

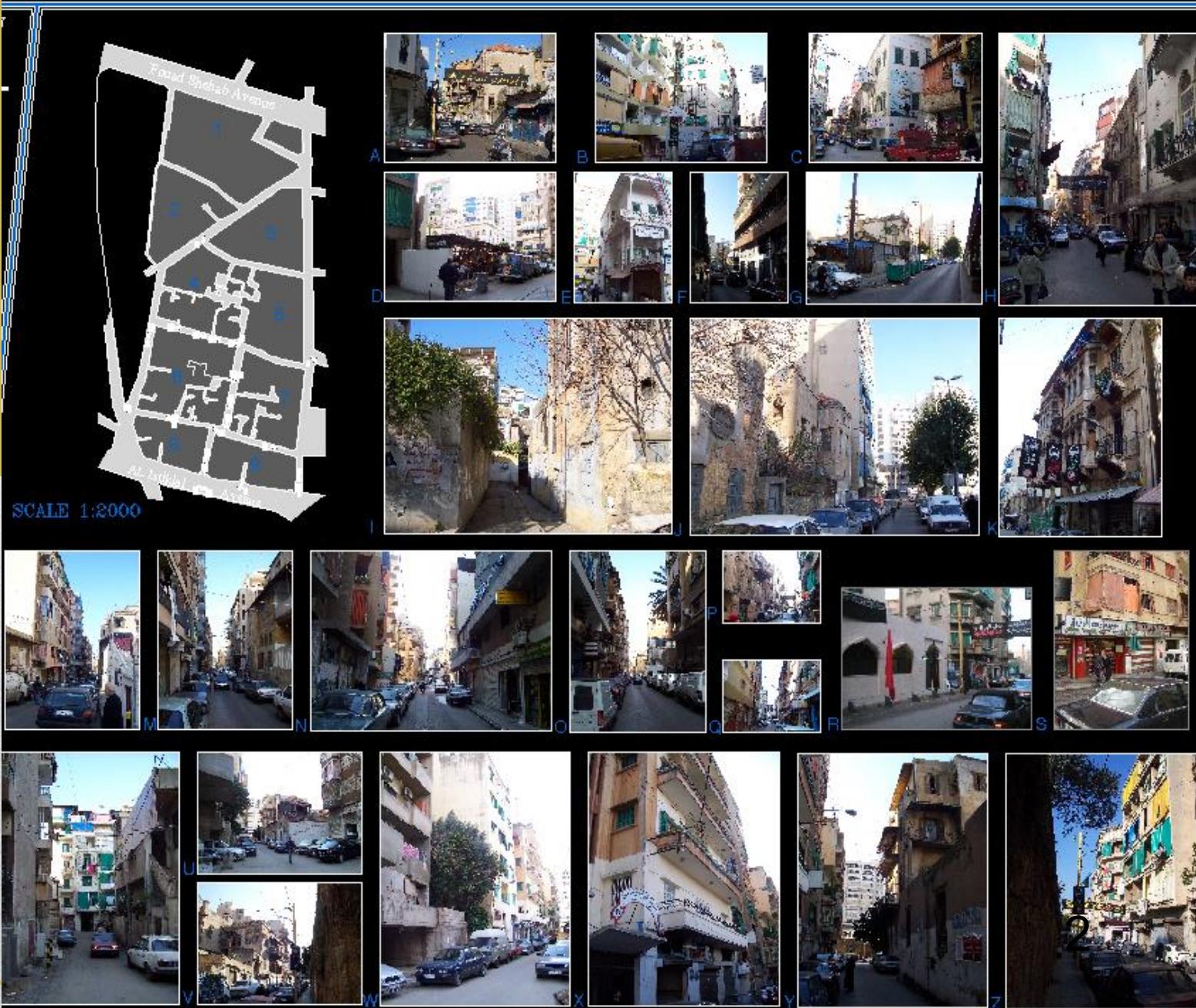
**ARCH 322**

**PRINCIPLES OF PLANNING I**

**1st Lecture**

**(Site Survey)**

**Soma A. Kareem**





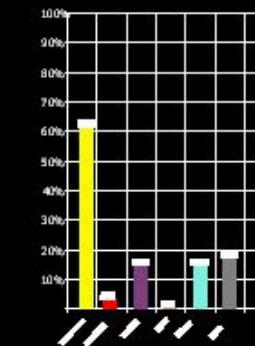


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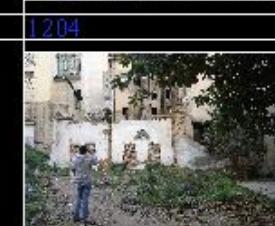
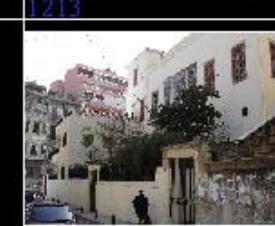
Building Usage:



