



Slovak University of Technology
Bratislava
Faculty of Civil Engineering
Department of Architecture

ECO-DESIGN

PhD. Students

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1. What is ECO-DESIGN?

ECO-
DESIGN

NATURE

IMPACTS

PRESERVATION

HUMAN

ACTIVITIES

INTEGRATION

POSITIVE

COOPERATION

COOPERATION BETWEEN THE NATURE AND HUMAN ACTIVITIES
MINIMALIZE ENVIRONMENTALLY DESTRUCTIVE IMPACTS

ECO-DESIGN



ECO-DESIGN



ECO-DESIGN

- ECO-BUILDINGS
 - ECO-INTERIOR
 - ECO-EXTERIOR
- ECO-TOURISM
- ECO-AGRICULTURE, FOOD
- ECO-INDUSTRY
- ECO-TRANSPORT
- ECO-POLICY

ECO EDUCATION

ECO-DESIGN

OPEN ISSUES

LEVEL 1: **ECOLOGICAL EDUCATION**



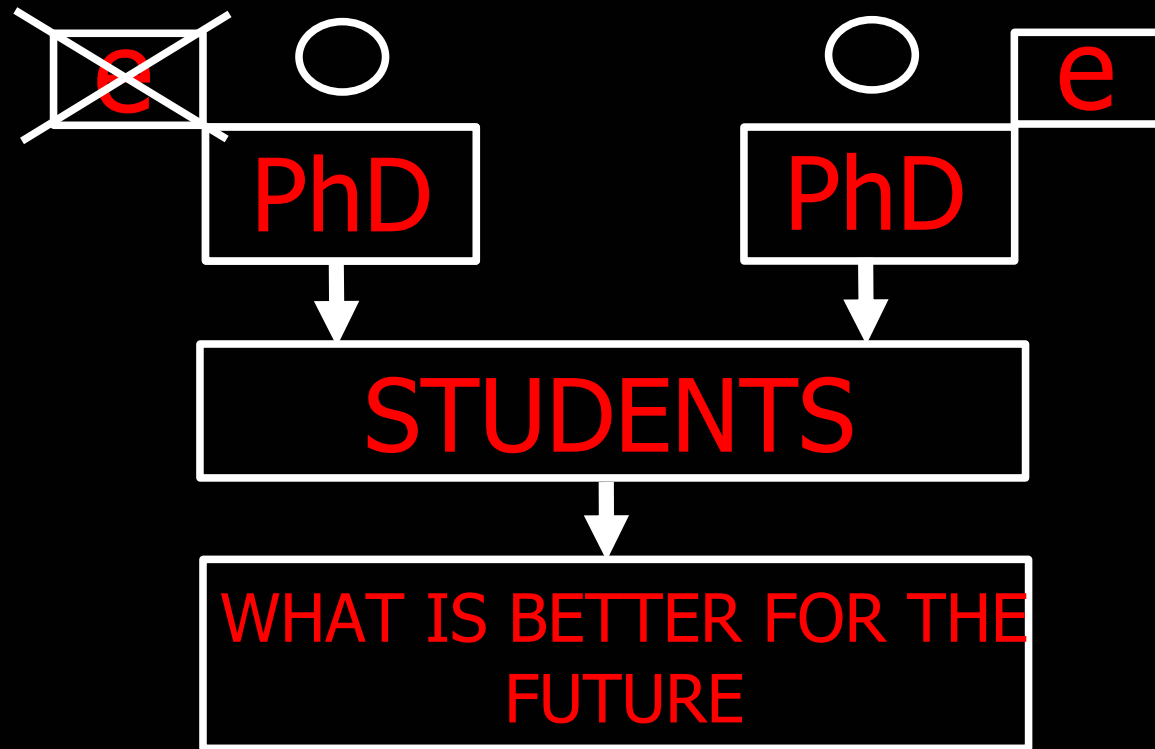
LEVEL 2: **ECOLOGICAL THINKING**



LEVEL 3: **ECOLOGICAL DESIGN**



ECO-EDUCATION



ECO-EDUCATION



PhD

PhD. STUDENTS



e

THE NEWEST TENDENCIES AND INNOVATIONS

PEDAGOGUES



ECO-EDUCATION



PEDAGOGUES

PhD

STUDENTS

ECO-EDUCATION

CLOSE
MINDS

OPEN
MINDS

NEW WAYS OF BRINGING INFORMATION
TO STUDENTS AND TEACHERS:

- SEARCH THE WEB
- PAPER MATERIALS AND
INFORMATION
- INTERNATIONAL WORKSHOPS

CALL

ASK

JUST DO IT

- E-LEARNING (INNOVATE,STIMULATE)

ECO-EDUCATION



A COMMON QUESTION:
OUR PERSONAL SHARE

THE PHILOSOPHY

- TO FIND THAT POINT IN EVERYONE WHICH WILL START
AN ECO-THINKING



ECO-EDUCATION

A COMMON QUESTION: **OUR PERSONAL SHARE**

- TO COLLECT INFORMATION ABOUT NEW ECO-TENDENCIES
- TO DO INFORMATION PAPER AND PRESENTATION ABOUT THIS TOPIC
- TO PROVIDE PRESENTATION FOR STUDENTS AND TEACHERS
- TO USE ECO-KNOWLEDGE IN OUR LECTURES

ECO-EDUCATION



A COMMON QUESTION:

OUR PERSONAL SHARE IN OUR LECTURES:

TYOLOGY:

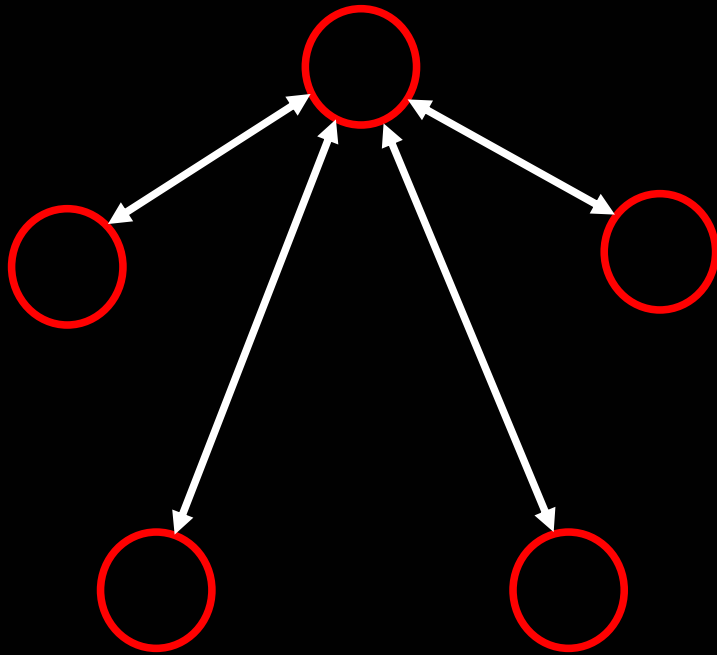
- TO DO OLD TYPOLOGICAL SCHEMES UP, TO APPLY NEW ECO-TENDENCIES INTO OLD SCHEMES
- TO DEVISE AND DESIGN NEW TYPOLOGICAL SCHEMES, DIAGRAMS, TABLES OF TYPOLOGICAL PRINCIPLES

