





# MASS HOUSING AREAS from SKOPJE (NMK)

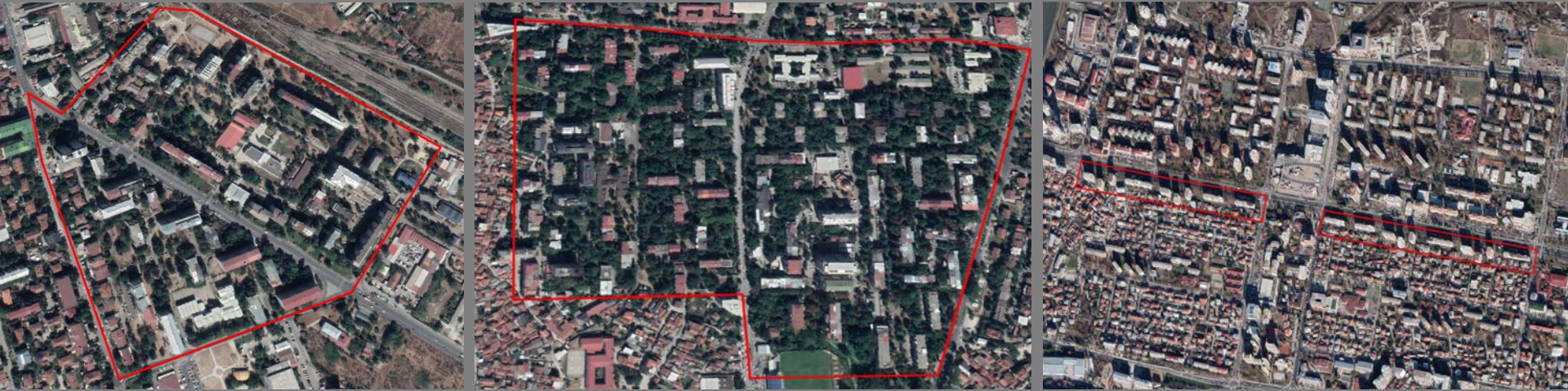
A black and white photograph of a mass housing area in Skopje. The image shows several long, multi-story apartment buildings with balconies, arranged around a central courtyard. The buildings have a repetitive, modular design. The sky is clear and light-colored.

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## Housing Development 11 Oktomvri, Skopje Sever and Partizanska



All five case studies presented are from Skopje's 1960's and 1970's urban transformation and housing development. The first three case studies: housing Development 11 Oktomvri, Skopje Sever and Partizanska, belong to the paradigm of functionalist transformation of the city according to the Modern principles after the WWII, and in some points enhanced with the master plan after the earthquake in 1963: planning and development of housing districts of 5000-6000 inhabitants, multi-dwelling units housing blocks of different size surrounded by ample green areas and an open-air recreation, diversification of pedestrian and motor traffic, underground parking spaces, complemented with commercial areas and local centres, schools, kindergarten and nursery



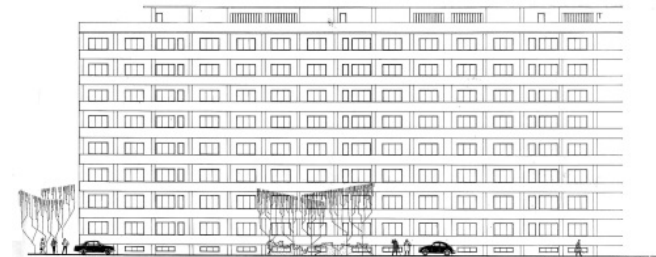
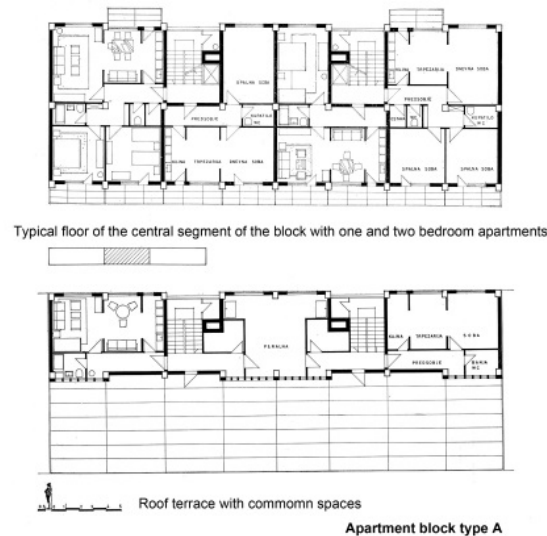
## Housing Development 11 Oktomvri



11 Oktomvri Housing Development area consisting of two neighbourhood units separated by a major collector street. One unit contains only housing blocks of different size while the other contains a tower, housing blocks and single family houses. The buildings started before 1963 and were reinforced and completed after the 1963 earthquake.



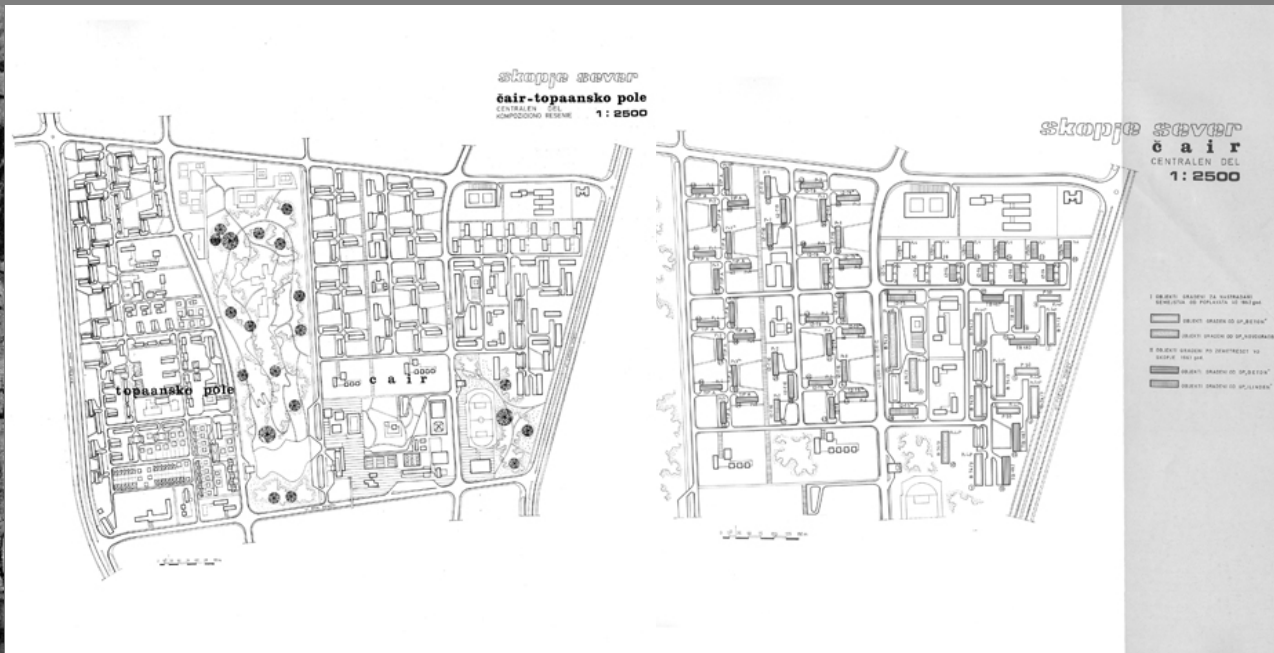
# Housing Development 11 Oktomvri



Skopje Sever and 11 Oktomvri housing development were part of a wider housing complex and were one of the first planned housing development according to the functionalist General plan made after the WWII. The initial building activities were connected to the construction of housing blocks for people whose houses were badly damaged in the flood of 1962.



