

GEOTECHNICAL PROBLEMS IN NICOSIA AREA

Project Report Submitted by

§ DINOS POLYCARPOU

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Project Supervisor: MR D. ANDREOU
Lecturer in Civil Engineering,
H.T.I.

External Assesor: MR A. MICHAELIDES
Hydrogeologist

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SUMMARY

Scope

The scope of the present work is to study the geotechnical problems encountered in the Nicosia area.

Work done

All the work done was based basically on site visits and collecting data (taking photographs, talking with people etc). Information was also taken from the Geological Survey Department (G.S.D), Ministry of Agriculture and Natural Recourses.

Method of approach

The whole project was treated by firstly giving an account on the geotechnical engineering. Then a more detailed account was given on foundations, with extensive reference on the failures of foundations, followed by a chapter on foundation properties of soil and rock types. A chapter was devoted to earthquakes which is very important for our country, as Cyprus lies within a seismic zone. Then more detail was given to the criteria for satisfactory performance of the foundations, followed by a chapter on site investigation, where the necessity of knowing the subsoil conditions of a site before the design stage is stated. Then an account was given on the types of foundations. All the above constitutes part A of the project.

The second part exclusively refers to the Cyprus conditions (Geology of Cyprus, Earthquakes in Cyprus), giving more emphasis on the Nicosia area (Geology of Nicosia, Geotechnical map of Nicosia, Problematic areas in Nicosia). The second part of the project ends with a detailed account on the design of building foundations-existing practice in Cyprus.

The third part of the project deals, in details, with two specific geotechnical problems in the area of Nicosia and the solutions employed to overcome those problems.

The study is concluded with comments on issues and problems related to foundations that one should be aware of in the Nicosia area.

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