Municipality of Kaçanik

URBAN REGULATORY PLAN “URBAN ZONE I” KAÇANIK

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1 INTRODUCTION

1.1.1 Plan drafting motive

Drafting of the Regulation Plan for the **“Zone I”,** has been initiated by the Municipal Assembly of Kaçanik and it was professionally supported by the institute ’INSI” from Prishtina under tender No.16-14273, dated on 19.06.2012, for drafting of Urban Regulatory Plan for the urban Zone I of the Kaçanik town, PHASE II, between the municipality of Kaçanik and Institute for science “INSI” from Prishtina.

The space included with this Urban Regulatory Plan occupies an important position for the development of the Kaçanik town in the aspect of connection with main roads and functions of the surrounding neighbourhoods.

Considering the importance of the position it has been submitted a task an obligation from the drafting team of this plan, that in cooperation with responsible authorities of Municipality dedicate a special importance to the Urban Profile (collecting and presentation of data for all facilities, infrastructure, inhabitants etc,) and all necessary analysis in order to achieve most favourable urban solution for implementation.

1.1.2 The objective of the development of this plan

The objective of drafting this plan, is the effort on the improvement of urban situation of the environment, to develop mechanisms for the assessment of environmental pollution and by pollution control measures ensure a rational use of the urban area for housing and business purposes, to contribute on establishing of a civil society for the assessment of the public system maintenance and to have motivation for implementing rules and laws in force.

By determining of the development direction an emphasis is placed on the analysis of the development, reconstruction and revitalization process , economical aspect of the value protection process, potential opportunities for the town development as well as providing of recommendations to create a strategy for development of Kaçanik by proposing variations that will allow an adjustment of the building areas in a more functional, economic and environmental way, together with a comprehensive scientific, social and political study.

Our role in the drafting of this plan is to regulate once for all the problems of this urban area by playing main role in the relationship between private investments and state planning.

2 BACKGROUND AND CURRENT SITUATION IN THE TOWN

Etymology of Kaçanik (Kaçaniki - Kaçaniku), existed before the arrival of the Turks in the Balkans although the name Kaçanik is found for the first time in the writings at the beginning of XV century as: Kaçanikli Derbendi (Turkish)- which means Kaçanik’s Gorge. On the origin of the name Kaqanik there are many versions: According to Mr.sc. Tefik Raka - Historian (killed by Serbian forces during the war (1999), in Dubrava Prison, the etymology Kaçanik is linked with the name of Nika, respectively Pal Don Nika, an Albanian feudal of this area (there is a village of Paldonika in Kaqanik called as Paldonica by the present residents).In the other version this etymology derives from merging of two words Kaça + of Nika. In Kaçanik are also recognized many other etymologies that end with Nik as; Nik’s well, Nik’s Church, Niks meadow, Nik’s field, Nik’s Mill (also Kaça of Nik), then Pustenik (Nik’s wells), Nikoc, Nikaj etc, that were actually land properties of Pal Don Nika.

Kaçanik territory and its vicinity were inhabited since the earliest periods, even prehistory. Dwelling tracks are observed in multiple locations and this proves the material culture in form of the ruins found in some settlements of this area as well as mountainous areas and valleys, even though most of them are damaged.

Kaçanik until the end of the XVI century was a village while in the first part of the last century starts its establishment as a town. Initially were built several monumental buildings by Gazi Sinan Pasha (mosques, public kitchens, school which still exists near the mosque, two inns, one Turkish bath (hamam) and a castle) which give to this settlements attributes of a kasaba-town. While real attributes of a town begin with the establishment of the producing industry of construction materials, after that by the construction and pavement of the roads, regulation of environment and green public spaces , development of trade and catering etc. In this way it becomes an urban area with historic features of an ancient town.

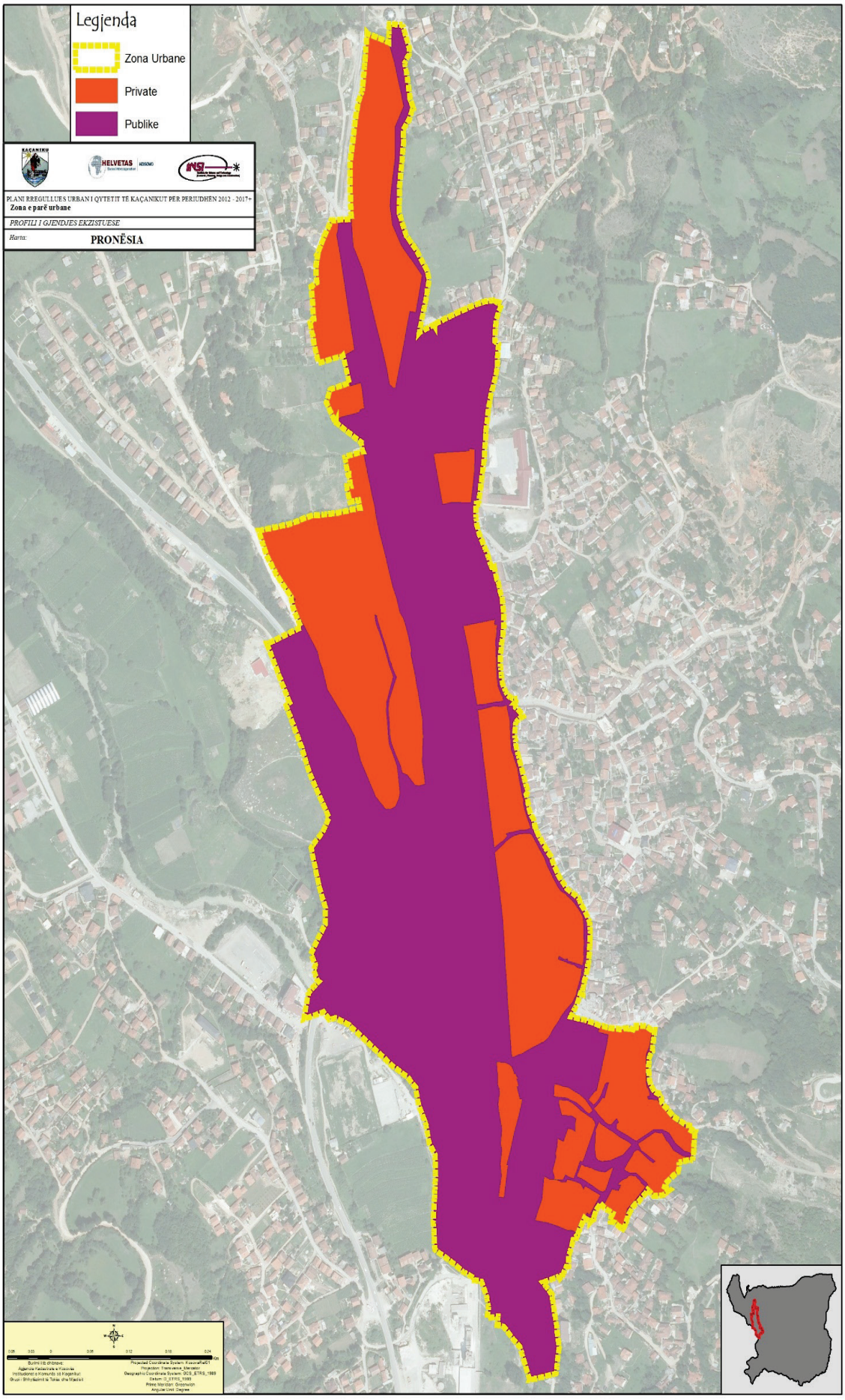
2.1 Zone boundaries and Cadastral Parcels

Urban Regulatory surface area is **38.67 ha**, boundaries and surfaces included in the plan (graphic presentation of the actual situation) 1:1000 of the boundary. Parcels included in the plan with numbers from the copy of the plan. While land use according to the ownership from the information obtained from Department of Urbanism, Cadastre and Environmental Protection is seen as mayor part of the area, is in public ownership with 24.88*ha,* while the rest is privately owned 13.79*ha*.

2.1.1 List of cadastral parcels

Number of parcels that are included in the first urban Zone:

515; 516; 521/37; 521/14; 521/36; 519/5; 519/6; 519/7; 519/8; 519/9; 519/20; 519/10; 652; 651; 650/4; 650/1; 650/2; 649; 650/3; 527; 646/3; 648; 647/2; 646/2; 647/1; 645/2; 645/4; 646/4; 645/3; 646/1; 645/1; 645/5; 1854/2; 643; 644/1; 644/2; 642; 640/1; 528/2; 532/5; 532/3; 532/1; 532/2; 532/10; 633/1; 633/2; 630/1; 630/2; 631; 632/2; 628/1; 627/3; 628/2; 632/3; 632/1; 627/1; 627/2; 626/1; 626/2; 625/1; 625/2; 623; 622; 621; 624; 617/1; 617/2; 617/3; 617/4; 617/5; 619; 620; 618; 616; 601/1; 601/2; 600; 615; 614; 613/1; 613/2; 613/3; 613/4; 612; 611; 610; 602; 609; 599; 598; 608/1; 608/2; 608/3; 597; 596; 594; 595; 593; 593; 591; 607; 1862; 640/2; 639; 638; 637; 636; 634; 635; 606/1; 606/2; 605; 604; 603; 577/1; 577/2; 587; 578/1; 578/2; 586; 585; 583; 584; 576; 575/5; 575/6; 574/2; 574/1; 575/4; 580; 575/3; 575/2; 575/1; 573; 581; 579; 572/1; 572/2; 571; 570/2; 582; 568/2; 568/3; 568/1; 1074; 1073; 1070; 1072; 1071; 1090; 1863; 1130; 1129/1; 1091; 1098; 1095; 1093; 1096; 1089; 1094; 1097; 1087/2; 1087/1; 1086; 1085; 1084; 1081; 1080; 1079; 1078; 1077; 1076/1; 1076/2; 1082/1; 1082/2; 1088; 1131/1; 1131/2; 1129/2; 1128; 1132; 1133; 1134; 1127; 1135; 1136; 1124; 1125/1; 1125/2; 1125/3; 1125/4; 1123; 1126; 1122; 1138; 1137; 1139; 1140; 1141; 1142; 1143; 1144; 1145; 1146; 1147; 1148; 1149; 1150; 1116; 1117; 1118; 1120; 1121/3; 1121/4; 1121/2; 1115; 1114; 1113; 1121/6; 1121/7; 1121/8; 1121/9; 1121/10; 1121/11; 1121/5; 1121/1; 1110; 1112; 1111; 1109; 1107; 1108; 1106; 1100/2; 1100/1; 1099; 1354; 1355; 1350; 1846/2; 570/1; 570/2; 570/3; 569; 1075/1; 1075/2; 1075/3; 1101; 1102; 1103; 1104; 1105; 1373; 1372; 1371; 1370; 1374; 1375; 1376; 1377/1; 1377/2; 1378/1; 1378/2; 1378/3; 1379/1; 1379/2; 1380/1; 1380/2; 1381; 1383; 1382; 1384; 1367; 1368; 1369; 1366; 1394; 1385; 1386; 1387; 1388; 1852/2; 1846/2; 1392; 1391/1; 1391/2; 1391/3; 1391/4; 1389/1; 1398/2; 1389/3; 1389/3; 1389/4; 1351/1; 1351/2; 1351/3; 1352/1; 1352/2; 1340; 1338; 1339; 1337; 1336; 1341; 1342; 1345; 1344; 1343; 1335; 1334; 1349; 1348; 1347; 1346; 1365; 1364; 1363; 1362; 1330; 1329; 1328; 1327; 1326; 1325; 1324; 1332; 1331/1; 1331/2; 1323; 1322/1; 1322/2; 1321; 1455; 1460; 1454/1; 1454/2; 1452; 1451; 1453; 1459; 1458; 1449; 1448; 1447; 1357; 1358; 1359; 1360; 1361; 1443; 1445; 1444/1; 1444/2; 1439; 1440; 1441; 1442; 1473/2; 1858/2; 1858/3; 1406; 1400; 1867; 1397; 1399; 1402; 1401; 1403; 1404; 1405; 1407; 1408; 1409; 1413; 1411; 1412; 1415; 1410/1; 1410/2; 1414/1; 1414/2; 1414/3; 1414/4; 1849; 1850; 1845; 1848; 1847/2; 1851/2; 1390/1; 1390/2; 1390/3; 1393; 1395; 1356; 1319/2; 1319/3.


Legjenda
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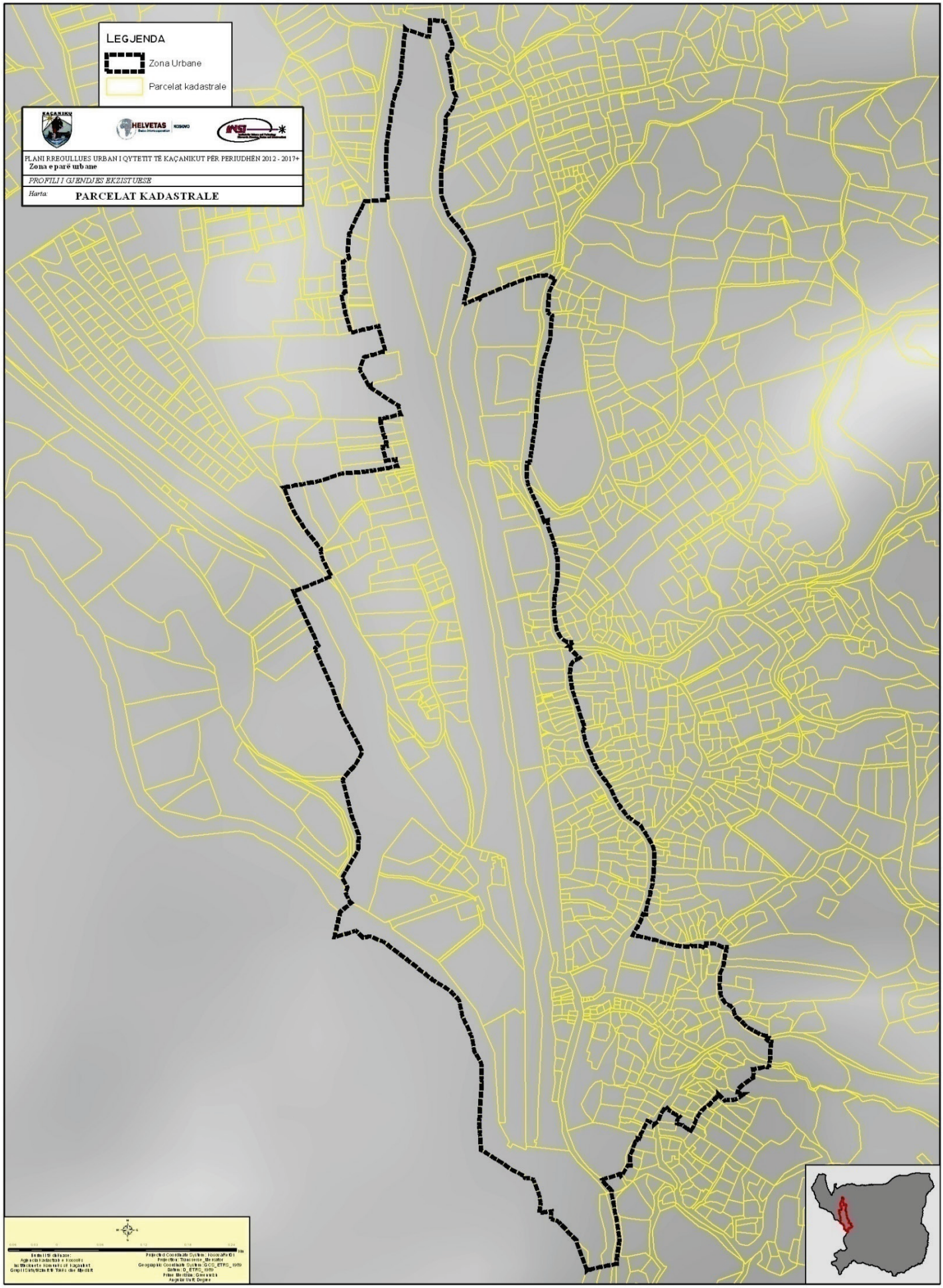
HELVETAS
PLANI RREGULLUES URBAN I QYTETIT TË KAÇANIKUT PËR PERIUDHËN 2012 - 2017+
Zona e parë urbane
PROFILI I GJENDJES EKZISTUESE
Harta:
PRONËSIA


LEGJENDA
Zona Urbane
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Zona e parë urbane
PROFILI I GJENDJES EKZISTUESE
Harta:
PARCELAT KADASTRALE

2.2 Time period for which the plan is drafted

Based on the legislation in force and accompanying decisions this Urban Regulatory Plan is drafted for the time period 2012−2017+.

2.2.1 Rationality on drafting of the planning document

Provision of area and it's designation to fulfil requirements for residents of this environmental area.

- The possibility of concessional building of collective-housing and business with projected interest of the owners and investors in the function of urban area.
- Rational and economic use of the construction land.
- Provision of new municipal technical infrastructure: water supply system, sewerage, electric installations, central heating, gasification, internet network, cable system network, telephony etc.
- Integration of new building facilities such as public and social ones within the urban area.
- Increase of the level of conditions and opportunities for housing, work entertainment, recreation and greenery.
- Elimination of polluting points and creating possibilities for a healthy life in clean and healthy environments.
- Melioration and protection of existing vegetation and use of green spaces for recreation, entertainment and rest.
- The possibility of better circulation of the traffic in the urban area aiming to integrate urban areas by making them functional and increasing security.
- Comprehensive approach for the disabled persons, elder people and the ones that live on social assistance in all community sectors.
- Rational use of the town's construction land.
- Separation of the public construction land from other construction lands.(if there are such cases)
- Defining of general interest.
- Arrangement (adjustment) of the suitable ground for construction.
- Research of the capacities in order to raise level of housing.
- Revitalization of the central zone.
- Regeneration of housing blocks.
- Establishing of new housing blocks outside of the central zone.
- Rising of floor criteria at the town centre as required by community.
- Tackling of illegal construction.
- Enlargement of the regional road.
- Defining rules for the adjustment of the area, harmonization of the existing contents with new planning.
- Rise of the infrastructural level.
- Revitalization of the concrete objects such as historic museum building, church etc.
- Expansion of roads according to the standards (make a real list of the roads to be adjusted and where green belt and cyclist path is going to be added etc.).
- Building of the new roads in the neighbourhoods in order to make traffic functional.

- Creation of the optimal conditions for vehicle and pedestrian approach to each parcel.
- Provision of the parking lots in the central area and other areas as needed.
- Establishment of open and green area for rest together with squares and green oasis within the blocks.
- Regulation of the sport and recreation area etc.
- Regulation of the area along the course of the River Morava and creation of an attractive environment.
- Regulation of the stream in the sport and recreation area together with attractive points along with cycling trails.
- Establishing of spaces with attractive content.
- Protection of the environment.
- Separation of the spaces that may be regulated directly according to this plan and the ones that need special treatment (detail planning!?).

2.3 Legal basis

- Law on Spatial Planning, nr.2003/14, and Law Nr.03/L-106, on amendment of Spatial Planning Law 2003/14
- Administrative Instruction No. 41 for the implementation of the Law on Spatial Planning on basic elements that Urban Regulatory Plan must consist
- Guidelines and other acts regulating the areas covered by this plan.
  Obligations arising from the Urban Development Plan of the city of Kaçanik approved by Municipal Assembly Decision 01.No.5606/2010, dated 08.06.2010,
- Decision 01.Nr.332/2010, approved by the Municipal Assembly on 28.01.2011 on the approval of the Urban Regulatory Plan “Urban Zone I “of Kacanik town
  - Project task for URP drafting, developed by the Department for Urbanism, Cadastre and Environmental Protection
- Contract 01.No.16-14 273, dated 19.06.2012, for the drafting of regulatory Urban Plan Zone I, Kacanik town, Phase II, between Kacanik municipality and "INSI"

2.4 Extract (part, fragment) project tasks

1.1. Surface and boundary of the Regulatory Plan

The surface of this area is close to the 38.67 ha, but the plan should address areas which have impact and are affected by the environment on which the development of urban regulatory plan is required (defined area):

- with street "Qamil Ilazi" and "Sali Bajra" from the eastern part of this area,
- with street “Jehona Raka", and "Skanderbeg" street and the highway M2, in the western part,
- with street "Idriz Seferi" and "Agim Bajrami" in the southern and south-east part.

This area is characterized by its position in the structure of the city's central area, with its mixed existing contents (residential, commercial, service,

administrative, educational, cultural, etc., as well as mostly flat configuration with a slight slope in the southern part.

1.2. Legislative base

Regulatory plan should be understood as normative technical document which precisely defines the basic rules for construction and land use in **1st Urban Zone of the Kaçanik's area**. Rules were set by preserving all fundamental solutions defined by the Urban Development Plan and based on the Law on Spatial Planning, Law on Amending the Law on Spatial Planning, Administrative Instruction on the application of LSP on elements that Urban Regulatory Plan should contain, Law on construction, Law on Cultural Heritage, the Law on Roads, UDP, MDP, and documents arising during the planning process.

1-3.Subjects for treatment and strategic goals

Subjects for treatment for Zone I of the urban area of Kaçanik town are:

- The existing situation (data from the field),
- Uncontrolled developments.
- Urban Profile and SWOT analysis for thematic fields
- Development of economical activities in the city centre.
- The regulatory plan should take into account the following strategic goals:
- Favourable economic Development,
- Development-advancement of social services,
- Infrastructure development ,
- Preservation of the environment and rational use of land, planned densification,

2. Target

Drafting of the Regulatory Plan for urban Zone I, aims at controlling and managing urban land use within the zone as well as the promotion of economic development and better quality housing. Regulatory plan for the urban Zone I, - town centre, aims to:

- Establish set of rules for construction and methods of land use by which it rationalizes land use and construction of infrastructure and provides certain effects that are required by urban rates and achieve the best quality of housing, work, etc., in terms of the environment and security.
- Investors, constructors and political staff need to be guided by urban general indicators that protect the public interest, namely protect better and more regular life in this area.
- To implement protection of critical elements of the zone that can be sanctioned by law and which is intended to avoid arbitrary decisions based on partial interests of the individual or group.
- To compile an urban database and other GIS data on: construction fund, land for construction, infrastructure, property relations, special interests, natural features and the identity of the area which would serve along drafting of the regulation plan.
- The entire process of developing of a plan and all these activities must be realized based on the principle of public participation in all stages.

3. Objectives

3-1. Economic development

- Qualitative and attractive economy development in the future, coherent with business development,

3-1.2. Business quality

- Type/ number of businesses should be harmonised with the size and needs of the country.
- Businesses within the centre should have a proper layout in order to achieve a balanced development.

3-2. Demography and social issues

3.2.1 Preservation and harmonization of the existing mixed contents at the city centre (housing and business, service, administration, education, culture etc.)

3.2.2 Planned densification

3-3. Environment and land use

3-4. Management and rational use of land.

3-4.1. Balancing (harmonization) between economy, housing and greenery

3-4.2. Appropriate and designated use of the city centre

3-5. Infrastructure

3-5.1 Development of multi-module transport (accessibility, movement and parking)

4-1. Profile

- **Urban profile must contain these type of data:**

- topography: 3D detailed geodetic survey of the property and public facilities,

- urban : description of the actual situation in a wider and narrower context, history, ownership, density and land use

- Socio economic: population, population structure, structure of education and other economic activities.

2.5 Participants in the process

- Kaçanik municipality ,
- Municipal executive ,
- Working group consisted of municipal officials and outside experts.
- Residents of the urban Zone I for which URP is done, and citizen of Kaqanik municipality,
- LOGOS Switzerland,

3 II. PROFILE AND SITUATION ANALYSIS

3.1 Housing structure and socio economic issues

In the absence of statistical and cadastral data for the Zone I of the town of Kacanik (Census results provide data for all city but, unfortunately cadastral data are not up to date, while implemented project data were not saved and inserted in the information system as implementation projects). Survey of data as the basis for drafting of the Urban Regulatory Plan is essential. Data collection is done with a field survey through questionnaires drawn up by the author of the project, in accordance with the requirements of the Municipal Urbanism Directorate: geodetic recording, topographic data, security and other data for the land, air observation etc. Multiple visits in Kacanik town and other local and national institutions that have had information or data for the area were undertaken by the Municipality of Kacanik and INSI science Institute in Pristina together with other stakeholders of the plan, in order to obtain as much as qualitative data as a basis for decisions of qualitative environment adjustment.

Additional data were provided by different municipal directories of Kaçanik, especially on existing infrastructure about important property issues on drafting the URP, etc. Therefore different documents that present the actual situation of the different sectors in Kaçanik town respectively Zone I as foreseen by URP of Kaçanik were researched.

Preparation of digital data base and using it to create Geo- database by GIS experts, enabled the preparation of various thematic maps for Zone I of the town of Kacanik. Vectoring of the created situation (construction) is made for Zone I, as a necessary part of Urban Regulating Plan, in order to understand the construction fund in the area. Collection and analysis of data for different sectors is determinant in the development of urban profile.

Urban area situation assessment, is done by using the method of SWOT-analysis (strengths, weaknesses, opportunities and threats), from which derive general conclusions of the zone situation. SWOT analysis was done by dividing it into thematic areas. After this on the basis of general conclusions certain problems and main issues have been identified for the Plan of Kaçanik town and Zone I in particular. In order to proceed further on with sustainable development strategy for this zone and to implement the vision, goals, objectives, policies and measures as demanded from UDP have been identified local potentials that will assist Urban Regulatory Plan.

3.1.1 Identification of the problems and main issues

Rapid development in reconstruction and in the construction of new facilities in the post-war period, other than urgent space renovation for housing as a necessary reaction is being characterized by irrational expansion of facilities, compared to land use.

Development plans provide an opportunity for a proper balance of quality development and rational use of land, while Regulation Plan details in an appropriate measure in order to establish proper regulation of environment and its utilization as planned and destined by UDP. The absence of the regulation plan has created an identity of irregular construction zone, which threatens to destroy the value of cultural heritage in the area and presents other challenges for normal and sustainable development of this urban area.

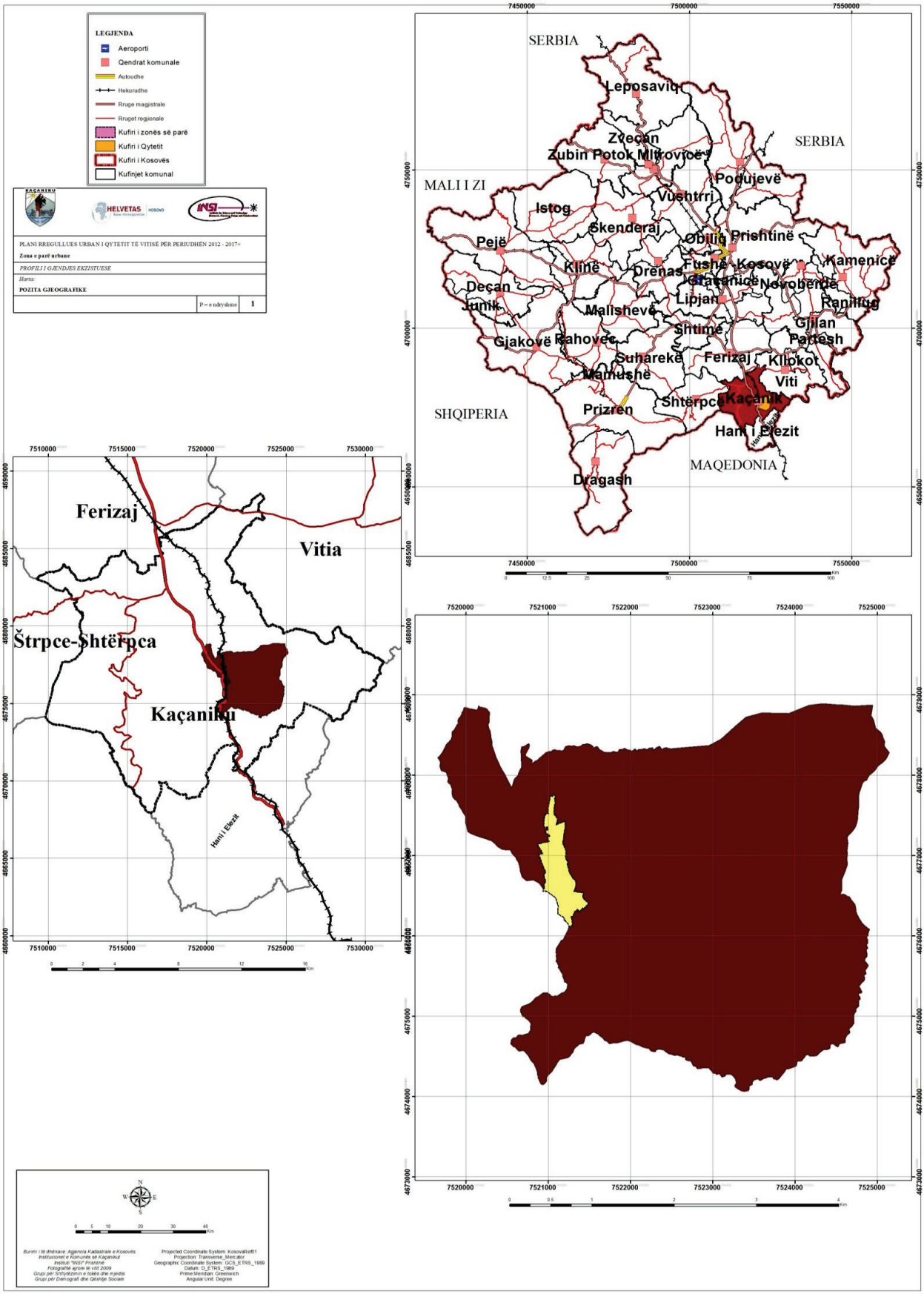
Based on the findings derived from the SWOT analysis, planning and evaluation of leading indicators in this area have identified the following key issues:

- Low and inadequate quality of the existing traffic infrastructure (motorised and non-motorised).
- Difficult and inadequate access on the construction parcels (most of the parcels have no access on public roads).
- Low standard of housing.
- Citizens low living standard.
- Uncompleted infrastructure (water supply system, sewerage, power supply etc).

3.2 Position and Orientation

Kacanik municipality lies in the southern part of Kosovo and has an area of 211.4 km ².The first urban zone for which the Urban Regulatory Plan is drafted, lies in the western part of Kacanik town cadastral area and covers an area of 38.68 ha or 386795.02 m2.

It has an extremely good position since it is known that in this area pass along rivers of Nerodime and Lepenc that give the town an attractive and beautiful scenery where at the same time through this area also cross the railway and highway Prishtina-Skopje which gives a particular economic importance to the zone. In this area there are also some items of particular importance such as; the hereditary mosque Koxha Sinan Pasha, built in 1595, then the city castle, Konak Bridge etc.



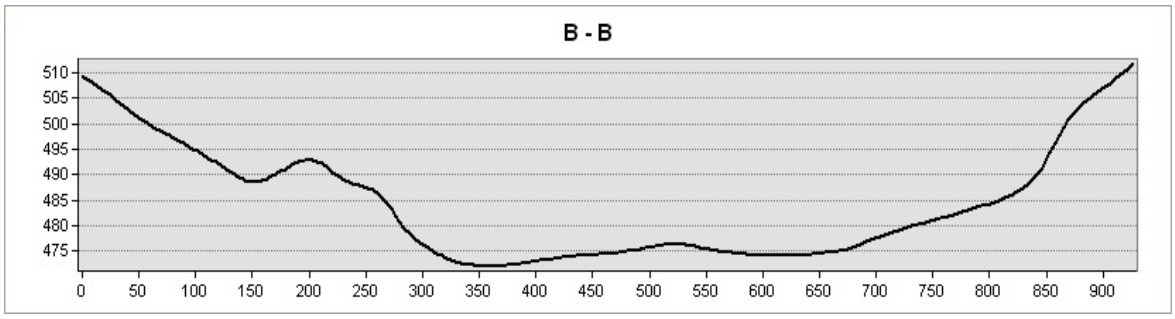
Map 2. Position of the Kaçanik municipality in the Republic of Kosovo

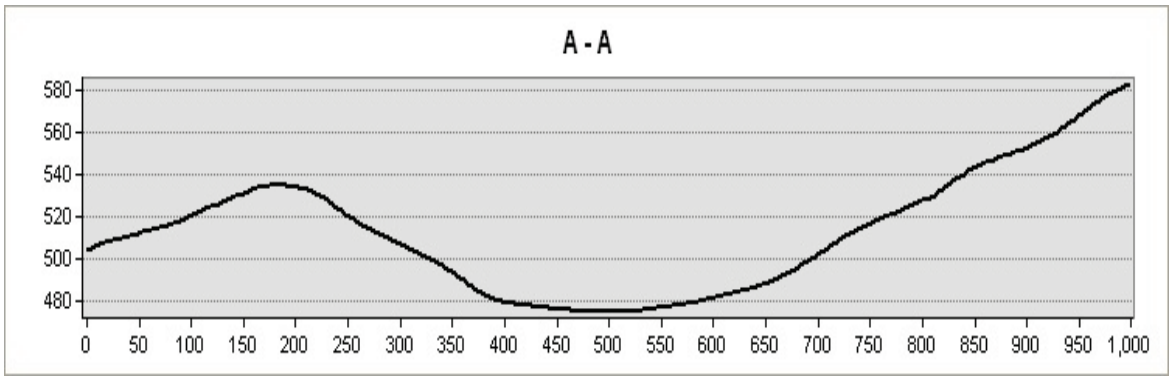
Map 3. The boundaries of the area where the URP is going to be developed

3.3 Morphological characteristics (Topography)

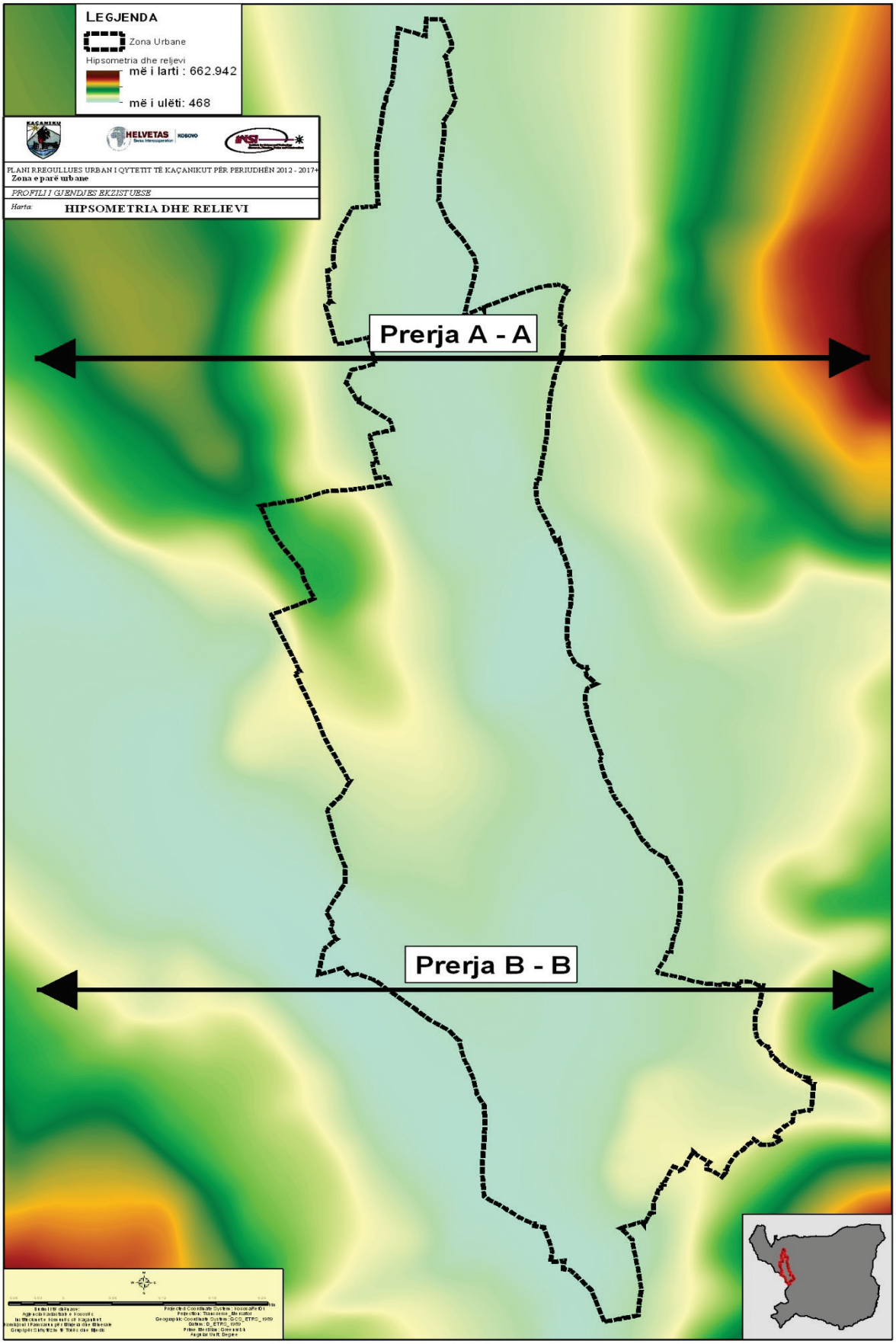
Kacanik central area lies in the valley between massifs of Sharri Mountains to the west and east Karadak where through this area stretch two very important rivers for Kosovo, Nerodime and Lepenc River. The largest surface of Kacanik central area stretches along the valley river basins Nerodime, and has a longitudinal stretch along the River Nerodime, while a small part extends along the river valley of Lepenc which has an altitude of 471m to 482 m, while another part of the city lies at slightly higher levels, from 490 m to 520 m. The altitude above sea level in the entire territory of the Zone is from 471 m to 520 m, and the elevation of the entire area is 50 m (see Map.2). In the central part begins an elevation of the mountain massif Karadak of Skopje, in which case this mountain massif has a gradual decline and serves as a physical separation of the two main rivers River Nerodime and Lepenc. Southern part is a uniformly flat with a slight decrease in the north -west, it was once part of the merging point of two rivers in this region, where this merger has moved over the geo-historical periods at a distance of 369 m. South-western part includes Lepenc River valley, with a more pronounced decrease towards Kacanik Gorge and includes a small central area, while the southern part lies in the valley of the joint river Lepenc and Nerodime. Due to topography of the zone, the settlement was developed in a stretched form along the river gorge, but at the same time along the road, and this conditioned linear form of this urban centre.

Graph. 1. A-A Cross cutting - of the Zone I urban terrain





Graph. 2. B-B Cross cutting of the of the Zone I urban terrain



Map. 4. Map of the relief

3.3.1 Geological characteristics

Geological conditions as a key factor for building of the settlements in the central area of Kaçanik have influenced in developing and building of settlements in this environment.

Based on the description of the geological map of Kosovo and other study materials carried out in the municipality of the Kaçanik, result these general features of the geological construction.

In geological construction of the Kaçanik take part these formations: Palaeozoic, Triassic, Jurassic, Upper Cretaceous, Neogene and Quaternary sediments.

Meanwhile, rock formations and mineral deposits that occurred in the area dominated by alluvium, biotitic-Muscovy and clay, sand and clay deposits, quartzes and quartzes with clay.

3.3.2 Hydrological and hydro-geological characteristics

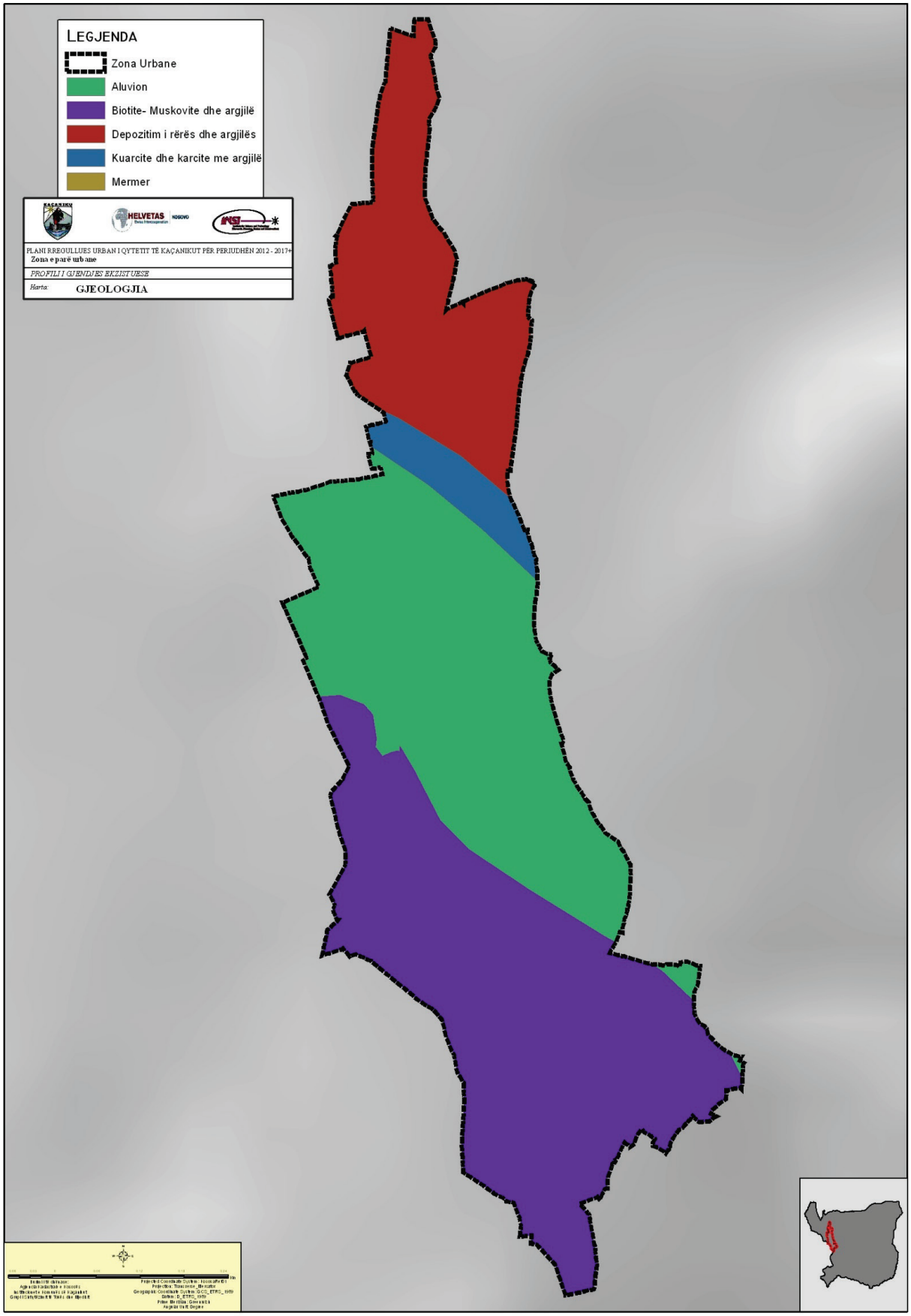
Waters as geographic element are important for the formation of initial contour of this environment. At the central zone of Kacanik town cross along two rivers. In the western part of river Lepenc which has a quicker flow with a vertical erosion, while in the central part of this area Nerodime river which has a slow leak and predominantly horizontal erosion. In this course pour in four streams:

- Tusha stream,
- The stream at the Lidhja e Prizrenit Street,
- Rakoc stream,
- Ramadan Agushi stream.

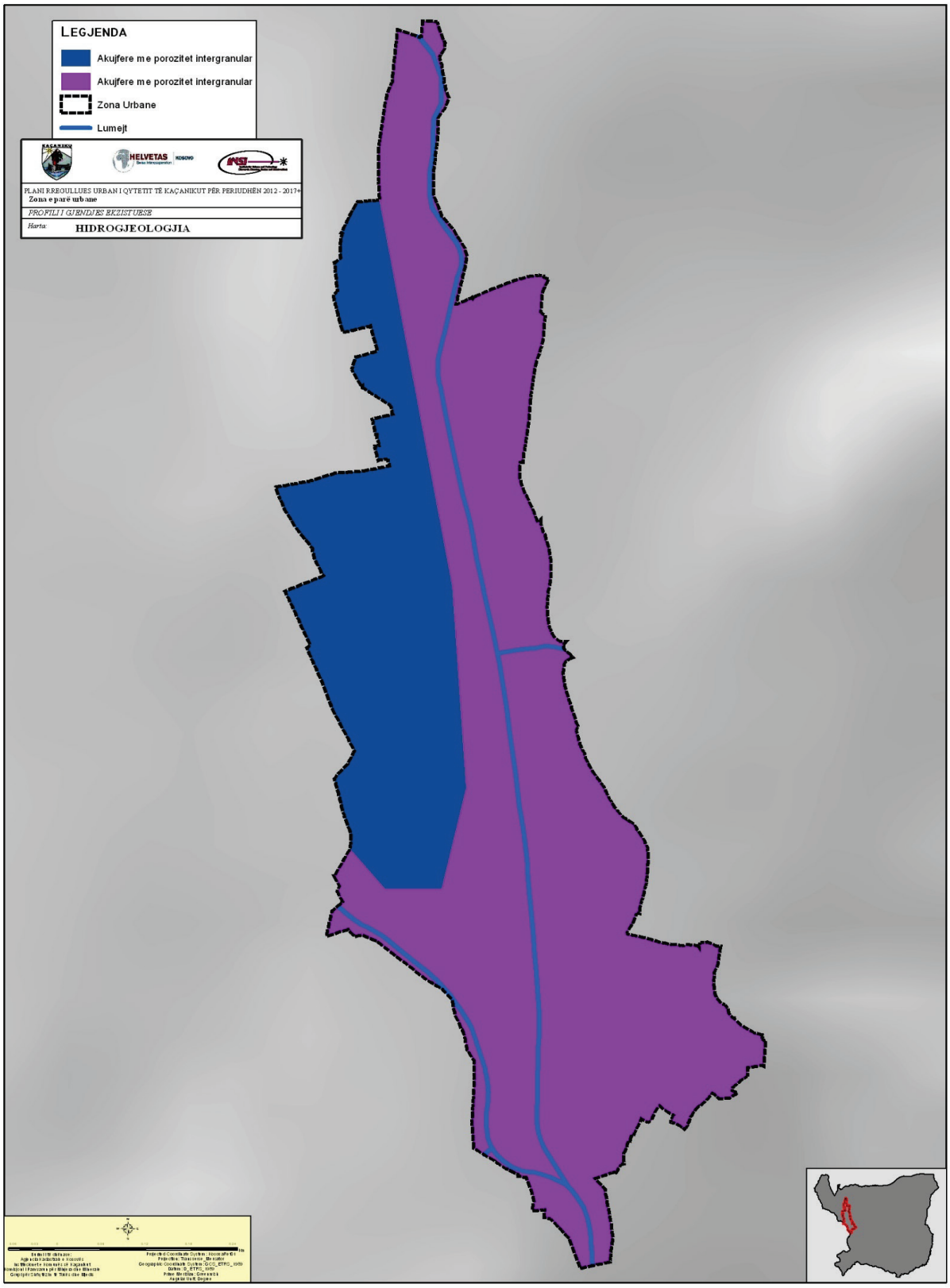
The basin of four streams has an eastern layout in the old Mountains of Karadak, where the basin is divided by a geological rounded relief with a geological composition worked out by exogenous processes.

Underground waters in the central area stretch along the river valleys with cold phreatic aquifer at a dynamic level to the earth's surface in an average of 2 - 4 m depth. These small aquifers are supplied with water from atmospheric precipitation and rivers.

Supply of these aquifers comes from atmospheric precipitation coming as a result of changing air currents in the mountain areas where it supplies Kacanik valley, while the river has a constant supply of water and with a great potential and a sustainable water supply.



Map .5. Geology



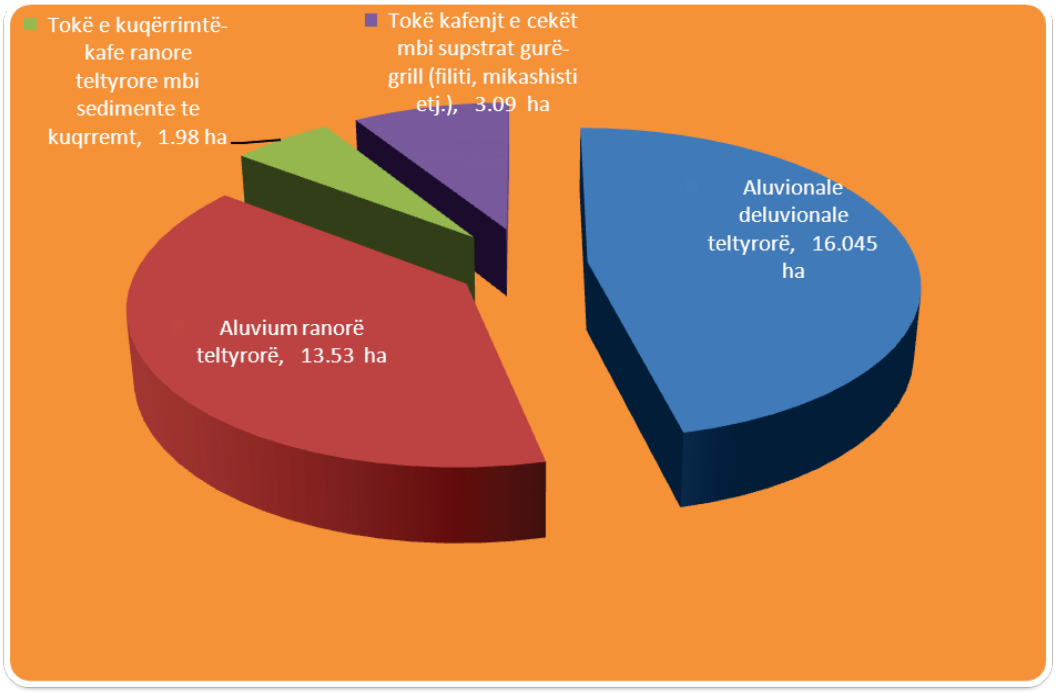
Map 6. Hydro-geology

3.3.3 Soil characteristics

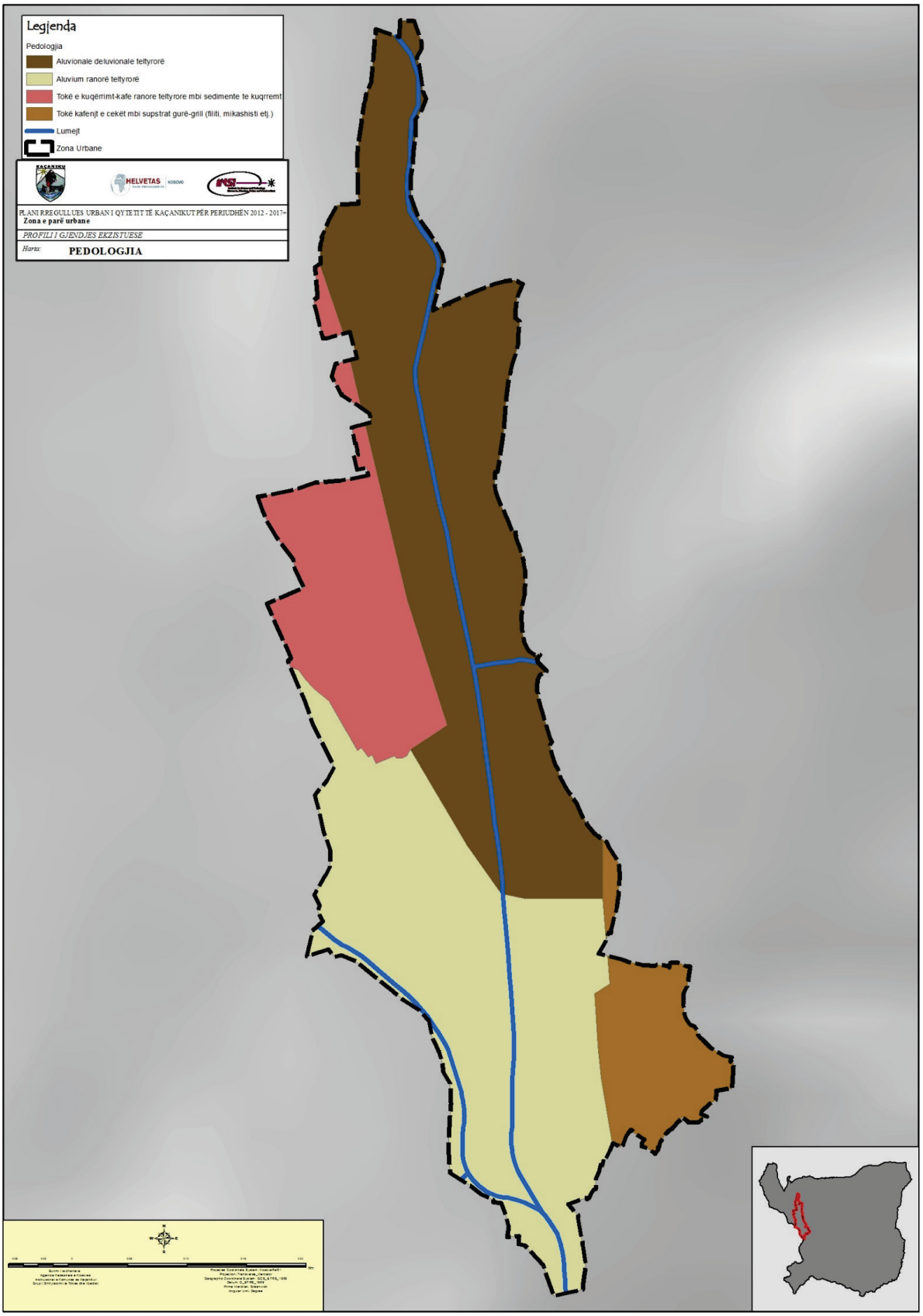
The surface area of the Regulatory Zone terrain is characterised with diverse soil where most of them include this types of soil: Alluvional deluvional deltas which are most fertile land with high biological adaptability.