BUILDING DESIGN:

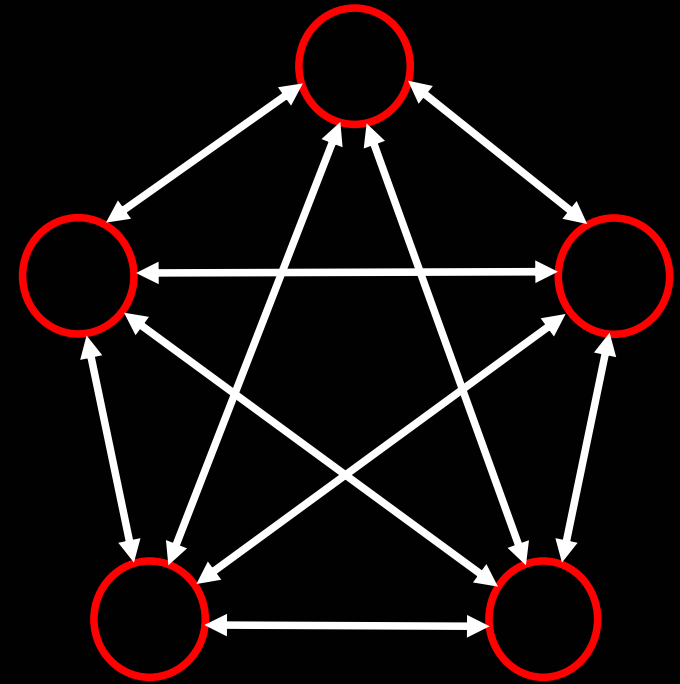
- TO APPLY ECO-PRINCIPLES
- TO PREFER ECO-HOUSES WITH ECO-MATERIALS

ECO-EDUCATION

TEAMWORK



ONE WAY



BETTER WAY

- TO USE IN OUR LECTURES NEW SYSTEM OF LEARNING



ECO-DESIGN

PHILOSOPHY = ECO-LIVING^g

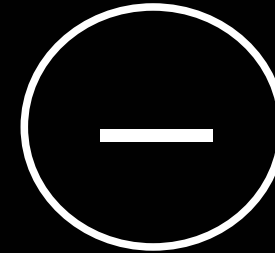
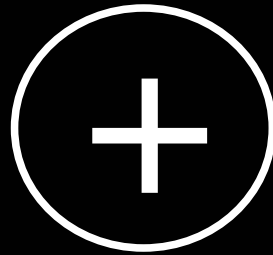
ONLY TO BUILD UP AN ISOLATED
ECO-HOUSE IS NOT ENOUGH TO LIVE
ECOLOGICALLY

ECO-EXTERIOR + ECO-INTERIOR^s
= ECO-DESIGN AND PERMACULTURE

NOT ONLY BUT PEOPLE
ECO-BUILDINGS + ECO-LIVING^m
= SUCCESS OF HEALTHIER LIFE



ECO-BUILDING



ECO-BUILDING

ECO-DESIGN

ECO-BUILDING

WHAT?

WHERE?

HOW?

ECO-BUILDING





WHAT?

WHERE?

- INTERACTION BUILDING - NATURE

- BUILDING IN NATURE (AREA)
REALIZATION BUILDINGS IN NATURE

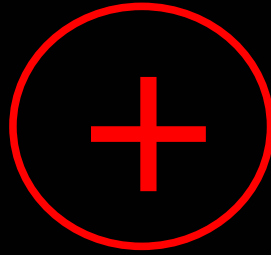
- RENOVATING (REVITALIZATION)
NATURE AROUND THE NEW
BUILDINGS

CREATE A NEW NATURE AREA AROUND THE
NEW BUILDINGS - DEVASTATED NATURE

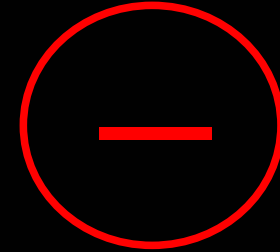
HOW?

- INCREASING AWARENESS
- STRATEGIES (LOCATION)
- STRUCTURE
- MATERIALS
- ECO-LIVING, ECO-THINKING
- DISPOSITION AND RIGHT ORIENTATION
- USING OF SOLAR ENERGY
- NEW SYSTEMS OF COOLING AND HEATING
- GREEN FLAT ROOFS

ECO-BUILDING



- MONEY RETURN DURING 10-15 YEARS
- NATURAL MATERIALS MAINLY FROM LOCALITY OF BUILDING
- SPEND LESS OF ENERGY THAN TRADITIONAL ONE
- ENERGY OF SURROUNDING (SUN, WATER, WIND...)
- SAVING THE NATURE AND HEALTH



- EXPENSIVE REALIZATION
- NOT ENOUGH SPECIALISTS
- MANY ARE USING NOT ONLY ECO-MATERIALS (GLASS FACADE,.....)
- GLASS FACADE – PROBLEM FOR BIRDS

HOW?

REALISATION (GREEN AREAS, BUILDINGS, ECO-BUILDINGS, WATER AREAS...)

COOPERATION BETWEEN THEM =SUCCESS

LAND SCAPER ↔ ARCHITECT ↔ CIVIL ENGINEER ↔ URBAN PLANNER ↔ CITIZENS

EDUCATION (NATURE, HISTORY, STRUCTURES, LAND-USE, PLANTS PROTECTION..)

PROTECTION

KNOWLEDGE

DISCOVERING

NATURE



HOW?

HOW?



