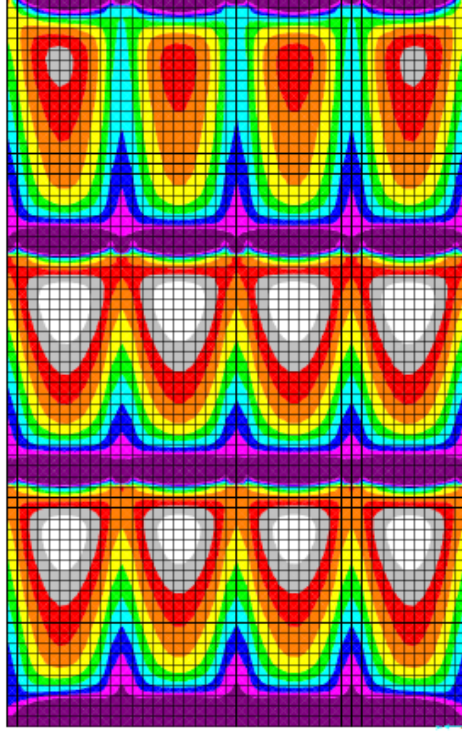
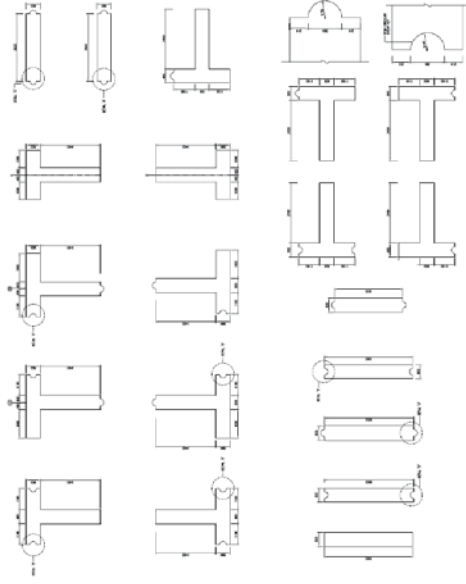
Container Terminal - Eastern Channel – Suez Canal



Container Terminal - Eastern Channel – Suez Canal



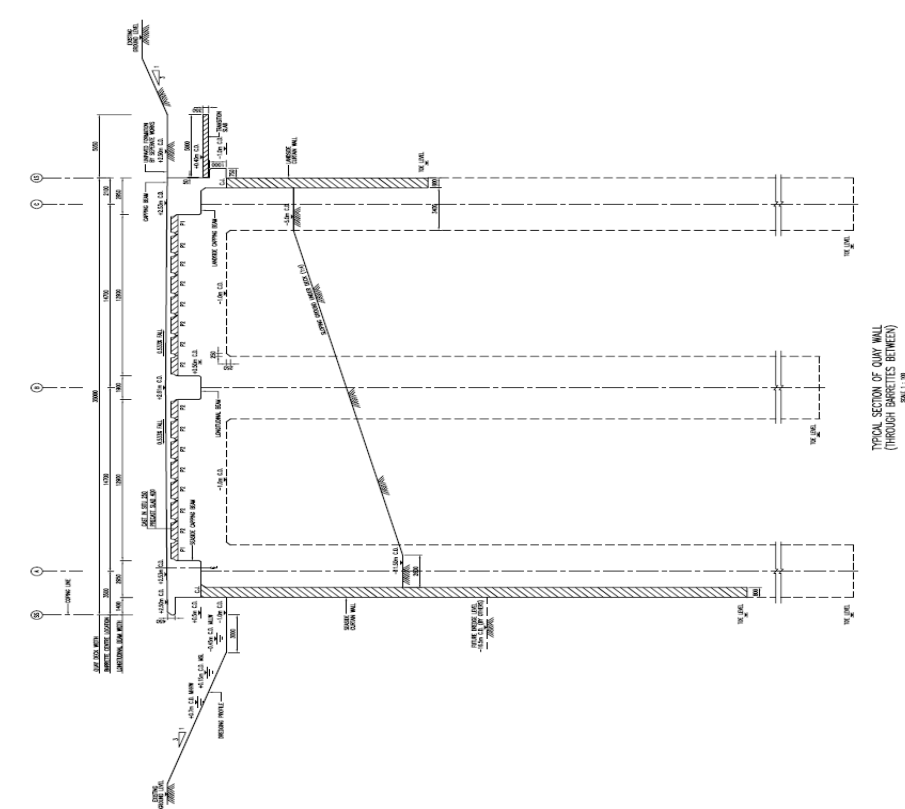
Container Terminal - Eastern Channel - Suez Canal



