

The extent of applying planning standards in the signature of the industrial facility / Al-Waziriya Industrial Zone, case study

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Abstract

Industry is one of the most important pillars of developing economies because of its key role in stimulating economic growth and rising per capita income, And the weakness of the existing industrial areas in Baghdad and its indiscriminate presence in various regions, including the Waziriyah Industrial Zone, is due to the unstable economic, political and security situation, and the continuation of the ongoing wars in Baghdad, And that this research dealt with the evaluation of the planning reality of the industrial zone in Al-Waziriya and the extent to which planning standards were applied when the industrial facility was signed, Moreover, this research subject had not previously undertaken similar studies on planning for the industrial zone in Waziriya, but studies were limited to examining the economic, financial and administrative aspects of the industrial zone. The research subject study methodology was focused on the collection of data and plans from the relevant authorities identified by the local authorities, the Municipality of Baghdad and the Department of Municipality of Rusafa linked to the Ministerial Industrial Zone, And perform field visits to the industrial zone and evaluate from the planning side the existing situation of the industrial area, In addition to the comprehensive study on the analysis and planning reality of the industrial area in Waziriya through (SWOT) model reaching a set of findings and recommendations for the current topic of research.

Introduction

Industry is the cornerstone of economic construction and it is the factor that affects social and economic growth. As the industry is the first center to draw and invest capital in pursuit of integrated services, And the inability to implement the planning principles used in many developing countries was the main reason why industrial parks were poorly proliferated. Which, in turn, led to social and environmental impacts on the areas built there, The long-term population growth of urban cities has not been taken into account, which has led this to

unplanned convergence between manufacturing, residential, educational and commercial areas. This overlapping led to countless social and environmental damages in the industrial zone .

Research problem

The weak role of the current industrial areas, the spread of industrial slums, and the deterioration of the industrial reality, in the city of Baghdad, is due to the lack of implementation of planning standards when developing plans and urban designs for signing industrial areas in the city.

Research hypothesis

The study was based on the hypothesis that there is confusion in land uses in the Waziriya industrial area, due to the absence of laws and regulations controlling those uses on the ground, and the suffering of the residents in residential areas from visual and environmental pollution due to the presence of facilities with industrial use in their areas due to the mixing of uses in the land, And the lack of availability of suitable environment for the industrialists in the industrial zone in Waziriya, and its exposure to great losses.

Research Methodology

It was based on the descriptive and analytical approach by collecting data and plans relating to the industrial zone of Waziriyah from the relevant authorities represented by the local authorities, the municipality of Baghdad and the municipality of Rusafa, and conducting field visits to the industrial zone and analyzing the current status of the industrial area from the planning side, as well as the comprehensiveness of the study on Analysis of the industrial zone in Waziriya and its planning reality through the Quadricot Analysis Model (SWOT).

1- concept of the industrial zone

The industrial zone is a civilized phenomenon on all levels, it is called the following designations: the industrial field, the industrial zone, the industrial scope, no matter how the terms differ, it refers to that area of land that includes a group of factories equipped with the necessary services and facilities, and this area is divided into small sections that are allocated Each of them is to establish a specific factory, in accordance with the types of industries to be created, their characteristics, the land they use and their facilities and service needs (Mansour, 2010).

From the point of view of the geographical economy, it is a large area within the cities or the surrounding areas, dedicated to obtaining industrial use permits, and this traditional definition lists the industrial areas within the city, but the prevailing trend from the eighties of the last century, is that the areas of existence of industrial areas must be relatively outside the urban zone, to reduce the damage of industrial waste, so the industrial area is a general designation for a geographical area (subject to planning and development), and is intended for the establishment of

units intended for industrial use (factories and warehouses), signed outside the field of Urban housing ,and which can benefit from tax benefits and exemptions (Marrakesh, 2012).

2- constituents of the establishment of industrial zones

1- Location: Choosing the site that is not suitable for the location of the industrial zone leads to a change in the natural ecosystem, for example: land reclamation in environmentally valuable areas such as (wetlands) with the aim of establishing industrial zones may lead to the destruction of the natural resources of many types of plants and animals, Therefore, the optimal choice of the industrial site requires a comprehensive planning process, during which the variables are studied, the sites that are compatible with the ruling determinations are determined, and environmental and social impacts are taken into consideration, then the administration appoints or signs the site, and the decision to choose the industrial site requires the following (Jeju, 2005)

- Avoid sensitive environmental areas, such as wetlands, forests, etc.
- Determine the areas on which the environmental impacts can be mitigated, through proper planning and management.
- Choose low-sloping lands with poor, low fertility soils.
- Avoid flood-prone, muddy or quake-prone areas, as they are uneconomical and environmentally unsuitable.
- Reuse of previously developed areas to contain urban extension, and to avoid violation on agricultural and wetlands, forests and valuable natural resources.
- Examination of previously used lands, to ensure that they are free of toxic waste, earth tanks and various pollutants of air, soil and water.

