

DESIGN METHODOLOGY

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OF DEPT. OF PUBLIC BUILDING DESIGN

- ✦ PROGRAM OF SEMESTER COURSE
- ✦ 0. PREFACE - WELCOME - INTRODUCTION
- ✦ 1-4. WAY OF DESIGN
 - ✦ - COMPONENTS,
 - ✦ - METHODS,
 - ✦ - APPROACH
- ✦ 5. DESIGN FACTORS
- ✦ 6. DESIGN PHASES AND MEMBERS
- ✦ 7. ARCHITECTURE AND THE ARTS
- ✦ 8. SUSTAINABILITY IN ARCHITECTURE
- ✦ 9. DESIGN WITH ARCHITECTURAL MONUMENTS
- ✦ 10. NEW TRENDS, NEW CONCEPTS OF DESIGN

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.1.a. PERSONAL REFERENCES

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.1.a. PERSONAL REFERENCES based on:

To achieve

HARMONY

we have to know

- **ourselves**
- **the system around us**
- **our tools**

↓
Cognition

Cognition of the world

is based on reaction of two elements:

- the subject - the human being
- the object - the rest of the world

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✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.1.a PERSONAL REFERENCES based on:

- attitude
- sensitivity
- capacity
- knowledge
- experience
- talent
- belief, self-confidence