SHEET NO. 05

PLAN ( SECTOR NO. 5 )

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1218

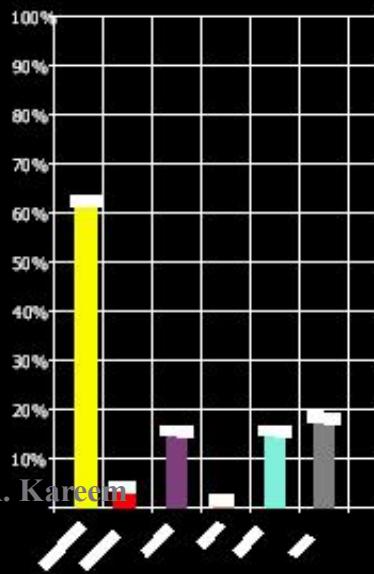
1217

1216



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## Land Use



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# Land-Use Dimensions

## LBCS Land-Based Classification Standards



### LBCSActivity

- Residential activities
- Shopping, business or trade activities
- Industrial, manufacturing, and waste-related activities
- Social, institutional, or infrastructure-related activities
- Travel or movement activities
- Mass assembly of people
- Leisure activities
- Natural resource-related activities
- No human activity or unclassifiable activity



### LBCSFunction

- Residence or accommodation functions
- General Sales or services
- Manufacturing and wholesale trade
- Transportation, communication, information, and utilities
- Arts, entertainment, and recreation
- Education, public admin., health care, other inst.
- Construction-related businesses
- Mining and extraction establishments
- Agriculture, forestry, fishing and hunting



### LBCSStructure

- Residential buildings
- Commercial buildings and other specialized structures
- Public assembly structures
- Institutional or community facilities
- Transportation-related facilities
- Utility and other nonbuilding structures
- Military installations
- Sheds, farm buildings, or agricultural facilities
- No structure



### LBCSSite

- Developed site
- Developed site with a structure – building
- Developed site with a structure – nonbuilding
- Developed site that is functional (crops, storage etc.)
- Developed site that is primarily ornamental (landscape)
- Developed site functional and ornamental (park)
- Developed site that is graded
- Site with temporary structure
- Site in natural state



### LBCSOwnership

- No constraints -- private ownership
- Some constraints – easements or restricted use
- Limited restrictions – leased or tenancy restrictions
- Public restrictions – local, state, federal ownership
- Other public use restrictions – regional, special district
- Nonprofit ownership restrictions
- Joint ownership character – public entities
- Joint ownership character – public, private, nonprofit, etc.
- Not applicable to this dimension

# LBCS Color Codes for 1-Digit Level Coding

## Function

| Red, Green, Blue Values            | Color*       | LBCS Code   |
|------------------------------------|--------------|---|
| RGB(255,255,0)<br>RGBHex(FF00FF)   | yellow       | <b>1000</b> Residence or accommodation functions                      |
| RGB(255,0,0)<br>RGBHex(FF0000)     | red          | <b>2000</b> General sales or services                                 |
| RGB(160,32,240)<br>RGBHex(A0F020)  | purple       | <b>3000</b> Manufacturing and wholesale trade                         |
| RGB(190,190,190)<br>RGBHex(BEBEBE) | gray         | <b>4000</b> Transportation, communication, information, and utilities |
| RGB(144,238,144)<br>RGBHex(9090EE) | light green  | <b>5000</b> Arts, entertainment, and recreation                       |
| RGB(0,0,255)<br>RGBHex(00FF00)     | blue         | <b>6000</b> Education, public admin., health care, and other inst.    |
| RGB(0,139,139)<br>RGBHex(008B8B)   | dark cyan    | <b>7000</b> Construction-related businesses                           |
| RGB(85,26,139)<br>RGBHex(558B00)   | purple4      | <b>8000</b> Mining and extraction establishments                      |
| RGB(34,139,34)<br>RGBHex(22228B)   | forest green | <b>9000</b> Agriculture, forestry, fishing and hunting                |

\*Specify the RGB (red, green, blue) values, instead of relying on color names, for consistent reproduction of colors on a printer, plotter, or computer screen. Using RGB values can sometimes avoid differences in how software and hardware render colors. Some colors, no matter what, differ how they look on screen from their printed version. Also, if you are reviewing this document on a computer screen, note that some software (web browsers, for example) limit the number of colors displayed. If your software can only accept hexadecimal values, as many GIS and plotting software do, then use the corresponding RGBHex value. For CMYK values and other color coding details, check the LBCS website.