2- The labor force: The labor force is one of the basic foundations for the establishment of industrial zones, and production is affected by this element, whether in terms of quantity or various competencies, so the site depends on population densities, which increases the number of the general class, but the efficiency is that it requires technical workers with Experienced and skilled and may be those with scientific and technical qualifications, there is a great importance for the existence of rehabilitation and training centers in the rehabilitation and training of those operating work force

3- Raw materials: Industrial zones are focused on the industrial institutions within them, and these institutions are centered on manufacturing industries, with the aim of creating and producing new goods to serve the benefit of people and to fulfill their desires and needs, as well as the value of the availability of raw materials and to achieve this objective at the lowest cost. As the raw material component is usually one of the highest expenditures in the industry, so the

reality of the industry highlights the great importance of raw materials and methods of obtaining them. (Al-Balz, 2004)

4- Capital : The establishment of any economic activity requires capital, whether to buy the raw materials which depend on it the production process or to obtain the machinery, equipment and machinery necessary to complete the industrial production process cycle. Therefore, capital is one of the most important levels of modern industry, and this importance is not due to the importance of money that should be provided for the operation of the process only, but is mainly due to the necessity of providing the needs of the industry in terms of machinery, equipment, transportation, semi-manufactured raw materials, etc. The industry needs variable capital to secure its needs from raw materials and pay wages, and it also needs fixed capital to secure its needs for machinery and machines and for the construction of constructions and buildings. The larger the project size, the greater the capital requirement. The capital needed to implement the industrial project depends primarily on the nature of the industry and the degree of the technological method's progress in it (Al-Sammak, 1998).

5- Energy : Energy: is one of the key factors in the signing of industrial zones, as it is the nerve that drives the production process within institutions. Energy availability and large economic quantities have played an important role in the proliferation and progress of manufacturing. But with the technological advances that contributed significantly to reducing the relative importance of energy, as a limited factor in the process of locating the industrial zone to a large extent, through the possibility of replacing between different energy sources, and thus decreasing the relative importance of each source separately (Al-Sammak, 1998).

6- Transportation: The transportation and transportation factor is an important factor in establishing industrial areas, and that the establishment and development of the industry does not require the transportation of raw materials or energy only or the provision of a good transportation service, but rather the transfer of the workforce from its residential sites to industrial areas and vice versa, 6- All this makes good and relatively cheap transportation service the most important component of modern industry and the selection of sites for industrial areas (Al-Hiti, Al-Tawil, Al-Nuaimi, 1997).

3-Criteria for selecting sites of industrial areas

(Bdeir, 2015, p. 32) specify the methods for selecting sites for industrial areas that are subject to certain criteria that contribute to the development and progress process, the most important of which are:

- 1- **Job criteria**: include the hierarchy and spatial relationships of the industrial area with its surroundings, as well as the spacing between inconsistent occupations.
- 2- **Social standards**: that take care of and consider the rights of the population in the areas designated for industrial use.

- 3- **Environmental standards:** that are concerned with compliance with laws and regulations that provide the necessary protection for the environment.
- 4- **Economic standards:** which mainly depend on grouping the homogeneous and converging professions in one space, to reduce the cost necessary for the production process, which contributes to economic development that will provide many operational opportunities.

3-1 Requirements for the site of the industrial zone

The most important requirements of the industrial city (Al-Kinani, 2005) include:

- 1- The topography of the land: that the land be easy and flat, and the slope of it does not exceed 5%, in order to avoid increased expenses or flood risks in the lowlands.
- 2- That the use of the land be appropriate to the type of industry, taking into account the necessary planning conditions regarding wind direction, and establishing green separators.
- 3- The presence of good roads and transportation.
- 4- Availability of facilities and services and ease of obtaining them.
- 5- The location should be in a location close to transportation and workers' housing.
- 6- Availability of squares, parking lots, restaurants, and the mosque.
- 7- Provides energy, water, security, fire and guide services.
- 8- The presence of management offices and technical and training consulting offices.

3-2 Site requirements for the space

The industry is divided into different groups according to the required area (Al-Tannir, 1978), including:

- 1- **Extended industries:** where labor intensity is low.
- 2- **Medium industries:** that the labor intensity increases in it, such as the extended industries that need large areas, such as iron and cement factories, chemical products, etc.
- 3- **Heavy industries:** It requires large and sometimes extended areas and an increase in labor intensity due to the increase in the size of its equipment.

