GEOMELETI

GEOTECHNICAL ENGINEERS & GEOLOGISTS

BUILDINGS- RETAINING STRUCTURES

...committed to the Art and Science of Geotechnical Engineering

...aiming for maximum quality through simple and cost-effective solutions

GEOMELETI

COMPANY PROFILE

GENERAL

GEOMELETI is a Consulting Engineering Company managed and operated by experienced engineers and geologists committed to the art and science of Geotechnical / Infrastructure engineering, always aiming in giving high quality, simple and cost-effective solutions to the projects undertaken.

GEOMELETI, is staffed with experienced Engineers and Engineering Geologists and managed by P. Laskaratos and T. Katsoularis, having extensive experience respectively, among others, in all aspects of Geotechnical / Infrastructure Engineering (Railway Projects, Hydraulic works, Road and Bridge design, Building foundation design, Tunnels, Slope design etc).

The Company owns modern equipment including drilling-rigs, in situ and laboratory testing devices and with the use of specialized software, can give reliable, fast and economical design solutions to all Geotechnical Problems.

OUR CLIENTS - COLLABORATIONS

GEOMELETI provides design, supervision and consulting services to the main organizations, managing infrastructure projects in Greece and abroad, such as:

- Greek Ministry of Public Works and Transportation,
- Greek Railways and Metro Authorities,
- Greek Highway Authorities,
- Infrastructure, Building and Industrial Contractors (Hochtief, AKTOR, GEK, TERNA, J&P, ABENGOA, etc)

Our collaborations also include major international engineering firms, such as, W.S. Atkins (UK), Faber-Maunsell (UK - USA), Hocthief (Germany), 3P (Austria), SSF and ISP (Germany), DBI International (Germany, Qatar), etc.

MANAGEMENT

Petros Laskaratos:
Geotechnical - Civil Engineer M.Sc, having more than 35 years of working experience in Geotechnical Engineering Projects, offered Consulting Services to the owners of the major highway authorities (Attiki Odos, Athens - Thessaloniki Highway, Egnatia Odos) in Greece, the Athens Metro and having an extensive experience in design of all types of infrastructure engineering projects, including building foundations, ground improvement, tunnels, bridges, dams, motorways, etc.

Tassos Katsoularis:
Engineering Geologist, having more than 25 years of working experience in investigations, quality control and geological and geotechnical design for all types of infrastructure engineering projects, including buildings, tunnels, open-cuts, dams, bridges, motorways, railway lines, etc.

GEOMELETI

OFFERED SERVICES

GEOLOGICAL / GEOTECHNICAL INVESTIGATIONS

- Geological Survey
- Programming of Investigations
- Inspection of Geotechnical Works
- Interpretation of Investigation Results
- Coring Boreholes: On-shore / Off-shore
- Horzontal Direction Drillings
- Trial Pits
- Special Sampling Works
- In situ Permeability Testing
- Standard Penetration Tests (S.P.T.)
- Plate Loading Testing (Static and Dynamic)
- Wagon Drillings
- Cone Penetrometer Testing
- Pressuremeter Testing
- Trial Embankments
- Borrow Areas Investigations
- Quary and Mine Investigations
- Geophysical Investigations
- Physical Properties Laboratory Testing
- Engineering Properties Laboratory Testing
- Chemical Properties Laboratory Testing

