



Urban Planning Project Nablus Boulevard



OCT 2017

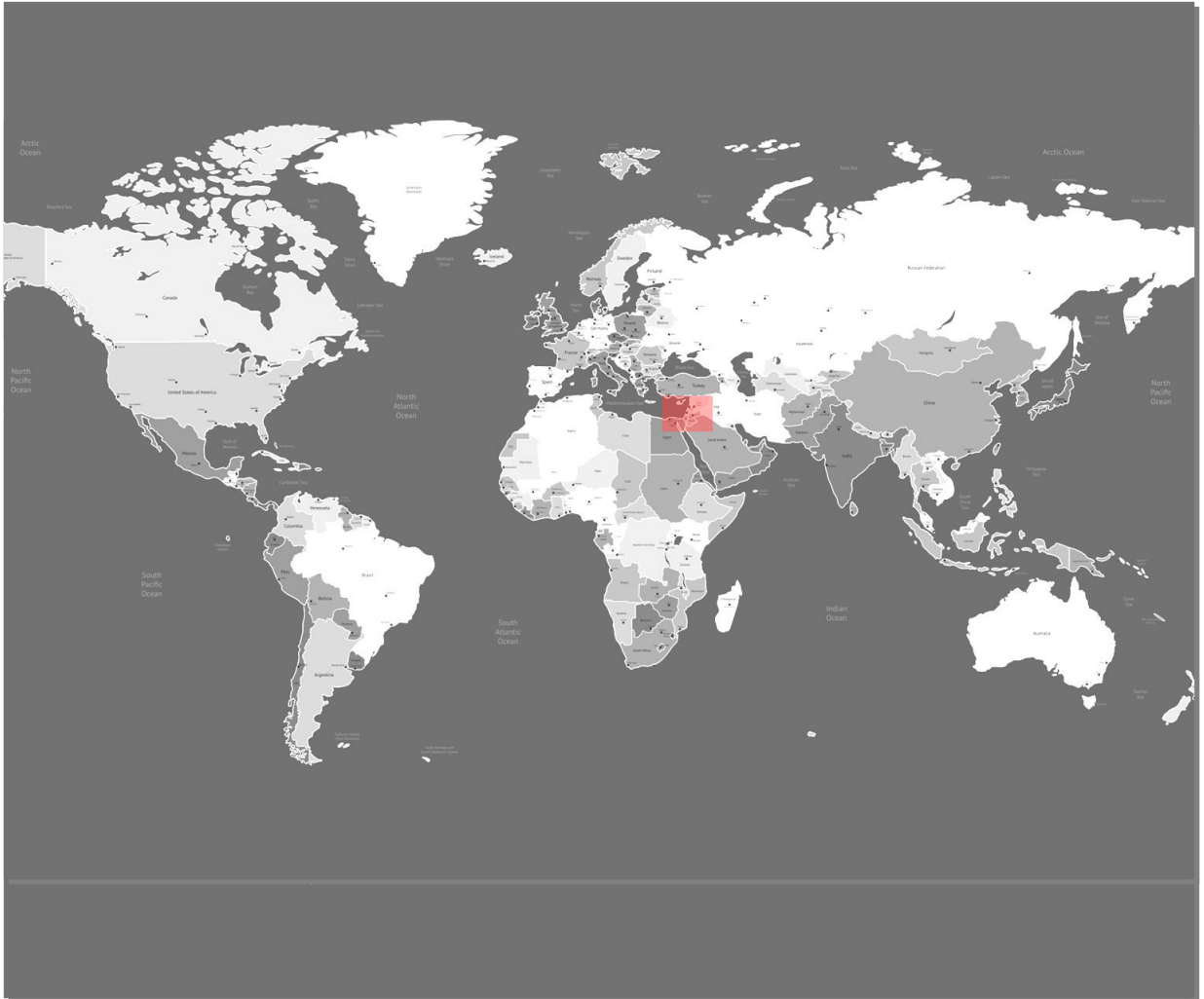
Fruitful cooperation and sister city relations between cities of Lille, France and Nablus, Palestine has produced a number of projects and initiatives that were carried out for the benefit of local communities and partner institutions in both cities. In 2015, municipalities and universities of Nablus and Lille launched "Urban Planning and Cultural Heritage Project" for two areas in Lille and Nablus. Technical teams from both cities worked together on urban planning and preserving cultural heritage for selected areas. They exchanged experience and thoughts, and learned about each other's culture.

This project is another success in the history of mutual cooperation, understanding and respect between Lille and Nablus. It wouldn't have seen the light without professional dedication of teams from both cities.

Contents:

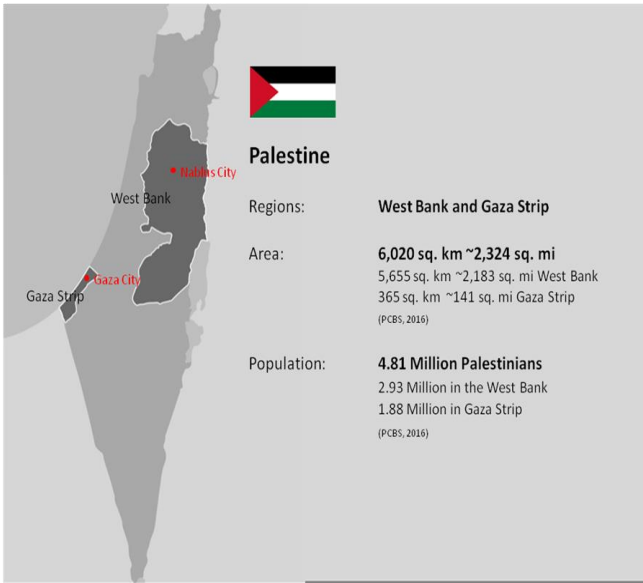
1: Nablus Historical Aspects	
1:1 City Location	4
1:2 Nablus History	4
2: Nablus Urban Spaces Analysis	8
2:1 City Master Plan	8
2:2 Main Parks	11
2:3 Built up Areas	11
2:4 Urban Spaces analysis	13
3: Nablus Boulevard	14
3:1 Site Location	14
3:2 Main Features of the Selected Location	15
3:3 Site and Design Needs	18
3:4 Site Characteristics	21
3:4:1 Topology	21
3:4:2 Buildings	22
3:4:3 Land Marks	23
3:4:4 Site Land Uses	23
3:4:5 Water	24
3:4:6 Sun, Wind, Climate and Water	24
4: Design Description for the Buildings	27
4:1 Rehabilitation of the old electricity buildings.	27
4:2 Suggested Activities in the Cultural Theater	31
5: Functional description for suggested project elements	31
5:1 Pedestrian Under Pass (Entrance from shkeim)	32
5:2 Outdoor exhibition	32
5:3 Indoor exhibition	33
5:4 City Hall	33
5:5 Youth park	34
5:6 Walking Path	34
5:7 Reading park for adults	35
5:8 Martyrs Monument	35

Palestine – Nablus City



1: Nablus Historical Aspects

1:1 City Location



The city of Nablus is situated on a saddle (550m) between the Mediterranean sea and the Jordan valley. It is flanked by the rising hills of mount Ebal (940m) to the north and mount Gerizim (881m) to the south. In the west and in the east the terrain slopes. The roads westwards lead to Tel Aviv and Tulkarm/Caesarea/Haifa respectively. The roads eastwards lead to Jerusalem and Nazareth/sea of Galilee. Nablus lies in a very fertile area with abundant water supply until the time, when irrigation project caused the decline of several springs.

It was surrounded by olive groves and orchards and has been mentioned by travelers as one of the most beautiful towns in Palestine

According to the most recent population survey conducted by the Palestinian Central Bureau of Statistic, the total population of Nablus is about 175,000 including the refugee camps established after 1948; Balata, Askar and Ein Beit Elma in addition to the surrounding towns and villages of 92,000 people.

1:2 Nablus History



Nablus has a very important historic center lies in the heart of the city added an aesthetic value to the city. However, the ancient center encountered severe damages caused by the 1927 earthquake and lately the vandalism caused the Israeli incursions. The center was built and rebuilt over centuries it still contains vestiges of all periods from roman and Byzantine times

to the reign of the ottoman as well as some partially acceptable additions of the 20th century. Impressive building and attractive details are to be found throughout the center most important is the well preserved densely woven structure of interrelated building and the configuration of open space-both typical for oriental cities.

It has been furnished with all public and religious buildings of a roman colonial city: colonnaded, street, aqueducts, temples. Theatre, hippodrome and necropolis on the slopes of mount Gerizim. It stretched far beyond the limits of the later Islamic city. In the Byzantine period (ad 324 -636) it was still an important place and a seat of a bishop.

In the first half of the 7th century AD the Arabs conquered the region and Neapolis became Nablus. Umayyad Abbasids Fatimids and Saljuqs reigned until in 1099 the crusaders entered Nablus and stayed there until Saladin successfully defeated them in 1187 and remains of these early periods are still to be found in the architecture of the city.