✦ 3. DESIGN PHASES

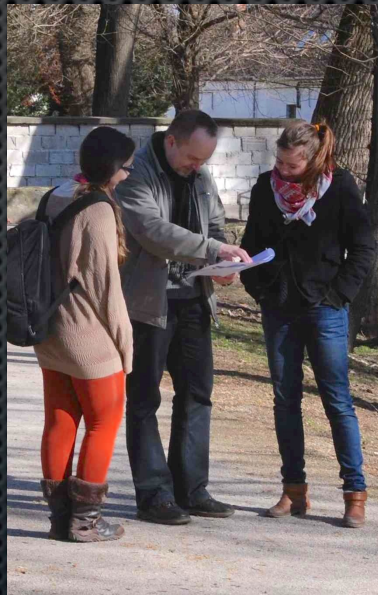
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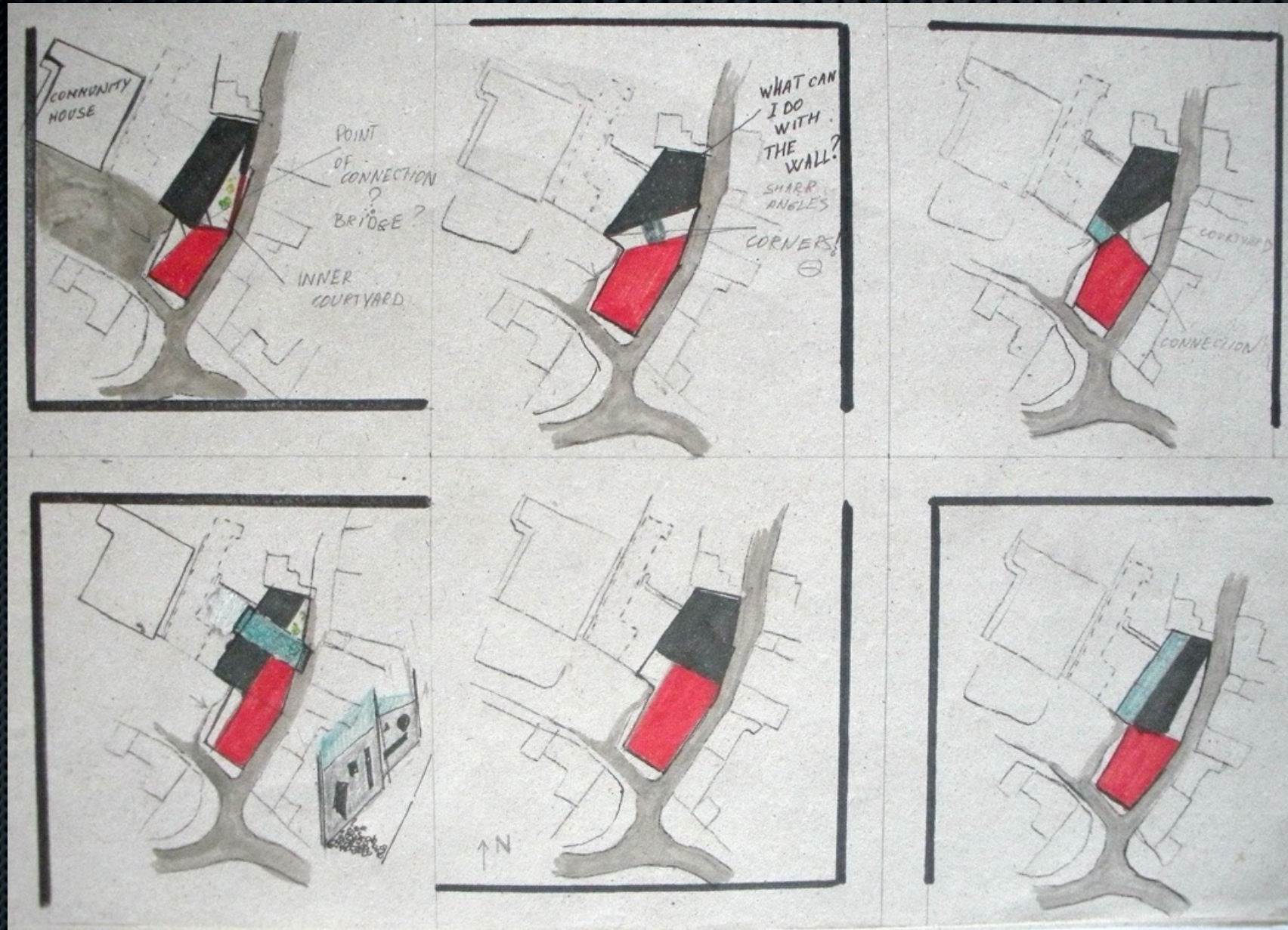
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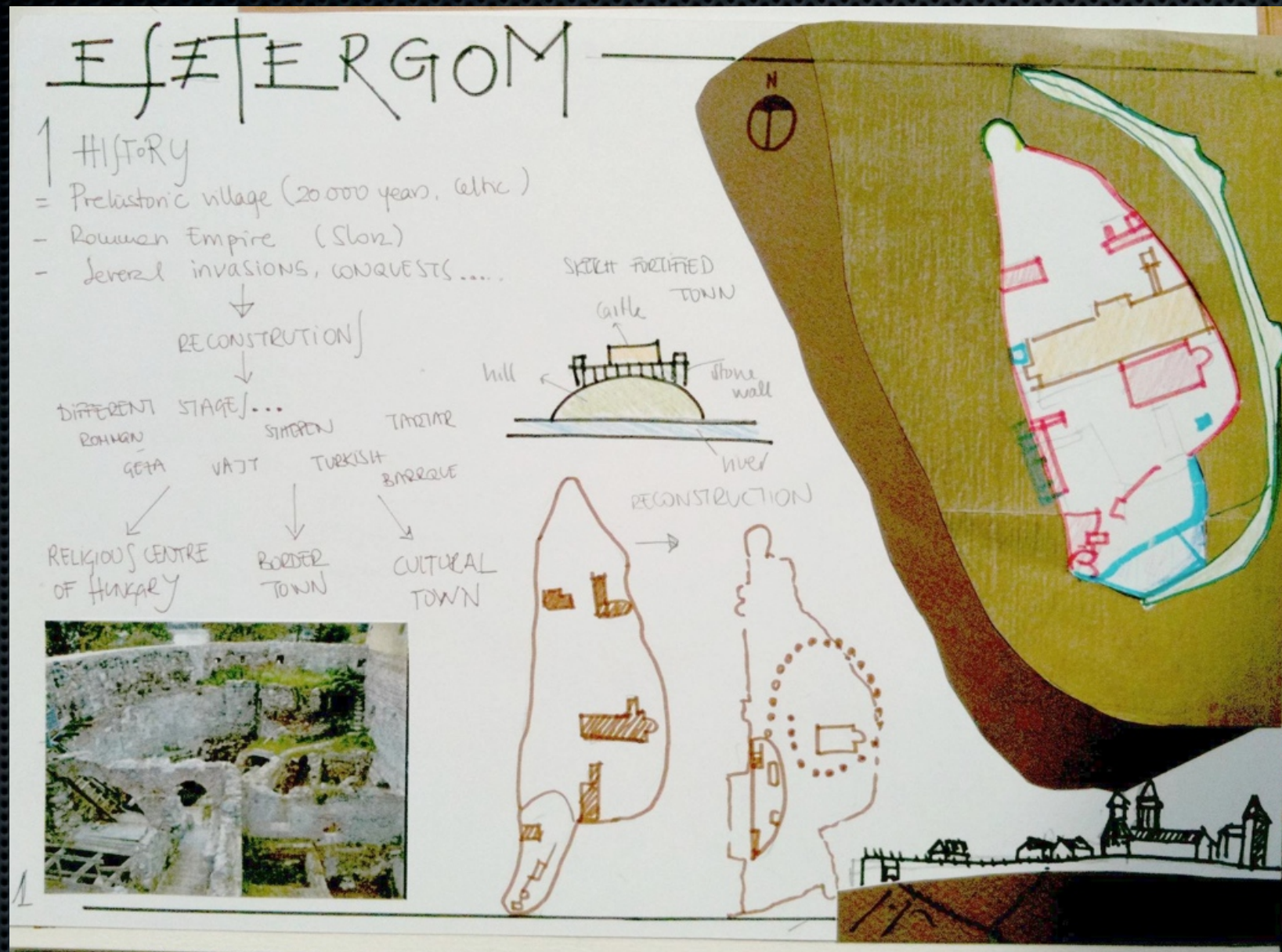
3.1.b INFORMATION 1. - ABOUT LOCATION, based on cognitive experiences