4 -The foundations and pillars of the requirements of planning cities and industrial areas

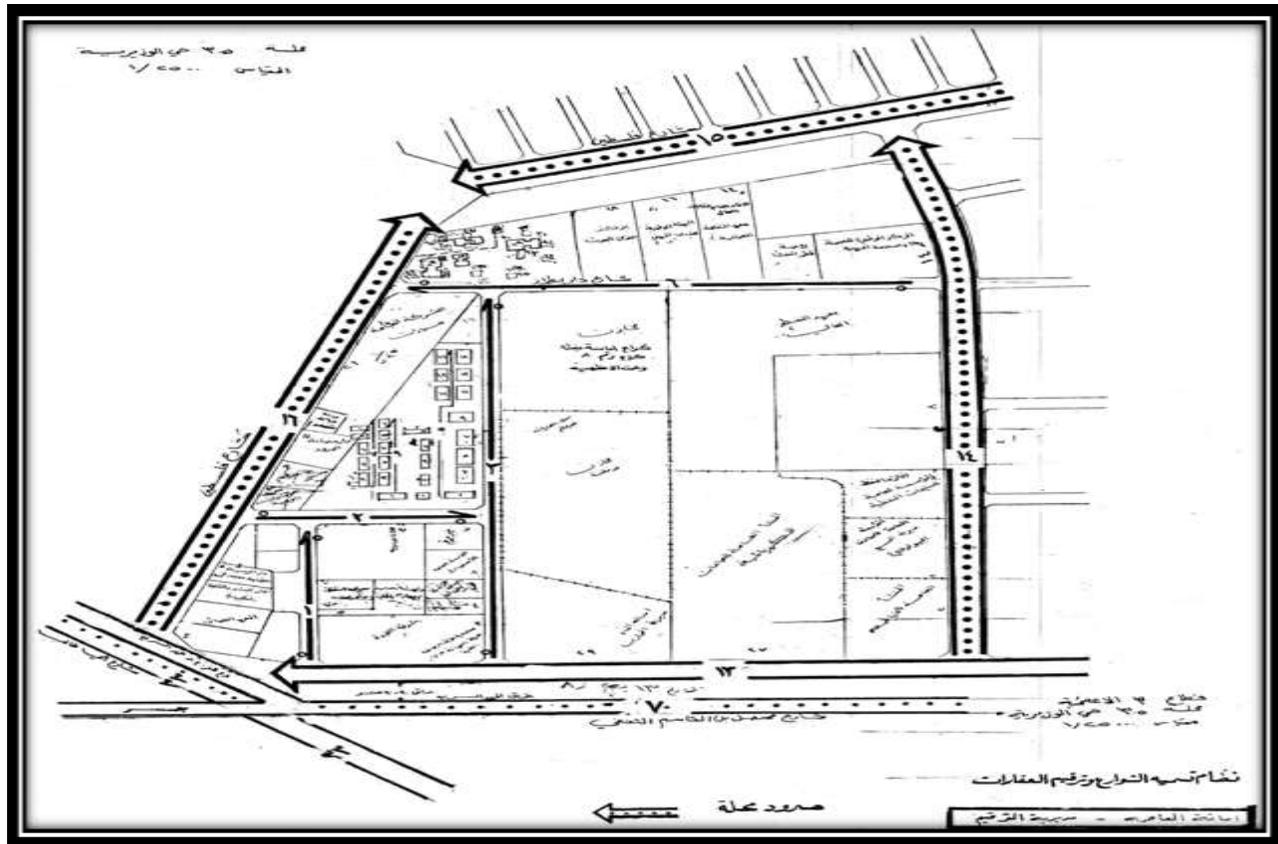
Many industries are in harmony with each other, and sometimes they are different. Also, it is necessary to work on achieving them in a balanced and integrated way, in order to maintain

this gathering at the site, after taking into account the future needs and the expansion and growth of services (Al-Balz, 2004), and this is done by the following requirements:

- 1- **Social requirements**: It is the fulfillment of the welfare requirement for visitors and neighbors in that region, by meeting their needs while they are there, taking into account the density of the working class, and the percentage of visitors to that region, in order to achieve their requirements and needs, whether administrative or technical and other services, such as parking lots and places Convenience, restaurants, banks, and mosques, as well as the information, security and firefighting center.
- 2- **Economic requirements**: the economic needs of that region are initially issued by several parties, which studies the economic feasibility of serving the public interest first and before considering any profits other than covering the expenditure required and according to current and future needs, Therefore, such a correct and clear economic study that can be promoted in different ways all contribute to attracting businessmen to investment, which contributes to reviving the economy, increasing the level of national income, raising the level of the individual's living, increasing job opportunities, and reducing unemployment, as well On limiting immigration, whether for the workforce, or even for those with capital.
- 3- **Aesthetic and sensory requirements**: This aspect, which is shared by various other sciences, in order to preserve the archaeological, historical and urban milestones, which we seek to survive in the event that land use is determined. Between them, they are all in the case of the coherence of relations between them, and help build confidence among investors to carry out the investment process without any hesitation or reservations. Therefore, the aesthetic, historical, heritage and civilizational dimension of these elements emerges when conducting the coordination process among them, as they are all in the case of the coherence of relations between them, and help in building confidence among investors to carry out the investment process without any hesitation or reservation.

