

## **Chapter Sixteen**

### **Infrastructure**

# LOCAL OUTLINE PLAN JERUSALEM 2000

## 16.1 Introduction

### General

The location of Jerusalem on the watershed line, far from the coastal strip (which constitutes the national infrastructure channel), its geo-political location in particular and its function as a wedge between Judea and Samaria, makes it necessary to build the infrastructure system of the city at a higher level of reliability than other parts of Israel that are built at a similar density but are adjacent to the national infrastructure channel.

The Plan proposes the building of a new infrastructure, comprehensive and sustainable, that responds to the problems that arise from dealing with the whole set of infrastructures, both at the urban level as well as the metropolitan. All this while paying close attention to conserving space, ensuring multi-layered utilization of land, making routine maintenance more efficient etc.

One of the challenges that the implementation of the plan faces is the reality of the existence of an old infrastructure in parts of the city which provides a level of service that is inadequate for development and which does not meet the criteria for sustainability. The raising of the density of the city also demands upgrading the various infrastructures to an adequate level of service and addition of new infrastructures, while preparing to avoid damages resulting from earthquakes.

The system of line infrastructure includes:

- A. The water system
- B. The sewage system
- C. The drainage system
- D. The electricity system at all levels.
- E. The communications system including antennae, telephone infrastructure and optical fibers.
- F. The fuel and gas including natural gas and the refueling system.

The plan provides a detailed concern with the transport infrastructure and environmental infrastructures such as solid waste in another chapter. In this chapter, two other subjects are included for analysis: earthquakes and cemeteries.

The urban development that is proposed places emphasis on sustainable development, preservation and improvement of the appearance of the city, especially of the “public space”. Among other things, the plan calls for maximum moderation of the existing and future infrastructure.

One of the goals of the plan is the multi-functional or multi-layered utilization of land that is used for the passage of various infrastructures such as use of traffic routes, bridges and tunnels, infrastructure installations, and this by means of integrating pre-planned systems.

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The plan cannot ignore external factors that influence the future of the city and a situation where there is a forecast of another political entity to the east, south and north of the municipal borders of the city.

## **Earthquakes**

A large proportion of the land area of the State of Israel is exposed to the possibility of earthquakes of different levels of intensity. The last earthquake that caused great damage and loss of life in the different areas of the country took place in 1927. The cyclical nature of this phenomenon points to the fact that another earthquake can be expected to occur within the next tens of years. Until now there are no methods to accurately predict the date, location and intensity of the next coming earthquake.

The state has increased its awareness of the problem in the last tens of years and recently the standards for buildings have been raised in order to avoid failure when an earthquake occurs.

The standard divides the country into different sensitivity zones and also defines the entire mountain ridge line as one zone.

Recently, the Ministry of the Interior has decided that the different zones may be similar in terms of the extent of the expected quake, but not in terms of the impact of the quake on the engineering installations of different types (including infrastructure installations), because of the varying sensitivity of the different geological zones of the country to the earthquake and its possible consequences.

The Ministry of the Interior demanded from the local planning and building committees to try and come up with a more detailed catalog of sensitivity zones within their respective areas and to define what should be done and what should not be done in the engineering design of infrastructure works, foundations of various buildings and installations, and the design of the buildings themselves.

The City Engineer of Jerusalem requisitioned from the Geological Institute a survey of earthquake dangers in the entire local planning area. The survey includes an analysis of regions in terms of sensitivities and engineering failures of various kinds, both on the basis of a geological mapping (old and new) as well as analysis of the events of the last earthquakes including that of 1927. A summary report was submitted in August 2003 to the City Engineer and the findings of the Geological Institute were organized and incorporated into this plan.

The survey that was carried out by the Geological Institute includes, among other things, reference to the following issues:

- A. A comprehensive geological map of the local planning area. This map draws upon the mappings that were done before there was development in the different zones.
- B. Identification of the sensitivity to the effects of earthquakes at six different levels of intensity.
- C. Identification of zones believed to have unstable slopes in which an uncontrolled arrival of water or extra loadings on the structures (without

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preventive measures) could cause them to fail by slippage on the slopes, disintegration of supporting walls or even more serious consequences.

### **The influence of the infrastructure on environmental quality.**

In terms of the water supply, fuel, gas, electricity, communications systems in contrast to the sewage and drainage systems, Jerusalem is dependent on the supply from the coastal strip. (There is a limitation element in the supply of artesian well water from wells in the area and the use of pumped water). This supply, which has developed by stages through time, utilizes the corridor connecting it to the coast. This corridor has other factors “competing” for its use such as access roads and rail lines which also connect the city to the heartland as well as the green spaces of the “green core”.