Under the reign of the Mamluks (1260-1516AD) the town has also been an important place. Several mosques and other public buildings were built, rebuilt or restored.

In 1517 the region came under Ottoman rule. Nablus became the capital of the district in the province of Damascus. Despite of its ever changing history and the continuing power struggles, the city consolidated within its boundaries impressive buildings were erected and gave the city and the historic old city its final shape.

After the First World War in 1922, the city and entire Palestine become under the mandate. Maps and aerial views dating from that time (Jausen 1927) show that Nablus was still a typical Ottoman settlement only slightly affected by the European influence and with few additions on the outskirts. In 1922 the city had 16000 inhabitants (Graham – Brown 1982 after Awad 19

The first major expansion of the city took place after the heavy earthquake in 1927. People living the destroyed settled along the valley and the foothills. The railway station and the west-east transit road north of the Ottoman settlement determined the expansion of the city and the position of the modern city center. Roads were built on the adjacent slopes and new residences were constructed, detached houses influenced by the European architecture of the turn of the century introducing not only a new architectural style but also creating a different residential culture. The majority were so called central hall houses built for the higher social classes so documenting the birth of a bourgeoisie and of a new national intelligentsia. At the same time commercial buildings and modern schools were constructed particularly in the western part of the city.

1948, following the Middle East war, the west bank came under Jordanian rule. The immigration from the lost areas resulted in a rapid increase in the population of Nablus, from CA. 25.000 in 1948 to 61.143 in 1967. The city expanded dramatically even though three refugee camps, Balata Askar and Ein Bayt Elma, were erected well outside the city. A new business district was built to the north of the old historic city, based on a grid pattern. The expansion of the city continued to follow the topography of the valley. Some roads were straightened. Apartment blocks with shops and offices at street level became prevailing within the new city as well as on the slopes to the north and south. Changes in the old town were minimal.

The Israeli occupation after 1967 imposed restriction on the extension of the boundaries of the city the focus of urban development had to be shifted to a limited municipal area resulting in increasing density. Green area even some of the few garden and orchards within the historic center were built over with apartment blocks of poor architectural quality. In many of the abandoned old houses and palaces, destroyed already in the

earthquake 1927 or later in the wars, unauthorized construction and inadequate repair occurred destroying even more of the architectural heritage.

The peace process between Israel and the Palestinians began since 1988 till 1993 when the Peace Accords namely ; Oslo Agreement, was signed. In December 12th, 1995, Israel redeployed its army from the city which became under the Palestinian autonomy.

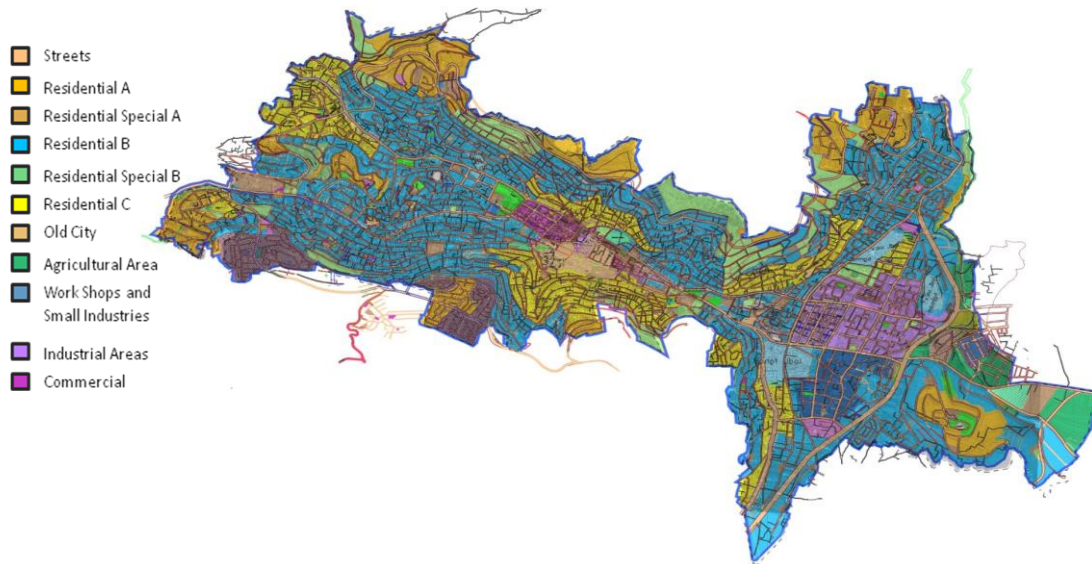
In September 28th, 2000, the Aqsa Intifada “Uprising” started in the entire Palestinian territories as a normal reaction and in response to the failure of Camp David agreement between Israeli and Palestinians in July 2000. The Camp David stipulated that none of the final decisive issues mainly; Palestinian refugees, security & borders, Jerusalem and the Israeli settlements will be settled in accordance to the Palestinian aspirations and do not ensure the rights of the Palestinians. Therefore, the political situation has been escalated further, particularly in April 2002 when Israeli army was deployed inside cities and villages including Nablus causing severe devastation to the Palestinian infrastructure demonstrated particularly in Nablus city.

2: Nablus Urban Spaces Analysis

2:1 City Master Plan

The Development Planning Project for the city of Nablus, which was prepared in 1995 under the PNA and endorsed in 1996, is considered the latest development plan adopted by the Municipality. The plan was amended and the amendment endorsed in 2006 on the assumption that the population of the city of Nablus will reach 298,000 people in 2015 and the area of the city will be 29 KM². New areas for expansion were proposed toward the southern and western sides Of the city. According to this plan, the land use is distributed as shown.

Till 1995, only one master plan was prepared for Nablus city in 1946 during the British Mandate. After 1946, a number of partial plans and certain detailed projects within the area plan had been prepared following the expansion and development in the city. In 1961, a general land use plan was prepared for the city, which included the subdivision and classification of lands into various use (e.g. residential, commercial, public services, agricultural, recreational, etc.).



In 1985, the Municipality of Nablus city decided to prepare a general plan for the city. However, the plan was stopped and had not been approved.

Due to the urgent need for an approved master plan of the city, the Planning Department in Nablus Municipality started preparing a master plan in 1995, which was temporarily approved by the High Planning Council in 1996. In 2011, master plan of the city was updated by the Planning Department in Nablus Municipality which was temporarily approved by the High Planning Council 2013.

The city enjoys all basic services, 92 schools for all educational stages, 2 universities (An Najah University as the largest university in Palestine and Al-Quds Open University), a number of research centers & institutes, a public library, and colleges.

Land Use	Area km2	Percentage
Streets	6.4	22.07%
Residential A	3	9.95%
Residential Special A	0.5	1.72%
Residential B		33.09%
Residential Special B	0.2	0.69%
Residential C	2.5	8.67%
Old City	0.4	1.38%
Agricultural Area	0.54	1.86%
Work Shops and Small Industries	0.6	2%
Industrial Areas	0.86	3.05%
Commercial	0.46	1.61%
Linear Commercial	0.28	0.97%
Public Lands	1.5	5.32%

Gardens	0.26	0.90%
General Facilities	1.01	3.50%
Parking	0.03	0.10%
Archeological Sites	0.02	0.08%
Camps	0.5	1.72%
Purification Plant	0.06	0.21%
Cemeteries	0.18	0.62%
Quarries	0.08	0.28%
Total	29	100.00%

The following table shows land uses in Nablus and their percentages:

Other Open Space	19,712	67%
Roads	6,400	22%
Buildings	2,610	9%
Parks and Green Areas	0,260	0.90%
Old City Spaces	0,116	0.40%
City center	0,086	0.30%
Cultural Heritage	0,020	.07%
Playgrounds	0,016	0.05%
NABLUS	Total = 29 400	Total=100%