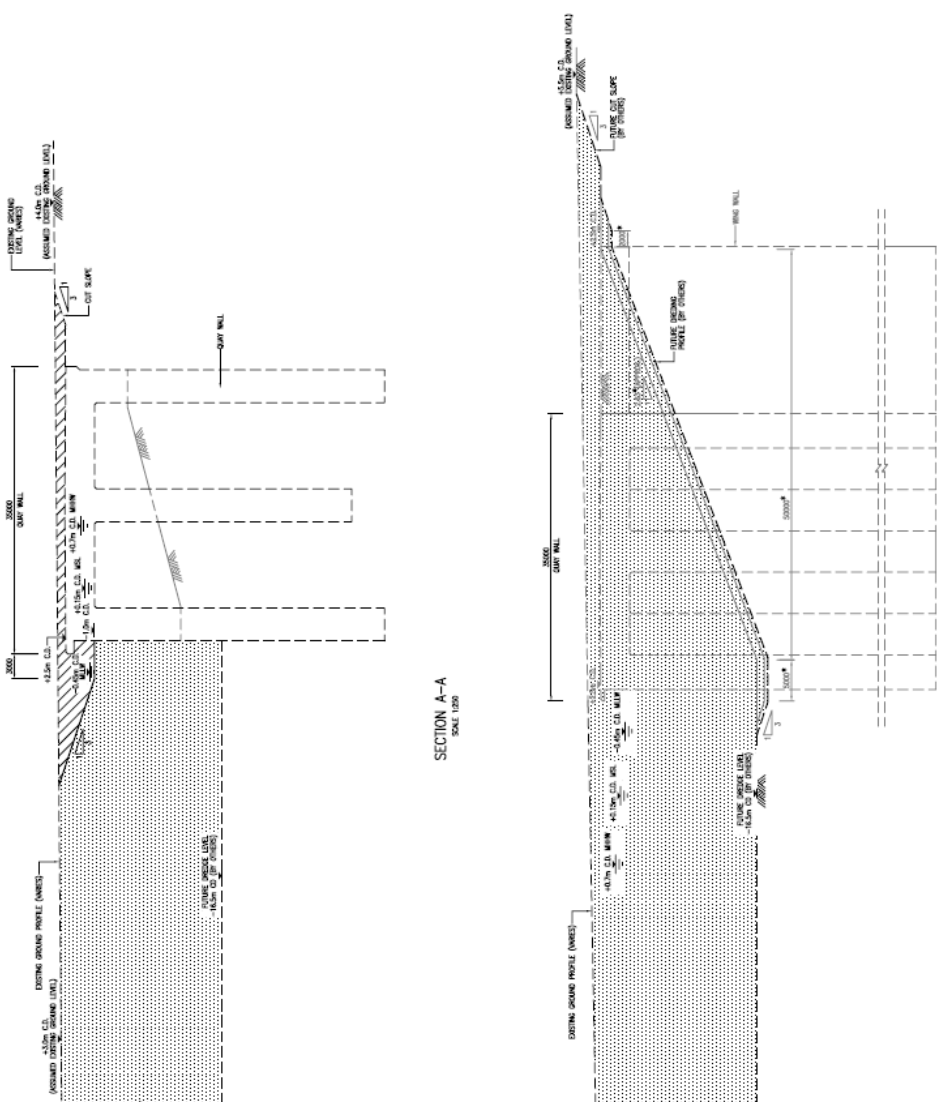
RFT DETAILS FOR THE SECONDARY PANELS

RFT DETAILS FOR THE PRIMARY PANELS

Container Terminal - Eastern Channel – Suez Canal



TYPICAL SECTION OF QUAY WALL (THROUGH BARRIERS BETWEEN)



Container Terminal - Eastern Channel – Suez Canal



CONTRACTOR:

ARAB CONTRACTORS

OSMAN AHMED OSMAN & CO.



www.geotechnegypt.com

Egyptian Partners



Marine Engineering
Geotechnical Engineering
www.geotechnegypt.com



Structural Engineering
MEP Engineering
www.ecu-me.com

www.geotechnegypt.com

Joint Venture Partners

Foreign Partners (Germany)

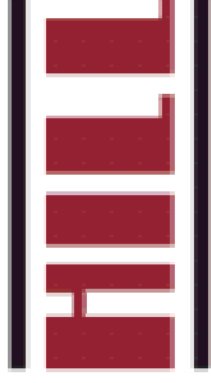


Container Terminal Design Experts
www.hamburgportconsulting.de



Transportation Engineering
www.uniconsult-hamburg.de

Foreign Partners (USA)



Project Management
www.hillintl.com