The transfer of raw materials to the consumers is carried out today by trucks which constitute a security danger when they park next to sensitive land use areas and the illegal emptying of fuel in forbidden areas which cause pollution of the ground and the water table.

Connecting the largest city in the country with the coastal corridor requires a solution of high reliability in order to maintain its vitality and function. Therefore what is required are a number of parallel routes and lines, 5 water lines, a ring (semi-circle) of high tension electricity, communication lines etc.

There is some financial difficulty attached to the high costs of maintaining quality in these systems without damaging the environment, and also without harming land meant for development. This issue requires innovative approaches such as the use of underground tunnels for infrastructure (utilizing tunnels meant for transportation for the same uses), underground cables for high tension wires instead of overhead cables etc.

Furthermore, it should be mentioned that there is still no comprehensive treatment of the use of sludge and recycled water for industry (agriculture etc.) However since most of the water purification installations are outside the borders of the outline plan and are located in xxx planning zones, the plan will not go into their details but only mention them in passing.

### **Financing the investments in infrastructure.**

The main infrastructure systems need to promote investments, planning and implementation of the systems together with the implementation of the road system and the development of the open spaces. In the implementation of infrastructure systems there are many bodies involved, state, urban and private, and it requires the advancement of financing for generations. In order to advance the financing of infrastructure, it is necessary to prepare a multi-year financial plan from many sources including loans and bonds because ordinary taxes are not enough to cover these costs.

The main duty of the city fathers will be to ensure the implementation of the plan by advancing the planning, financing and implementation long before the implementation of the building plans, so as to make sure that there is a sustainable and comprehensive system for the future.

## 16.2 Water

### 16.2.1 Goals

Jerusalem has since long ago, developed almost an absolute dependency on water brought from the coastal plain. The discovery of the mountain aquifer in the twentieth century was a significant supplement to the independent sources of underground water that supplied Jerusalem. However all these are inadequate for fulfilling the needs of today (due to the increase in population, area and the water consumption per capita, even though this is lower than most countries) and the future population.

During the last century, water was brought to Jerusalem by four parallel lines that were installed between the British Mandate until the end of the century. Today, the issue is the addition of the fifth line that is presently in the stages of physical and statutory planning.

From the above, the goals of the present system are:

1. Supply of high quality water to the city population.
2. Preservation of a good level of water supply from the sources of coastal strip water and the National water carrier, while balancing this with water from springs and artesian wells of the mountain aquifer.
3. Preserving a reliable and continuous water supply to the city while allocating the water correctly and efficiently between its different sectors, and taking into account the increase in overall average water consumption per capita.
4. Preserving a good level of water storage in tanks for emergency (in view of the special location of the city).
5. The preference for laying out the pipes and other infrastructure in parallel and in the channels of bypass and arterial roads, while minimizing the laying out of infrastructure lines in the areas of open spaces of all kinds.
6. The proposing of possible solutions for the use of used and recycled water and other methods for savings in pure water.

### 16.2.2 Means for intervention.

1. Because of the almost complete utilization of the four water lines that serve Jerusalem, there is a need for putting in a fifth line that will serve the increasing population. This line is the strategic line to Jerusalem and needs to pass through and internal and secured area, far from the "stitching line" [kav hatefer], with minimal conflict with built-up areas, main roads etc., One of the acceptable options for this line is placing it in a tunnel almost along its entire length from the Eshtaol valley to the approaches of Sorek valley.

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2. In order to decrease the need for pumping for a great height and the waste that this entails due to break in pressure, it is proposed to set up in the new neighborhoods. Water storage tanks at different height levels. Storage tanks can be built on the surface, however it is recommended to give preference to water tanks that are dug and covered as much as possible. The tops of these tanks can be used for other purposes such as gardens, sport etc. so as to make efficient use of land by mixed uses.
3. As a rule, every distributive network of water lines needs to be located in the road network including ring roads. This needs finding solutions for passage of water pipes and maintenance methods in tunnels, bridges and interchanges.
4. In old arterial roads (city center) through which the future mass transportation system is expected to pass, the building density and water consumption patterns are expected to increase. Here the installation of a service tunnel should be considered for the future.