# Housing Development Skopje Sever



The Chair housing development is part of a bigger housing complex, Skopje Sever, which was to replace the existing substandard traditional single family houses. After the earthquake a wider area was developed as one of the new housing areas in Skopje. The housing units were completed, but the area designated for the park is still occupied by old houses. The green area although well developed today is in need of rehabilitation and not in good condition.



# Housing Development Skopje Sever



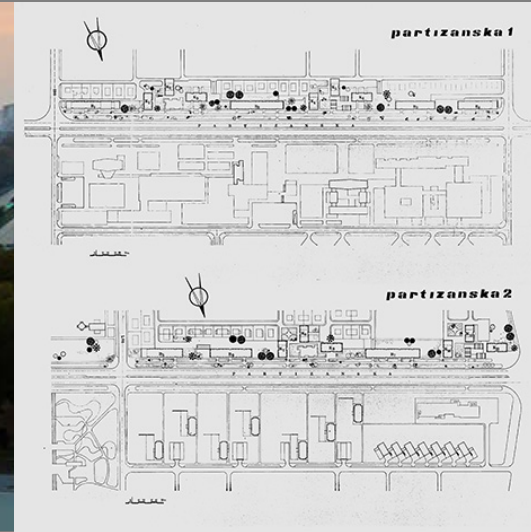
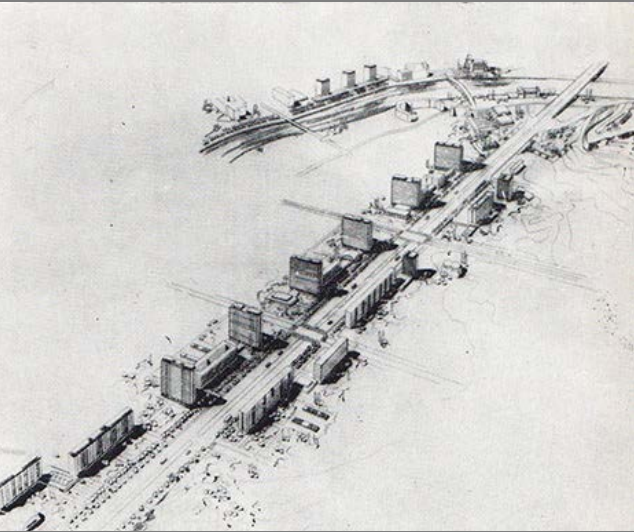
Typical floor plan with one, two and three bedroom apartments



Apartment block type A

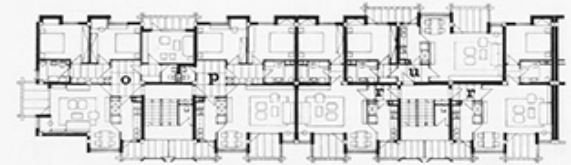
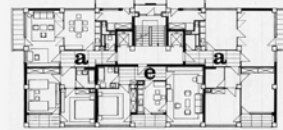
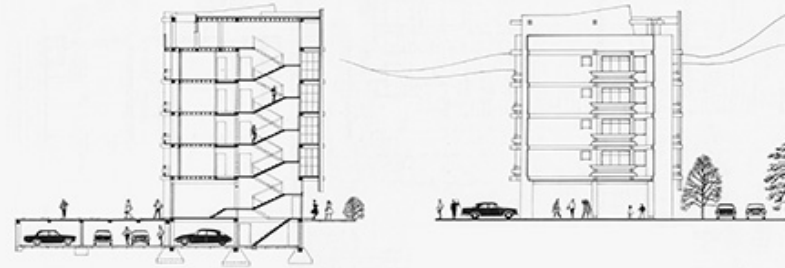


# Housing Development Partizanska



The housing development “Partizanska” consists of high-rise towers and linear free-standing blocks located directly along the southern part of Blvd. Partizanska, which is the main east-west longitudinal circulation artery of the city. Workplaces and commercial use shops are on the ground floor of all residential towers and blocks.

# Housing Development Partizanska



In addition, greenery, parking lots, underground garages and structures of social standard are interpolated between the towers. Facades treatment is with plastic elements inspired by Japanese architecture and Metabolism, which is becoming more relevant due to the presence of Kenzo Tange in Skopje.





## Curent situation and problems recognised:

Coordinated planning and housing development until 1991 were according to the standards and conceptual definitions of the socialist system and planning economy of that time: State property of the land, state financed plans and architectural projects and building construction.

After the system change and period of transition new ownership structure emerged (from state to private property). The original plan and buildings have gone through several phases of transformation which resulted in increase of density by inserting of new buildings or conversion of the roof terraces into dwellings and widening of the original blocks with additional structure. Individual interventions by the inhabitants have altered the facades of the blocks. Problems in maintenance have reduced the quality of shared/common areas and premises.

## The City Wall



The fourth case study presented is the City Wall which, together with the City Gate, is one of the main symbolic defining elements in creating a new city identity in the plan by Kenzo Tange team after the earthquake in 1963. The City Wall was used to create a new image of the city centre and it is derived from the template of the pre-existing ring-road. It was conceived as a wall of buildings surrounding the old and the new part of the centre, a residential composition that should meet the housing needs of that time and in that part of the city.



# The City Wall



When developing the project, the so-called the Ninth variant departs from the competing idea of a City Wall formed of multi-storey terraced blocks, and have been replaced by residential towers and laminated apartment blocks. Although the "City Wall" has undergone many alterations from its original concept to its completion, yet it is perhaps the most striking structure in Kenzo Tange's plan and the only structure that is entirely derived from his plan.

# The City Wall



The City Wall is designed as double folded residential structure in which nearly 8,000 people live in their 1,814 apartments of different typology. The idea behind the composition is it to be a kind of wall-fortress in modern interpretation. It consists of chained linear blocks of 24 meters height and towers of 45 meters height that cut these linear elements, allowing aerating of the linear chained blocks this way. The front of the wall is oriented to the city center and the busy streets, while between the residential towers and blocks are green areas, children's playgrounds, kindergartens which are separated from outside traffic. Ground floor of the both types of buildings is of commercial use.