5- Waziriya industrial area

Within the Paul Service Plan, the Ministerial Industrial Zone was established in (1968), where the area of land allocated for industrial use reached (30.7 km²), i.e. (7.7%) of the total other land uses, the Ministerial Industrial Zone was signed in the Al-Waziriya district / Adhamiya sector , In the northeastern direction from Baghdad city, in Mahala 303 area, and the industrial zone has been signed on an area of (73 hectares). (Plan No. 1, the basic plan for the industrial zone in Waziriya).



Source / Baghdad Municipality / Designs Department (Plan No. 1, the basic plan for the industrial zone in Waziriya)

As for the most important industries in the Al-Waziriya industrial area, they include: The General Company for Battery Industry, established in 1969 on an area of (13296 m²), and produces acidic and rubber liquid batteries of large size, with design capacity (167000) standard batteries annually, and the water used is water Net, with quantities of approximately (100-120 m³) per day, and used for industrial purposes, cleaning ... etc, The amount and quality of the effluents applied to sanitation is (60-100 m³) per day, and the nature of pollutants discarded from the General Company for Battery Industry are expressions of solid waste and liquid waste, and the industrial zone also governs the General Electric Industries Company: at (1965) was established It was officially opened in the year (1967) and the General Company for Electrical Industries regulates eight laboratories: the main laboratory in the company's center in Al-Waziriya for the production and operation of plastic, turnery, winding, insulation, pressing and plumbing, a ceiling fan production plant, a refrigerator motors production plant, a fluorescent bases production plant, and a hardware production plant The electrical plant, the industrial motor production plant, the air conditioner production plant, which are three laboratories (light, birth, and cold stores), the lamp

production plant in Taji, and the industrial waste from the company is liquid pollutants, solid pollutants, and gas pollutants.

5-1 Analysis of the state of the Waziriya industrial area

5-1-1 Location of the Waziriyah Industrial Zone

- With regard to the type of soil and the level of its slope, the soil of the site of the industrial zone has the advantage of being fertile and flat land.

- A location relative to the prevailing winds, it is located in latitude ($37^{\circ} 23' 44''$), longitude ($10^{\circ} 28' 33''$), and its climate in winter is cold and short, and in summer hot, dry with dust storms during summer days due to drought, and rates Wind speed is between (10-20 m / hour) during the months of the year, its direction is northwestern (75%) compared to the rest of the directions, so the signature of the industrial zone in terms of wind direction is negative.

- As already mentioned, the signing of the industrial zone took place on an area of (73 hectares), but later on it became an area of (157 hectares), due to the violation of the forbidden zone (government administrative uses).

-Surrounding the industrial zone in Al-Waziriya, from the north is the Al-Waziriya district and Muhammed Al-Qasim Bridge, to the south and east by the Cairo neighborhood, and from the west by Al-Mustansiriya district. It is noted here that the vicinity of the industrial zone is residential land (scheme No. 2, residential use in the vicinity of the industrial zone).



Source / researchers in cooperation with the Baghdad Municipality / Designs Department, (Plan No. 2, residential use in the vicinity of the industrial zone)

5-1-2 Urban formation

In terms of the physical formation of the industrial zone in Waziriya, in terms of:

-Partial division of the region: Through the green areas to separate the industrial zone and the surrounding uses and also to separate the different industries, it can be said that these green areas are not present due to several reasons, including the excesses on the areas surrounding these industries, and also the overlapping of the land uses in the area that occupied A large area of it and did not leave space for those green areas.

- In terms of making the most of the site's capabilities, such as renewable energy (wind, solar energy), the energy sources that the Waziriya industrial zone depends on are the main electricity energy, as well as electrical generators, and the renewable energies available from solar energy and wind have not been utilized in The industrial site, thus wasting natural resources and not using them, due to insufficient awareness of the residents of the industrial zone, and consequently the lack of maintaining the requirements of a clean environment.