Tab.1. Central Zone Soil

Types of Soil
Alluvional deluvional deltas
Alluvium sand deltas
Reddish brown delta sandy above reddish sediment
Brown reddish soil above stone-grill subtract (filit ,mika-shist etc.)
Alluvional deluvional deltas
Alluvium sand deltas
Reddish brown delta sand above reddish sediment
Brown reddish soil above stone-grill subtract (filit ,mika-shist etc



Graphic 3 Central Zone soil


Legjenda
Pedologjia
Aluvionale deluvionale teltyrorë
Aluvium ranorë teltyrorë
Tokë e kuqërimt-kafe ranore teltyrore mbi sedimente te kuqremt
Tokë kafenjt e cekët mbi supstrat gurë-grill (fliiti, mikashisti etj.)
Lumejt
Zona Urbane
HELVETAS
PLANI RREGULLUES URBAN I QYTETIT TË KAÇANIKUT PËR PERIUDHËN 2012 - 2017-
Zona e parë urbane
PROFILI I GJENDJES EKZISTUESE
Harta:
PEDOLOGJIA

Map. 7. Soil

3.3.4 Seismic characteristics

Based on seismic data from the past to the present day, the territory of Kosovo,and Kacanik municipality also have been covered by a series of earthquakes that generally had a native character. But in certain cases, the tremors were felt from the neighbouring territories of Kosovo whenever there was an outbreak of earthquakes in the area. It is worth to mention the earthquake in Ferizaj,on February 26, 1755 with the epicentre intensity I - IX of MSK-64 scale and magnitude 6.1 of Richter. Then, the one of 1921, with intensity of IX face MSK-64, which hit the region Ferizaj-Viti-Gjilan, including the territory of the municipality of Kacanik. The extent of the territory of Kosovo itself within tectonic zones and sub-zones, which are interwoven within its territory conditioned an active local seismicity but also a seismicity arising from earthquakes outside the area of Kosovo. These attest to its ranking among the territories with high seismic activity. The territory of the municipality of Kacanik in terms of seismic is characterized as not very active space based on the fact that within this space have a combination, namely tectonic contact of almost three tectonic zones (Vardar Zone, Drenica (DrinoIvanjica) and the one of Mountain Korab which have been especially active during the Pliocene. From disconnections that can be calculated within this territory is Lepenc which manifests itself within the area of Mountain Korab and which is not characterized by an expressed seismicity but that can be calculated as opportunity for the introduction of local seismic resources, then we have a break on the eastern side of the valley of Hani Elezit which includes the municipality of Kacanik and has been characterized as active seismic area.

If we analyze the seismic map of Kosovo, it is clear that the territory of the municipality of Kacanik, is related to the existence of hypo-centre of indigenous earthquakes with which are characterised wide areas of terrains as follows: Ferizaj-Gjilan-Viti-Kaçanik. Depth of hypo-centres of these earthquakes is different, but not exceeding 15 km. By analyzing the seismic map of Kosovo it derives that within the territory of the municipality of Kacanik exceed isoseismic of IX degree and the VIII degree. Isoseismics of VIII magnitude is the central area for which the regulation plan is being drafted and this area exceeds 21,460 ha or 97.5% of the territory of Kacanik.

3.3.5 Climatic characteristics

Temperature, precipitation, air

Climate

Hypsometric differentiation of the Depression and the entire mountain range mountain climate elements show by temperature and humidity its changes. All these are manifested in the hydrographical regime, soil variability, in flora and fauna and human activity itself.

Air temperatures

Changes in temperature occur from lower integrity to the higher one. The average annual temperature is 10.2^{0}C; warmest month of the year is July with an average temperature 20.6^{0}C, while the coldest month of the year is January with an average temperature 1.4^{0}C.

Monthly and yearly average temperatures in Kaçanik

Month	I	II	III	IV	V	VI	VII	III	IX	X	XI	II	Aver age year temperature
Station Ferizaj	1,4	,3	,3	0,1	4,5	8,5	0,6	0,5	6,4	0,6	,0	,5	10,2

PRECIPITATION

The large amount of rainfall gives basic characteristic to this area. From the valley toward the mountain range and the whole mountain rainfall is increasing. More rain is falling in the west of Mountain Sharr, where we have approximately larger water condensation due to the altitude, and other parts of the Kosovo valley do not have as much precipitation as the territory of the Municipality of Kaçanik what makes it different from other areas.

Average monthly and yearly precipitation

Month	I	II	II	V		I	II	III	X		I	II	A verage quantity
Kaçanik	4, 1	8,1	7,1	2,5	5,7	7,8	9,3	0,4	5,2	5,2	21,4	6,6	8 61,4

The introduction of this massif in this area has a significant impact on the movement of air currents and microclimate of the region .Starting from Kacanik valley in which the average amount of rainfall reaches 861.4 mm in the whole range of mountain precipitation is growing. In Kaçanik maximum rainfall appears in autumn and winter, this change in seasons is due not to the same intensity winds. The main types of precipitation: rain that fall in the spring and autumn season , heavy snow falls during the winter, hail precipitation that falls mainly during the late spring and during the summer, and frost which then falls mainly in the spring.

3.4 ECOLOGICAL CHARACTERISTICS

3.4.1 MICROCLIMATE

Ferizaj, is located at an altitude of 471up to 520m above sea level. In Kaçanik continental climate is prevailing. Average temperature is 10.2 C0 and lower temperatures go down to-8 C, while extreme temperatures go down to-22 C, but that does not last long - up to three days. Maximum temperatures range up to 27 C, while extreme temperatures up to 36C.

During construction, should be considered selectiion of building materials that affect increase of the temperature and severity of urban microclimate and also we should have a suitable vegetative cover selection, and stable types for the Ferizaj urban environment.

Ferizaj, throughout the year, has over 2100 hours of sunshine. In the area where construction is planned, it should comply with the height in order to ensure sufficient sunshine: 2 hours in each window, and sky visibility, minimum SVF 0.3. But in areas that are provided for individual housing must be minimum SVF 0.2.

3.4.2 NOISE

Noise or the acoustic pollution, causes stress and irritability, cardiovascular and nerve diseases. In this zone, as we have planned by Regulation Plan we have collective housing. Housing should be organised from second floor and upper since position in the first floors is not favourable due to the vibrations from the noise caused by traffic. To prevent noise from traffic in the area along the route summary and centre area (highway Pristina-Skopje), should be taken these measures: to build anti-noise panels along the track but also in the motorway Pristina-Skopje, then planting trees which have the ability to absorb shock and vibration from traffic noise. Noise at night in urban areas should not exceed 40 dB, while during the day should not exceed 50 dB.

3.4.3 AIR

Air as an integral part of the environment, in this case the urban environment must be continually tracked and monitored so as not to exceed permitted levels of air pollution, in order to reduce the effects of air pollution. In the area where the plan is being drafted, should be taken measures by planting trees, which have the capacity to absorb the emissions of NOx and SOx, CO and other gases that affect gases increase their concentration and air pollution in general. Greater pollution in the area is expected to come from dense traffic, as well as construction materials for which should be taken measures on their selection. Data taken from the questionnaire indicate that environmental pollution comes mainly from traffic pollution and noise pollution gases and particularly from dust of the lime factory.

Air pollution is a big problem all over the world with emphasis in developed countries.

Air is considered as polluted if it contains foreign substances in its natural consistence, economy and ecosystem in general.

In Kosovo there is no air monitoring system so there is no reliable results which we can refer to but based on air pollution problems that exist in the region where we are as well as poor infrastructure inherited after the war, outdated technology, number of about 215,000 vehicles together with questionable quality of the fuel, wastes from industry, it can be concluded that Kosovo has significant air pollution.

In the zone where Kaqanik's project of the urban development is going to start there is a Lime factory "New Lepenci" in the highway Pristina -Skopje.

Many vehicles in Kosovo are older than 20 years and a number of them is technically lacking.

In the market is available fuel and low quality oil which are imported and most of the vehicles don't have catalysers. Every vehicle contributes to air pollution by soot, CO, hydrocarbons, NOx, PB and other different substances such as: Benzopyrene with carcinogenic properties.

Whenever fuel quality is questionable and the vehicle is old "release" of toxic substances increases.

According to an analysis the gases released from vehicles contain 200 toxic compositions and even cancerous benzopyrene. To illustrate this we will mention that from the vehicle in each 1000 litres of burned fuel is discharged in the atmosphere 98 kg of CO, Nox,C oksidosis,4.5 sulphur compounds,o.5 kh Pb.

Its worth to mention that Kaçanik municipality includes border area in the border between Kosovo and Macedonia and frequent convoys are a one of the major sources of pollution in our town.

Based on the two intervals within 1 week we have this result:

Date	Han i E.Ferizaj	Hour 7”-8”	Ferizaj-Han i E.	Hour 7”-8”	Han i E. Ferizaj	Hour 15”-16”	Ferizaj-Han i E.	Hour 15”-16”
11.05.2011	.E-F	183	F-H.E	153	H.E-F	208	F-H.E	**146**
12.05.2011	.E-F	152	F-H.E	122	H.E-F	228	F-H.E	**196**
13.05.2011	.E-F	208	F-H.E	192	H.E-F	248	F-H.E	**230**
14.05.2011	.E-F	177	F-H.E	151	H.E-F	225	F-H.E	**208**
15.05.2011	.E-F	113	F-H.E	88	H.E-F	128	F-H.E	**117**
16.05.2011	.E-F	157	F-H.E	133	H.E-F	212	F-H.E	**197**
17.05.2011	**H.E-F**	**147**	**F-H.E**	**134**	**H.E-F**	**173**	**F-H.E**	**155**

According to this analysis we can see that on the date 13.05.2011 Friday was largest movement of the vehicles in both directions at different time intervals.

Sunday 15.05.2011 had smaller movement of the vehicles in both directions at different time intervals. So in the weekends we can say that we have less pollution by the road traffic.

Air quality has been worsened by the lack of central heating systems, illegal burning of waste in illegal landfills, electricity generators work etc.

Besides technologic and legal measures for the protection of the air, special attention should be paid to increase the surface of the green areas in the town of Kacanik, which have the ability to absorb large amounts of dust and gases as major air pollutants. As far as air, greenery can be compared with filters placed before the gases released from the chimneys of factories.

In the central Zone we have these green areas:

Area includes the core of the old city center around mosque of Koxha Sinan Pasha and continuing towards Municipal Assembly on the Boulevard "Ismajl Raka" and streets "Qamil Ilazi", and "Sali Bajra", to the House of Culture and west it passes Nerodime River and goes to the city including Fortress and town Stadium.

Green area has 1220.25 ha. Green areas need to grow significantly in the town because Kacanik has a little available green regulated surface such as: park, sports and recreational terrains, corridors and green belt along the Nerodime River and central street etc.

These areas will reach about 20 ha:

Priority is the identification o and remediation of the areas that are more attacked by pollution, noise and vibrations aiming to increase improvement of the environmental situation and decrease of the level of diseases transmitted by pollution.

Noise caused by railway and other factors in this zone:

Noise respectively acoustic as well as all other physical factors of the environment, has its actions in the body. Harmful actions of noise can come to expression in a particular organ, i.e. in the sense of hearing and other body organs. When it comes to the overall noise activities in the body, it hits the nervous and cardiovascular system. If the noise continues for a long time and its intensity is high, it appears the rate of fatigue. In this case, the sensitivity of ears drops (up to the value of 30-50dB), especially with regard to high-frequency tones (Hz voice frequency)).

First railway line in Kosovo was built in 1874 in the direction Han i Elezit- Fushe Kosova -Mitrovica. Railway is presently in a very difficult situation.

Railway infrastructure (track, signalling facilities, telecommunication and energy), then railway operations (locomotives, passenger carriages and those goods) require large investments.

So the types of locomotives passing in the urban part of Kacanik are different: local train LT, LFMT free movement train.

Trains are from 30 to 40 years, and the newer ones are about twenty years old. They are from different countries who have engaged in Kosovo, namely from Germany, Sweden etc.

Protective measures against noise can be general and local. The general measures can be counted as technological measures of insulation and the measures in terms of temporal and spatial constraints of noise.

To decrease the level of pollutant emission in the atmosphere particularly from transport as a moving source of pollution it’s being developed a plan that that offers sustainable steps for removal of the use of leaded fuel. This could relatively be implemented in Kosova since we have no oil refineries. The presence of the pollutants impacts not only the living organisms but also static and moving facilities. To illustrate this phenomenon we will emphasize that corrosion is faster including vehicles and metallic constructions in Ferizaj, Kaçanik, Han i Elezit, Viti, Prishtina then in e.g: Brezovica. It is similar thing with the facade resistance in the buildings of those settlements.

Air pollution and its negative effects in the health:

Effects of air pollution on human health reflect among other things in the respiratory and cardiovascular system. Own reactions depend on the type of pollutant (pollutants) and the person is exposed to them, then the duration of exposure, individual health status and genetic basis.

Research on the effects of air pollution on human health indicate that different chemical ingredients of aero pollution, in greater quantity penetrate the human body through the respiratory tract, causing to people not only various chronic diseases such as asthma, bronchitis, emphysema etc., but due to the large surface they penetrate in the lung alveoli and into the bloodstream and from there to other organs of the body.

As single barrier of the different toxic penetration in the airways is presented by presents inner mantle respiratory system composed of hairy cell. Lids of these cells are always in motion (around 20 motion 20 sec). On tidal movement of these lids, different particles are stopped and taken out.

In this way the internal wrapping of lids in a way functions as a filter barrier in the respiratory system. In this case it should be mentioned that the polluted atmosphere, which contains SO2, O3 and nitrogen oxides inhibits mentioned movement of the lids with the different particles, instead of taking it out it remains in the respiratory organs and hence cause damage to them.

3.4.4 WATER

Kaçanik (first Zone), based on hydro-geological data, has a stretch of surface and underground waters which unfortunately are contaminated by the effects that come as a result of anthropogenic factor activity. Impacts come from sewage drains in the area, which according to data from the field don’t have a good flow in existing sewers, then from household waste and other hazardous waste which are also discharged into the river. All these points of sewage discharge should be directed to the main collector, which will collect all wastewater in terms of their treatment point.

Characteristics and geographical position of the River Lepenc and Nerodime region

Despite the highly developed network of rivers and streams in our country they haven't been explores so much, this especially applies to rivers and streams flowing into the Aegean Sea.

Kacanik municipality environment includes southern part of Kosova. It lies between the mountain range of Mountain Sharr and Karadak Skopje, the rest of Kosovo valley includes northern parts of the municipality being penetrated by river valley of Lepenc.The entirety of the valley is limited in the west with dislocation line that goes along River Lepenc and the one parallel to it with the length of 21 km.

Lepenc and Nerodime valley consist of alluvial sediments. Lepenc springs on the northern slope of village Oshlak in 2212 m altitude. In a length of 53 km from the source to the crossing of the territory of municipality of Kacanik, takes a significant number of its branches.

Most important branch of Lepenc River is Nerodime River that joins near Kacanik, bringing significant amounts of water (2.10m ³/s (water per sec)). Given that most of the rivers go through many states and pollute seas and oceans and it becomes a global problem. This means that in addition to the pollution of lakes and seas, this includes also underground water pollution, so the problem becomes greater because this water is increasingly being used for drinking, irrigation, land, etc.

Another problem is classification of their pollution. However, we can do a kind of classification, such as urban pollution, industrial, agricultural, etc.

In these waters are present different pollutants such as: household waste, infectious agents, various agricultural fertilizers, pesticides, detergents, industrial waste, radioactive substances, etc.

It is a fact that a good portion of these pollutants are resolvable during biological processes. Inorganic and organic pollutants that are resolvable can be introduced again in the life cycle such as: plastic measures, heavy metals (Pb, Hg, cadmium) different pesticides etc.

3.4.5 The quality of urban waters

In the urban area of Kacanik two rivers are flowing: Lepenci and Nerodimja where water quality belongs to category degree II b.

Based on one analysis carried (Shehu. A; 2006), Lepenc has this condition: in four locations dominates Hydropsychiidae family, in the two previous locations their number is small, and on the third and fourth location their dominance is greater. The second location is the area of the River Lepenc in Kaçanik where Hydropsychidae family dominates by 25%, then family Isoonychiidae with 17%, which are collectors' filters, together with family Heptagenidae with 15% of other types.

Based on this analysis, we conclude that the first and second location seem to be less contaminated by two other locations which is certified and proven by biotic index values.

Nerodime River has no reliable analysis in terms of water quality, but on the basis of field observations Nerodime river has darker colour and smaller transparency, which means that pollution is greater i.e. water is eutrophic.

In Nerodime river pollutants are brought from neighbouring municipality of Ferizaj as a result of the discharge of wastewater (effluent) and waste discharge in the river bed.

Main pollutants of Nerodime River in urban zone are numerous streams flowing along with effluent water in this river bed.

Some of the existing streams that are main pollutants are:
1. Rakoci stream,
2. Tusha stream,
3. The stream from Lidhja e Prizrenit Street,
4. Stream at the Mejdi Dalloshi Street.

1. **Rakoci stream** – is one of the most polluted mainly because of the wastewater (effluent) and waste that can’t be fissionable in biological way.

2. Stream at Lidhja e Prizrenit Street – Brings along effluent wastewater (black), household waste, and a large number of fissile solid waste. In the place where this stream goes into Nerodime River is an illegal landfill of different types of waste.

3. Tusha stream – collects effluent waters, household waste, detergents and other fissile solid waste that pour into Nerodime River.

The main part of this stream is regulated with pipeline but a portion of 100 m is open.

3.4.6 LAND

Land in this area is known to be of a good quality thus greatly favours the development of plants and gardens, and can be reached quick vegetative cover of the area. Land in this area is quite in a manner of a flat slope but with a very easy slope in the middle of the area, where the western slope reaches 18%, whereas the eastern one reaches up to 11%. Measures that should be taken in this area are the measures against soil creep, control of construction materials which could lead to soil pollution. Control of pesticides, especially in areas intended for gardens, parks and green decorative areas. Construction should be made in such a way as to have as little as possible impact on the destruction of the soil structure.

Soil should have adequate ventilation and enough sunshine in order not to impact the living world. All polluting activities that cause soil pollution should be removed from this area.

3.5 Urban area convenience

This zone is very convenient for urbanism as its contours are extremely flat and suitable for construction and other developments.

3.6 CURRENT STATUS AND ZONE CAPACITIES THAT ARE INCLUDED BY PLAN - BASIC FEATURES OF ENVIRONMENT

3.6.1 ENVIRONMENT USE

(Zoning and land use)−

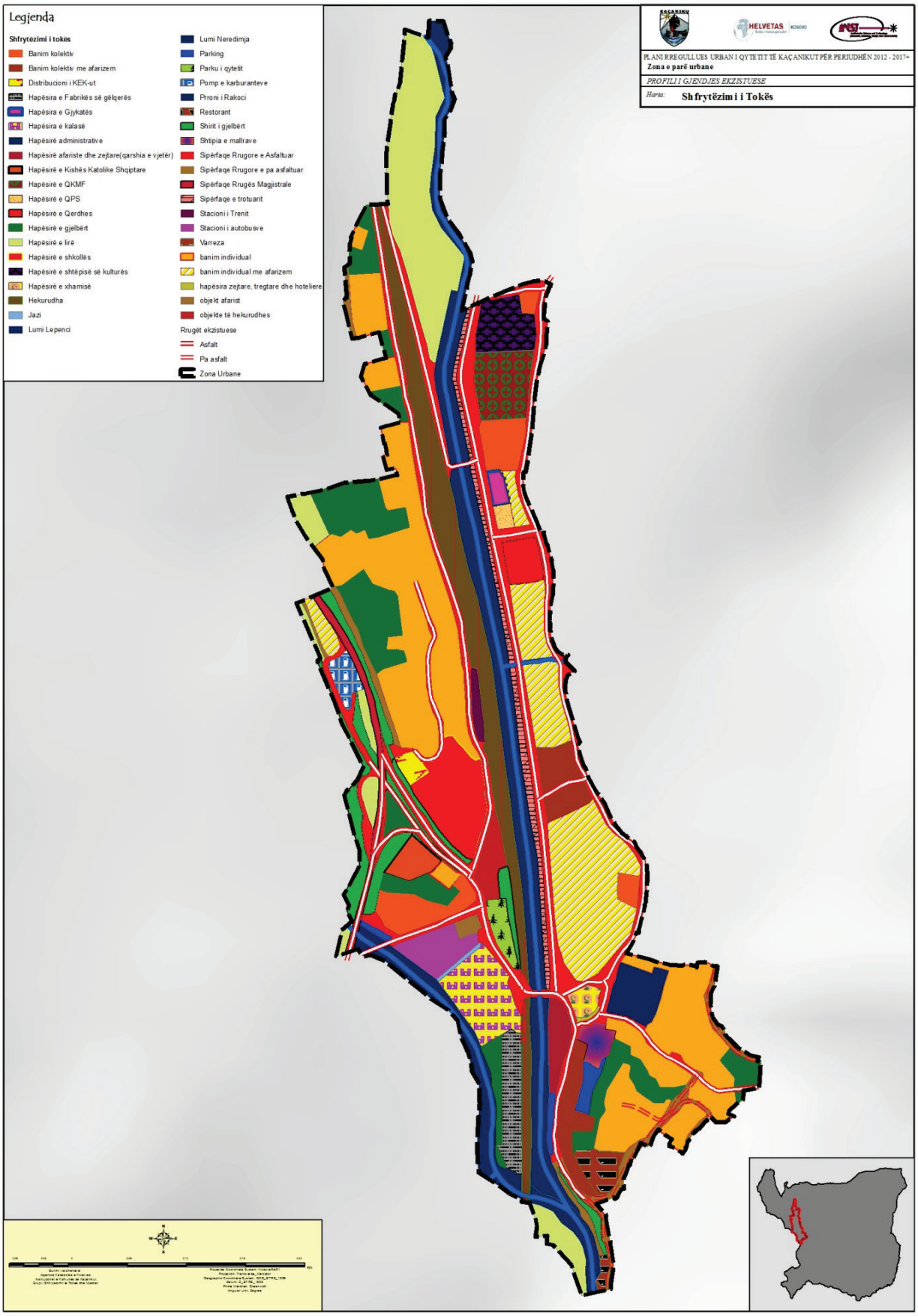
Surface coverage

Based on UDP, Kacanik town is divided in 3 zones. The first zone (I), is bounded on all sides with second zone (II). Zone I has heterogeneous structure dominated by low residential construction, while in the axes along the main roads that limit the area, are built facilities which develop different activities: business, commercial, manufacturing, service, craft, cultural, health, education etc. The field research shows that most of the buildings were built before the war in Kosovo, while along the road, (Pristine - Skopje), constructions took place after 1999, mainly in facilities which develop different activities. For this area it was required by the cadastre office official information for public properties which are essential in the process of area regulation. Provision of information, would enable the presentation of public spaces in maps.

Source: Directory of Urbanism in the municipality of Kacanik , December 2010 and area research , December 2010.

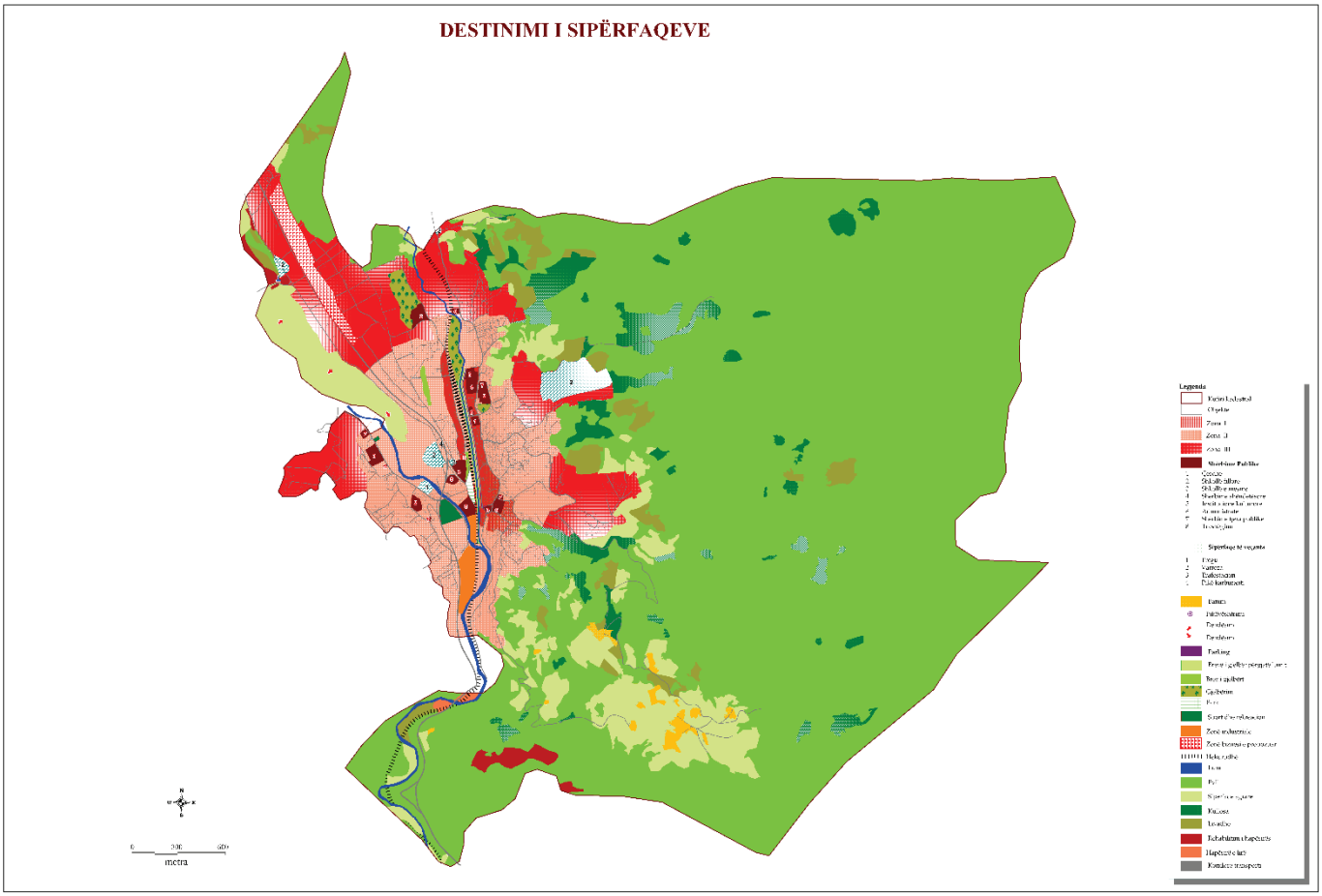
Use of areas	ha
Individual housing	.26
Cemetery	.5
Individual housing /business	.98
Collective housing	.97
Collective housing	.94
KEK Distribution	.1
Lime factory area	.47
Court area	.1
Castle area	.77
Craft , trade and catering area	.01
Administrative area	.43
Business and craft area(old square)	.27
Green area	.73
Albanian Catholic Church area	.24
Free area	.99
Kindergarten area	.26
MCFH	.61
SWC area	.07
School area	.92
Cultural house area	.48
Mosque area	.13
Railway	.49

Dam	.03
river	.6
Business objects area	.07
Railway objects	.26
Parking area	.22
Town park	.19
Gas station	.18
Rakoc stream	.02
Restaurant	.05
Green belt	.22
Mall	.18
Sidewalk area	.54
Regional road area	.42
Asphalted road area	.04
Not asphalted road area	.79
Bus station	.4
Train station	.11


Legjenda
Shfrytëzimi i tokës
Banim kolektiv
Banim kolektiv me afarizem
Distribucioni i KEK-ut
Hapësira e Fabrikës së gëlqerës
Hapësira e Gjykatës
Hapësira e kalasë
Hapësirë administrative
Hapësirë afariste dhe zejtare(qarshia e vjetër)
Hapësirë e Kishës Katolike Shqiptare
Hapësirë e QKMF
Hapësirë e QPS
Hapësirë e Qerdhes
Hapësirë e gjelbërt
Hapësirë e lirë
Hapësirë e shkollës
Hapësirë e shtëpisë së kulturës
Hapësirë e xhamisë
Hekurudha
Jazi
Lumi Lepenci
Lumi Neredimja
Parking
Parku i qytetit
Pomp e karburanteve
Prroni i Rakoci
Restorant
Shirit i gjelbërt
Shtipia e mallrave
Sipërfaqe Rrugore e Asfaltuar
Sipërfaqe Rrugore e pa asfaltuar
Sipërfaqe Rrugës Magjistrale
Sipërfaqe e trotuarit
Stacioni i Trenit
Stacioni i autobusve
Varreza
banim individual
banim individual me afarizem
hapësira zejtare, tregtare dhe hoteliere
objekt afarist
objekte të hekurudhes
Rrugët ekzistuese
Asfalt
Pa asfalt
Zona Urbane
HELVETAS
PLANI RREGULLUES URBAN I QYTETIT TË KAÇANIKUT PËR PERIUDHËN 2012 - 2017+
Zona e parë urbane
PROFILI I GJENDJES EKZISTUESE
Harta:
Shfrytëzimi i i Tokës

4 Extract from earlier plans

Kaçanik as well as all other centres of Kosovo have inherited urban plans, which in most cases did not meet the criteria to be applied. This happened since Kosovo in that period of time was under the rule of foreigners /Serbia /. In 2010 the municipality of Kacanik approved MDP and UDP.



Kaqanik’s urban structure is consisted of three main areas that correspond to each other representing urban area in general while empty spaces within the urban borders continue to be completed with construction.

Central zone includes the core of the old city centre, around mosque of Koxha Sinan Pasha and municipal assembly, continuing northward, between the streets "Ismail Raka","Qamil Ilazi" and "Sali Bajra" to the House of Culture, while in the west passes Nerodime River and goes back to the stadium of the town, including the castle. Central zone is distinguished by the presence of public facilities, cultural and commercial ones which surround the individual housing facilities, and more recently appeared some collective housing facilities.

Other residential areas of different activities surround the city centre, main streets toward the centre, as well as some side streets near the centre that are distinguished for commercial activities in the form of shops that contain different types of goods.

The housing areas are developing in all areas of city centre, less in the west side while industrial area is located south of the town near Lepenc River.

Urban structure of the Kaqanik area in the future may be constituted by some empty spaces also (Dushkaja and Bob residence, which will be completed with buildings. Destination of the treated surfaces within the cadastral boundary of the town where are included some built

surfaces, transportation, special surfaces and green areas. A part of the town will continue to develop in cadastral settlement of Bob, with relevant and vital content for the city.

Built surface area in accordance with planned time period to the Urban Development Plan (2009-2020) will be 308 ha. From generally built total area of 308 ha built, most of it will function for housing with 296 ha, or 96%.The central part of surface area occupies 15.78 ha, or 5.1% (housing and services), institutions public services will occupy an area of 7.4 ha, while industrial surface will be...

4.1 TECHNICAL INFRASTRUCTURE

4.1.1 Transport infrastructure

Traffic planning has a key role in the management of public and private income of a country. Kacanik Urban Development has major obstacles to implement this plan, primarily due to age and major changes. Position of the Zone I is very significant for the road infrastructure and represents a chance for development of Kaçanik in a functional city with appropriate contents for a better quality. Given the increasing number of vehicles and greater economic development of the country and its citizens' demands for normal development of the traffic it is necessary to fix the road infrastructure. Movement of vehicles in the intersection is regulated by horizontal and vertical signalization. This way of vehicle circulation is very important to orient vehicle drivers along their movements.

Some of the intersections in Zone I of Urban area are regulated by vertical signalling and much less with horizontal signalization which doesn’t have sufficient visibility due to the poor quality of the material.

4.1.2 Current status of the road infrastructure in the Zone I of the urban area

Road infrastructure which includes Zone I of the Regulatory Plan of the Municipality of Kacanik, is all paved, where we have few damaged ones and at the same time not all of them have standardized distances from residential areas. The movement of vehicles is developed in two directions with one lane direction that has speed limit. Currently traffic on this road is regulated by horizontal and vertical signalling except for a portion of it. It should be noted that horizontal signalization in the longitudinal direction of roads is lacking, in some parts of the road, where road condition as well as signalling are shown in the pictures below, which represent the real situation of the roads.

In the zone I are included a total of 20 intersections, out of which 10 are provided with vertical and horizontal signalling in some parts of the roads in Zone I. The road names that are included in this area are:

Street “Skenderbeu”,
Street. “Agim Bajrami”,
Street. “Ismail Raka”,
Street. “Qamil Ilazi”,
Street. “Sali Bajra”.
Street. “Jehona Raka”
Street.“Dëshmorët e kombit”,

Regional road,
Street. “Mukadeze Lika – Muhagjeri”,
Street. “ Mejdi Dalloshi”,

Road network included in this area (Zone) has a length of 4429 m or 4.429 km.

Street. “Skenderbeu” presented in the photo 1 and 2.
Street’s length: 884 m,
Street’s width: 6 m,
This part of the road has a sidewalk in the left and a part of it in the right side of 1 m width.
There is no parking lot.
Vertical signalling marks speed limit of 30 km/h and parking ban.

Photo .1.

Photo. 2.

Street “Agim Bajrami” presented in the photos 3 and 4.

Street’s length: 460 m,
Street’s with is changeable.
The sidewalk in this street is included only partially with 50 m. Length and 1.5 m width..
The street width is 6 m for each lane.

Photo 3.

Photo 4.

Photo 5.

Regarding street “Agim Bajrami” is worth to mention that this road intersects with levelled railway, it’s equipped with vertical signs, protection ramp exists, but it’s very dangerous since it has a lot of pedestrian and vehicle traffic. It is presented in the photo no. 5.

Street. “Ismail Raka”, is presented in photo 6 and 7.
Street’s length: 892 m,
Street’s width: 8 m,
The width of the sidewalk in the right side 4 m, while on the left side is 6 m including green part. Paralal to this road stretches Nerodime River with 24 m width.
There is a parking space on the left side of this road and total of 160 vehicles can be parked.

Photo 6

Photo 7

Street. “Qamil Ilazi” and “Sali Bajra” that are presented in photos 8, 9, 10 and 11
Street’s length: 1055 m,
Street’ width: 7 m, average.
There is no sidewalk in this street and there is no parking space.
Vertical signalling marks speed limit of 30 km|h.

Photo 8.

Photo 9.

Photo 10.

Photo 11.

Street “Mejdi Dalloshi” presented in the photo 12.
Street’s length: 860 m,
Street’s width: 2.5 m to 5 m,
There is no vehicle parking lot

Photo 12

Street “Jehona Raka”, presented in the photo 13.
Street’s length: 375 m,
Street’s width: 3.00 m

Photo. 13

No name roads:
Crossing of the street "Skenderbeu" in" Ismail Raka "
Length of route: 400 m,
Road width: 3 m.
Also "it is worth mentioning that this road crosses the levelled railway, this road junction has vertical signs, there is no protective ramp, and it is dangerous because it's attended by pedestrians and vehicles, which is shown in photo 14.15.

Photo 14

Photo 15

The one way traffic street behind the Cultural Centre presented in the photo no.16
Street’s length: 90 m,
Street’s width: 3 m,

Photo 16

Street at Department of social issues presented in the photos 17,18.
Street’s length: 54 m,
Street’s width: 6 m,

Photo 17.

Photo 18.

Street at the P+8 building presented in photo 19, 20.
Street’s length: 69 m
Street’s width: 5 m

Photo 19.

Photo 20.

Other parking areas are: at the building P+8, 40 vehicles may be parked.

There is no public transport of the passengers by busses in this area even though there is a bus station in this Zone but transport lines are mainly stretched to rural areas.

Kacanik's municipality advantage is that this area is traversed by the railway network of the national character and has a north-south stretch, by which it connects the capitals of the two neighbouring states of Republic of Kosovo and Macedonia.

Rail infrastructure in this area is intersected in two places with motorways and presents a great danger for the citizens.

4.1.3 Technical description of placement of horizontal and vertical signalling in the urban Zone I of the Kaçanik

Rapid development of the town requires the increase of the road infrastructure standards which is necessary for further development. Despite this the number of residents is increasing and therefore it requires improvement of the citizen movement in the traffic. Based on the analysis and calculations we came to the conclusion that treated intersections of the city, is satisfactory as it does not have huge time loss, but due to population growth the rate of motorization will increase so we have predicted that in the future there may be more time loss, so in order to make these losses minimal we need to expand roads and crossroads so that there is enough space for circulation referring to construction lines, in order to have better service compared to the existing situation.

According to this we can anticipate that horizontal and vertical signalling should be scattered in the entire Zone I of the urban area as it follows:

Street "Skënderbeu", vertical signalling: (signs): speed limit 30 km / h, the name of the road, stopping and parking ban, the school proximity , pedestrian crossing sign, stop sign, parking sign, road junction with priority driving, Andrew cross, bicycle path, "Skanderbeg" street intersects with "Agim Bajrami" street where the main road would be "Agim Bajrami" street, as it crosses with the neighbourhood street of Dushkaja and no name street towards "Ismail Raka, where this road crosses the railway track, horizontal signalling: pedestrian crossing sign, stop line before the pedestrian walkway, the parking spot sign, full longitudinal line sign.

Street "Agim Bajrami", will have the advantage over the road "Vëllezirit Çaka" and vertical signs which will be placed are: speed limit 40 km / h, the name of the road, stopping and parking ban, pedestrian walkway, orient of the institution, stop sign, Andrew cross sign, parking, taxi parking, one-way street, obligated passing on the right side, the road junction with priority of driving, forced direction, bicycle path, priority road crossing, road extension priority passage with "Ismail Raka", also this road crosses the railway track with a pair of binary, horizontal signalization: pedestrian crossing sign, stop line sign before the pedestrian walkways, parking lot sign, interrupted longitudinal line, parking place sign.

Street "Qamil Ilazi" and "Sali Bajra", will have priority over secondary roads and vertical signs that will be placed are: speed limit 30 km / h, the name of the street sing, stopping and parking stops, pedestrian crossing sign, the street with one-way circulation, the junction with the road passing priority, parking, bicycle path, a road with priority crossing, horizontal signalling: pedestrian crossing sign, stop line before the pedestrian walkway, the parking spot sign, full longitudinal line.

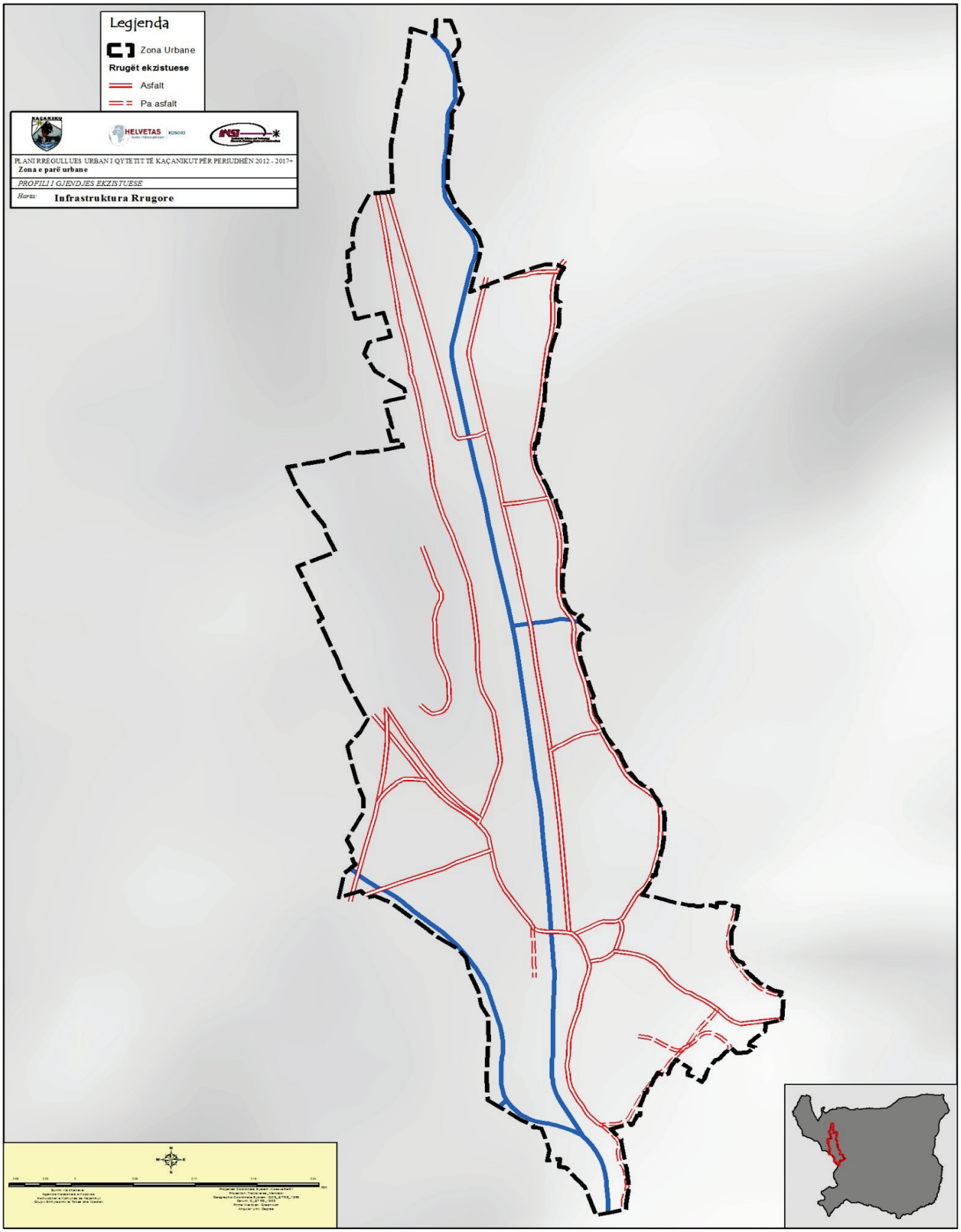
Street “Ismail Raka” will have priority towards secondary roads and vertcalk signs that will be placed are: speed limit 40 km/h, street name, stopping and parking ban, pedestrian crossing sign, traffic ban in one direction, priority road crossing, intersection with priority rad crossing, parking sign, bicycle path, horizontal signalling: pedestrian crossing sign, stop line before the pedestrian walkway, the parking lot sign and full longitudinal line.

Street “Mejdi Dalloshi”, this street intersects with “Qamil Ilazi” street. Vertical signs that will be placed are speed limit 30 km / h, the name of the street, stopping and parking ban, intersection with priority road crossing, stop sign, parking sign, bicycle path sign, horizontal signals: pedestrian crossing sign, stop line before the pedestrian walkway, the parking ***lot*** sign and full longitudinal line.
Street "Jehona Raka", this street intersects with the street in the neighbourhood, "Martyrs of the Nation" and the regional road, vertical signs that will be placed are: speed limit 30 km / h, the name of the street, stopping and parking ban, pedestrian walkway, stop, bicycle path, sign of a dead-end street, horizontal signalization: pedestrian crossing sign, stop line before the pedestrian walkway, the parking lot sign and full longitudinal line.

4.1.4 Parking

Town’s layout and presence of the important lines of road infrastructure is also presenting a problem for the parking lots in the Zone I of urban area.

Based on the organization of the movement of vehicles and pedestrians in the town, in order to create an adequate infrastructure, by using existing infrastructure we must do the planning for the establishment of parking for vehicles (parking lots), in such a way as to extend the roads sidewalks in order to improve and increase the number of parking spaces in urban Zone I. The necessity to increase the number of line parking spaces would be in the streets "Qamil Ilazi", "Sali Bajra", "Agim Bajrami" "Skanderbeg",and "Mejdi Dalloshi". A more appropriate solution for a modern and qualitative parking, will be the construction of an underground parking lot or one with floors at the town entrance, which would be a good choice for tourists that will visit our municipality. In this area should be also included reserved spots for taxi vehicles, which may be marked in two ways in two ways depending on whether we realise parking in groups or individual parking, based on the configuration of the Zone I of the urban area it is necessary to build two taxi parking lots close to the castle and in the outskirts of the town where parking lots exist but some infrastructure regulation is needed.



Map 9. Road infrastructure

4.2 Telecommunication

4.2.1 Telecommunication distribution networks in the municipality of Kaçanik

Landline telephones – Landline phone network of the urban area in Kaçanik is connected via optical fibber which belongs to the Ferizaj-Hani i Elezit track. This network is managed by PTK unit in Kaçanik which has a postal facility in its possession and a optical fibber switchboard. 400 phone numbers are being used from the total capacity of Kaqanik postal switchboard.

The following table presents usage of the landline phones in the urban area of Kaçanik.

Table 2. Population with landline phone access

No.	**No of pop.**	No of users
Pop. With access to landline phone	13 450	400
Number of households	19 21	
% of the use of landline phones	20. 82%	

Based on the table we can see that the land line network in the urban area of Kacanik is extended quite well, but its usage level is very low, because the ratio of the number of users by the number of households shows that only 20.82% of urban citizens use the fixed telephone network.

Mobile telephony – in the territory of Kacanik urban area is well covered. All citizens of the urban area of Kacanik have access to mobile phone services, which are provided by two operators that are licensed by the TRA. The two mobile operators have individual antennas distributed in different locations in the municipality, but only IPKO operator has placed an antenna on the territory of urban area.

Postal services - in the urban area of Kacanik are distributed according to streets and addresses that are recorded in the database of PTK from Kaçanik unit.

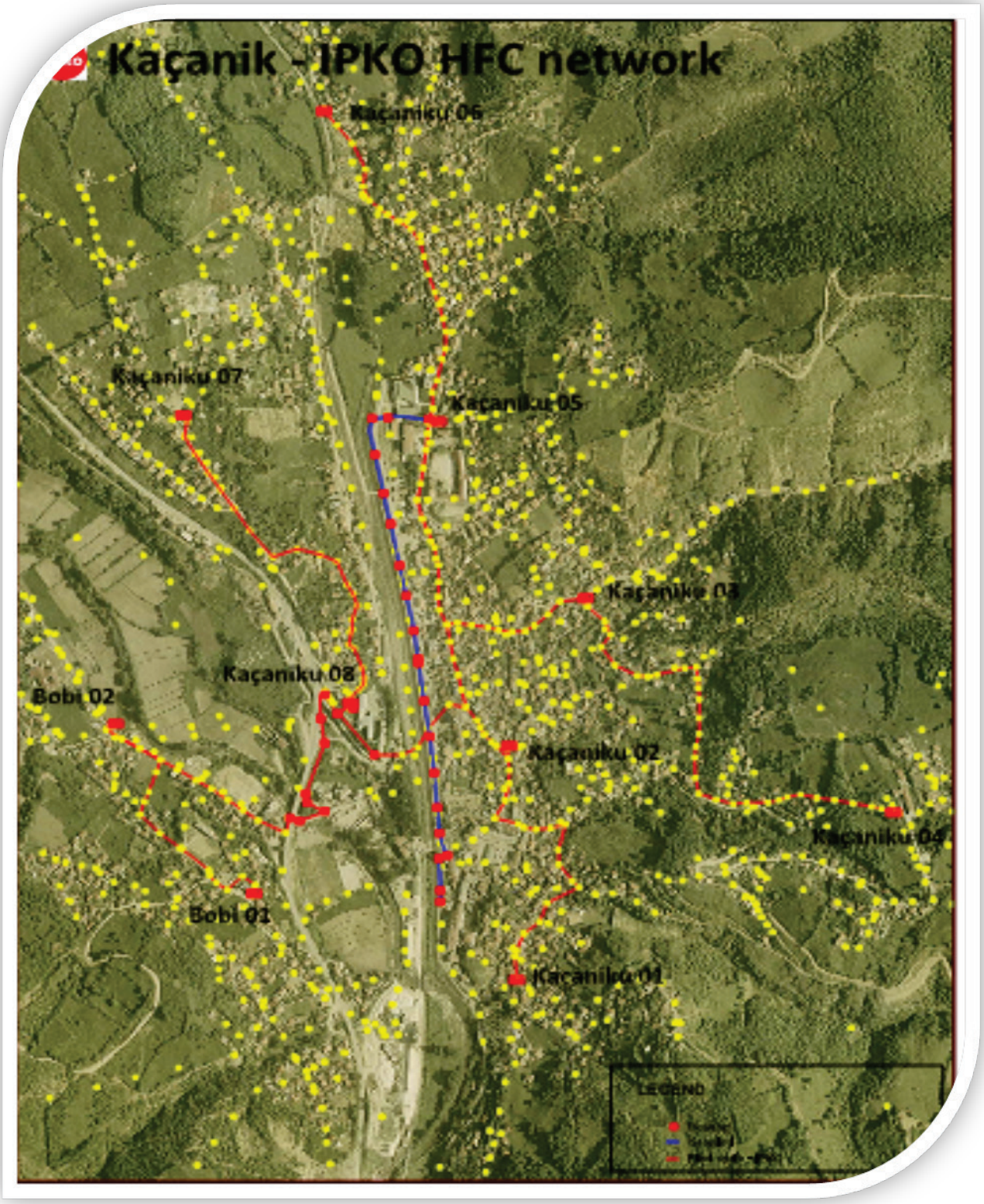
Internet services – There are several operators that provide Internet service delivery in urban area of Kacanik and they cover very well the entire territory of the urban area. Internet in urban area is mainly spread at Internet cafes and certain individual and institutional connections. Operators with greater impact that provide Internet services are:

1. PTK - Darda NET, through telephone landline
2. IPKO – provides internet services through antennas (individual) and
3. KUJTESA – provides services through antennas (individual)

4.2.2 Telecommunication network

On the map 10 is shown the layout of the underground and air cables of the PTK.

In map 8 is shown layout of the IPKO operator.


Kaçanik - IPKO HFC network
Kaçaniku 06
Kaçaniku 07
Kaçaniku 05
Kaçaniku 03
Kaçaniku 08
Bobi 02
Kaçaniku 02
Kaçaniku 04
Bobi 01
Kaçaniku 01
LEGEND

Map .10.