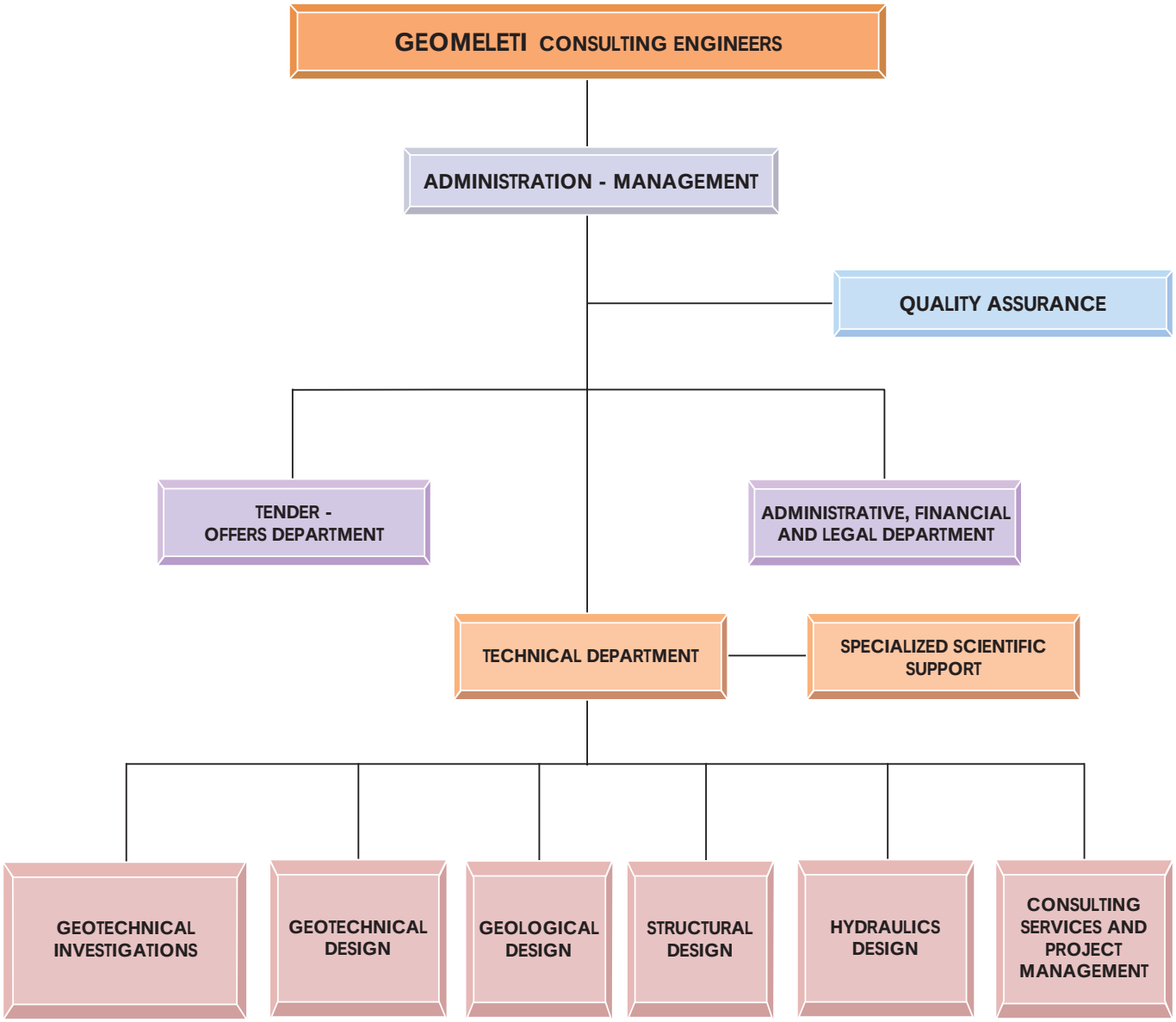
ENGINEERING DESIGN

- Shallow - Deep Foundations
- Ground Improvement / Treatment
- Foundation Improvement (Underpinning, Micropiles, etc)
- Dams - Hydraulic Projects
- Borrow Areas - Damping Sites
- Embankments
- Excavations
- Slopes and Landslides
- Geosynthetics (Design and Application)
- Retaining Structures (temporary and permanent)
- Road / Airfield Pavements
- Tunnels - Underground structures
- Water Filtration and Drainage
- Port Structures / Offshore Geotechnics
- Instrumentation
- Landfills
- Bridges
- Industrial / Residential Buildings
- Ground Water Management

GEOTECHNICAL CONSULTING SERVICES

- Checking of Design
- Expert Evaluations
- Inspection of Geotechnical Works
- Material Quality Control
- Observation / Interpretation of Instruments
- Modification of Design During Construction
- Preparation of Tender Documents
- Evaluation of Contractors' Offers
- Value Engineering Services

ORGANIZATION CHART



EXPERIENCE IN

BUILDINGS

GEOMELETI

Schools and University Complexes, Conference Complexes,
Bank Complexes, Municipal Market Buildings, Plants,
Railway Stations, Deep Retaining Structures and
a large number of private Complexes and Shopping Centers.

BUILDINGS

KOSMOPOLIS PARK SHOPPING MALL, KOMOTINI CITY, THRACE PREFECTURE, GREECE

Client:
REAL ESTATE DEVELOPMENT
KOMOTINI S.A.

Geotechnical Investigation (Coring Boreholes and Trial Pits) and Geotechnical Foundation Design concerning a Complex of Buildings of 10.000m^2 ground coverage with two basements and five floors at an environment of high ground water level.

NEW OFFICE BUILDINGS AT PEIRAIUS STR., ATHENS, GREECE

Client:
J & P DEVELOPMENT S.A.