# LBCS Color Codes for 1-Digit Level Coding

## Structure

| Red, Green, Blue Values            | Color*       | LBCS Code   |
|------------------------------------|--------------|---|
| RGB(255,255,0)<br>RGBHex(FF00FF)   | yellow       | <b>1000</b> Residential buildings                                 |
| RGB(255,0,0)<br>RGBHex(FF0000)     | red          | <b>2000</b> Commercial buildings and other specialized structures |
| RGB(160,32,240)<br>RGBHex(A0F020)  | purple       | <b>3000</b> Public assembly structures                            |
| RGB(0,0,255)<br>RGBHex(00FF00)     | blue         | <b>4000</b> Institutional or community facilities                 |
| RGB(190,190,190)<br>RGBHex(BEBEBE) | gray         | <b>5000</b> Transportation-related facilities                     |
| RGB(133,133,133)<br>RGBHex(858585) | gray52       | <b>6000</b> Utility and other nonbuilding structures              |
| RGB(255,192,203)<br>RGBHex(FFCBC0) | pink         | <b>7000</b> Specialized military structures                       |
| RGB(34,139,34)<br>RGBHex(22228B)   | forest green | <b>8000</b> Sheds, farm buildings, or agricultural facilities     |
| RGB(255,255,255)<br>RGBHex(FFFFFF) | white        | <b>9000</b> No structure  |

\*Specify the RGB (red, green, blue) values, instead of relying on color names, for consistent reproduction of colors on a printer, plotter, or computer screen. Using RGB values can sometimes avoid differences in how software and hardware render colors. Some colors, no matter what, differ how they look on screen from their printed version. Also, if you are reviewing this document on a computer screen, note that some software (web browsers, for example) limit the number of colors displayed. If your software can only accept hexadecimal values, as many GIS and plotting software do, then use the corresponding RGBHex value. For CMYK values and other color coding details, check the LBCS website.

# LBCS Color Codes for 1-Digit Level Coding

## Site

| Red, Green, Blue Values            | Color*       | LBCS Code  |
|------------------------------------|--------------|--|
| RGB(144,238,144)<br>RGBHex(9090EE) | light green  | <b>1000</b> Site in natural state                            |
| RGB(245,245,220)<br>RGBHex(F5DCF5) | beige        | <b>2000</b> Developing site                                  |
| RGB(205,183,158)<br>RGBHex(CD9EB7) | bisque3      | <b>3000</b> Developed site -- crops, grazing, forestry, etc. |
| RGB(139,126,102)<br>RGBHex(8B667E) | wheat4       | <b>4000</b> Developed site -- no buildings and no structures |
| RGB(139,90,43)<br>RGBHex(8B2B00)   | tan4         | <b>5000</b> Developed site -- nonbuilding structures         |
| RGB(139,35,35)<br>RGBHex(8B2323)   | brown4       | <b>6000</b> Developed site -- with buildings                 |
| RGB(34,139,34)<br>RGBHex(22228B)   | forest green | <b>7000</b> Developed site -- with parks                     |
| RGB(211,211,211)<br>RGBHex(D3D3D3) | light gray   | <b>8000</b> Not applicable to this dimension                 |
| RGB(255,255,255)<br>RGBHex(FFFFFF) | white        | <b>9000</b> Unclassifiable site development character        |



\*Specify the RGB (red, green, blue) values, instead of relying on color names, for consistent reproduction of colors on a printer, plotter, or computer screen. Using RGB values can sometimes avoid differences in how software and hardware render colors. Some colors, no matter what, differ how they look on screen from their printed version. Also, if you are reviewing this document on a computer screen, note that some software (web browsers, for example) limit the number of colors displayed. If your software can only accept hexadecimal values, as many GIS and plotting software do, then use the corresponding RGBHex value. For CMYK values and other color coding details, check the LBCS website.