- MATERIAL
- STRUCTURES
- RELIEF
- ENERGY
- CONDITIONS OF LOCATION

ANALYSIS

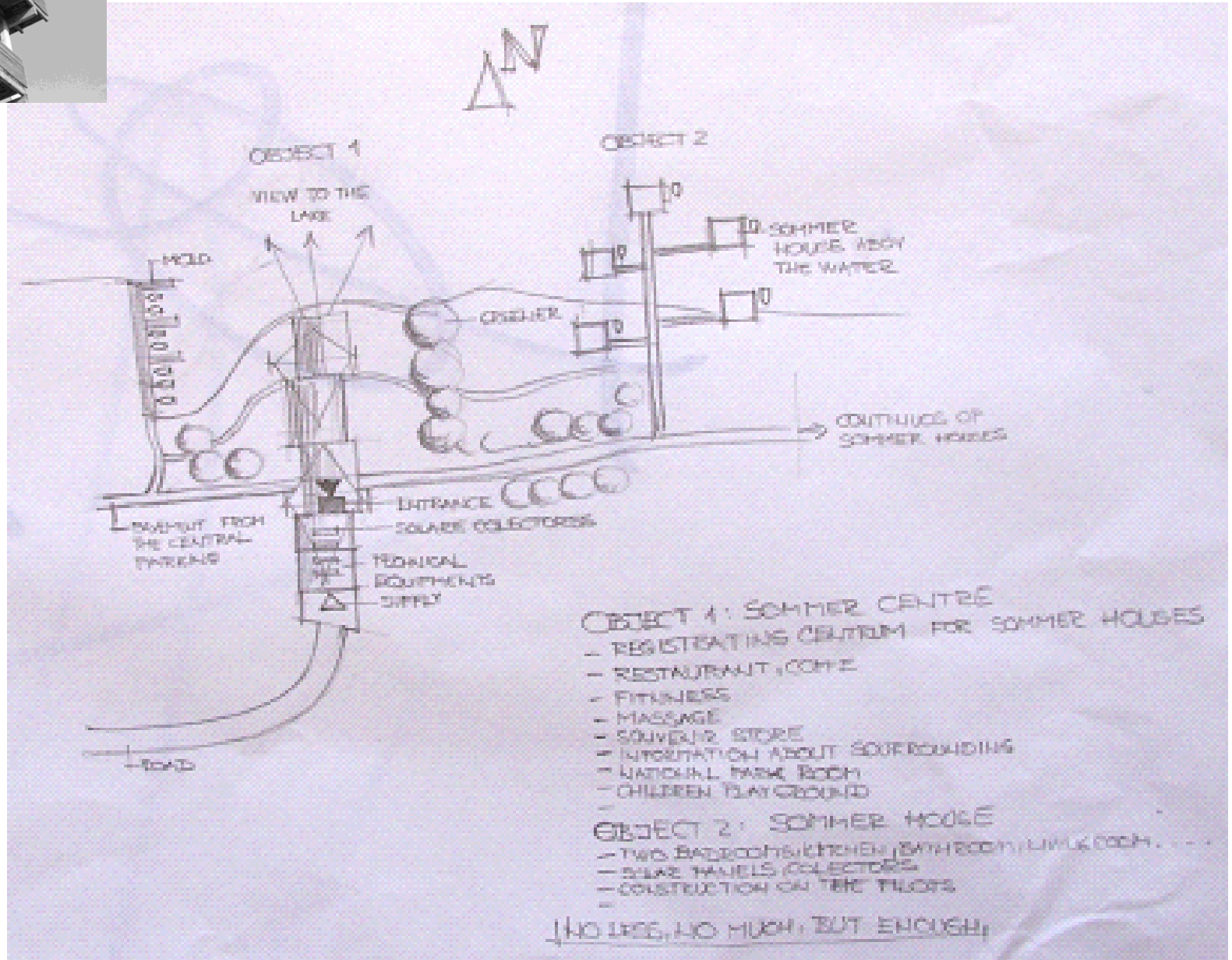
- FIND THE RIGHT WAY OF REALISATION
- APPLY PRINCIPLES OF ECO-DESIGN INTO PRACTICE

- CRITERIAS OF URBAN PLANNING
- LAW

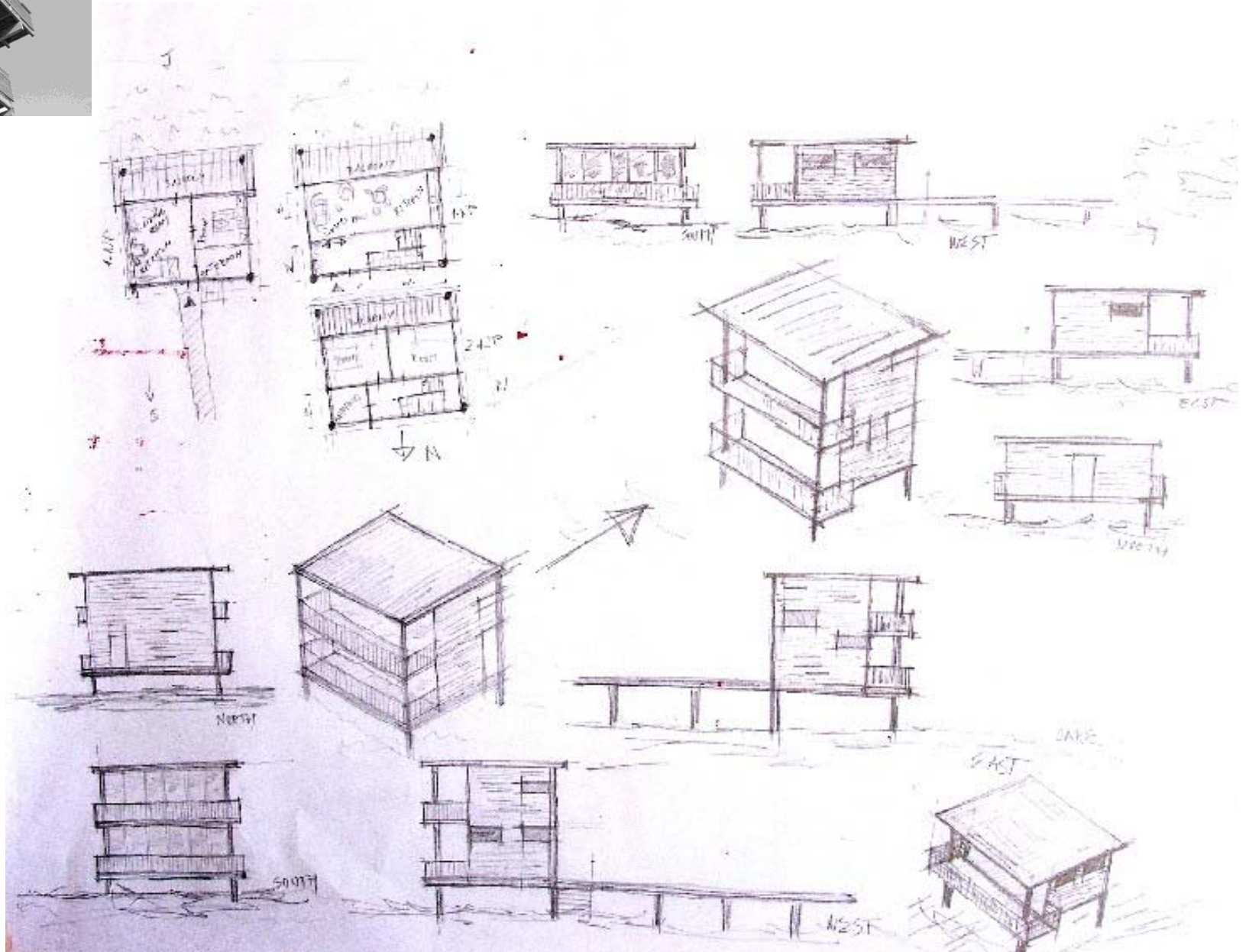


REALIZATION (GREEN AREAS, BUILDINGS, **ECO-BUILDINGS**, WATER AREAS...)