### **16.3 Drainage**

#### **16.3.1 Goals**

The drainage system is influenced by the topography, the precipitation level, the precipitation rate (maximum hourly) and the type of development. The increasing of building density in the city will bring in its wake the increase in the paved area and lessening the absorptive capacity of land and damage to the Judean Hills aquifer. The careless planning of the drainage system can cause runoff erosion damage and removal of the little fertile land that still remains.

The increase in the run-off quantities can also, at peak times, cause flooding and damage from peak rainfalls that were not taken into account in the planning of the channels. On the other hand the drainage system can also become clogged or lacking in capacity due to lack of proper maintenance.

In order to restore the drainage system of the city it is important to create a situation in which the drainage system will increase the possibilities for run-off absorption, decrease erosion damage and will be separate from the sewage system.

#### **16.3.2 Means for intervention**

- A. In the planning of every precinct, the measured mutual influence will be calculated according to standards of 25 years at least to ensure proper drainage.
- B. It is imperative to completely separate the drainage system from the sewage system.

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- C. In some of the older neighborhoods the outline plan proposes to increase densities. No additional building should be allowed as long as the drainage system is not separate from the sewage system. In neighborhoods and roads in which there is no drainage, the Municipality is obliged to implement this by opening up the roads and installing drains of the proper dimensions.
- D. The cost of these procedures should be borne by the property owners that want to enlarge their apartments or the owners of the rights for additional dwelling units. The demand for payments should be through a municipal bye-law or any other kind of legislation.
- E. Sensitive installations in valleys (for example, zoological gardens) will be required to plan and install "Dry Protection" of plastered channels in case of flooding due to system failure or sewage breaks.
- F. The setting down of principles for allocating maximum permitted building coverages so as to ensure that there is enough unpaved area in the lot that will allow seepage of run-off water into the underground water table.
- G. Fixing rules for slowing down of run-off flows on the surface by use of barrages and controlled falls (instead of closed pipes), so as to increase the absorption of the water.
- H. To leave 20% of the area of the lot as open ground or absorptive gardening with no building, paving or flooring that prevents water seepage, or to insist on an engineering solution that will ensure seepage of run-off water.
- I. To plan "natural" drainage systems in every feasible place by creating waterfalls and ponds in order to avoid erosion and increase seepage.
- J. To plan the capacity of the neighborhood drainage system such that it will answer to the needs of the entire built-up area and the development of "drainage connections" between roofs, roads, sidewalks, paved paths and floorings for a peak capacity of 25 years at least. In built-up areas in valleys and low areas of the center, it is recommended to take into account a peak capacity for 50 years.
- K. To examine the possibility of building a landscaped dam as a means for enriching the water table, and utilizing this as a landscape element integrated into metropolitan parks.

### **16.4 Sewage**

#### **16.4.1 Goals**

The increase in the population of the city, the increase in the per capita water consumption, cancellation of septic tanks and the upgrading of the central system against run-offs and flooding, will necessarily bring about the increase in the

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quantities of occasional sewage that will be much more than linear interpolation. The sewage is distributed to a number of natural drainage lakes that all flow into open areas and water sources. Therefore it becomes necessary to purify all the waste in a thorough manner. The purification installations shall be built in stages by emphasizing the priorities for service to the new built-up areas and the increased densities, so as to avoid all possibilities of environmental pollution and pollution of the water table.

### 16.4.2 Means for intervention

- A. Preparation of a new Master plan with alternatives that take into account the geopolitical situation of the Jerusalem area.
- B. Locating additional sites for purification plants at the urban or local scale for all kinds of treatment. The main issue in principle is the treatment of the eastern basins. If the geopolitical situation does not permit the building of proper installations in the south-eastern part of the city, a solution must be found for the sewage of the eastern city such as channeling them from the eastern basins to the Sorek basin or other solutions such as detailed in the chapter on environmental quality.
- C. Fixing rules for channeling the sewage system via alternative routes and axes that will enable the handling of the wastes from the new building and increases in densities as proposed in the plan. The flow of the sewage is mainly by gravitation and hence much more problematic than water pipes or electricity conductor corridors. Hence it will be necessary to provide for passages through valleys such as Nahal Sorek, Emek Haarazim, Saker Garden and Gai Ben Hinnom. These passages should be accompanied by maintenance paths that can be used for hiking paths, horseback riding, bicycle paths etc. such as the main line of the western waste water purification plant in Nahal Sorek.
- D. Fixing rules for building compact purification plants in metropolitan parks that will produce purified water for watering these areas.
- E. Fixing of clear guidelines for the solution of the problem of chemical or toxic pollution that could damage the purification process itself or the water after purification. The relevant solution is the setting up of pre-purification of sewage at the exit from factories or large polluting employment areas, in order to prevent the problem at source (see in this connection the chapter on environmental quality).
- F. Setting down guidelines for private factories or local campuses for the treatment of polluting factors of sewage that are generated in their areas, and the ensuring of continuity of this treatment. This is an acute issue especially in areas of advanced industries (High-Tech and biotechnology).