BUILDING HEIGHTS

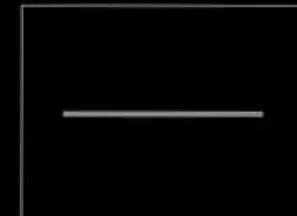
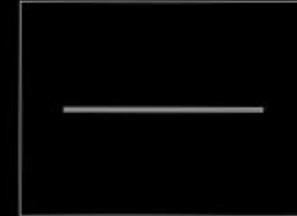
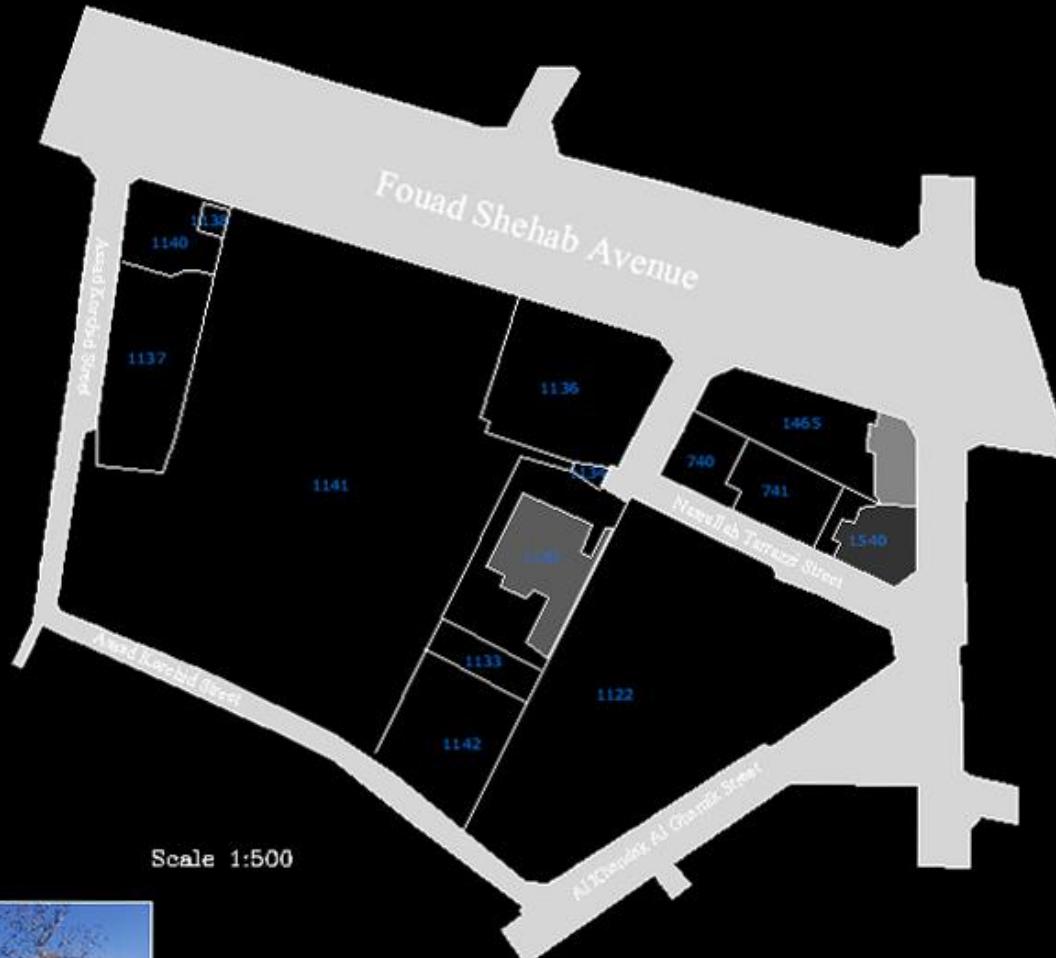


1 FLOOR  
3 FLOORS  
4 FLOORS

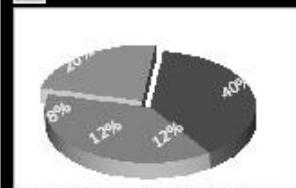
Scale 1:500



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## Building Heights:

