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— T H E T H I S —

TOWN PLANNING SCHEME  
FOR THE  
VILLAGE OF BESHMEZZINE

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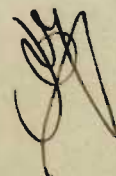
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" I N T R O D U C T I O N "

The spectacular growth of industrial and business towns and cities in this age created many problems and there-with the need to solving them. As a result Town Planning has been the answer. Town Planning may be properly looked at as the lawful son of an art and a science and possesses as a result the likelihood and characteristics of both. The existence of such a thing as a blend of an art and a science under the name of "Town or City Planning" may be attributed to the fact that order and beauty, which town planning is striving to achieve in the structure of the Modern City are both basic elements in the human self, which tries to create them for its own satisfaction.

That is sufficient for a definition of the term Town Planning. It remains to be pointed out how economical and efficient the different systems controlling the life of an urban community would become if that city grew according to a logical preconceived plan. The figures published in foreign magazines and books as estimates of losses incurred because of the haphazard growth of certain cities are appalling. Therefore a good lesson may be learned from others, and our newly, springing up cities may be saved, if a sincere effort is made to make use of the principles of town planning in guiding their growth.

Ideally speaking The Planning of a city is most effective before that city comes to exist, or at least before it has attained such a size and formation as to make <sup>with it</sup> modifications difficult if not impossible.

The village of Beshmezzine although small at present is growing fast and in a way that is typical of the growth of our towns and cities. People cluster their residences alongside roads and crossroads not minding the noise, dust, and other nuisances, while elevated healthy sites remain unoccupied behind. The locality under Town Planning constitutes the northern extension of the village municipal property and occupies a commanding site over the surrounding.

The present scheme, worked according to latest town planning principles and with full consideration of therecommendations of notable men in the field as well as experienced instructors, proposes a plan of development for the above mentioned locality. The aim is to guide the growth of this locality as a purely residential quarter to a satisfactory development. It deals only with the locality in question and not with the existing village as the title may falsely convey. The locality is a mere extension of the present village of Bishmizzine. For this reason the title given to the scheme does not fit well, although it is not in error.

## CHAPTER I

GENERAL CONSIDERATIONS

The scheme consists of (1) a topographic map of the site in its present condition, drawn to a scale of one to one thousand with 5-meter contour lines superimposed (2) a town planning subdivision plan containing, in addition to the original, the suggested improvements marked in red ink as well as the suggested subdivisions, and (3) a preconceived plan of the area after it has attained full development with contour lines omitted and with such architectural representations as would give to the place the signs of life and human activities, all done according to well established conventions. The three plates all to the same scale - one to one thousand - are considered sufficient in conveying a clear and definite idea as to the present and future condition of the locality, provided the suggested scheme has been strictly complied with under authoritative supervision.

The locality has been chosen for purely residential purposes. No industry of any kind will be allowed and no business center will exist. Only shops and secondary shopping centers in sufficient number size, and variety as was thought necessary to satisfy the needs of the prospective community were located here and there at central points of population where they lie within easy reach of all the homes to be served by them. Reasons for the above choice will be mentioned later under proper headings and justification made on well grounded considerations.

The scheme as it stands will provide for adequate outdoor and indoor activities, passive and active, physical and cultural. No social activities that are in any sense conducive to bad habits or debasing to public morals, and which eventually will affect public manners were allowed any shelter. The motive had been to create and accomodate a physically and mentally healthy community, and to that end the various social requirements were worked out to give full pleasure and satisfaction to those who may want them. A public library that contains good and interesting books was provided, so that people of all ages and stations may come at any time sit in comfortable seats read or join in deucational discussions. Also a club for public physical education was provided with spacious fields around it offering the opportunity for enrolment and training in active exercises of constructive nature. The play fields around the school building may well be used by the public after school hours.

Although the location under consideration enjoys distinctive natural advantages that will entitle it to a first class residential quarter, it still may not be considered as a first class summer resort. However it stands fairly well in coolness and warmth between the summer and winter extremes. The area of the locality as a whole is hilly and wild and therefore difficult and costly to tame. In the present scheme whole parts were left untouched as public parks so that they may be enjoyed in their natural virgin condition. Such blending together of the natural and the artificial in a locality that is to be utilized as a place for human habitation



is, when possible to realize, nearest to ideal as far the residential requirements of comfort, beauty, and calm are concerned.