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## 16.5 Electricity

### 16.5.1 Goals

- A. Preserving a proper level of reliable electricity supply to the city parts, while taking into account the increase in consumption beyond the increase in population.
- B. All supply of electricity arrives at Jerusalem via a corridor at right angles to the coast. The ensuring of continuity, security and safety requires the closing of a loop of extra-high tension line with the national carrier (electricity) in the coastal plain. Such a corridor is reasonably supposed to be located in the route of Emek Ayalon from the city in the direction of the Gezer power station. A solution based on this principle, or similar, will ensure an alternative source in case of breakdown in transmission.
- C. The forecast development in the eastern city will require the creation of another corridor or two from the west to the east by high tension lines.
- D. The finding of solutions for backing up loads in peak times and hours of emergency in the local stations (which will be operated eventually by the network of natural gas that will be installed in the country by the plan period).
- E. Finding of possible solutions for planning of electric lines of all voltages, including installations such as secondary stations (takhmashim) and others, that will be “environmentally friendly”, while dismantling and discarding the old above- ground equipment in the city.

### 16.5.2 Means for intervention

- A. The definition of guidelines for setting of policy in agreement with the Electric Company concerning the problem of planning alternatives to the 400 KWH line and the laying of underground electric lines, including the standards for these lines, implementation stages and the locations of the above ground and under ground lines, including a solution for locating an additional power station in the Atarot area and aligning a semicircle from Even Sapir station northwards and westwards as above. So that if there is a breakdown, there will be electricity backup from this additional station that will be connected to the faulty station. The 400 KWH line is meant to connect the existing station in Even Sapir to the gas turbine in Atarot and from there on there is a connection to the Gezer site that is connected to the national carrier. All of this is outside the boundaries of the outline plan.

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- B. Setting regulations that insist on underground electric cables and their location in various ways, while lessening the use of above ground cables in areas to be determined in advance. Coordination between investments in roads of all types and the laying out of lines according to the goals of the outline plan and not at the time of laying out the roads must be ensured.
- C. Finding alternative sites of an adequate level for the secondary stations meant for displacement while dismantling the old and deciding on locations for the new secondary stations in the urban network, especially in the areas for increased density and the city center, so that they will be underground, covered or integrated into buildings (for example the secondary station in the Azrieli Towers in Tel Aviv).
- D. In dispersing the secondary stations, the requirements of the light railway in its full capacity must be taken into account, including extending further lines. Similarly, the fast rail line to Jerusalem must also be taken into account since it apparently will be operated by electricity and is a heavy consumer.
- E. Setting of guidelines for installing transformer stations within buildings, in retaining walls of site development, or to implement them in underground or covered structures. As a rule, it is desirable to allocate areas that will be used by these stations solely.

### **16.6 Gas, fuel and gas stations**

#### **16.6.1 Goals**

- A. The gas and fuel infrastructure is based on piped underground flow that arrives from the coastal strip. The dispersal of installations and terminals throughout the city should be aimed for, while paying attention to operational storage, emergency storage and limited concentrations from the security viewpoint.
- B. The aim should be to maximize the use of gas, at the expense of the use of liquid fuel in general, and raw fuel in particular, since gas causes less damage to the environment.
- C. The use of energy centers based on hot water produced by natural gas should be investigated. This should be preferable to heating by electricity which is a dominant factor in peak hours of the city.

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- D. The dispersal of the distribution centers, terminals and gas stations to the periphery so as to lessen the transportation of tankers and to lessen the pollution from gas stations in the city which are difficult to supervise, manage and control, should be aimed for.

### 16.6.2 Means for intervention

- A. The moving of the Pi-Galilot station, which endangers the Har Nof neighborhood, harms the landscape visually, and is apparently located on the planned route of Road No.16 or its replacement, should be carried out.
- B. The preliminary locating of two additional gas and fuel terminals that were indicated in the infrastructure appendix, in the Atarot area and in the eastern city, so as to decrease the size of tankers, the volume of fuel trucks, the amount of storage, and as a consequence, the environmental danger.
- C. Setting out of guidelines for the laying of natural gas lines that should arrive at the above three terminals and from them to the proposed power station in Atarot, to the existing and future energy centers that can make a considered transfer to the use of natural gas.
- D. Setting out of guidelines for supplying gas for other consumers such as institutions, factories or hotels, in which there are central facilities for producing energy for large areas or industrial uses.