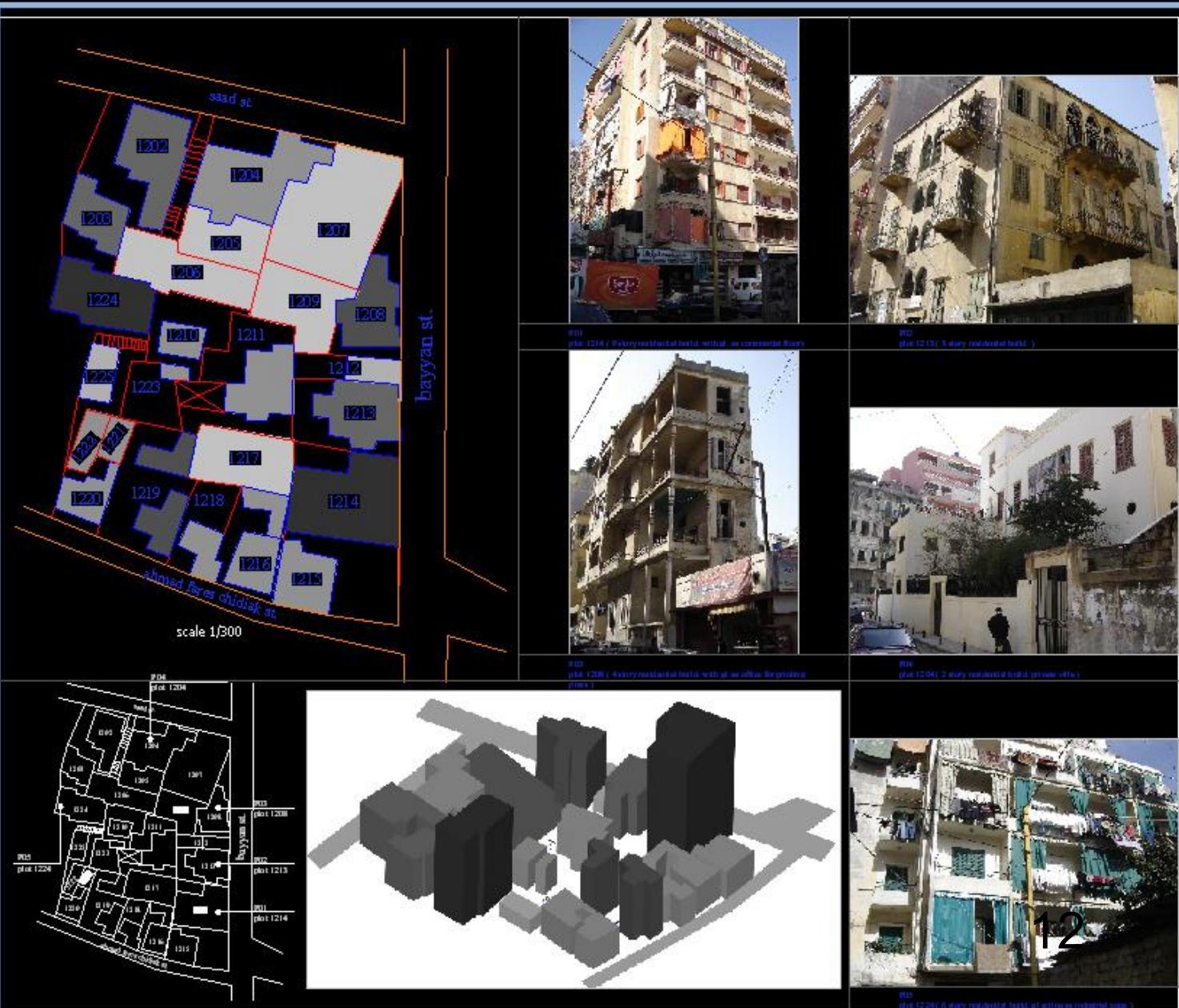


|                          |      |
|--------------------------|------|
| 1 Room buildings         | 8%   |
| 2 Room buildings         | 40%  |
| 3 Room buildings         | 12%  |
| 4 Room buildings         | 12%  |
| 5 Room buildings & above | 19%  |
| Empty Space              | 2.0% |

SHEET NO. 05

PLAN ( SECTOR NO. 5 )

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## BUILDING CONDITIONS



- VERY GOOD
- GOOD
- FAIR
- BAD

Scale 1:500

| BUILDINGS              |                 |                        |
|------------------------|-----------------|------------------------|
| Building Type          | Building status | Notes                  |
| 1-Villa                | Good            | Needs house-early used |
| 2-Residential Building | Good            | Deserted               |
| 3-Commercial Building  | Fair            | Needs Maintenance      |
| 4-Industrial Building  | Good            | ---                    |
| 5-School               | Very Bad        | Must Be Demolished     |
| 6-Fence                | Very Bad        | Must Be Demolished     |



Villa



Residential Building



School

3



Fence



Commercial Building



Industrial Building



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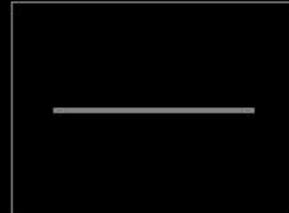
EXISTING BUILDINGS