Geotechnical Investigation and Geotechnical Foundation Design for a 5 Floor Office Building with 2 basements, of 9.000m^2 ground coverage in total.

NATIONAL LIBRARY, PRAGUE, CHECH REPUBLIC

Client:
J & P DEVELOPMENT S.A.

Geotechnical Foundation Design for a Building with ground coverage of 6200m^2, total Height of 27m and total floor area of 63.000m^2.

INDUSTRIAL COMPLEX OF LARKO S.A., GREECE

Client:
LARKO S.A. / E' TECHNIKI S.A.

Geotechnical Investigation and Geotechnical Shoring Design for retaining structures supporting industrial facilities.

PRINTING INDUSTRIAL COMPLEX OF D.O.L., VIOTIA MUNICIPALITY, GREECE

Client:
DOL S.A.

Geotechnical Investigation (Coring Boreholes and Trial Pits) and Geotechnical Foundation Design for an Industrial Complex of Buildings, with ground coverage of 25.000m^2, including special foundation design of large and heavy machine complexes. Quality control services during construction of backfilling and excavations.

RESIDENTIAL COMPLEX OF BUILDINGS, CRAKOW, POLAND

Client:
W. S. ATKINS

Geotechnical Foundation Design for a Complex of Residential Building with ground coverage of 8.500m^2, total Height of 24m and total floor area of 31.500m^2, with three basements close to a river, with loose sand-gravel deposits.

BUILDINGS

NEW EXTENSION BUILDING OF ARCHAELOGICAL MUSEUM OF POLIGIROS, CHALKIDIKI, GREECE

Client:
MINISTRY OF CULTURE

Geotechnical Investigations (Coring Boreholes) and Geotechnical Foundation Design for the new building of ~700m^2 of area coverage for the archaeological museum of Poligiros at Chalkidiki

NEW BUILDINGS FOR THE RAILWAY STATION OF MEGARA, GREECE

Client:
IONIOS S.A

Geotechnical Investigations (Coring Boreholes) and Foundation Design for two buildings of ~400m^2 of area coverage for the new Railway Station of Megara

RESTORATION OF THE TECHNICAL SCHOOL AT EVRITANIA REGION, GREECE

Client
MUNICIPALITY OF EVRTANIA

Geotechnical Investigations (Coring Boreholes and Trial Pits) and Geotechnical Foundation Design for the restoration of the Technical School Building of Karpenisi

XATZIKONSTA FOUNDATION, ATHENS, GREECE

Client:
NIKOLAOS LEMPESIS, Civil Engineer

Geotechnical Investigations
(Coring Boreholes and Trial Pits),
Geotechnical Foundation Design.

PREFECTURE OFFICE BUILDINGS AT TRIKALA, GREECE

Client:
J&P – AVAX S.A.

Geotechnical Investigations
(Coring Boreholes and Trial Pits) and
Geotechnical Foundation Design
for a building complex having 3 floors,
1 basement and 3.450m^2 ground
coverage.

NEW BUILDINGS FOR THE LOGISTICS CENTER OF JUMBO S.A. IN INOFITA, VIOTIA, GREECE

Client:
JUMBO S.A.

Geotechnical Investigations
(Coring Boreholes and Trial Pits) and
Geotechnical Foundation Design
for two buildings for the logistics center
in Inofita, Viotia Prefecture .

BUILDINGS

ALDI LOGISTIC CENTER AT THE GREATER PATRAS AREA (GOMOSTO), GREECE

Client:
3P Geotechnik ZT GmbH.

Geotechnical Investigations
(Coring Boreholes and Trial Pits)
for the ALDI logistics center
with ~54000m^2 ground coverage.