SKETCHES

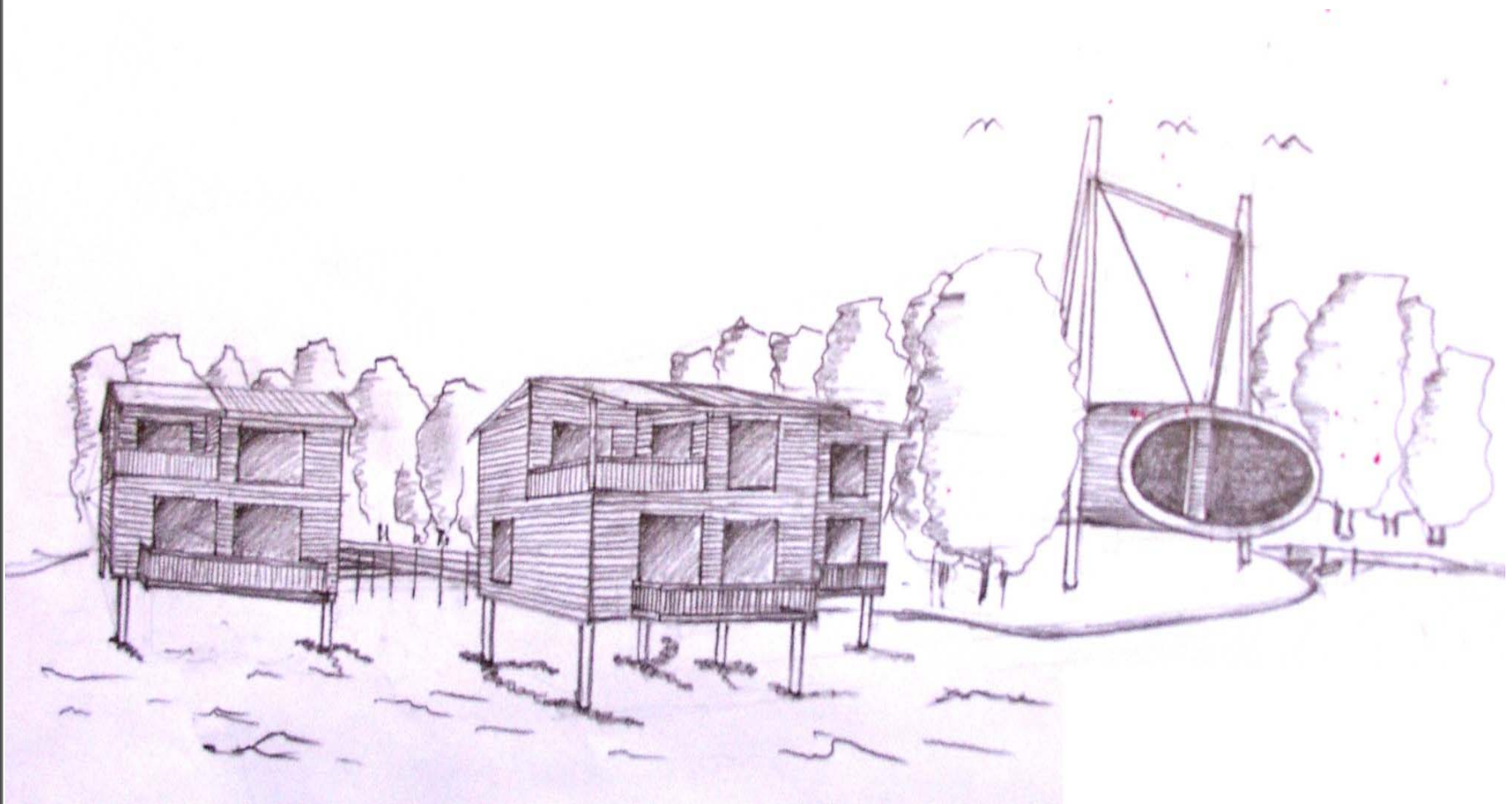


SKETCHES



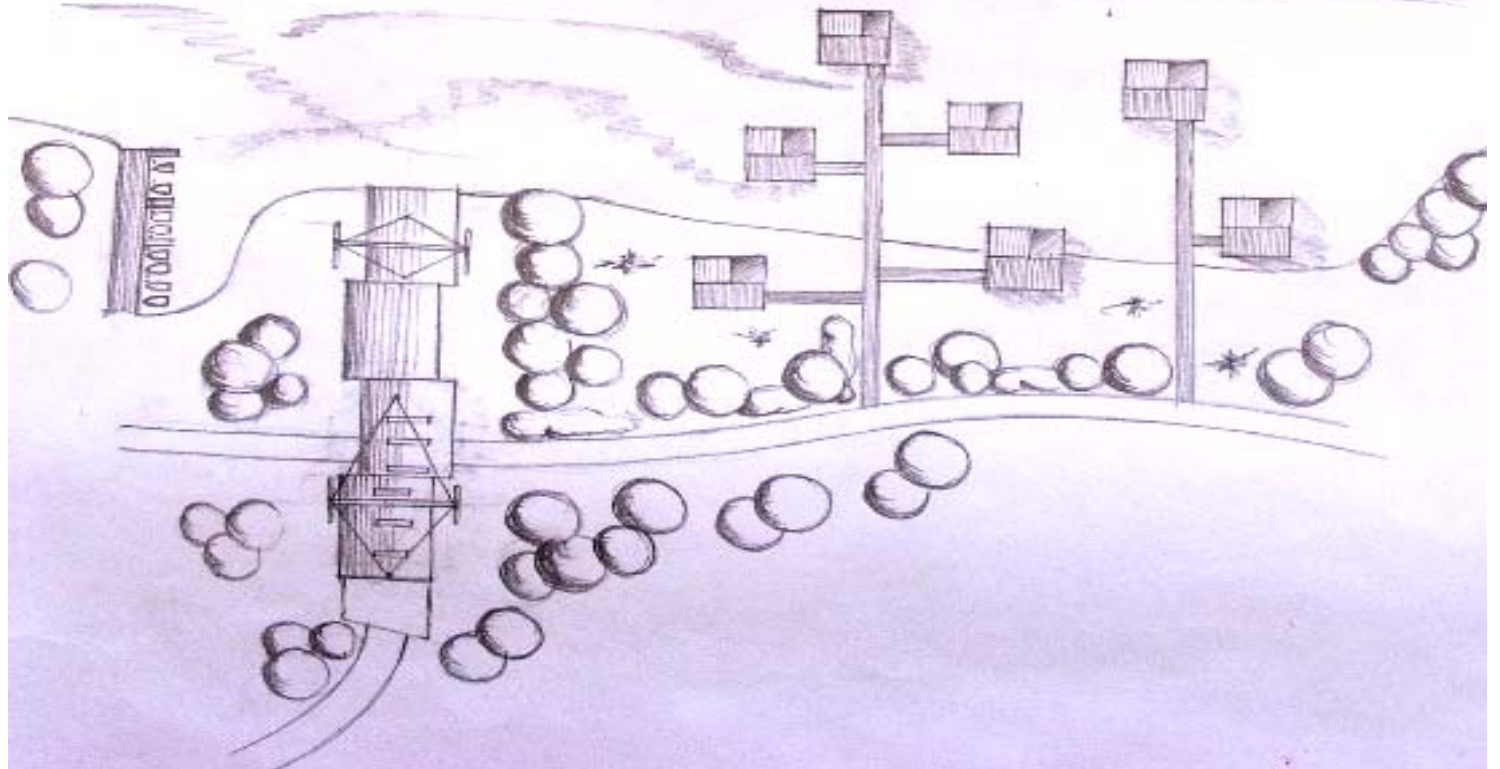
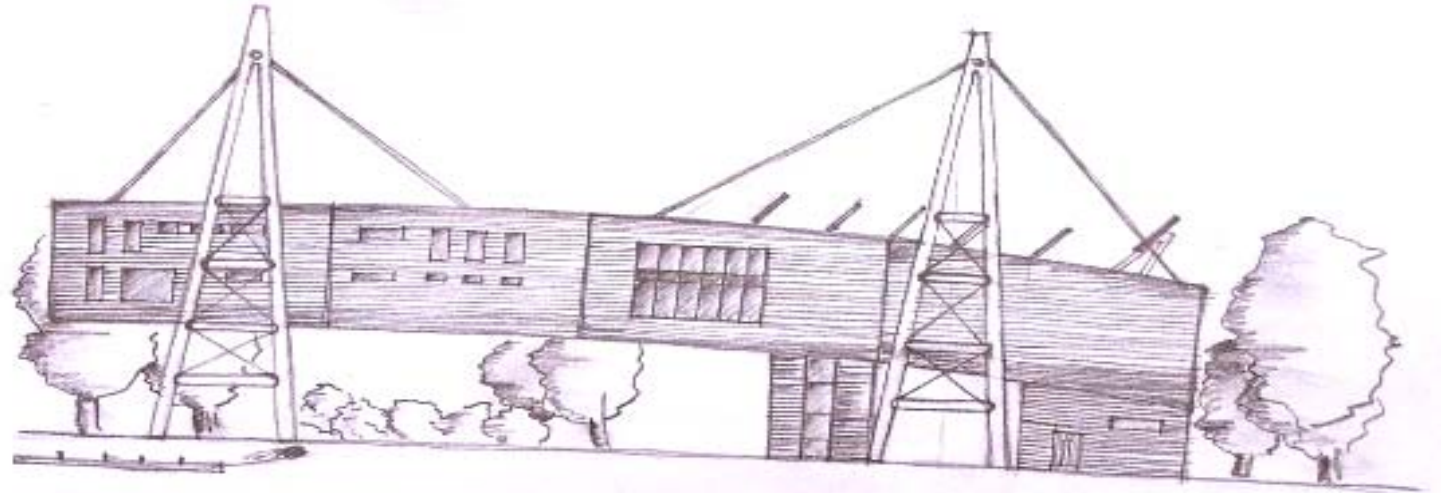
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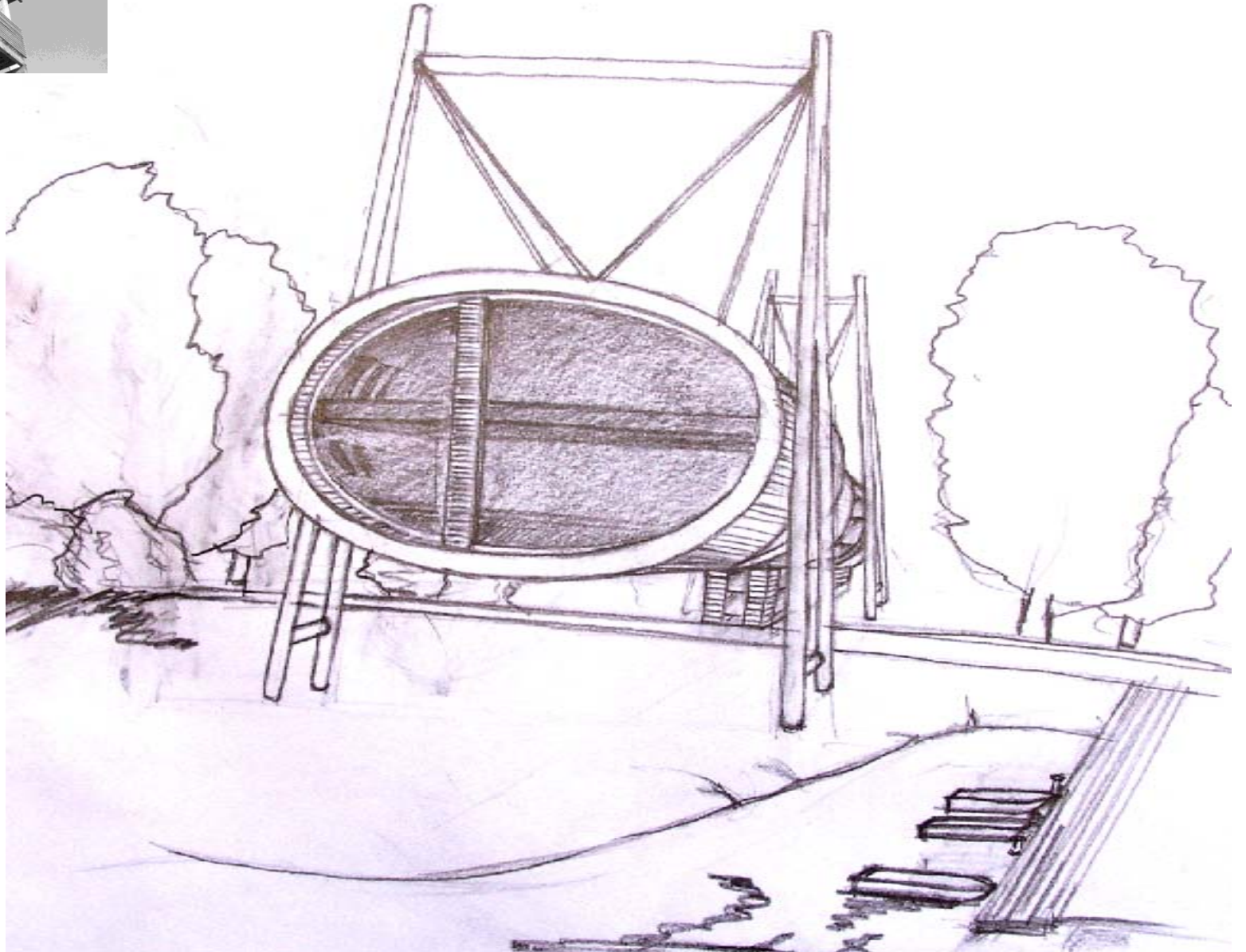