Scale 1:500

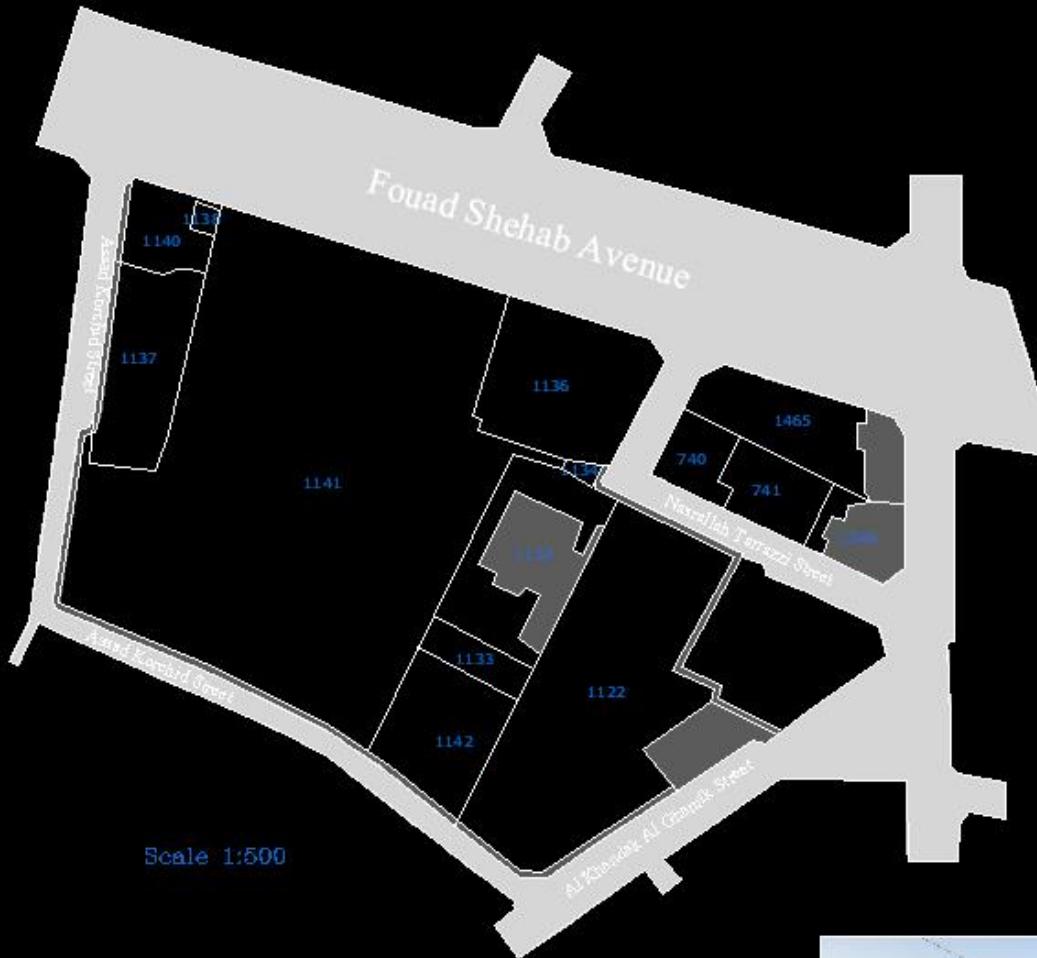
**BUILDINGS**

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## SERVICE BUILDINGS



Scale 1:500

 HOSPITAL

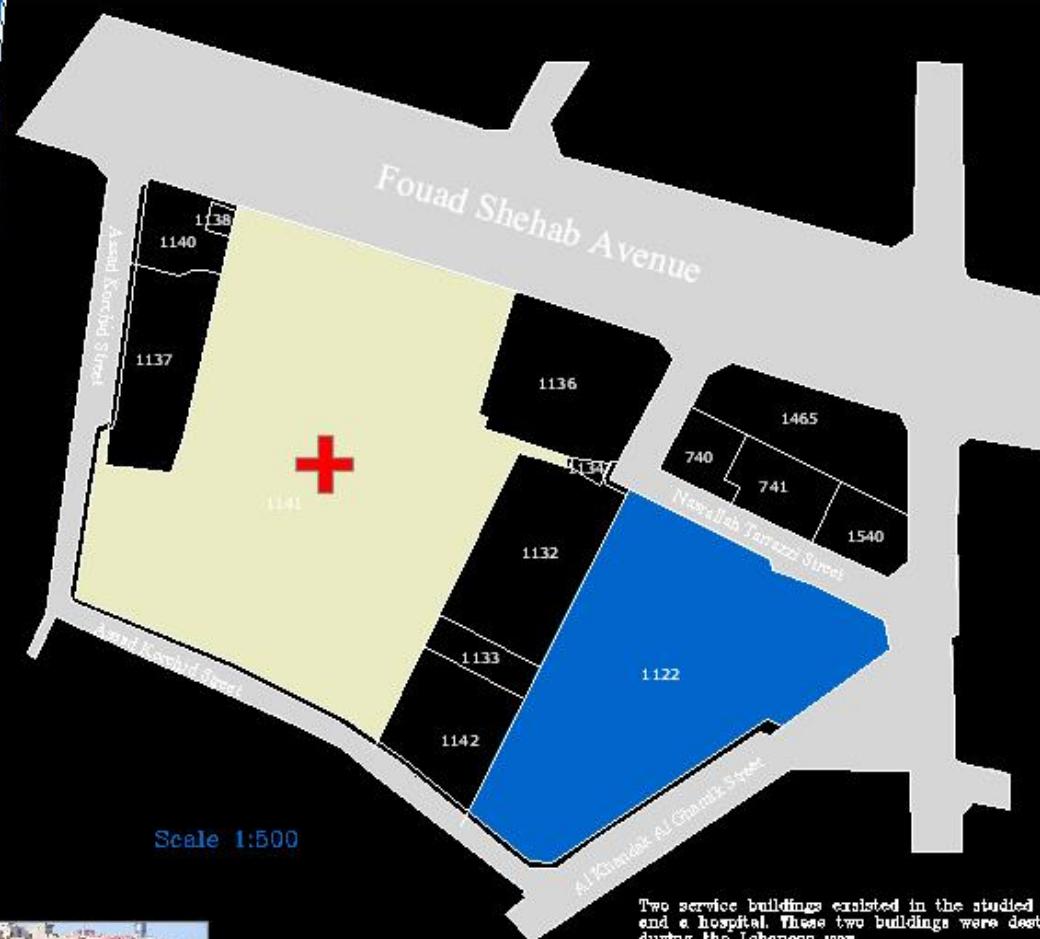
 SCHOOL



Hospital Site



Fouad Shehab Avenue



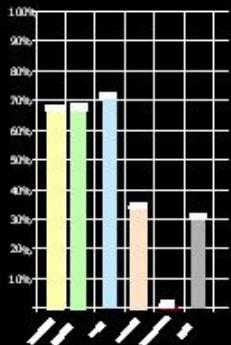
School Site



Two service buildings existed in the studied zone ,a school and a hospital. These two buildings were destroyed completely during the Lebanese war.

The land lots that were used by the school and hospital are now used as playgrounds for children,creating a place for interaction between people.

### Building Services:



SHEET NO. 06

PLAN (SECTOR NO. 5)

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scale 1/200



Notice that buildings under 20 years of age have legal power supply from the government.



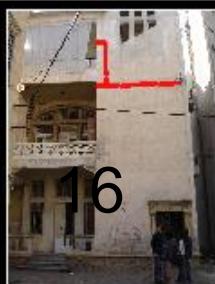
While buildings that age over 50 years all are supplied with electricity illegally



Same is applied for water installments. Notice in the adjacent photos how water pipes are installed on the external elevations of aging buildings.



Phone lines are supplied legally to the area but are distributed to the buildings in an inordinately fashion