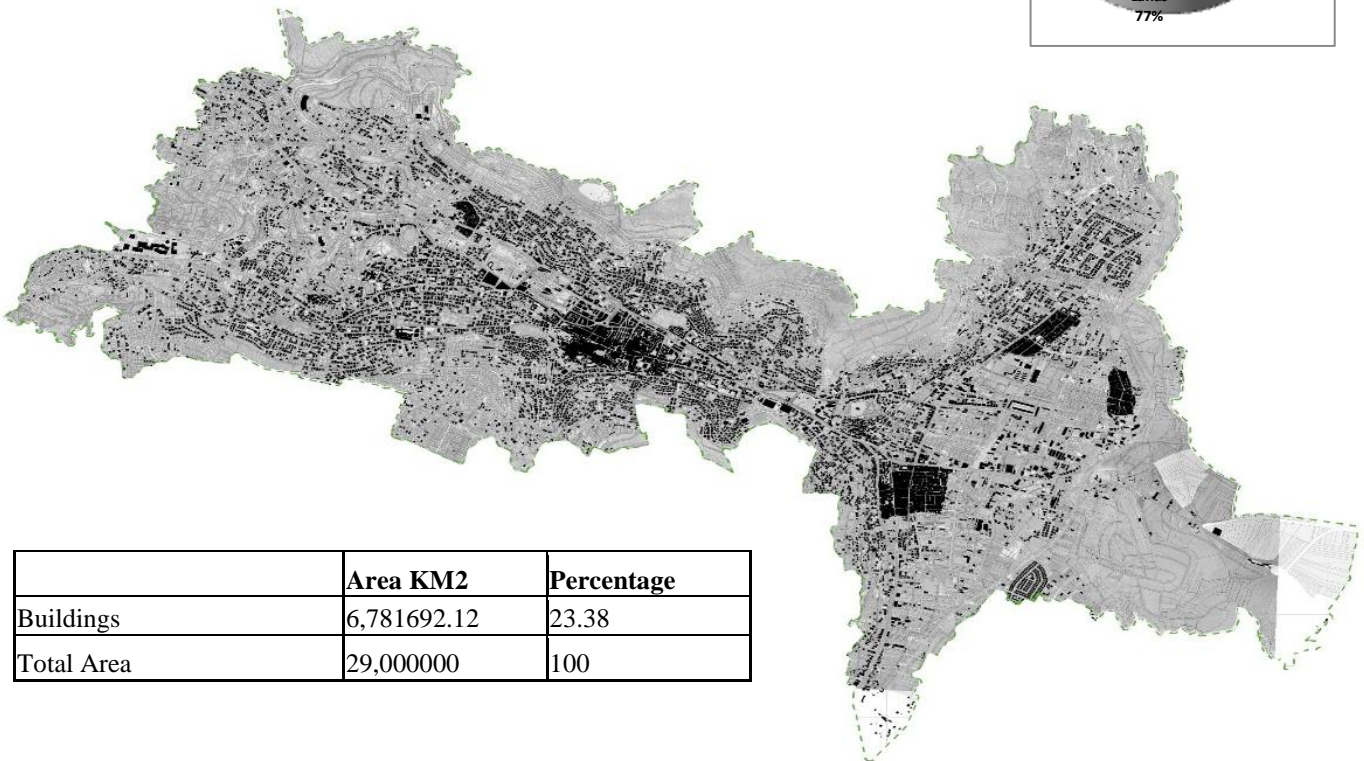
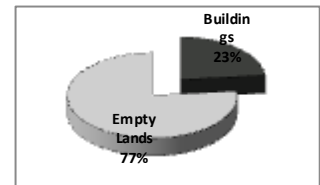
Nablus land uses and their areas

2:2 Main Parks

The following map shows the main urban spaces usually used by citizens for purposes of recreation.

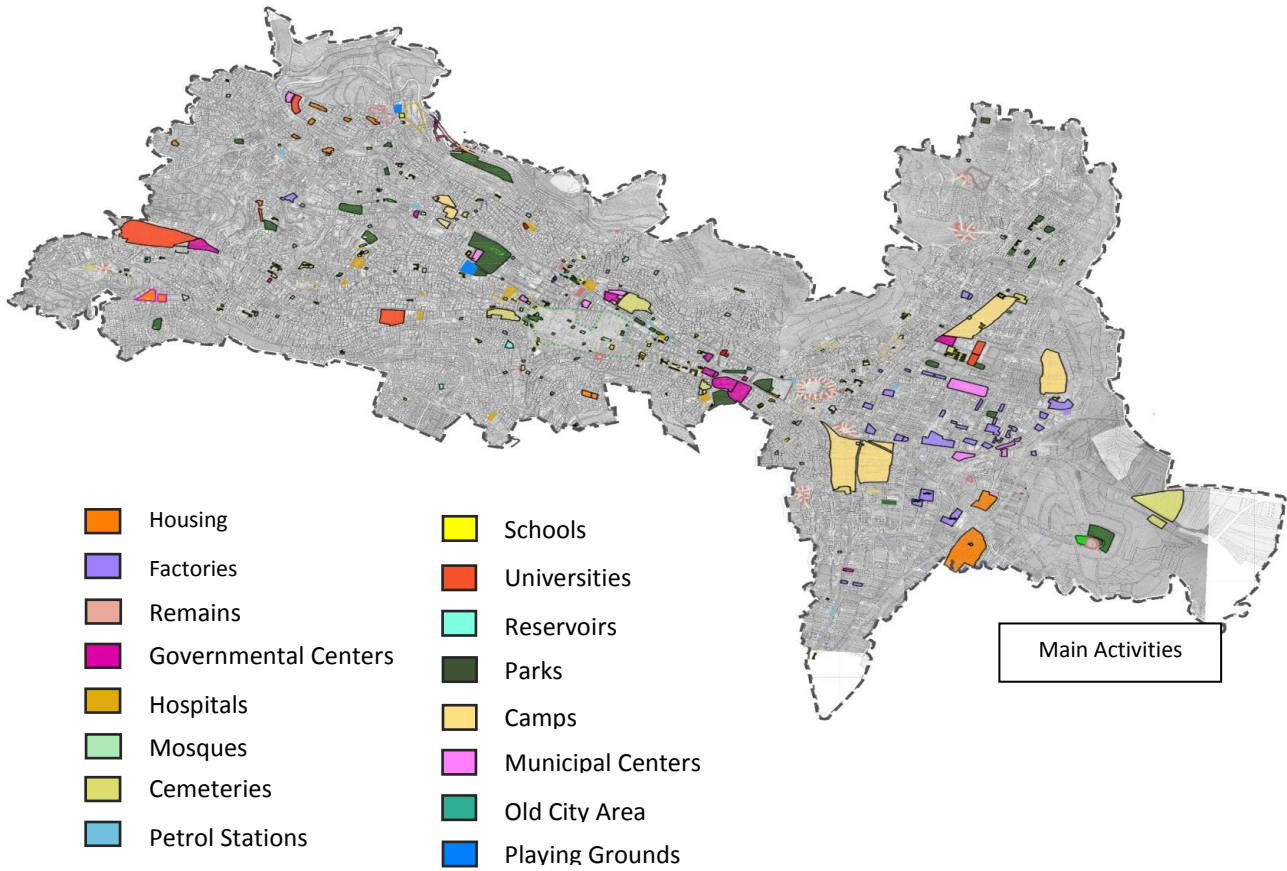
2:3 Nablus Built up Areas

Nablus has a total area of 29 KM², the built up area in Nablus as shown in this map is around 6,7 KM². The all built up area is about 23% of Nablus. The rest of lands are empty lands, and at some areas it's empty because of its topography.

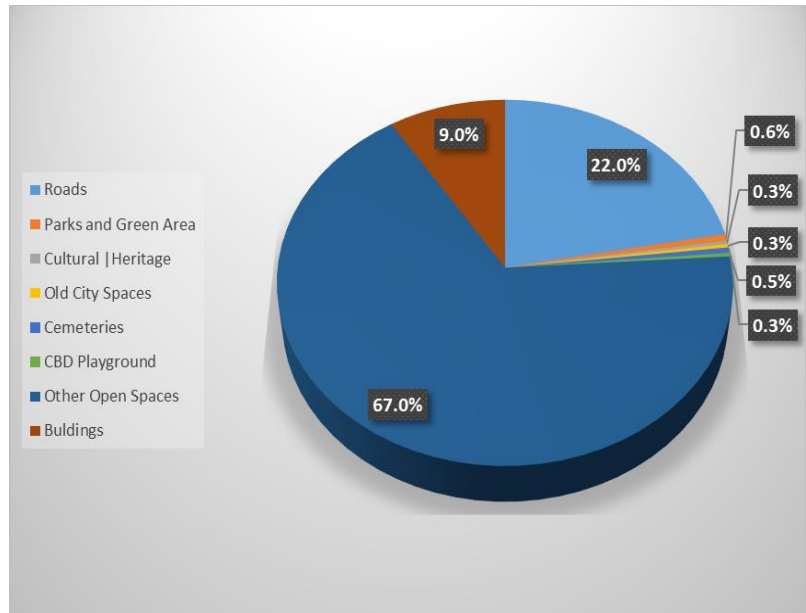


	Area KM2	Percentage
Buildings	6,781692.12	23.38
Total Area	29,000000	100

Nablus City Main Activities



Land use	Area (in Donums)
Open Spaces (Empty Land)	13994
Buildings	4623
Parks	237
PlayGrounds	11
Factories	128
Camps	462
Cemeteries	203
Old City	18
Hospitals	65
Mosques	41
Ruin	161
Universities	175