## 16.7 Communications

### 16.7.1 Goals

- A. The realization of the outline plan is dependent on the functional ability of employment zones to be intelligent, clean, interconnected and connected to the wide world.
- B. Even though it may suffer from delay in the development of different forms of communication, the laying of communication infrastructure is one of the central tools for economic development of the city or region. For this purpose, there are many line and wireless, public and private, systems competing with each other between different modes of communication or within identical modes.
- C. The central aim today should be to transform Jerusalem into an “**Intelligent City**” by creating an all-urban, universal communications system, that connects residential zones with employment zones, and that provides its users with all the necessary services such as cables and equipment, whether public or private.

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- D. The conventional communication systems such as “Bezeq” and its cabling should be retained, and in parallel create an infrastructure and rules of the game for wireless communications including all kinds of antennae etc.

### 16.7.2 Means for intervention

- A. Setting up of new Bezeq exchanges shall be in the new neighborhoods only. It can be assumed that Bezeq Company will not need to set up new exchanges in the urban areas slated for density increases due to the miniaturization of the installed equipment.
- B. Setting down regulations for the laying of underground communication lines along road ways. These lines include Bezeq lines, TV cables, and optical fiber lines. The capacity of the infrastructure will be determined for each channel by the needs of owners of existing licenses and the needs of the communication companies that will be added to in the future.
- C. The setting out of proper planning and operational arrangements for the installation of a central piped system for cable communications that is not Bezeq Communications, that will be part of overall urban road system and will cover all parts of the city. Such a system will ensure the achievement of goals on the one hand, and prevent the need for opening up roads and sidewalks for installations on the other, including the minimizing of nuisance to the public resulting from lack of coordination and duplication of effort in laying out communication lines along road ways.
- D. Fixing of regulations for setting up cellular antennae in accordance with National Outline Plan (TAMA)36, since the planning team requested specific and stricter regulations according to Plan No.7777<sup>1</sup>, but this was impossible due to the regulations of TAMA 36.
- E. The moving of specific antennae such as that of the Second TV Channel or cable companies in employment zones or industry.

### 16.8 Earthquakes

The planning department in the Jerusalem Municipality requisitioned a report from the Geological Institution for the estimation of the danger of earthquakes in Jerusalem. From this report, the outline plan summarized its goals and identified the recommended means of intervention as follows:

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<sup>1</sup> Plan No.7777 was prepared by M.Cohen from the Keshet Company (Promotion of Planning Services)

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## 16.8.1 Goals.

- A. Identification and definition of sensitivity zones at different levels in which there are reasonable assumptions of existence of special danger factors for earthquakes, landslides, land failures on the natural and artificial slopes etc.
- B. Identification of areas of sensitivity to intensification, in which there could be intensification of seismic movements as opposed to ordinary sensitivity.
- C. Identification of areas built upon weak geotechnic layers, in which there is a potential for failure in the layers during an earthquake, with connection to the natural slope.
- D. Setting out binding regulations concerning the dangers of earthquake.

## 16.8.2 Means for intervention

- A. In the question of the preparation for the dangers of earthquakes, the outline plan, as stated, relies on the survey of earthquake dangers carried out by the Geological Institute. Following upon the survey and depending on its conclusions, six types of sensitivity zones were defined in which there are reasonable chances of existence of danger factors resulting from earthquakes and these have been drawn up in the Infrastructure Appendix. In addition binding regulations were devised, part of them for the stage of preparing detailed plans and part at the stage of granting of building permit. In areas in which there is no sensitivity, or in other words, no expectation of intensification of the seismic danger, the regulations of Israel Standard 413 and 4133 will apply. For the rest of the zones, regulations were devised that will ensure the prevention of dangers resulting from earthquakes. The regulations of the outline plan are additional to those of the Israel Standard or any other legislation on this issue.
- B. The responsible body for investigation the requirements of the outline plan in this subject is the Department of Environmental Quality of the Jerusalem Municipality who will examine the considered opinion attached to the application of building permit or detailed plan submitted to the Municipality, and shall approve the findings of the opinion.