5-1-3 Land uses in the industrial area

Although the zone is industrial, it includes other uses (Plan No. 3, land uses in the Waziriyah Industrial Area):

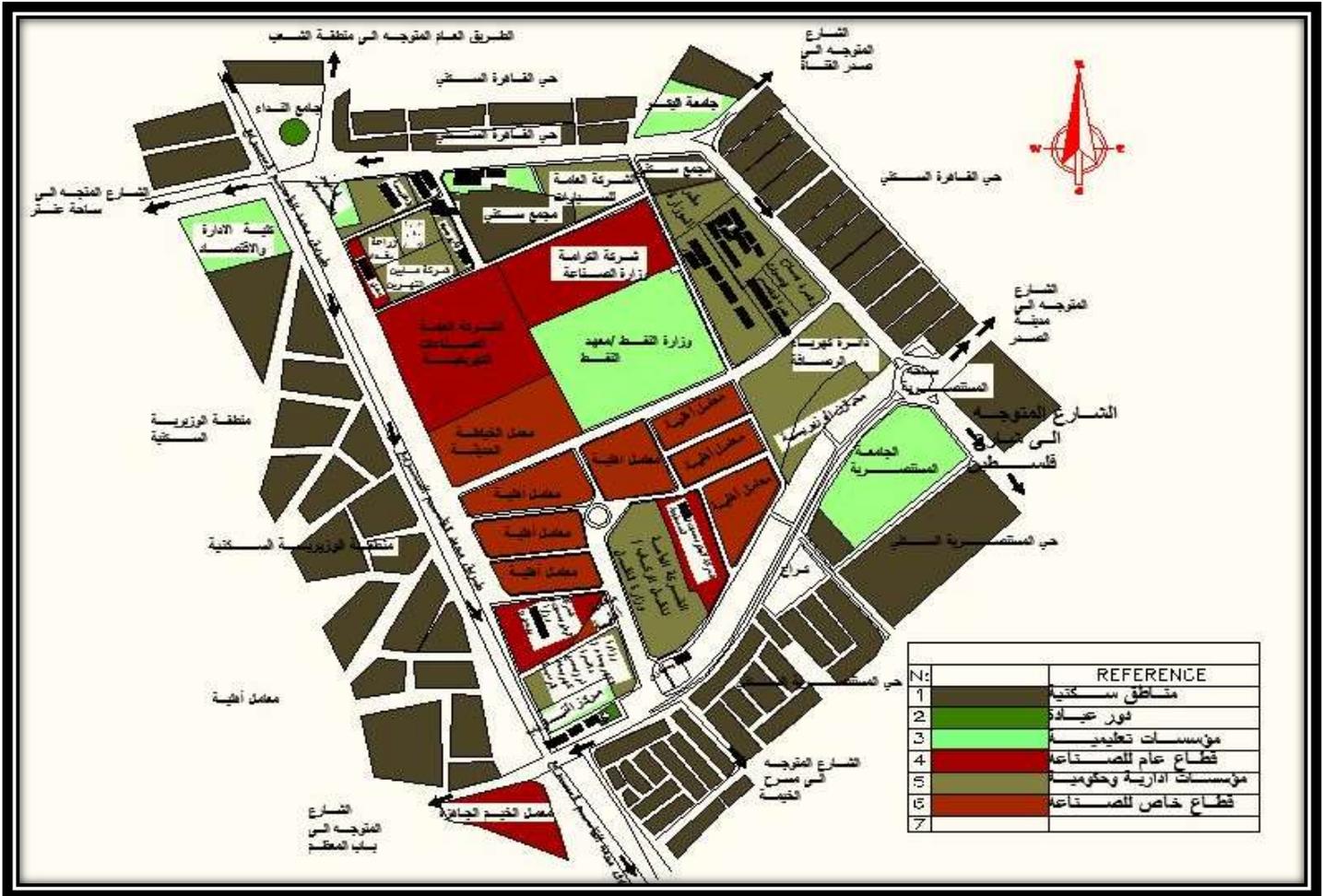
1- Industrial use: represented by the (Ministerial Industrial Zone), which constitutes (29.4%) of the total area.

2- Administrative use: represented by the (Electricity Distribution Department, Ministry of Labor and Social Affairs), which constitutes (25.7%) of the total area.

3- Educational use: represented by (Al-Mustansiriya University, the Oil Institute), constituting (9,386%) of the total area.

4- Residential use: which is represented in (Al-Qahira residential neighborhood, Al-Mustansiriya residential neighborhood), constituting (3.75) of the total area.

5- Religious use: it makes up (0.224%) of the total area.