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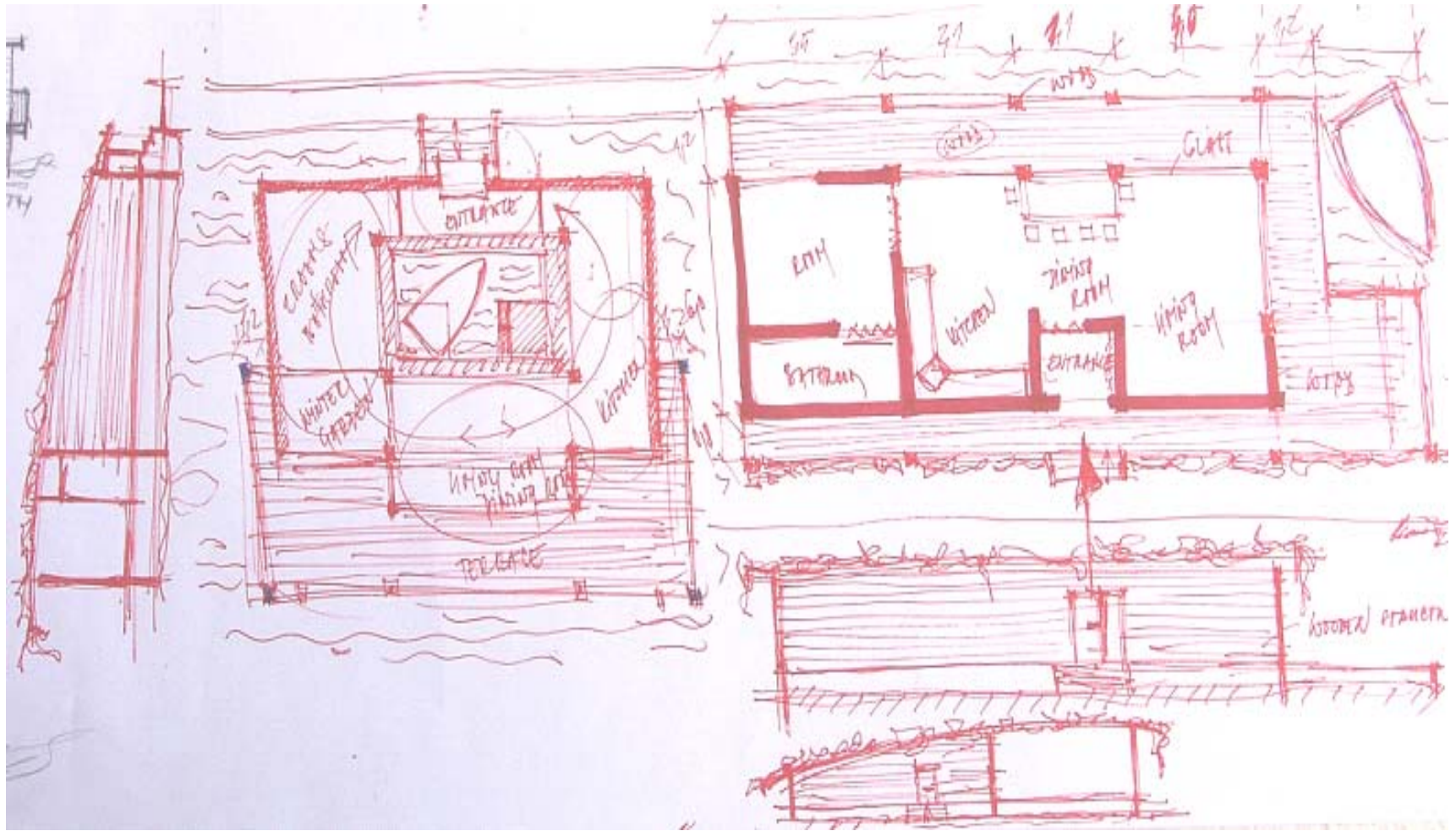
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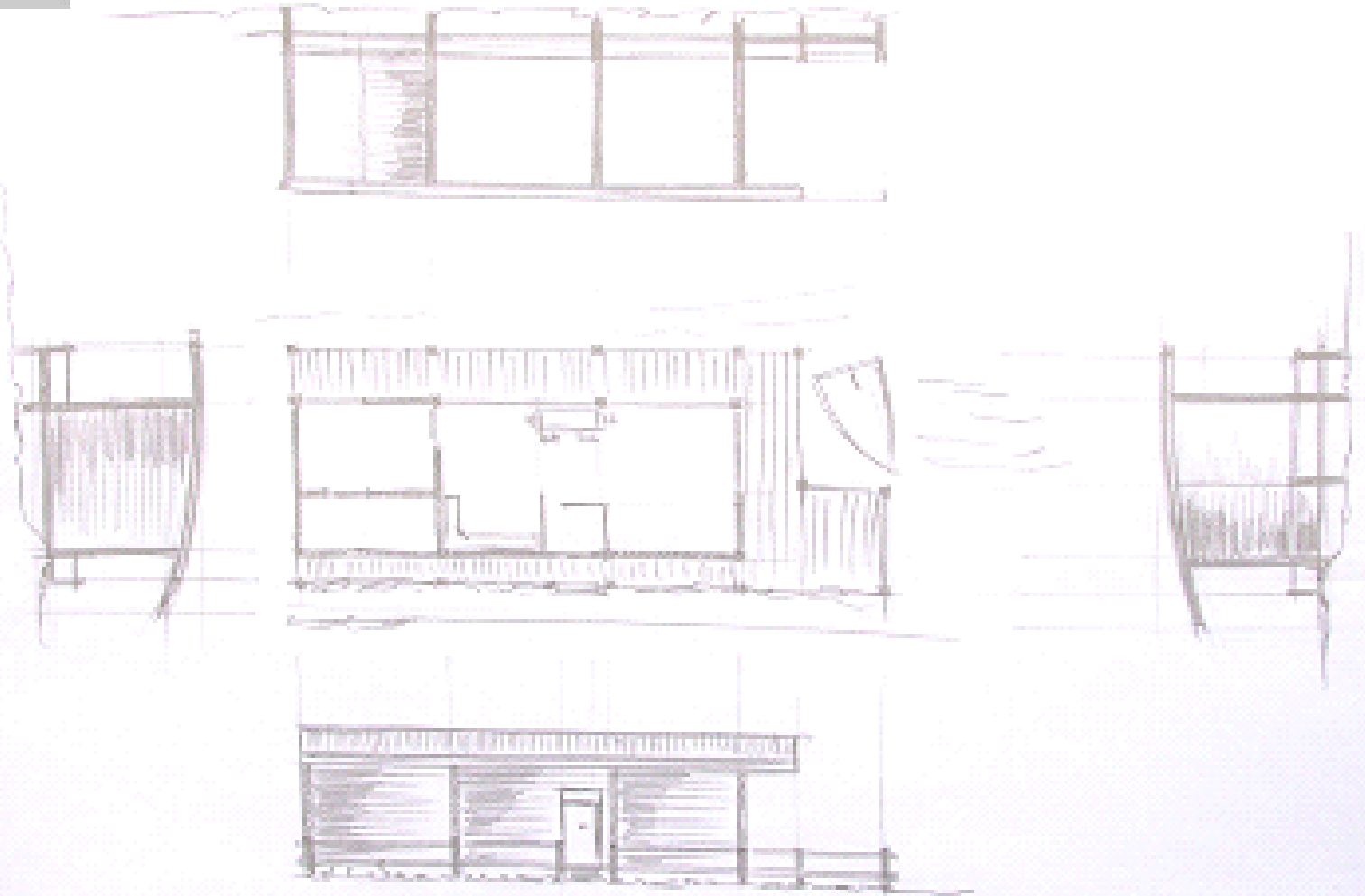
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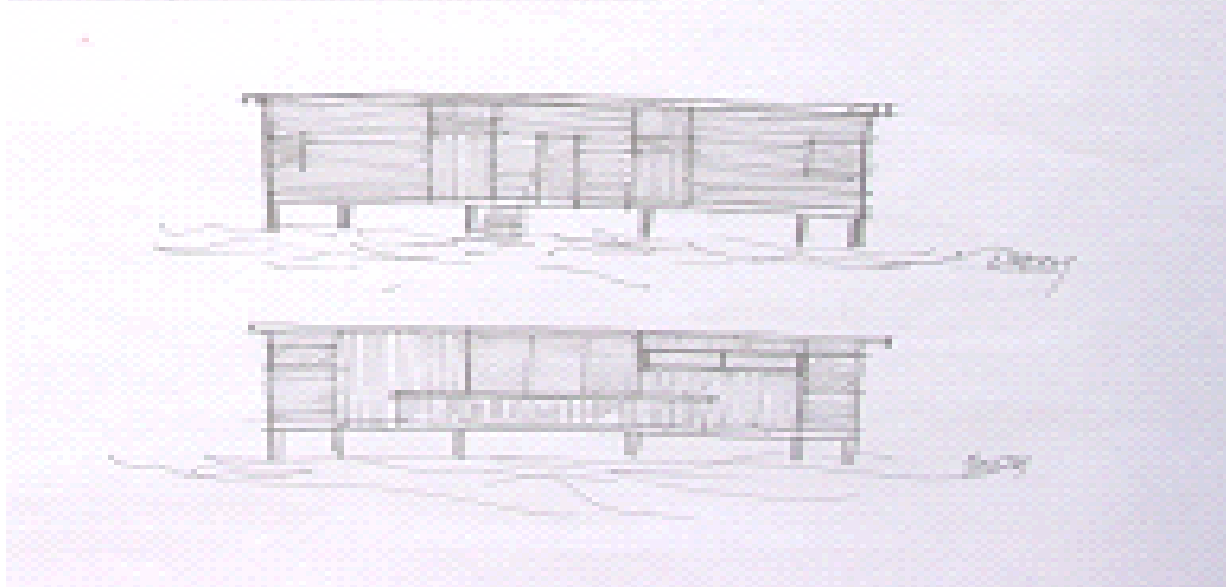