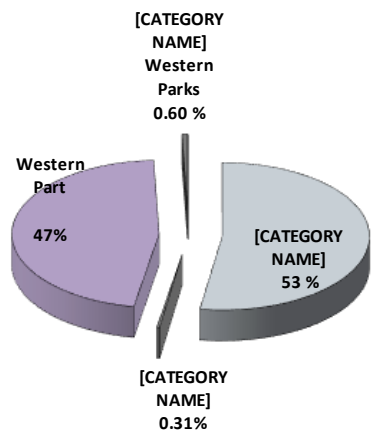
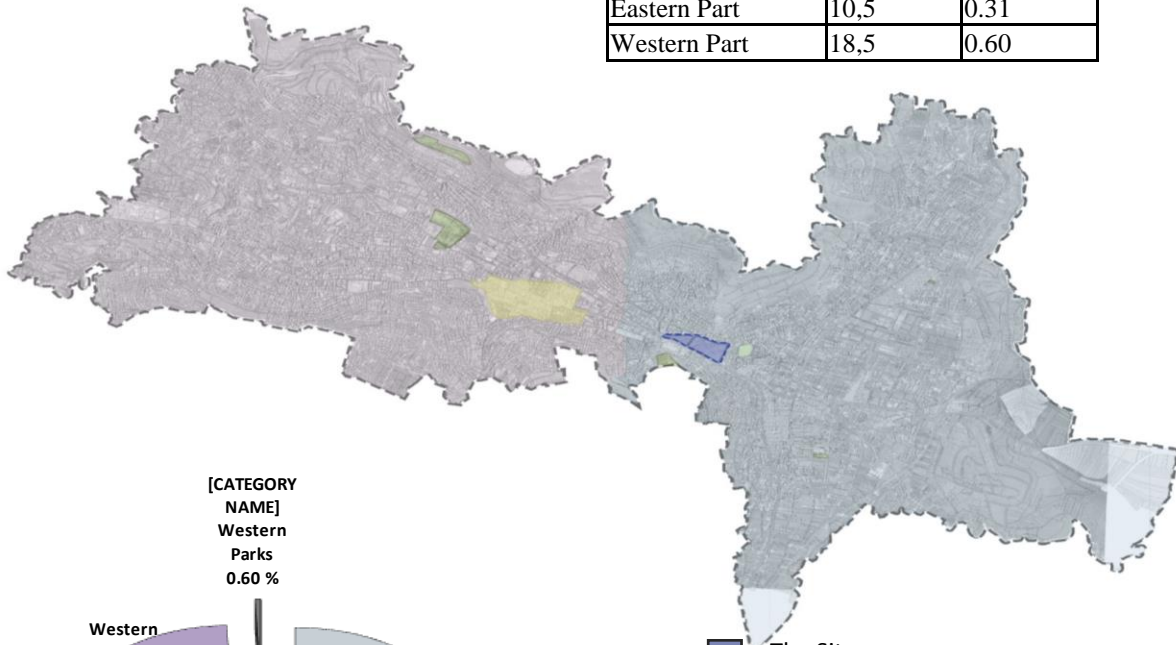


The previous figures show that the dominant land use in Nablus is free open space which consist of public and private properties and high slope lands in mountains.

2:4 Nablus Urban Spaces analysis:

In order to have a good preview of those important spaces in Nablus, the city is divided into two parts (East and west) as shown in the following map and each one is analyzed individually. The parks at Nablus don't have large areas, and they are distributed at the two parts of Nablus. Eastern part has parks and green areas with total area of 10,5 km² and 0.31%. The Western part has area of 18,5 km² and 0.6% of it.

	Area km2	Percentage
Eastern Part	10,5	0.31
Western Part	18,5	0.60



- The Site
- Eastern Part
- Western Part
- Parks
- Tal Balata
- Old City

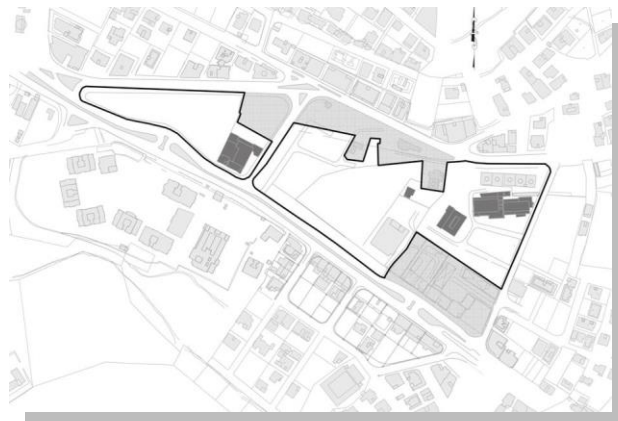
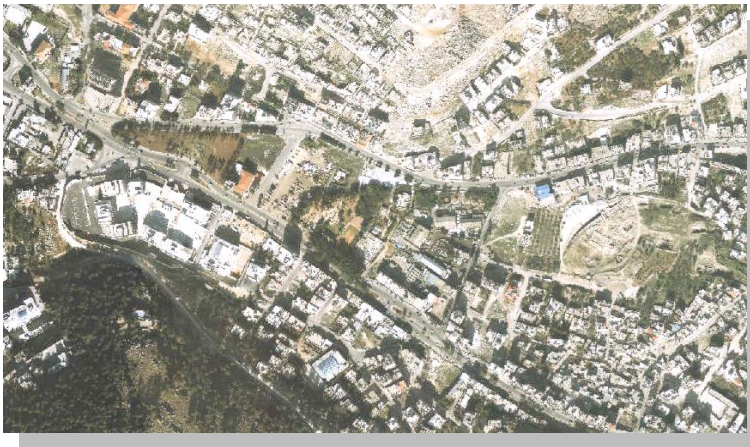
If we look at the last map and comparing between these two parts of and their urban spaces, we notice that the eastern part has a largest area and the fewest area for urban spaces.

From the previous table, the Eastern Part has 0.65 % of urban spaces from its area which should be raised in order to accommodate the high population number in the western part of Nablus including camps residents of Balata and Asker.

3: Nablus Boulevard

3:1 Site Location

According to the previous analysis for Nablus City and the distribution of the public parks and gardens and the distribution of the different activities, it was obvious that the Eastern Part of the City needs to have the balance in activities and parks, and since the Municipality of Nablus owns the Child Happiness Center and the Lands close to it in the Eastern part, the shown location was selected, which lies between Amman and Jamal Abdul Naser main streets in the Eastern Part of the City.



3:2 Main Features of the Selected Location

The selected location has an approximate area of 45 dunums, and about 90% of this area is for the Municipality of Nablus.

- The site is rich of many opportunities that nominates it as an important project. This site is close to Shkeim -Old nablus



- The site was previously used for generating electricity for all the city from the year 1956 . The old buildings that were used for generating electricity exists until this time and not used.



- The Childhood Happiness Center that was constructed to serve the children needs in sports, fun, parties, etc.



- Ein Dafna water which was historically discovered by the Canniness to provide Old Shkeim with water. A pump station now provides water for 16 neighborhood areas from this water.



- Old, big and different kinds of trees that are found within the site provides the site with a great value.



- Main streets that surround the site make it accessible for everybody especially in addition to the main public transportation routes go through these main routes.



Eastern Part Entrances

The eastern part that connects the south and north sides of the city with western part, have two main entrances from Jerusalem and Jordan Valley. These entrances hold high traffic volumes and considered as the widest main streets in the City.



3:3 Site and Design Needs

In order to understand the exact needs for the design elements, many discussions about the citizens and site needs were done. Different assumptions and ideas have been discussed, meetings with mayor, city council, and University have been made. A general questionnaire also was done to about 500 inhabitants to know their needs and desires. Finally the design elements that were approved are:



- Rehabilitation of the two old electricity buildings to use them as a cultural and exhibition centers and keeping the identity for these buildings.



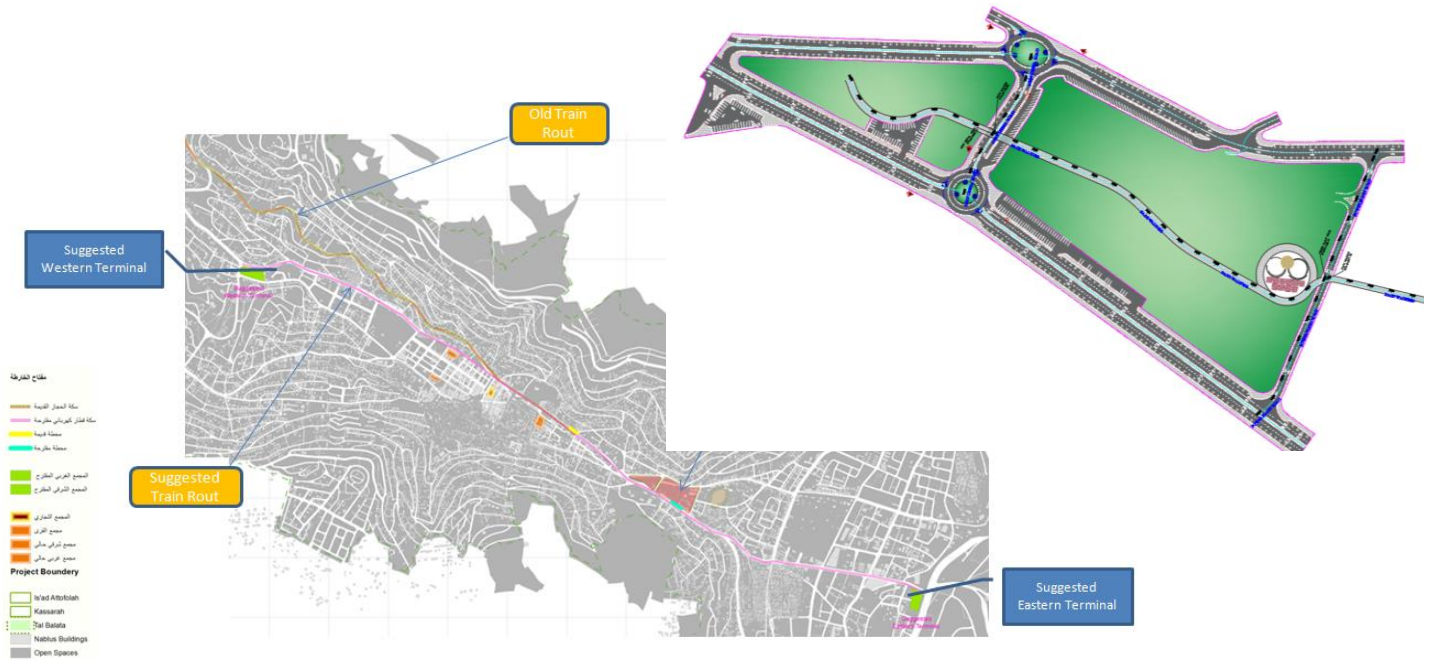
- Connecting the two gardens that are divided by the main street by a walking path starts and ends at Shkeim and the Martyrs Monument and vice versa to keep the value for Shkeim, putting in mind the connection with old city of Nablus through connecting the street from the eastern part of the Old City with the begging of the project.