A green belt of varying depth was made to surround the location defining its municipal boundaries with respect to neighboring municipal areas and adding, with its occasional merging into the interior parks, to the beauty and naturalness of the place. The above description gives a general idea of the locality and the intended community to live in and explains concisely the means and provisions to guide the growth of the living groups to a satisfactory realization.

## CHAPTER II

NATURAL PECULIARITIES OF THE LOCALITY.

The location covered by the present scheme lies to the north of the present village of Beshmezzine in the Kura District in North Lebanon. It constitutes the outer northern municipal extension of properties belonging to the village of Beshmezzine. Its horizontal projection covers an area approximately equal to 420,000 square meter or 105 acres; but since it is hilly and has quite an irregular topography, its surface area is much more than its horizontal area and may amount to as much as five fourths the first. It rises up at first comparatively mildly as it recedes away from the body of the existing village; then about its middle or so it sweeps up in a semi-cliff-like fashion and finally terminates as it started in a comparatively easy sloping stretch of ground.

Among the surrounding neighborhoods the locality holds a commanding position and in certain points gives to the sea, which is 10 kilometers away to the north west. A long unobstructed ravine cuts thru from the sea to a point just near the north eastern corner of the elevated stretch and brings fresh soothing air continuously all summer. In the same way the location bathes in the warmth of a coastal climate during winter. The highest point in the locality is 1045 meters above sea level. Thus by virtue of its proximity and openness to the sea, the locality is protected from the extremes of temperature all over the year and at the same time kept soothened and lively.

Suitability As A Residential Quarter. As is mentioned before the locality has rough surface, partly covered by woodland and partly by pasturage. It is pierced in some places by small winter streams. Judging from the vicinity it should be underlaid by a water-bearing strata or aquifer. But such a strata occurs deep enough so that no fear of a rising water table is to be taken into account. However artesian wells with a good quality water supply may be constructed successfully. Such a water supply may be used for purposes of drinking only while water for garden irrigation and other uses may be made available by extending a water main into the locality from the water supply system belonging to and operating under the direction of Kadisha Water Supply Company. Likewise an adequate supply of electric power is possible and with little expense. These facilities add considerably to the advantages of the locality as a residential neighborhood.

Roads. The question of roads is an important element in the development of the scheme and therefore claims very careful consideration; for people will not be encouraged to build their homes in a place - no matter how good and near to the ideal it may be as a home site - unless they are sure that by doing so they still remain in easy communication with the outer world. In spite of the difficult nature of the place, a satisfactory system of roads and streets was made possible by occasionally straining the rules and specifications of what is universally considered a good practice in road construction. Much study was put into the problem of choosing the courses and widths of suggested roads so that economy as well as convenience and comfort may be mutually served. Further details

on the system of roads that are more of a specific character will be presented later in this discussion under proper heading.

It may be relevant to mention at this instance that most of the cost of development of the scheme lies in the excavations necessary for building and grading the roads and building lots. Therefore development works constitute the main item of initial cost since the actual land value is so low as to be negligible. Since in similar schemes the value of land usually constitutes a major item of initial cost it is readily seen from a balance between the two major items of cost, land and development, that the scheme is feasible being justified economically whether carried out as a private or a public undertaking. Moreover the many other advantages of the locality from a residential stand point will tip the balance in favour of the execution of the scheme.

This argument is supposed to clear the doubts that the above hastily reached conclusion may have raised, and no further going into the economics of the scheme is considered necessary hereafter; but it may be stated that several residences have already spotted the locality offering a good indication of its natural attraction.

## CHAPTER III

Subdivision Of Land.

The area of the locality is around 420,000 square meter approximately. It is subdivided into the various uses as follows:

- a) 60,000 square meters or 14.8 % of total area for roads
  - b) 50,000 square meters or 12 % of total area (excluding green belt) for parks
  - c) 303,000 square meters for building lots.
- 420,000 square meters .....total .

