

Z E P

Zone of Alternate Urban Planning

October 2007



ZEP TODAY



DEPEPOK S.A. has completed the creation of public infrastructure (road network, water supply, drainage, electricity, lighting, heating network, broadband fiber optics network)



278 houses residences constructed by the Workers Housing Association on a 5.5 Ha area

The headquarters of the Western Macedonia District, on a ~1.5 ha area



TOOLS FOR THE CREATION OF ZEP

- ✓ OPERATIONAL REGULATION
- ✓ PLANNING AND DESIGN PRINCIPLES
- ✓ ENERGY SPECIFICATION



TOOLS OF DEPEPOK

— AIM & OBJECTIVES

Aim:

Landscape management for sustainable development

Objectives:

- ✓ Assurance of high and equal living condition quality
- ✓ Contemporary qualitative architecture
- ✓ Respect of landscape and natural environment by use of bioclimatic and ecological principles
- ✓ Investor – Residence protection from downgrading that is due to uneven and low construction quality



TOOLS OF DEPEPOK

OPERATIONAL REGULATION

Assures:

- ✓ Harmonic neighboring and living along with high standard of living for the residents of ZEP
- ✓ Continuous application of the planning principles



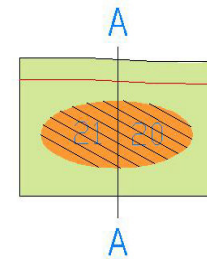
TOOLS OF DEPEPOK

PLANNING AND DESIGN PRINCIPLES

Aim to achieve a highly aesthetical and operational output during the construction of the settlement in relation to architectural and urban planning issues

Intervention points:

- ✓ **Building position within space**



A-A: PLOT BOUNDARIES
WHERE TWO HOUSES ADJOIN

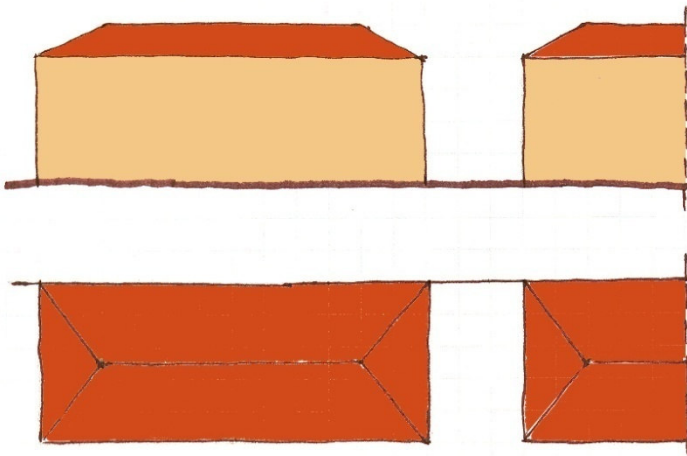


TOOLS OF DEPEPOK

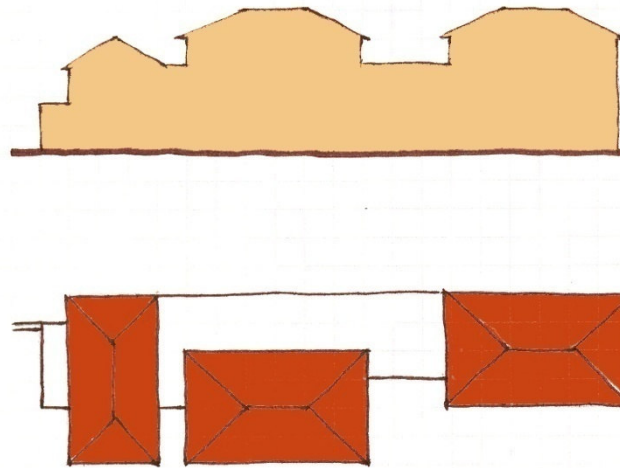
PLANNING AND DESIGN PRINCIPLES

Intervention points:

- ✓ Architectural style
 - Building morphology
 - materials



Schematic indication of simplistic architectural composition with buildings out of human scale
(Undesirable example)



Schematic indication of architectural composition on the desired human scale and visual interest



TOOLS OF DEPEPOK

— PLANNING AND DESIGN PRINCIPLES

Intervention points:

- ✓ **Construction Rules**
 - **Building Construction Coefficient**
 - **Plot Coverage**
 - **Maximum allowed building height**