- Keeping the Childhood Happiness Center with addition to other functions close to it.
- Covering the water pump station with a special architectural umbrella and adding the element of water through the landscape design to keep the value of the water history.
- Keeping the different kind of trees through the landscape design since they are considered as the treasure in this site.



- Providing good traffic circulation plan to the main streets that surround the project with organizing sufficient parking spaces

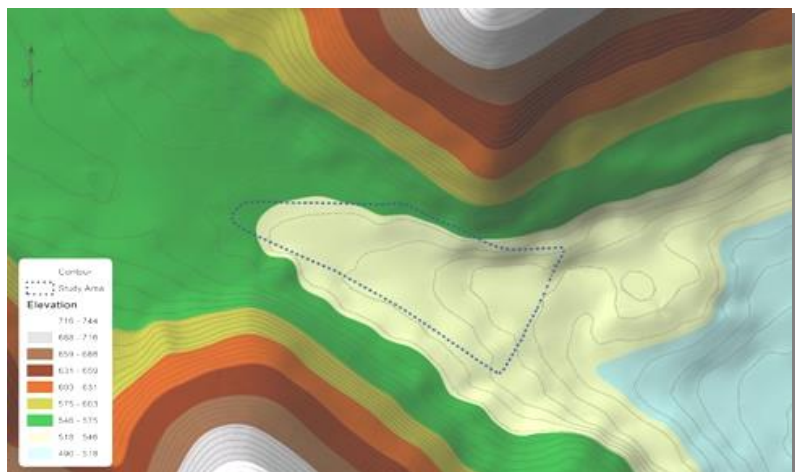
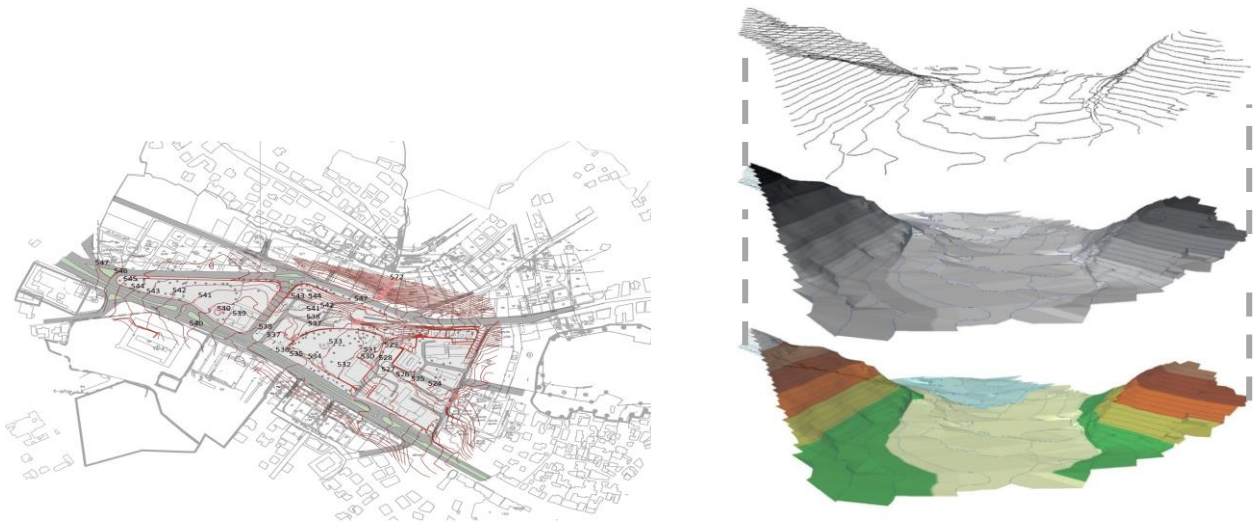


- Studying the relation between the vacant lands with the new design for the area in order to adapt all the design.

3:4 Site Characteristics

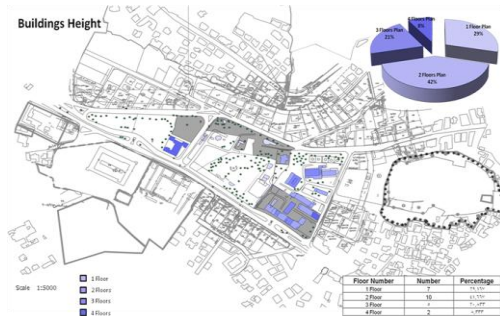
3:4:1 Topology

The site is like a valley since it lies between the two mountains of Nablus City, the contour shape is shows that the site could be seen from the surrounding streets and adjacent mountains.



3:4:2 Buildings

The existing buildings near the project have different heights, the maximum height is 4 floors with different shapes, models, construction materials. A Deep analysis for these buildings have been made, all the data is summarized as shown



Site Plan	Types	Modules	Angle	Function	3D
	Area = 385.22 m ²	3.5 x 6.5 x 3 x 5	Angle = 7	Services	Floors = 2
	Area = 500.30 m ²	5.5 x 6.5 x 3 x 5	Angle = 14	Services	Floors = 3
	Area = 2.15.82 m ²	1.5 x 1.5 x 3 x 5	Angle = 22	Services	Floors = 2
	Area = 638.46 m ²	10.5 x 3 x 5	Angle = 36	Services	Floors = 4

Site Plan	Types	Modules	Angle	Function	3D
	Area = 339.66 m ²	3 x 6 x 5	Angle = 36	Services	Floors = 3
	Area = 379.05 m ²	6 x 2 x 5	Angle = 16	Services	Floors = 3
	Area = 129.87 m ²	3.5 x 1.5 x 5	Angle = 33	Services	Floors = 1
	Area = 301.09 m ²	4.5 x 3.5 x 5	Angle = 18	Residential	Floors = 2

Site Plan	Types	Modules	Angle	Function	3D
	Area = 113.30 m ²	2.5 x 2.5 x 5	Angle = 31	Services	Floors = 1
	Area = 52.91 m ²	6 x 1.5 x 5	Angle = 31	Services	Floors = 1
	Area = 1015.68 m ²	8 x 6 x 5	Angle = 24	Services	Floors = 4

Site Plan	Types	Modules	Angle	Function	3D
	Area = 255.45 m ²	2 x 5.5 x 5	Angle = 24	Services	Floors = 1
	Area = 111.63 m ²	3 x 2 x 5	Angle = 32	Residential	Floors = 1
	Area = 51.88 m ²	1.5 x 1.5 x 5	Angle = 33	Services	Floors = 1

Site Plan	Types	Modules	Angle	Function	3D
	Area = 758.1 m ²	5.5 x 6.5 x 5	Angle = 33	Services	Floors = 3
	Area = 127.23 m ²	3 x 2 x 5	Angle = 33	Services	Floors = 1
	Area = 124.19 m ²	2.5 x 2 x 5	Angle = 17	Services	Floors = 1
	Area = 123.61 m ²	2.5 x 5	Angle = 33	Services	Floors = 1

Site Plan	Types	Modules	Angle	Function	3D
	Area = 199.49 m ²	2.5 x 3 x 5	Angle = 33	Services	Floors = 4
	Area = 438.96 m ²	2.5 x 6.5 x 5	Angle = 31	Services	Floors = 2
	Area = 194.08 m ²	3 x 2.5 x 5	Angle = 24	Services	Floors = 2
	Area = 804.99 m ²	3 x 10 x 5	Angle = 33	Services	Floors = 3

