



## HOUSE MARKET S.A.

### CONSTRUCTION OF A SHOPPING CENTER BUILDING COMPLEX

PROJECT BUDGET:	22.000.000 €
ARCHITECTURAL DESIGN:	AETER S.A.
STRUCTURAL DESIGN:	KANON CONSULTING (2006)

Pictured below is a 20.000m<sup>2</sup>, two-storey shopping center in a building complex that features an underground parking station that is under construction on Piraeus Street in the Municipality of Ag. Ioannis Rentis.

The first of the two buildings measures approximately 80.0x100.0m without any intermediate expansion joints. Columns are placed in the basement in a grid measuring from 7.80x7.80m to 7.80x15.60m on the first floor and 15.60x15.60m on the second floor. The live load requirement of this building is high: 15KN/m<sup>2</sup> for the sale areas and 20KN/m<sup>2</sup> for the storage areas.



*3-D view of the building on Pireos street*



*“HOUSE MARKET” during construction*



***"HOUSE MARKET" - aerial view***



***Steel roof during construction***



***Eastern facade of the building***

The greater part of the roof consists of a steel structure, while the perimeter is constructed with reinforced concrete in order to sustain heavy E/M equipment and to provide rigidity to the roof diaphragms.

The second building of the complex is located on Fleming Street with columns placed at a 7.80x7.80m grid on all levels. Constructed with 60x80cm columns and 60x80cm beams, this building has a 5KN/m<sup>2</sup> live load requirement, with a roof mainly composed of structural steel.

The foundation of the building complex is constructed with a spread foundation slab in order to accommodate the poor soil conditions in the high underground water table in the area surrounding the Kifissos river. In order to retain the excavation of the basement and the foundation a long pile wall was constructed.