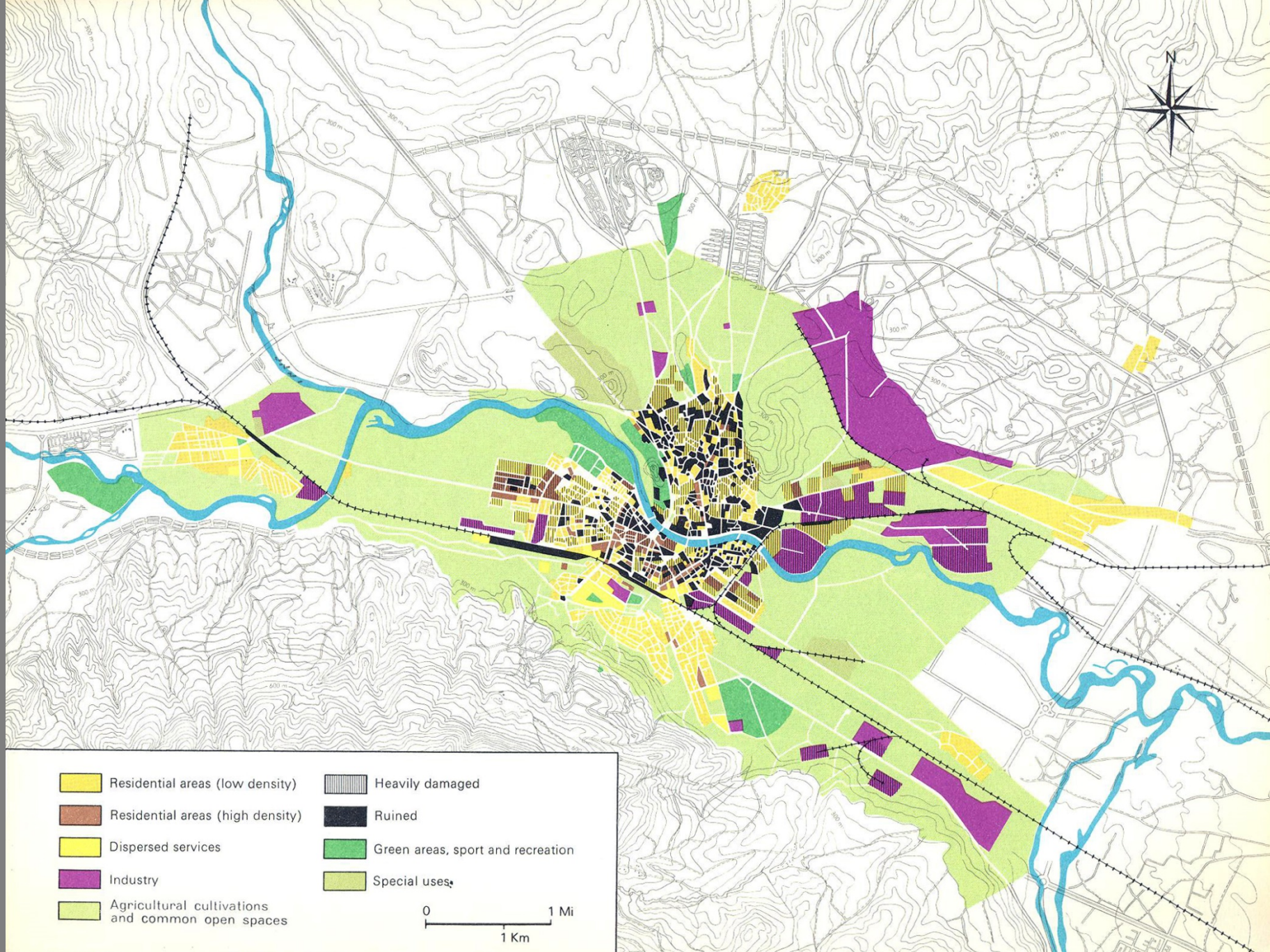


# The City Wall



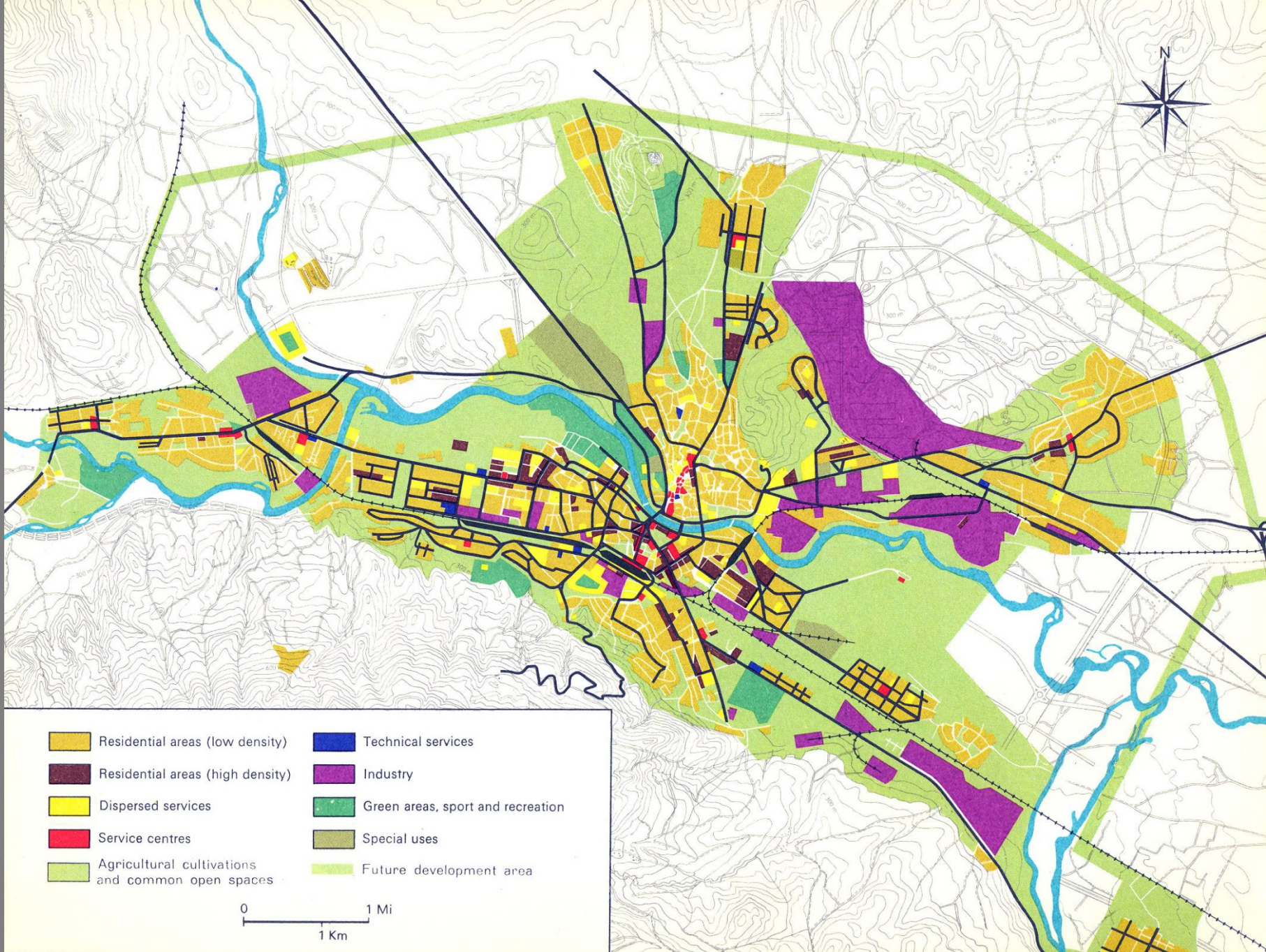
The City Wall still remains the main symbolic city image structure, of good urban life quality and social integration. Some original ideas are corrupted, spaces appropriated or not well maintained. Continuity of pedestrian circulation throughout the inner green and public amenities space are interrupted and “invaded” by increased motor circulation and parking. Although the “City Wall” has undergone many alterations from its original concept to its performance, yet its symbolic and metaphorical image is still preserved today.