Five to seven per cent of each building lot shall be set apart for a private garden. Where lots are arranged in rows of two, two such gardens may be combined into one to the advantage of the occupants of both lots. Of the remaining area of the lot 15 % or less shall be covered by a villa type of building if it is a villa lot and 25 % or less by an apartment building if it is an apartment lot. The rest of the lot area may be turned into gardens or left as open space to provide for a healthy cheerful surrounding. No particular type of building is to be imposed in any lot group or sub-block. Subject to the above mentioned regulations building may have any shape depending on individual taste and liking. No intermixture of the two types of buildings shall be allowed in one lot group or sub-block. These shall occupy separate lot areas, each being consistently uniform as far as buildings type is concerned.

The shape of lots was made mostly rectangular with the narrow side facing on the street, except where purely

economical factors of decisive importance dictated otherwise. The lots vary in width from 25 meters to 35 meters, 25 meters widths being the most common; lengths vary from 30 meters to 50 meters, 35 and 40 meter length groups being the more common. Such dimensions will give a maximum lot area of 1500 square meters and a minimum of 750 square meters per lot. Lots of 1500 square meters in area are very few lots of 815 square meters being the most common. Such lot area is considered as good and above the average.

Town Planning Regualtions. The buildings that are proposed to occupy the various lots are all of the detached type. The villa buildings will in most cases consist of two storeys only or two storeys and a basement or semi-basement. An average of five persons was assumed for each villa building. Apartment buildings may be of single or double apartment type, two or three storeys in height. An average of 20 persons was assumed to the apartment. From these assumptions the probable population of the locality sum up to 2150 persons. If we add to these the maximum number of people that may be staying at the hotel and which are assumed as 50 (the hotel was designed to take up only 50 persons at a time) they probable total number of persons present at one time over the area may be considered according to these assumptions as 2200. In the above estimation, 150 lots of a total of 220 lots over the whole area were assigned to villas and 70 lots to apartment buildings. From the above figures, the population density is 21.4 persons per acre, obtained by deviding 2250 persons by 105 acres. Since a maximum of 50 persons is allowable to the acre in residential quarters, the above density figure is by no means high.

## CHAPTER IV

ROADS & PARKS.

Roads. The problem of road in the present scheme was at times both easy and difficult. In almost all cases, hardly any classical rule could be made use of. Here nature would not only refuse to submit, but would also refuse to compromise. It dictated its command in almost irresistible tyranny. When it came to the choice of the road system that suits best the topography, the meandering system immediately suggested itself, being distinctively the most flexible and hence the most adjustable to the irregular topography of the ground. Moreover, when it is made to harmonize with the slopes and flats, it becomes an object of great beauty and attraction, thus serving the aesthetic as well as the functional.

The roads fall structurally into classes depending on their widths and importance. In the present scheme they are classified with respect to their widths as follows:

- 1) Class A roads or main roads. These are 12 meters wide and serve the in, out, and thru traffic. A total length of 3830 meters of this class pierces the area.
- 2) Class B roads. This class has a more specialized use in that it serves only the local neighborhood by establishing a means of transportation between the interior of blocks and sub-blocks and the main roads. There is a total length of 1120 meters of this class of roads.
- 3) Class C roads or Cul-de-sacs. The function of these Cul-de-sacs is to effect communications between interior groups of buildings and roads of class A or Class B. The groups of

buildings served by this class of roads enjoy fully the benefit of seclusion quiet and peacefulness. A total length of 450 meters of this class of roads branches over the area. The final class of means of traffic provided is the lane or foot-path. This class as the name implies is devoted to pedestrians. There are two groups in this class, the 4-meter group and the 3-meter group. The 4-meter group is used across parks only. the 3-meter group is used in interior posts of parks and in short-cuts between two adjacent palces usually separated by a great difference of elevation and a long stretch of regular traffic road. Such foot paths are nearly in all cases furnished with flights of steps to take a pedestrian to his destination without having to move over long horizontal distances. There is a total length of a hundred meters of this class.

Although the total area occupied by roads falls nearest the minimum specified by good subdivision regulations and recommendations, it never the less offers adequate transportation facilities for the community it is serving. The reason for this apparent semblance of contradiction is that the percentage of area occupied by parks was inevitably made a bit in excess of the maximum specified by good town planning regulations, thus reducing the total area to be allotted to lots and roads. Such a decrease affected the respective percentages of lot and road areas together making a smaller percentage of the latter sufficient for a profortionally smaller percentage of the first.