INDUSTRIAL COMPLEX "AGGELIDIS - GEORGAKOPOYLOS, OINOI, ATTICA, GREECE

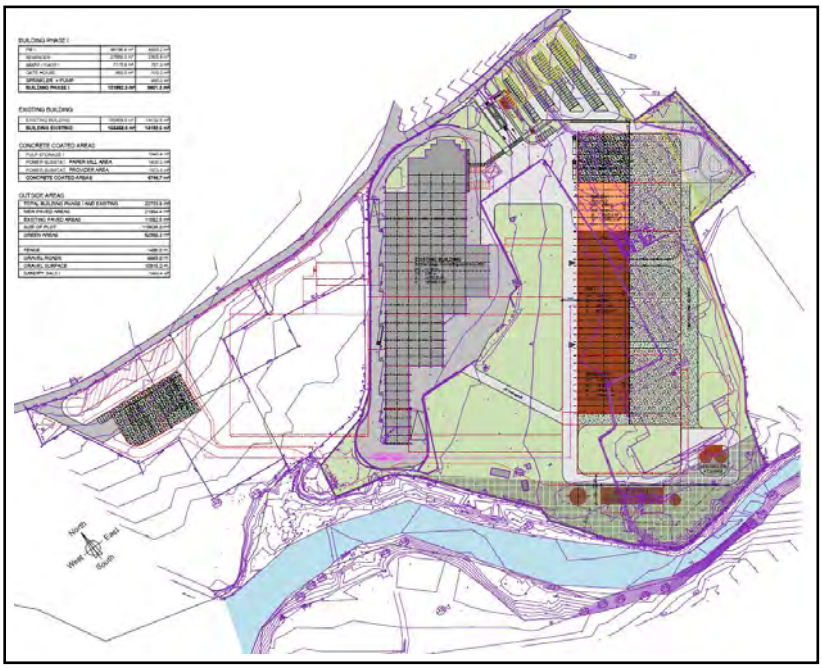
Client:
AGGELIDIS - GEORGAKOPOULOS S.A.

Geotechnical Investigations
(Coring Boreholes and Trial Pits) and
Geotechnical Foundation Design.

NEW PAPER FACTORY INTERTRADE HELLAS IN VIOTIA, GREECE

Client:
INTERTRADE HELLAS S.A.

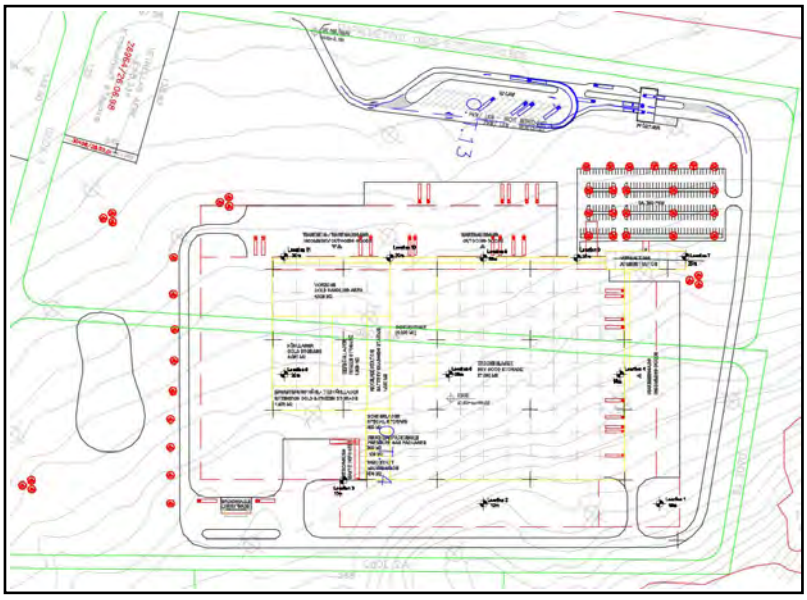
Geotechnical Investigations (Coring
Boreholes and Trial Pits) and
Geotechnical Foundation Design for
industrial building with ~5000m^2 ground
coverage.
Special Foundation Design
for Heavy Machinery.



ALDI LOGISTIC CENTER IN THE INDUSTRIAL ZONE OF LARISSA

Client:
ALDI LOGISTICS

Geotechnical Investigations (with Coring Boreholes) for a logistics building complex, Geotechnical Foundation Design.



RESIDENTENCE COMPLEX IN MAROUSI ATHENS, GREECE

Client:
J & P DEVELOPMENT S.A

Geotechnical Investigations (Coring Boreholes) and Foundation Design for a new residence complex having seven stories buildings with two basements in Marousi area.

NEW TRAINING CENTER OF OLYMPIAKOS PIRAEUS FC, RENTI AREA, ATTICA, GREECE

Client:
DEKATHLON S.A

Geotechnical Investigations (Coring Boreholes and Trial Pits) and Foundation Design for three new buildings of ~2600m^2 of area coverage and two football fields with aproximate dimensions 104 X 66m for the training center of Olympiakos Piraeus F.C.

EXPERIENCE IN

RETAINING STRUCTURES-UNDERPINNING

GEOMELETI

Investigation, Design and Consulting Services during Construction.

RETAINING STRUCTURES - UNDERPINNING

"KARELIAS INDUSTRY", KALAMATA CITY AREA, PELOPONNESE, GREECE

Client:
KARELIAS S.A.