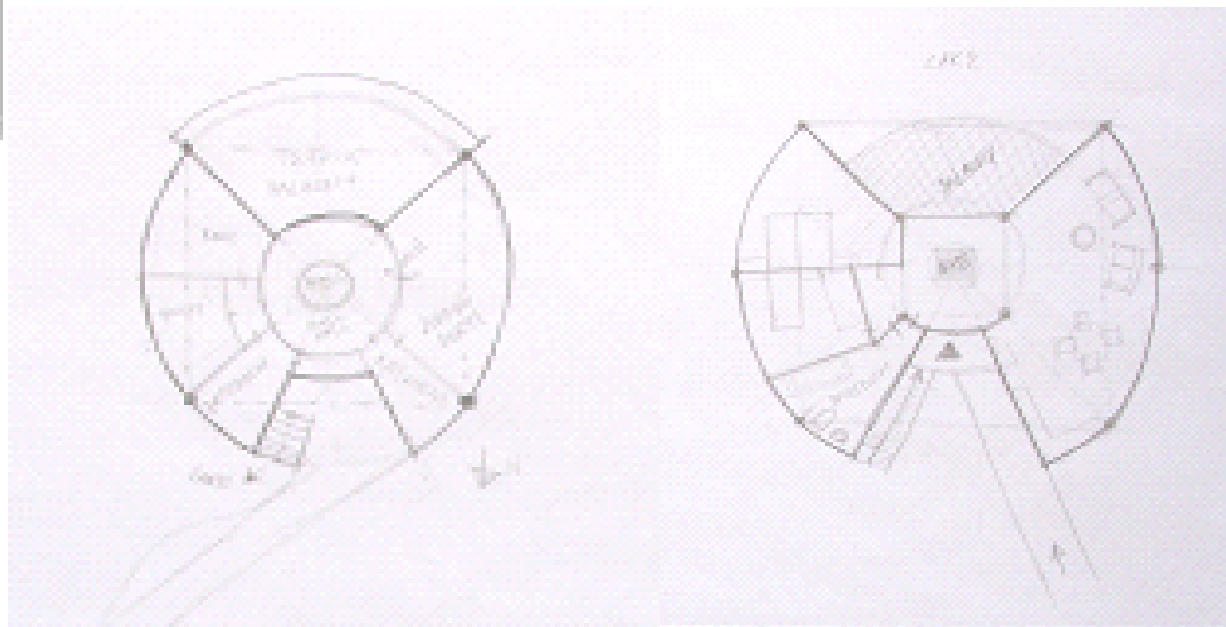
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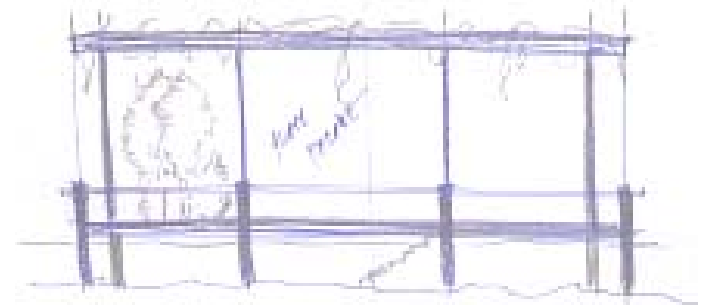
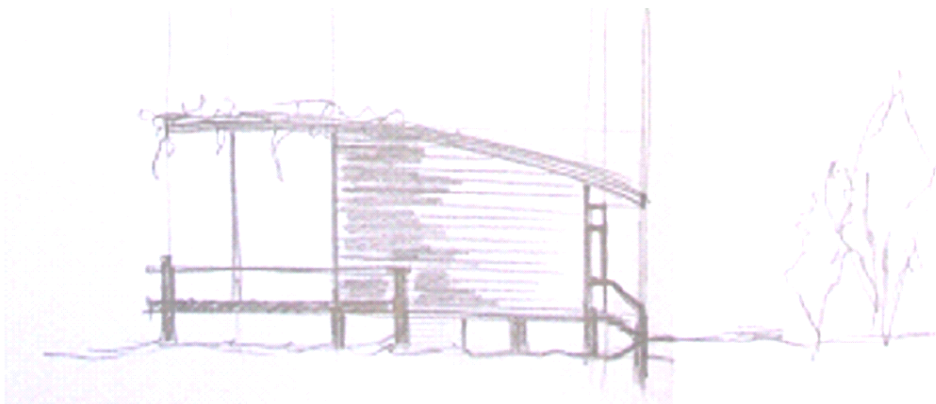
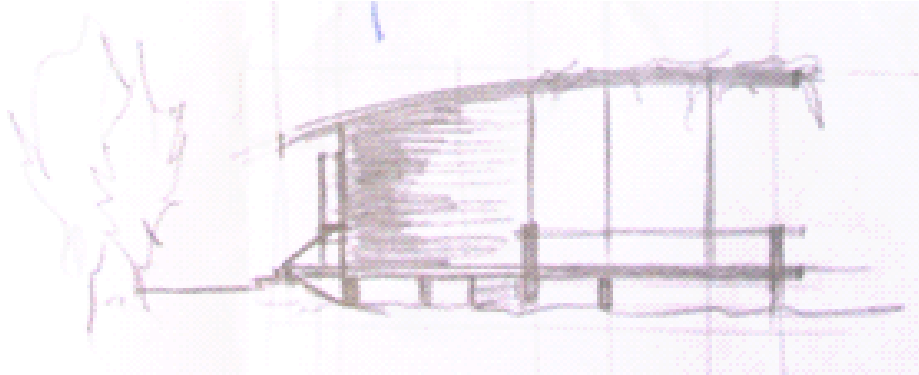