Parks. In the present scheme, parks have usurped 12.5% of the total area or 2.5% more than the maximum that should be allotted to them. The reason for that is that some steep sloping grounds which cannot be used for buildings were turned into parks. An effort was made to select and cede to building lots areas which by virtue of their privileged location will justify the extra expense of levelling and terracing. The aim was to make the different allotments approach as much as possible a good subdivisional balance. The purpose of parks play fields and other open spaces is to provide enough recreation and diversion to the inhabitants of the locality. Meanwhile the existence of open spaces free from buildings increases the solitude of the individual buildings and building groups inducing in the occupants a feeling of isolation and independence that leads to comfort, pleasure and relaxation.

Another element that contributes a great deal to the idea of isolation in the present scheme is the third dimension. By the third dimension here is meant the vertical. While for example, a row of building lots occupying the frontage of a long straight stretch of road will convey the picture of a long vista and a monotonous arrangement when seen in plan, this same row if viewed with a perspective eye aided by contour lines will change its picture completely. The occasional rise and fall of buildings due to a change in grade will do away with monotony, keeping the occasional observer in a state of constant admiration and pleasure.

## CHAPTER V

PUBLIC BUILDINGS .

The School. The size of the community even after the locality is fully inhabited does not justify more than an elementary school. As already predicted, the maximum expected population is 2200, and 12% of these (12% normally gives the approximate number of children in the elementary school age in a community) equals 260. So a school building large enough to accommodate that number was designed as a part of this scheme. It is an eight room school designed and equipped according to the best American practices and recommendations. Two books on modern school buildings whose names are mentioned in the list of bibliography were consulted before the design was made. Each class room can take a maximum of 32 to 33 students. A class room has an average floor area of 50 square meters so that each student is allotted 1 and  $\frac{3}{4}$  of a square meter of the gross space. This is by all standards considered generous and healthy. The area of windows in class room was made 20 per cent of the floor area in compliance with latest specifications for school buildings. The arrangement of the rooms and other architectural details are shown on the drawing plates.

The school site is a relief of land between two slopes. It covers about three and a half acres of relatively flat ground and is exclusively suitable for a school since it can provide the necessary flat area for the construction of play ground gardens and parks. In the norther side, the school yard

steps, which may be provided with seats to accomodate a large number of spectators on such occasions as outdoor ceremonies and field days. Another merit that may be attributed to the school site is its segragation from population centers by parks of green trees. The dominating atmosphere is an atmosphere of quite and freedom. The surroundings are inviting to pleasure and inspiration.

Public Library. With the community intended to occupy the locality in mind, a public library becomes a first necessity; for no highly cultured community can live in complete satisfaction without a free access to good and interesting books. The library building will not only contain rooms for silent reading, but also large spacious rooms for groups to meet converse and discuss subjects of educational character. They may be served means while with soft drinks and refreshments. The building will further include a music hall and a public auditorium for the display of dramatic activities. Of course such building is not a library in an ordinary sence. It is in a broad sense a center of literary activities.

The library building will be surrounded on all sides by parks and gardens furnished with comfortable benches and seats under large green shadowy trees. The site assigned to the library building holds a commanding position over nearly the whole community and gives cheerfulness and gay to the observer. The library building was not designed, but the above requirements and descriptions may serve as the main outline of design.

Public Club And Playfields. The public club is another unit of social interest. It is dedicated mainly to the advancement of physical culture and the promotion of a spirit of sportsmanship among the inhabitants. A total of 8000 square meters constitute the site. A central building, where amateurs of sports meet to organize their activities under the direction and leadership of competent sportsmen and athletes. The central building consists of an administration office room, an assembly or instruction room, a hall for dancing and concerts, a cafeteria for serving soft drinks and refreshment, equipment room, showers and toilets. A half sheltered swimming pool is located to one side of the central building and not far from it. In the basement special rooms for indoor games are provided. Only light games are housed. The main outdoor games are Football, Volleyball, basket-ball and tennis. Such muscle exercises as gymnasium parallels, weight lifting boxing etc. are provided for outdoor and indoor. The other minor games need not be listed, but a complete set of them is made available.

The area allotted to public club is not alone enough to satisfy the needs of the community for physical training and exercises, but if used in conjunction with the school playgrounds, the combination will not be much in deficiency. However the centers of recreation, passive and active, taken as a whole at one time can offer enough amusement and diversion to satisfy the desires of the community at large. As in the case of the library building no design for the club is being submitted. Merely a mention and a description of the different functional units suggest the preliminary data for design.