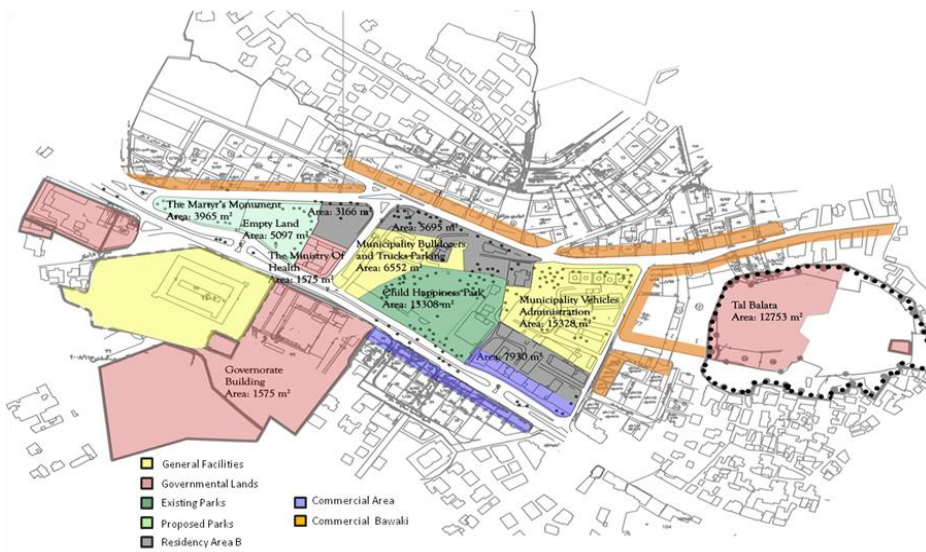
3:4:3 Land Marks

The site is close to important land marks as the Martyer Monument, Jacoubes well, old Shkeim, administration governmental offices, College. These sites give the project a great value in the history and future meaning.



3:4:4 Site Land Uses

The selected site has many uses, as shown in the following map some areas are reserved as public parks, governmental, commercial, and residential. The project area is about 50 donums and owned by the Municipality and the site boundaries are as shown in the next map.



3:4:5 Water

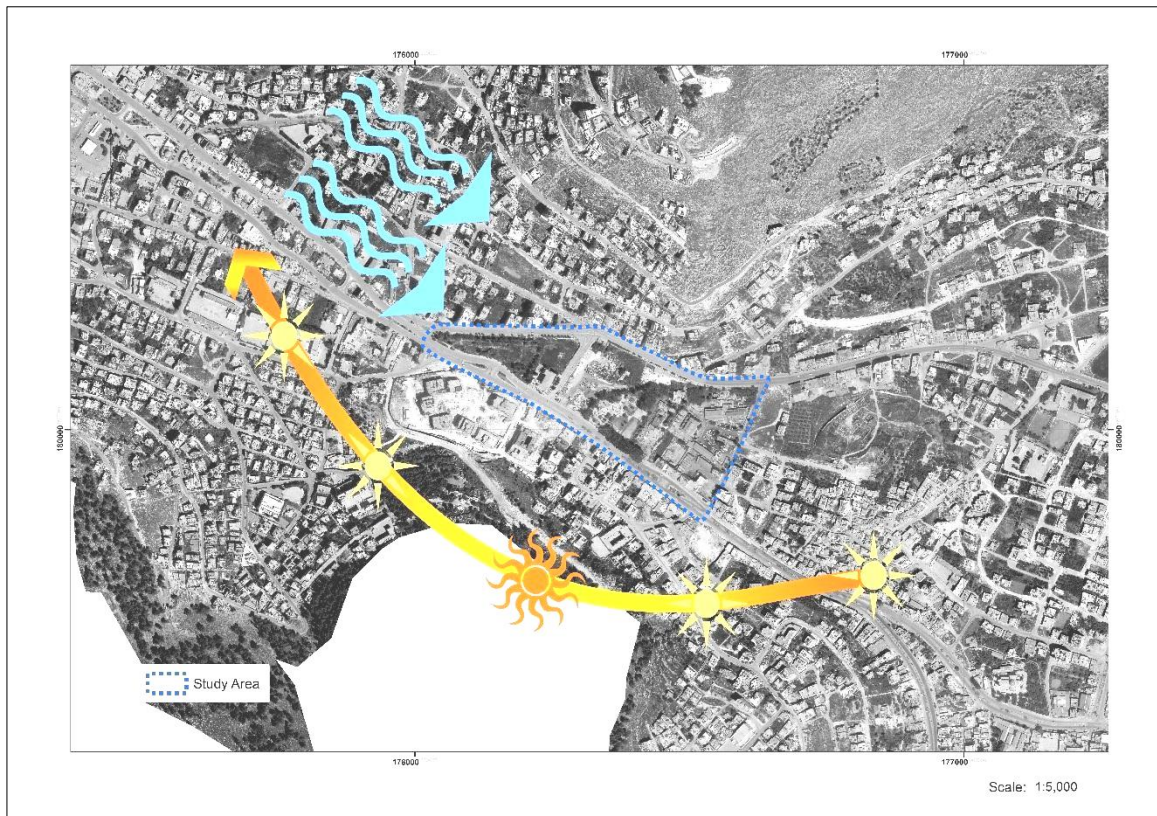
The site lies in a plain area which surrounded by Ebal and Gerzeem mountains and this makes the area rich of water, it also contains Ain Defna spring that mentioned later.

Although the project area lies in a plain, it consists of different lands from the top to the bottom and from east to west.

The reservoirs zone that lies to the east of the chosen area has a higher level, and it is suggested to keep these old reservoirs for water that will be pumped from the new reservoir that is suggested to be constructed in the lowest point of the project land and close to old ones.

3:4:6 Sun, Wind, Climate and Water:

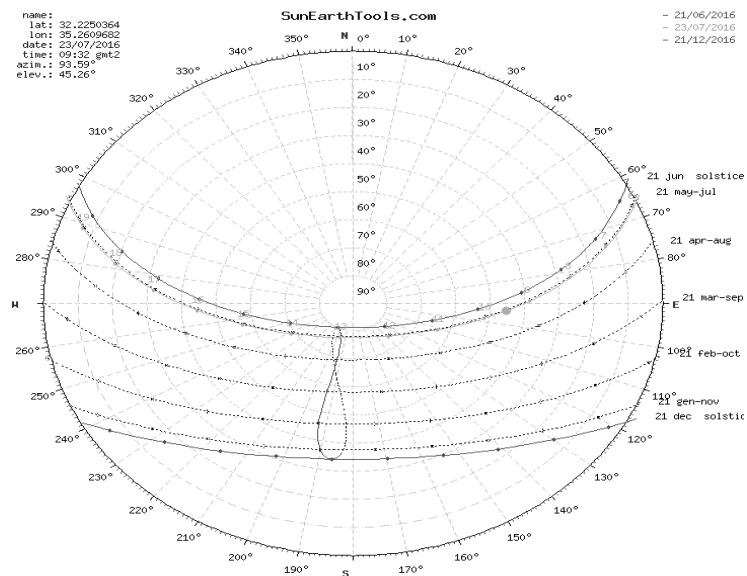
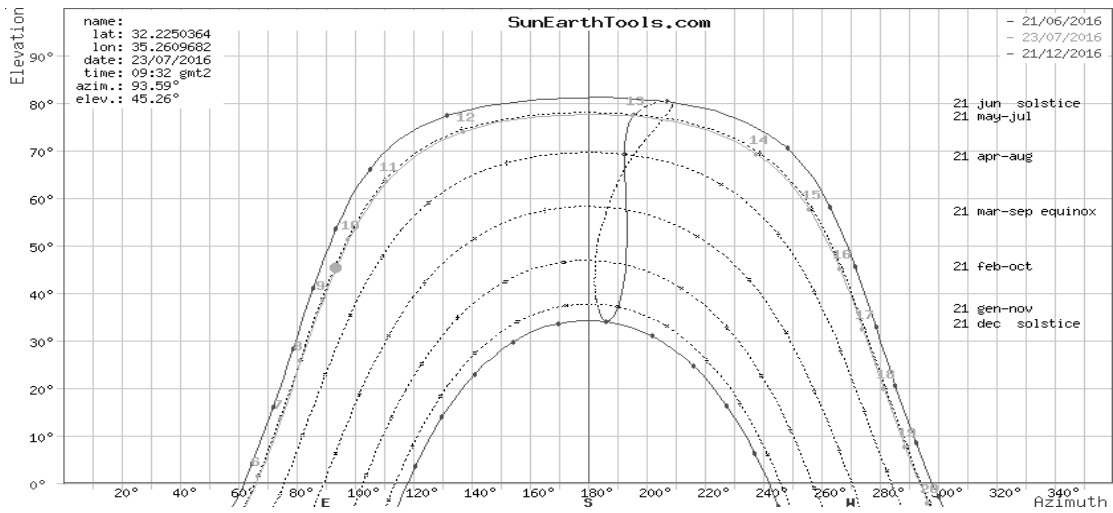
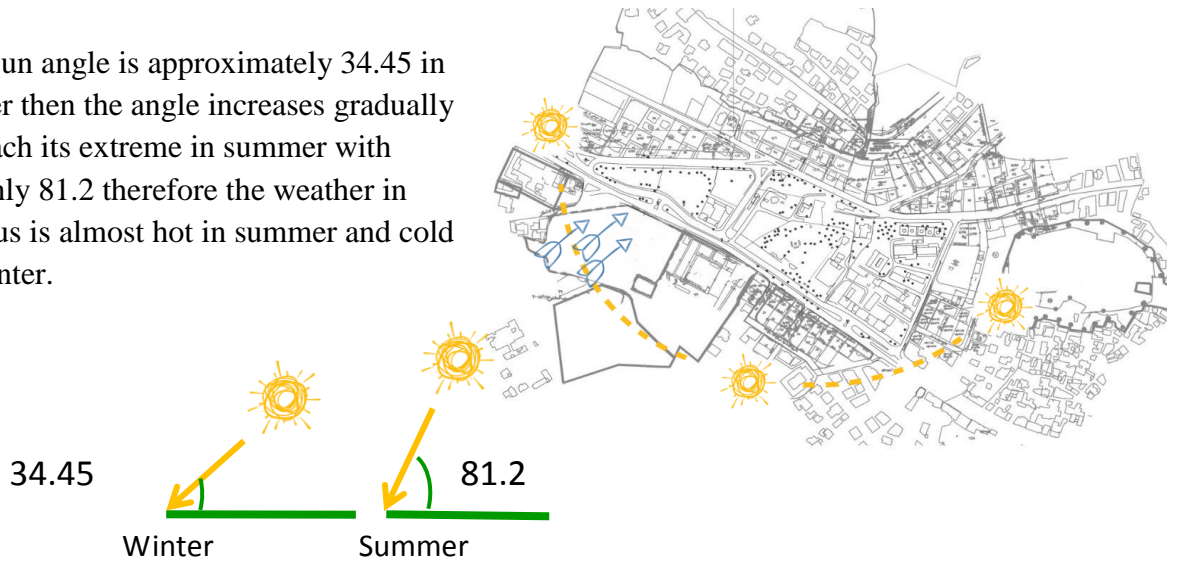
Sun brightens to the area from south as Palestine is located north equator. And the area is affected generally by the western northern wind which has an approximately annual speed of 10 km/h.