Source / Baghdad Municipality / Designs Department, (Plan No. 3, Land Uses in Al-Waziriya Industrial Area

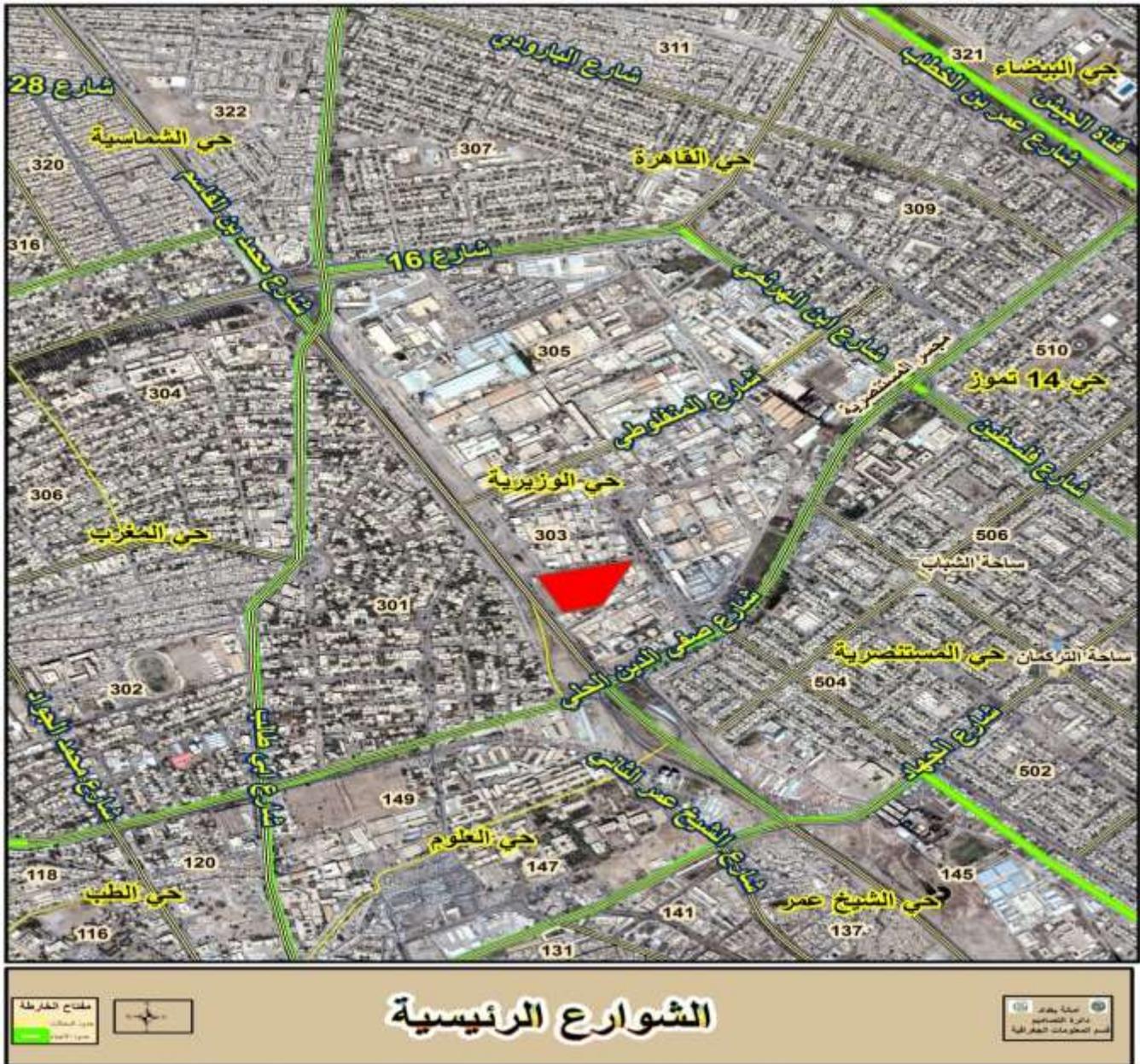
5-1-4 Green areas and environmental protection ranges

- Inside the industrial zone: The industrial zone lacks the green belts that separate industrial qualities and activities, and as it is known that trees inside the industrial zones obscure a certain amount of the solar beam falling on them, which contributes to reducing the exposure of the surrounding surfaces to the solar radiation falling on them, thus reducing thermal gain. These surfaces, and green plants have the ability to lower the temperature of the building's outer shell.

- Between the industrial zone and the rest of the other uses: the green belt that is supposed to surround the industrial zone is not available to reduce pollution emanating from the existing industries, and the reason for this is due to the overflow on the perimeter of the industrial zone, and also the overlapping of the land uses in the Waziriya region occupied large areas and did not leave space for the green belt.

5-1-5 Road and transport network planning

The location of the industrial zone is connected with its neighborhoods, as it is linked to an integrated transportation network close to the main markets in Baghdad, which helped it to secure the arrival of raw materials, fuel, and workers, to the region and the ease of disposing of final products (scheme No. 4, the main streets), but the area suffers from heavy traffic momentum, especially during peak times, and this violates the planning standards in the signing of the industrial facility, which must be far from the areas of traffic motion.