4.2.3 Cable network

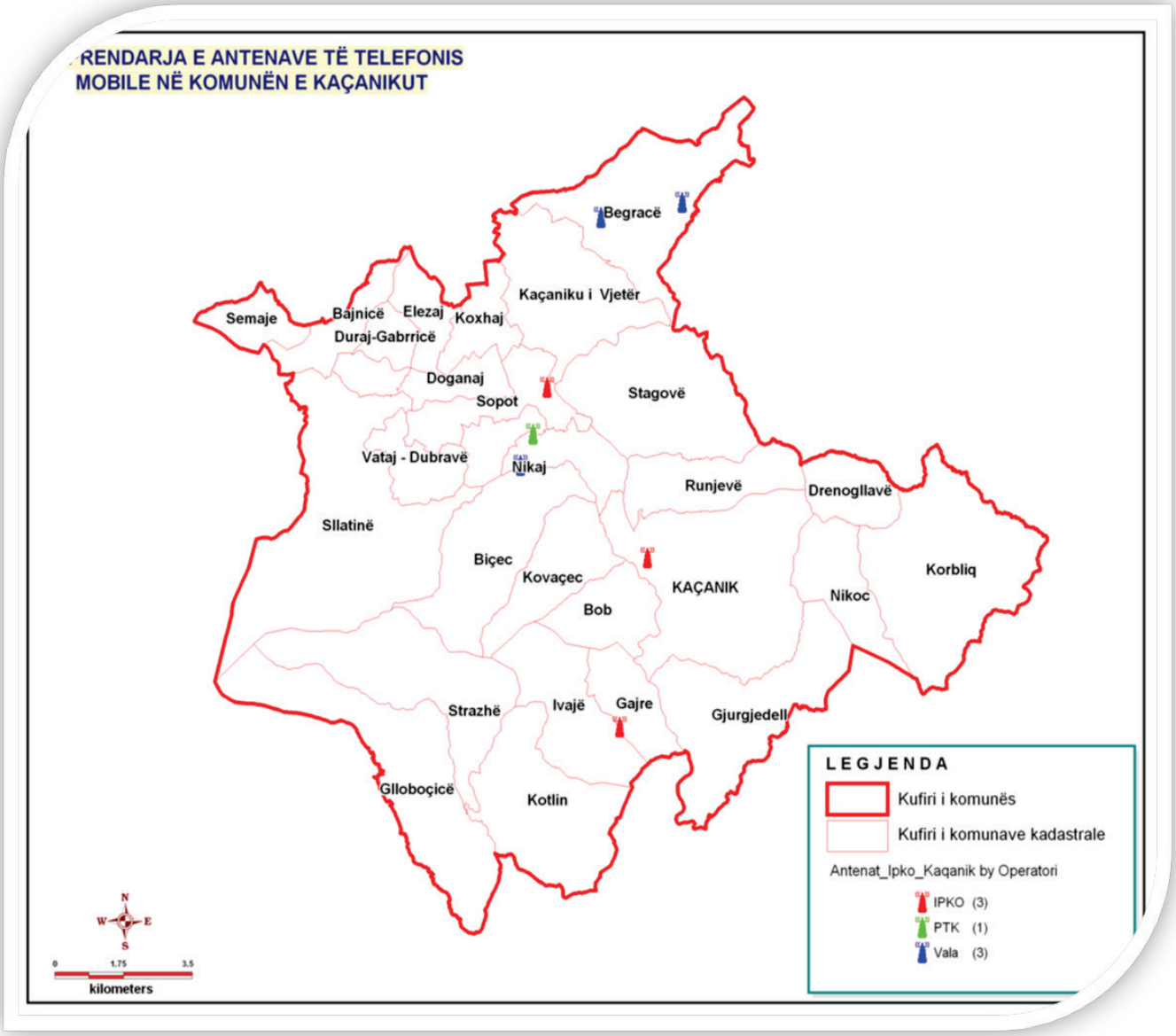
IPKO-cable network and placement of the connections

PTK-s cables network and placement of the connections as shown in the map 7.

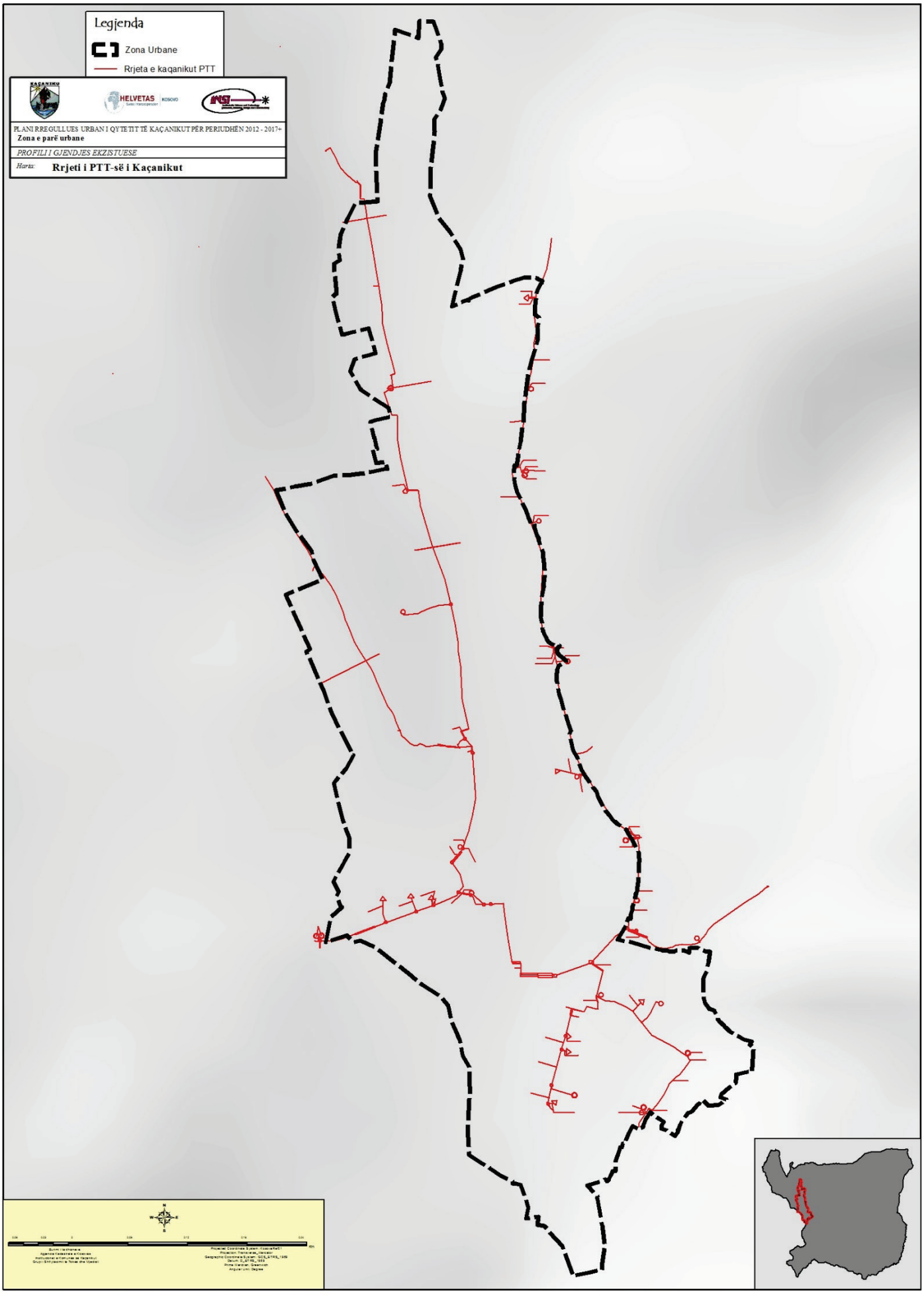
4.2.4 Antennas

In Kaçanik in total are 7 antennas from which 3 belong to Vala, 3 to Ipko and one to PTK.

Distribution of cell phones antenna in the municipality of Kaçanik.



Map 11. Mobile telephone antennas



Map n.12. PTK-network

4.2.5 Water Supply System

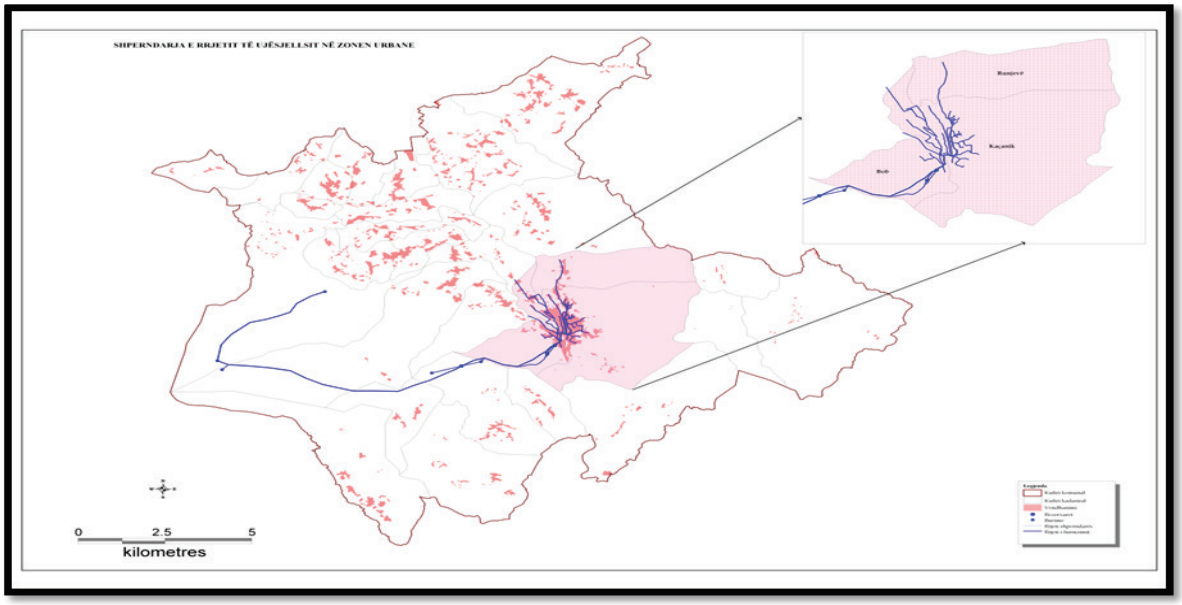
Water supply and sewerage system (sewage and storm water) in Kaçanik is managed by municipal public enterprise "Lybeteni" which has a service agreement with the municipality and is licensed for this purpose. Water supply system in Kaçanik gets the water from five sources with a total capacity of Q=40-44 litres/sec, depending on the season. These water resources for the supply with drinking water are mainly resources on the located at Luboten Mountain.

1. Largest source called "Uji i Bardhë", has an altitude of1475 m in the cadastral territory of Dubrava and has a capacity of Q=18-24 litres/sec.
2. Second natural resource is "Reka e kafexhisë" and is located in the territory of Gllboçica with a distance of 700m from the first resource, with a capacity of Q=16 litres/sec.

   Water from resources with pipes PE (polyethylene) with a diameter of Ø 110mm in a length of 700m is accumulated in the common cascade with dimensions of 3.2mx3.4m. From this resort with a tube of Ø 225mm and length of 800m water is sent to the first switching cascade.
3. The third resource with a capacity of Q=5 litres/sec has an altitude of 1600m (western part of the territory of Gllboçica). In the level of the first switching cascade, the water from this resource is added to the reservoir.
4. In the territory of Ivaja, exist two more natural resources with a capacity of Q=2x2.5 l/sec with pipes AC- asbestos cement Ø 150mm placed in 1968, which flow to the joint reservoir.

The main network of water supply system from the resource to the main reservoir lies on the ground with very steep configuration in which are distributed 14 switching cascades which regulate the water flow pressure. These switching cascades, all with dimensions 3.20x3.40m, are placed next to the main pipeline Ø 225mm. In the territory of Ivaja is located the reservoir-cascade with a capacity of V=120m^3, where is done the disinfection of water and first jointing of the distributing network in the neighbourhood of Dushkaja, and with polyethylene pipes Ø 125mm to Ø 150mm, depending on the terrain, it continues to the central reservoir with a capacity of V=440m^3 (two basins 2x 220m^3) which is located near a place called "Livadhet e Bobit" with an altitude of 555m. From here the main distribution network with a diameter of Ø 220mm and a length of1600m continues along with the jointing network for the city with a diameter of Ø 63 mm and a length of 21 km.

Water supply system of Kaçanik, supplies the entire city as well as two other settlements such as Bob and Runjevë with water. In this system have access 15958 inhabitants or 41.80 % of the total population in the municipality.



Map. 13. Extension of water supply system in the urban area by UDP

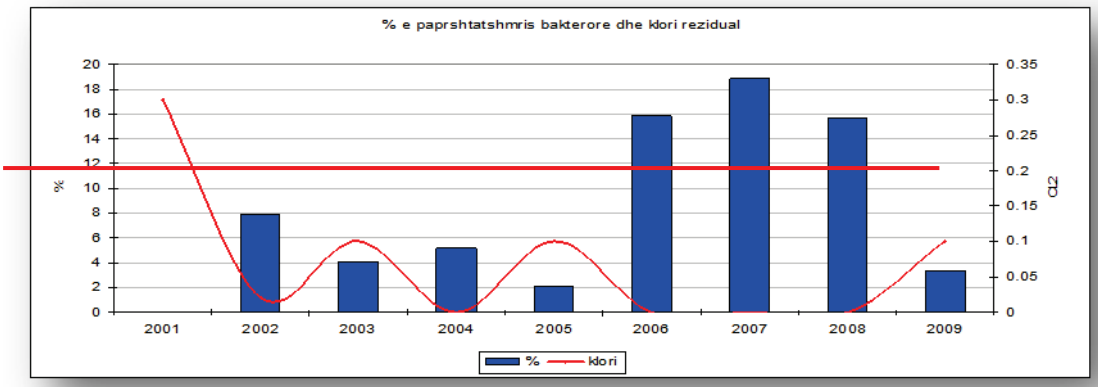
In this system are connected 1950 identified customers:

- 210 handicraft facilities,
- 40 institutions and
- 1700 households.

Almost all the urban area of Kaçanik, around 95%, is connected to the water supply system whereas settlements of Bob and Ruvenje are 100% connected. By this system, based on the quantities of water which are currently available, the average daily consumption per capita is estimated to be approximately 200-250 litres per day. Compared to EU levels, water consumption per capita is good. Despite the great capacities of resources during the summer months there are problems with water supply especially in the critical points of the system (high areas and remote points). Main reasons for such problems consist with the fact that water losses in the distributing system are at a very high level – around 60%. These losses represent the difference between the amount produced and the amount of billed water. These problems present technical losses, which are estimated to be 40%. Main factors influencing this high rate are considered to be: obsolete network of water supply system, illegal connections, non-accurate measuring of water etc. Collection for 2008 is considered to be around 55-65%.

Treatment of drinking water is done with the disinfection/chlorine of the system, and also in the joint reservoir (territory of Ivaja) where the system of chlorine with gas has been built in 2003 and currently is not operating. Currently chlorination is done with liquid chlorine, which is not in conformity with the standards set by legal provisions, and is reflected in the quality of water. Distribution of water is done through the free flow with gravitation.

Quality of drinking water from the water supply system of Kaçanik is controlled by IRSHP-Ferizaj since the beginning of the operation of the aqueduct. Frequency and the number of test points are provided in accordance with the foreseen standards IA 2/99.



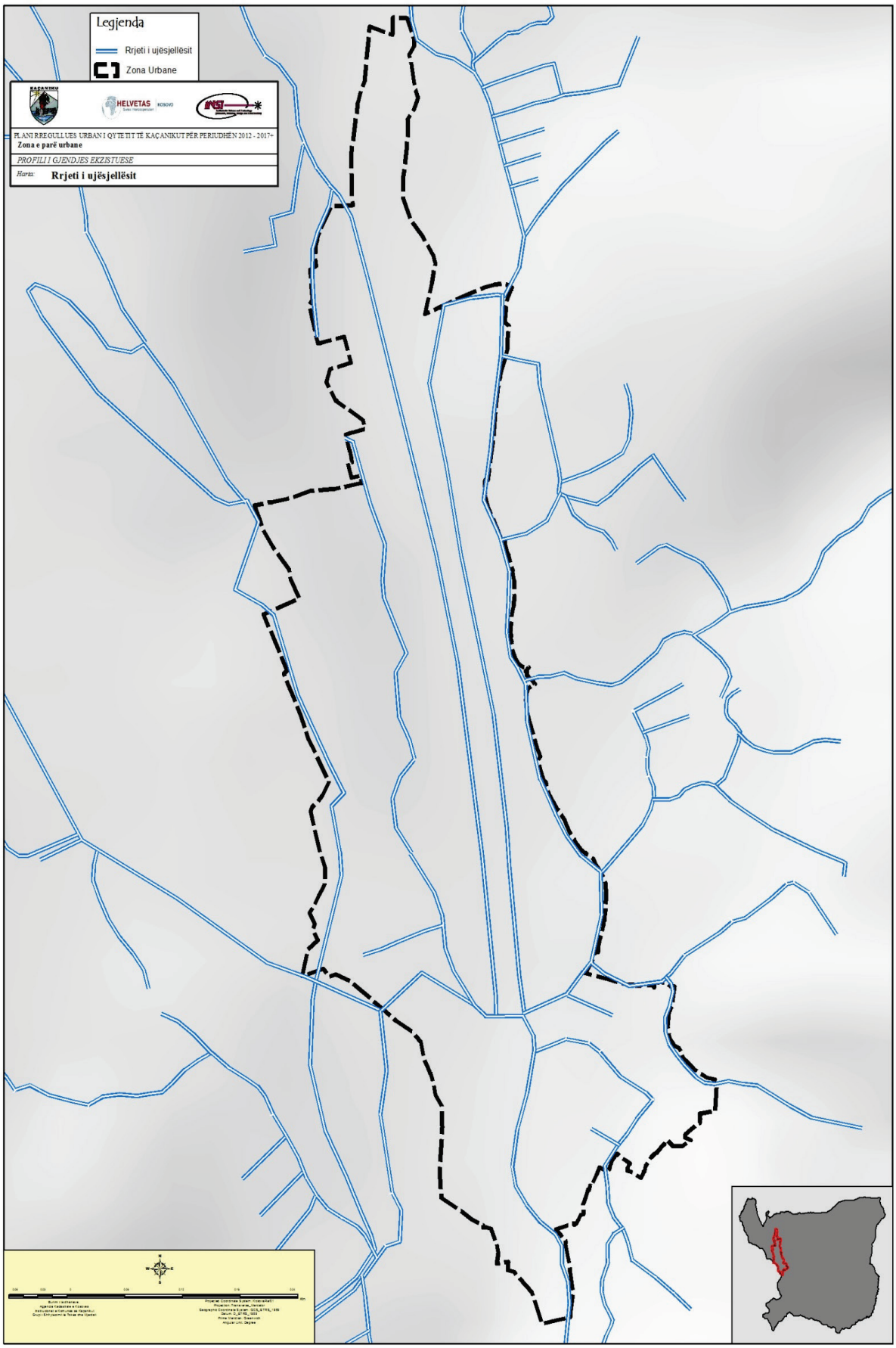
Graph 4. Quality of drinking water and residual chlorine

The graph shows that during 2006-2008, drinking water from the central network of water supply system in Kaçanik has not fulfilled the standards set for drinking water and that the permissible limit of 10% has been exceeded according to the WHO standards for the annual average regarding bacterial adaptability. All this happened because of the breakdown of chlorine gas system and use of liquid chlorine which does not meet the required standards.

Due to the fact that existing water resources with which the municipality is supplied are not sufficient for the existing number of residents but taking into consideration the

constant growth of population and sufficient supply with water, we should search new resources in order to meet these requirements.

The total capacity of water, at the moment, from five sources is 40-44 lit/sec, which is not a sufficient capacity for this number of residents. After the hydraulic calculations, for the next 30 years water supply should significantly increase to 74 lit/sec, where the diameter of the main pipe should be Ø350mm. The entire network which is from asbestos should be replaced with the new once made of HDPE – 100 or similar material.



Map 14. Water Supply Network

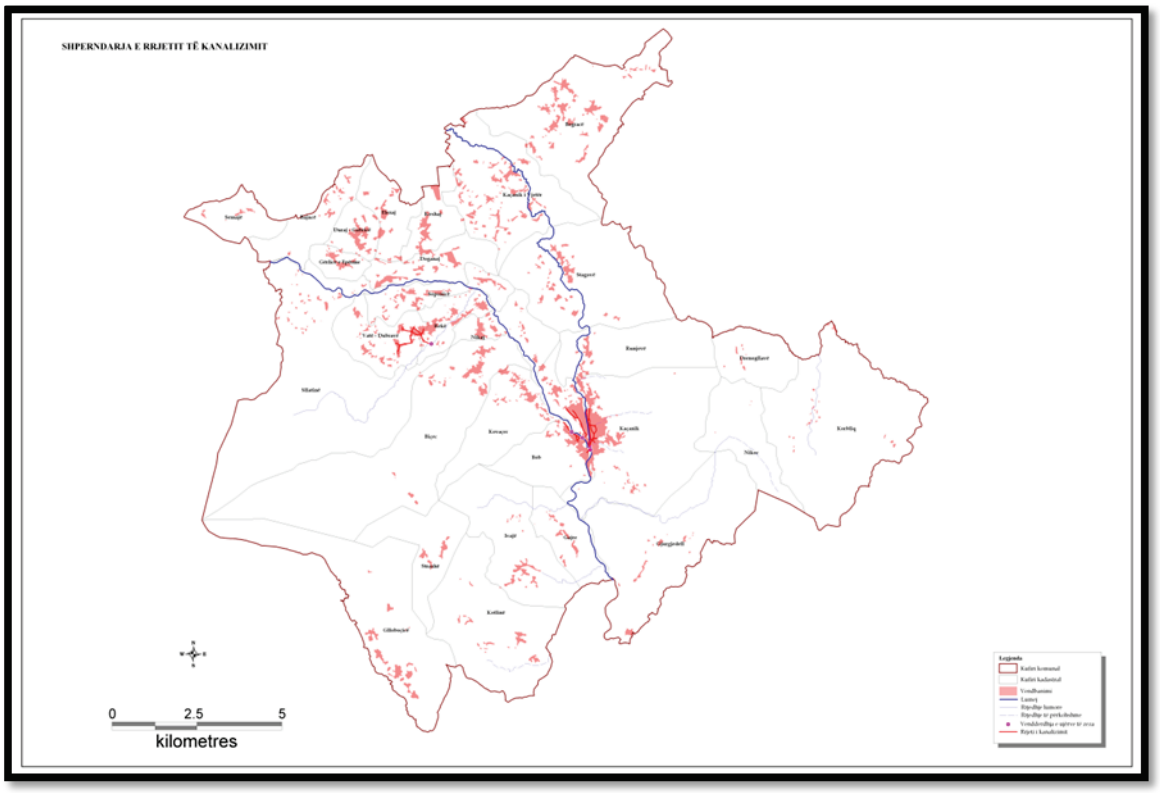
4.2.6 Sewerage System

In the municipality of Kaçanik, wastewater sewerage operates since'70s, but even today, is very poorly developed; respectively this system is extended in urban areas.

- Urban area of Kaçanik has a total of 13450/b or 35.23% of the population of the municipality.

Sewerage system in the urban area of Kaçanik consists of the accumulating network of wastewaters and atmospheric waters. The length of the main network for wastewaters is 1200 m, ∅ 1000 mm lying concrete pipes in the urban area, whereas the accumulating one has a length of 11 km, ∅ 600 mm and ∅ 200 mm.

Pipes of the old sewerage system are from asbestos and in most cases are damaged, while the new network has a composition of concrete and PVC. Accumulating network of atmospheric waters in the city is spread over the length of 4950m with a capacity of ∅ 200 mm - ∅ 400mm, with 121 wells which are very old and damaged. Their maintenance is very difficult because of their small diameter ∅ 400-∅ 500 and 30-40% of them do not function.



Map. 15. Sewerage network of wastewaters by UDP

Majority of sewerage wastewaters, around 70% flow without any prior treatment in the bed of river Lepenc near the lime factory of "Ura e Hekurt" towards "Hani i Elezit". While the rest of the sewerage wastewaters flow in open areas and risk the spread of infectious diseases, they flow at different points in the river of Nerodime and Lepenc. It is estimated that the pollution of rivers in the municipality is 160 litres /24 hour.[1]

Only 16372/b or 42.89% of the population of the municipality have access to collective sewerage network, the urban area has a connection of 40%, and 57.11% of the

[1] NPK "Lybeten"

population of the municipality do not have access to the sewage network, but wastewaters are shed fiercely in settlements where they live, respectively in the banks of streams and rivers.

Management of the sewage system is a responsibility of the municipal utility for water/sewage “Lypeteni” in Kaçanik.

Users of this service for 2008 are 1188 costumers, of whom:

- Households – urban areas – 80% connection, - 50% collection
  – Rural settlements– 20% connection – 0 % collection
- Institutions – urban areas – 1000% connection, - 1000% collection
  – Rural settlements– 30% connection – 100 % collection
- Businesses – urban areas – 95% connection, - 50% collection
  – Rural settlements– 20% connection – 0 % collection

To the network in question we must consider improving the existing network and its separation from the atmospheric waters network. All industrial facilities and waste from hospitals, clinics and all other facilities from which the water it flows is not sanitary, but have a different treatment shall have the own plant for preliminary purification of wastewaters as each industry has its own specifics, so that the flow of sewage into the central sewage is in proportion with foreseen parameters by the regulations on wastewaters.

Network of atmospheric waters must have a particular network, the place for its flow should be determined and care must be taken not to discharge the sanitary and industrial wastewaters. A very special importance should be given to the collection of atmospheric waters in one point and these waters must be used for the hydrants network for the city and the irrigation of parks.

Map 16. Sewage network of wastewaters by UDP

4.3 Energy

Kaçaniku and its surroundings are supplied with electricity from the substation TC 35/10 kV with the power of energy transformers I – 4 MVA and II – 6, 3 MVA i.e. Maximum installed power in the municipality of Kaçanikut with its surrounding is S_{ins} =10.3(MVA). By the region distribution is recommended that by this, active power is P=9.88(MW) and reactive power Q=3.24(MVAr) so with $\cos\varphi = 0.95.$

Visual appearance of the distribution

This substation is located in the urban area, respectively near the gymnasium. From this transformer is done the distribution of EE in 7 different directions which enable the distribution of EE in municipal level. Urban areas are also supplied by the power station through main distribution directions:

- ✓ city direction with10 kv
- ✓ lime factory direction with 10 kv
- ✓ direction of 630 kVA

This substation is supplied by TC 110/35kV Bibaj – Ferizaj where from this TC – Kaçanik is supplied in the form of loops with two high conductors of 35 kV. One of them is build with concrete pillars with a length of 19,5 km and with a section of conductors of Al-Çe 70 mm^2 , where high conductors emerge from TC 110/35 kV Bibaj – Ferizaj and end in TC 35/10 kV Kaçanik.

Second high conductor of 35 kV, which is build in trusses emerges from TC 110/35/10 kV Bibaj and continues to the village of Gurëz, where the high conductor enters and exists in TC 35/0,4 kV with an installed power of 630 kVA in the glazing factory "RENOVA" and there is an entry-exit in TS 35/10/0,4 kV in "SILCAPOR" factory in Matlumë village and from the factory "SILCAPOR" ends in TS 35/10 kV Kaçanik. The length of this high conductor is 29,97 km to Kaçanik, whereas the conductors are Al – Çe 95 mm^2 . In addition to electricity supply lines with a capacity of 35/10kv, which come from two directions, in the territory of the municipality passes also the transit line of high voltage in national and inter- national level. Map1.

In the electricity supply network of the urban area according to the distribution of users, we have a total of 10 transformers with different capacities. Given this fact we can

conclude that in the municipality of Kaçanik from 99 functional TCs, 17 are individual, whereas 82 others are collective.

The total number of power users (based on the meter) is 6196 users.

The following table presents the total number of: TCs, their status, number of users and population, according to the directions of supply.

Table 3. Transformers in Kaçanik

Direction of Energy network	**C**	**Individual**	**Collective**	**No. of Users.**	
Forestry direction 10 kv and		1	5	802	9.29
City direction 10 kv		0	4	729	5.72
Direction of 630 kva		0	4	507	4.84
Lime Factory direction 10kv		3	0	3	.15
Total	**7**	**4**	**13**	**2041**	00.00

Based on the % of supply of the population on the urban area with electricity according to the directions, forestry direction includes the most important line of supply with electricity, since it supplies 802 (39.29%) users in the urban area. Then is the city direction with 729 (35.72%) users, direction of 630 kV with 507 (24.84%) users, followed by lime factory direction which usually supplies businesses with electricity.

4.4 Scheme of supplying transformers and high conductors in Kaçanik

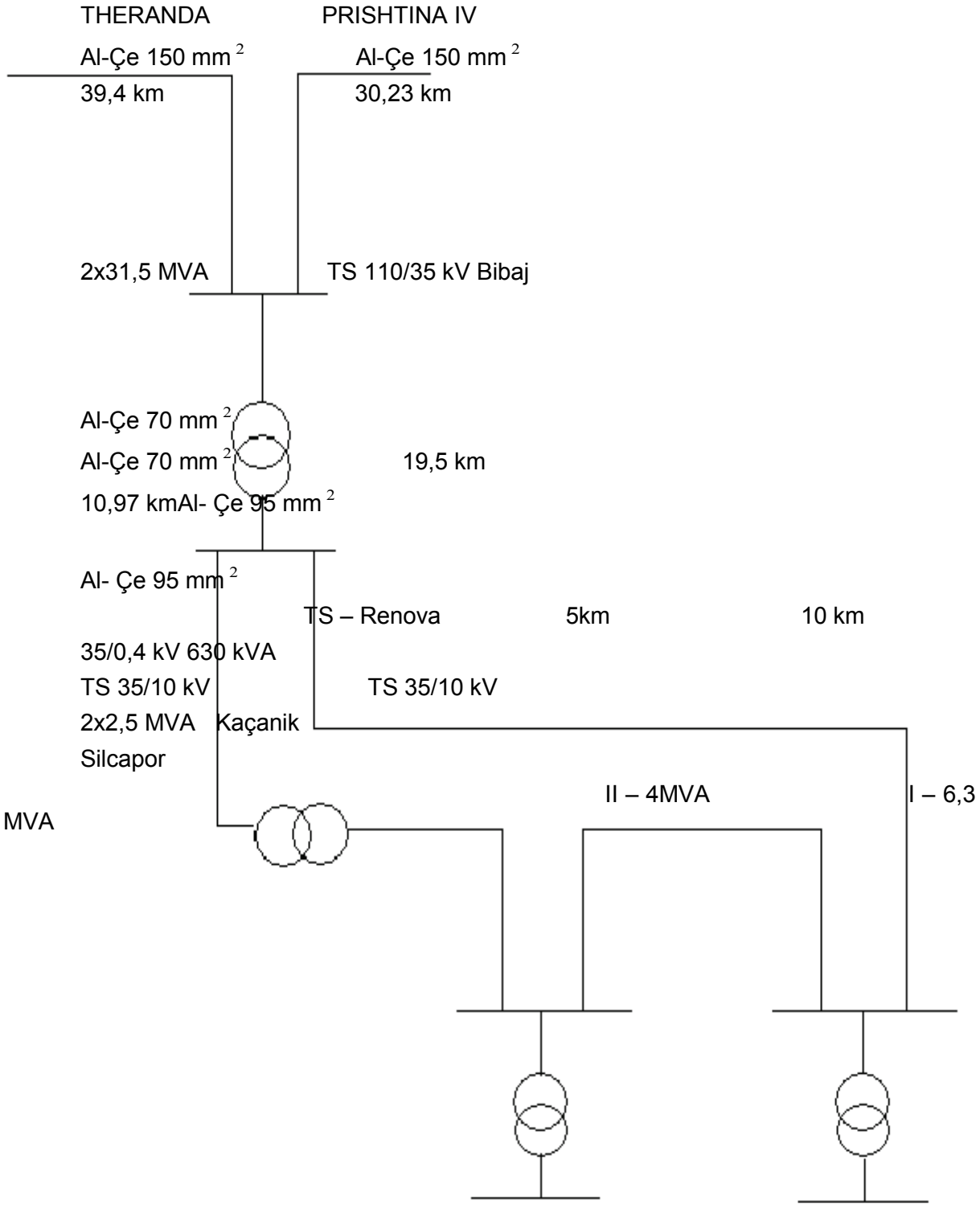


Fig.1. Scheme of supplying transformers and high conductors in Kaçanik

SINGLE POLE SCHEME OF TC 35/10 kV KAÇANIK

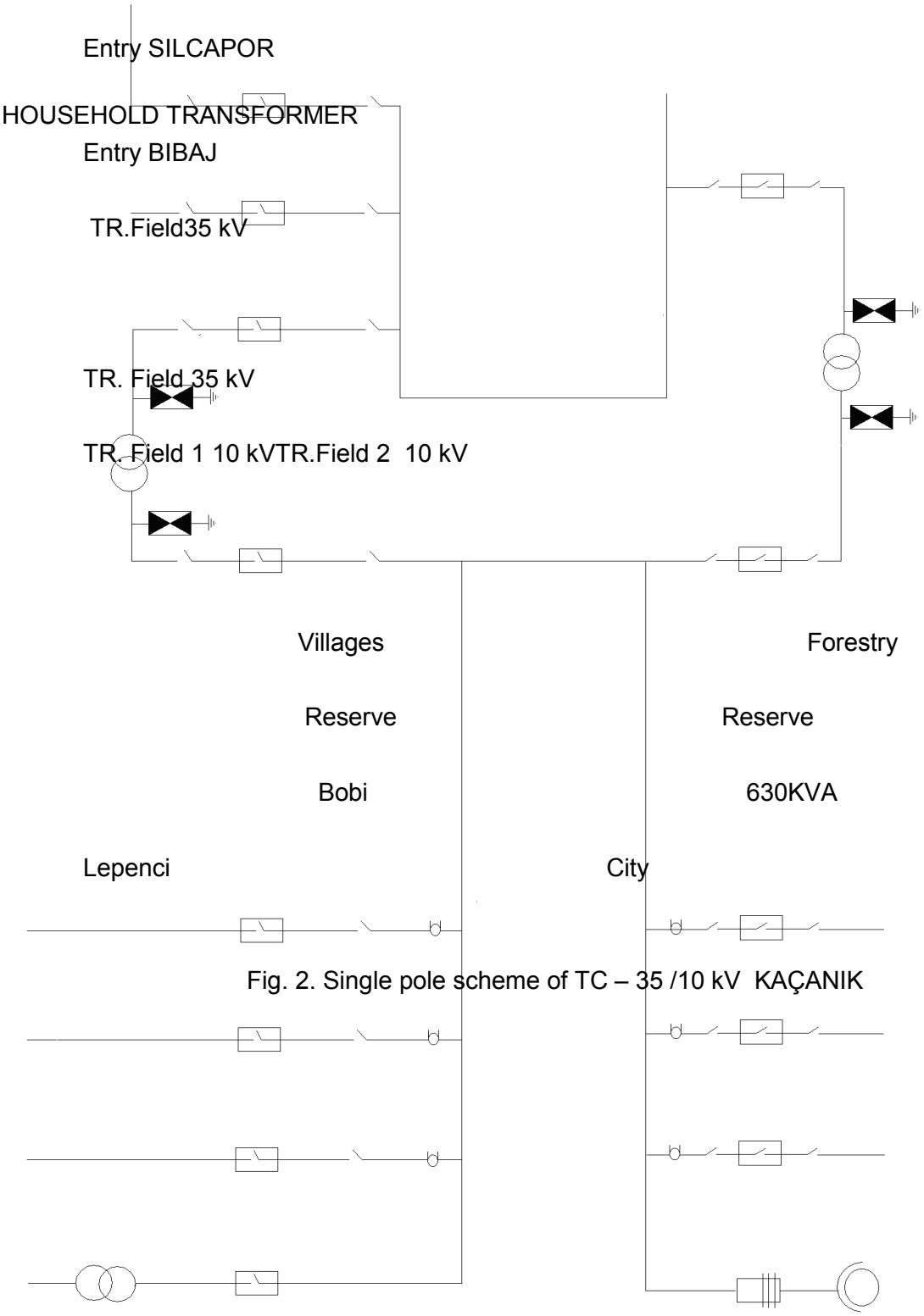


Fig. 2. Single pole scheme of TC – 35 /10 kV KAÇANIK

Visual View of high conductor 35 kV build with CAPRI POLES – KAÇANIK

Visual view of the high conductor 35 kV of 35kV with Capri poles build with concrete poles –Kaçanik

TC 35/10 kV with the power of energetic Transformers 6.3 MVA – KAÇANIK

Visual view TC 35/10 kV with installing power 4 MVA – KAÇANIK

Transformer Stations

In the first urban area and in its vicinity are located these transformer stations:

1. TC-Committee (Kaçaniku Radio)
2. TC-Old Post
3. TC- Ramadan Agushi (Mejdi Dalloshi)
4. TC- Shopping Mall
5. TC- Police

6. TC- Vakufi
7. P + 8 (Big Apartments)
8. TC- Forestry
9. TC-Cultural House
10. TC-Gas Station
11. TC-Railway
12. TC-630kva

Ts-Committee (Kaçanik Radio) 400KVA

It is supplied by the transformer station of 630K VA which is located at the distribution with underground cable with a section of 3*1*185mm² from aluminium with an approximate length of 300m which lies along the fences of “Skënderbeu” high school, snaps the “Skenderbeu” road and continues to the galvanize tapes in the wall of the city park with approximately 3m below, then snaps the road and continues towards the left direction and again snaps the road and enters into the TC which is placed in between teahouse “Tusha” and “Dadini” store.

In the same direction of the supply cable 10 KV comes a voltage cable of 0.4 KV which supplies the TS, continues to the pole and supplies the costumers nearby, and also from this same TS with voltage of 400V the motel “KALA” which lies on the left side of the road is supplied.

The second exit supplies the lighting in the “Skënderbeu” road which is located on the left side of the road from the TS. The third exit snaps the road in the opposite direction of TS-Committee to the pole located nearby. The fourth one snaps the road and supplies the bus station.

The fifth one supplies the “Sanitekt” facility lying under the sidewalk approximately on the right side of the road. There are also other exists which supply the apartments nearby.

Old TC-Post 400 KVA

This transformer is located on the opposite side of Raiffeisen Bank. It is supplied with underground cables with sections of 3*1*150mm^2 with manholes trusses laid down the river in “Ismail Raka” street. TC-Old Post has several cable exits with low voltage of 10kv without manholes underground pipes with sections 3*1*185 mm² from aluminium with a length of 100m connected to the side of primary and supplies the transformer on the back of the shopping mall and apartment up to the transformer. Through the low tension 400v with underground cable placed without pipes and manholes on the left side from the transformer it supplies the wood pole which is placed in the wall of the Mosque near the teahouse on the opposite side of “Besa” supermarket, and from there the road “Mejdi Dalloshi” is supplied with placed poles on the right side of the road. On the road “Ismail Raka” in the last issued tender by the municipality of Kaçanik the placement of PVC pipes which are located on the right side of the road from the house of culture to the TS Old Post, the channel is placed slantwise near the bridge and enters between “Besa” market and kiosk.

TS - Shopping Mall (400 KVA)

It is located behind the shopping centre and is supplied by TS- Old Post office with an underground cable of 3*1*185mm² with an extent between the shopping mall and the apartment, without pipes and manholes. There are several 400 kv voltage outputs and one voltage output 10kv which supplies TS- Police.

TS-Police (400 KVA)

TS police is located in the building of the police, and is supplied by the shopping mall transformer station through the cables with underground oil with a tension of 10kv placed on the wall of the municipality with a section of 3*1*185mm² with length of 250m without pipes and manholes.

TS-Vakufi (400 KVA)

It is located on the right side of the street “Qamil Ilazi” in conjunction with the road “Ismal Qemali”. Supplied by the primary side of TS- Police with underground cables of 10 KV voltage placed in PVC conduit pipes with a length of 400m and sections 3*1*185mm², extension of the channel is on the right side and then continues on the midway up to TS-Vakufi.

TS- Vakufi has several exits with underground and air cables which are short in length: Two exits snap the street “Qamil Ilazi”, one of them is from underground which supplies the lighting and the other is an air cable which lies to a nearby pole.

Another exit with a short length is cabling up to the nearby located pole, in street “Ismail Qemali” which then is extended to the air network on the left side of the road.

From TS Vakufi exits two channels with manhole and PVC pipes.

One of them supplies the transformer on the right side of the road. The other channel is placed in the right side of the road up to the flat of Bashkim Topojanit.

City lighting in the street “Ismal Raka” is done through the air network taken by TS P+8 to the big building (apartments).

TS P+8 (400 KVA)

Transformer P+8 is located within the big building (apartments) which is supplied with 10KV voltage from the primary side of TS-Vakufi with cable section of 3*1*185mm² Al.

This transformer supplies with electricity the building with 44 apartments, lighting in street “Ismail Raka” and individual homes nearby.

TS- RAMADAN AGUSHI (400KVA)

It is supplied by TC –Old Post with poles on the hotel premises “Te bunari” and from there with underground cables is supplied transformer “Ramadan Agushi” which is placed in the same neighbourhood.

TS- R. A. Has three exists of low voltage 400V with short length located nearby, whereas two of them are lying on the right side of the road with a length of approximately 100m, on a pole as in the picture.

TS- Forestry 1MVA

TS-forestry is located on the street “Sali Bajra” opposite of health house.

It is supplied with underground cables and with manholes trusses on the left side of the street “Ismail Raka” which snaps the road between the health house and house of culture and continuous up to TS –Forestry.

TS- Forestry – has a total of 8 exits, out of which 7 are cable and 1 through the air, 4 of them are of short length which snap the road up to the pole nearby, and at the same pole is well established the road lighting which is supplied by the poles.

The hospital is connected to the low voltage from the transformer with a length of 100m by snapping the street “Sali Bajra”.

House of Culture is connected to the underground cable with a tension of 10kv without pipes and manholes which lies on the right side of the road with a length of 120m and snaps the road and enters in between the House of Health and House of Culture.

Also in this range is located the cable of low tension which supplies the Facility of Social Work Office as well as the Municipal Court, which lies in “Ismail Raka” street, on the left side of the Health House fences. One exit is through air and lies on wooden poles of TS – Forestry.

TS Pump (100 KVA)

Supplied by the underground cable trusses up to the placed pole on the left side of the street “Ismail Raka” between the Health House and House of Culture, the transformer is supplied by the poles through the air lines.

TS- Pump is placed in steel structures between the railway and Nerodime River and supplies the placed pumps nearby with underground cables of 400V capacity with an approximate length of 50m. Another exit is a cable passing by the railway up to the nearby pole and supplies consumers in “Skenderbeu” street.

TS – 630 KVA

Is located within the fences of the distribution and has 5 exit underground cables; 4 with small distances which snap the road and continue to the poles.

TS-Railway 160 KVA

TS – Railway is supplied by the primary side of TS-630KVA with voltage of 10KV and cable section of 3*95mm^2 C_u, which is lying between the employment office and Jona Dent clinic, continues to the “Skenderbeu” street to the building, but the exact extent is not known.

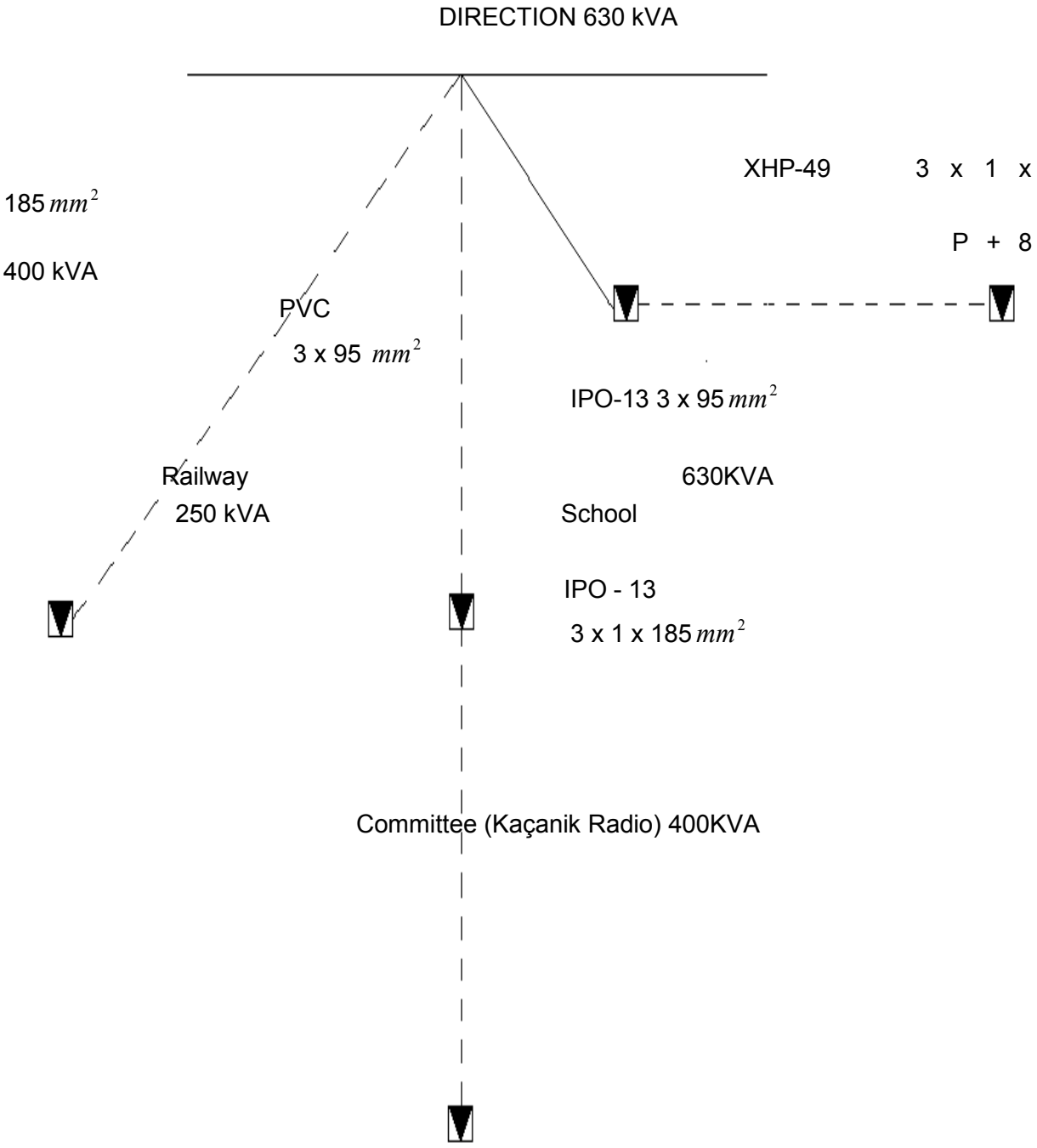
Network 10 KV

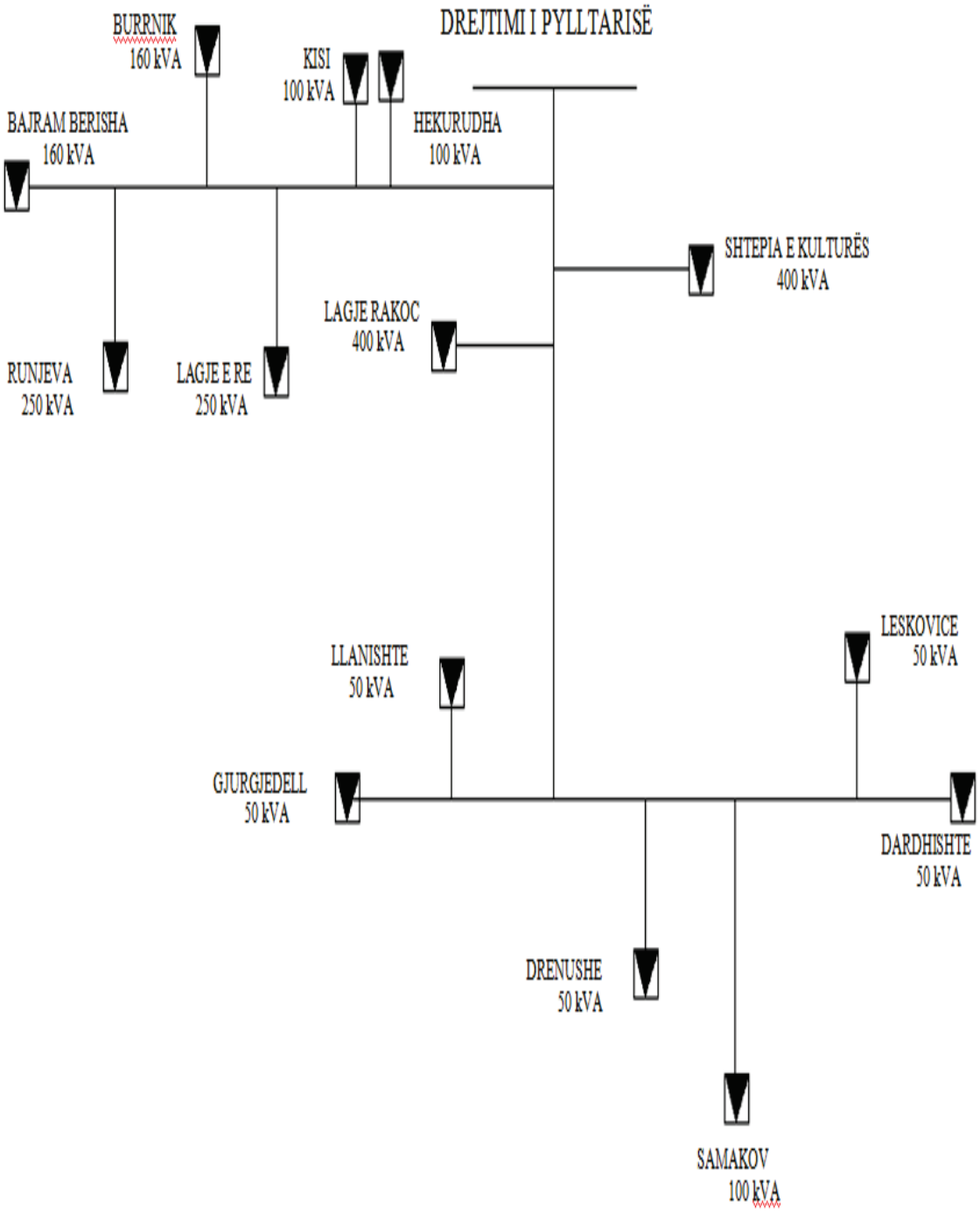
Exits from the voltage level of 10 kV from TS 35/10 kV Kaçanik, are mainly through air, underground and combination of air and underground. Mainly, the extension of the distributing network is done through radial and spurring methods and less in loops. Overview of exits of 10 kV and their approximate length is presented as follows.

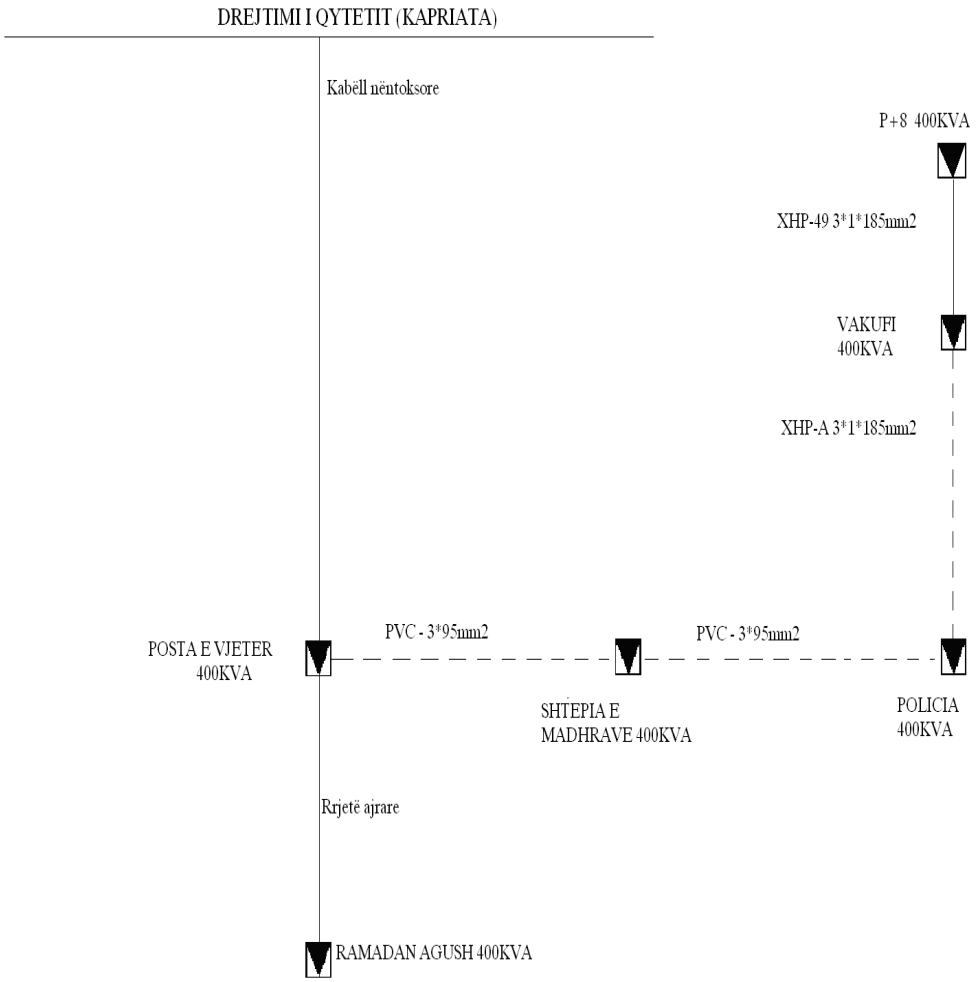
Table- 4.