Sun and Wind in Study Area

- **Climate-sun**

The sun angle is approximately 34.45 in winter then the angle increases gradually to reach its extreme in summer with roughly 81.2 therefore the weather in Nablus is almost hot in summer and cold in winter.



• **Climate-temperature**

The hottest months in Nablus are July and August with the average high being 29.6 °C (85.3 °F). The coldest month is January with temperatures usually at 6.2 °C (43.2 °F). Rain generally falls between October and March, with annual precipitation rates being approximately 656 mm (25.8 in)

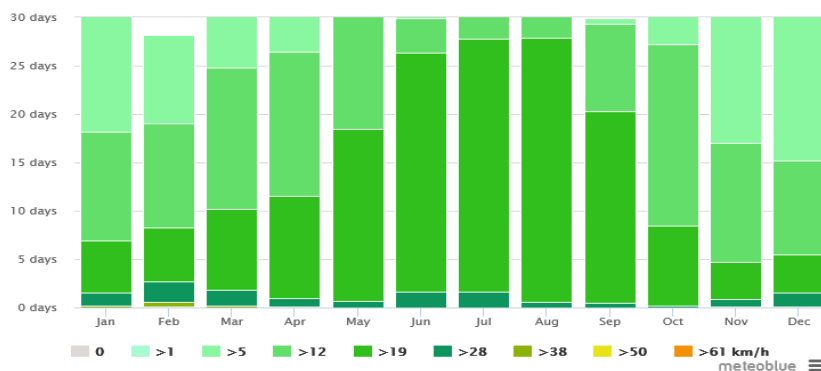
The "mean daily maximum" (solid red line) shows the maximum temperature of an average day for every month for Nablus. Likewise, "mean daily minimum" (solid blue line) shows the average minimum temperature. Hot days and cold nights (dashed red and blue lines) show the average of the hottest day and coldest night of each month of the last 30 years.

The maximum temperature diagram for Nablus displays how many days per month reach certain temperatures.

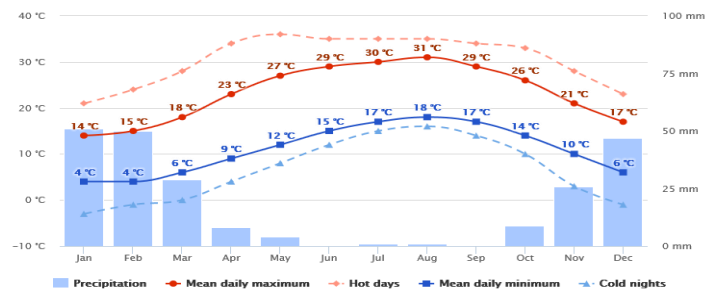
The precipitation diagram for Nablus shows on how many days per month, certain precipitation amounts are reached. In tropical and monsoon climates, the amounts may be underestimated.

The diagram for Nablus shows how many days within one month can be expected to reach certain wind speeds. Monsoons create steady strong winds on the Tibetan Plateau from December to April, but calm winds from June to October.

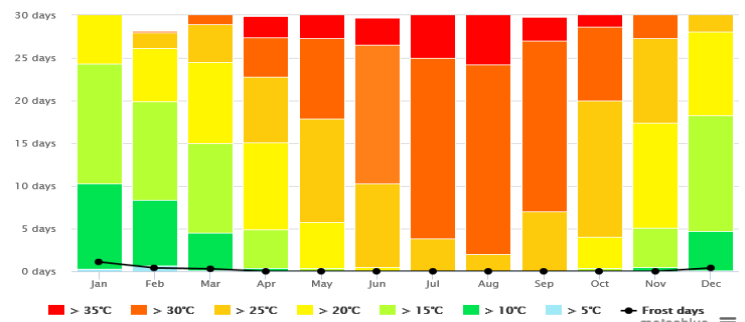
• **Wind speed**



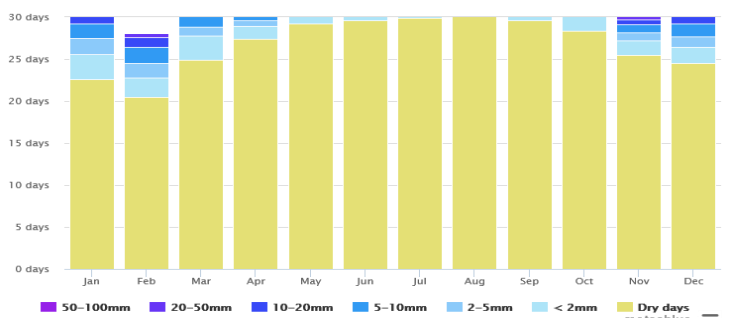
Average temperatures and precipitation



Maximum temperatures



Precipitation



4: Design Description for the Buildings

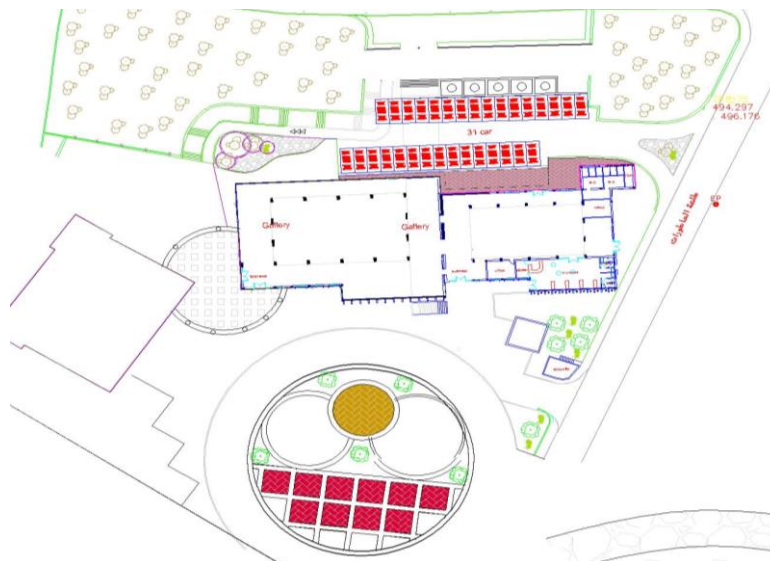
4.1 Rehabilitation of the old electricity buildings.