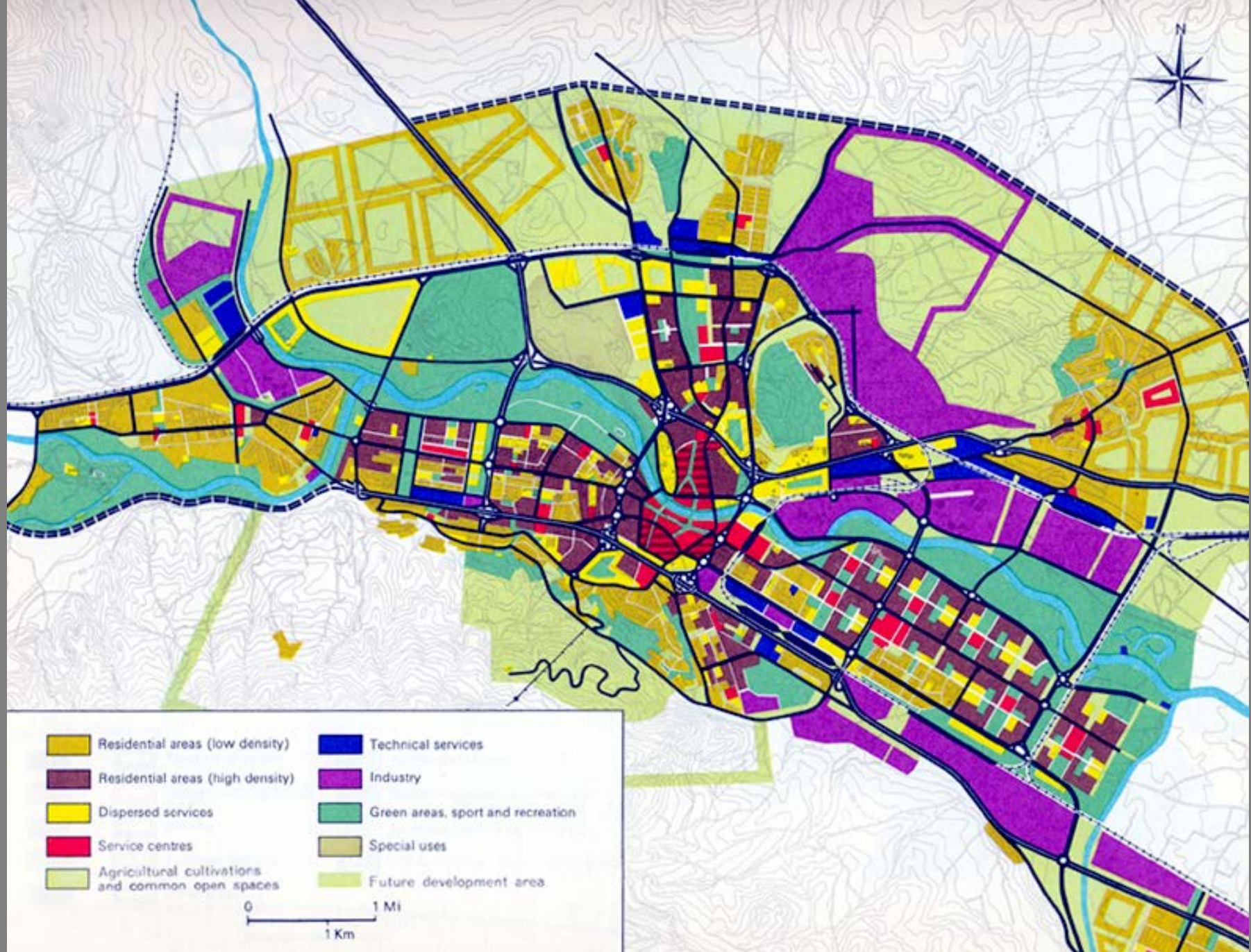
## • Skopje 1963





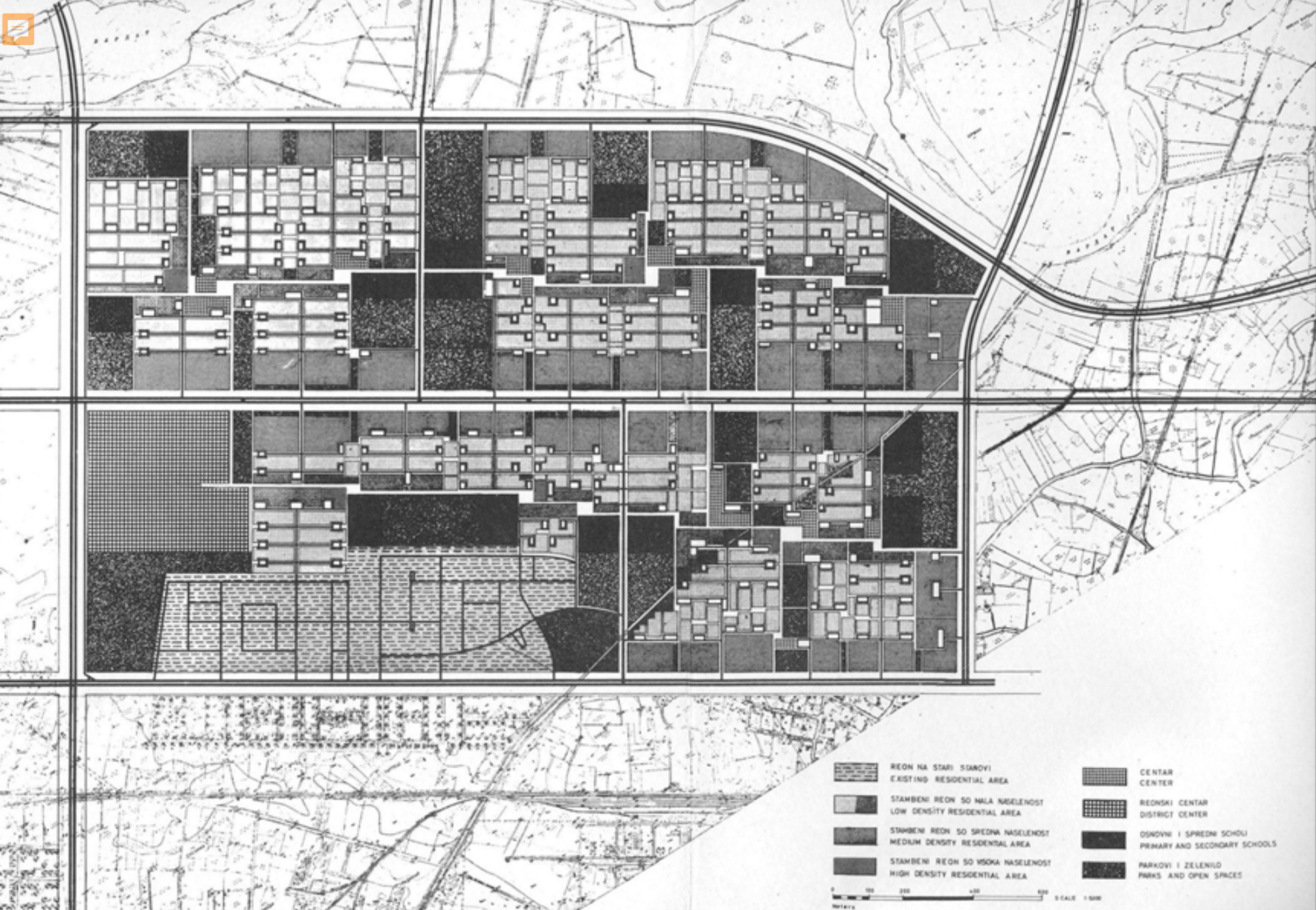
## • Skopje 1965





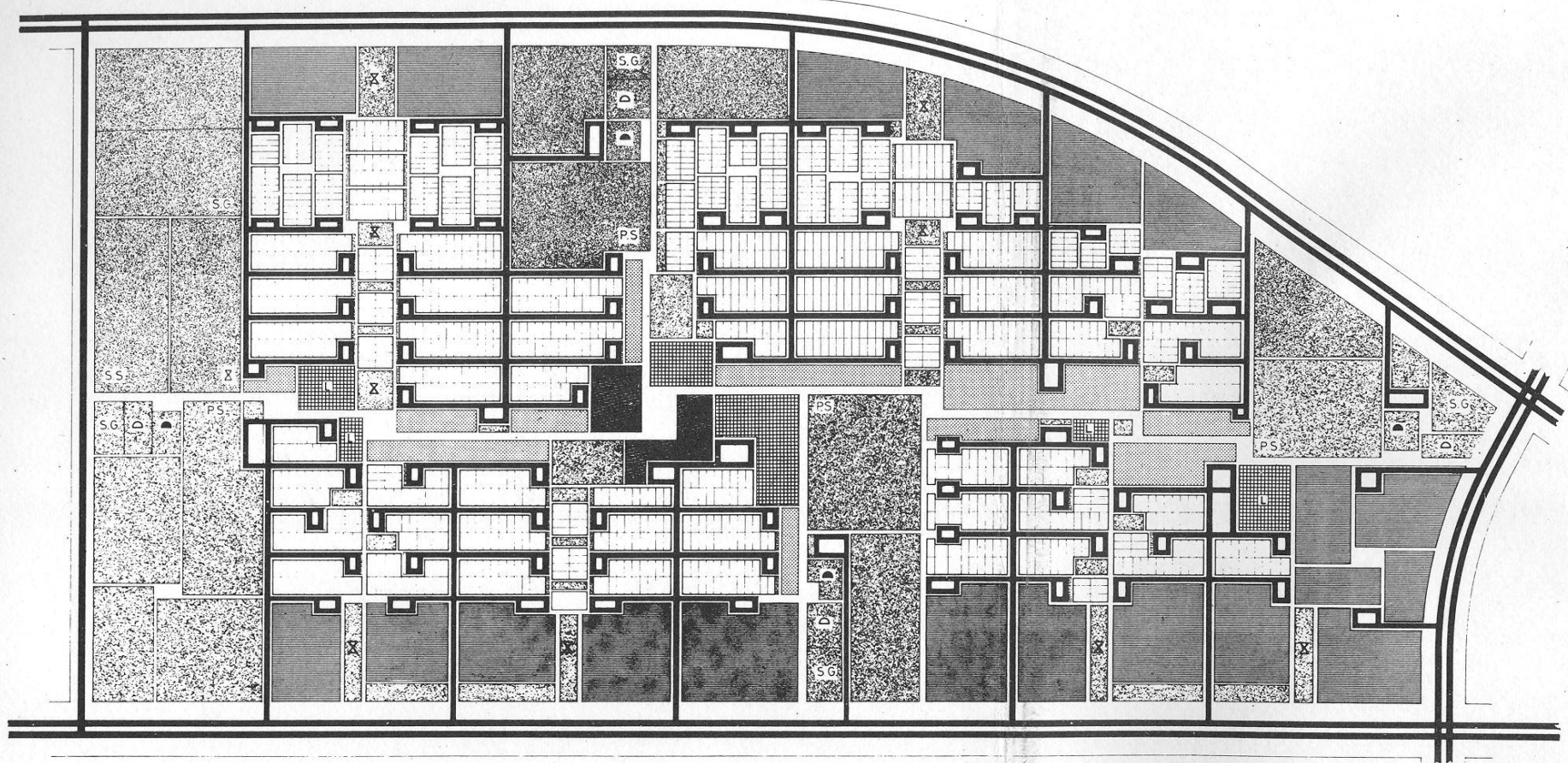
- Skopje 1981-planned



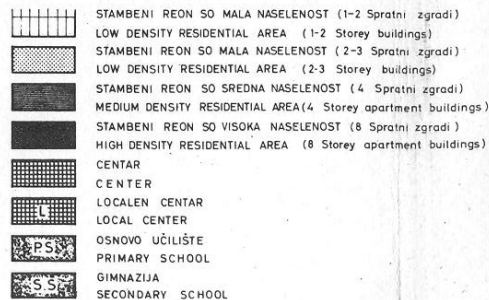


Proposal for the district with housing sectors developed by Doxiadis Assoc., 1965





| TIPE NA STANOVI<br>TYPE OF RESIDENTIAL AREA | BR NA SPRATNI<br>Nº OF STOREYS | POVRN.Ha<br>AREA Ha | GUSTINA<br>DENSITY<br>Per / Ha | NASELENIE<br>INHABITANTS |
|---|--------------------------------|---------------------|--------------------------------|--------------------------|
| MALA GUSTINA<br>LOW DENSITY                 | 1 - 2                          | 34.2                | 190                            | 6.500                    |
| MALA GUSTINA<br>LOW DENSITY                 | 2 - 3                          | 4.9                 | 280                            | 1.350                    |
| SREDNA GUSTINA<br>MEDIUM DENSITY            | 4                              | 18.5                | 540                            | 9.800                    |
| GOLEMA GUSTINA<br>HIGH DENSITY              | 8                              | 1.0                 | 600                            | 600                      |
| VKUPNO<br>TOTAL                             |                                |                     |                                | 18.250                   |