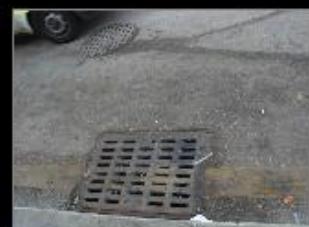
16

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INFRA-STRUCTURE



- Electricity Column
- Electricity BOX
- TELEPHONE BOX
- TELEPHONE HOLE
- TELEVISION HOLE
- MAN HOLE
- BUILDINGS



SCALE 1:500



## VISUAL ASPECTS



- NODE
- MINOR PHYSICAL EDGE (STREETS)
- MAJOR PHYSICAL EDGE (HIGHWAY)
- VISUAL&PHYSICAL EDGE



### VISUAL ASPECTS :

-Landmarks (none)

-Edges: There are two types of edges;

1. Physical:

a. Major: Fouad Shlehab highway is the major physical edge defining zone1.



b. Minor: Internal streets form the minor physical edges defining zone1.



2. Visual & Physical: Old fences that are still found on site, but in a very bad condition, play the role of a physical and visual edge blocking both movement and view.



-Nodes: There are two main nodes in the zone:

1. Hospital & School zone:

The land parcel that used to contain a school and a hospital, is now used as an open playground for children from all the nearby area, were several activities take place especially football.

2. Internet Cafe:

The second important node on site is on the common street between zone 1 & zone 3 (khardak al ghamik), were most children and teenagers from the area gather at the internet cafe.