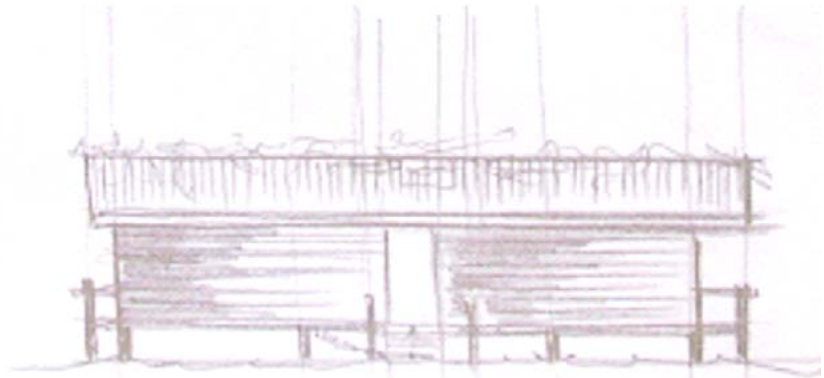
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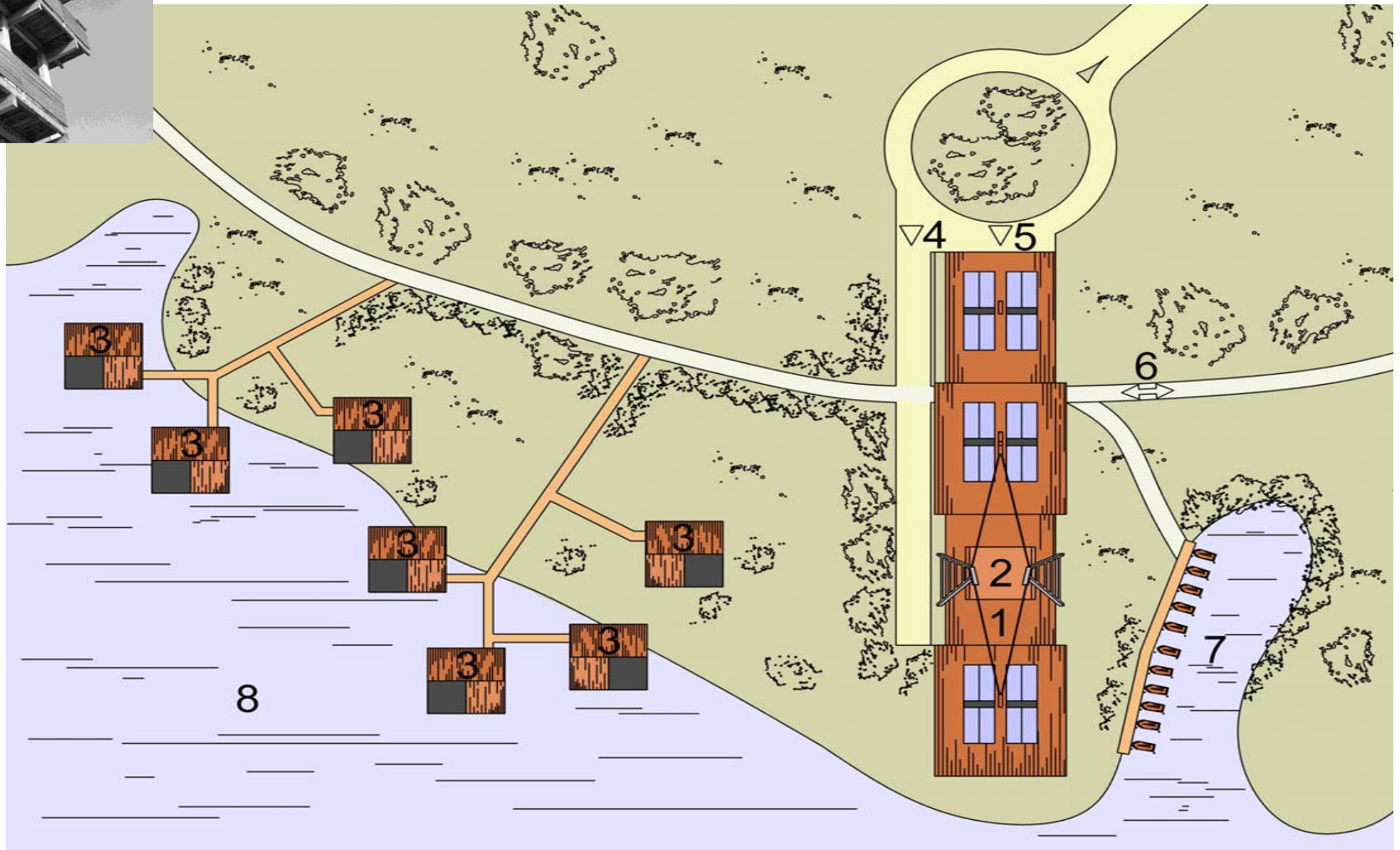
SKETCHES

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1. Touristic-relaxing centre, 2. Watch tower, 3. Accommodation in apartment chalets, 4. Supply, 5. Administrative and supply entrance, 6. Visitor's entrance from the parking place near the lake path, 7. Yachting mole, 8. Neusiedler sea



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