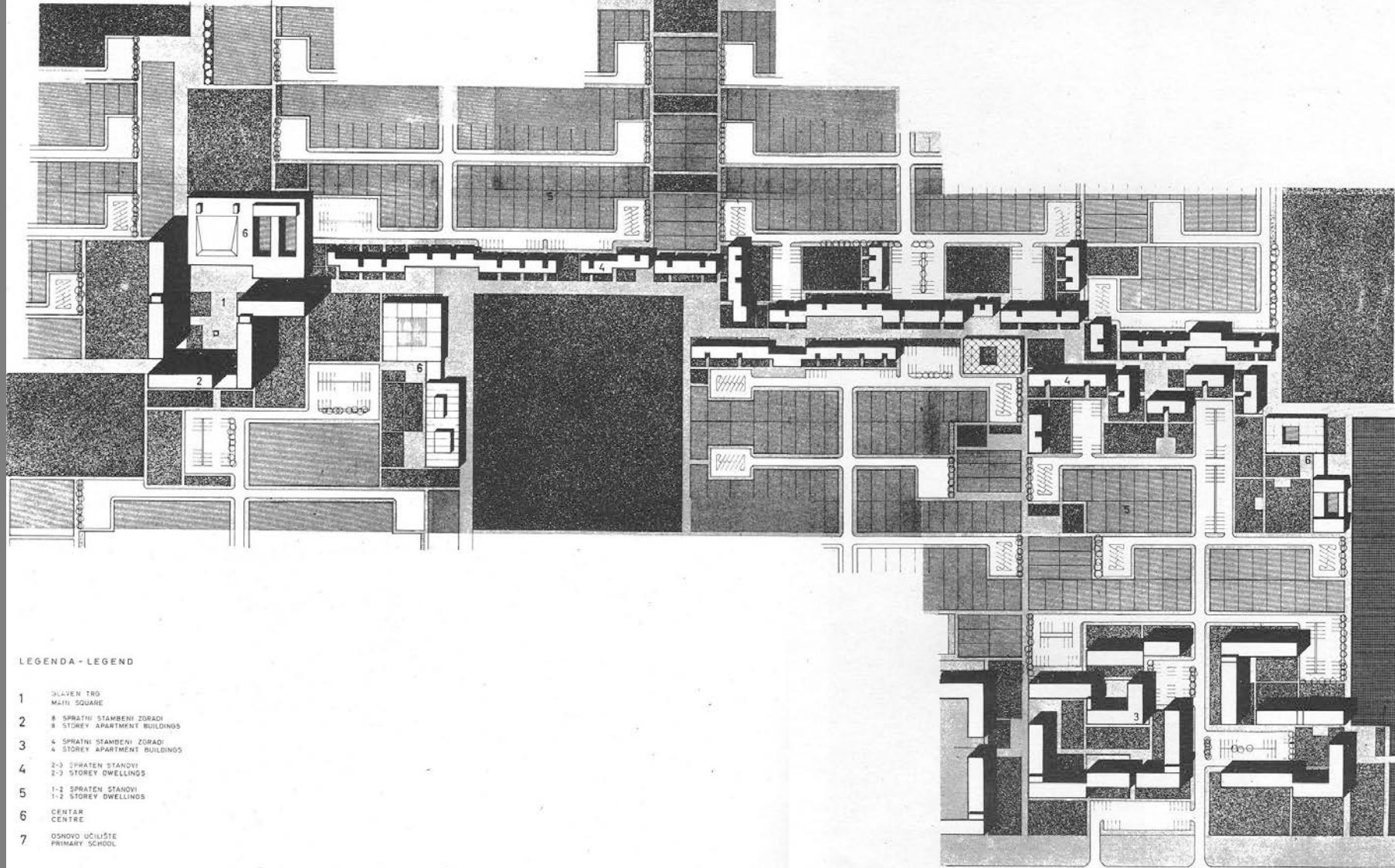


Proposal for a housing sector with 18.250 inhabitants  
Proposal for a housing sector with 18.250 inhabitants



# ZAEDNICA COMMUNITY

19 F

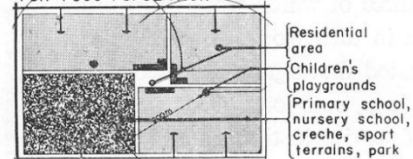
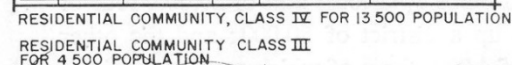
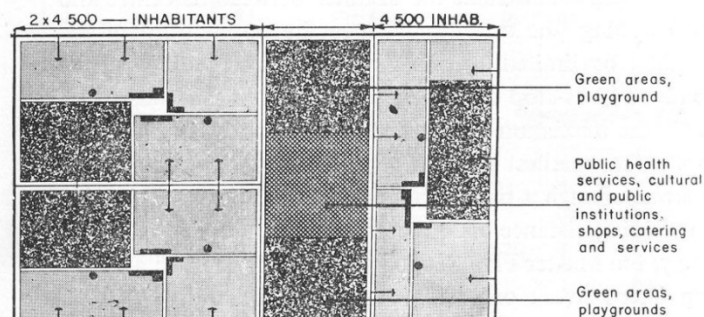
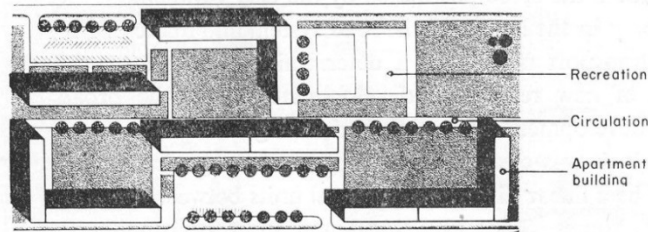
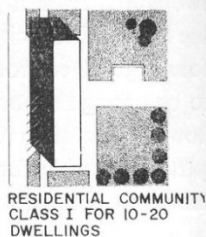
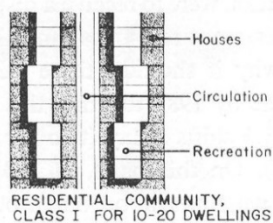


## LEGENDA - LEGEND

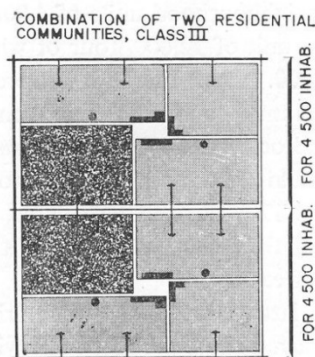
- 1 JILKEN TRG  
MAIN SQUARE
- 2 8 SPRATNI STAMBENI ZGRADI  
8 STOREY APARTMENT BUILDINGS
- 3 4 SPRATNI STAMBENI ZGRADI  
4 STOREY APARTMENT BUILDINGS
- 4 2-3 SPRATNI STANOV  
2-3 STOREY DWELLINGS
- 5 1-2 SPRATNI STANOV  
1-2 STOREY DWELLINGS
- 6 CENTAR  
CENTRE
- 7 OŠNOVO UČILIŠTE  
PRIMARY SCHOOL

- A model community – the main pedestrian road and separation of traffic

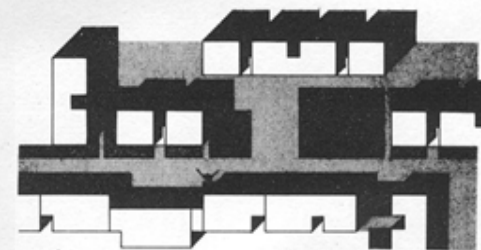
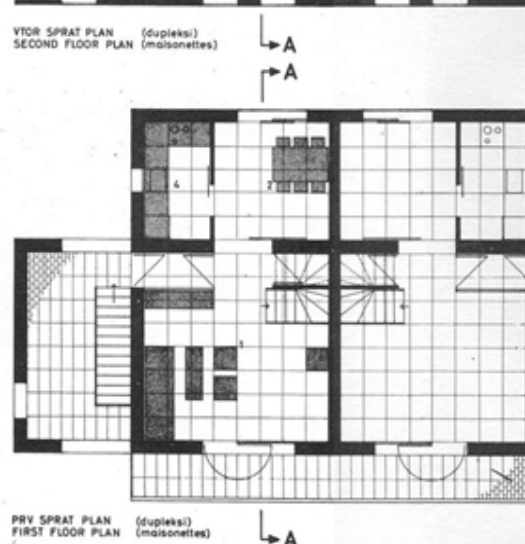
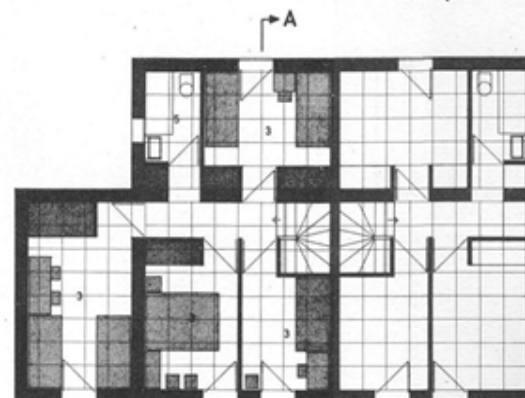




| PROGRAM FOR RESIDENTIAL COMMUNITIES |  |                                  |  |
|-------------------------------------|--|----------------------------------|--|
| 4500 INHABITANTS                    |  | 13500 INHABITANTS                |  |
| EDUCATION                           | PRIMARY SCHOOL   | HEALTH                           | HEALTH STATION   |
| PUBLIC INSTITUTIONS                 | NURSERY SCHOOL<br>CRECHE                               | CULTURAL AND PUBLIC INSTITUTIONS | CLUB HOUSE<br>AMUSEMENT  |
| TRADE TRADING<br>AND SERVICES       | LOCAL SHOPS, WORK-<br>SHOPS, RESTAURANTS               | TRADE CRAFTING<br>AND SERVICES   | SHOPS, #RAFTS,<br>RESTAURANTS, CAFE  |
| GREEN AREAS<br>AND PLAYGROUNDS      | SOCIAL SPORT TERRAINS,<br>CHILDREN PLAYGROUND,<br>PARK | GREEN AREAS AND<br>PLAYGROUNDS   | SPORT TERRAINS,<br>CHILDREN PLAYGROUND,<br>LOCAL PARKS AND<br>PUBLIC SQUARES |