Source / researchers in cooperation with the Baghdad Municipality / Designs Department, (Plan No. 4, main streets)

6- Analysis of the current state of the Waziriyah Industrial Area (SWOT ANALYSIS)

SWOT ANALYSIS This type of analysis is used to assess the current status of the industrial zone and its planning in Al Waziriya, by knowing the internal strengths available and obtainable in the region, as well as identifying its weaknesses, external opportunities and threats as follows:

(Strengths)	(Weaknesses)
<ul style="list-style-type: none"> -Availability of human resources. -Having advisory offices and planning experts. -Roads around the industrial zone 	<ul style="list-style-type: none"> -Location and climate. -The local market. -Random presence of industrial facilities. - Very weak infrastructure -Lack of detailed plans
(Opportunities)	(Threats)
<ul style="list-style-type: none"> - Facilitate assignments and provide incentives for the influx of investors and developers from abroad. - Provides financial and technical support from donor countries to establish industrial parks. - Attracting industrial zone planning experts from developed countries, as well as experts to train workers to operate industrial parks. - Entering machines and equipment necessary for manufacturing raw materials. -Exporting industrial zone products without hindrance 	<ul style="list-style-type: none"> -Successive and repeated wars and the destruction of factories and industrial areas. -Lack of funding for industrial zone projects and neglect. -Increasing the import of foreign industrial products

The quadric analysis (swot) of the existing situation of the industrial zone in Waziriya, (source / researchers, 2019)

6-1 internal strengths

First: The availability of human resources: There are in Iraq, and in particular in Baghdad, the sufficient number of technical and professional specialists in the fields of various industries, where there are thousands of craftsmen and workers in various types of industrial sectors, who previously worked in major factories before the deterioration of the industrial sector in Iraq, There is no doubt that human resources have an effective role in the development of the industrial sector and industrial areas.

Second: The presence of consultative offices and planning experts: There are in Baghdad a sufficient number of specialists and experts in the field of urban and industrial planning, and even that they are taught in their academic universities according to the accepted standards and standards, in addition to the presence of specialized consulting offices in that.

Third: Roads around the industrial zone: The location of the industrial zone is linked with its neighborhoods, as it is linked to an integrated transportation network and is close to the main markets in Baghdad, which helped it to secure the arrival of raw materials, fuel, and workers, to the region and the ease of the disposal of final products, see (Scheme No. 4, the main streets).

6-2 internal weaknesses

First: Location and climate: The site and climate have been briefly explained in an analysis of the state of the Waziriya industrial zone schematically. So it may be said that the signature of the industrial zone in terms of wind direction is negative.

Second: the local market: The market share is significantly lower for most of the domestic industrial sectors, but in the event that appropriate solutions are found to legalize the import of foreign competing industries and the provision of raw materials, the Soviet proportion of domestic industrial products will increase.

Third: The random presence of industrial establishments: The city of Baghdad suffers from a lack of industrial areas, and the existing industrial areas do not exceed 15% of the areas allocated to them in the regional scheme, and the majority of the industrial sector's dependence is on the products that are produced by the established industrial establishments Indiscriminately and spaced throughout the city of Baghdad, that is, they are not established in the industrial areas, and therefore that randomness in the presence of industrial installations increases energy consumption, as well as the increase in transportation and communications costs.

Fourth: The severe weakness in the infrastructure: The industrial zone in Al-Waziriya suffers from a low level of implementation of the necessary infrastructure work for many sectors, and this is due to a number of reasons that can be summarized mainly in the lack of funding necessary to rehabilitate the infrastructure, and the successive wars in the country that helped On the destruction of infrastructures, and the manifestations of weak infrastructures in the industrial zone are: the methods needed to operate the industrial zone, as there are no detailed plans for it yet, also energy and fuel as it is one of the main problems, which has a direct negative impact on productivity and the work of machines in factories ,Rather, the problem of electrical energy was and still threatens to stop the entire production process because of its interruption for long periods and because of the high cost of fuel has led to raise the cost of the process productivity dramatically, and this can be considered the most prominent of internal weaknesses.

Fifth: The lack of detailed plans: One of the most important obstacles is the failure to prepare detailed plans and regulations for the industrial zone by the municipalities, which in turn negatively affects the development and investment of industrial areas.

6.3 External opportunities:

The elements of external opportunities that help in the development and planning of the industrial zone can be summarized as follows:

- Facilitate assignments and provide incentives for the influx of investors and developers from abroad.
- Provides financial and technical support from donor countries to establish industrial parks.
- Attracting industrial zone planning experts from developed countries, as well as experts to train workers to operate industrial parks.
- Entering machines and equipment necessary for manufacturing raw materials.
- Exporting industrial zone products without difficulty.