- local impressions (subjective)

- ideal
- manual
- digital









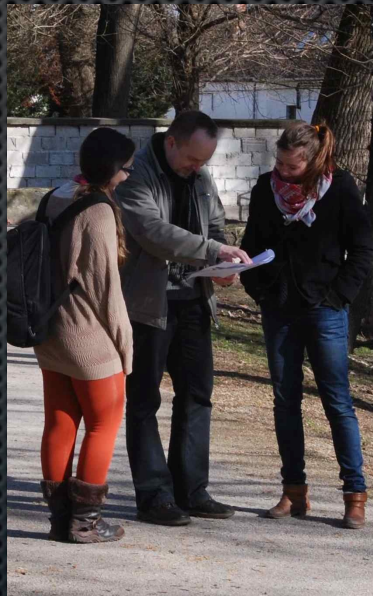
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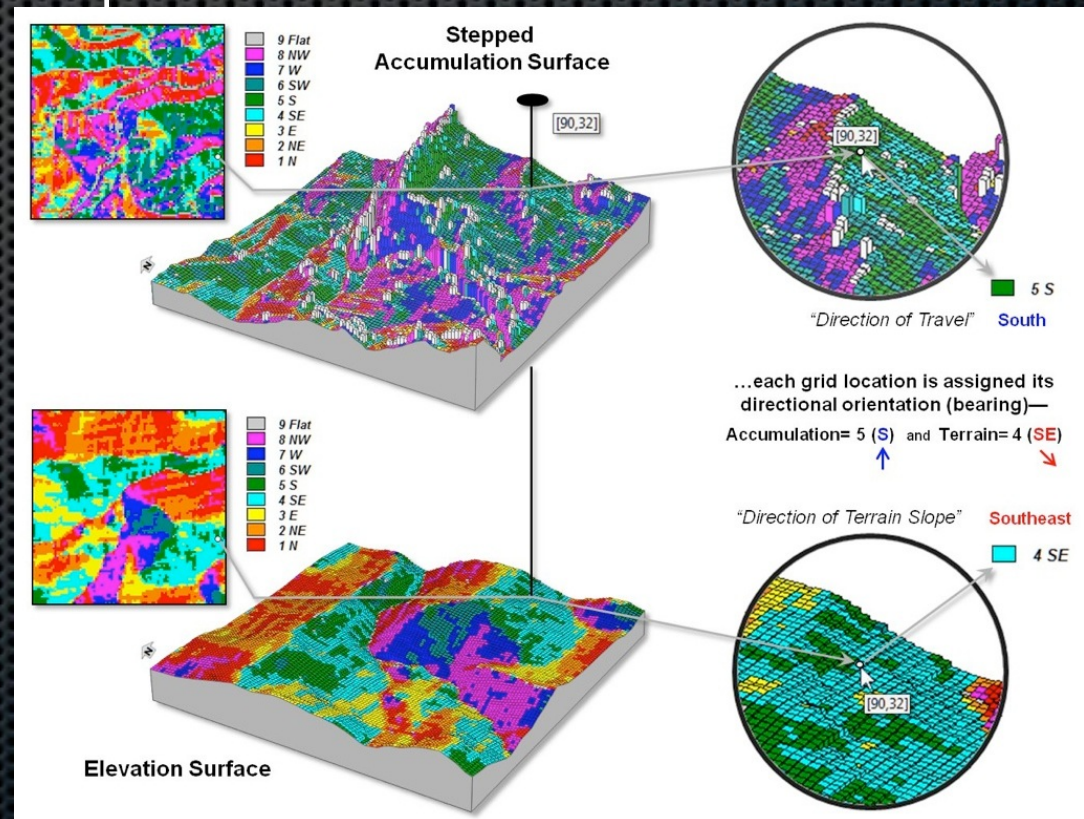
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✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.1.a PERSONAL REFERENCES