Church. As the prospective population of the residential locality are christion, a site for a church was selected to suit the convenience of the public. In this selection the idea in mind was to find a place in a quite and peaceful surrounding so that the religeous groups may have a solemn atmosphere suitable to their religeous spirits and sentiments. A church building that can take up to 400 persons is the required thing, as no higher number of attandant is likely to be present at one service, even in times of holidays. The present tendancy is toward less attendance.

Hotel Building. The hotel building should be made of such a size as to accommodate a maximum of 50 persons at a time. Because of the limited area devoted to residences and its ultimate occupation by permanantly residing owners, provision for occasional visitors only was made. This condition helps to create a homogenous community of high cultural standards, interested in its own welfare, and disposed to act as a unit free from foreign influence or interference. The hoted building should be a first class building worked according to the latest architecture style to match with the rest of the residential homes over the licality. The conceived plan of the general layout of the hotel site presuposed an adequate area for parking cars, tennis courts, and a park with a pool in the middle. As a final statement, the hotel building was conceived to be so rated as to encourage people of the same social level as the community living around.

Shops. Only shops that would satisfy the living needs of the community were allowed a place. These are grocery shops,

vegetables and fruit shops, dry canteens, meat shops, barber and shoe-shine shops. As mentioned before, the location of these shops were chosen in central points of population where they may serve conveniently the largest number of persons. The actual shop buildings in all cases should be set back a distance wide enough to allow shopping groups to park their cars safely while they are doing the shopping. All precautions should be taken to make the shops look neat and clean, to have and to maintain a safe hygienic condition.

## CHAPTER VI

PUBLIC UTILITIES .

Water Supply; As has already been mentioned, water supply is not a problem in the locality. In the absence of water supplied by companies, artesian water may be used for all purposes at a reduced cost. This fact is evidenced by the existence of artesian wells over the locality and in the neighborhood that are yielding a good supply of water. The well bore does not have to go deeper than 8 to 10 meters to give the required supply.

However the district all around is being supplied at present by a private water company that is using the River ABU ALI as the source of supply. Not long ago, news spread over the district, accompanied by much clamour and excitement on the part of the people that the government had an earnest intention to nationalize the present water supply company and to establish in its place a water supply system utilizing Nibi' al-Gar as a source of supply instead of the River Abu Ali. If the government were true in her intention and promise, the Kura district would, before long, be enjoying a water supply of exquisite qualities at a relatively low cost. Such is not the case now. Moreover, the head gained by using Nibi' al-Gar as the source of supply will be enough to supply water to the highest point in the district at a fairly high pressure, and the locality under consideration will profit considerably in consequence. It may be stated without exaggeration that the hygienic and economic status of the district may be notably improved by the realization of the aforementioned project. There is hope that the

awareness of the district people of this fact will make them exert the necessary pressure on the government to move it action.

Sewage System. Sewage disposal is no less important than water supply in a community of high sanitary standards; because sewage that is not disposed of in a sanitary and safe way, becomes a source of pollution and consequent by a real menace to the life of the community. From an aesthetic point of view it is a nuisance and a public disgrace. But like water supply, sewage disposal in the present locality is not a problem difficult of solution. In fact more than one method may be suggested. One way is by constructing septic tanks large enough to serve groups of houses, another is by a sewerage system.

The sloping nature of the site and the orientation of the slopes makes a sewerage system particularly suitable and advantageous. No actual design of a sewage system was attempted in this work, But as a hinting to such a design it may be stated that the main sewers can be laid along-side the road beds to take advantage of the gentle regular slopes. For the final disposal of sewage sedimentation pools may be built to the north eastern part of the site where chemical and biological treatments may be applied. The resulting substance after treatment may be used to fertilize the adjoining agricultural fields.

Electric Power, Telephone System, Post Office. The present village of Beshmezzene has been enjoying the privillage of electric power since 12 years. A secondary telephone exchange station has been also in existence since two years. The site is not more than two kilometers away from the heart of the



same village, and so the extension of a system of wires to supply the community with electric power, telephone communication, etc., is a simple matter. With the same case a post office, preferably annexed to the telephone service may be provided.

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