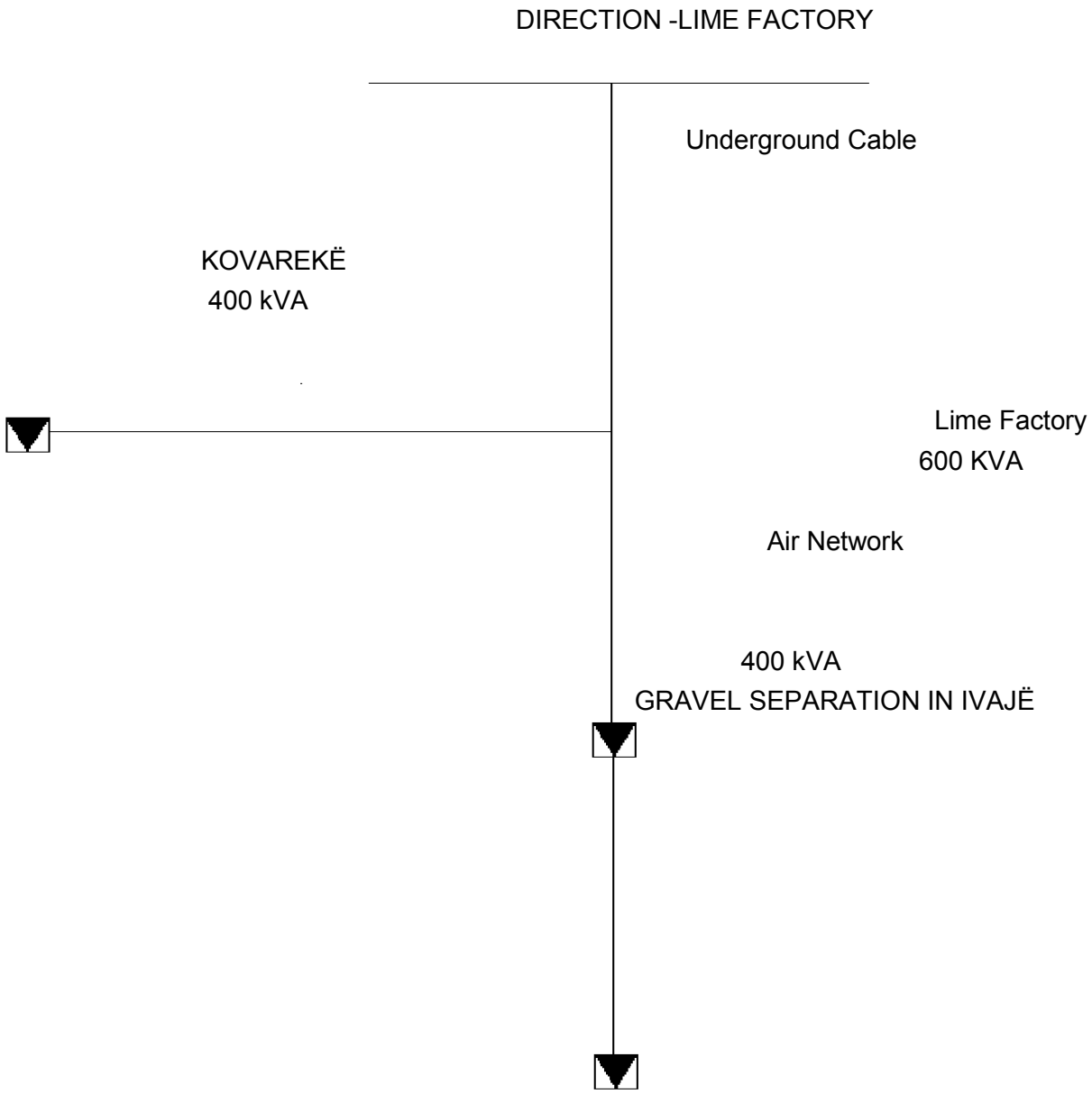
No.	Name of exit 10 kV	Type of L.P 10 kV	Length km	Air Wood Pole (km)	Air Concrete Pole(km)	Underground. Cable (km)
1	VOSKOPOJA	Air	28,27	13,43	14, 64	0,2
2	City	Underground-Air	2,08	0,8		1,28
3	Exit 630 kVA	Underground				0,7
4	Forestry	Air	27,3	5,8	20. 3	1.2
5	LEPENCI	Air	6,3	5,8		0,5
6	BOBI	Air	13,8	13,3	0,5	
	Lime Factory	Underground	0.85			0.85

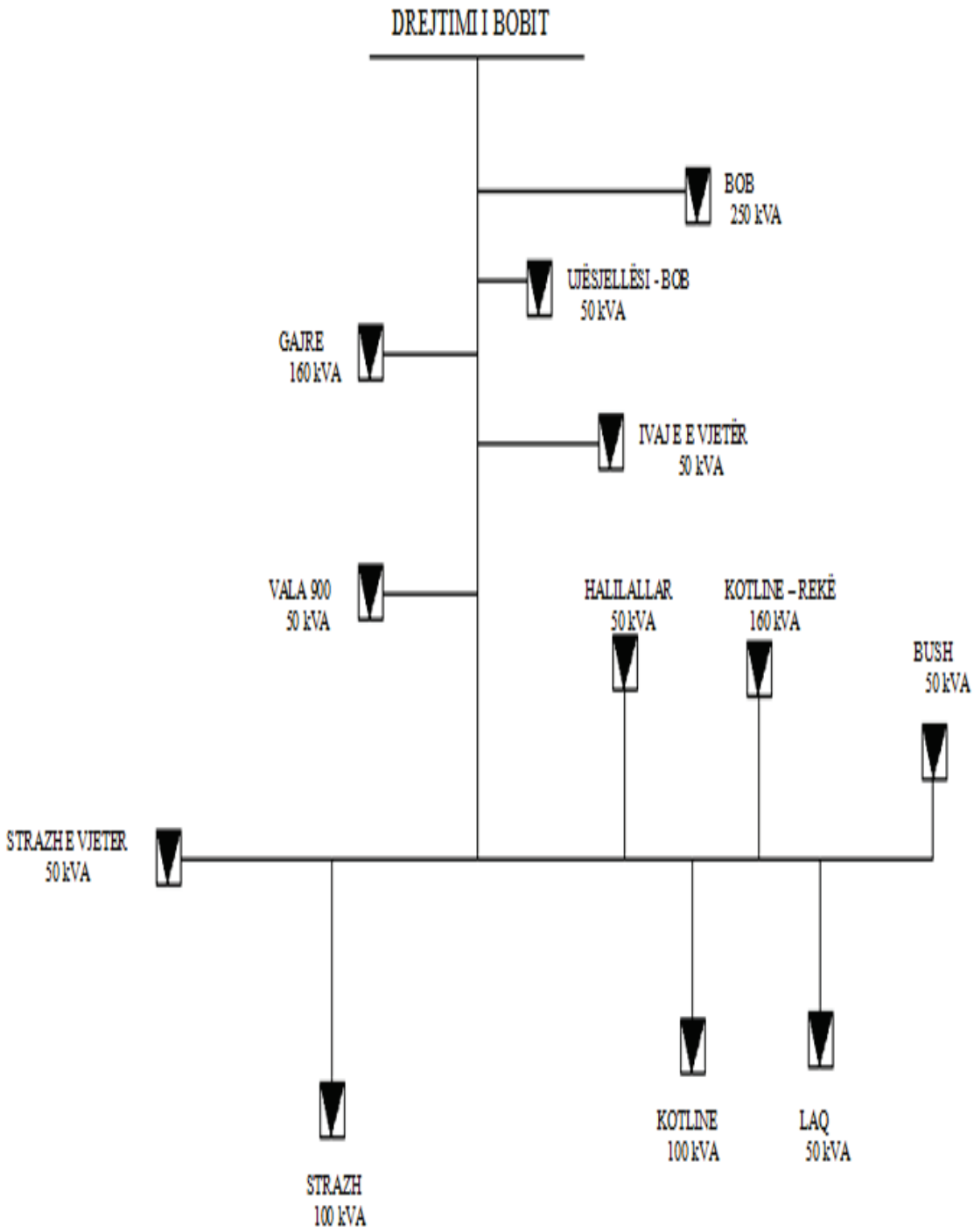
In rural areas, the electric mains are of radial and spurring type. Specific for these mains is that their energy direction is toward the direction of spenders in the main of spurring. These are characterized by small sections and small conductors with size of 25 mm^2 and with aluminium conductor material. Commandment and control which relays on these networks is very simple. These networks have increased losses and the high drop of voltage level. These drops often reach up to 18% of nominal tension, and often they should be disconnected to avoid an abnormal operation of work. Another characteristic is the lack of reserve supply. In case of defects, the line part remains without supply until the decay is eliminated or isolated. In the city compared to villages in its surrounding, the electrical network is very good because there are mainly cable lines and the supply is distributed in a circular way which provides greater assurance for uninterrupted supply and smaller drop voltages.


DIRECTION 630 kVA
XHP-49 3 x 1 x
P + 8
185 mm^2
400 kVA
PVC
3 x 95 mm^2
IPO-13 3 x 95 mm^2
630KVA
Railway
250 kVA
School
IPO - 13
3 x 1 x 185 mm^2
Committee (Kaçanik Radio) 400KVA

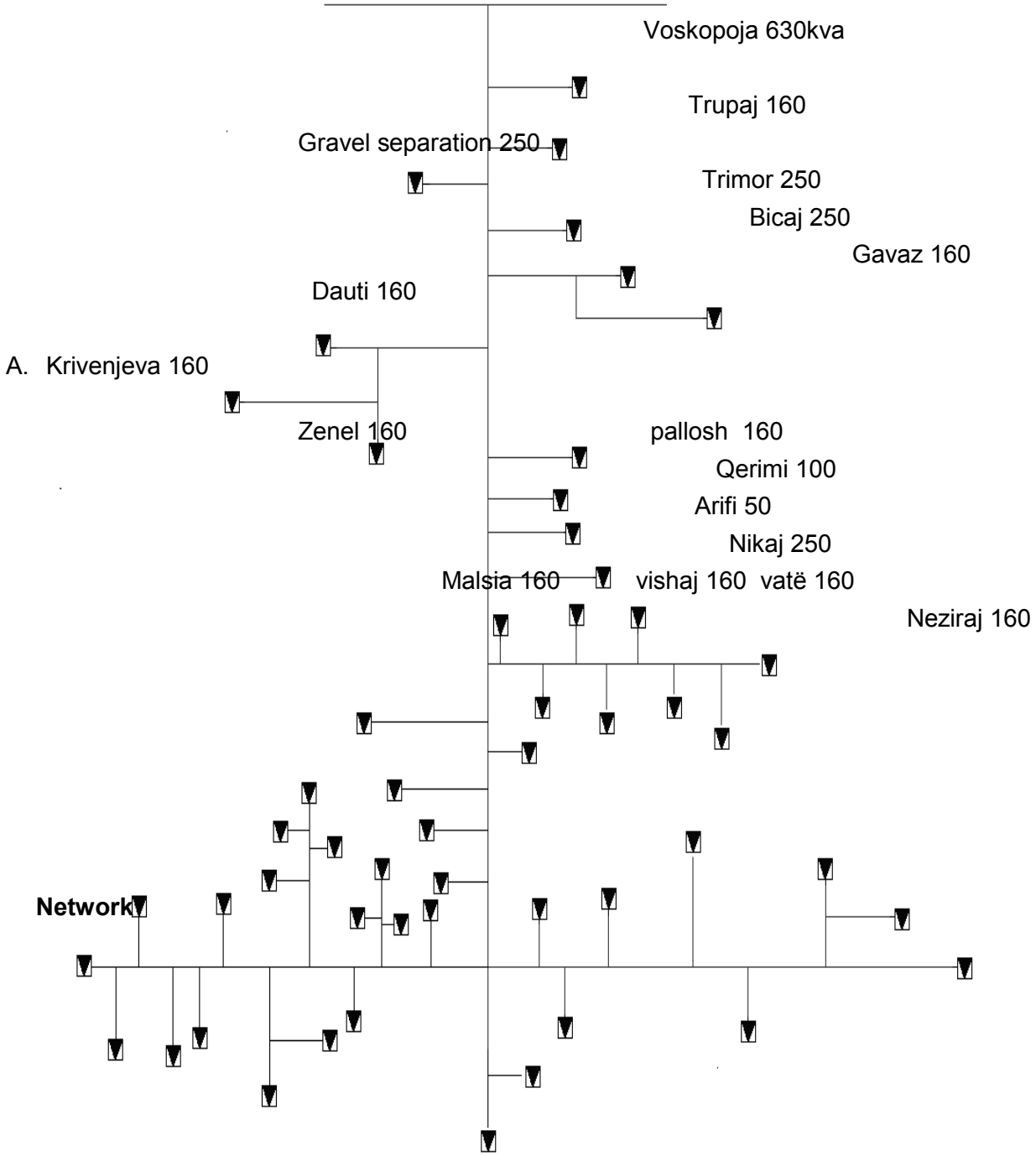

DREJTIMI I PYLLTARISË
BURRNIK
160 kVA
KISI
100 kVA
HEKURUDHA
100 kVA
BAJRAM BERISHA
160 kVA
SHTEPIA E KULTURËS
400 kVA
LAGJE RAKOC
400 kVA
RUNJEVA
250 kVA
LAGJE E RE
250 kVA
LESKOVICE
50 kVA
LLANISHTE
50 kVA
GJURGJEDELL
50 kVA
DARDHISHTE
50 kVA
DRENUSHE
50 kVA
SAMAKOV
100 kVA


DREJTIMI I QYTETIT (KAPRIATA)
Kabëll nëntoksore
P+8 400KVA
XHP-49 3*1*185mm2
VAKUFI
400KVA
XHP-A 3*1*185mm2
POSTA E VJETER
400KVA
PVC - 3*95mm2
PVC - 3*95mm2
SHTEPIA E
MADHRAVE 400KVA
POLICIA
400KVA
Rrjetë ajrare
RAMADAN AGUSH 400KVA


DIRECTION -LIME FACTORY
Underground Cable
KOVAREKË
400 kVA
Lime Factory
600 KVA
Air Network
400 kVA
GRAVEL SEPARATION IN IVAJË

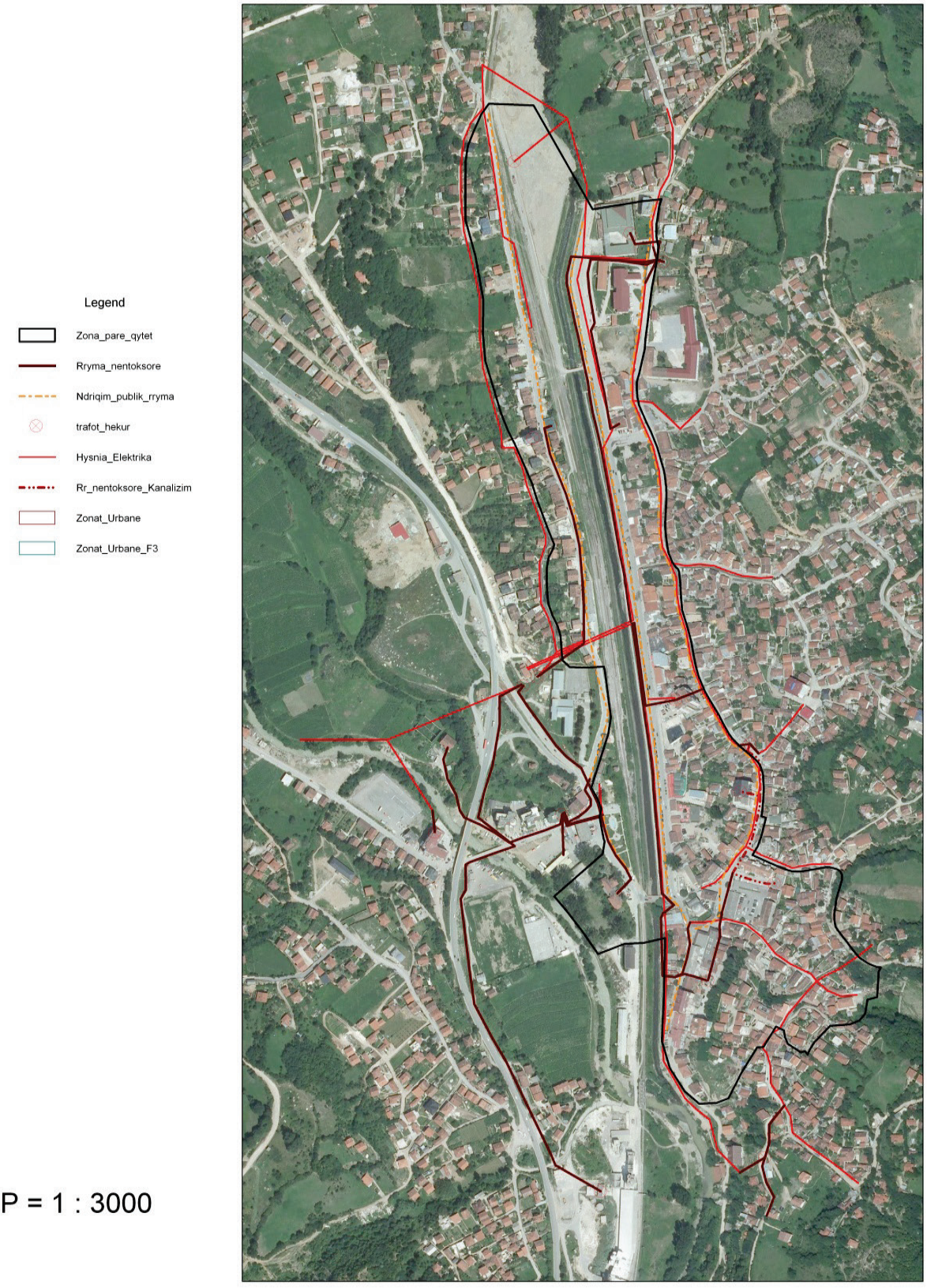

DREJTIMI I BOBIT
BOB
250 kVA
UJËSJELLËSI - BOB
50 kVA
GAJRE
160 kVA
IVAJ E E VJETËR
50 kVA
VALA 900
50 kVA
HALILALLAR
50 kVA
KOTLINE – REKË
160 kVA
BUSH
50 kVA
STRAZH E VJETER
50 kVA
KOTLINE
100 kVA
LAQ
50 kVA
STRAZH
100 kVA

DIRECTION - VOSKOPOJA



Map 12 presents air and cable network 10kv and 400V in the urban area as well as transformers

Plani Rregullues Urban - Zona I



P = 1 : 3000

Map .17. Underground cable network 10KV and 400V

Map 18. Public lighting of urban area I

4.5 Demographic Development of Zone I

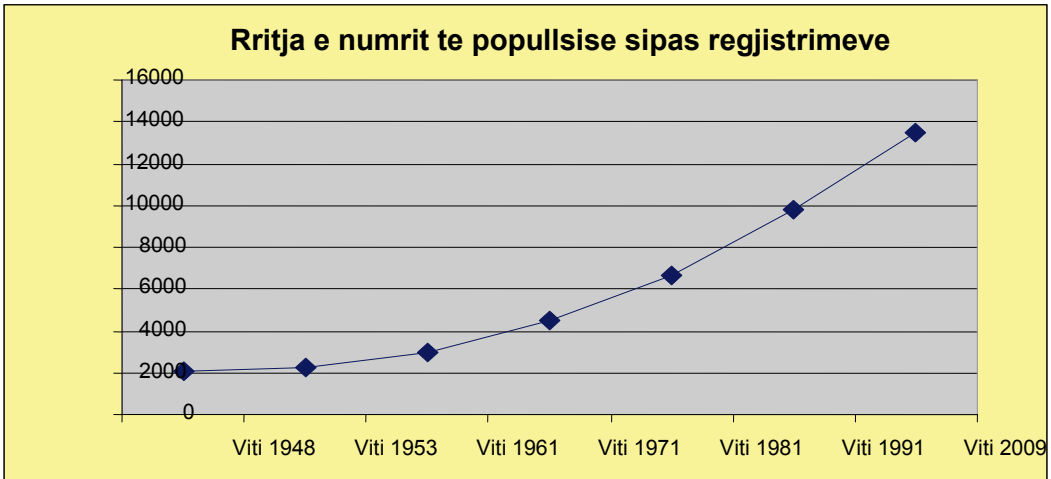
Number of population

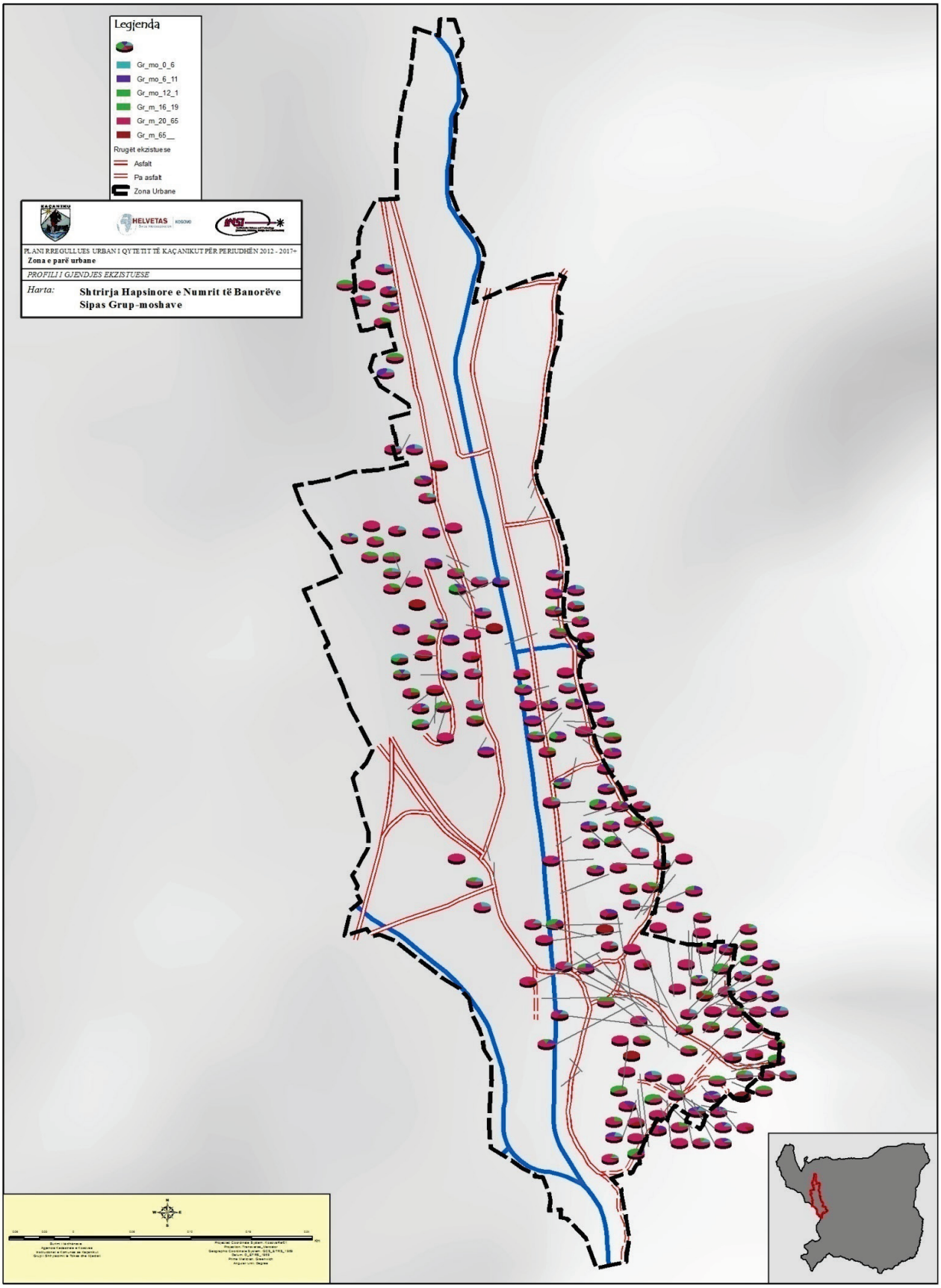
Since 1948, until today, city of Kaçanik has had a continuous population growth. In 1948 Kaçanik had 2094 residents, whereas in 2009 had a total of 13450 residents, which means that for this period of time (60 years) the number of population has increased for more than six times. Population census in the city of Kaçanik has been done by the Municipal Assembly in collaboration with DATA Gis Consulting Company for the needs of the Municipal and Urban Development Plan.

While referring to the population census during 2011, the number of residents in urban area is 10.387, not including people who live outside of Kosovo for a period of more than six months.

Table. 5. Demographic development of Kaçanik until today

Year	Houses	Residents	Members per Household
1452	57	-	**-**
1467	81	-	**-**
1900	250	-	**-**
1913	-	1236	**-**
1921	210	1205	**5.7**
1948	428	2094	**4.9**
1953	414	2275	**5.5**
1961	538	2923	**5.4**
1971	729	4513	**6.2**
1981	1017	6624	**6.5**
1999	1272	10049	**7.0**
2009	1892	13450	**6.4**
2011	**2194**	**10.387**	**5.7**





Graph. 5. Increase of the population number according to the records
Map .19.

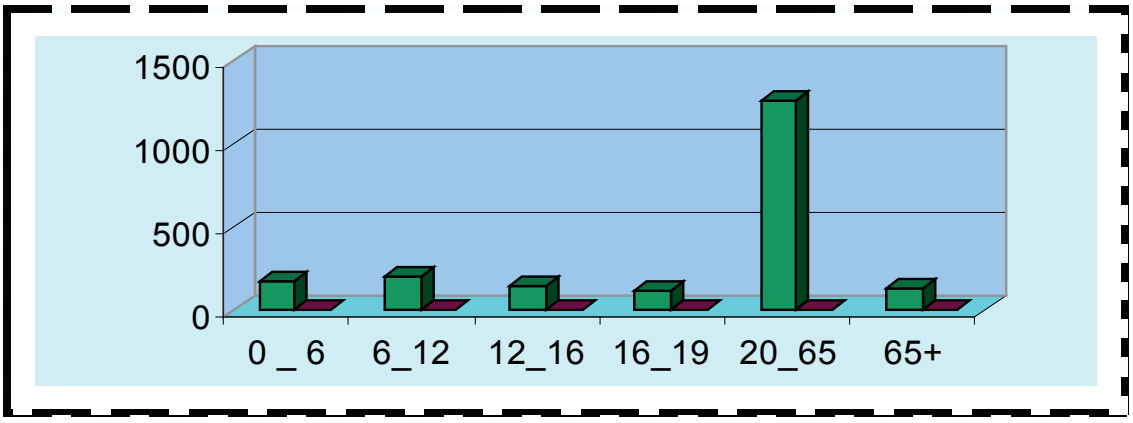
Based on the population census in the central area for the needs of the regulatory plans, the number of residents in this area is 2002.

According to the data from the table and graph, it is noted that, until the 60s, the city of Kaçanik has marked a demographic growth, but the intensity of growth has been very small, considering the high level of birth rate and mortality, where as a result we have a low level of augmentation. After 60s, respectively in 70s, a pronounced increase of the population has been shown, as a result of lower mortality rate. Birth rate is still high, where as a consequence we have a very high scale of natural growth. A more pronounced demographic growth is shown in the period 1971 -1981. The period between 1991 -2009 is the most pronounced growth but actually it includes a longer period of time of (18 years). Also significant growth appeared during the period 1981 -1991.

4.5.1 Natural Growth of Population

Population structure based on age and gender

Central area of Kaçanik has mainly young population and expanded base of the pyramid age, although recent periods of time show some tendencies with small change for the reduction of young age groups. The average age of the population is 34.1 years, which shows that this area has young population. Gender structure of the population is also very characteristic with a slight dominance of the male population based on the census in the central area from the municipal officials where according to the data 49.56% are females and 50.44 % males.



During the analysis of the demographic data from the census, changes are seen in the population structure. These changes can be distinguished clearly by the graph below:

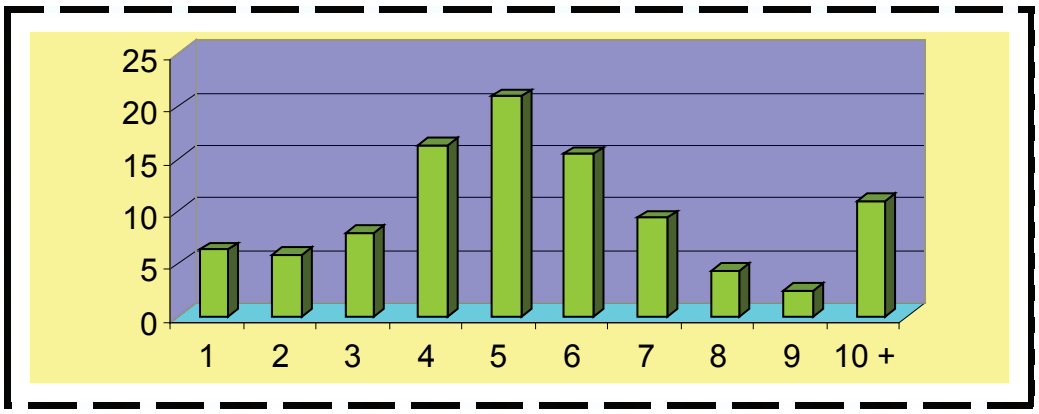
Graphic presentation of the population based on age of the Urban Zone I in the city of Kaçanik, according to the 2012 data

Based on the data from the above chart, it is shown that there is a tendency of reduction of age groups, as a result of decrease of birth rates, in certain periods. From the population chart it is shown that young age groups of 0-6 years have lower participation in the general population compared with age groups of 6-12 years, and higher participation than age groups of 12-16 years and 16-19 years, whereas the age groups of 20-65 year, have the highest participation in the population graph. Approximately 31.69 % of the total population in the city are young age groups of 0 up to 9 years, whereas age groups above 65 years have lower participation with only 6.84 % of the total population of the city of Kaçanik.

There are no high imbalances of gender in the city of Kaçanik. We have a slight domination of masculine versus feminine population, where the masculine coefficient is 1017.6, which means that on average there are 1017.6 males in every 1000 females. If expressed in percentage terms, it appears that in the city of Kaçanik lives around 50.44 % males and 49.56% females.

4.5.2 Family and it's characteristics

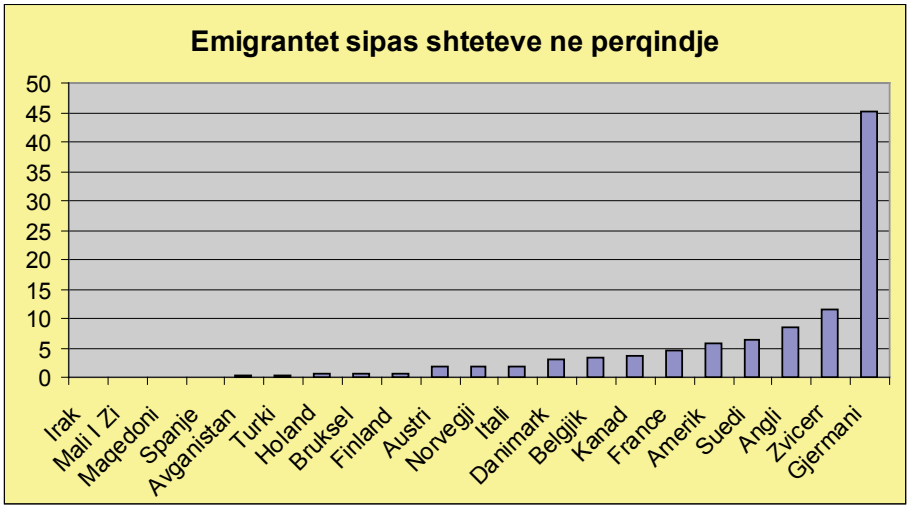
The census data shows that the average household size in the zone I of Kaçanik is 5.7 members. Generally dominate families with 5 members which include 20.94 % of cases with 4 family members which include 16.25 % of all household in urban Zone I. Also families with 6 and 7 members have substantial participation. Families with 1, 2 and 3 members include 20.11 % of all households and households with 8, 9, and 10, include 17.91 %.



Graph. 6. Percentage of households based on the average number of family members

4.5.3 Mechanical Movement of the Population – Migration

With the influence of a range of factors with various natures such as socio-economic, political, cultural, demographic etc… in the town of Kaçanik have been identified a significant number of immigrants. During the census have been identified 1410 immigrants, including 10, 4 % of the total number of the population of the city. These immigrants are scattered in different countries of Europe and world, which include about 21 different countries mainly from Europe, but we also have immigrants in the American and Asian continent.



Graph.7 Migration of population by country of immigration

Permanent or definitive immigrations are those immigrations, when people immigrate to another settlement or municipality to live forever. Data for these immigrations are also taken from the census which shows the number of immigrants who have moved from the town of Kaçanik which is 30 people or 2.1% of the total population. They have mainly immigrated to Ferizaj, Pristina, and Fushe Kosova etc.

4.5.4 Employment-unemployment structure, education level, age and gender

House of Culture “Xheladin Kurtaj”- Kaçanik, was built during the 80s of the last century. This is the facility where the constitution of Kaçanik has been approved, on 7 September 1990. It is located in the northern part of the Urban Zone I.

Kindergarten – Kaçanik has one kindergarten (QEAP “AGIMI“) for children under the age of 5, which has solid conditions. It operates on full norm whith a low number of children (17 children). This kindergarten is used for the education of pre-school pupils due to the lack of the available space in the primary school. There are two kindergartens; “Emin Duraku” school has a kindergarten, and kindergarten “Agimi”, with solid conditions.

4.5.5 Cultural-historical monuments

Cultural- historical monuments enrich numerous tourist resources in the municipality of Kaçanik. The castle which was built in the late XVI (in 1595), in the centre of the city, is a precious object which is connected with two rivers, Lepenci and Nerodime, before their unification near the city exit. Motel “Kalaja” constructed almost in the foundations of the caste, which currently is not operating (there are still some sheltered families), represents an attractive complex for visitors.

Among the old cultural monuments that still remain today is the mosque of Kaçanik built by the great vizier Koxha Sinan Pasha in 1594. Koxha Sinan Pasha, built the mosque that exists today as well, and at the same time it had a public kitchen, two inns and a Turkish bath (Hamam). The castle which exists today is built over the centuries XIV-XVI.

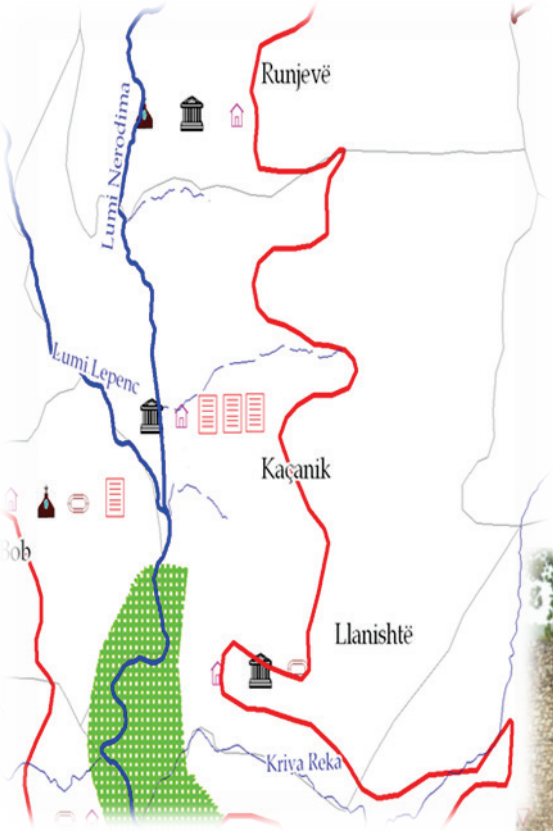
This cultural-historical object in the future has urgent needs for renovation of the space inside and outside of the facility and requires immediate intervention by the competent authorities.

Mosque of Koxha Sinan Pasha, 1594

Tab.6. Monuments with protection status in the central area

Municipality of KAÇANIK – Monuments with protection status

Municipality of Kaçanik – Monuments with protection status					
	o.	Facility / entirety	settlement	Year of Declaration	Forecast for the future
Monum. Archae.					
		Remains of the old caste of Kaçanik century.XIV-XV, no.V.E.K.02-979/67	Kaçanik (I - 6)	1967	Reconstruction and conservation
Mon. culti		Mosque of Koxha Sinan Pasha no.V.E.K.02-168/66	Kaçanik (I - 5)	1966	Reconstruction and conservation



4.6 Education

Urban area has (3) school facilities, two secondary schools and one elementary school as well as one kindergarten. These facilities have a total of 3692 students, with a number of 176 teachers, with an average of 20.97% of teachers.

There is a kindergarten with appropriate conditions up to a level.

As a deficiency (but as a need to be fulfilled in the future is the primary education in the urban area which requires an immediate solution, because primary education is carried in three shifts, with around 1747 students and 83 teachers, 21.04% students for one teacher with an inside space of 1.9m2 for one student.

The percentage of the qualified teaching staff is 88% qualified and 12% unqualified. These data are in terms of primary and secondary education.

Analysis of the situation in the secondary education is as it is shown, there are two school facilities with three and four years of education from ages 15-18 years, with a total of 1743 students and with 89 teachers, which means that for 19.58 students is responsible one teacher, with a qualified staff of 82.5% and 17.5% unqualified.

Regarding the interior space of these schools, 2.98m² of space is available for each student which indirectly suggests that the situation in the secondary level of education is somewhat satisfactory.

The facilities of primary school “Emin Duraku” as well as other facilities need to be renovated inside and outside, as well as expansion of the space. “Skënderbeu” Gymnasium– this high school offers opportunities for education in three areas: natural sciences, mathematics-computing, and social sciences.

Number of students in this school is 685, with 34 teachers, which means that 20.14 students are a responsibility of one teacher. In terms of qualified staff it is shown that 94.5 % are qualified and 5.5% unqualified. The inside space of the gymnasium “Skënderbeu” is 2700 m2, which means that 3.94 m2 belongs to a student. Classes in this school are held in two shifts.

This gymnasium has its own library with a considerable amount of books and is used by the students of this school; also this school has its own sports hall in good infrastructure conditions. The infrastructure of the facility is in good condition.

The existing facility of primary school “Emin Duraku”

Existing vocational high school facility

Almost a similar condition is in the facility of the vocational school, where the space to a certain extent is good but the construction of the unfinished annex needs to be continued.

4.7 Health

The health sector in the municipality of Kaçanik is in a quite good position but it should be improved with the qualified staff as well as sufficient spaces for the development of health services, where a greater need is the provision of qualified health personnel (specialists) of various fields. Services offered in the FMC, are carried in a building with two floors with an area of 1100m² and emergency facility with 200m², where health services are required by some villages such as: Bob, Drenogllava, Nikaj, Korbliq, Runjeva etc; with a number of 17314 residents or expressed in percentage 45.37% of the population of the municipality. Employed in this centre are 81 employees, 8 doctors of whom 4 are specialists of family medicine and 4 physicians,1 specialist of emergency medicine,1 ophthalmologist, 1 dentist, 48 nurses and technicians and 21 non-medical aid workers. The work is organized in two shifts which provides 24-hour emergency. During a study was found that over a year in this health centre were offered 125.460 patients of whom 52,396 visits and 73,064 interventions. All health services are conducted almost free because 88.48% of services have been without participation.

The proportion doctor – nurse –number of residents is 4.62 doctors per 10.000 residents, and 48 laboratory technicians or 27.73 per 10.000 residents.

4.7.1 Future Institutional development strategy

In the near future the need for the improvement of health and educational infrastructure will arise. In the primary school, arises the need for the expansion of the educational facility and the library. FMC facility has an urgent need for the renovation and reorganization of the surrounding space, with the aim of offering better services for all citizens. In order to increase the level of services in the field of education and health, intensive work and commitment is required in order to improve the physical infrastructure of the facilities, as well as the training of staff and technical-technological equipment to achieve professional performance and better services for residents of the municipality for a short and medium term of time.

The main family medicine centre (FMC) “Dëshmoret e Lirisë”, as carrier of the primary care, is located in the city of Kaçanik and provides services in a building with two floors with an area of 1100 m², where general services are provided, as well as the facility for emergency services with an area of 200 m². This facility was rebuilt in 80s intending to be a health facility, which today is in satisfactory physical condition. In this building which offers services to the territory of Kaçanik and its village such as: Bob, Drenogllavë, Gjurgjedell, Korbliq, Nikaj, Nikoc and Runjevë, have access 17314 residents or 45.37% of the population of the municipality.

The facility of the main family medicine centre (FMC)

The main family medicine centre fulfils all the conditions for the exercise of its activity, but there is a need for renovation of the space inside and outside of the facility as well as expansion of the existing capacities. The condition of FMC inside of the facility is shown in the following picture.

Space inside the facility of FMC

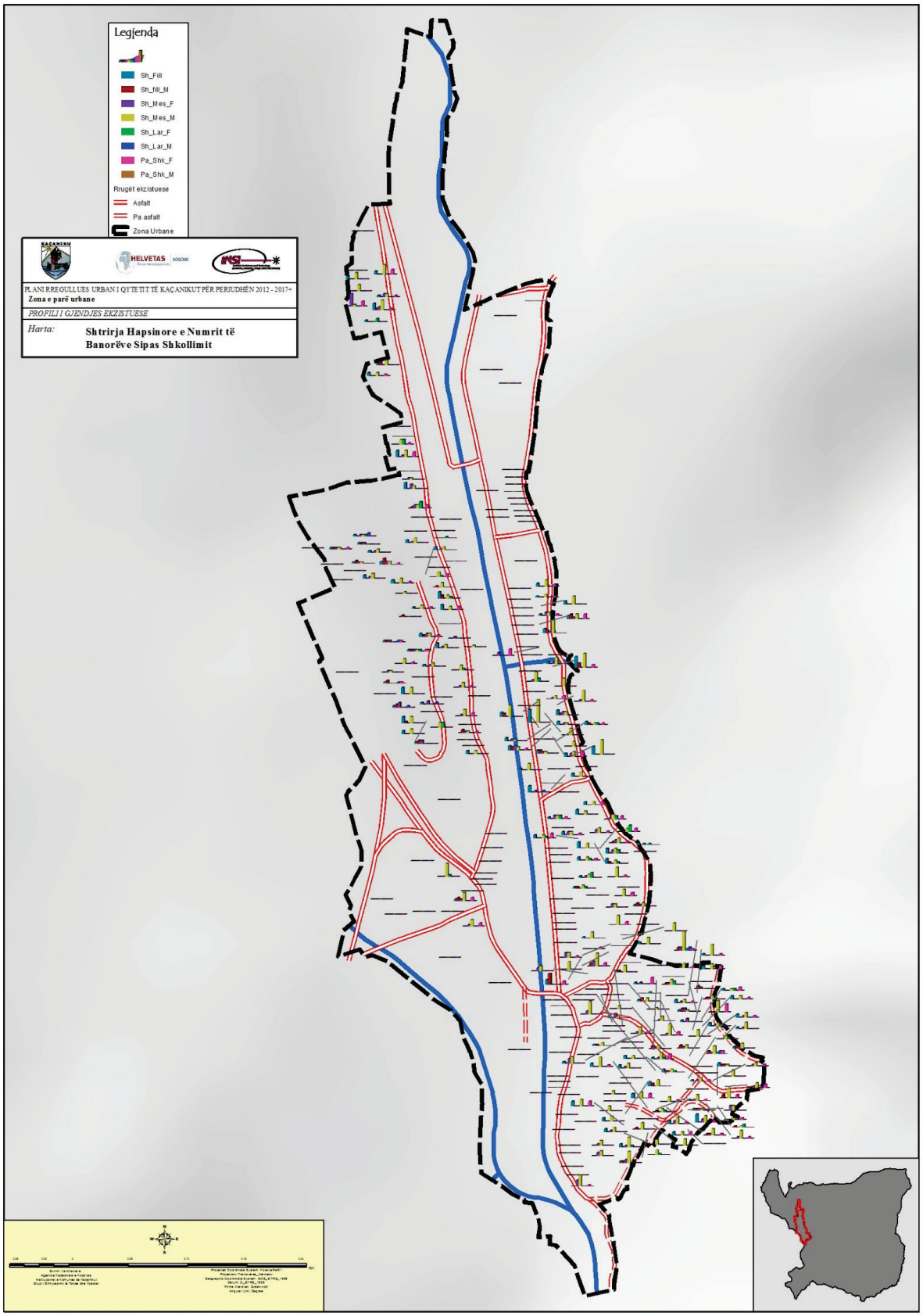
As it is seen in this picture, the conditions within the facility of FMC are quite serious and require an intervention by the relevant institutions to take action for the sanitation of the created situation. This institution employs a total of 81 employees, 8 doctors of whom 4 are specialist of family medicine, 4 general physicians, 1 specialist of emergency medicine, 1 ophthalmologist, 2 dentists, 48 nurses and technicians as well as 21 non-medical aid workers. This centre works in two shifts, whereas the emergency facility provides 24 hour services. Although there isn’t any specialist in the field of gynaecology, the counselling centre for mothers and children works consistently. The vaccination centre in 2008 has

realized its vaccination plan for 100% in the municipal level. Within FMC, once a week are engaged two specialists as external collaborators: a pulmonologist and a psychiatrist. During 2008, a total of 125,460 health services were carried of which 52396 visits and 73064 surgeries. All health services have been done without participation.

The largest distance of settlements which gravitate in FMC of Kaçanik is over 10 km, which distance should be passed by the residents of Korbiliq.

In FMC “Dëshmorët e Lirisë” in Kaçanik, the proportion doctor / nurse / no. of resident is: (8 employed doctors - or 4.62 doctor/10000 residents and 48 technicians or 27.73/10000 residents), is consistent with the requirements of the Ministry of Health.

Construction in the central area (around the Municipal Assembly and old mosque) has a maximum of P+2. Construction in the centre zone (in between the streets “Ismal Raka” and “Qamil Ilazi” and “Sali Bajra”) has a maximum of P+5.



Map.20. Spatial extension of no. of residents based on their education

4.7.2 Health

The health sector in the municipality of Kaçanik is quite in a good position, but it should be improved with qualified staff as well as with sufficient space for the development of health services, where a greater need is the provision of skilled health personnel (specialists) in various fields.

Services which are offered in FMC are offered in a building with two floors with an area of 1100m² and emergency facility with an area of 200m², where health services are required by some villages such as: Bob, Drenogllavë, Nikaj, Korbliq, Runjevë etc; with a number of 7314 residents or expressed in percentage with 45.37% of the municipality population. Employed in this centre are 81 employees, 8 doctors of whom 4 are specialists of family medicine and 4 physicians, 1 specialist of emergency medicine, 1 ophthalmologist, 1 dentist, 48 nurses and technicians as well as 21 non-medical aid workers. The work is organized in two shifts and provides 24–hour services.

In a study was found that during a year in this health centre were provided health services to 125,460 patients of whom 52,396 visits and 73,064 surgeries. Mainly all health services were carried almost free because 88.48% of the services have been without participation.

The proportion doctor-nurse-no of residents is 4.62 doctors per 10.000 residents and 48 laboratory technician or 27.73 per 10.000 residents.

4.7.3 Institutional development strategy in the future

In the near future the need for the improvement of health and educational infrastructure will arise. In the primary school there is a need for the expansion of the object for learning and a library. The facility of FMC has an urgent need for renovation and reorganization of the surrounding space, with the aim of offering better health services for its citizens. In order to increase the level of services in the field of education and health, work and commitment is required to improve the physical infrastructure of facilities, staff training and technological equipment to achieve professional performance and better services for residents of the municipality in the short and medium term.

5 Situation Analysis

Vision statement ***"Kaçanik, a city with efficient administration, qualitative services in education and health, qualitative and sufficient housing, planned constructions and treatment of informal settlements, increased quality of life and economic growth, development of historical and environmental values, with a modern infrastructure network and bridging with international character..***

Goals and objectives arising from UDP Goals

- Capacity building of the Working Unit, "Pastrimi" for effective management.
- Placement of the recycling process
- Taking measures to collect and process urban waste
- Provision of Private-Public Partnership for the processing of waste recycling
- Taking measures to reduce the level of dust from construction industry (lime factory)
- Fiscal initiative for environmentally friendly behaviour
- Continuing planting trees and increasing green spaces
- Taking measures for the preservation of open spaces, natural beauties (river banks of Nerodime and Lepenc)
- Emergency working group: for agriculture, fires, floods, medicine, earthquakes, natural disasters, war cases etc.
- This UDP foresees the construction of the city shelter for evacuation in case of danger.
- Creation of green areas to achieve the rate/objective of $7m^2$ green areas per resident.
- Reconstruction and construction of modern parks, completed with all the components needed for a garden or park to be called truly such, the area near the river Nerodime from the railway bridge near the new mosque to the House of Culture, in the right side of the river as well as the creation of spaces with playgrounds for children.
- Reconstruction or construction of areas sown with grass, ornamental shrubs or flowers on both sides of Nerodime river bank;
- Renovation or placement of lighting, other elements of urban furniture etc, in parks and public gardens to make them accessible and attractive for people of all age groups during the day and night;
- Completion with chairs and tables in order to create rest places for citizens, not only in the park but also in other areas of the city.
- Creation of areas with playgrounds for children inside the old castle of the city which can be used as free spaces to create recreational facilities for younger groups, by adding thematic elements and social programs;
- Creation of infrastructural and organizational conditions for the continuous maintenance of green areas.
- Restoration of Mosque "Sinan Pasha"
- Restoration of the town Castle
- Completion of renovation of the House of Culture and its declaration as a cultural monument due to its historical importance" Proclamation of the Constitution of Kosovo", the so-called "Kaçanik Constitution",
- Within the house of culture, the historical and sensational cultural heritage museum of Kaçanik and its surrounding will be opened.

Objectives

Objectives achieved after the completion of the project

Enhancement of the quality of citizen cultural practices’ through the provision of artistic, cultural, and innovative projects with high and contemporary quality

- Improvement of the social life of citizens through a combination of traditional projects with civic engagement.
- Presentation of a Kosovo and European image of the Albanian city for the foreign visitor as well as for Kosovo’s image.
- Revitalization of historical and cultural objects with different forms of creativity as an expression of city’s identity
- Reinforcement of the confidence of citizens in a city in which you can live.

Offers which are intended in culture as part of the heritage and tourism offer

- Establishment of multimedia in the framework of the House of Culture
- Construction of the “Theatre” hall of the city.
- Reconstruction of the City Library.
- Summer academies, for the promotion of young talents in fine arts.
- Organization of cultural and historical competitions for children who attend secondary school.
- Cultural twinning with other European cities and Albanian territories for exchange of ideas and cultural activities.
- Launch and creation of new traditional holidays, based on global experiences and folklore.

5.1 SWOT - Analysis

Assessment of the situation in the town of Kaçanik (First Urban Area), is one of the most important steps, which has allowed the exact meaning of priorities (description of the advantages of the area), weaknesses (barriers which stop or limit the development of the area, respectively its regulation) opportunities (description of external factors which can be used) and threats (description of external factors which may risk the regulation, development of the area and population), with which the city of Kaçanik may be faced (“First Urban Area).

This will reflect and provide all the relevant facts and professional analysis to illustrate, as well as address key issues for appropriate regulation of the area, as well as create conditions and other measures. The following analysis is done on data, research and indicators collected by the survey and other sources, structured in the profile of the Regulatory Plan of the area, according to the identified and used thematic areas, during the designing process of higher level plans. These are: Demography and social development, environment and land use, economic development, infrastructure, synergy, and interconnection issues. Analyses were conducted by thematic areas, issues, topics and sub-topics. For the purposes of the Regulatory Plan, are presented only as a ratio consisting from the analysis in the Plan level, and Conclusions. Conclusions of the situation assessment of the areas, for which the draft plan is used, are one of the important bases in all the following steps, stating from scenarios, collective and individual housing blocks, to the final chapter in this document.