6.4 External threats:

The elements of external threats that prevent the development and planning of the industrial zone are summarized as follows:

- Successive and repeated wars and the destruction of factories and industrial areas.
- Lack of funding for industrial zone projects and neglect.
- Increasing the import of foreign industrial products.

7- findings and recommendations

7-1 results

1- The existing industrial zone in the Waziriya region suffers from a severe weakness in the demand for it by the owners of factories and investments, due to the poor security and political conditions, and the promise to implement projects that relate to the field of infrastructure.

2- The Ministerial Industrial Zone includes polluted industries, classified according to Iraqi law as category (a) and class (b), which makes them a great source of environmental pollution.

3- The industrial zone in Al-Waziriya was not equipped with an infrastructure network separate from the city's network, which caused pressure on the area's network, which suffers from severe weakness in infrastructure, in all its fields, especially in the energy field.

4- The green belt that is supposed to surround the industrial area does not exist, to reduce pollution emitted by these industries, due to the overlapping of the land uses in the area that occupied a large area of it and did not leave enough space for reforestation.

- 5- The region is characterized by great traffic motion, especially during peak times, and the presence of industries in it, and the transportation of goods and raw materials increase the traffic momentum, and this contravenes the planning standards for industrial sites that must be signed away from the areas of traffic momentum.
- 6- The existing planning of the industrial zone in the regional plan does not take into account sustainable planning for it.
- 7 - Lack of development planning vision, in relation to industrial areas, and all the competent authorities, due to the poor security and political conditions that are not stable in the country.
- 8- A clear weakness in the efforts made to complete the detailed plans of the industrial areas by the competent authorities.
- 9 - The continued decline in the proportion of the industrial sector's contribution to the gross domestic product of the city of Baghdad sharply, and for several years now, is due to successive wars on it.
- 10- The existing industrial zone in Waziriya does not contribute to raising the wheel of economic growth, nor does it contribute to achieving the principle of social justice in terms of providing job opportunities and providing some services to the population.
- 11- The existing location of the Al-Waziriya industrial area in the city of Baghdad is inappropriate and does not take into account the planning criteria for locating industrial zones.

7-2 Recommendations

- 1- That the use of land be according to the classification of use, and not at the expense of other uses, in order to preserve the rights of future generations, through the application of strict regulations and laws.
- 2- Emphasizing the transfer of all crafts and industries that cause direct and indirect damages outside the boundaries of residential gatherings, and that they are within the boundaries of the industrial zone, and that the responsible authorities provide all the requirements of those industrial areas or cities.
- 3- Allocating the spaces and locations of different industries, of all kinds, heavy, medium and light, with the provision of incentive programs and assistance, and tax exemptions granted by the authority, in order to push the owners of industries in their current places to leave them, and head to the new industrial zone.
- 4- The necessity of confirming the existence of facilities for industrial areas, to serve workers and visitors to the industrial area, such as restaurants, banks, parking and other facilities.

5- Taking into account the existence of an infrastructure that is qualified to serve the industrial zone, in the event of its future expansion and expansion, in order to maintain sustainability and development.

6- Gradual diversification of industries, according to the degree of their environmental impact and reducing their risks, in the event that they are close to the populated logic, with the need to preserve the application of regulations and laws to protect the environment.

7 - Determine the type of land use, through topographical and geological aspects, which have a major impact in determining the type of soil, the inclination of the earth, and landslides in addition to the extent of the region's impact on tremors, earthquakes and natural disasters.

8- Existence of legislations, regulations and laws, in addition to granting the powers to implement those regulations by the responsible authority, and applying control over factories, to ensure their commitment to applying all safety conditions and taking into account environmental safety.

9- Making bumpers from trees in the vicinity of industrial areas, to protect from pollution, clean air, beautify the area, and reduce noise, by planting the surrounding areas using a specific type of tree grown in industrial areas and by a special way.

10- Promote cooperation between officials in the departments and other concerned authorities that contribute to the planning process, and emphasize the role of the planner in order to highlight industrial areas of all their components.

11- Controlling the import process, and protecting local products, through awareness programs and public participation, in order to preserve the Iraqi national economy, which is drained by the import process.

12- Encouraging the consumer to consume local and national industries and products, in different ways and means, and to clarify the implications of this consumption for our Iraqi economy, and to increase employment and employment opportunities.

13- Because the existing location of the Ministerial Industrial Zone in the city of Baghdad is inappropriate and does not take into account the planning criteria for choosing the locations of industrial areas, we recommend that the space be used for administrative use that belongs to a ministry from the ministries in the region, or that it is used as a commercial center as it is located in the heart of the city of Baghdad Surrounded by residential areas from all directions, or this space is converted to educational use, because of the location's proximity to Al-Mustansiriya University and Al-Rafidain College.

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