## 16.9 Policy instruments for planning cemeteries in Jerusalem

### 16.9.1 Goals

Outline Plan No.62 of the year 1959, designated the area in Givat Shaul in the western city for cemetery use. The outline plan for the old city and its environs that was

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approved in 1977 designated areas in the Mount of Olives, Mount Zion and others as cemeteries for the Arab population.

District Outline Plan TAMAM 1 (approved in 1977) designated for cemetery use, the southern slopes of Orah on the Laban ridge (that was located in the jurisdiction of the Mate Yehuda regional council). In addition attempts were made to locate two more cemeteries, one on the Salmon ridge and the other outside the area of jurisdiction of Jerusalem on the eastern city. All these plans were not realized due to the objections of the public. As a result all the solutions for extending the area for graves in Jerusalem were the result of responding to problems of the hour, or creation of facts on the ground not according to any plan.

The outline plan adopts the plan for the expansion of the cemetery on Givat Shaul to about 200 dunams in order to meet the burial needs of the Jewish population for the next 25 years, and to locate about 100 dunams for the needs of the Arab population (Muslims and Christians).

### **16.9.2 Means for intervention**

Policy instruments for the implementation of the principles of the outline plan are as follows:

- A. Processes for the approval of the detailed plan for the expansion of the cemetery in Givat Shaul should be continued and not wait for the approval of the outline plan.
- B. The detailed plan for the expansion of the cemetery in Givat Shaul should be prepared according to the following principles:
  - Saturated Burial- A more intensive use of the area should be planned. Instead of 230 graves per dunam for on site burial, about 600 graves per dunam by saturated burial (burial in layers) and no less than 450 graves per dunam (according to the decision of the Government of 25.12.97) should be planned.
  - The planning of the cemetery should be such that it will be possible to allocate land for each community according to their respective customs, including land for alternative secular burial (Government decision of 24.2.2000).

As an inseparable part of the cemetery expansion plan there have to be transportation appendices that include solutions for access roads to the cemetery and also parking for workers and visitors. Parking shall be planned in such a way that the parking lot will be able to be used for overnight parking for heavy trucks and transportation vehicles for dangerous materials.

- At the stage of implementing the cemetery, binding regulations should be included that make it clear that there should be no burial until there have been installed, to the satisfaction of the Jerusalem Municipality, the necessary services for the cemetery such as hall for burial services, purification rooms

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and other installations so that long queues between the place of burial and the Hall for services may be avoided.

- In the development plan for the cemetery attention should be paid to the following (with proper considerations for the burial customs of the various communities):
  1. A separation strip of 5.0 m. for the planting of trees around the cemetery.
  2. The cemetery will be planned in such a way that there will be gardened areas that serve as green islands in which visitors may sit and congregate.
  3. The planning of the cemetery will be such that from the view from afar, the gravestones will not jut above the fence around the cemetery.
  4. The cemetery shall be planned in a way that allows for Cohens to enter and will be planned according to the instructions of the Halacha.
  5. In the regulations of the detailed plan, it should be clearly stated that the conditions for the start of burials in the area of the cemetery are the execution of restoration developments to the appearance of the existing cemetery according to the landscape restoration plan that will be approved by the Jerusalem Municipality.

In order to answer to the needs of the non-Jewish population (Muslims and Christians), as stated, it will be necessary to allocate an area of about 100 dunams according to the same principles, unless it will be decided otherwise after consultations with the authorized Halacha bodies of the communities for whom the cemetery was established. It should be emphasized that the outline plan did not locate the site in order to avoid compensation claims according the section 197 of the law. The possible sites are in the north of the city near Atarot and in the south, but this can only be carried out by detailed plans that will be prepared in the future.

In addition, the planning team was in contact with the Home Front Command and the recommendations were to prepare an area of about 10 dunams for emergency burial in the expansion area of the Givat Shaul cemetery.

The Jerusalem Municipality and the District Committee have to enforce the planning and building law and prevent the phenomenon of unauthorized burial by the Hevra Kadisha in the west of the city, and to prevent the grabbing by Arab residents of the land meant for the cemetery in the eastern city by residential building.

### **16.10 Infrastructure Appendix and plan regulations.**

From the collection of subjects discussed in this chapter, only those issues for which statutory regulations could be devised were included in the plan documents. The infrastructure appendix is an advisory appendix that provides in a maximal way

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information on existing and planned infrastructure, including the marking of infrastructure installations by means of symbols. This format requires an additional planning process of a detailed plan that identifies exact locations for the planned infrastructure installations. In addition to this, regulations have been included that ensure the implementation of the plan.