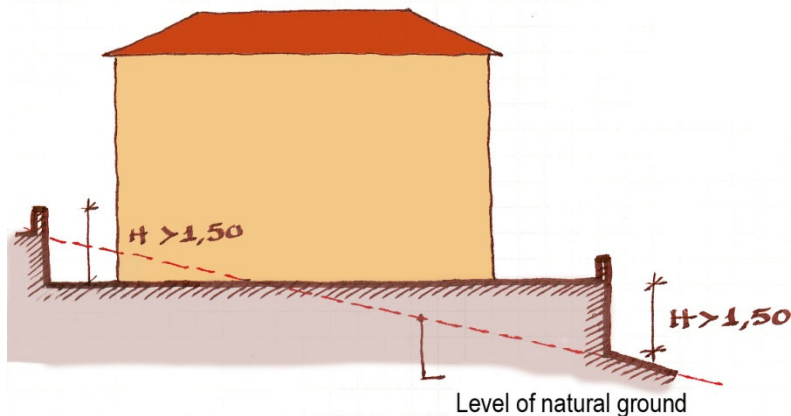


TOOLS OF DEPEPOK

PLANNING AND DESIGN PRINCIPLES

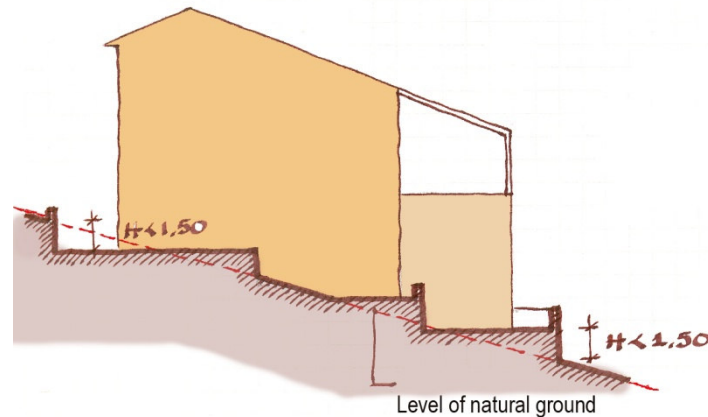
Intervention points:

- ✓ Formation of the frontage (clear space)
 - Fences
 - Adjustment of the landscape and the natural ground
 - Plants



Unacceptable example

Extensive excavations and embankments, which devalue the landscape



Acceptable example

Adaptation of building to the landscape with mild (not extensive) excavations and embankments

TOOLS OF DEPEPOK

— PLANNING AND DESIGN PRINCIPLES

Intervention points:

- ✓ **External building facades**
 - **General elements**
 - **Roofs**
 - **Balconies**

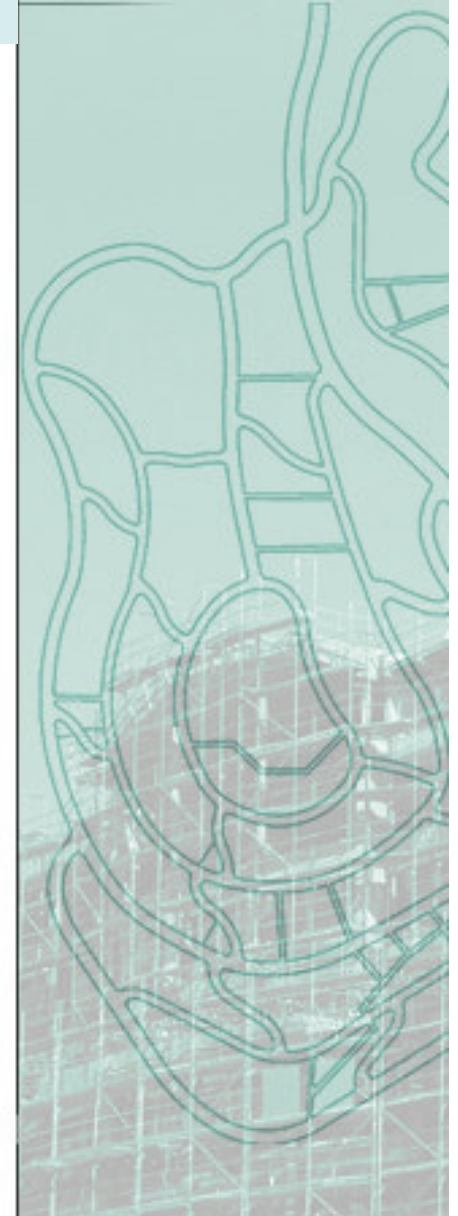
- ✓ **Compulsory parking spaces per building**



TOOLS OF DEPEPOK

ENERGY SPECIFICATIONS

- ✓ Energy specifications are related to the building's bioclimatic design
- ✓ Designed by the Group of Building Environmental Research of National and Kapodistrian University of Athens
- ✓ However, there are minimum energy guidelines for the construction of buildings – EU Directive 2002/91/EC incorporated into national legislation



TOOLS OF DEPEPOK

ENERGY SPECIFICATIONS

Energy Specifications intervene to:

- ✓ **Indoor air quality**
- ✓ **Thermal comfort**
- ✓ **Visual comfort**
- ✓ **Low energy consumption**



TOOLS OF DEPEPOK

ENERGY SPECIFICATIONS

Expected results

- ✓ Achievement of thermal, visual comfort and good indoor air quality
- ✓ Reduction of energy consumption
- ✓ Reduction of heating expenses
- ✓ Increase of the building market value from such constructions
- ✓ Reduction of CO₂ emissions



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