3.1.b INFORMATION 1. - ABOUT LOCATION, based on cognitive experiences

- local impressions (subjective)
- research work (objective facts)
 - official site plan
 - local building code (regulations)
 - morphological map
 - geodetical survey
 - soil mechanical conditions
 - traffic examinations

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

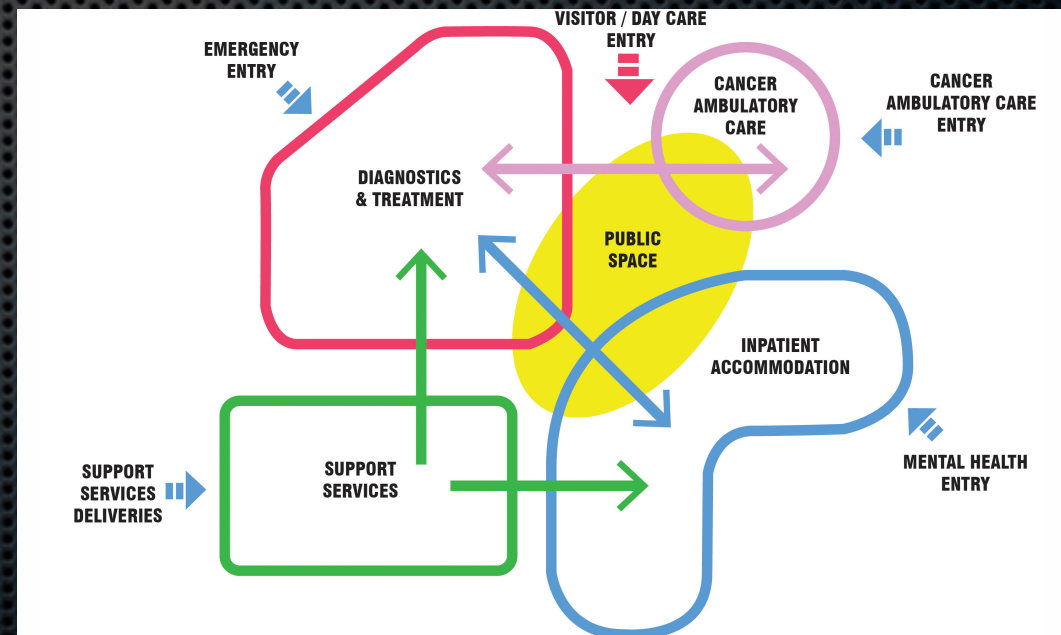
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3.1.b INFORMATION 1. - ABOUT LOCATION,