Geotechnical Investigation (Coring Boreholes inside Buildings) and Geotechnical Design of micro-pile support system for underpinning nine Buildings of the "Karelias" Industry.

TECHNICAL COLLEGE, KARPENHSI, EVRITANIA MUNICIPALITY, GREECE

Client:
EVRITANIA MUNICIPALITY

Geotechnical Investigation (Coring Boreholes) and Geotechnical Design of pile support system for underpinning Buildings of the Technical College.

NEW SHOPPING MALL CENTER AT LARISSA RAILWAY STATION AREA, ATHENS, GREECE

Client:
KAROYZOS CONSTRUCTION S.A.

Geotechnical Design of the Temporary Retaining Structure consisting of a 21.5m Deep Anchored Piled Retaining Wall, designed for the construction of a 5 floor underground parking - garage.

"TIMAGENIS" BUILDING AT PIRAEUS PREFECTURE, GREECE

Client:
TIMAGENIS S.A.

Geotechnical Investigation and Geotechnical Shoring Design for a 10m Deep Anchored Piled Retaining Wall, excavated Under Existing Old Masonry Building.

RETAINING STRUCTURES - UNDERPINNING

GREEN LINE METRO, DOHA, QATAR

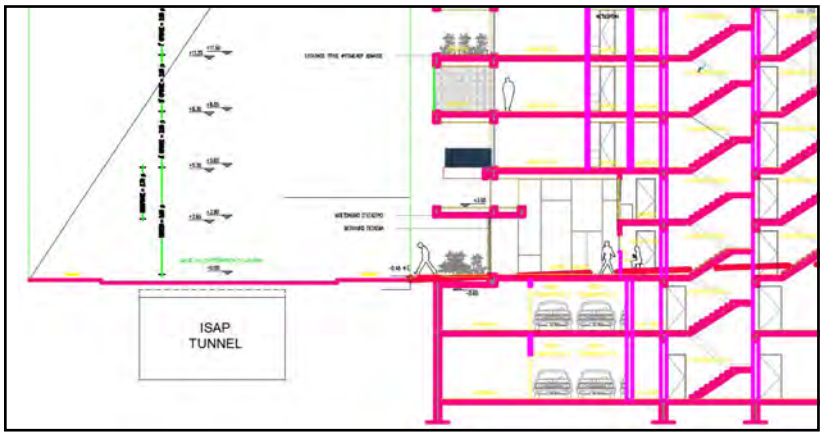
Client:
SSF Ingenieure AG / QATAR RAIL S.A.

Retaining Structure Design for six (6) cut and cover Metro Stations with pilewalls and / or temporary prestressed anchors, supporting open cut excavations.
Retaining depth was from 20m to 40m.

MULTIFLOOR BUILDING AT THE CROSSING OF SEPTEMBER 3RD AND EPIROU, ATHENS, GREECE

Client:
GEORGIOU AND CO

Geotechnical Shoring Design for the excavation of a 2 floor basement building at a close distance to the Line 1 Metro Tunnel (ISAP TUNNEL).



MYSTRAS EUPHORIA RESORT, PELOPONNESE, GREECE

Client:
EVOIKOS S.A.

Geotechnical Investigations (Coring Boreholes), Geotechnical Foundation Design for multiple buildings, Design of Deep Retaining Structures and Monitoring during construction.

NEW OFFICE BUILDING COMPLEX OF "DIMAND S.A." AT SINGROU AND LAGUMITZI INTERSECTION, PIRAEUS, GREECE

Client:
PANTERRA S.A.

- Geotechnical Investigations (coring boreholes).
- Geotechnical Foundation Design for the construction of a multi-story office building with four basements (16 – 17m in depth).
- Shoring Design for 5000m^2 retained vertical slopes.
- Monitoring during construction.

