



ACADEMIC YEAR 2010 – 2011

TITLE OF DIPLOMA THESIS:

Technical and economic management of the construction of the bearing structure of the arcade Hirsch

AUTHOR: Argyropoulou Dafni

ABSTRACT

This paper deals with the economic and technical management of the construction of the bearing structure of the arcade Hirsch. Initially, the technical description of the work is presented which is of particular interest because in this project geotechnical engineering issues, buildings' underpinning issues, conservation aspects and issues of strengthening of the bearing structure constructed by reinforced concrete and adding of floors constructed by a mixed metal body, were combined, which made the project unique. Then the estimate of quantities of work is presented and on this basis the budget of the project is calculated. The schedule of the project comes after as it was originally estimated and as it was finally formed after significant delays due primarily to the discovery of archaeological finds in the Tsimiski part during the embedment of the piles of Berlin Wall. As a result, works on the part of Tsimiski were ceased for six months. The archaeological discoveries apart from the delays they caused had as a result significant changes in the static and dynamic analysis of the project. Specifically a prop was removed from the basement as well as the ground floor of the building and this prop was constructed as "planted" from the roof of the ground floor and on. Moreover, a strong beam was constructed in order to create a framework on which the "planted" prop would be constructed. In addition, an estimate of the machinery used is quoted. Finally, there is a presentation of the project from an architectural standpoint.

KEYWORDS

Reconstruction of the arcade Hirsch, Economic management of the arcade Hirsch, Technical management of the arcade Hirsch, Estimate of quantities of work, Schedule of work