Kaçanik City "First Urban Area"	
Analysis of the situation	
STRENGTHS	***WEAKNESSES***
Appropriate position of the area in terms of configuration of the terrain for urbanization and adjustment.	*Extent of unplanned developments with all the contents.*
From the analysis of the shape and size of parcels in location, we see that most of the plots are small and a large number of them have regular shapes, while a significant number of them are suitable for development.	*Housing for all segments of the population is not provided, and the standard of living is still low.*
The interest of the municipality and the private sector for the preparation of plans, and projects as well as provision of areas for development and investment.	*Lack of culture for collective housing.*
Predominance of the use of land for housing, but in the area where the plan is being drafted has the majority of destinations.	*Lack of social housing*
Natural growth of the population has a positive trend, but also the movements toward areas for which the plan is being drafted, are in a positive trend.	*Lack of law for voluntary consolidation of urban land or urban re-consolidation.*
Increased life expectancy compared to previous decades.	*Unplanned developments*
Balanced gender structure.	*Non-maintenance of sewage infrastructure.*
Capable contingent for work.	*Small parcels*
Possession of a large percentage of families with private residential unit (80%)	*Average number of family members is still high (6.5 Residents/Family).*
There are requirements for new constructions by private developers.	*Lack of collective housing areas (only 15 facilities) in the First Urban Area, where development pressures exist.*
Social, economical and environmental potential of the area of the regulatory plan.	*Presence of narrow public roads hinders the unification of parcels for collective housing, and destinations conform to standards and urban norms.*
Connection of the first area with other areas through corridors.	*Insufficient space for youth activities, elderly ad children.*
Property with high percentage	*Pollution from road transport*

between publicly owned and private	
Private sector is strong and constantly growing.	*Lack of spaces and adequate social care, at a certain extent lack of health, recreational, and environmental care.*
Constructions are mainly concentrated in the main axes.	*Infrastructure of inadequate standard and inadequate maintenance level.*
Suitable environmental conditions (low level of industrial pollution).	*Inadequate spatial placement of school and health facilities.*
High interest of youth for education, sports and culture.	*Inadequate capacity of sewage wastewaters in terms of pipe profile and non-functionality*
Existence of several bank branches in the area for which the plan is being drafted.	*Inadequate electrical grid and they appear to be dysfunctional segments.*
Existence of complete primary school in the vicinity of the area for which the Urban Regulatory Plan is being prepared and relatively good conditions of facilities. As well as the existence of a high school.	*Lack of cyclist paths, in some segments lack of sidewalks, and in places where they exist they do not have the adequate width, constructions occurring on the pavement and lack of public parking.*
The existence of the FMC and pharmacies in the area for which the Urban Regulatory Plan is being prepared.	*Highway distorts the traffic since all the vehicles from this road are directly led to the first zone.*
Existence of road transport and partially functional traffic system.	*Lack of local and urban transportation.*
Existence of some paved roads with sidewalks, lighting etc.	*Insufficient space especially for the kindergarten and other social and cultural contents, foreseen by the UDP, analyzed by comparing the spatial capacity of the area (potential densification).*
The existence of lines, equipment and telecommunication operators.	*Inadequate capacity and periodically shifting of water supply, electricity, sewage and waste collection services.*
Water supply network lies in the majority part of the area for which the plan is being designed, where constructions exist.	*Physical and administrative losses (water, electricity...)*
Sewage network of wastewaters lies in the majority part of the area, for which the plan is being drafted, where constructions exist, while the atmospheric water network lies in only two roads (main urban arteries).	*Insufficient road width for the volume of traffic, standard and urbanization trends, existence of some local blind streets etc.*
Improvement of water supply network in some parts of the city (first area).	*Cycling transport is not used or used just a little.*
Existence of underground power cable segments.	*We have only 42 resident /hectare.*
Existence of associated	*Lack of sports and recreation facilities.*

equipment and energetic services.	
Coverage of the majority part of the area where currently are transformation facilities.	*There are no sidewalks on all roads; therefore the risk for all categories, especially for youth and elders is very high.*
Provision of internet services by some operators.	*There is no central heating.*
Advanced technology level and more complete service packages.	*During the survey, it was estimated that in the majority of facilities there are inadequate thermal and acoustic insulation, or not at all.*
Familiarity with easy, simple, quick and inexpensive services.	*30% are not connected to the landline telephony.*
Digitalization of plants.	*Non-exploitation of alternative energy in the area.*
Landline phone for the majority part of the area which is covered by the plan.	*Constructions close to or even below the high voltage line.*
Coverage with mobile network of 95% of the territory of the area which is covered by the plan.	*Lack of public and municipal property for the completion of all public contents, and creation of partnerships for development.*
Majority of the facilities which are located in this area, are in a good or medium condition as construction structures.	*Very steep terrain in some parts.*
This area is dominated by low housing.	
There are free spaces which allow adequate and creative adjustment of the area.	

OPPORTUNITIES	THREATS
Creation of a diverse fund of housing (individual, collective, and social etc).	Diseases from the odour of existing sewerage, water supply and waste.
Planned residential development if the areas defined and regulated by this plan.	If the construction trends without conditions and urban measures continue, lives of people and goods may be threatened from earthquakes and other disasters with greater intensity.
Creative designs for new housing units.	Loss of lives and material goods from breakdowns under the high voltage line, and public health from electromagnetic effects which are transmitted by this line.
Development of the housing market and relatively affordable housing prices per m^2.	If facilities are not regulated and if socio-economic conditions are not created in the area, then the

	creation of a society without values, perspective and stability may occur.
Fulfilment of safety standards of housing facilities while respecting the laws, urban and construction standards.	If conditions are not created, it may result in the increase of crime rate.
Taking the key role from the private sector for the provision of housing units according to a satisfactory standard.	If conditions are not created, it may result in immigrations outside of the urban area.
Creation of instruments and capacities for urban management, urban development direction within the framework of the Regulatory Plan, addressing areas with priorities which are in pressure for the realization of objectives and urban policies.	If conditions are not created it may result in protests and riots.
Promotion of mixed activities in the level of the area for which the plan is being drafted.	Problems with property because of the process of parcelling and re-parcelling.
Provision of spaces for economic and employment activities.	If conditions are not created, it may threaten the level of shortening the longevity of people.
Development of green spaces, recreational and public spaces.	If conditions are not created, it may result in the addition of deviant phenomena, with particular emphasis on the young population.
Promotion of public transportation and sustainable adjustment and organization of parking.	Exit out of the control of the social cases and extreme poverty.
Improvement of facilities where is possible, and the organization and adjustment of sidewalks for pedestrians, cyclists and people with disabilities.	Further deepening of the economic crisis.
Creation of opportunities for the construction of new sports infrastructure, in the area for which this plan is being drafted.	Changes in the structure of the population, due to immigration of the young population outside of the area.
Adjustment and organization of spaces for sustainable health, work, services and vacation.	
Organized heating of the city and of the first area.	
Adjustment and organization of the water supply, sewage and atmospheric water network as well as qualitative network management where is lacking and reorganization and functionality were it exists.	

5.2 Conclusions

Updating of parcel boundaries based on property transactions and their reflection in cadastral documents, should be considered as a priority by the municipality. Non-fragmented properties represent a considerable potential for achieving planned density and strengthening of urban tissues within the urban territory. Municipality along with professional supporters should take into account smaller property transactions during the process of parcelling and re-parcelling, so this plan is more applicable, especially considering the lack of the Law for Urban Reconsolidation.

Inadequate road network is represented almost in the entire area, with special emphasis on the inside of the area. Main characteristics is that, narrow roads, closed of with no exit, lack of fluidity and treatment of the road sections. Often are seen constructions within the road perimeter which cause serious traffic jams. Some roads for which a plan has been prepared, in many cases conflicts have arisen between pedestrians and motorized traffic. In some roads, parking is done spontaneously, creating conflicts, very often, for the use of the area and occupation of pedestrian spaces.

Densification of the site, should be done through compacting in the entire area with individual housing, with a low degree of densification, and it should be treated in the concept of spatial development, as well as the possibility of collective housing facilities, while maintaining the existing structure which does not show any economic, social and environmental justification to demolish or redevelop: based on the principles of sustainable planning. The height and human dimension of buildings within the territory of the second area should be maintained, and the densification and efficient use of the urban plot should be favoured. The plan should limit the height of the buildings, based on the carrying capacity of the plot, planned density by the UDP, as well as other norms and standards. Care should be taken, that new constructions preserve elements of local typology and architecture. In order, to preserve a homogenous urban environment, care should be taken in the control of dimensions of the new constructions.

Care should be taken with the standards or avoid construction with flat cover, which deeply contrasts with the surrounding environment. Architecture, facades and materials which are friendly to humans and environment as well as the characteristics of these areas should be promoted.

6 VISION, PRINCIPLES, GOALS AND STRATEGIC PRIORITIES OF UDP WHICH HAVE AN IMPACT ON THE URBAN AREA I- KAÇANIK

This vision should be taken into consideration when this Regulatory Plan is designed, but also the goals and strategic priorities which should be converted in the adjustment of areas, creation of conditions for concrete measures starting from:

> *"Kaçanik, a city with efficient administration, qualitative services in education and health, qualitative and sufficient housing, planned constructions and treatment of informal settlements, increased quality of life and economic growth, development of historical and environmental values, with a modern infrastructure network and bridging with international character.*

Fundamental goals according to a broader view which deal with this plan can be defined as:

1/ further development of a system of values where all stakeholders exercise their rights to know, to be heard have an influence in decisions which have an impact in life and its development: one of the global goals is that during the designing and implementation of this document we should have qualitative participation.

2/ sustainable development, faster and more intensive and changes in the socio-economic structure including an equitable development within the urban area

3/ creation of conditions for continuous increase of inclusion, alleviation of poverty, fighting of diseases, improving health and reducing child mortality at a rate that would provide the basic goals of changing socio-economic structure, dynamic development of economy and the standard of living and strengthening the role of the private sector for socio-economic development.

4/ continuous increase of security in all its dimensions (creation of safety for primary education, social, environmental, physical etc)

5/ building a global partnership for the development

General duties are: Reasonable and rational utilization of the space, which itself understands also the orientation with a development plan of the city as a whole; Contemporary processes of the economic development especially in the concept of cities as the engine of economic development, posing the requirements that, distribution capacity and organization of life and work in the area, is treated in a complex manner, also in broader frameworks and not only within certain zones. For this reason, subject to planning in the Urban Development Plan of Kaçanik, is not only the space and physical environment, but in the first place is the persons and organization of life and work, in a certain space. Therefore, organization and adjustment of spaces is a prerequisite for the intensification of development, and the improvement of living conditions of the population and workers.

To determine the basic goals of spatial development of Kaçanik City, the territory of the city is treated as part of the general spatial system of Kosovo, part of which is; based on the fact that we are a cross-border municipality and the role of Kaçanik city is planned in this prism: given that the Urban Development Plan of Kaçanik offers rational organization and

equipment of area, so that the organization of the area responds to the best interest of the population which lives and works in the city of Kaçanik, without neglecting broader interests as well as interdependence and connectivity with other regions.

In addition to the goals and tasks which arise from the municipal and central level documents, as well as agendas of local and international conventions, for the city of Kaçanik more specifically, the following goals and tasks can be defined.

Goal 1. Development and protection of areas and socio-welfare services
Goal 2. Development and protection of heritage values
Goal 3. Sustainable economic development
Goal 4. Sustainable environmental development
Goal 5. Sustainable spatial development
Goal 6. Development of an integrated functional and modern infrastructure
Goal 7. Development of free and safe mobility, attractive and diverse for all citizens of the city of Kaçanik, as well as urban and inter-urban interconnection specifically aims the following goals as well:

- Planned densification and infrastructure development

Development of constructed environment, run by efficient exploitation of the urban territory, within the existing boundaries of construction in order for its compacting; Densification of existing residential areas, while respecting the social structure and the identity of the resident community; Development of the basic infrastructure: roads, water, sewerage, telecommunications, as a response to current needs and foreseen developments.

- Development of activities and social services; Strengthening and promotion of life in the community, through interventions in the structure of services; Strengthening of public spaces and integration with community functions; Creation of recreational poles with urban influence, as integration and socialization elements in between communities.

- Economic development

Economic development, aims at strengthening the private sector; promotion of commercial activities, creation of functioning organisms related to these facilities; is one of the most important elements for the existence of the urban centre; Preservation of structures of small family households, creation of conditions for their development in symbiosis with other civic development.

Based on the vision and goals of the plan for the urban level, the following specific tasks arise:

-Resetting of the place and the role of Kaçanik city, within the region of Anamorava and Kosovo.

-Presentation of all resources as a development factor, as well as maximum and rational utilization of all natural factors and those created for development; in order to achieve the aforementioned goals and harmonious development of the area; Global conception of long-term socio-economic development of the city, oriented to the development of all areas.

-Creation of conditions for a more favourable distribution of economic activities, depending on the distribution of population, infrastructure and involvement.

-Spatial distribution of infrastructure (roads, water supply system, sewerage, power network, telephone network, internet, hydro-economic facilities etc...).

-Creation of conditions for the organization and spatial distribution of service activities

-Spatial distribution and organization of housing, in accordance with the distribution of population and infrastructure and those planned.

-Growth rate of development should be in accordance with the set principles; Changes which will follow in the socio-economic development of the city, pose the need that planning becomes an inseparable process; only by cultivating the inseparable spatial strategic planning, the balance between social, economical and environmental development can be stored.

- **Strategic Priorities**

- Treatment of informal settlements,
- Treatment of public spaces.
- Completion of the infrastructure for existing cultural and sports facilities,
- Functionality and re-development of active, semi-active, and passive economic spaces.
- Development of new recreational and sports areas.
- Development of basic design, and implementation for the project of the river Lepenc with all the accompanying contents
- Protection of green structures and spaces
- Waste treatment
- Treatment of mixed areas and associated infrastructure, according to the norms and standards.
- Application of seismic criteria
- Creation and completion of the quality of public spaces (cemetery sites, parking areas, green areas, rehabilitation of commercial areas)
- Central treatment of drinking water and water supply infrastructure,
- Resources and electricity supply for heating,
- Treatment of wastewaters and atmospheric waters,
- Improvement of the road network with the associated infrastructure,
- Support of the compact development of the city, in functioning and polycentric concept, and ease of access from the urban areas in terms of sub centres
- Safety and regulation of the urban transportation, and other purposes during the designing process of the First Zone Urban Regulatory Plan.
    - River Lepenc and Nerodime, as a value for the city should be strengthened.

River Lepenc and Nerodime, passes in between the city and presents a value which needs to be strengthened as a Kaçanik identity element. Professional team along with

representatives of the civil society, institutions, and other teams during the designing process of the UDP have foreseen the treatment of the river area in all phases, by planning to address functional elements such as the re-regulation of the river in the segment where is regulated only in one level, it’s completion throughout the entire foreseen space required by an urban development plan, completion of the accompanying infrastructure: roads and sidewalks sidings, lighting, green areas, treatment of atmospheric sewage and other waters which flow into the river are nearby; completion with other contents for relaxation and recreation, up to the services which are offered for relaxation, drinks etc. Some urban effects should be implemented in order to make the city more attractive, in accordance with the principles of urban design. Attention should be given to the construction of one bridge, which would enable the communication and complement the mosaic identity, as well as special emphasis should be given to solid waste which sometimes is carried through the river.

7 V. SPATIAL DEVELOPMENT FRAMEWORK OF THE AREA

7.1 PLAN BOUNDARY

The area covered by the urban regulatory plan is bounded as follows:

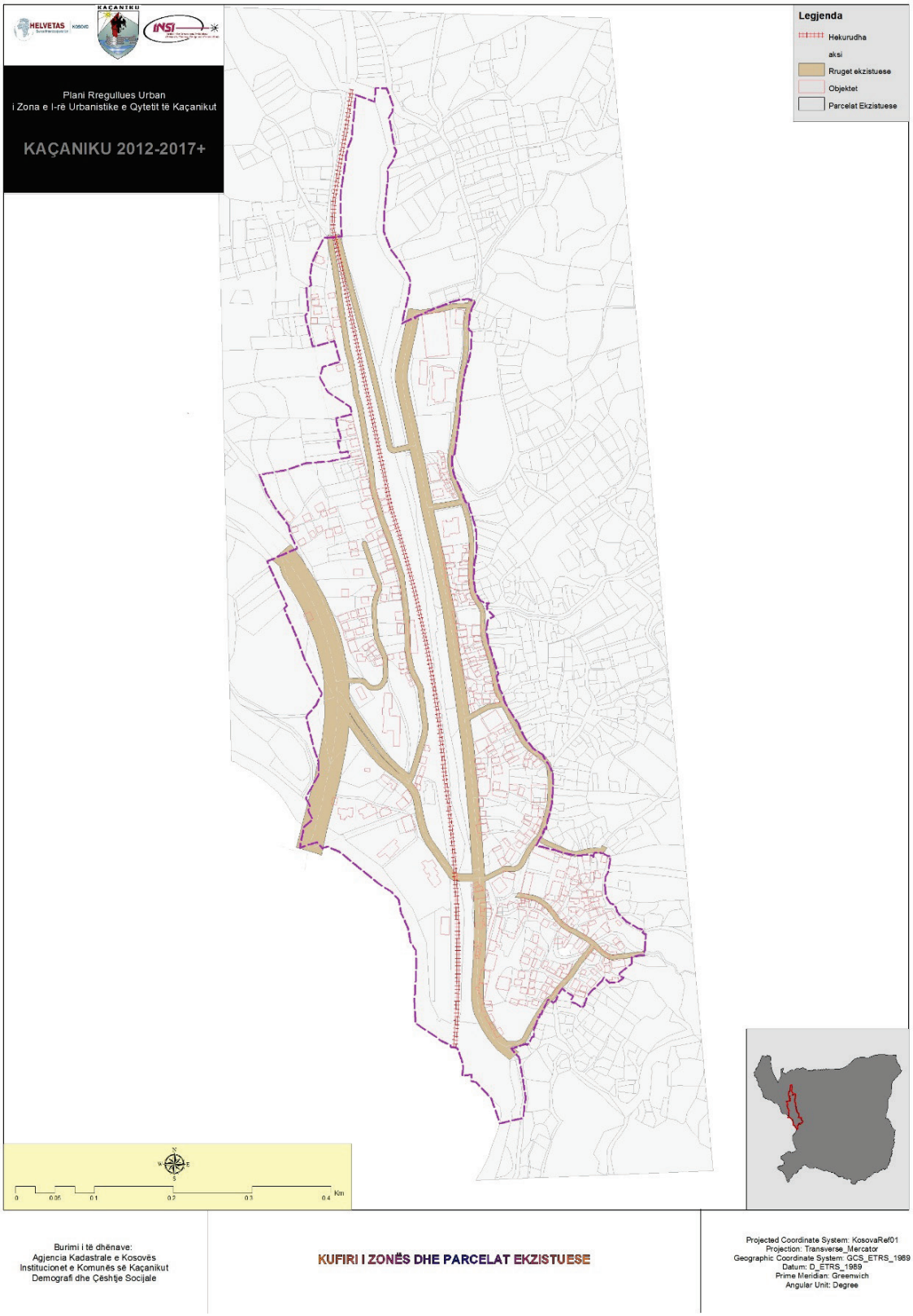
North: in the northern part, the area is bounded by the recreational area.

East: in the eastern part, the area is bounded by the “Qamil Ilazi” and “Sali Bajra” street.

South: in the southern part, the area is bounded by the lime plant.

West: in the west, the area is bounded by the Skopje-Pristina highway.

According to data from the municipality, the area covered with the Urban Regulatory Plan; the plan includes the “1st Urban Area” of the city of Kaçanik, with an area of 38.67 hectares, while the local component plots are as follows:



Map No. 21. Cadastral parcels

7.2 THE BASIC CONCEPT OF ORGANIZATION AND REGULATION

The basic concept of the plan is based on the Urban Development Plan of Kaçanik. This concept is based on the functional, organizational and formation aspect based on urban-architectural design requirements. The Regulatory Plan will set the conditions for rational and economic construction so that the solution in general will present the tendency of contemporary achievements, i.e. urban achievements, new understanding of urban areas (environmental regulations, orientation issues, informative values) and the so-called “topic of many urban functions”. The basic concept can be decomposed by these points:

• The Urban Area “The First Urban Area” is treated as one of the most organized areas within the city's urban organization.
• The balance between the existing and the projected.
• The distribution, change and completion of functional contents (housing, supply, education, health, culture, recreation, etc.), was aiming to satisfy the functional and organizational aspects.
• The existing geometric forms are a roadmap and a target for dealing with current developments.
• The urban solution is based on the concept of the basic spatial unit – the housing unit.
• With the combination of content with different urban functions, the mono functional character is eliminated.
• Floor area, to be understood as a combination of internal and external areas.
• The amendment and supplementation of the traffic network by adapting the housing concept, aims at removing and creating opportunities for the free walking of pedestrians.
• The possibility that through greenery, choice of materials, colours and contents certain parts within the urban area are allowed to reflect their specifics and characteristics, in order for them to be identified and to enable easy orientation within the urban area. The obtained results from the existing situation in the three areas show that for these areas, the best way to regulate the environment created many years ago would be the reconstruction of the area at the proposed boundaries, by renovating them and by creating new environments for businesses, housing, sports and cultural institutions and environments for the realization of the vision of the city: as a service point for tourism and congressional youth (hotels, halls, hostels etc.) as well as green areas for a healthy environment and a peaceful life, whereas in the river area, the improvement of the existing embankment.

The river area, filling with content, extension in the two segments with the right embankment, functional spaces around the river and planning of a Kaçaniks’ identification symbol Since the main street passes through this area, and we have the streets of the river and the parallel street that connects the northern part with the southern part but also with some settlements of Kaçanik, is defined by the Urban Development Plan. The aim of drafting this plan is to try and improve the urban situation of the area, develop mechanisms for the assessment of environmental pollution and control measures, ensure rational use of urban land with residential, businesses, and sports and recreation purposes, while at the same time contribute to the creation of a civil society to assess the performance of public systems, and be willing to implement the rules and laws in force.

7.3 5.2. THE DIVISION OF THE SPATIAL AREA IN URBAN BLOCKS

Since this area is passed by the main street that connects the northern part of the city with the southern part, and at the same time it separates the eastern part of the city from the western part, then the division of the territory was conducted in two urban areas: in the urban site that is identified with the sign BL-A and the urban site identified with the sign BL-B, and L (L stands for Lum, which means river in Albanian).

32 blocks were identified within these two urban area 1 block for business activities and a park, 1 block for administration,1 block for school, 3 blocks for sports and recreation

space, 1 block for cemetery, 1 block for a city mosque, 1 block for a church, 1 block for the castle and lime factory. There are 19 blocks for housing with a mixed purpose: 11 of them are collective housings, 8 are individual housings mixed with businesses and other purposes within the housing block.

Essential elements in the proposed functional and spatial structure are public spaces and contents. The area covered by the regulative plan offer much potential, many of which are unused and degraded, but that have the opportunity to create an easy network for access and content functions and public spaces. According to the Urban Development Plan, housing has a dominant role in all the areas, which is accompanied by the associated physical infrastructure.

“The First Urban Area” consists mainly of low housing, where functions besides housing are created, and other urban functions, such as: public, business and sports and recreation spaces.

Housing remains the dominant function of the area. Depending on the needs, potentials and requests of the residents, different levels of reconstruction, respectively consolidation of structures, are foreseen.

In the South, the sports and recreation space has a dominant function. Through these actions, conditions for healthy living must be ensured, including accompanying spaces and contents (free spaces, parking capacities, effective public services etc.). The proposed traffic network should provide a new concept, where free movement of pedestrians, cyclists and public transport is encouraged.

Map No. 22. Division in the entire spatial areas (blocks)

7.4 5.3. BALANCES OF DESIGNATIONS ACCORDING TO SITES AND BLOCKS

The balances of the surfaces with this regulatory plan are given in a tabular form, divided by the accounts and structures based on entire urban site planning.

7.4.1 Other areas in contact with urban areas

With this regulatory plan, the space which is defined by the design task on the perimeter of the highway “Adriatiku” M2, “Qamil Ilazi,” “Sali Bajra,” “Ismail Raka” is regulated.

The school premises are located in this area in perimeters: standard with the spaces where the Regulatory Plan is being done, by covering this part, also in this area is the kindergarten, with the enhancement of the capacity can meet area needs.

The health facilities are also located in this area and cover the spatial site with the standard perimeter.

7.4.2 Existing and planned roads

Zone I, represents the most vital part of the town of Kaçanik, even though the road infrastructure is not so well developed in the urban site A, it is even weaker in the urban site B, consisting primarily of new construction, mainly individual houses. However, it presents a very attractive area of the city for the future of Kaçanik. The existing streets are mainly composed by the roads; “Idriz Seferi”, “Agim Bajrami”, "Skenderbeu", "Qamil Ilazi”, " Sali Bajra" street, the "Adriatiku" M2 highway, "Vëllëzrit Çaka", "Jehona Raka", "Mejdi Dalloshi", "Ismajl Raka", "Mukadeze Lika - Muhagjeri".

In this area, the roads which are being expended are “Qamil Ilazi” and “Sali Bajra” street, which will have a sidewalk of 1 m on both sides. Greenery will be integrated into the sidewalk on both sides. Road width will be: 3.0+3.0 =6.00 m.

The street “Dëshmorët e Kombit” will expand to a street with a width of 6 m and with 2 m sidewalks on both sides.

“Agim Bajrami” street will have a sidewalk with a width of 1 m, with greenery integrated on one side of the sidewalk with a street width of 3.0+3.0 = 6 m.

“Vëllezërit Çaka” street will have a sidewalk with a width of 2 m, with greenery integrated on both sides, with a street width of 3.0+3.0 =6 m.

“Skenderbeu” street will have a sidewalk with a width of 1 m on both sides with integrated greenery, and a street width of 3.0+3.0 =6 m.

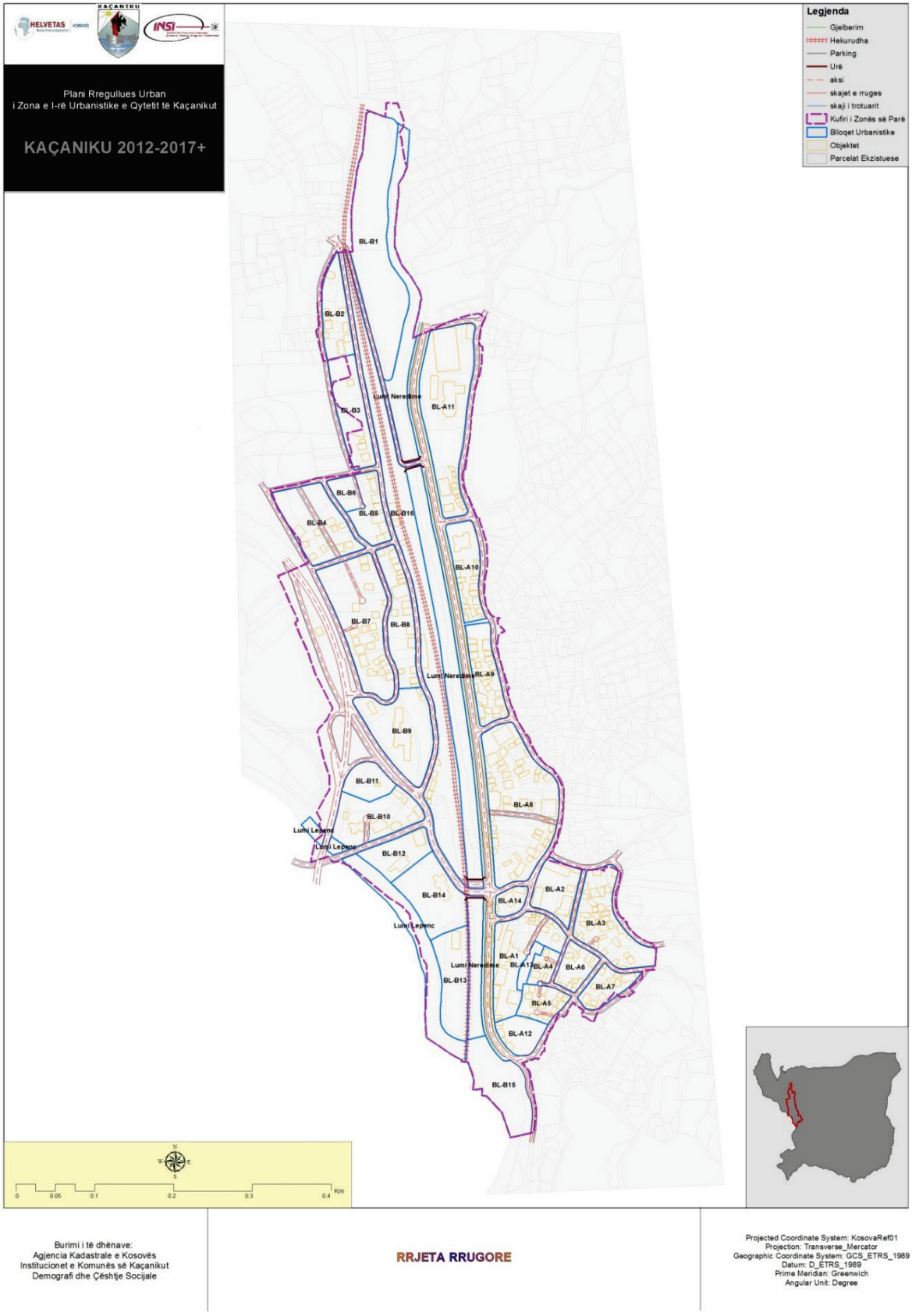
“Mejdi Dalloshi” street will have a sidewalk with a width of 1 m on both sides, with integrated greenery and a street width of 2.5+2.5 = 5m.

“Mukadeze Lika – Muhagjeri” street will have a sidewalk with a width of 1 m on both sides, whereas the street is planned to expand to 3.0+3.0=6m.

“Ismail Raka” street will have a sidewalk with a width of 3.50 m with an integrated bike path, whereas on the other side it is 4.00 m with a bike path. Greenery is organized on both sides in line with the street width of 1m. Parking is organized in the 90 º angle (fast parking), whereas the road width is 3.5+3.5=7.00 m.

All the other roads in the area are developed roads with this plan which contain the highest street standard. The other local roads have a road dimension for motor traffic of 5.00 m, up to 6.00 m, while one way roads and access roads vary from 4.00 m for access to the parcel, up to 5.50 m.

All aggregate roads are designed in such a way as to have parking for quick stops (linear parking’s), whereas the other existing parking’s with defined purposes, remains of the same use.



Map. 23. New and proposed roads

7.4.3 Categorization of roads

Road network for the Area I, represents one of the basic spatial structures of the city, and from the current situation, it has a very regular layout in terms of alignment with straight lines, but is still raw due to a lack of proper widths of the green path, cycle paths and narrow sidewalks in some road segments. Based on current conditions and trends, development of the area within the city, will be even more difficult if a proper (basic) structure of the road system is not created. In dealing with the street network, it is aiming to achieve:

• Preservation of existing road track,

• Expansion of roads which have difficulties in movement and access,

• Proposal of new road tracks with the purpose of creating urban blocks which contribute to easier access or permeability within the neighbourhood from the area surrounding roads,

• Continuation of roads with no passing approach (dead end) which go under the road category,

Expansion of road lanes is one of the main priorities as the conditions for construction cannot be given, if the area of transport (public road space) does not provide easy and safe access. The creation of new roads with the purpose of creating peripheral blocks will assist in the completion and the structure of the road network. The categorization of roads is divided into:

• *Aggregate roads (of the city and area),*

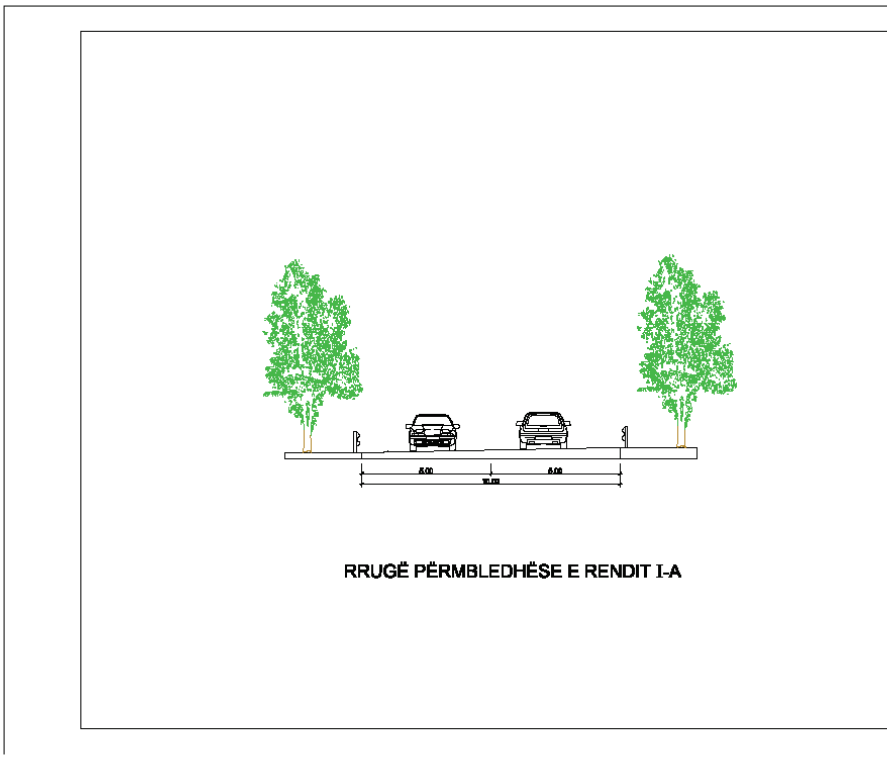
• *Local roads*

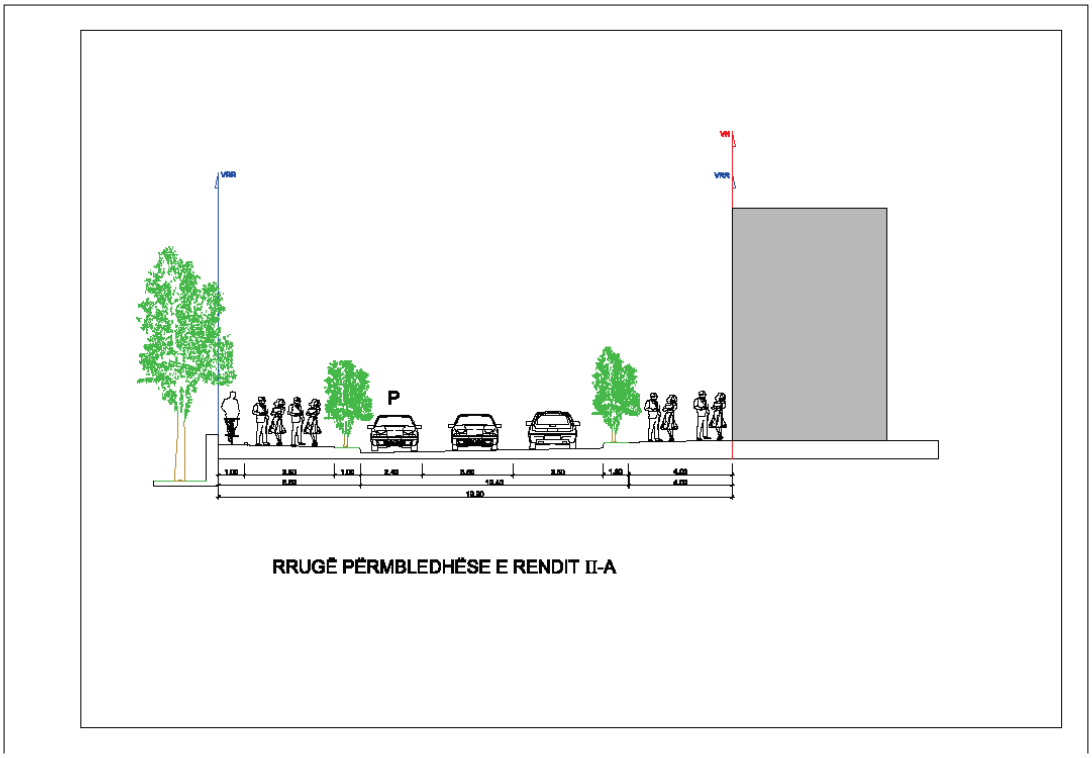
• *Access road*

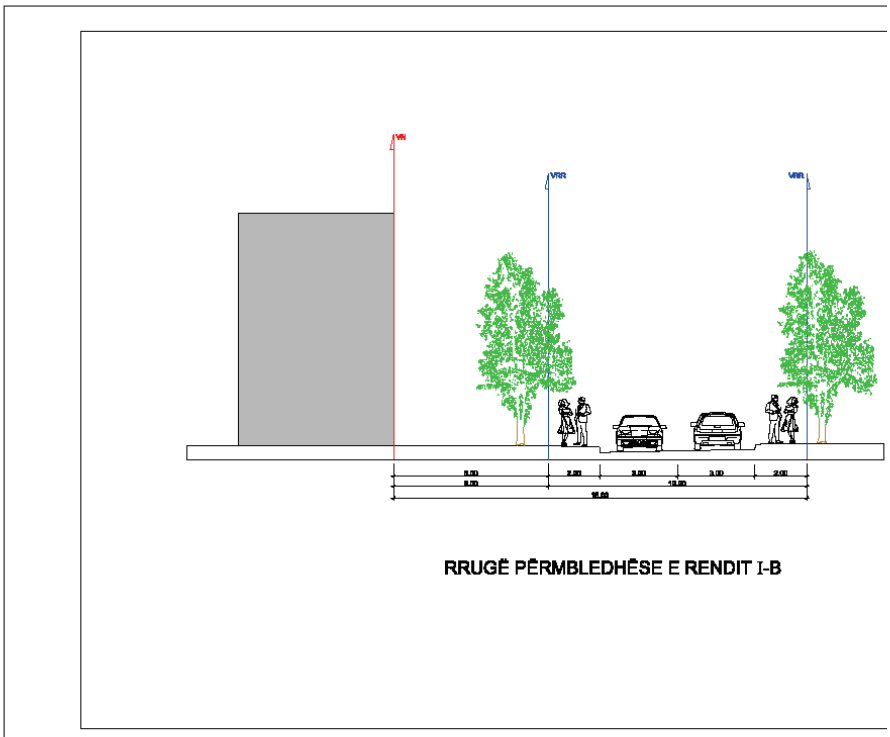
Aggregate roads that are included in the area defined by the Urban Regulatory Plan should cover the summarization for about roughly 6.94 km, while local roads which simultaneously create urban peripheral blocks should have coverage of 75 - 180 m in the housing blocks, and 90 - 150 m in the blocks with sports and recreation and business function. Urban block access streets shall have a minimum distance every 50 - 60 m from aggregate roads whereas a minimum of 40 – 50 m from the local street.

Map. 24. Categorization of roads

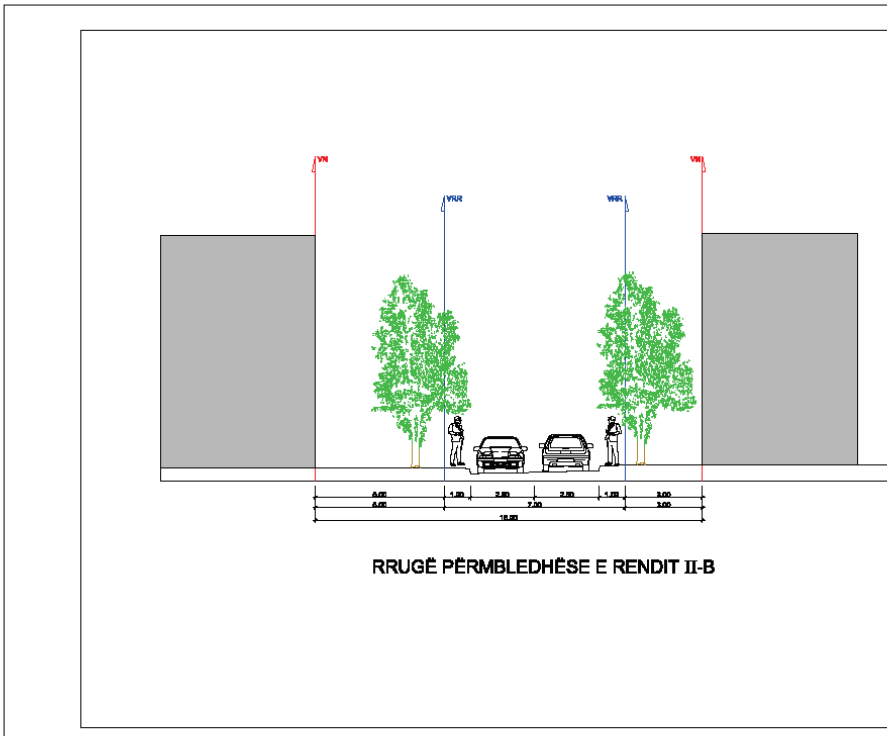
The categorization of roads and layouts







RRUGË PËRMBLEDHËSE E RENDIT I-B



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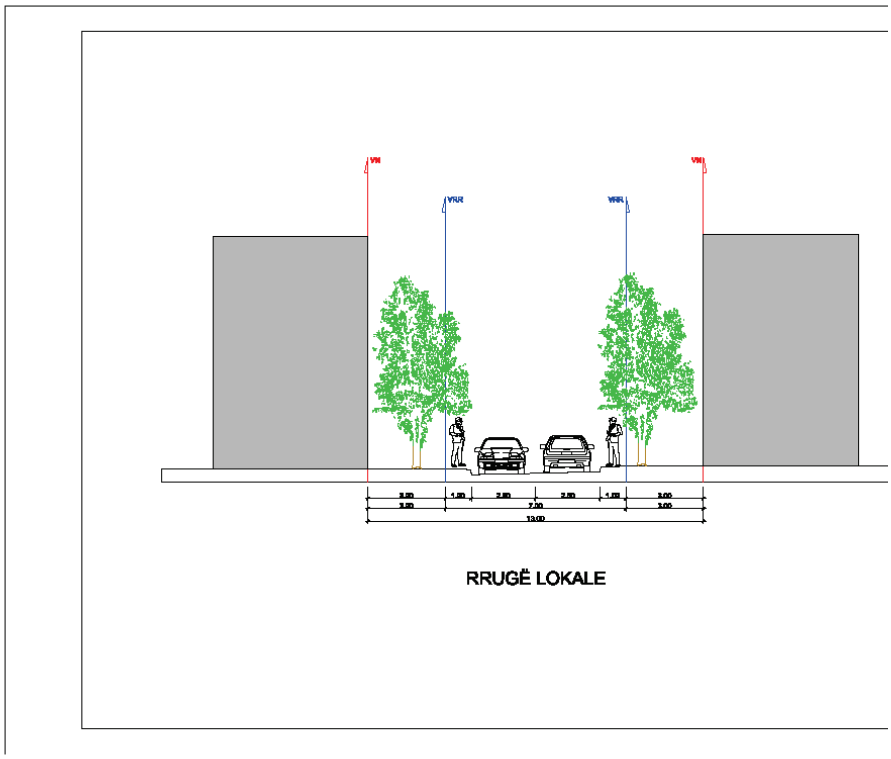

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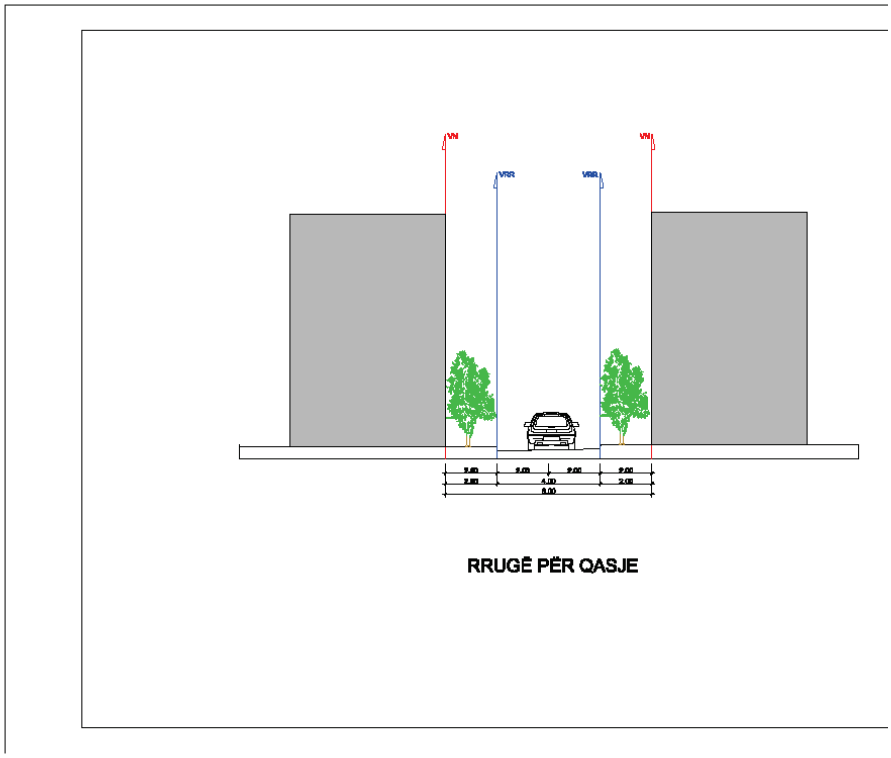


RRUGË PËR QASJE

Speed limit

With the new traffic law, the maximum speed limit in residential areas in Kosovo is 50 km/h. Under the authorities that the MoI and the municipality hold, speed limits in residential areas can be lower or higher if they are justified. Speed limits at aggregate roads can be of a maximum of 40 km /h and on the other hand local streets a maximum of 30 km/h.

Urban vehicles movement

The movement of heavy vehicles over 3.5 t, as well as bus movement on the local roads and on those for access to the block, is prohibited. These vehicles have the right of movement only on the main and aggregated roads. Movement of light trucks for the purpose of supply of goods, as well as the movement of buses in local roads and aggregated roads is allowed.

Traffic orientation

It is concluded that, for adequate traffic orientation in the 1st Area, adequate horizontal and vertical signalization with notification signs, road indicators, crossroads etc, are needed so that the traffic is orientated. Timely and regular orientation of the participants in the traffic to their final destination reduces traffic jams and the number of vehicles oriented to the wrong destination.

Public transport

Public transport is organized only between urban settlements of the municipality and interurban connections, and this same transport is used to move between different points of villages. The main stopping point in the city is the existing bus station and the other points that are used as bus stop, like the one at “Pasqyra” on the “Idriz Seferi” road, and the other point in front of the high school complex. Public transport within the city is carried with taxis and in some parts also with vans.

Pedestrian and cyclist paths

Pedestrian paths should be an inseparable part of the urban street, and are defined as spaces for pedestrians so that there is no threat from the movement of vehicles. The movement of pedestrians on the inner streets of the city centre, except the “Qamil Ilazi” street and “Sali Bajra” street is not considered to be safe since there are no or only partial pedestrian paths on these streets:

Sidewalks of aggregated roads should reach the width of 2-3.2 m. on both sides,
Sidewalks of local roads should be a min of 2 x 1.5-1.7 m.
Sidewalks of access roads should be a minimum of 2 x 1.2-1.5 m.

In the middle of the path for pedestrians and the road track should be a green barrier. At crossroads where the pedestrian movement trajectory intersects with the automotive road, marked pedestrian crossings are foreseen, parallel with the adequate vertical signalization, traffic signs for pedestrian crossings.

The parts of the crossroads and places where pedestrians cross the automotive road need to be visible: at daytime have no interference from any excessive greenery or building beside the road, while at night they should be illuminated so that at any time, pedestrians are visible to drivers who move in that part of the road.

Given the need of cyclists for safe movement and the adequate landscape of the city centre, cyclist paths are foreseen only on the aggregated roads. In the future, the placement of paths on local roads should not be excluded. Cyclist paths are on the same level as the automotive road, however, the difference between these tracks can be created with different materialization or asphalt painting cyclist paths.

Parking

Considering vehicle parking as a fundamental importance to the quality of the space where we live and work, how it is regulated, is of vital importance for the job, life and recreation of the Zone I. Currently, for the most part individual parking’s on their properties

are used by the residents, but we also have some public parking’s on the "Ismail Raka” street. However, it is planned that with the regulation of space, parking spaces for the residents, workers as well as temporary users should be provided in the future. Also at the administrative, public, social and cultural buildings a number of required parking spaces should be provided. To create a more attractive centre, the domination of space by vehicles, disturbance of pedestrians or cyclists should not be allowed. Especially on the active aggregate roads, it is best that they are not disturbed by the calm traffic.

The taxi parking spaces are foreseen to be organized in linear parking’s and marked with special signs for taxis.

The public parking will provide appropriate and necessary short-term parking for commercial maintenance of the areas for which the plan is drafted. Services for the parking of bicycles will be required in all new developments together with the parking spaces for persons with disabilities, which need to have good connections to the new urban structures. Proposed solutions have been:

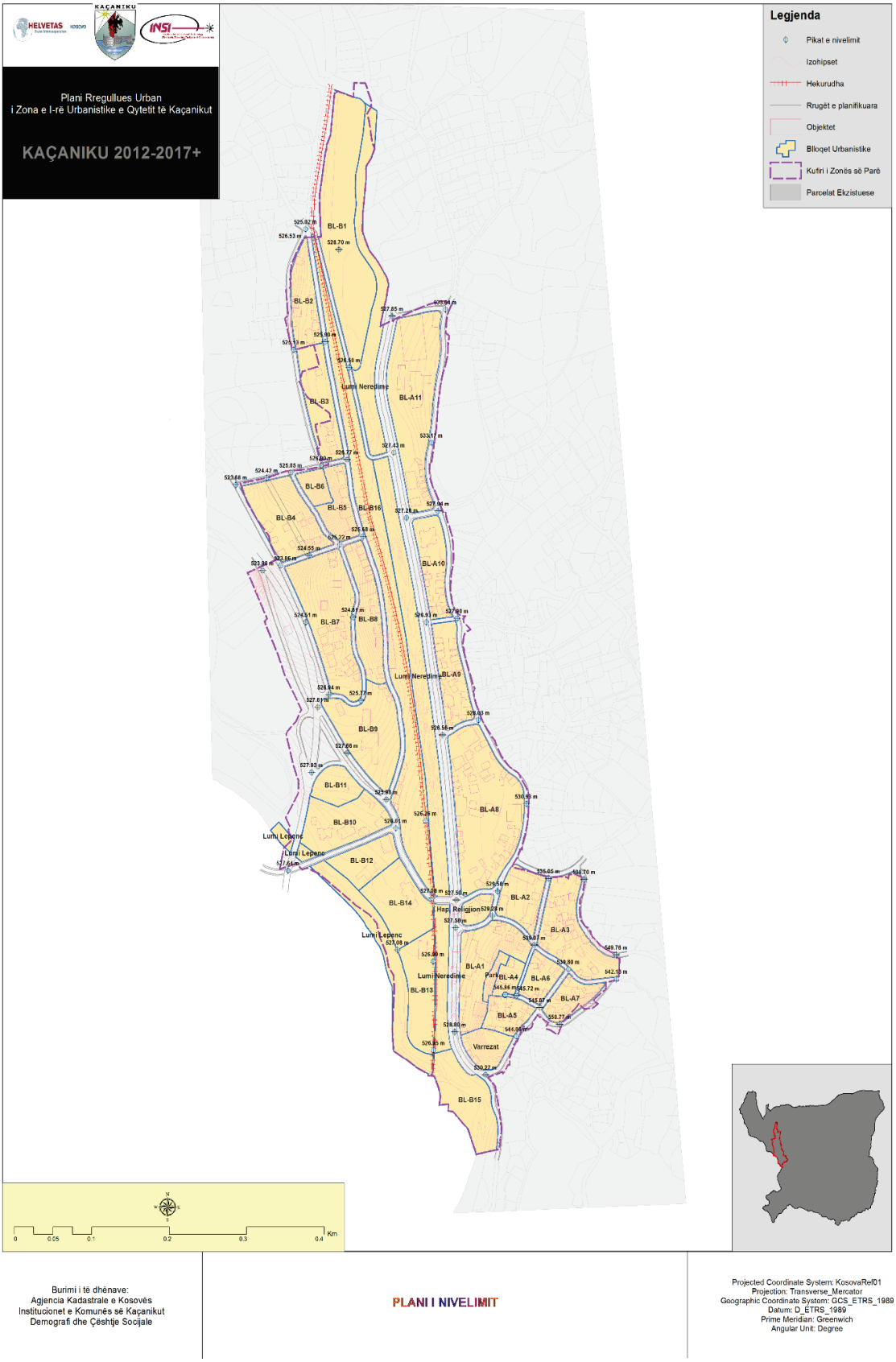
- *Open space parking’s (oasis),*
- *Parking’s along the road (tracks),*
- *Underground and surface parking’s at the collective housing blocks and mixed areas, as well as underground and surface parking’s at the individual housing blocks, and at the other sports and administrative spaces.*

Table 7. Parking’s

Shtëpi	1 vendparkim/shtëpi
Banesë	1 vendparkim/banesë
Objekt tregtar	1 vendparkim/40m^2 sipërfaqe tregtare
Çerdhe	2 vendparkim/20 femi kopshti
Objekt shëndetësor	1vendparkim /30-40m^2 sip .nett e institucionit
Servis automjetesh	6 vendparkime për një servis
Institucionet publike	1vendparkim >50-100m^2 sip .nett e institucionit
Institucionet arsimore	1vendparkim >50-100m^2 sip .nett e institucionit

7.5 LEVELING PLAN

The levelling plan shows height quotas of the roads, and road access possibilities. The lowest quotas lie in the south of the Zone I, mainly on the streets that are near the spot where the two rivers, Lepenc and Nerodime meet. The lowest quota on the street is 526 m and lies in the south of the area, whereas the highest quota is 550 m which lies in the south-eastern part of the area.