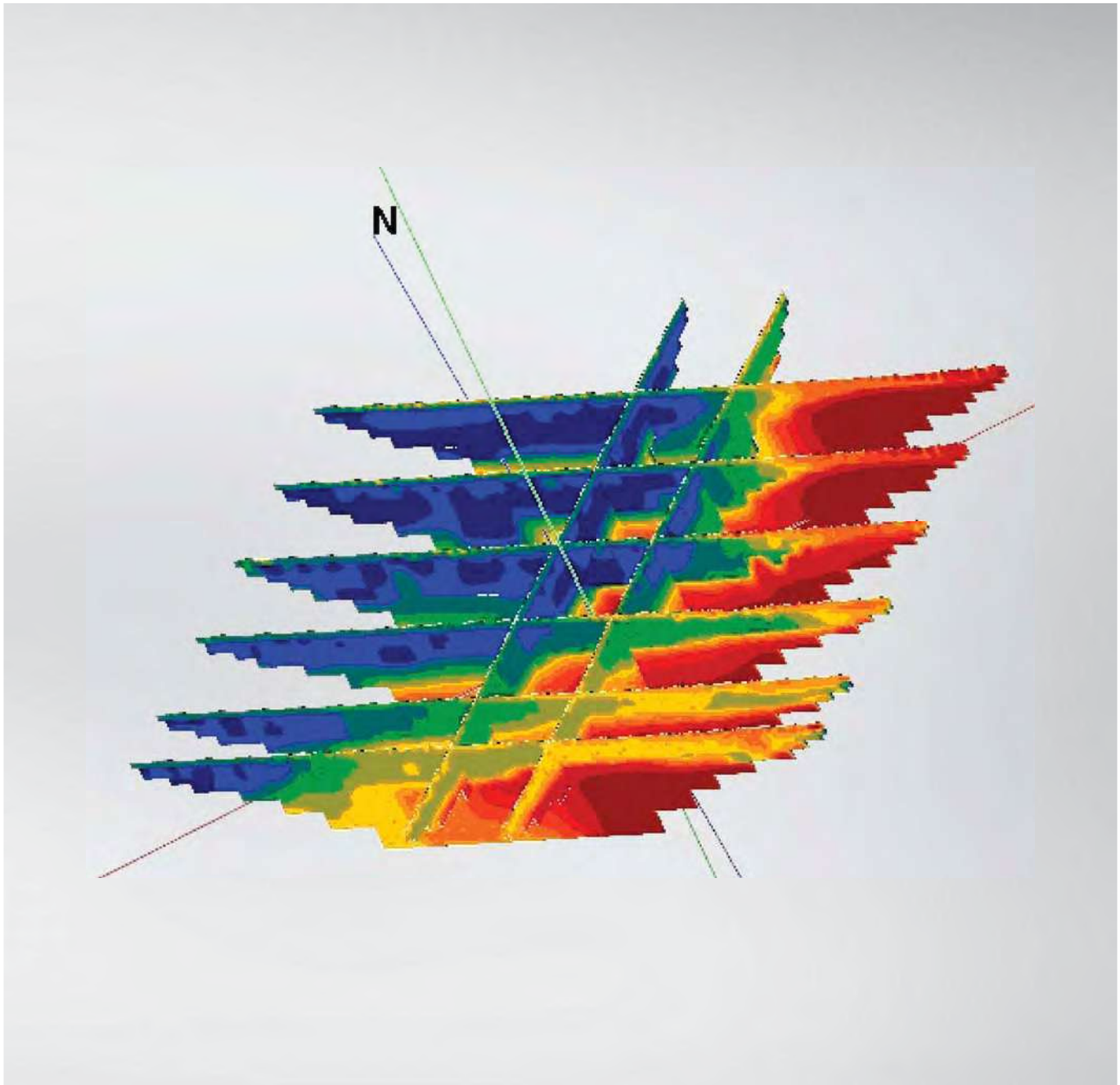
Temporary retaining system consists of reinforced Ø800 concrete piles with 4 rows of prestressed anchors, steel piles 2U350 with 2 rows of prestressed anchors, steel struts CHS610/16 and CHS610/12.5 with maximum length 19m, horizontal steel girders 2HEB450 and reinforced concrete pilecap.

EXPERIENCE IN

GEOPHYSICAL INVESTIGATIONS

GEOMELETI

Karsts - Cavities - Sinkholes - Fracture Zones,
Utilities - Buried Structures,
Reinforcement - Voids of Concrete,
Seismic/Dynamic Properties of Subgrade Materials,
Unexploded Ordnances (UXO's), Marine - Hydrographic Services
Environmental Applications, Parameters for Grounding Design