TIP · TYPE  
**M3 - 01**



| LEGENDA - LEGEND                             |   |
|--|---|
| PRZEMIEJ<br>GROUND FLOOR PLAN                | 2 SPOWIEC STAN<br>2 STOREY DWELLING     |
| KPP<br>UFA                                   | 72,6 <sup>net</sup> 72,7 <sup>net</sup> |
| PROSTOTAĆ 24,3m<br>LIVING SPACE              | 58,9 57,7                               |
| POWIERZCHNIA PROSTOTY<br>KUCHENIA I JEDZENIA | 13,7 15,0                               |
| PROSTOTAĆ (32,2% <sup>net</sup> )            | 92,4 (32,0% <sup>net</sup> ) 92,3       |
| WPP<br>TFA                                   | 96,0 96,0                               |



ALTERNATIVA 1 (KORISNA PATOSNA POVRŠINA 15,33 m<sup>2</sup>/OSOBA .1,18 OSOBA / SOBA)

STANDARD NA STANOVANJE PREMA ANALIZITE ZA MINIMALNI STANBENI POVRVNINI I STRUKTURA NA SEMEJSTVA VO SKOPJE VO 1981

ALTERNATIVE 1 (USABLE FLOOR AREA 15,33 sq.m / PERSON .1,18 PERSONS/ ROOM)

OCCUPANCY STANDARDS ACCORDING TO THE ANALYSIS OF MINIMUM HABITABLE SURFACES AND THE STRUCTURE OF FAMILIES IN SKOPJE 1981

| SAMAČKI SOBI<br>HOSTELS       | O/S %<br>P/F % | OSOBI / SEMEJSTVO<br>PERSONS/FAMILY | SOBA + KUPATILO<br>ROOM + BATHROOM   | ZAEĐNIČKI SANITAREN ČVOR m <sup>2</sup> /q<br>COMMON SANITARY INSTALLATION |                                     | ZAEĐNIČKI PROSTOR m <sup>2</sup> /OSOBA<br>COMMON SPACES sqm / PERSON |                             |                             |                             |                                | KPP/S<br>UFA/D | KPP/O<br>UFA/P             | KPP/OX10/Sq<br>UFA/P/P/F % | O/STAN<br>P/ROOM             | O/S %<br>P/R % | O/SX10/Sq<br>P/Rx(P/R %) |              |      |      |      |      |      |
|-------------------------------|----------------|-------------------------------------|--------------------------------------|--|-------------------------------------|---|-----------------------------|-----------------------------|-----------------------------|--------------------------------|----------------|----------------------------|----------------------------|------------------------------|----------------|--------------------------|--------------|------|------|------|------|------|
|                               |                |                                     |                                      |  |                                     |   |                             |                             |                             |                                |                |                            |                            |                              |                |                          |              |      |      |      |      |      |
| 9,6                           |                |                                     | 50% SO KUPATILO<br>50% WITH BATHROOM |  | m <sup>2</sup><br>17<br>litro<br>11 | □ ZA 50% SAMO<br>FOR 50% ONLY   | 1                           | □                           |                             |                                |                | 1,5                        | 16                         | 16                           | 1,53           |                          |              |      |      |      |      |      |
| 4,8                           |                |                                     |                                      | 195  |                                     |   |                             | □ □                         |                             |                                |                | 3                          | 225                        | 112                          | 0,54           |                          |              |      |      |      |      |      |
| STANOVNI<br>D W E L L I N G S |                |                                     | DNEVNA SOBA<br>LIVING-ROOM           | KUHNA<br>KITCHEN   | SPAL.SOBA RODIT.<br>PARENTS' B.ROOM | SPALNA SOBA 1<br>BED ROOM 1   | SPALNA SOBA 2<br>BED ROOM 2 | SPALNA SOBA 3<br>BED ROOM 3 | KUPATILO+ WC<br>BATHROOM+WC | OSTANA+PREDSOB<br>STORE+CORRID |                |                            |                            |                              |                |                          |              |      |      |      |      |      |
|                               | 2,4            |                                     |                                      | m <sup>2</sup><br>sqm<br>125   |                                     | m <sup>2</sup><br>sqm<br>4  | —                           | m <sup>2</sup><br>sqm<br>—  | —                           | m <sup>2</sup><br>sqm<br>—     | —              | m <sup>2</sup><br>sqm<br>4 |                            | m <sup>2</sup><br>sqm<br>1,5 | 22             | 22                       | 0,53         | 1    | 2,8  | 0,03 |      |      |
|                               | 11,2           |                                     |                                      | 12,5   |                                     | 4   |                             | 1,3                         | —                           | —                              | —              | —                          |                            | 4                            |                | 1,5                      | 35           | 17,5 | 1,96 | 1    | 13,1 | 0,13 |
|                               | 20             |                                     |                                      | 16   |                                     | 6   |                             | 13                          | —                           |                                | 8              | —                          |                            | 4                            |                | 4                        | 51           | 17,6 | 3,52 | 1    | 23,4 | 0,23 |
|                               | 20             |                                     |                                      | 18   |                                     | 6   |                             | 13                          |                             | 10,5                           | —              | —                          |                            | 4                            |                | 4                        | 55,5         | 13,9 | 2,78 | 1,33 | 23,4 | 0,31 |
|                               | 6              |                                     |                                      | 8  |                                     | 6   |                             | 13                          | —                           |                                | 8              | 8                          |                            | 4                            |                | 4                        | 61           | 15,2 | 0,92 | 1    | 7    | 0,07 |
|                               | 16             |                                     |                                      | 20   |                                     | 7   |                             | 13                          |                             | 10,5                           | 8              | —                          |                            | 6                            |                | 6                        | 70,5         | 14,6 | 2,34 | 1,25 | 18,7 | 0,24 |
|                               | 7,5            |                                     |                                      | 22   |                                     | 8   |                             | 13                          |                             | 10,5                           | 10,5           | —                          |                            | 6                            |                | 6                        | 76           | 11,8 | 0,88 | 1,55 | 8,8  | 0,14 |
|                               | 2,5            |                                     |                                      | 22   |                                     | 8   |                             | 13                          |                             | 10,5                           | 8              | 8                          |                            | 6                            |                | 6                        | 81,5         | 13,1 | 0,33 | 1,24 | 2,8  | 0,03 |
|                               | 100            |                                     |                                      |  |                                     |   |                             |                             |                             |                                |                |                            |                            |                              |                |                          | 15,33<br>sqm |      |      | 100  | 1,18 |      |