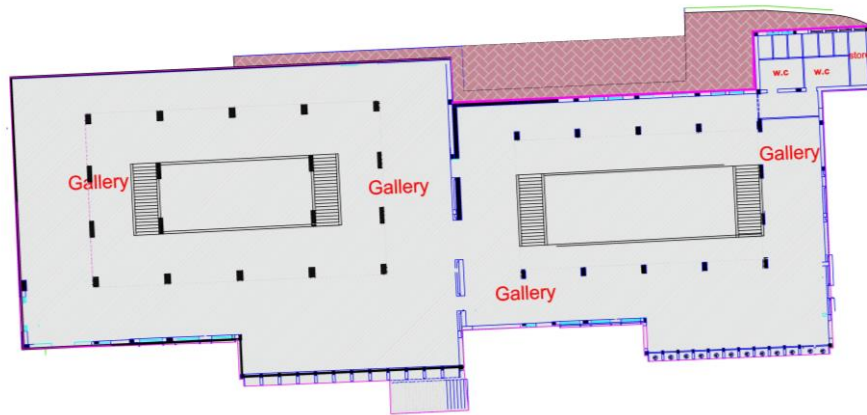
The old electricity building as shown in the photo is planned to be used as an indoor exhibition and the outside spaces as an outdoor exhibition too. Different surveys have been made to study the city needs for such exhibition and the summarized needs are listed below.



The suggested design includes areas for exhibitions on two floors, administration office, and small restaurant with total area 1689 square meter for each floor. Public parking for about 30 space with the opportunity for loading and unloading for goods. The space can handle about 2,500 visitor.

We can arrange 75-100 exhibition per year. We can use the outdoor exhibition in summer and spring seasons.





Rehabilitation of the old electricity building to be used as indoor exhibition such as furniture, arts, engineering, educational, industrial, etc.

Number of current exhibitions 32300 visitor per year 212 day of the year will be occupied

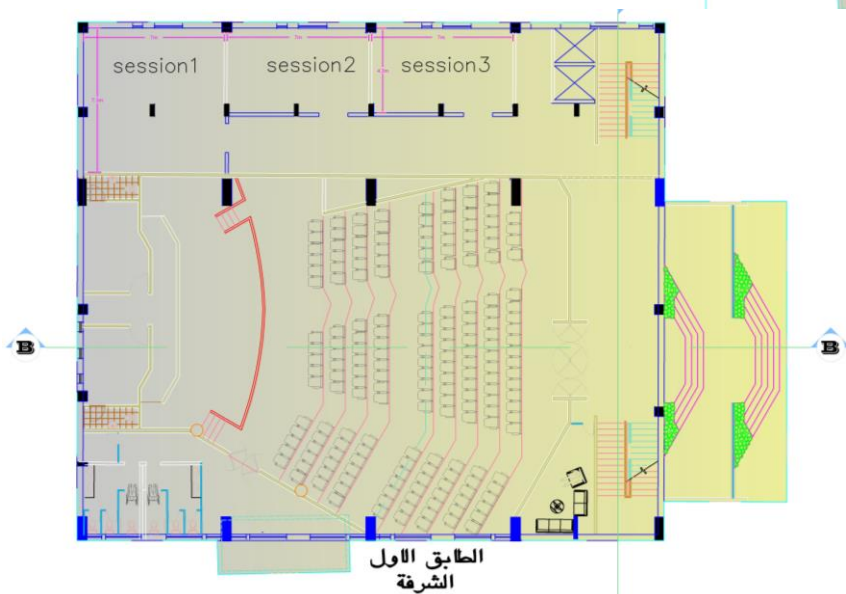
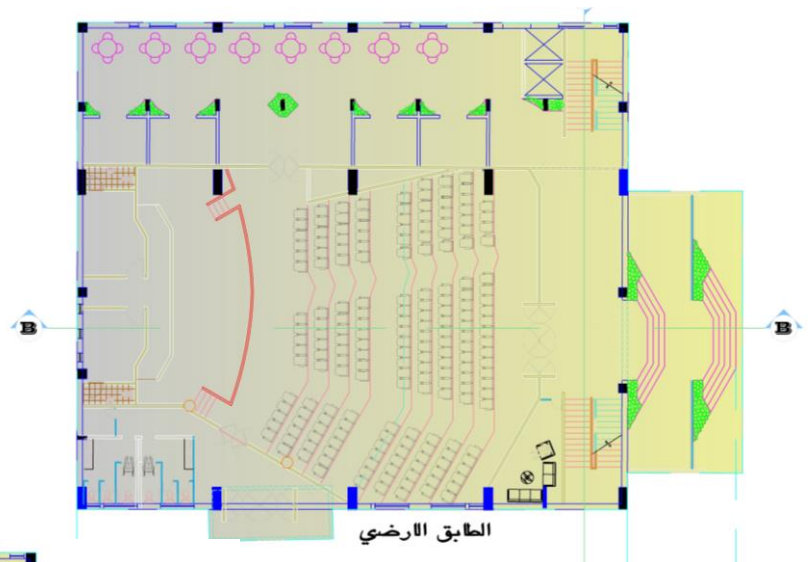


The Other Electricity Building has a top area of 750 square meter. With a total height 13meter.The structural status according to engineering testing is good and can accommodate the planned rehabilitation.



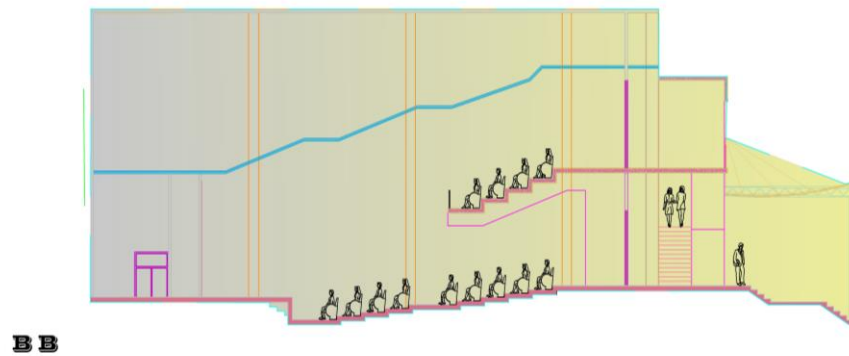
It is planned to use this building as a cultural theater for multiuse as, festivals, conferences, parties, seminars, workshops, and different public meetings. According to the specified survey, the city of Nablus has many activities that are not located in a specialized space, and such place will be very suitable for the City and the eastern area as all.

The Ground Floor has an area of about 755 square meter. It is designed to have a theater with a capacity for 200 persons. The second floor which is the terrace, has the same area with a capacity for 110 person.





Because of the good height of the building the theater was designed as two floors with a big stage. The other spaces in the building were designed for seminars.



4:2 Suggested Activities in the Cultural Theater

- 7 Current Conferences per year ,21 days of the year will be occupied, 5000 visitor
- 29 Current Seminars per year, 29 days of the year will be occupied, 3000 visitor
- 4 Current Festivals per year, 8 days of the year will be occupied, 25,000 visitor
- 28 Current Festivals per year, 116 days of the year will be occupied, 15,000 visitor

5: Functional description for suggested project elements



5:1 Pedestrian under Pass

Because of the streets that cross the Boulevard, a pedestrian underpass was suggested to connect the two sides of the Boulevard with two entrances, from shkeim side and from the martyrs park side. The underpass for pedestrian that will continue to the whole park with the suggested walking path.



5:2 Outdoor exhibition

The area close to the indoor exhibition is suggested to be used in spring and summer times for outdoor exhibition.



5:3 Indoor exhibition

The old electricity building will be kept and rehabilitated for this use. The building will be kept and rehabilitated, each gallery or exhibition can make the suitable arrangements in decor according to their needs.



5:4 City Hall

Cultural Center, the theater, which the old electricity building that will be kept and rehabilitated for this use too. The existing height for the building could be used as a theater with multi uses according to the Municipality and City needs.



5:5 Youth park

that contains different activities such as a playground, chess, sliding, and cafe. It was selected to be in a safe area that is suitable for this use.



56 The walking path

that connects the two sides of the park and it is suggested to be used for walking, biking, and running. This path is a very important part in the project since it is considered as one of the main entrances of the project and the way how trees are found and planted in the path will be adapted for the street that connects the Old City with the project site.



5:7 Reading park for adults

which close to the Martyers Monument with seats and landscape that is suitable for reading.



5:8 The existing Martyers Monument , and it is suggested to include national books within the site as a small library to be close to the suggested reading park

Team Work

Mr. Ayman Shakaah

Eng. Rania Doleh

Eng. Samah Kakany

Eng. Masara Hanbali

Eng. Ola Khayyat

Eng. Raed Yaesh

Mr. Firas Dweikat

Mr. Abd Alafo Alaker

Graphic Design

Mr. Sameh Touqan

Mrs. Samah Odeh

Thanks To

Eng. Azzam Qasrawy

Dr. Ali Abd Alhameed

Dr. Zuhra Zawawi

Eng. Anan Braik

Eng. Mohamad Barham

Eng. Raghad Hamad

Eng. Roqaya Alfares

Eng. Duha Sa'd Al Deen

Eng. Rushdi Mabrokeh