GEOPHYSICAL INVESTIGATIONS

KARSTS - CAVITIES - SINKHOLES - GROUND WATER TABLE - FRACTURE ZONES

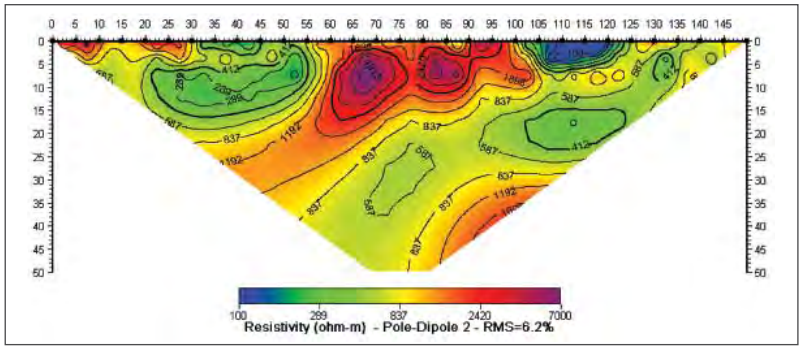
Project:
"KTENIAS", TRIPOLIS GREATER AREA, PELOPONESSE, GREECE

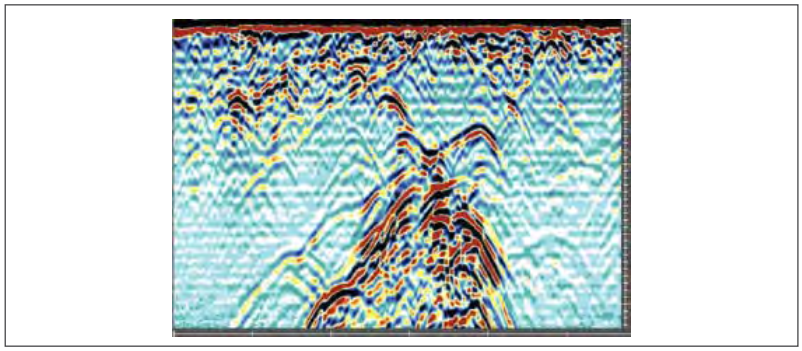
Scope:
- Detection of cavities-karsts, sinkholes and fracture zones with non-destructive geophysical methods

Geophysical Methods:
- Ground Penetrating Radar (GPR)
- Electrical Resistivity Tomography (ERT)

Geophysical Equipment:
- Mala Geoscience GPR (ProEx Control Unit, shielded antennas of 500, 250 MHz and unshielded of 100, 50 & 25 MHz central frequency, XV11 monitor, Trimple RTK GPS)
- Terrameter LS 16 channel resistivity meter, multicore cables, electrodes

Depth Range:
- 0 - 15m (GPR Method)
- 0 - 80m (ERT Method)





THESSALONIKI METRO, GREECE

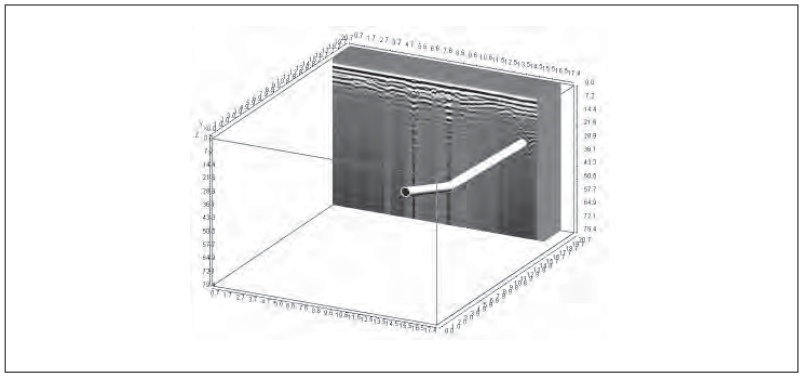
Project:
THESSALONIKI METRO, GREECE

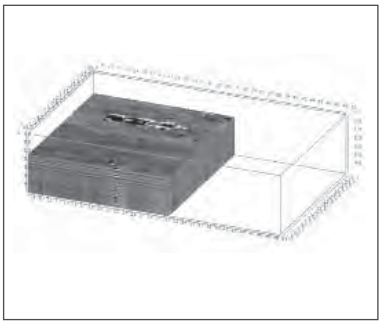
Scope:
- Detection of buried structures (water pipes, cables, sewer pipes, ancient remains, etc.), along the Metro Alignment using non-destructive methods

Geophysical Methods:
- Ground Penetrating Radar (GPR)

Geophysical Equipment:
- Mala Geoscience GPR (ProEx Control Unit, shielded antennas of 500, 250 MHz, 1.6 GHz central frequency, XV11 monitor, Trimple RTK GPS)