Map. 25. Levelling Plan

8 PLANNED SOLUTIONS

8.1 GREENERY/ LANDSCAPES

The landscape should be regulated, beginning with the horizontal layout of the housing blocks. The housing blocks do not need to be classical regular shapes or straight lines. It is preferred that through the greenery or placement of the buildings (construction lines), to create curved shapes, the colours of the facilities to be lighter and warmer (there should be no diversity of colours), and in no way bright colours. The colours must comply with the greenery and not create great contrast with the sky. The categorization of the green spaces depends on the categorization and purpose of the space, and accordingly to this the green spaces are classified in:

Spaces for public use

- park−forest,
- square,
- greenery along the traffic,

Greenery with restricted use,

- greenery on housing blocks
- greenery in working areas (administration, health services, etc..)
- greenery in education spaces,

Greenery with special purpose

- greenery on protective lanes,
- greenery of infrastructure,
- greenery of school facilities
- greenery of protective lanes,
- greenery along the economy (industry is thought)

8.1.1 Park surfaces areas

Within the frames of the first area, the blocks B16 and A13 are dedicated for the city park, where is the existing park. In the B1 and B15 blocks, there are spaces dedicated for recreation and sports, where you can create mini-park type of spaces, up to 1 ha. Also, the area of the Nerodime and Lepenc river has been designated with greenery with the UDP, which in the future will serve not only the area in question, but also the entire city of Kaçanik. Of course, the fundamental problem in the difficulty of creating parks is the lack of free municipal properties, demand for construction and the high price of land.

8.1.2 Green areas

Green areas include smaller green spaces and green belts. They lie along the main circulation lines of pedestrians and motors and on the free spaces within the housing blocks. In addition to ensuring the continuity of green network in the visual aspect, these areas serve as barriers to pollution and noise. Regarding the greenery along the road, the following conditions must be met:

- The definition of the profile must be provided.
- They must be decorative and appropriate to the environment and climate and the mid-climate of the region.
- They must have environmental capacity (dust and noise absorption capability, large crown with large leaves); See profile of road layout above.

8.2 INFRASTRUCTURE AND SOLUTION OF PROBLEMS FOR POTABLE WATER IN THE CITY OF KAÇANIK (THE FIRST URBAN AREA)

8.2.1 Water supply system

The current situation of water supply in the city of Kaçanik and especially in the area, for which the regulatory plan is drafted, is taken into account in the regulatory plan which will continue to be resolved and executed as a branched network, which will continue to be supplied from reservoirs found in cascades. The current network is build with PVC, asbestos and with plastic pipes and as a priority during the period in which the plan is drafted is the replacement of the asbestos cement pipe because of its negative health effects that it may cause.

The profiles of the used pipes are from Ø50 mm up to Ø200 mm. Control wells are executed in the main nodes. The pipe drop responds to the surface drop of the city, which is approximately 1, 0%. As for plans and projects to solve the potable water problem in the city of Kacanik, first urban area, it is worth mentioning the following projects:

- Replacement project of the asbestos cement pipes with another pipe with adequate material and a profile according to the necessary capacities that are defined with this regulatory plan for the area and the transit capacities of water which passes through the area and uses this pipe should be replaced as soon as possible.
- Water supply pipes in the existing areas need to be advanced based on the water consumption capacities and interventions in the areas with large capacities, materials and losses.
- A new water supply system needs to be built in the new planned areas based on the planned capacities of water consumption.
- Construction of associated facilities for water supply (manholes etc.)

Hydraulic calculations

For the hydraulic calculation of the area covered with the regulatory plan, this methodology is used and for the calculation of the spending water, these parameters are used:

- Number of residents according to the planning period is in residents per block,
- The coefficient of the population growth p=2,0 %
- Project period n=25 years,
- Spending rate q =220 lit. /resident/24 h,
- Coefficient $kd = 1.40$,

A. (Remark) The consumption calculation was done on the block level by calculating the maximum potential of residents, resulting from the maximum density of residents and the surface of the block

In the collective and individual housing areas but also in the mixed areas including all the consumption for other purposes

The number of collective and individual residential users is multiplied by the rate of consumption in the way listed below

In this way, the amount of water was found, expressed in litres per day

Q = qo x N0 x kd=..... l/day

The maximum daily flow is found and expressed in

Max Q daily=..... l/s

and

B. Dimension of the pipe

V=1.0 m/s

π = 3.14

$$d = \sqrt{\frac{4Q}{\pi \cdot v}} =$$

The dimension of the pipe is done segment by segment and is presented graphically. The graphic part is found in the graphic appendix “water supply.”

Map 26. Water supply infrastructure

8.2.2 Atmospheric sewer

Hydraulic calculations dimensioning of sewage

Principles of calculation

Regulatory plan has treated the atmospheric sewerage at a level that creates the basis for normal functioning of the atmospheric waters disposal from the urban zone I and creates foundations for drafting the main project for different segments of the Urban Zone I.

Although we utilized hydraulic calculation bases (dimensioning) that are supported in (the main) implementing Project Scheme of the Sewerage System for the inner Ring road. Selected option of the atmospheric Sewerage System is functional, economical and convenient towards topographic extension for more efficient evacuation of atmospheric water from the road to the main collector and its discharge into the closer recipients (rivers). In addition, the relevant technical-technological data are provided, which are taken into account in the Model of hydraulic calculation.

For pipeline construction, the pipes from structured poly-ethylene (PE) were selected, with high density in accordance with the Standard EN 13476-1.

Fundamentals of hydraulic calculation of the pipeline waterproof ability

For an outflow of water in the sewerage, according to the well-known law of Prandtl-Colebrook, applies:

Qdim = A • v m³/sec

Qdim - flow in the pipeline [m³/s]

A - Transom surface filled with water [m²]

v - The average speed of water movement [m/s]

For the speed of an outflow of water in the sewage, according to Sticklers’ known Model, applies:

v = Ks • J ½ • Rh 2/3

Ks - Coefficient, which depends on the severity of inner pipeline sites and shape of the wet perimeter [m³/s]

J - Pipeline sloppiness [%]

Rh - hydraulic radius [m]

In the sewerage network, the scale of partial filling of transom surface should be considered during dimensioning. This rate of filling during the dimensioning results in higher safety, although in the atmospheric sewerage system is allowed to fill the entire pipeline, because it happens at rare intervals (long return periods) and of short duration.

In subsequent hydraulic calculations model has been adopted the rate of filling:

hu = 0, 85 • D emç

Severity coefficient that is adopted in hydraulic calculations:

- For the selected pipe material from PE: Ks = 120
- For the selected material for ditches from EURODRAIN: Ks = 100
- For the selected material from concrete: Ks = 40
- According to the well-known law of Prandtl-Colebrook, for the sewerage water flow (inflow),

Applies:

$Qdim = A \cdot v$ [m³/s]

Qdim - flow rate in the pipeline [m³/s]

A - Transom surface filled with water [m²]

v - The average speed of water movement wm/sç

- For the speed of an outflow of water in the sewage, according to Strickler's known Model, applies:

$v = Ks \cdot J1/2 \cdot Rh2/3$

Ks - Coefficient, which depends on the severity of inner pipeline sites, Size and shape of the moistened perimeter [m³/s]

J - Pipeline slope [%]

Rh - hydraulic radius [m]

The main part of the area is proposed with open canals with sufficient capacities based on calculations and toward shorter flows of rivers and streams.

Map.27. Atmospheric waters Sewage Infrastructure

8.2.3 The basis of hydrological calculation

Dimensioning of atmospheric sewage pipeline is based on water inflow created by atmospheric precipitation (rains) falling on the area of the basin during this precipitation.

The amount of rainfall for the area that permeate the streets of the First Urban Area is calculated based on the nearest meteorological station. As presented in the previous chapter, the nearest station is for this hydro meteorological region is meteorological station in Shtime. Based on the processed data of this hydro meteorological station in addition, the determination of the rain intensity will be carried out, predicted by Norms for dimensioning of atmospheric Sewage Systems for urban infrastructure facilities.

General expression for the inflow of atmospheric water:

$$Q = i \cdot \psi \cdot \varphi \cdot \eta \cdot F \qquad [l/s]$$

i - Intensity of atmospheric precipitation

For infrastructure facilities and residential areas, according to urban hydrology, coefficients φ (retardation coefficient) and η (coefficient of the rain intensity reduction) take the value 1, therefore in the calculation is treated only the flow coefficient ψ according to the following table:

Type of basin surface and coating	Ψ
Sidewalks and asphalted roads	0.80

To economize the designed system for atmospheric water evacuation, the reduced duration (tr) versus real time (t) duration of the rain, should be considered:

tr – reduced time

tr – real time of the rain duration

r – Minimal altitude of rain to create the flow of water in to the pond

Coav – flow coefficient

h – Effective height of rain

d – Distance from the furthest point of the pond to the observed section

vs – Speed of the water flow in the observed basin

This duration is taken into account for each basin of the sewerage System calculated by computer software in the created Model, whose results represent the required dimensions of the pipes.

Non-uniformity distribution of the rain intensity appropriated above the basins for hydraulic calculations is not taken into account because it is about urban basins with relatively small surfaces and the full concentration time is shorter than the time of the water flow in the pipeline.

Due to the sizes set out above, in the appropriated Model for dimensioning of the pipeline with MIKE URBAN (MOUSE module) software that enables the simulation of hydrodynamic flow in the Sewerage system, have been applied following theoretical basis and boundary conditions that characterize the designed network:

Dimensioning of a sewage network is carried out with hydrodynamic flow simulation program (MOUSE).

Priority project is intervention in the closed canal that lies from the vicinity of the Catholic Church where we have a few hundred meters of atmospheric sewage and flows inserted in the tube with measures provided to the field of surface water.

See the map of the atmospheric sewage treatment.

Planned solution for treatment of (faecal) wastewater in the

Existing condition of faecal and atmospheric canalization in the city of Kaçanik- Urban Zone I, has been resolved and executed as systems with one main collector, because that way has enabled the configuration of the terrain and the river flow.

Even in the future, sewage system will continue to be removed from the First Urban Area in one main collector that will continue to flow in direction of Hani i Elezit and the Municipal main collector, also with free fall.

The network of sewerage system should be executed with pipes that meet the standards in terms of material, diameter, quality and adequate function.

Maintaining manholes should be planned in standard lengths and be technically designed to meet the function, material and acceptable quality.

As for plans and projects to solve wastewater problems in Kaçanik- Town, Urban Zone I is worth mentioning the following projects:

- Certain segments should be treated and improved within the Urban Zone I, to meet the functional standard and planned capacity with this plan
- New segments should be built for removal of wastewater
- Accompanying equipments should be built, such as; manholes and facilities for partial treatment of wastewater especially in the area near the mosque where it takes place the direct discharge into the river and when the river level rises, there is a risk that water flows back the wastewater

Hydraulic Calculation

Calculation of water consumption by residents

-Planned number of resident

-Increase rate of the population (birth rate) p=2, 0%

According to demographers statistics

-Percentage of filling the pipe h/d=0.85

-n→ exponent for projected period n=25 years

-Kp→ Safety coefficient

-Q→ Flow

-Qtr→ Transit flow

-Qto→ Total Flow (calculated)

-ω→ Surface of pipe wet section (mm²)

-R→ Hydraulic radius

-V→ Flow velocity (m/s)

-D→ Nominal diameter (mm)

-C→ Chezy Coefficient

-I→ Longitudinal slope (%).

-C→ Chezy Coefficient

* Specific consumption rates of water per inhabitant in a day are:

- According to sanitary inspection of the former FRY min. 80l/b/day
- According to practical norms in Germany Din1838….100 l/b/day
- According to EU standards EU-150-250l/b/day.

Adopt:

B. Calculation of the quantities of wastewater.

-Determination of number of residents for projected period n = 25 years.

-Number of inhabitants after 25 years

-Consumption of sanitary water:

h/d=0.85

Hydraulic analysis and dimensioning of faecal canalization pipes has been made in this form, as shown in the following map

Map 28 Infrastructure of the wastewater canalization

8.2.4 Energetic and cable telephony in Urban Zone I

Even in this area of infrastructure, treatment of network and energetic infrastructure is done in compliance with urban development plan and the planned number of residents and residential units, businesses and others around the blocks.

Research and analysis has been worked up to the level that enables to create the basis for the development of conceptual and main projects.

Here is intended the fulfilment of long-term goals of those that are met with the help of projects, studies and other activities.

Specific goals respectively objectives, are very concrete goals. They are carried out directly from the implementation of the research.

General purposes are intended, whereas particular goals are carried out.

The objectives must be clear, specific, realistic and achievable

The main purpose of this plan is to establish the basis for conceptual projects for distribution (installation) of cable canalization for electricity, telephony and public lighting. Canalization for electricity should be carried out with electrical junction pipes for medium voltage (MV) and low voltage (LV) for all streets of the Urban Zone I. This is necessary to be carried out to replace old electrical air cable network and to expand distribution capacities for the future so that the electricity supply is more qualitative, certainly, taking into consideration the increased safety and aesthetics of the town.

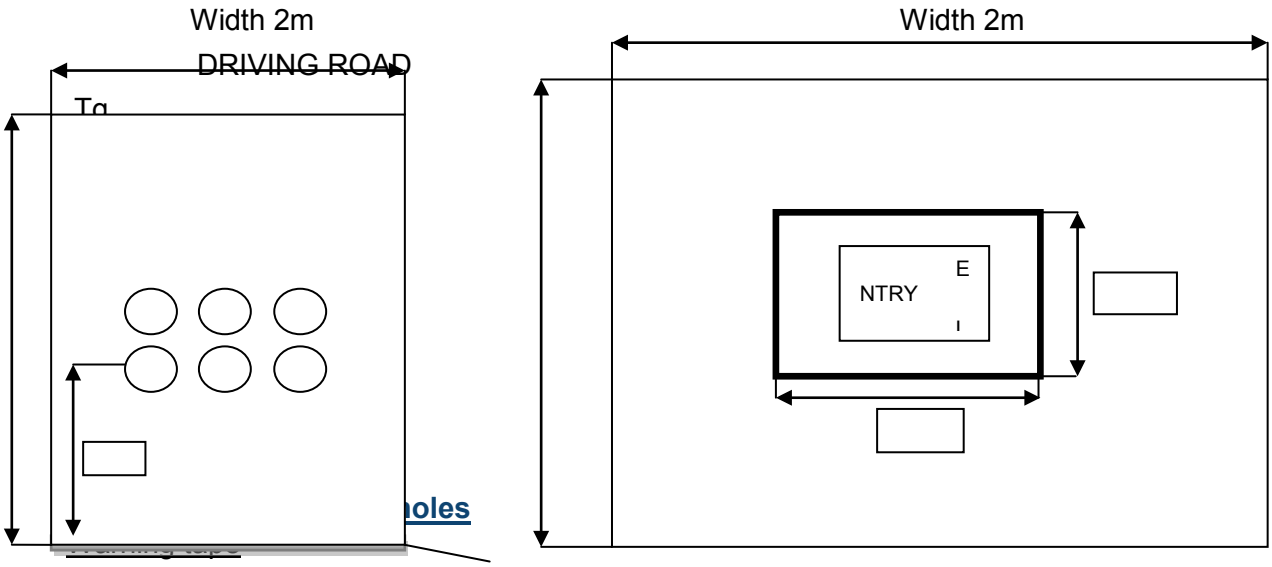
Also canalization of cable for telephony should be carried out with junction pipes for all streets of the Urban Zone I, in Kaçanik.

The canal regulation

The canal dimensions should be (0.7x1.2) m, or (0.7x1.5), (depending on the number of pipes) from strong PVC pipes with diameter Φ180, after opening the canal with shown dimensions, its bottom is well flattened, 10cm sand is casted and then is pressed, PVC pipes shall be placed on it, 5cm away from each other, and then 10 cm of sand is casted again over them, once pressed, the remained soil is brought back again. Dimensions of underground canal and the number of pipes for each road are illustrated with pictures.

The dimensions of manholes

The dimensions of manholes should be (2.5x2x2.2) m of length, width and depth, the bottom of which must be drained and the entry lid should be with dimensions (80X80) cm from metal.



Warning tape should be placed 50cm over pipes throughout the route with respective notes of voltage levels and types of cables.

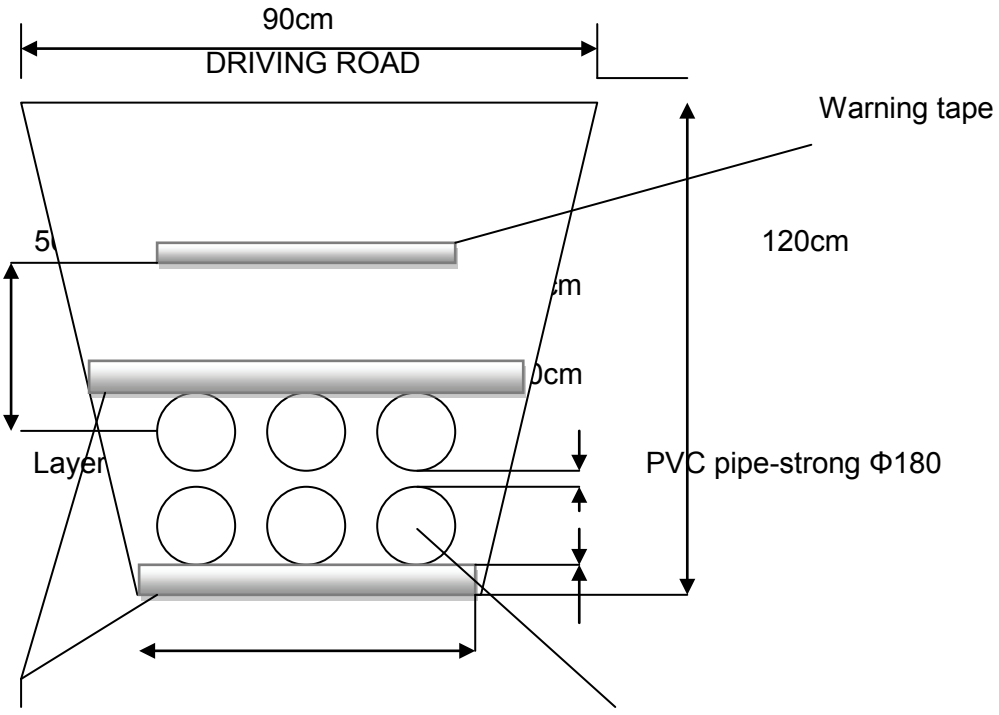
KEK, PTK and IPKO container

Should be placed on the pavement and be well enhanced on it. Each container must communicate with manholes with two PVC pipes Φ75 for entry and exit. The dimensions of containers and fuse number are determined based on the number of connections. (This task is performed by the workforce of the above mentioned companies).

Distribution- underground canal

The arrival of the two power supplies in the distribution of Kacanik, with installed power Si = 10.3MVA, and with voltage 35KV from village Bibaj, one with concrete pillars, and the other one with metal construction, stationed down the city cemeteries and other one above cemeteries, with power lines crossing the highway to the distribution, it is planned to be placed in the underground duct for both supplies, on the same duct will be placed also 10KV exits for the direction of the villages and Bob. In the duct are foreseen to be placed 6 pipes and the distance of manholes should be in each 50m.

Figure

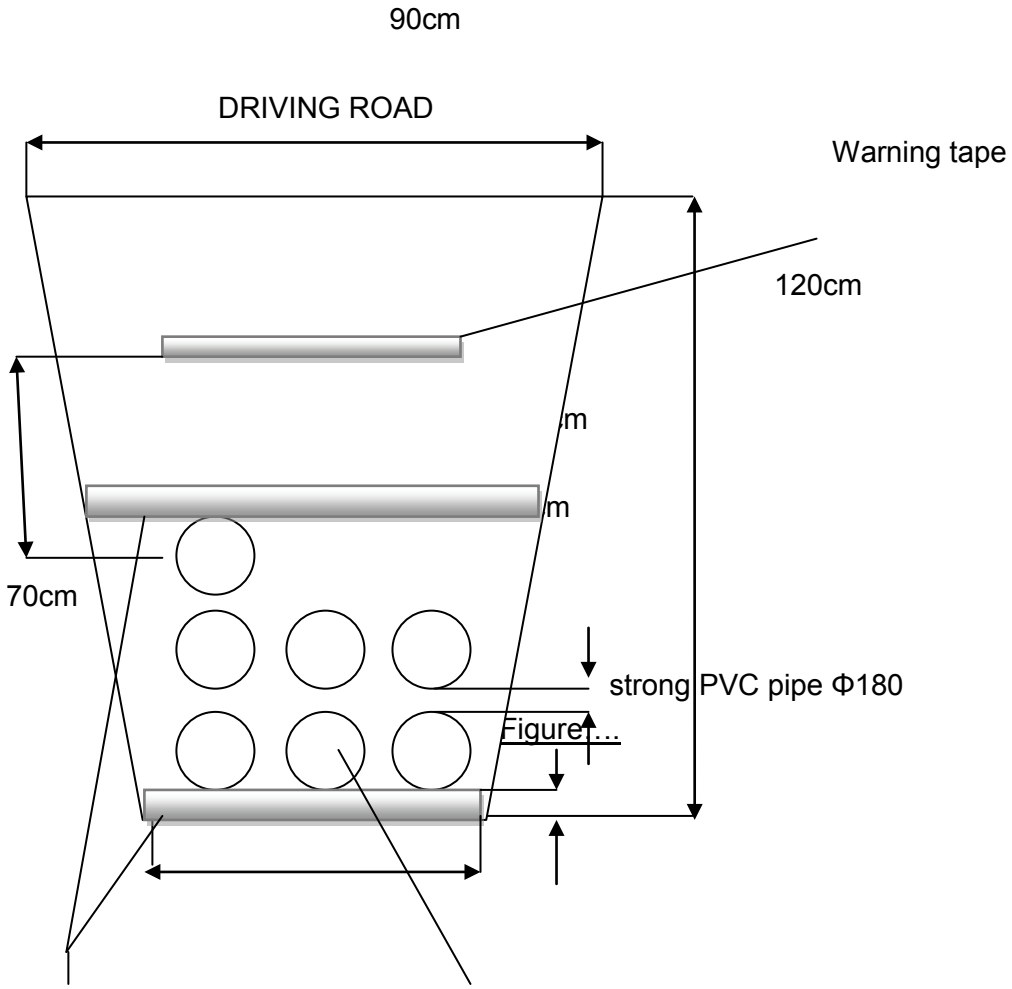


Distribution, underground canal - Ismail Raka Street

The distribution canal of KEK up to Ismail Raka Street, which segment is foreseen to pass between the employment office and Jona Dent clinic

The work executor should be careful because cable with voltage 10KV is lied in this direction that is provides the railway station and PTK cable

The underground canal has 7 PVC pipes which continues under the railway and down the river Nerodime (or shall be placed one metallic pipe internally plasticized with Φ450) until “Ismail Raka” street.



Underground canal “Skenderbeu” street

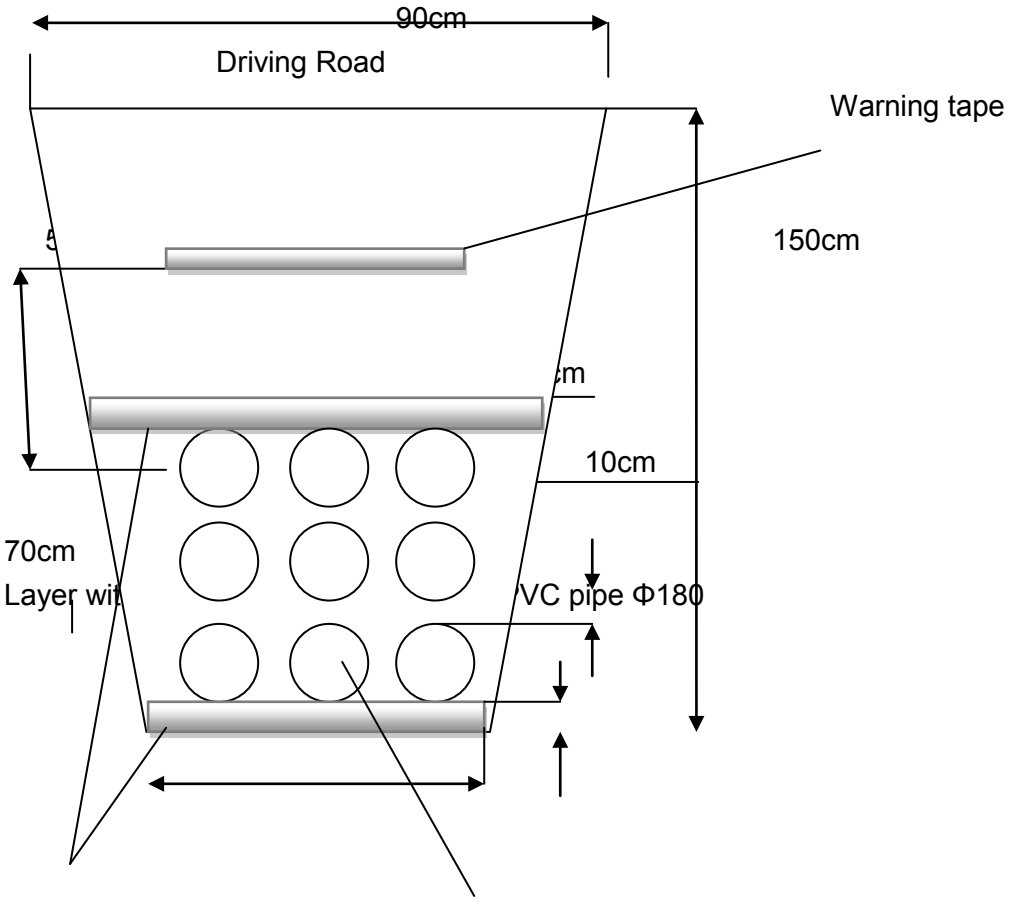
The canal in “Skenderbeu” street will be extended on the left side of the road due to extension of the canalization; it contains 7 PVC pipes, Figure…...

The distances of manholes, containers of galvanized sheet for electricity, PTK and IPKO tapes will be stored in the pavement on the left side of the road, well reinforced in each 30m.

Underground canal - “Qamil Ilazi” street

The underground canal in “Qamil Ilazi” street should be extended through the road, and pipes will be placed on it .The distances of manholes should be at every 30m and container from galvanized sheet on both sides of the road, figure 3. Existing canal with 4 PVC pipes from the police station to P +8 is not functional and appropriate one because manholes are small (sewage manholes are placed) and pipes are stuck with sand.

Underground canal in “Qamil Ilazi” street is linked to it in “Ismail Raka” street, in three places: at big apartment building, kindergarten and among the health and culture house, where 6 pipes should be placed.



Underground canal “Vëllezërit Çaka” street

The underground canal in “Vellezrit Çaka” street is linked from “Skenderbeu” street, it contains 7 pipes, and the distance of the manholes and containers is 30m. Figure …..

Underground canal in “Qarshia e vjetër” and “Mejdi Dalloshi” street

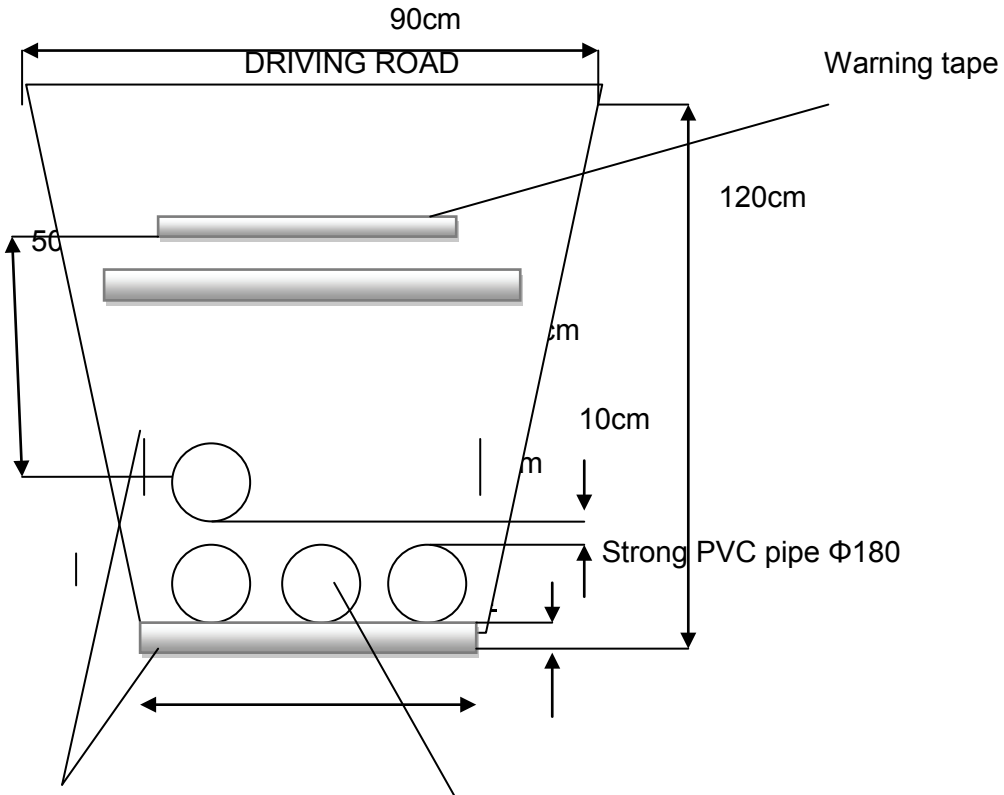
The canal in “Qarshia e vjetër” street is connected to the existing canal which comes from “Ismail Raka” street near the “Nerodime” river bank wall, that continues until the road – the entrance between the old buildings at which yard the is located TS - Supermarket, at this site will also be placed TS-Old Post office .

The canal continues to be connected on the road at the entrance of the old buildings, on both directions, one with 4 pipes (figure 4) until above the business premise called “Te bunari” which will connect TS- Ramadan Agushi, and the other one with 7 pipes (figure 2) which continues its extension in “Qarshia e vjetër” and “Mejdi Dalloshi” street, and again returns down in “qarshia e vjetër” street.

The distances of manholes and the container is 30 m.

Underground canal in “Jehona Raka “former “Ganimete Tërbeshi” street

This road will be supplied from TS_630KVA with 400V voltage through underground canal with 4 pipes, figure 4. Distance of manholes and the container is (30) m. Communication between the tapes and manholes is done through 2 flexible PVC pipes Φ75 for each container, as well as the communication between the containers itself is done through the canal.



Calculation of supplying cables section of 10KV voltage

All power stations which are located in the First Urban Zone, should be supplied by copper (Cu) cable distribution 3x1x150mm^2 with the exception of TS_Forestry and P+8 which must be supplied with the cable section 3x1x185mm^2 C_u because they have impact in other urban areas.

Calculation of cable section is made; taking into account that; voltage decline is not higher than 4%. The planned buildings with the development plan P + 5 in the collective construction area should install power plant that would supply up to two buildings.

Commercial housing centres while constructing should possess their own power station planned for consumption and to supply pumps beyond Nerodime River.

Constructed buildings which do not have power stations, should as soon as possible install one according to the number of their own consumers.

Street illumination in the first urban area will be done by supply from electricity taps that will be planned and placed in the pavement.

Installation of power lines of 10KV voltage, and other voltages and types of cables is carried by KEK because they are responsible for this.

Relocation of TS`s

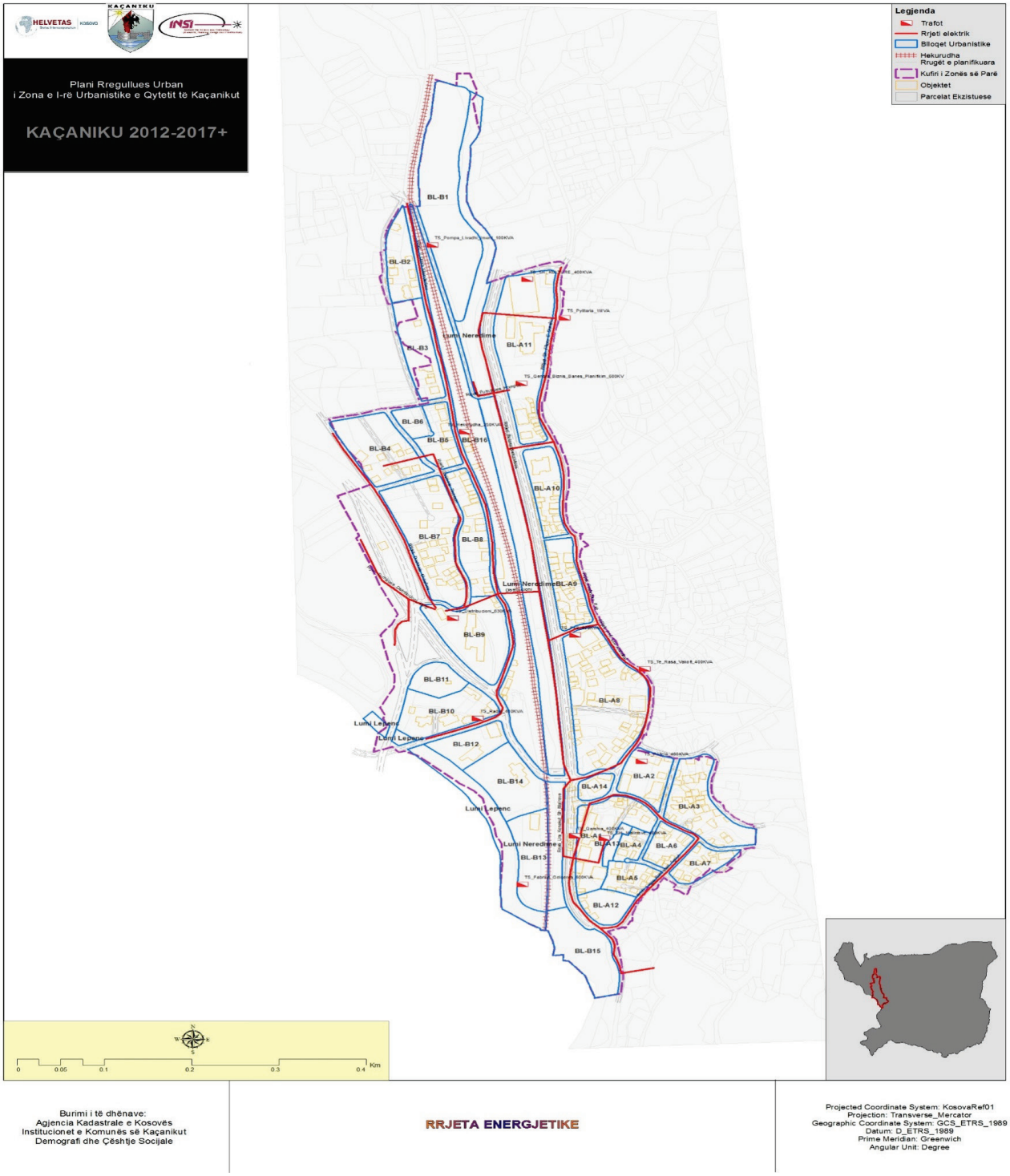
TS- Forestry is planned to be relocated from private property within the fences behind the health house, which will be placed in a closed system.

TS-Old post office is planned to be relocated at TS- Shopping Mall. TS- Pump is planned to be relocated on the left side of “Skenderbeu” street near the train station in a closed system.

Other notes

Cable extension in underground canal is done in a way that high voltages levels 10KV are placed in pipes, and then low voltage level for the supply of tapes, while over upper pipes, PTK and IPKO cables should be placed.

The numbers of fuses in one cassette as well as its dimensions are determined by power (section) of cable which communicates from one cassette to the other one, as well as the number of the consumers connected to it. Such a task is performed by KEK workforce.



Map 29. Electric network

8.2.5 Distribution of public lighting

Based on investor demand for public lighting in the neighbourhood, the distribution of public lighting should be designed, for two categories of the area:

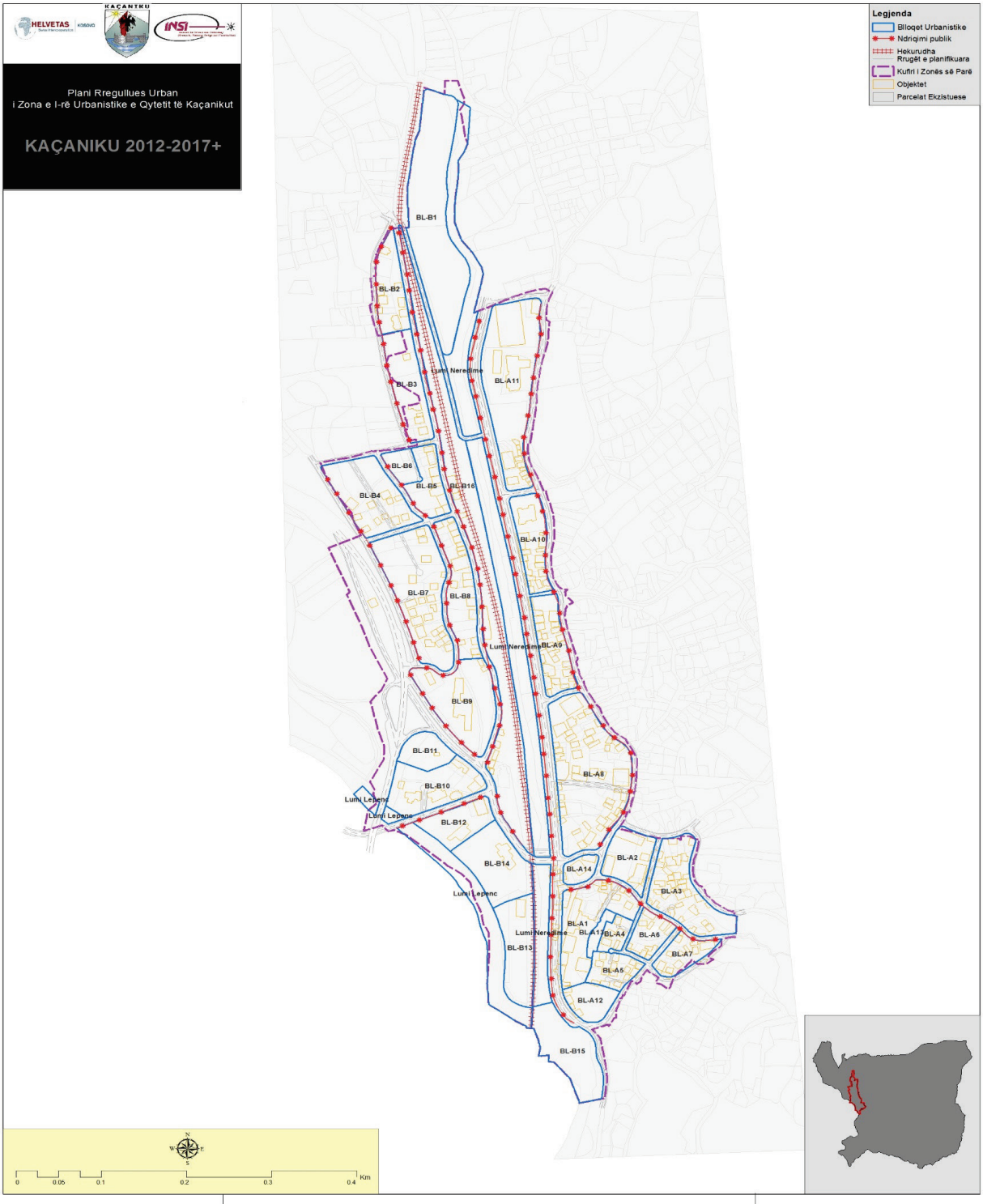
- Distribution of public lighting along all above-mentioned roads;
- Distribution of public lighting in free areas (green areas, parking lots, sports fields, etc.);
- Distribution of public lighting along all above-mentioned roads

This distribution is done along the pavement in all streets of this neighbourhood with galvanized metal bars for resplendence, 8 m height, with electric bulbs resplendence power of 150w (or other power based on photometric calculations so that quality lighting is achieved according to the standards). This lighting should be supplied with electricity from the nearest power station installed in an adequate neighbourhood. Based on the width of the roads in this neighbourhood (around 6m), it is necessary that distribution of lighting pillars is done in one side of the road at inner edge of the pavement.

Distribution of the lighting supply is done through adequate cables dimensioned based on total power of this lighting and based on technical standards. This supplying cable should be stored in a plastic junction pipe Ø63mm. Also along the lighting path, the switches track should be extended and connected to each lighting pole in order to provide tactile voltage. Commanding and supplying lighting equipment are usually installed as integral part of power station 10/04kV, or in special cases these equipments are installed in metallic framework dedicated for lighting. Through this commanding equipment is set the interval of time until when the public lighting will be active within 24 h, with a condition that in order to save electricity it should 50 % active starting from the 24:00 hours, and in a zigzag system. The distance between the lighting pillars can be from 20 to 25 m, always based on photometric calculations and technical rules.

8.2.6 Distribution of public lighting in the free areas (green areas, parking lots, sports fields, etc)

This distribution is made with galvanized metal bar for resplendence, with lighting body designed for above-mentioned areas, with a height of 3.0 to 5.0 m and the power of the bulb of 90W (or similar power generated by photometric calculations). The distance between these lighting pillars should be from 10 to 15 m (or calculated based on photometric parameters).



Map. 30. Public Lighting

8.2.7 Cable canalization for telephony

The main objective of this conceptual project is to design cable canalization for telephony for roads of the Urban zone I, which will impact significantly in improving the quality of telecommunication system and telephone line expansion for the future of the city. This design should be made based on the recommendations of the European international systems (IEC) and (DIN) and based on the Urban Zone I Regulatory Plan.

Distribution of this canalization is done by extending junction pipes ϕ110mm that lies in the same open canal for extension of electricity cable canalization in the entire length of that canalization. Three (3) pipes are placed in parallel above the covered layer of electricity canalization pipes in vertical distance of 0.6 m; this distance is set based on standards, along the open canal. Also these pipes are covered with layer of fine sand both in the upper part and at the bottom. Junction pipes are connected along the entire length of the canal through manholes in distance around 40 m with dimensions of manhole 2x2x2m.

The canal path at certain locations penetrates the road (road crossing), as presented in the situation of distribution of cable duct. Road crossing is accomplished with steel pipes 110 mm.

Through this duct with junction pipes, the distribution of telephone cables is done, based on the needs and planning distribution of telephone network.

Map . 31. Telecommunication network in the area

8.2.8 Cemeteries

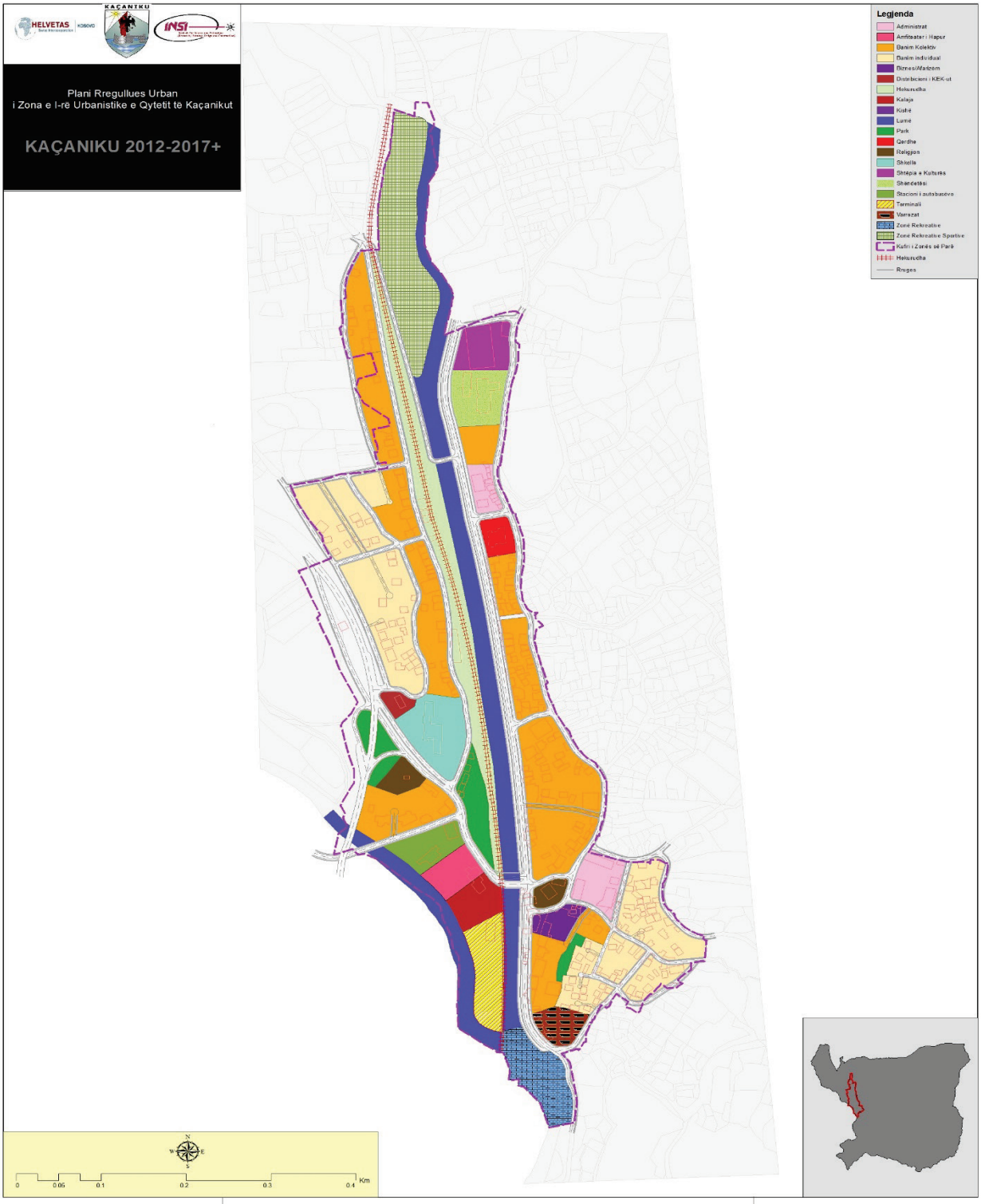
In the area where regulatory plan is being prepared, there are old town cemeteries. Urban regulation of the area where old cemeteries are located, it means protection of the area according to the principles for protected areas, excluding the possibility to expand it in the future, but completing it with contents that are not finished from the projects for this area and to create opportunities for meetings that will have reminding features.

Whereas **Urban regulation of the area** where old cemeteries are located, means treatment of this area including regulation of pedestrian paths and accompanying facilities within the complex as well as treatment of greenery.

9 VII. GENERAL PROVISIONS OF REGULATION

9.1 DESIGNATION OF THE AREAS

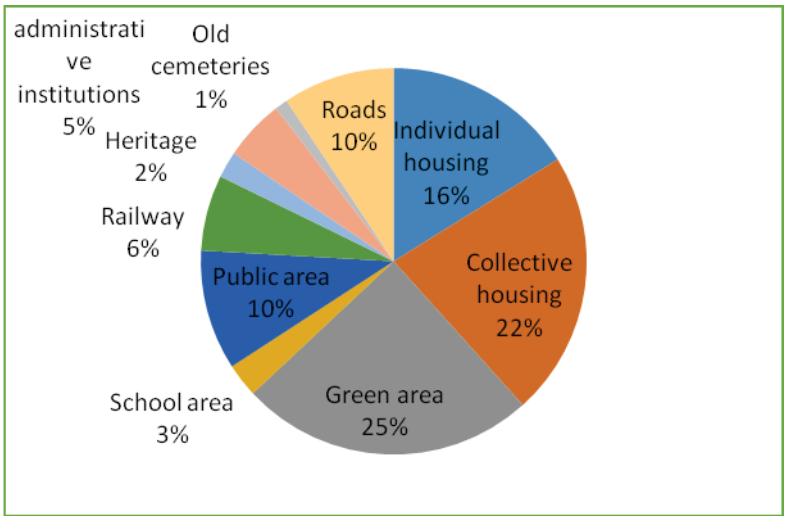
Designation of the areas, as a starting point has followed the obligations arising from UDP, existing situation, while it has been detailed at proposing level of the Urban Regulatory Plan. Based on the framework defined by this plan, the plan for designation of the areas has been made, by dividing the area in 27 ways of exploiting it. The biggest part of the surface area is occupied by collective housing 12%, individual housing nearly 9% of the total area. The greening area of Nerodime River is 9%, while designation of other areas is less than 6 % of the total surface area.



Map . 32. Designation of the areas

Table no.4.
Designation of the areas

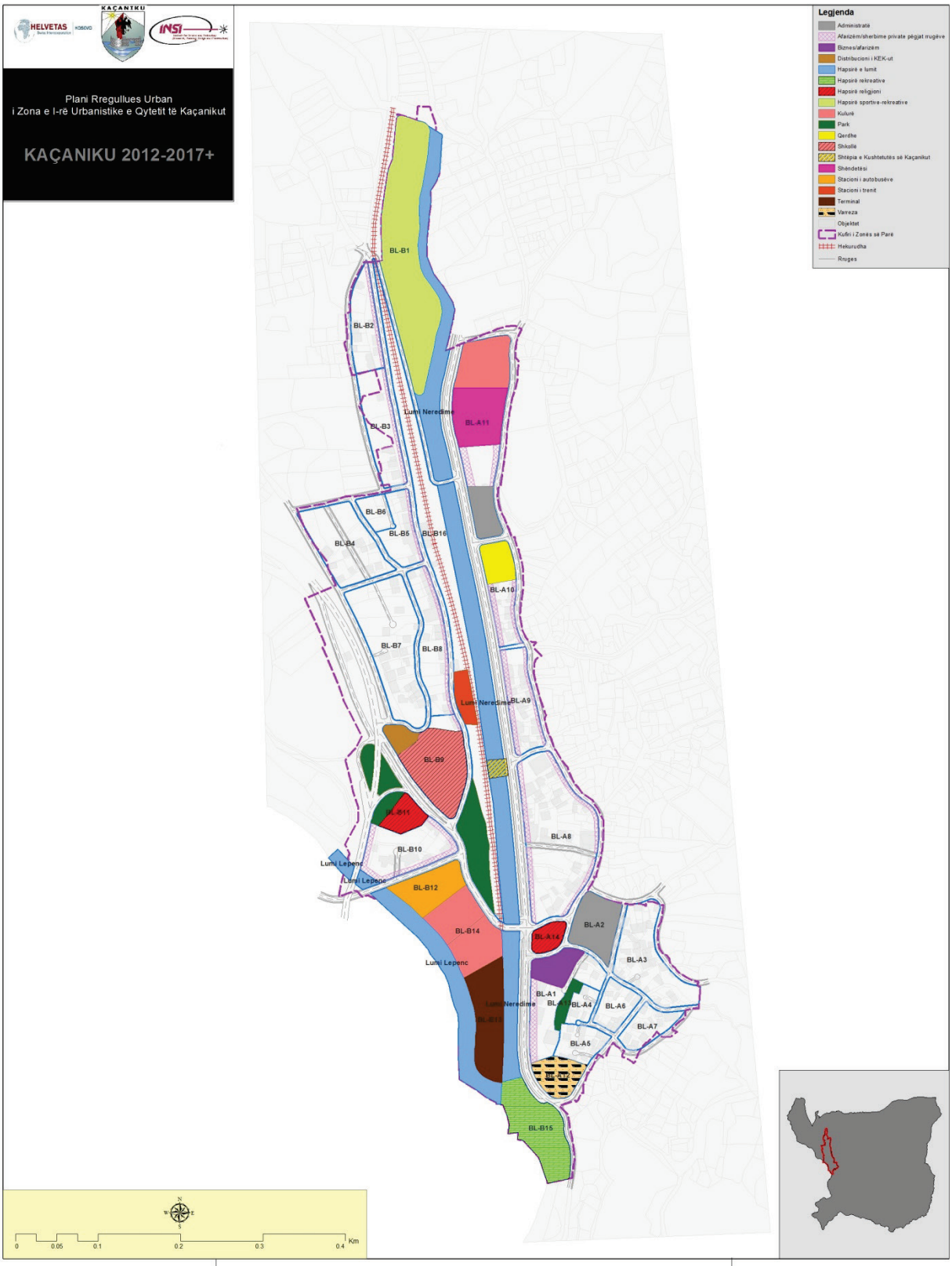
Designation	Sur.area *ha*
Individual housing	6.14
Collective housing	8.43
Green area	9.38
School area	1.07
Public area	3.82
Railway	2.41
Heritage	0.84
Administrative institutions	1.94
Old cemeteries	0.41
Roads	3.56



Graf.8. Designation of the areas

9.2 ATTRACTIVE AREAS

Attractive spaces are those which give vitality to the city or to a specific area. Among the attractive areas in the Urban Zone I are: recreation and sports areas in block B1, B15 and A13, block B14 is located at fortress, in A2 block there is a fortress, A2 block consists of administrative contents or business block, in block B9 are placed educational institutions, as well as business area on ground floors of residential buildings, along the roads as shown in the map of attractive contents.



Map .33. Attractive areas

9.3 PLANING OF THE CONSTRUCTION LAND

Proper planning of land and creation of favourable conditions for development, directly affect the value growth of the area, and promote the interests of residents and investors for the development of activities. During the planning process of development, the existing priorities should be utilized, as well as creating new ones. These priorities are closely related to the content, structures, visual or natural features. The proposed network of traffic and infrastructure in general, is one of the main components that help in the efficient development of the areas. Free public spaces should be planned in order to enhance the attractiveness of the areas. Features like these, in combination with efficient land management policies are essential to increase the value and attractiveness of the plots. Planning of plots and buildings in the area covered by regulatory plan, depends on the location and general conditions of the regulation. Regulatory conditions within the areas and parcels are:

- Regulatory line,
- Construction line,
- Distances between buildings,
- Form and the size of plot,
- Coefficient of transferability of the plot,
- Height and floor size of the building,
- The possibility of extension and positioning of the building in the plot,
- Access to the plot,
- The need for parking,
- Green area,
- Re-parcelling, and
- Urban land consolidation

These conditions vary depending on the areas and the function.