3.1.c INFORMATION 2. - ABOUT PROGRAM

based on cognitions and consultations

- functional analysis



✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.1.a PERSONAL REFERENCES

3.1.b INFORMATION 1. - ABOUT LOCATION,

3.1.c INFORMATION 2. - ABOUT PROGRAM

based on cognitions and consultations

- functional analysis
- collection of samples
 - digital
 - manual
- room program
- financial conditions

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.2. PLANS

3.2.a SKETCH PLANS

- study plan
- preliminary plan (1:500 - 1:200)
- feasibility study
- competition plan
- massing model

3.2.b PERMISSION PLANS, DOCUMENTATION

3.2.c TENDER PLANS

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.2. PLANS

3.2.a SKETCH PLANS

3.2.b PERMISSION PLANS, DOCUMENTATION

- principle permission doc. (1:500 - 1:200)
- regular permission doc (1:100)
- site plan
- architectural drawings
- technological drawings (in some cases)
- landscape and road plans
- public service utilities
- demolition plans (if needed)
- descriptions

- description chapters:
 - architecture
 - building construction
 - structures
 - building services
 - plumbing (water and sewage)
 - gas
 - sprinkler system (if needed)
 - heating
 - cooling
 - electricity
 - low-voltage systems
 - fire alarm
 - RWA (smoke and heat extraction)
 - security system
 - telephone
 - television
 - IT
 - technology
 - hygiene
 - fire protection
 - ...

- description chapters:

...

- elevators, escalators
- barrier-free environment
- landscape
- environmental protection
 - emissions
 - air
 - waste water
 - noise
 - waste
 - communal
 - biohazard
 - chemical
 - nuclear
 - radiation
 - acoustics
 - traffic
- roads
- public utilities - supply systems

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- regular permission doc (1:100)
- site plan
- architectural drawings
- technological drawings (in some cases)
- landscape and road plans
- public service utilities
- demolition plans (if needed)
- descriptions
- calculations

- calculations:
 - statical
 - evacuation
 - acoustical
 - traffic
 - emissions

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.2. PLANS

3.2.a SKETCH PLANS

3.2.b PERMISSION PLANS, DOCUMENTATION

3.2.c TENDER PLANS

contents: 3.2.b +

- specification of qualities (CPR EU law)
- bills of quantities
- line-art drawings of
 - plumbing
 - gas
 - heating and cooling
 - ventilation
 - electric systems

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.2. PLANS

3.2.a SKETCH PLANS

3.2.b PERMISSION PLANS, DOCUMENTATION

3.2.c TENDER PLANS

3.2.d FINAL (EXECUTION, SHOP) DRAWINGS (1:50)

contents: 3.2.c +

- building constructional details (1:20 - 1:5 - 1:2)
- interior design drawings (1:50 - 1:20)
- detailed drawings of each former mentioned profession

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3.2.a SKETCH PLANS

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3.2.c TENDER PLANS

3.2.d FINAL (EXECUTION, SHOP) DRAWINGS

3.2.e REALISED SITUATION PLANS

- detailed drawings of each former mentioned profession

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.2. PLANS

3.2.a SKETCH PLANS

3.2.b PERMISSION PLANS, DOCUMENTATION

3.2.c TENDER PLANS

3.2.d FINAL (EXECUTION, SHOP) DRAWINGS

3.2.e REALISED SITUATION PLANS

3.2.f URBAN DEVELOPMENT PLANS

- strategic plans (1:10000 - 1:2000)
- local regulation plans, codes (1:1000 - 1:500)

✦ 3. DESIGN PHASES

3.1. PREPARATION PHASE

3.2. PLANS

3.3. PERSONAL ACTIVITIES

- communication and cooperation with the client

business interest vs public interest

- communication and cooperation with authorities

ambitions vs codes

- communication and cooperation with colleagues

personality, attitude, knowledge

- direction of design flow

personality, attitude, knowledge, ambition

Quote for today:

“No person who is not a great sculptor or painter can be an architect. If he is not a sculptor or painter, he can only be a builder.”

John RUSKIN (1819-1900)