Depth Range:
- 0 - 6m





SEISMIC/DYNAMIC PROPERTIES OF SUBGRADE MATERIAL

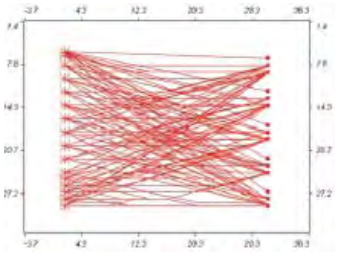
Project:
DESIGN OF "ASOPOS" EARTH DAM, GREECE

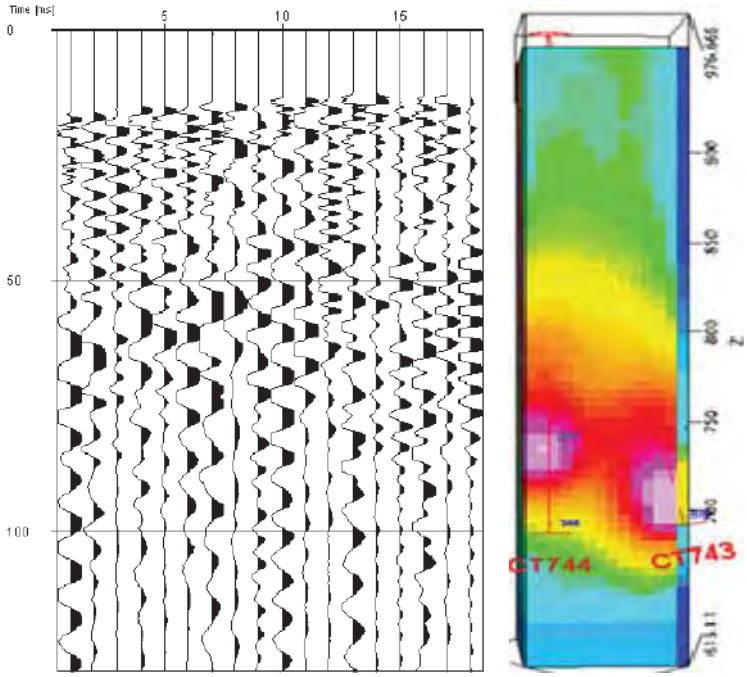
Scope:
- Detection of the dynamic elastic parameters of the subgrade materials in the foundation area for the a-seismic design of the dam (80m high)

Geophysical Methods:
- Seismic Tomography (CSL Method)

Geophysical Equipment:
- Digital Seismic recorder with 24 channels of GEOMETRICS Company, model SMARTSEIS, with sampling ability of 32 ms.
- Mechanical seismic source, automatic, with applicability within the borehole. Type MH 60 of company VIBROMETRIC OY.
- Wooden beam for the production of S-waves in the multi-offset VSP method.
- Chain of eight (8) tri-axial geophones, with 5 meters spacing between geophones and ability to attach them to the walls of the borehole.
- Control Box for controlling the seismic source. Control Box for controlling the geophones. Laptop to control the data quality and their preliminary processing.

Depth Range:
- 0 - 100m





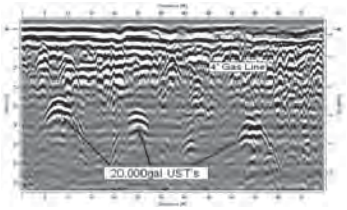
ENVIRONMENTAL APPLICATIONS - GROUNDING DESIGN

Project:
PETROLINA FACILITIES, CYPRUS

Scope:
- Hazardous waste mapping, underground storage tanks (UST), Resistivity definition for Grounding Design

Geophysical Methods:
- GPR
- ERT

Geophysical Equipment:
- Mala Geoscience GPR
- Terrameter LS 16 channel resistivity meter, multicore cables, electrodes



EXPERIENCE IN

GEOTECHNICAL INVESTIGATIONS

GEOMELETI

More than 50.000m of coring boreholes, both on-shore and off-shore with in-situ and laboratory testing for more than 1.000 different projects.

GEOTECHNICAL INVESTIGATIONS

GEOMELETI has the capability and experience to execute a wide range of field and laboratory testing / investigations.

Our experience includes execution of more than 50.000m of coring boreholes, both on-shore and off-shore, for more than 1.000 different projects, with corresponding laboratory testing and evaluation of their results. For these projects programming and inspection of the works were included in our scope.

On-Shore Borehole

Off-Shore Boreholes

Railway Line Drilling

Wagon-Drilling

Laboratory Testing

GEOTECHNICAL INVESTIGATIONS

Trial Excavation

Pressuremeter Testing

Rock Sampling

Soil Sampling

Light Dynamic Cone Penetrometer (DCP) equipment

Static PLT equipment

Dynamic PLT equipment

GEOMELETI

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