9.4 REGULATORY LINE

Regulatory line represents the line which defines the land, which is intended for general interest (roads, railways, river) and the land which is intended for special destination, which can be of private or public use. Regulatory area restricted by regulatory line, enables unimpeded development of functions in the land of general interest, on the ground and underground (installations). Regulatory line is defined for entire area, where the construction is new one, the area where redevelopment of the area is planned, and the existing area. In all cases, the defined regulatory line was a new one, having into consideration that even in the existing roads with existing construction, there was a need for road profile regulation (track designation for vehicles and pedestrian sidewalks). Designation of regulatory line is made based on the road profile which is defined based on the road category. Minimum width allowed in this plan, is 3.0 m, it is applied in built-up areas where the minimum of road lane width is 5.0 m, and the minimum pavement width is 1.5 m.

Regulatory area enables deployment of technical infrastructure underground (water supply system, sewerage, electricity network, telecommunication and heating network). Deployment of infrastructure in the regulatory area is defined by this plan, while it can be found in the graphical part. Road cuts, ducts for installations are presented in a schematic form, and should serve as guidance when drafting detailed road plans, in the textual and graphical part of installations. With this plan, the requirements are defined in more detailed manner for deployment of installations, and in case of non-compliance, these should be taken as valid conditions.

9.5 CONSTRUCTION LINE

Construction line, determines the smallest distance of the building allowed by regulatory line. In the developments set out in the Regulatory Plan, the road network is based mostly on existing paths, while in some parts; the existing structures will be recovered. Distance between the construction line and regulatory line, varies in different parts. Construction line must not cross the regulatory line.

In addition to the distance from the regulatory line, construction line has its role in providing sufficient distance between buildings on both sides of the road, in order to provide adequate sunshine, and providing privacy as well. The standard requirement for adequate sunshine is met if residential areas have at least 2 hours of direct sunshine (between 10-14 hours), in a day with least direct sunshine (21 December).

Based on the development of structures and functions, the minimal proportion between the building distance and their height should be at least 1:1. The most suitable proportion is 1½:1 or more, therefore where possible this proportion should be increased.

Depending on number of the floors, the distance between construction lines varies as well on both sides of the road. Inside the blocks, the distance between the buildings depends on their orientation and the position within a parcel. The distance between the building with opening (frontage with Windows) and the line of parcel, should be at least 0.5 H (of the building height), while the distance between the building without opening or with secondary opening for ventilation and the line of the parcel, should be 0,25 H ≥ 2.5 m.

Example:

With opening for number of floors P+4

P+4=13h x Kh=0.5=6.5 m. away from parcel boundary and 6.5 m. the distance of the building of the neighbouring parcel = 13m. i.e. the distance between two buildings, is 13m.

Without opening for number of floors P+4

P+4= 13h x Kh =0.25=3.25 away from parcel boundary, and 3.25 m. distance of the building of the neighbouring parcel = 6.5 m. i.e. distance between two buildings, is 6.5 m.

Map.34. Regulatory and Construction Line

9.6 FORM AND SIZE OF THE PLOT

In the central part, the plots are larger and have more regular shapes, while in the southern part the plots are smaller, and their shapes are more irregular. This condition is the result of inherited situation and subsequent divisions, due to the increased number of residents. In order to create suitable parcels for new developments, it is necessary to make re-parcelling of the plots and merging them into larger units. Depending on destination and function, certain categorizations of the size of parcels are foreseen. According to the size, the parcels are divided into three categories, such as:

- Small size up to 4 ari of land;
- Medium size from 4 - 10 ari of land;
- Large size > 10 ari.

The most appropriate form of the plot is rectangular form; with rib ratio is 1:1 to 1:2. Taking into consideration the existing situation, the best conditions for development and flexibility in providing solution are large plots > 10 acre. Small plots which are unsuitable for development as a result of very small surface or inappropriate form, affects non-development and non-flexibility in providing good resolution.

9.7 INDEX OF PLOT USE (IUP)

IUP presents the maximum permitted area ratio of the building base (A1) against the plot surface (A). This index is conditioned directly by the minimal requirements of green space, parking on the ground and the distance required between buildings. Depending on the size of the plot and the number of floors, the maximal values of the coefficient are set:

- Housing up to P+2 in plots ≤3.0 acre, IUP = 75%
- Housing up to P+5 in plots ≥ 7- 10 acre IUP = 50%
- education, IUP = 35 %
- administration IUP = 80%
- culture IUP = 100%
- Commercial IUP = 60%.

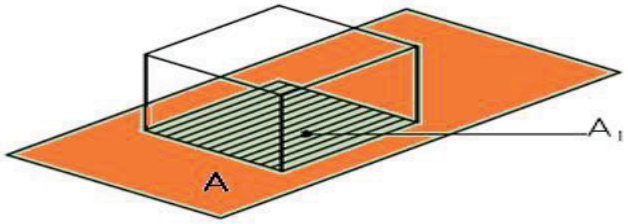


Illustration no.1. The ratio between the constructed areas with parcel area

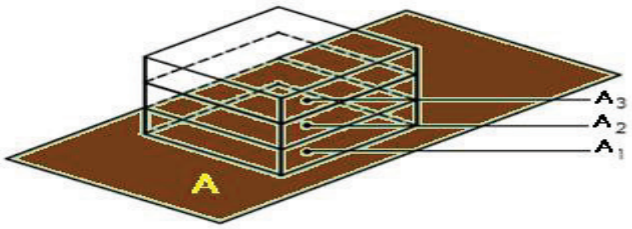


Illustration no.2
Number of floors and the ratio of the developed area against the parcel

In the context of the constructed areas, are counted also non-accessible roads inside the blocks for above mentioned functions, if they respond to the general character of the area. After the decision on land consolidation, the sector of cadastre makes the registration of the land in cadastre registry books. After this process, the co-owners may apply for urban permit under the terms of the regulatory plan. Re-parcelling opportunities are presented in the graphical part, where existing and proposed divisions are also presented.

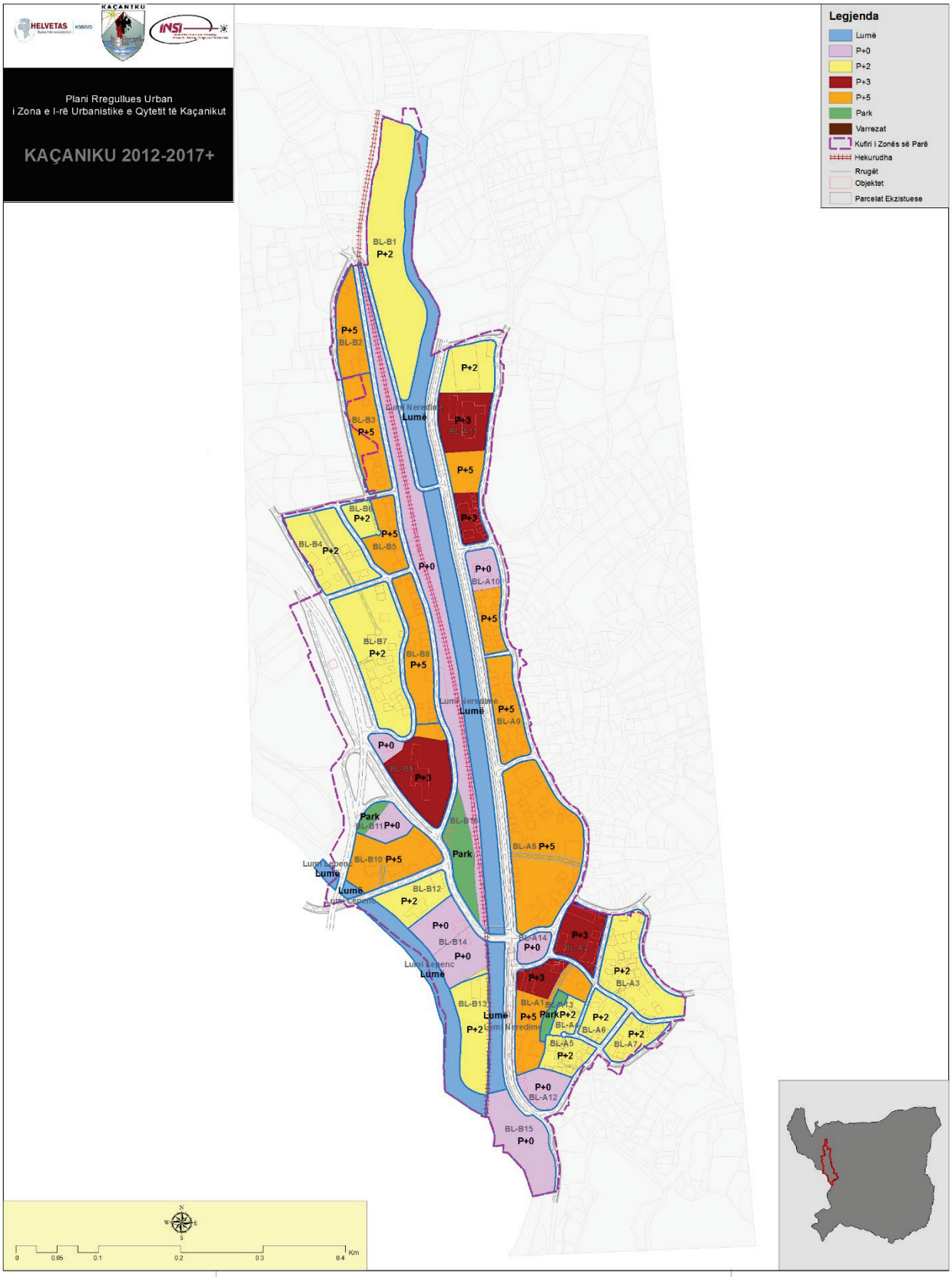
Permitted tolerances are provided in order to enable the construction in stages, based on the demand of investors and real situation of investments.

9.8 NUMBER OF FLOORS AND THE HEIGHT

Height and number of the floors are important conditions for determining the volume of the building. The height of the building is dependent on the size of the parcel and destination, and is closely related to the distance from neighbouring buildings.

Maximum height is P +5 for collective housing, while for individual housing the maximum permitted height is P +2. New construction, require merging of parcels and creating surface plots enough to build floors: P +5 and P +2. The maximum height for P +5 is 20 m, whereas for P +2 is 12m.

In order to ensure sufficient sun light must be respected certain restrictions regarding the height under the roof, and traction from the facade. If the peripheral walls under the roof are not higher than 1m., then there is no need for traction. However, when the peripheral walls under the roof are higher than 1m., then traction from the facade of floors below should be at least 2.5 m.



Map. 35. Number of floors

9.9 FREE/UNCHANGED AREA

The size of this area within the parcel is a primary condition which should be respected in order to ensure the appropriate healthy functioning. As it was noted earlier, to the coefficient of transferability, the free area within the parcel depends on the function, the parcel size and floors. The size of open spaces within the parcel is 35% of settlements P+5, and 25% of buildings P+2.

Within the free space, is necessary to ensure green spaces and areas for access and parking.

Green area in the parcel

According to rules the report between the green area and total area of the parcel should be at least 15%.

Providing access to parcels and parking.

Car parking for the needs of residents of the buildings should be provided in its own construction parcel, outside the public road area. The number of parking places has to be provided according to regulations described earlier. The conditions for vehicle access in the parcel are:

- Access to the parcel from the general road is not a desirable solution. Taking into account the existing situation and the possibility of adapting existing structures, especially in the south of the area, access from this level of roads has to be foreseen. The optimal distance from these two accesses is minimum 50 m on the other way.

- The distance between these two accesses in the parcel from the local road should be minimum 40 m.

-Connection to the parcel from the accessing road can be frequent as needed

In case of emergencies a quick and easy access of the fire-fighters should be provided. For this purpose, the minimal width of 4 m for access has to be foreseen.

During the development phases, in case of inability to develop a construction parcel for a certain period of time, or the incapability of merging certain properties, temporary entries in the parcel should be enabled.

9.10 Parcel and re-parcelling plan

Successful development of the centre area is of great importance and this development may be implemented only if it`s considered one of the main components, which is the regulation of the private property through the parcelling and re-parcelling process. The land planning has to be developed in such ways that in order to less damage the owners as possible.

Parcelling and re-parcelling plan is prepared according to standards and has been graphically presented, trying to preserve or have as few interventions in as few existing parcels.

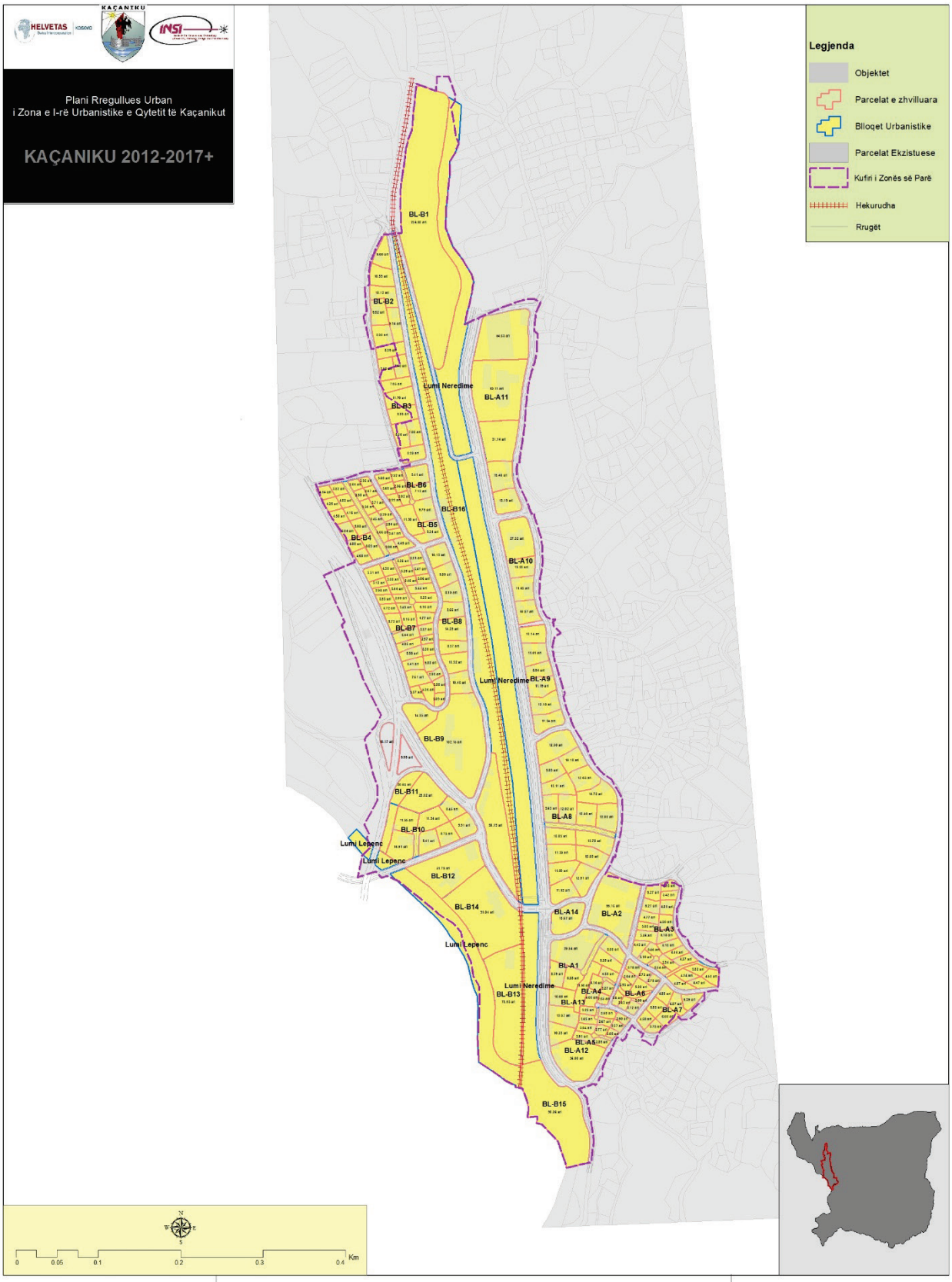
Parcelling – The space which is included in the Urban Zone I is separated in individual and collective urban residency blocks and within this urban blocks has been prepared a parcelling plan. The basic principal used in this parcelling plan was to build regular parcels with a few interventions in the existing parcels. The urban parcels are formed according to the Projecting Duties, and by respecting regulations and European standards for the functioning of the individual and collective residence. In the individual residence blocks are formed parcels from three (3) until six (6) ari. In the collective residence are formed parcels from twelve (8) to fifteen (13) ari, being aware that the parcels in the existing

condition are small we believe that we will encounter request for constructing permits with different areas from what we have foreseen in the parcelling and re-parcelling plan, in this case we believe that another parcelling can be performed and to be issued permission for constructing in smaller areas but not smaller than 2 ari in individual residency and no less than 7 ari in collective residences.

In cases when we receive requests for permits outside of what it is foreseen in the graphical part, the municipal authorities may issue constructing permits from a special team which will assess the possibility of issuing permission and the terms in which the permission is given. The team will consist from 5 members: an architect, a construction engineer, an environmental expert, an economist and a jurist. The approval for such permits is given in the municipal assembly.

Parcelling and re-parcelling plan presented graphically is the best option and the most convenient to implement based in standards and urban provision in which there might be interventions in case of claims mentioned above.

At any case, spaces predicted for roads and other public spaces should be preserved and the municipality has to decide to expropriate with the market price this areas with public destination or to do the urban land consolidation within the block and to owners based in the percentage of the property they posses within the urban block, the space for public destination to be taken from them.



Burimi i të dhënave:
Agjencia Kadastrale e Kosovës
Institucionet e Komunës së Kaçanikut
Demografi dhe Çështje Socijale

Plani I Riparcelimit

Projected Coordinate System: KosovaRef01
Projection: Transverse_Mercator
Geographic Coordinate System: GCS_ETRS_1989
Datum: D_ETRS_1989
Prime Meridian: Greenwich
Angular Unit: Degree

Map.36. Parcelling plan

9.11 URBAN LAND CONSOLIDATION

The property consolidation is done in order to create a new, property and physical condition (with sufficient size for the intended purpose, a regular form and a property with access in public roads), where rational planning is allowed and spatial regulation according to Urban Regulating Plan. Land consolidation at the same time regulates the property right, respectively determines the participation of owners in the created property. The consolidation starts than when in accordance with the urban regulatory plan, the owners of at least 70% of the general properties submit their request.

Land consolidation request should have attached the:

- *Owners list, parcels and their area: it should be mentioned that in the space for land consolidation enters only a part of the existing parcel and its area has to be showed.*
- *Geodesic company which will implement the land consolidation in the technical aspect.*
- *Executor of the land consolidation (e.g. the investor), which carries the process to the end and covers the land consolidation expenses.*

Participants in land consolidation are all owners of land/investors which can participate in the joint area created (as it is decided in the regulatory plan or with urban conditions)

Decision on land consolidation is made from competent municipal bodies. In reaching a decision in a land that has passed through the land consolidation, selling is not allowed (except between participants in land consolidation or the municipality) and exercising individual activities.

The land consolidation process is leaded from the profession commission, formed within the municipal bodies, consisting from an urban planner, a geodesist and a jurist. The participants in land consolidation can chose a representative or a representative council.

Border regulation and property relation, are made before the land consolidation process. Before the land consolidation process it has to be done the regulation of property relationships and the precise definition of boundaries. All new roads in the private properties, green spaces and other spaces are in the service of blocks, which should be fulfilled in the account of private properties, each owner by participating with the percentage of his property, as much as it belongs to each of them. The other variant is all these spaces of new roads in private properties, green spaces and other spaces to be expropriated from the municipality.

The new data are entered in the new elaboration in which the land consolidation process is based. The evaluation of immovable property is conducted in order to determine the part of each owner in the joint property. This is done from an independent agent of property, authorised and accepted from at least of 70% of owners.

Real estate assessment contains:

- *Size of the parcel,*
- *Position of the parcel and its access in public roads,*
- *The size of the building (if the size exists),*
- *The building age (if a building exists),*
- *Building destination (if the building exists),*
- *Construction permit (if the object without permit, is not considered),*

The value of the real estate, determines the value of participation of each owner in the common property in percentage.

Contracts on land consolidation

All owners in the land consolidation area should reach a contract on land consolidation. The contract should contain the proposal for the union of properties, respectively the new property, as well as participation of everyone in that property.

Cadastre Registration

After the decision on land consolidation, the cadastre sector conducts the land registration in the cadastre book. After this process, the co-owners may apply for an urban permit according to the terms of the regulatory plan. The possibilities of re-parcelling, are presented in the graphic part where existing separation are presented, as well as the proposed separation.

Allowed toleration is given in order to enable new construction in phases, based in the investor's requests and the real situation of real investments.

9.12 TECHNICAL NORMS AND STANDARDS FOR URBAN DEVELOPMENT

Norms, regulation and urban projecting standards are the technical and practical fulfilment necessary and as such are obligatory for all projecting and drafting organisms from the field of spatial planning and urban studies.

Constituent elements of the area treated with regulative plan are;

A) Residence terrains
B) Social terrains
C) Green terrains
D) Sports terrains and spaces for kids playgrounds
E) Roads, accommodations and squares (free areas)

A) In the residence terrains are included urban residence units and the inside roads between them. A composing part of them are the parcels of pre-schools, kindergartens, primary schools and daily trade and municipal services.

Residence terrains are separated in urban structural units depending on the territorial areas and the number of residents. Structural units of residential urban terrains are:

o residential group
o residential block
o residential complex
o residential neighbourhood

Depending from the point of view of the territorial size and the general number of population can be analyzed in urban development of parameters while the common of all is that the construction area in maximum has to be 4.5 m^2 /resident.

A residential group is the smallest structural urban unit with population up to 1.000 residents and an area of 1.5 ha with a gross S=15.5 – 16m^2/resident.

A residence block is structural urban unit consisting from 3-4 residence groups with population from 3000-4000 residents and a area 6-8 ha with gross S=20m^2/resident.

A residential complex is a structural unit which consists from several residence blocks with a population of 6000-8000 and a area from 16-20 ha.

A residential neighbourhood is the largest urban unit which consist from two residential complexes with a population from 12-16 thousand residents and a area 32-40 ha.

In its constitute has concentrated trade, municipal, social services, gardens, preschools, two primary schools, a secondary school, the neighbourhood park, sportive terrains of all group ages, health and administrative service, concert room, library etc.

B) In social terrains are included pre-school facilities, gardens and schools.

Normative indicators for social objectives are; 2.0 m^2/ a child- student while necessary areas for parcels can be:

• Nurseries and kindergartens parcels 0, 3-0, 4 for a kindergarten or a nursery

• Primary school parcels 0, 6 – 1.0 ha.
• The residence block for its population needs a kindergarten and a garden.
• The residential complex for its population needs two kindergartens, two gardens and a primary school.

C) Green terrains include:
• Parks and gardens area of the residence group 3.0 -4.0m^2 /residents.
• Parks and gardens areas of the neighbourhood residence 1.0-2.0m^2/ residents
• Road and water coasts green areas 1.0 m^2 / resident
• Green areas of social facilities 2.0m^2/ resident

D) in sports terrain and play ground for kids include the necessary areas for sport terrains according to group ages and spaces for children playgrounds:
• For residential blocks sports terrains with area of 0,5 m^2 / resident
• For residential complex, sports terrains with area of 1.5m^2/resident
• For a residential neighbourhood, sports terrain with a area of 1.5 m^2 /resident
• For residential group, kids playground with a area of 1.3 m^2 /resident
• For residential blocks, playground with a area of 1.5 m^2 /resident
• For residential complex, playground with a area of 1.5 m^2 /resident
• For residential neighbourhoods playground with a area of 1.5 m^2 /resident

E) Roads, landings and squares (free spaces) include:
• Areas of the main roads together sidewalks
• Areas of roads within neighbourhoods and residential complex
• Areas of Squares and free spaces
• Vehicle parking area (open or closed)

Areas of the city’s main roads together with the sidewalks

• Roads of the 1st category: roads with 4-6 lines are the main roads of the urban service and the city circle roads with heavy traffic.
• Roads of the 2nd category – Roads with 3-4 lines are the roads that separate residence neighbourhoods of the town from each other.
• Roads of the 3rd category – roads with 2 lines are the inside roads of the residence neighbourhoods.
• Roads of the 4th category– roads with 1-2 lines are the inside roads of the residence blocks

Road areas within the residence neighbourhoods and complexes
• Roads with two passing lines + two parking lines
• Roads with two passing lines + one parking lines
• Road with one passing line + two parking lines
• Road with one passing line + one parking lines

Road access stoppages and accessing in roads according to categories

Access in first category roads from the fourth category roads is prohibited. It’s prohibited the exit of any road nearer than 50m from the crossroad. Minimum distance of accesses in the roads of 1st and 2nd category has to be 100 m. Minimum distance of road access in roads of the 3rd and 4th category has to be 50m.

The cross roads according to categories are made with:
• With interchanges or with a circle for two roads of the first category
• With interchanges or with a circle for two roads of the first category with roads of the second category
• According to conditions in disposal for the roads of other categories.

Roads of the first and second category should not permeate: residence groups, residence blocks, residence complex or the neighbourhood.

Areas of squares and open spaces

Areas of squares and open spaces constitute the necessary areas for the lying of road infrastructure and the area of open spaces:

Normative indicators are:

• For residence groups area for roads and squares between groups 1.5m^2/resident

• For a residence complex road area and squares 3.0m^2/resident

• For all categories of residential terrains from the residence group up to the residence neighbourhood are needed 10,0m^2/resident areas for open spaces.

Areas of vehicles parking (open or closed)

Necessary areas for

Necessary surfaces for the development of opened and closed parking are 15m2 / 1 parking:

• For collective buildings 1 parking slot for family 1 / 1

• For libraries one parking / 25 persons 1 / 25

• For trade centres one parking / 3 persons 1 / 3

• For health centres one parking / 25 persons 1 / 25

• For social facilities 0.10 m^2 / area resident

Area resident is the number of residents of an area to which the above facility serves to

9.13 Housing

The intended area for housing presents the largest part of the area's location. On the largest area, the housing is proposed to be mixed with many residential buildings on the flattest parts of the area, whereas the individual one is planned on the parts with a higher percentage of slope *(see map for area designation)*

The separation into urban blocks within the area provides a good basis for future development in existing and planned infrastructure, existing and planned construction at the individual, collective, public etc. The area has requirements regarding the construction area, in order to maintain and avoid unplanned developments; demands for housing will be balanced with real spatial opportunities, as well as a comprehensive planning of the spatial area, by protecting individual and public property.

We must consider the demands of the private and public sector in order for them to be in harmony with the environment. The main and primary objectives in the housing area are:

- *Providing quality housing for all residents,*
- *Planning of new housing areas with mixed housing with a high density*
- *Regeneration of existing housing areas and increase of quality,*
- *Renewal of existing buildings of value through urban revitalization, regeneration of blocks and through development of detailed urban plans,*
- *Creating new spaces for business or other needed contents,*
- *Promoting social life of the residents of the city centre, through planning of free and green spaces, a playground for children, sports fields etc.*
- *Improvement of living conditions, which means easy access for all, and providing a sufficient number of parking spaces based on high standards,*
- *Providing an attractive housing by reducing traffic (noise, pollution) in housing areas and by reinforcing elements of greenery,*
- *Planning towards the standard, approximately 4.5 residents per housing unit,*

9.14 HOUSING DENSITY

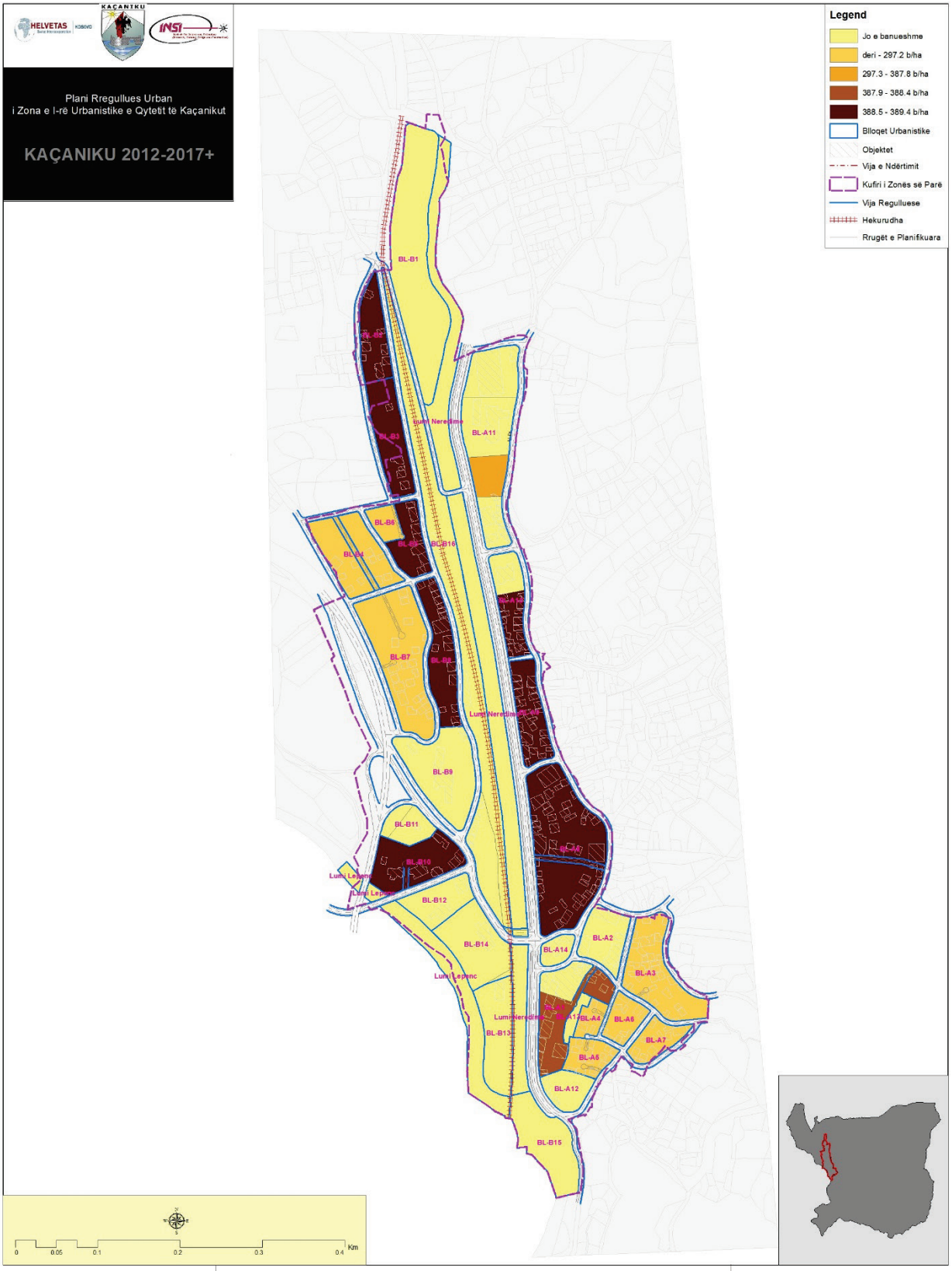
Conceptually, the proposal for the future development of the First Urban Area supports the development of low and individual housing, because all projections of population growth do not show that in the next 10 years there will be such an increase as to justify the need for densification of housing. The main purposes are:

- *The development of high collective housings max. up to floor P+5,*
- *The development of low individual housings max. up to floor P+2,*
- *Maintain an attractive area for individual and collective housing, where the maximum height of a building will be 9.00 m. for individual housings, and 20.00 meters for collective housings.*

The proposed residential density, results in average density, and this level of increased density is enough for more than the next 10 years.

(Table ..... utilization coefficient and area designation).

According to foreseen development trends, housing density within the period of 5 to 10 years can reach a maximum of 389 people per ha, whereas on average 297 r/ha in the collective housing area and a maximum of 97 residents per ha where it is intended for individual housing.



Map.37 Density of residency

9.14.1 Commercial areas

Business will be developed at ground floor level and first floors in blocks. Mainly, business is planned to be developed along the main street, but also on streets that separate the blocks which are thought to be the most frequented and most attractive for business development. Business will be developed along the "Ismail Raka," “Qamil Ilazi” and “Sali Bajra” street, and on both sides of the “Vëllezërit Çaka” street. Business is also foreseen to be developed in the areas of the mall, in the areas of the green market and in some streets between the planned urban blocks. (See map of attractive contents).

9.14.2 Spaces for sport and recreation

This includes areas dedicated to sport and recreation in free areas, including sports contents (objects/sports fields, open air swimming pools), accompanying green areas and necessary parking. Map No. XXX, presents the treated area with detail contents and along with textual analysis, it can be used as a basis (spatial organization) for the development of project tasks for implementing plans.

9.14.3 Sports facility/City stadium

The existing condition of the city stadium does not meet the requirements in its content. Renovation of the stadium should include the building of tracks for gymnastics, building of tribunes and of the following facility for administration. The stadium area presented in the graphical part is organized together with the associated contents according to standards adopted under the following table:

Adopted standard	**2m² of area per no. of residents at the municipal level** **1 Stadium for 30,000-50,000 residents with a usage radius of 2 km** **Number of viewers in a maximum capacity of 2000 spectators**
Planned	2m² of area per no. of residents at the municipal level 1 Stadium for 30,000-50,000 residents with a usage radius of 5 km Number of viewers in a maximum capacity of 2000 spectators

City hall and open fields (handball, basketball, tennis and volleyball)

Hall for physical culture, sports and recreation of the citizens					
	No of residents in the urban area	Covered spaces		Open spaces	
		Total in m2	Per resident for m2	Total in m2	Per resident in m2

Adopted standard	15000	3026	0.2	36620	2.38
Planned	15000	3026	0.2	36620	2.38

The sports hall is organized in the southern part of the area, near the martyrs' memorial with the primary purpose of: use for sports activities (individual sports, duels, collective sports and various programs). The proposed location of the hall enables a good connection with the city stadium and the multipurpose area in the central part. Also, proximity to the martyrs' memorial enables organizing memorial events.

	No of resident in the urban area	**No of existing halls**	**No of needed halls**	**Number of existing open spaces**	**No of needed open spaces**	**Recommended dimensions for the hall**	**Needed additional space and opportunity for expansion**
Adopted standard	15000	0	6	0	50 + 5	45X27	30X27.24X24
Planned	10000	0	1	0	10	45X27	30X27.24X24

Source of standards; Sports object, author Slobodan N. Ilic p. 161

Open following areas - sports fields regulated by the appropriate use (handball, small football, basketball, tennis and volleyball) serve the needs of citizens, extracurricular activities and students as well as of various sports clubs / societies. The organization of the designated area for sports and recreation of the UDP enables the accommodation of 10 sports fields with accompanying contents.

Central city swimming pool

There is a swimming pool within the area of the regulatory plan, however the capacities (the existing swimming pool is primarily intended for recreation, not for water sports), and its geographical position set the need for the designation of a particular central zone. The complex of water areas (swimming pool complex for sports and recreation, analyzed in terms of ownership, is planned on the western part and is intended for sports and recreation contents, according to the UDP.) Analyzed in terms of infrastructure, the designated area containing water area is located near the planned infrastructure for development and a relatively good distance. Given the convenient geographical position, the designated area enables the development of the project with all the required content. The featured graphical part is designed based on standards required by the following table:

	Number of residents in the gravity space	Water area per resident m3/resident	Total water area in m2	Parking		Green areas in the suburbs 3m2/resident
				No of vehicles	No of bicycles	
Adopted standard	20,000	0.10	2000	100	200	60000
Planned	15,000	0.10	1721	105	200	28,300

1. **Squares, green spaces and water areas**
2. **Squares**

Squares are public spaces dedicated to the movement and gathering of citizens. The main squares covered by this plan are:

The central square in the area intended for sports and recreation which enables use for many purposes;

The square in front of the old municipal facility, can be arranged with the restriction of vehicular traffic during the period specified.

Also, other squares should be organized within the collective housing blocks, as a common space for use.

3. **Green belts**

Green bands are spaces between areas with different purpose. The main purpose is the protection against pollution. With the UDP, green bands imply avenues along the motorway.

4. **Water areas**

The Nerodime and Lepenc River, as well as two streams, flow through the Urban Zone I. During the redevelopment of the existing and the additional road network, the construction of roads along the river is planned, where possible with the purpose of: maintaining the river bed and creating the opportunity to fix them for public use.

The practice of chaneling two pounds has proved unsuccessful, especially after the precipitation causing flooding. Given the urban waste that accumulates, the most favourable option is to establish a selective net in the entrance area, which would make the collection of waste and other items which should be cleaned from time to time as is the need, by the professional company for waste collection.

Treatment of public spaces along the "Lepenc" and "Nerodime" river

The "Lepenc" and "Nerodime " river, which flow in the area defined by the URP, should be treated for the public use of the riverbanks. The municipality will develop an implementation project to regenerate public spaces along the riverbanks. However, the municipality and INSI have analyzed the current situation and identified the problems, features and actions as following, which can be enriched even more during the drafting of the project for the project implementation.

Analysis of the existing situation

- The river bed carries various waste;
- Bank of the river along the water area is unused;
- The regulated area of the river bed does not cover the entire area;

- Major damages of embankment and narrowing of the water absorbing area;
- Build various structures that prevent visibility in the area;
- Large distance between the bridges for vehicle traffic;

The area and the existing processing of the fixed parts of the river bed, has resulted successful in the reduction of flooding.

I. Actions

- Cleaning of waste along the river, and along the riverbed,
- Creation of public space through regulation and adequate processing of paths and spaces for recreation. Improving/creating pedestrian connections (east-d west and interconnection of other areas)
- Continuation of regulation of the riverbed in the two segments, north and south. The practicum of the techniques that have proven successful in reducing flooding in the river bed (regulation of the riverbed by maintaining the absorptive area of the river). Continuation of regulation of the riverbed into two segments, north and south, at a distance of 200 m, in both directions.

II. Project features

1. Retreatment of the park, recovery and interconnection with the proposed paths, demolition of boundary structures (surrounding wall with the purpose of easier access and non visual obstacle in the area)

   Reconsideration of the idea of building a structure on the river: with visual appearance from the main axes,
2. Creation of spaces and treatment of mobility in the narrow area, regulation of cyclist path and regulation of green belt, building of communication links between the road and the river.
3. Construction of an object that would symbolize the Kaçanik constitution and would serve as a bridge for pedestrians. The distance between the two existing bridges is 700 m. So, the construction of this object which would serve as a bridge in the middle is also rational for improving overall circulation.

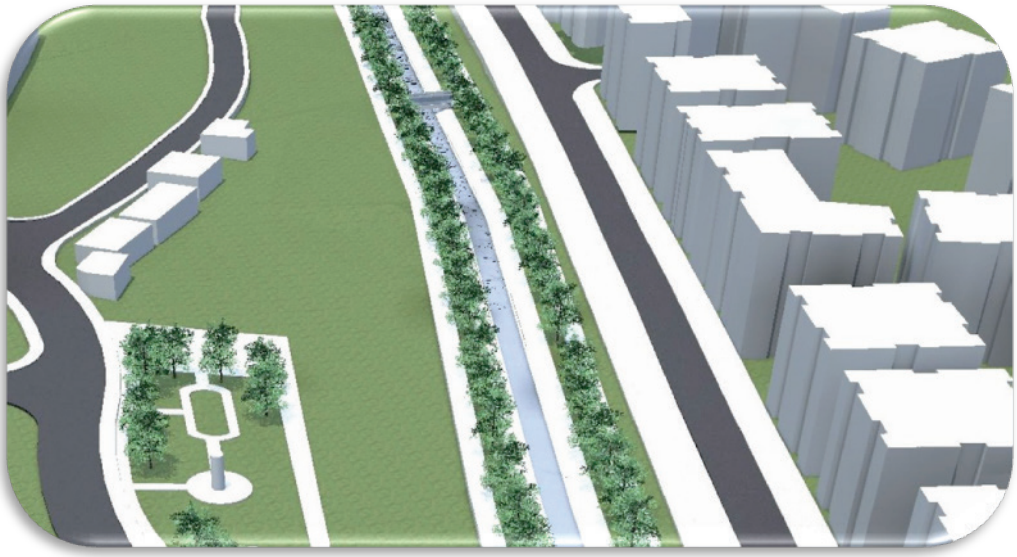


Fig. 3. Illustration of the Nerodima river and bridge fixing

9.14.4 Public spaces

With the designation of the area, the public spaces have been identified where the majority of them are street spaces, parking, squares, parks and spaces along the river, whereas the rest includes religious spaces and buildings, administration, schools and cultural buildings. Streets as public spaces in general, are followed by attractive content and enough spaces for the regular crossing of vehicles, pedestrians and cyclists. Also, in some streets linear parking is foreseen, which offer opportunities for quick parking and without interference of circulation. Public parking is foreseen in some parts of the area near the public institutions, such as near the object of the municipality, near the school, kindergarten etc. Squares and parks are also intended as public spaces and need to be accompanied with necessary content, including lighting, seats, baskets for waste etc.

According to the concept foreseen by the UDP, in the public spaces around the river it is thought to develop an intelligent park. With the UDP, spaces such as the pedestrian paths with seats, lighting etc., paths for cycling and paths for greenery have been regulated, and it is thought that tiles with different motifs should be placed on the side wall along the pedestrian paths.(see the area destination map).

9.14.5 Administration

Within the Area we have designated 2 spaces for the development of administration. One of the areas is located in the northern area which serves for registering, culture and judiciary, while the other part is located in the southern area, which serves for the local administration. Areas for developing administration should be followed by appropriate facilities for development and modern access of the administration. The municipality facility, is recently renovated, fulfils spatial needs for the development of services activities.

9.15 Treatment of urban sites

To implement the densification concept, it is natural that a big part of the town centre needs to pass through a regeneration process. Different blocks of the town centre, depending on the location, will have to subject to changes through detailed urban plan, while the municipal authorities will determine primary areas for treatment based on the importance and general interest. Urban blocks, have particular characteristics and for these reason the form of their treatment differs. These ways of treatment are recommended to be examined more in urban detailed plans.

- Development of the area: foresees the entire interventions in the existing constructed areas or the new constructions and advancement of the public space in the area.
- Redevelopment of the area: as a way of treatment which is mainly planed for the entire urban centre, represents interventions such as: demolition or revitalization of existing structures and planning new residential structures.
- New development: in the proposal there are unconstructed areas that represent the new areas for residency.

Implementation of the plan has to be done in phases depending from the interest of residents and investors. This means that, a large part of the existing residential buildings will have to be demolished, some existing buildings will have to be adopted, while some existing multi residential buildings should be renovated, rebuilt or new buildings to be build, when the request is subjected from the investors in cooperation with the residents. All this changes cannot be implemented without an agreement with the owners.

10 VIII. REGULATING CONDITIONS

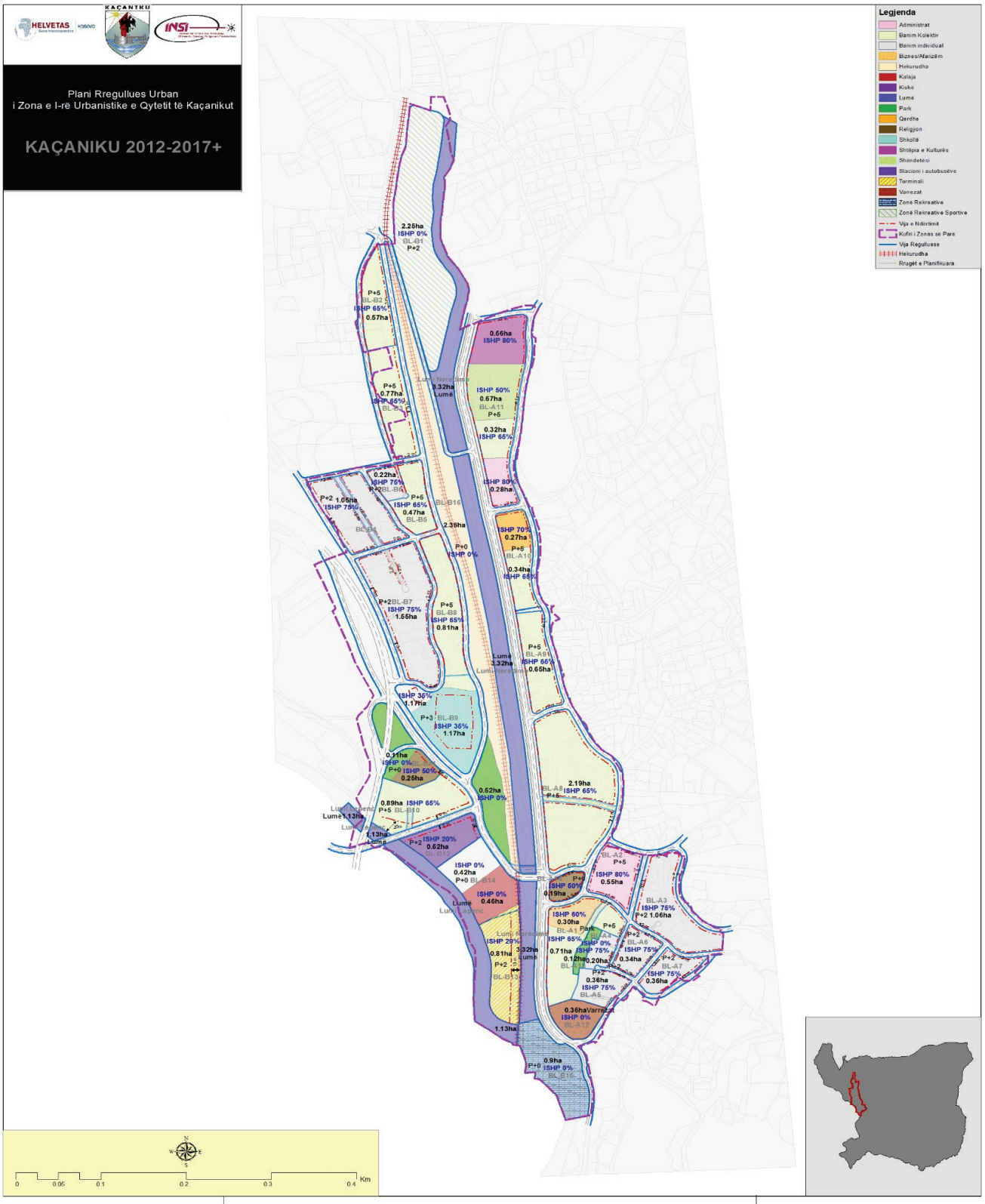
Taking into consideration the size and the need for efficient functioning and managing, the separation in smaller spatial units is necessary. Based in structural and functional characteristics as well as in the circulation network, with this Regulatory Plan is treated the Urban Zone I, which is separated into 32 blocks of individual and collective housing. The block is the smallest spatial unit and is bounded with local roads which according to standards should have a distance of 75-180 m in residential blocks and 90-150m in business function blocks.

Creation of blocks is allowed with the creation of efficient road system. With the creation of orthogonal road system, perimeter blocks with different surfaces are established. In the map below, 55 urban blocks are presented, while the denomination is temporary until the official systematization of spatial entireties is done.

Shapes and sizes of blocks differ, depending from existing or proposed structures, as well as from the traffic movement network. Regarding the function, none of the blocks is with single function. Dividing of the entire area in urban blocks helps in managing, developing and easier orientation in the Urban Zone I.

Table.8. Coefficients of surface utilization and destination

BLLOKU	Shfrytëzimi	Sip Bruto m2	Indeksi I shfrytëzimit te parceles	Sipërfaqja e shputes (m²)	Numri I kateve	Sip e zhvilluar e objektit	Indeksi I sip se dyshemese	Banim			Afarizëm		Parkim		Nr. I banoreve	Sip bruto ha	Dendesia banimore	Parkimi per afarizem (1 parking per 30m2)
			IShP				ISD	%	m²	90m²/ apartman	%	m²	parkim 30%	garazhi m 70%				
BL-A1	Biznes/Afarizem	2,953.85	60.00%	1,772.31	3	5,316.93	1.80	100.00%	5,316.93	20	100.00%	5,316.93	6	14	0	0.2954	0.00	177
	Banim Kolektiv	7,079.71	65.00%	4,601.81	6	27,610.87	3.90	70.00%	19,327.61	55	30.00%	8,283.26	17	39	275	0.708	388.89	276
BL-A2	Administrata	5,516.16	80.00%	4,412.92	4	17,651.70	3.20	0.00%	0.00	0	0.00%	0.00	0	0	0	0.5516	0.00	0
BL-A3	Banim individual	10,568.37	50.00%	5,284.18	3	15,852.55	1.50	80.00%	12,682.04	63	20.00%	3,170.51	19	44	313	1.0568	296.30	106
BL-A4	Banim individual	2,006.26	50.00%	1,003.13	3	3,009.39	1.50	80.00%	2,407.51	12	20.00%	601.88	4	8	59	0.2006	296.30	20
BL-A5	Banim individual	3,592.15	50.00%	1,796.08	3	5,388.23	1.50	80.00%	4,310.58	21	20.00%	1,077.65	6	15	106	0.3592	296.30	36
BL-A6	Banim individual	3,398.81	50.00%	1,699.40	3	5,098.21	1.50	80.00%	4,078.57	20	20.00%	1,019.64	6	14	101	0.3399	296.30	34
BL-A7	Banim individual	3,626.17	50.00%	1,813.08	3	5,439.25	1.50	80.00%	4,351.40	21	20.00%	1,087.85	6	15	107	0.3626	296.30	36
BL-A8	Banim Kolektiv	21,904.70	65.00%	14,238.06	6	85,428.33	3.90	70.00%	59,799.83	170	30.00%	25,628.50	51	119	852	2.1905	388.89	854
BL-A9	Banim Kolektiv	6,500.02	65.00%	4,225.01	6	25,350.08	3.90	70.00%	17,745.05	51	30.00%	7,605.02	15	35	253	0.65	304.82	254
BL-A10	Qerdhe	2,731.63	70.00%	1,912.14	1	1,912.14	0.70	0.00%	0.00	0	0.00%	0.00	0	0	0	0.2732	0.00	0
	Banim Kolektiv	3,365.96	65.00%	2,187.87	6	13,127.23	3.90	70.00%	9,189.06	26	0.00%	0.00	8	18	131	0.3366	388.89	0
BL-A11	Shëndetësi	6,698.26	55.00%	3,684.04	4	14,736.17	2.20	0.00%	0.00	0	0.00%	0.00	0	0	0	0.6698	0.00	0
	Shtëpia e Kulturës	5,642.94	80.00%	4,514.35	3	13,543.05	2.40	0.00%	0.00	0	0.00%	0.00	0	0	0	0.5643	0.00	0
	Banim Kolektiv	3,171.73	65.00%	2,061.62	6	12,369.73	3.90	70.00%	8,658.81	25	30.00%	3,710.92	7	17	123	0.3172	388.89	124
	Administrat	2,842.34	80.00%	2,273.87	4	9,095.49	3.20	0.00%	0.00	0	0.00%	0.00	0	0	0	0.2842	0.00	0
BL-A12	Varrezat	3,608.17	0.00%	0.00	0	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	0.3608	0.00	0
BL-A13	Park	1,169.53	0.00%	0.00	0	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	0.117	0.00	0
BL-A14	Religjion	1,867.25	50.00%	933.62	1	933.62	0.50	0.00%	0.00	0	0.00%	0.00	0	0	0	0.1867	0.00	0
BL-B1	Zonë Rekreative Sportive	22,481.56	0.00%	0.00	3	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	2.2482	0.00	0
BL-B2	Banim Kolektiv	5,726.43	65.00%	3,722.18	6	22,333.07	3.90	70.00%	15,633.15	45	30.00%	6,699.92	13	31	223	0.5726	388.89	223
BL-B3	Banim Kolektiv	7,705.34	65.00%	5,008.47	6	30,050.82	3.90	70.00%	21,035.57	60	30.00%	9,015.25	18	42	300	0.7705	388.89	301
BL-B4	Banim individual	10,452.43	50.00%	5,226.22	3	15,678.65	1.50	80.00%	12,542.92	62	20.00%	3,135.73	19	43	310	1.0452	296.30	105
BL-B5	Banim Kolektiv	4,699.98	65.00%	3,054.98	6	18,329.91	3.90	70.00%	12,830.94	37	30.00%	5,498.97	11	26	183	0.47	388.89	183
BL-B6	Banim individual	2,160.41	50.00%	1,080.21	3	3,240.62	1.50	80.00%	2,592.50	13	20.00%	648.12	4	9	64	0.216	296.30	22
BL-B7	Banim individual	15,470.10	50.00%	7,735.05	3	23,205.15	1.50	80.00%	18,564.12	92	20.00%	4,641.03	28	64	458	1.547	296.30	155
BL-B8	Banim Kolektiv	8,064.66	65.00%	5,242.03	6	31,452.18	3.90	70.00%	22,016.52	63	30.00%	9,435.65	19	44	314	0.8065	388.89	315
BL-B9	Shkollë	11,709.45	35.00%	4,098.31	4	16,393.24	1.40	0.00%	0.00	0	0.00%	0.00	0	0	0	1.1709	0.00	0
BL-B10	Banim Kolektiv	8,889.05	65.00%	5,777.88	6	34,667.28	3.90	70.00%	24,267.10	69	30.00%	10,400.18	21	48	346	0.8889	388.89	347
BL-B11	Religjion	2,476.00	50.00%	1,238.00	1	1,238.00	0.50	0.00%	0.00	0	0.00%	0.00	0	0	0	0.2476	0.00	0
	Park	1,106.44	0.00%	0.00	0	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	0.1106	0.00	0
BL-B12	Stacioni i autobusëve	5,179.12	20.00%	1,035.82	3	3,107.47	0.60	0.00%	0.00	0	0.00%	0.00	0	0	0	0.5179	0.00	0
BL-B13	Terminali	8,057.38	20.00%	1,611.48	3	4,834.43	0.60	0.00%	0.00	0	0.00%	0.00	0	0	0	0.8057	0.00	0
BL-B14	Kalaja	8,894.73	0.00%	0.00	0	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	0.8895	0.00	0
BL-B15	Zonë Rekreative	9,029.28	0.00%	0.00	0	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	0.9029	0.00	0
BL-B16	Hekurudha	23,636.21	0.00%	0.00	0	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	2.3636	0.00	0
	Park	5,206.95	0.00%	0.00	0	0.00	0.00	0.00%	0.00	0	0.00%	0.00	0	0	0	0.5207	0.00	0
		sip (ha)		(ha)		(ha)			(ha)	njesi		(m²)	nr	nr		ha		parking per afarizem
Analiza e përgjithshme		25.62		10.15		46.11	0.74		27.20	904		101,660.09	271	633	4518	25.624		3389



Map. 38. Regulation conditions

10.1 RESIDENTIAL BLOCKS OF THE CENTRE AREA, URBAN ENTIRETY A (COLLECTIVE HOUSING)

Housing block is an urban structural unit consisting of 3-4 residential groups with population from 3000-4000 residents and surface 6-8 ha with gross S=20m^2/resident.