PREDPOSTAVKA  
ASSUMPTIONS

A SEMEJSTVO / STAN  
1 FAMILY / DWELLING

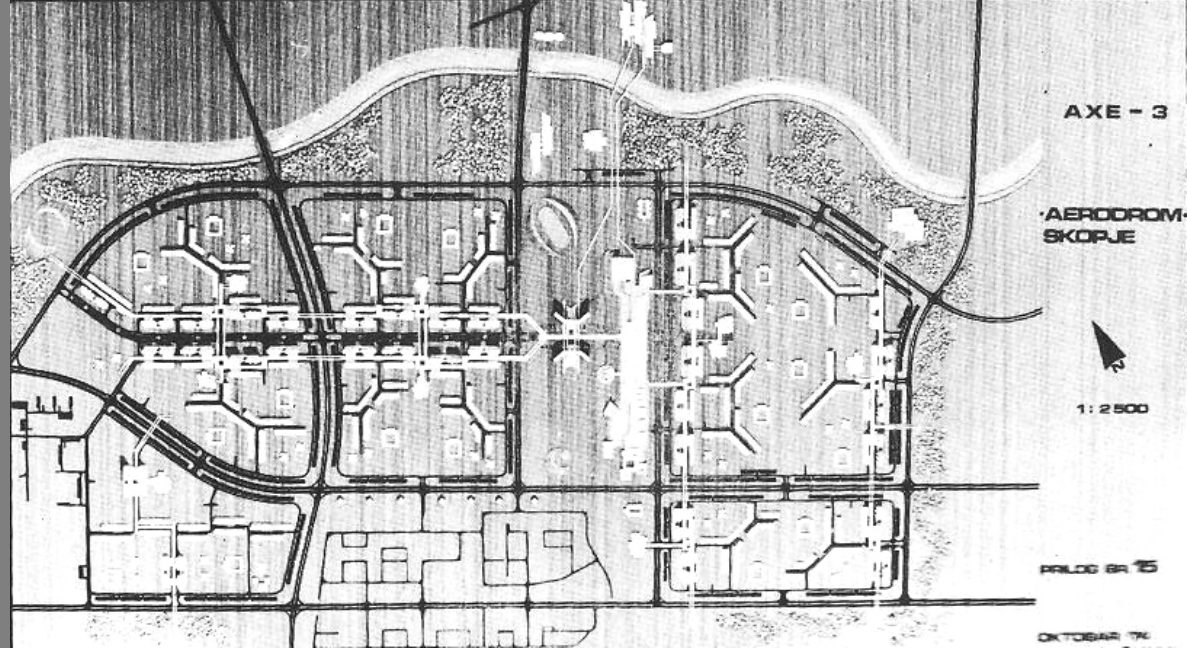
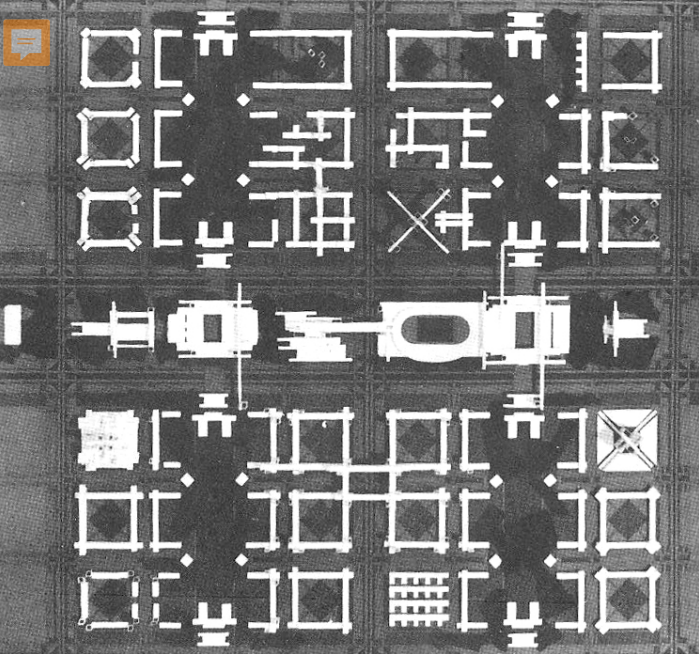
B SAMO KREVETI VO SPALNI SOBI  
BEDS ONLY IN BEDROOMS

C ODVOENOST PO POL NA 10 GOD STAR  
SEPARATION OF SEX OVER 10 YEARS

D NASTANLIVA POVRŠ PREMA ANALIZITE ZA  
MINIMALNI STANDARDI  
HABITABLE SURFACES ACCORDING TO THE  
ANALYSIS OF MINIMUM STANDARDS

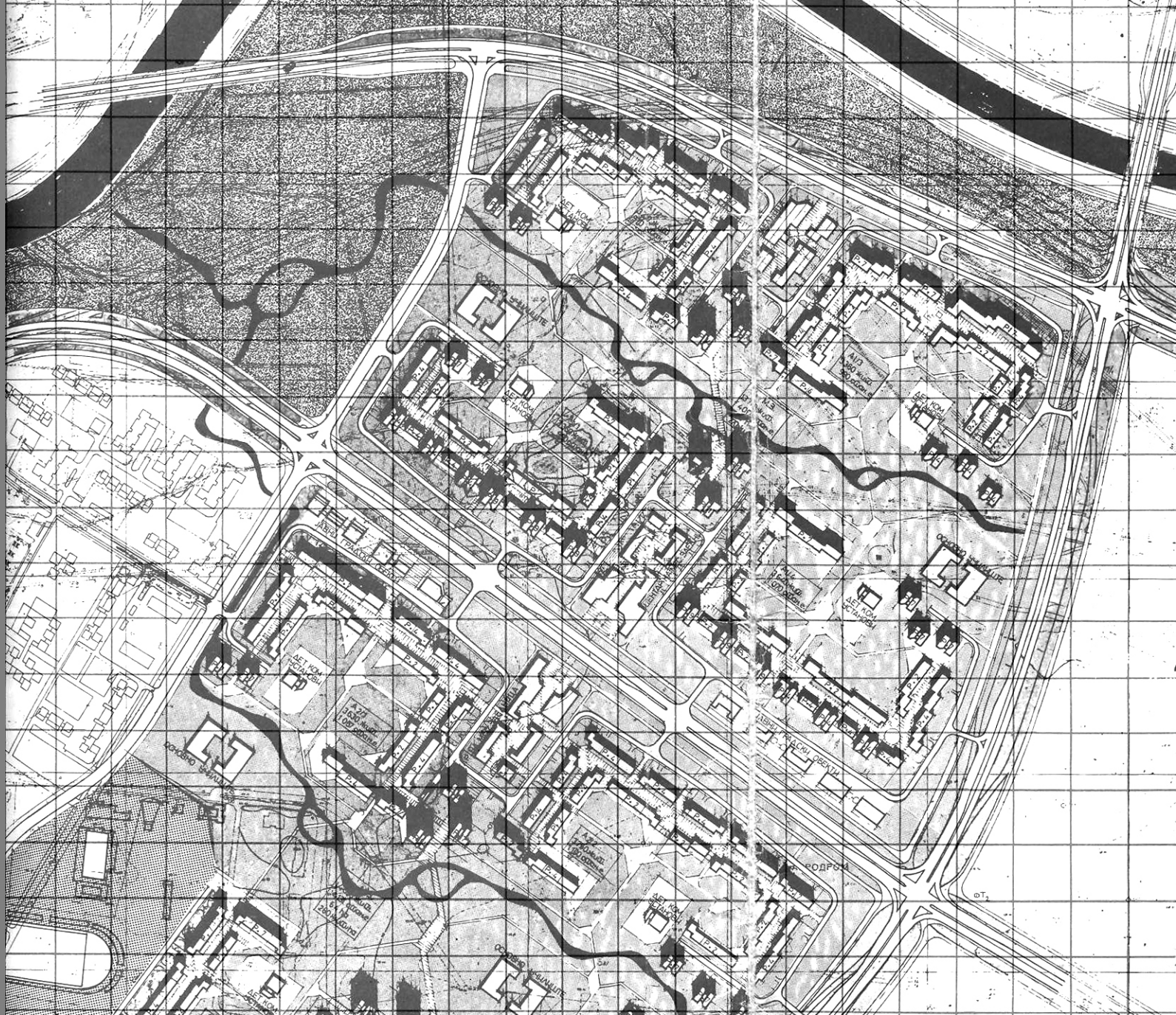
## • Occupancy standards





- The winning competition entry by JUGINUS





- The first development plan for Aerodrom





- The housing area at the turn of the century





Master Plan 1965



Master Plan 1985



Master Plan 2002



