For efficient functioning and easier regulation of the area is necessary its separation in smaller spatial entirety. The block is the smallest spatial unit and is bounded with local roads which according to standards should have a distance of 75-180 m in residential blocks and 90-150 m for blocks in functions of businesses. Creation of blocks is allowed from the creation of an efficient road system.

In the map below are presented 32 blocks named based on the position in which they are located in the letters of Albanian alphabet.

The entire division of the area in urban blocks helps in managing the development and easier orientation in the town of Kaçaniku.

The separation into urban entirety except roads is based also in large and narrow parcels which can be organized as blocks. This large parcel can be re-parcelled in smaller parcels, by creating smaller spatial units.

This way of organizing urban areas is conditioned from the factual situation in the area. To create a balance between the actual condition of the parcel and the requests of owners(investors) we can come into a conclusion that the most appropriate parcels for the developing the town centre are:

10.1.1 Collective housing blocks

The largest percentage of human that live in the town live in multi-story buildings, recently, with the increase of human density in planet the need for height utilization was born. Precisely this style of life, in superimposed or attached apartments is called collective residencies.

Parcels of collective residential blocks based in this urban plan is determined in such way that the optimal parcel should not be smaller than 10 ari since it is considered inadequate because they do not fulfil the condition for planning the location. In forming the collective residential blocks we have had large and small parcels which we have united and formed collective blocks determined, during the determination of blocks in the map we have separated the space for construction of necessary roads for the type of residencies planed which will facilitate the life of the citizen, necessary space for determined greenery with the rules for greenery, sport terrains and spaces for children games, social terrains (school parcels, kindergarten and nurseries, different trade services etc).

In social terrains are included kindergarten, nurseries and school facilities.

The normative indicators for social objects are: 2.0m^2 /1 child-pupil while the necessary surfaces for their parcels can be:

- Parcels of kindergarten and nurseries 0.3-0.4 ha for a kindergarten or a nursery
- Primary school parcels 0,6 – 1.0 ha.
- The residential block for its population needs a kindergarten and a nursery
- The residential complex for its population requires two kindergarten, two nurseries and one primary school.

10.1.2 Individual housing blocks

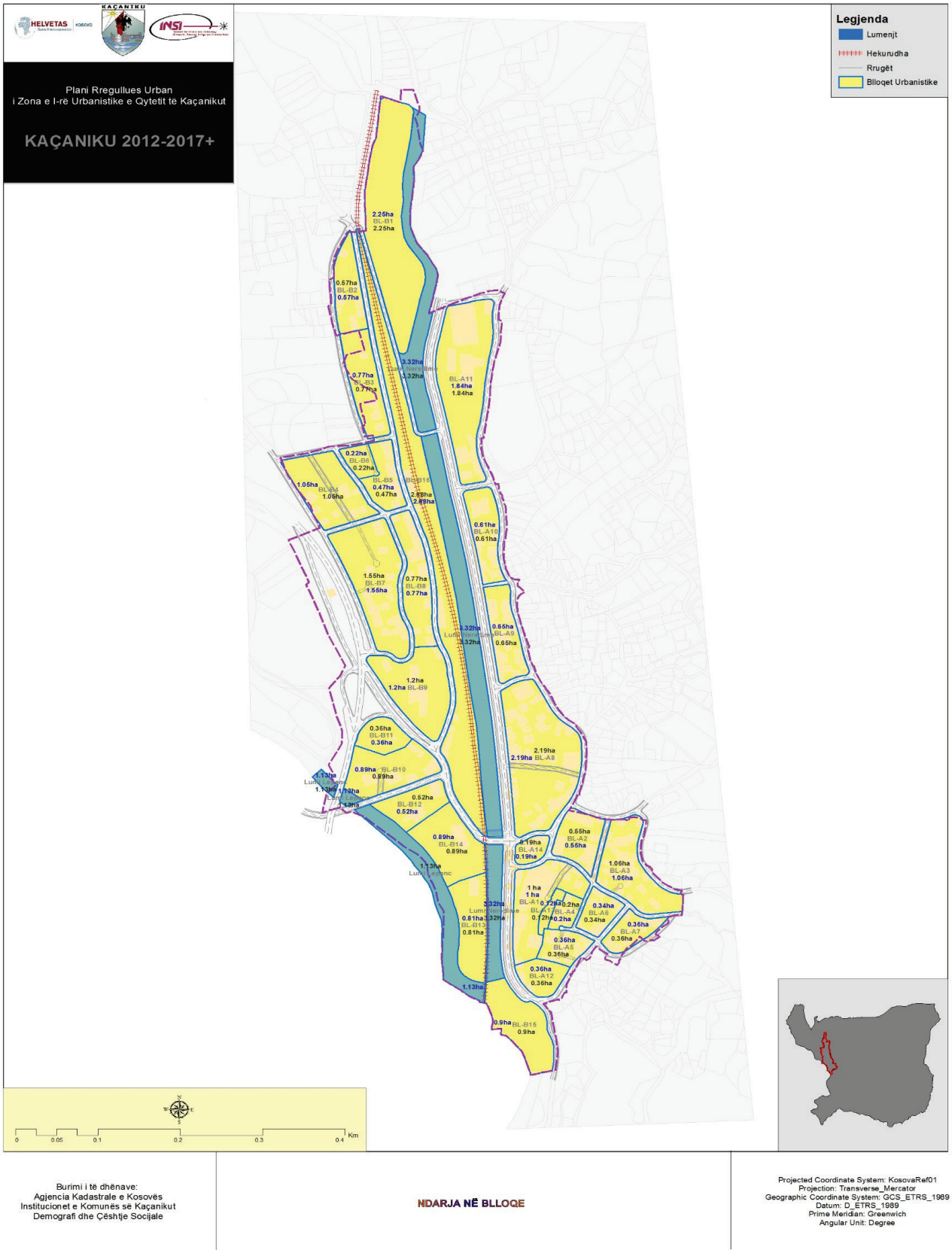
Individual housing blocks are determined in that mode that the optimal parcel of the individual housing should not be smaller than 2 to 5 ari.

Parcels which are smaller than 2 to 5 ari should be united with each other.

During urban area parcelling for the creation of blocks, the parcelling of parcels should be corrected and regulated in such way that in the future the parcel can be separated and a single construction parcel can be used from two owners.

In blocks the smallest parcel formed with re-parcelling has a surface of 2.18 ari while the largest parcel formed in this plan has a surface of 6.19ha and which is used for sport activity and recreation. We have divided this urban plan into 32 block which are presented in the chart below

:



Map.39. Separation into blocks

We have divided this plan in particular areas which we have divided in blocks

Urban entireties BL-A- Is characterized with dense and not so high construction, business facilities, town hospital, house of culture, primary schools, municipal courts, religious buildings, cemeteries and various businesses, collective housing buildings in this part, are some old buildings from before the war which are foreseen to be renovated or to be demolished. In this part we have special spaces around Nerodima River which are used as recreational spaces, administration of the municipal, city park.

Fig.4. Illustration for the urban entirety A

Block BL-A1 –This block is formed from 18 existing small parcels which haven’t fulfilled the condition for parcelling, this block have a 99.83 ari surface area which are business facilities such as: a bank, shopping malls, insurance companies, from these 18 parcels are formed 10 new regular parcels, the smallest surface area of the parcel formed is 4.48 ari and the biggest parcel formed have 29.54 ari surface area.

Block BL-A2 - This block is formed from 6 existing parcels from which many of them are irregular. This block has a surface area of 56.61 ari in which we mainly have: police station, fire-fighters and the municipal facility, from these 6 existing parcels from parcelling a new parcel has been formed.

Block BL-A3 - In this block we have 25 existing parcels which are mainly low and have a surface area of 1.0568 ari. In this area we have individual residence and business facilities and a post office. From these 25 existing parcels we have gained 24 new parcels where we have foreseen the road in the north side which did not exist before. The smallest parcel formed has a surface area of 3.10 ari, while the largest parcel formed is 5.27 ari.

Block BL-A4 – in this block we have 4 existing parcels which are short and a little

irregular that need to be regulated. There is a surface area of 1.092 ha, mainly individual residencies and business facilities. From these 4 existing parcels that we have 4 new ones are formed which fulfil the foreseen condition. The smallest parcel formed has a surface of 2.65 ari, while the largest parcel formed is 4,66 ari.

Block BL-A5- In this block in general there are 12 existing parcels which have an surface area of 3.6 ha, which mainly consist of individual housing and in this block are located the town cemeteries. Here we gave short, small and irregular parcels. The smallest parcel formed has 2.05 ari, while the biggest parcel formed is 36.00 ari

Block BL-A6- In this block there 6 existing parcels registered which are irregular and small, the surface of this block is 3.398 ha, in this area there are business facilities individual housing facilities, from 6 existing parcels are formed 10 new parcels with parcelling. The smallest parcel formed has a surface area of 2.09 ari, while the largest parcel formed is 3.78ari.

Block BL-A7- This block contains 15 existing parcels, and the problem is that most of the parcels are very irregular; this block has a surface area of 3.626 ha. Mainly for individual housing, from this parcels through parcelling we have created 7 new regular parcels. The smallest parcel created has a surface area of 3.73 ari, while the largest parcel formed is 6.08ari.

Block BL-A8- In this block we have 50 existing parcels where most of them are irregular and small. This block has an area of 2.904 ha, and is composed from collective residential buildings, business facilities such as banks and other and collective residential buildings, it is bordered with the Nerodima river where there is a certain recreation surfaces, in these existing parcels are created 18 new parcels which are regular and all parcels are regulated so they have access to the road. The smallest parcel formed has a surface area 8.64 ari, while the smallest parcel formed is 12.80ari.

Block BL-A9**-** In this block we have 30 existing parcels mainly regular parcels with a surface area of 65 ari, this block is bounded by the river where we mainly have business facilities and individual residential buildings and collective residential buildings. From 30 existing parcels we have created only 6 new parcels through parcelling the parcel with the smallest surface formed is 8.54ari, while the parcel with the largest surface forms is 12.18 ari..

Block BL-A10 – this block consists of 10 irregular existing parcels, which have an entire surface of 61.33 ari, it contains business facilities, individual residential buildings and collective residential buildings. From this existing parcels through parcelling are only 4 new regular parcels in conformity to the foreseen plan, the parcel with the smallest surface area is 10.97 ari, while the formed parcel with the largest surface is 27.32 ari.

Block BL-A11 – In this block are 8 existing parcels which almost all are irregular, this block has an area of 1.13 ari, in this block we have business facilities, collective residential buildings, a court, town hospital, house of culture, theatre. From 8 existing parcels which were through parcelling we have 8 regular parcels. The smallest parcel formed has 7.05ari, while the biggest parcel formed is 69.11 ari.

The urban entirety BL-B- In this entirety we have more individual housing, fewer collective residential buildings , where in total of this part of Kaçanik we have different business facilities, squares, the “Skenderbeu” high school, a power station and in this area we have a religious building (a church).

Figure.5 Illustration from the urban entirety

Block BL-B1-In this block exist 2 complete parcels, but even with a surface area of **224.82 ari** this is a free area, from parcelling in this block is formed the new parcel with a regular form. The smallest parcel formed

Figure. 6 Illustrations from Block B1

Block BL-B2- This block contains 7 existing parcels here we have the case of

creating parcels. This block has a surface area of **57.27 ari** in this area we have individual residential buildings and business facilities. Through parcelling in this block are formed 6 new regular parcels, the smallest parcel formed has an area of 8.90 ari, while the largest parcel formed is 10.59 ari

Block BL-B3- In this block exist 8 parcels and the same applies here for the parcels which are not complete as the existing ones, where among them we have regular and irregular parcels, mainly with individual residential buildings and business facilities, from parcelling are formed 8 regular parcels with access to the road. The smallest parcel formed has a surface of 7.40 ari, while the largest parcel formed is 11.07 ari.

Block BL-B4– in this block exist 12 irregular parcels where not all of them are complete, this block has an area of **90.54 ari** mainly with individual residential buildings and collective residential buildings, from parcelling are formed 24 parcels, the smallest parcel formed has an area of 3.82 ari, while the largest parcel formed is 8.03 ari.

Block BL-B5 - In this block are 15 existing parcels, **53.2** ari , in this block we have an individual residential object and collective residential objects. This block is bounded with the town river Nerodima where there are recreational spaces around the river. From parcelling we have 6 regular parcels and that have access to the road. The smallest parcel formed has a surface of 3.60 ari, while the largest parcel formed is 11.30 ari.

Block BL-B6- In this block exist 2 parcels some of them are not complete but form the block. Parcels are mainly irregular. This block is mainly composed from individual residential buildings, collective residential buildings and different business facilities from this parcels are formed through parcelling, all 3 new parcels have access to the road. The smallest parcel formed has a surface of 3.60 ari while the largest parcel formed is 5.78 ari.

Block BL-B7 - In this block we have 27 existing parcels which are irregular with a surface of **1.50ha** mainly with individual residential buildings and business premises, after parcelling we have 37 regular parcels. The smallest parcel formed has a surface of 2.46 ari while the largest parcel formed is 7.61 ari.

Block BL-B8 - In this block we have 20 existing parcels with a surface of 80.57 ari, this part is mainly composed with individual and collective residential buildings and business premises and ‘Shendi’ factory After parcelling in this block we have 8 irregular parcels that have access to the road. The smallest parcel formed has a surface of 8.19 ari, while the largest parcel formed is 14.39 ari.

Block BL-B9-In this block we have 5 existing irregular buildings, with a surface of 1.175 ha. In this block we have the high school facility “Skenderbeu”, and electricity substation. After parcelling we have 2 regular parcels. The substation parcel is with a surface of 14.95 ari and the high school parcel with a surface of 1.025 ari.

Block BL-B10 – In this block are 11 existing parcels which are irregular and have a surface of 75.93 ha, in this block exist business facilities, trees, this area is very rich with greenery and beautiful recreational spaces, from this existing parcels based on their surface area 7 new parcels are formed through parcelling. The smallest parcel formed has a surface of 7.45 ari, while the largest parcel formed is 15.91 ari.

Block BL-B11 –In this block there is one existing parcel with a surface of 45.07 ari in this block there is a catholic Albanian church which has a surface area of 45.07 ari.

Block BL-B12- This block has 2 existing parcels, their shape is partly irregular, and has a surface area of 51.79 ari. In this block there are business premises and the bus

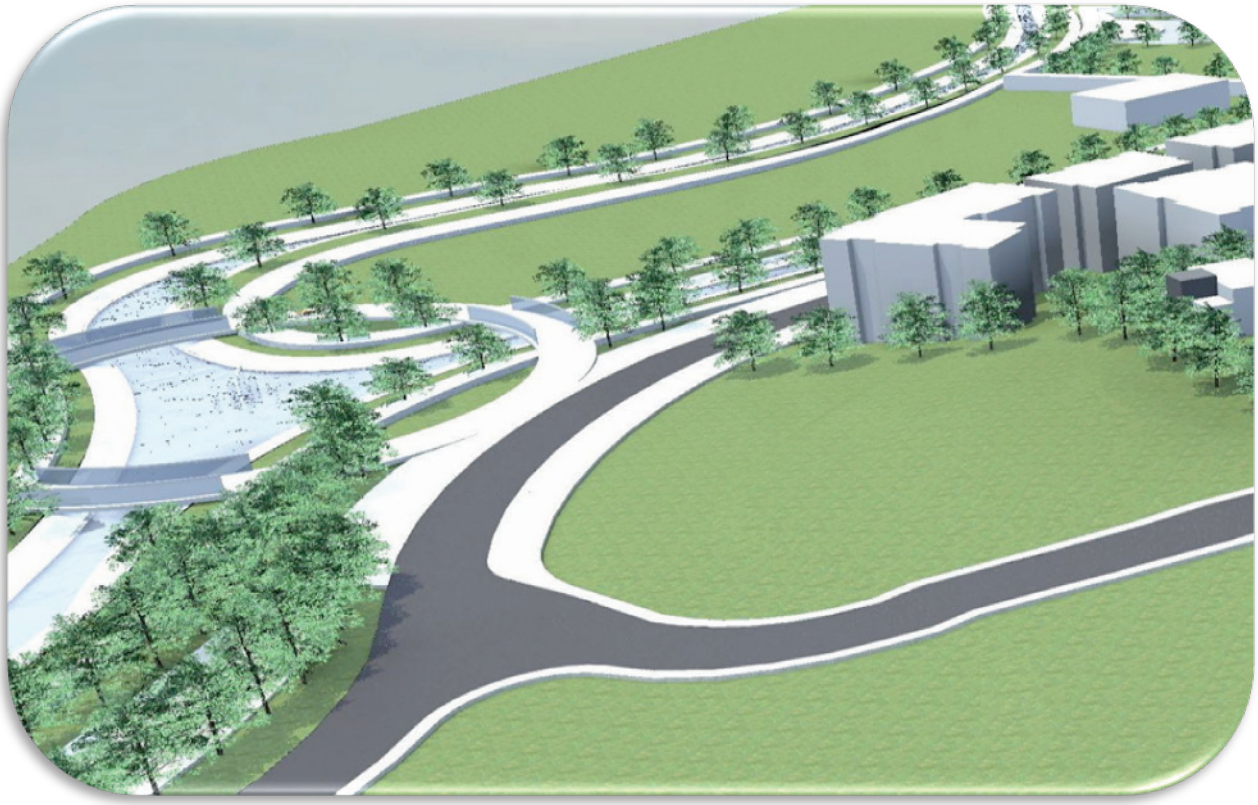
station. From the existing parcels is formed a parcel with 51.79 ari.

Block BL-B13- In this block are 2 parcels where some of which are long and thin, this block has a surface area of 78.53 ar. There is mostly large buildings and in this block is located the limestone factory and here a mini terminal is also planned, through parcelling a parcel has been form.

Block BL-B14- There is an existing parcel in this block, which is irregular and has an surface area of 91.04 ari. Here is also located the castle of Kacanik. In this block has been formed a parcel that has a surface of 91.04 ari.

Illustration from Block B14 view of the town Castle

Block BL-B15-This block has two existing parcels which are long and thin and this block has an surface area of 90.26 ari is mainly a free area with few individual residential buildings, this block is limited with the Nerodima river and has good space for recreation. With parcelling remains a parcel with an area surface of 90.26 ari.



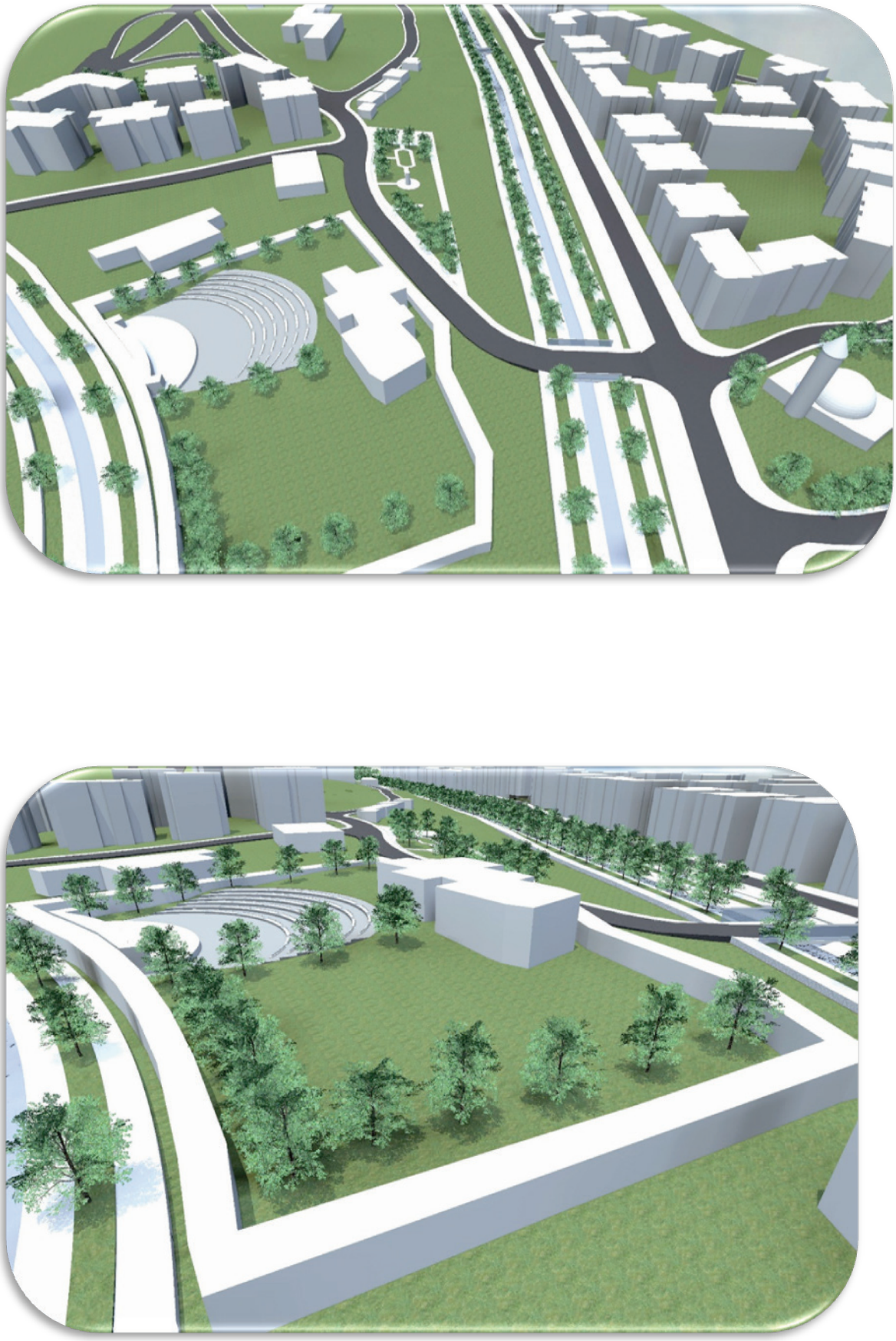


Fig.7. Illustration from Block B15 recreational area view

10.2 CONDITIONS FOR CONSTRUCTED STRUCTURES

Since with the MDP of the town of Kaçaniku is planned regarding development of a supporting centre for tourism in municipal level which can be developed inside the town of Kaçaniku. If interest is shown for such construction, the competent municipal body should provide urban conditions and construction permits also in the area which is treated with URP. Inside the Plan for parcelling and re-parcelling is evaluated that conditions for such developments can be given.

In case of the submission of a request, the regulation and construction lines should be respected as the other conditions foreseen with this UDP, integration of the facility and the entire content in the town architecture, and to be in function of the development of tourism.

Such development should fulfil the norms and standards which are required in the relation with such parking, greenery, noise and to be friendly with the surroundings.

The House of Culture, considering the importance of this facility in the municipal level, also treated during the drafting of MDP and UDP, since this facility is located in the area for which the URP is being prepared for. The team has treated all the dimensions and evaluates that, this facility in a close future as possible should be completely ready and in function of cultural activities. The majority of spaces should be enabled with taking a various activities which are in a level to be used for cultural activities (enabling in this case means the renovation, re-development of these spaces in order to use them). The large hall should be fulfilled with content in accordance with the character that this hall has while the small room should be reorganized in terms of interior and to be filled with equipment, in order to be functional for lower level meetings. The hall of the House of Culture, in the future can be used for purpose of exposing art materials etc, on the condition that it is maintained and filled with content for exhibition purposes. Sanitation should be improved and maintained. The team thinks that the external part of the House of Culture and the square should be integrated, so to create an urban integrated space, which can be filled in with some elements: vases, green elements etc. It has to be intervened in the plateau of the House of Culture in the sense of changing plateaus and designing the lightening from the ground, which would integrate with the lightening foreseen in the square.

The town Castle should be completed with all content in order to be used as an amphitheatre. It has to be renovated and fulfilled with elements and original content, which have characterized the town Castle. It has to be intervened in the inside spaces according to a project, which should be prepared for renovation and utilization of spaces.

“Skenderbeu” gymnasium during the review was proposed from citizens, employees and pupils that the school space to be expanded and to have a more attractive and sportive content in this school, also the team for drafting this plan has evaluated that the request is appropriate.

Railway; the railway that passes through this area separates the town and the area in two symmetrical parts, due to impact respectively noise that the railway has and the passing of the train through the area it was thought from the team to set anti-noise panels in the entire area where the railways passes. The panels are thought to be transparent from glass or other transparent material which would reduce the noise pollution in the area and would avoid other risks during the passing of the railway.

The lime factory, except that releases noise pollution and turbulences it also has a rough view in the area. From the team is that until change of its location to undertake measures by greenery for the elimination of pollution, absorbing the noise and turbulence which come from the factory as well as the elimination of her rough view.

10.3 CONDITIONS FOR CONSTRUCTION

General conditions

• All new buildings, should comply to the location condition as to the regulation line, construction line, floors, relation of constructed surface area and the free surface area, distance between buildings, parking and greenery,

• shaping the physical structure by respecting the perimeter form of urban blocks

• Buildings should be projected that way so they will fit to the character and contest of the surrounding

• Buildings should be flexible with the purpose of modification and re-utilization of the existing structure.

• Practices of designing green buildings (conservation of energy and reduction of environment impacts)

• Buildings of different functions differ from the frontal part of the building, size and shape of the parcel, building volume, design quality, connections with surrounding functions, parking needs, spaces for circulation traffic and natural landscape,

• Every building should have appropriate parking space

• Every building should have efficient circulation,

External view of the building and the material

In order to ensure harmony in the urban integrity and establish a healthy relation between the buildings and the ground, the following rules should be respected:

• Last floor of the multi residential buildings should enter inside the construction line minimum for 6 meters.

• The roof can be steep or flat,

• The maximum level of the steep roof should be 35°(in multi residential buildings the roof is suggested to be covered with parapet), also is suggested to build green bio-diverse, extensive roofs.

• Is not allowed the application of the mansard roof,

• Ground floor is preferred to enter inside the construction line for maximum 6m, creating a shelter near stores and a wider path for pedestrians,

• Usage of natural materials is encouraged (bricks, stones, and similar)

• Usage of base colours, which may be intensive (unmixed with other colours or gray scale) or mitigated (base colour mitigated with the white colour) is not allowed, it is encouraged the usage of pastel colours, or similar.

• Materials with large reflections such as windows-mirrors and blue ones, is not good to be used. They can be used as secondary materials.

•Architectonic characteristics as the entrances and shelters highlighted, coming out of the wall, glass facades, etc; green parking spaces; well designed landscapes and fountains or other water elements, is good to be used,

• Is encouraged a simple architecture, clean, without many details.

Conditions for determining the ground floor quota

Quota of the ground floor of the building is determined in report with the public street level, respectively, in comparison to zero quotas.

• Ground level quota of new buildings cannot be lower than the quota of the public roads.

• Ground floor quota can be at most 1.2 m over the zero quotas,

• For buildings that in the ground floors have trade or services, the ground floor quota may be higher than the sidewalk quota for (max) 0.3m,

•in cases when these rules cannot be implemented, when the terrain is sideling or in other cases, the ground floor quota should be determined through the urban permit.

Fences /surrounding walls

Construction parcels of multi residential buildings and buildings with public destination should not be surrounded and they are determined according to rules with this plan:

• is not allowed to surround the parcel with a fence in the multi-residential buildings

• is not allowed to surround the parcel with a fence in public buildings except pre-school and school institutions

• The fence or the surrounding wall of individual houses should be removed, if it hinders the expansion of the public road (usurpation of the public space)

Construction parcels of individual residential buildings and educational buildings can be surrounded according to rules determined with this plan:

•Surrounding with a fence in the individual houses up to 1.2 m is allowed (from the sidewalk quota)

•The fence should be established in the regulatory line, in order for the pillars of the fence to be located inside the construction parcel which is surrounded.

• Doors should be open inside the parcel

• Fences which are built and which come from the rules determined with this plan, should be changed in order to preserve the general interest (safety, aesthetic appearance, hygiene)

Existing parcels in the building

• If the existing building exceeds the regulation line, and is located in the corridor of regulation, it should be ruined completely or partly (the part that lies in the corridor of regulation)

• Problematic buildings that hinder the expansion of public roads cannot be demolished without agreement with the owners.

• Existing buildings which are not in the construction line (are left in or out of the construction line), can be kept in the existing condition, but overbuilding, annex construction or new constructions in the same base are disabled.

• If within the existing building (same parcel) a new building is constructed, than that building should fulfil the general conditions of adjustment (the report of the constructed surface area and the free surface area, distance between buildings, etc)

Interventions in buildings Without a request for permission it can be allowed:

• Renovation, recovery and replacement of constructive elements within existing building (recovery and replacement of constructive elements is not allowed for buildings which impede the expansion of public road),

• Connection in municipal instalments, or reconstruction of such instalments,

• Annex- construction for the expansion of the building should be foreseen only if the base surface area index is exceeded

• Adoption of space inside existing building area

General conditions for placement of temporary buildings

• Destination of such buildings should not be in,

• cannot have more than 60 $m^{2,}$

• Temporary buildings should have a light structure, cannot be build of bricks, concrete or other solid construction elements

• Buildings should be montages (to fulfil the 24 hour removal criteria)

• In a construction parcel can be placed some temporary objects

Residential buildings

Housing is divided in low multi residential housing, medium multi residential housing and low individual housing.

• Low multi residential buildings have residential units attached horizontally as well as vertically. Their height goes from 2, to 4 floors, with a common core (common vertical communication). These buildings can have parking inside the structure or out in the open.

• Medium multi residential buildings have residential units attached horizontally as well as vertically. Their height goes from 4 to 5 floors with a common core (common vertical communication). These buildings can have parking inside the building, annex or in the open.

• Low individual buildings is characterized with one residential unit, so it serves only for one family (5 members’ the average), their height goes from1-2 floors. This buildings can have parking inside the structure, annex or in the open.

It is enabled the development of all types of multi residential buildings

• Block type buildings, is a compact form of buildings which results with a high housing density, while the form of the external space is more limited.

• Linear type of buildings, a more free (open) form of building, has a little or no external space limit,

• The tower type of buildings, a free form of building. Has no external space limit.

It is enabled the development of all types of buildings of individual residency

• Particular type of house,

• Double house type (two houses attached),

• Series type of house (three or more houses attached),

Business facilities (working buildings)

Business buildings are structures dedicated for work, trade or research and have these common characteristics:

• Repeated floor basis,

• Open and flexible spaces,

• Core that contains the elevator, stairs, mechanical systems of the buildings and other common elements

Business is divided in trade & craft services, service buildings (office) and in hotelier activity (restaurants, bars, hotels)

• Business activities, can be established in a mutual building or in a particular building,

• It is preferable to mix business activities in a building,

Particular conditions of spaces for offices

• Orientation depends from the location, it is preferred the east-west axis

• Typical dimension of the layout plan base are 45m x 36m and 60m x 45m,

• More flexible buildings for organization with the possibility of moving the interior wall,

• Floor to floor height for office is 3.0 to 3.6 m

• Distance between the core (vertical communication) and the edge of the building should be 25 m

• Distance between two cores should be 40m,

• Providing good lightening and ventilation,

• Parking access (underground parking) and economic entrance (supply dock)

• 2–4 parking slots for 100m^2 of the building

• Understandable signs and a unique entrance design

Specific condition of trade spaces

• Floor to floor height for trade, is 3.6-5.4m with the possibility of placing cables and other building systems

• Visitors access in front and trucks access in the sideways

• Efficient use of space (space between pillars 6.4 m increases the flexibility)

• Ramps for trucks should be max. 5%

Public institutions building/ Special conditions for kindergartens/nurseries

• Surface area of the location 25m^2/ child, or 0.25-0.3 ha

• The entrance to the building has to be ensured from the road for access

• Kindergartens (children 8 months - 3 years), should be groups of 6-8 children with a surface are 2-3 m^2 / child

• Nursery (children 3 – 6 years), should be groups from 25-30 children with a surface 1.5 – 3m^2/child

• After school child care centre for (children 6-15 years), should be groups from 25-30 children with an surface area 1.5-4m^2/child

• Room for a group of children should be minimum 60m²,

• In the urban area the building is preferred to be with two floors,

Tab.9. Conditions for kindergartens and nurseries

Group age	Surface area	Distance from home (m)	(minuta)
0 – 6	0.6	110 - 230	2
6 - 12	0.5	350 - 450	5
12 - 18	0.9	700 - 1000	15

• Minimum: 6 parking lots and space for bicycles and carts

• Minimum space for children playing is 40m^2 (5m^2 for residence unit)

• Playing spaces should be closed / limited with a barrier: minimum 1m, so it is protected from the road, parked vehicles, water and other sources of risks

• The playing spaces depend from the group ages, used area for person etc.

Special condition for primary schools

• Necessary surface areas of the location is 0.50 up to 1 ha

• Necessary surface areas within the location are: game fields (football, basketball, tennis etc), pedestrians paths that connect other social contents, expanded parking and buss access, provision and protection of green spaces.

• Necessary educational spaces: 2.5-4m²/pupils,

• Necessary spaces within the building are: teaching (classes and rooms for small groups), administration and staff, social spaces (cafeteria or buffet, etc), media centres, sport and recreation (physical education hall, pool and wardrobes), visual and performing arts(theatre, music room, art, etc) and the economic space.

• Buildings with more floors and more flexible spaces, is preferred in areas with high density

10.4 CONDITIONS FOR THE REGULATION OF OPEN SPACES/

Treatment of greenery alongside of the roads

• The URP green belt means that there will be trees in the both side of the road, with a certain space for low greenery.

• Low greenery areas along the green stripe are interrupted and represent a base for the plantation of trees (see fig...)

• The green belt has to be established alongside of the roads with a width of 1.0m this belt is mainly established in both sides of the road (1.0+1.0m= 2.00m),

• The green belt should be established along local roads with width 1.0m. This belt is established in both sides of the roads (2x1. 0m=2m). Distance between trees should be maximum 9m. ,

Fig. 8 Conditions for greenery placing

Treatment and creation of new squares

• The existing square has to be re-arranged along the Nerodima River

• New public square are proposed within the inside yards of the existing multi-residential buildings they`re connection with the main road should be clear with the purpose of better usage of these areas.

• To create as much free areas as possible it is proposed that under these squares to be located public parking lots

•Squares can be created within residential blocks depending from the need and demands of owners.

Green areas and parks for resting

• Advancement and supplementation with content of the existing park in the town centre

• Reorganizing of the public park in the “Agim Bajram” square.

- Creation of the recreation area with greenery and walking paths at the place where the two rivers meet

• Green spaces and parks for resting can be created within residential blocks depending on the needs and demands of owners.

Spaces for sport and recreation

•Surface areas of sport and recreation can be created within residential blocks depending from the need and demands of owners. ,

• The lack areas for sport and recreation in the area, conditions the utilization of the closest sport and recreation centre, which is foreseen in the north part of the area in Block B1

• It is foreseen the increase of sport terrains within the primary school complex.

Percentage of green areas in parcels

• Greenery within the parcel is obligated and should be foreseen from every developer of the parcel.

• If the relation with surface area of the unconstructed base, is variable and it

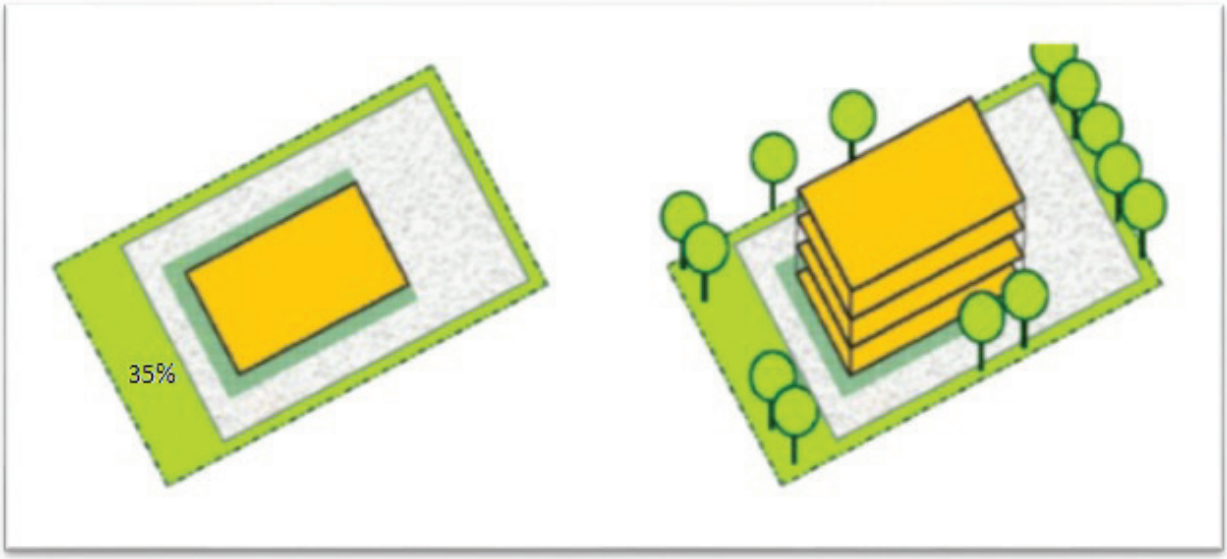


Fig .9 Percentages of green areas in parcels

Is defined based in floors, 65%-35% (P+2)

Figure.9 Green area within the parcel should include minimum 35% of the general area, or 65% of the build area (see figure ....)

Type of plant/trees

• At least one tree with a wide crown, has to be planted for 500m^2 area of the unconstructed area,

• It is suggested the planting of indigene plants which suit to climate, exposition, sea level and place.

• Existing trees should be preserved.

• The appropriate distance between trees with large routs from underground instalments has to be foreseen

The rout system of trees is suggested to be of deep type in green belt, along sidewalks

Table.10 Type of plants for the Urban Zone I

Acacia decora
Acer negundo
Acer pseudosieboldianum
Aesculus hippocastanum
Berberis media Red Jeëel
Berberis vulgaris
Betula pendula Roth.
Catalpa bignonioides Ëalter
Cercis syliquastrum
Cupressus Sempervirens Pyramidalis
Forzicia
Fraxinus exelsior
Fraxinus ornus L.
Fraxinus ornus Meczek
Juniperus hibernica
Juniperus sabina
Magnolia grandiflora L.
Picea abies
Plantanus orientalis
Prunus cerasifera nigra
Rosa hybrida
Salix vitellina var. Pendula
Tamarix tetrandra
Tilia cordata
Berberis media Red Jeëel
Laurus nobilis L.
Lule sezonale
Mahonia aquifolium
Perene shumevjeçare
Alnus glutinosae
Picea glauca

Conditions for establishing micro-urban elements

a) Kiosks/vending machines, ATMs, and other devices

• Cannot be built from bricks, concrete or similar constructions elements

• Objects should be montage (to meet the criteria of removal for 24 hours),

• They are placed in the sidewalk with the primary condition with the first condition not to hinder the free movement of pedestrian.

b) *Informational signs and billboards*

• Should serve for orientation within the area as well for identifying the building itself.

• Informational signs or billboards which identify the building should be placed in the area of the green stripes area, within parcels after the regulation line in order not to hinder traffic visibility, and to be visible from the pedestrian and bicycles line.

• Informational and billboards signs which identify the entire area or certain parts of the area should be established in the sidewalk area (public space), in order not to hinder the free movement of pedestrians, or can be placed in the green stripe along the road.

c) *Furnishings*

• Seats should be placed in the sidewalk area with the primary condition no to hinder the free movement of pedestrians, also can be placed in the green stripe along the road facing the side walk

• Lighting is placed every 30m along the roads and should have pillars not higher than 6 m.

• Waste containers for services in individual parcels, electricity substations, water and electric meters, should be hidden where it is possible, where is not possible they should be in harmony with the landscape.

10.5 Measures for preventing the adverse impacts on the environment

•In the Urban Zone I, are not allowed these activities that cause smoke, steam, noise, smell or dust up to the measure that can be dangerous, offensive and harmful for health.

• In the Urban Zone I along national and local roads, should be ensured a green corridor in order to isolate from pollution and strengthening the view in the entire area of the centre

• Draft strategies and emergent plans for protection of environment against-earthquakes, fires, floods and emergent plans for protection against-earthquakes, fires, floods, erosions, air pollution and others.

• Strategies for waste managing need to be checked from the municipality in a continuous in order to remove environmental impacts.

• Municipal concept for environment protection has to be drafted: additional regulations in municipal level that fulfil the environmental legal frame from the central level and facilitate its implementation (See: Local environmental convention, drafted from Kosovo’s Municipalities Association)

10.6 URBAN MEASURES FOR PROTECTION FROM DISASTERS

For protection from earthquakes, facilities should be realized and categorized according to the regulation for technical norms for construction of objects of high construction in seismic areas (Law no. 02/L-68). Document: Risk Assessment and Disaster management, is based in the following laws:

- Law on spatial planning, No. 2003/14,
- Law on amending the Law on Spatial Planning,
- Law no. 02/l-68 for protection against natural and other disasters
- Kosovo water law, Law no. 2004/24,
- Law on fire protection, Law no. Nr. 02/L-41,
- Law on explosive usage, Law no. 02/L-005,
- AME administrative instructions (Agency for Emergency Management- MIA)
- Municipal Assembly status

10.6.1 Earthquakes

Seismicity of the Anamorava territory and area of Kacanik, is controlled from earthquakes with origin from Varda (Ferizaj-Kaçanik-Viti-Mitrovica-Skenderaj-Skopje and Kumanova). The sources of the following earthquakes are local with origin from the main seismic area Ferizaj-Kaçanik-Viti valued with Max=6.5, while the maximum intensity for the Kosovo valley, is: VIII°- IX° MSK 64. The strongest earthquake from indigenous sources that have happened in the seismic are of Kaçanik is the one of 1921 M=6.2, Io= IX ° MSK-64).

10.6.2 Floods/Erosion

Rivers Lepenci and Nerodimja, which pass through the urban area, are very important natural resources for the city of Kaçanik, whose beds are regulated in the urban area, and based in empiric analyzes there was no flooding in the urban area. However, actions which should be undertaken in order to maintain the river bed, respectively the prevention of floods are:

- Cleaning the urban remains along the river bank and the river bed.
- Continuous regulation of the river with the same treatment in both segments in north and south along construction areas.
- Improvement of embankments with soil work, where is considered necessary through planting plants/green (adequate plants that strengthen , and safeguard the form of embankments

In the context of undertaken anti-erosion action, beside above mentioned actions which also are preventing measures of floods:

- Planting vegetation in the area from 10 meters distance from the river bed.
- Other hydro-technical anti-erosion measures.

10.6.3 Fires

During the issuance of urban and construction permits, relevant institutions should respect laws and regulations in force.

Re-development of urban blocks respectively buildings should be drafted according to standards for the distance between them, except other aspects treated in special fields, enables the access of the fire-fighter service near the object and also localizes eventual fires.

Also during the construction/ improvement of the water supply system should plan the construction of hydrants according to norms and standards applicable.

10.7 URBAN MEASURES FOR CIVIL PROTECTION OF HUMANS AND PROPERTY

Urban measures for the human’s civil protection and material goods are a duty to build sheltering objects, which are in accordance with these rules for the construction of shelters:

- Planed administrative and public objects have a duty to construct shelters or to prove other possible forms for the protection of the civil staff.
- All physical and juridical subjects which in existing facilities construct additional annexes of residence or something else, are obligated to pay a contribution for construction or providing a shelter.
- The obligation for the construction of the shelter or payment of contribution for planned objects will be proved during the implementation of the plan.
- Planned sheltering should be realized in accordance with the instruction of technical norms for capacity sheltering, micro location...

In function of civil protection, shelter building is an obligation and a special elaborate should be conducted, in addition to protection measures from natural disasters and conditions for Spatial Plans with interest of protection which an integral part of the plan.

10.7.1 Hygienic rehabilitation

It is expressed through a number of measures and inventions in the infrastructure which in the future will rehabilitate the current conditions. The development of infrastructure will be done according to modern requirements consisting of:

- Development of the road system based in the Urban Development Plan of the town in general,

-Development of infrastructure and settlements and other parts of this entirety, which results in perspective and highest hygienic standard, according to European norms,

- Percentage of the greenery, data in urban standards, for residence of this urban entirety but also for the residents Kaçanik town.

11 PROVISIONS FOR IMPLEMENTATION

11.1 PROVISION REGARDING THE RESPONSIBILITIES, COOPERATION AND PARTICIPATION

Decision-making

Decision making for the development of the Urban Zone I of Kaçanik, should be done from the Municipal Assembly Kaçanik.

Establishment of the working group

Working group is established from the Municipal Mayor and has to be composed from the Director of the Directorate for Urbanism, Cadastre, Property and Environment, Director of the Directorate for Finances Economy and Developments. Beside the directors that are part of the working group, these groups consist of representatives of the business community and representatives of land owners.

Improvement of inclusion, participation and awareness

Implementation and enforcement of the regulation plan for the Urban Zone I will be successful only if the municipality will create sufficient support and confidence, between investors and its owners for these activities.

Assessment and monitoring

Urban Regulatory Plan, will be evaluated in a regular way, once every two years, unless if there is a special request. Also, recent developments given and completed from the feasibility study, traffic plan, data regarding the needs every five years: the plan should be reviewed in general.

Construction permit

Process of offering a permit of refusal of a request for permit, includes the guaranty for the transparent role of all stakeholders (owners, enterprises, stakeholders and administration), will be improved through clearing the procedures.

- An adequate base for re-parcelling should assist the process of permit issuing. This activity should be realized in cooperation with the sector of cadastre within DUCEP
- Construction permit can be issued only after the approval of URP of the First Urban Area.
- Construction permit can be issued only after the conditions for establishment of certain activities are fulfilled.

Feasibility study

Feasibility study will identify the needs of the market, financial needs and will propose the best model for financing of the infrastructure of the Urban Zone I. Possible sources of financing are: municipal budget of Kaçanik, loans from bank institutions, Kosovo`s budget, capital of private enterprises and foreign donations.

First urban area managing

Decision for the model of managing the First Urban Area, should be taken depending from the capacity and need of local authorities. Two models of the development of the First Urban Area are recommended:

- Managing from the municipality of Kaçanik- Department for Urbanism, Cadastre and Environment Protection, Department for Economy, Finances and Development;
- Management from a special body or from the Agency for Development.

Cooperation with private owners

- Establishment of agreements with private owners, about the purchase of properties-expropriation from the municipality.
- Establishment of agreements with private owners, about the re-parcelling possibility.

Creation of agreements with private owners, about the purchase of properties from private enterprises

Cooperation with the business community

- Agreements with private enterprises about stimulating investments (favourable condition for investing.
- Agreements with private enterprises about the possibility of re-parcelling

Promotion of the Urban Zone I

The body which manages the development of the Urban Zone I of Kaçanik town is responsible for the promotion of the area. Promotion (marketing) implies creation of the webpage, fliers, participation in fairs, direct cooperation with potential investors, preparation of the facility package from the municipality etc.

12 FINAL AND TRANSITIONAL PROVISION

Approval of the plan

Approval of the plan is done from the Municipal Assembly of Kacanik immediately after the conclusion of the public hearing

Validity

- This plan has validity for 5 years from the date of the approval of the plan.
- After 5 years from the approval of the plan, is done the reviewing and fulfilment of the plan.

13 INSTRUCTIONS FOR THE TREATMENT OF ILLEGAL OBJECTS

With the designing task, it is foreseen that regardless the update of the geodesic database, with the survey in the field it is proven the existence of newly constructed buildings and the parcels with this buildings is treated as urban: in accordance with the technical/urban condition or the condition of infrastructure and if obstacles do not appear, to foresee the inclusion of facilities without permits, and to see the alternative possibility of solution.

As non-formal facilities, means all objects noticed in field, the ones that are fully completed and the ones being built during the drafting of the Plan, the ones that have exceeded the defined urban parameters and do not have a construction permit, or are not evidenced in the cadastre-topographic base.

For objects which have started constructing, have to apply the condition for planned objects. For the existing completed objects, which have not exceeded the parameters defined by the plan, and that with plan are formed urban parcels, the legalization procedures can be applied in the existing dimensions, regardless to the drawn position GL1, which partly passes into the object.

For objects which have exceeded some of the defined urban parameters (the construction index or the occupation of land, stores etc), which have started construction without construction permit or illegally have upgraded, according to allowed capacities, regardless the completed position GL1, which partly passes through the object, can be legalized in accordance to this terms.

For projects which are completed without construction permit and that have exceeded these urban parameters for the construction of buildings (land occupation index, build land index, maximum allowed flowers, parking), which is the truth of BGP, the maximum allowed BGP for the subject of parcel (i-0-8 for the parcel, up to 625 m^2, or BGP-500-m2 for parcels for the parcels larger than 625 m2), exceeded up to 25% can act according to legalization rules in the dimension of the condition found, by raising the payment of municipal taxes, according to municipal regulations.

For object that are constructed without construction permit and that have exceeded the defined urban parameters for the construction of the object (land occupation index, constructed land index, maximum allowed floors, parking), which are real BGP, the defined BGP has exceeded more than 25%, it`s necessary in accordance with any urban parameter (according to objective possibilities for the reduction of the horizontal or vertical dimensions), up to maximum, exceeds the 25% defined BGP for the parcel in question. Therefore we must be careful that in object can be realized interventions in compliance with the parameters, in the view of compliance of overbuild parts, of the parts of the objects, e.g. the annex of the object, the external stairs, covers, and the view of environmental and architectonical form.

For all non formal facilities, apply the following rules:

-Construction lines in constructed parcels, are not recognised according to the base dimension of the object

-Construction line of the blocks, are set in parcels with the existing facilities and are activated only in case of the demolition of existing objects, according to the recommendation of the block line.

- Buildings which are partly located out of the recommended area of the construction line can be rebuilt by respecting the position of the new construction line, up to the allowed parameters and floors.

-Parts of the facility (which are found in high floors), which exceed the construction line, are absorbed in the dimension found in the implemented form.

-The underground floors are absorbed, which are spread out of the construction line, in the border of the parcel, as it is foreseen with plan during the construction of new facilities.

14 ELEMENTS AND INSTRUCTIONS FOR FURTHER RESEARCH

Researches, policies additional plans, which should be drafted

- Assessment of the requirements for residence
- Populations projections
- Economical projections
- Feasibility study in certain areas
- Policy of the construction land – land consolidation and re-parcelling
- Environmental action plan
- Area marketing plan
- Assessment for the production of energy and heat, including the feasibility study on alternative energy (renewable energy etc)
- Assessments of the requirements for open public spaces

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