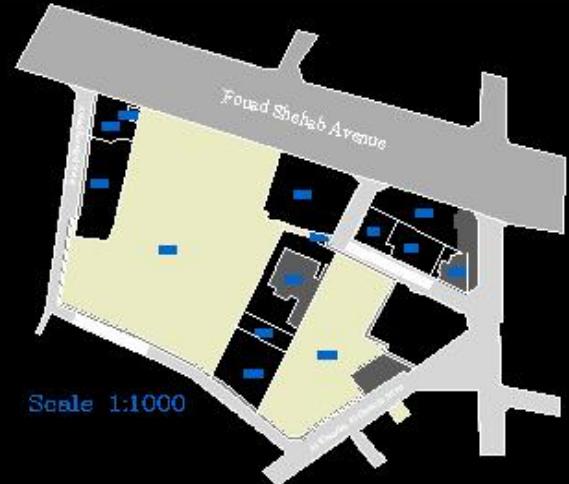
-Activities: Activities taking place in the zone are on two levels.

1. Economical:

This is achieved from the activities of the people working in the car maintenance field. Were they do some of their work on the street.

2. Social:

Social activities are clearly realized in the nodes of the site, were people from different ages meet. Besides to the nodes defined above, it was realized that the streets in these crowded areas are also used as meeting points for teenagers were they gather at defined hours to talk and smoke bubble bubble.



### LAND PRICES



SCALE 1:1000

*Fouad Shehab Avenue*



#### Land Price List

|  | Zone Number | Price              |
|--|-------------|--------------------|
|  | 1           | 1500-3000 Per Dmra |
|  | 2           | 3000-3000 Per Dmra |
|  | 3           | 1500-2000 Per Dmra |
|  | 4           | 700-1000 Per Dmra  |
|  | 5           | 500-700 Per Dmra   |

#### Building Price List

| Street Name                  | Price                         |
|------------------------------|-------------------------------|
| 1- Fouad Shehab              | 1500 & above per square meter |
| 2- AL Istiklal               | 1000 per square meter         |
| 3- AL Barhoun & Zhal AL Blat | 800 to 1000 per square meter  |
| 4- AL Bara AL Yatta          | 700 per square meter          |
| 5- Khandaq EL Ghani          | 150 per square meter          |



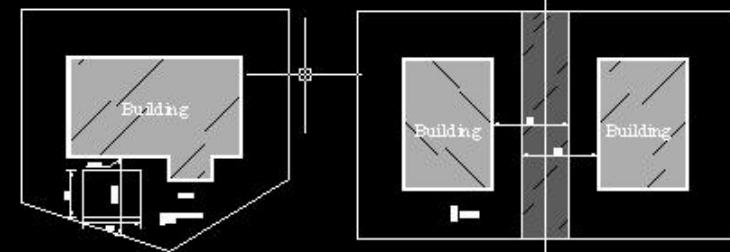
| ZONE No. 2                |                |               |
|---------------------------|----------------|---------------|
| LOT PARCEL AFTER DIVISION |                |               |
| minimum surface           | minimum facade | minimum depth |
| 2.50 m <sup>2</sup>       | 10 m           | 10 m          |

| ZONE No. 2           |                |               |
|----------------------|----------------|---------------|
| CONSTRUCTIBLE PARCEL |                |               |
| minimum surface      | minimum facade | minimum depth |
| 100 m <sup>2</sup>   | 9 m            | 7 m           |

| ZONE No. 2                  |                      |                            |                             |
|-----------------------------|----------------------|----------------------------|-----------------------------|
| MINIMUM SIZE OF PARCEL FROM |                      | PERCENTAGE OF CONSTRUCTION | Coefficient of exploitation |
| Road                        | at front back (side) | 70 %                       | 5                           |
| 4.5m                        | —                    | —                          | —                           |

\* The zone in front of the openings

\* The common zone btw two buildings



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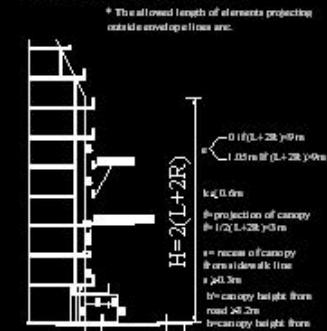
## PERCENTAGE OF CONSTRUCTION & COEFICIENT OF EXPLOITATION



### ENVELOPE LINES



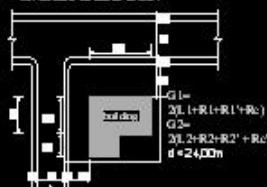
### PROJECTIONS FROM ENVELOPE LINES



\* building located at an intersection between 2 or more roads:



\* building located at an intersection between 2 or more roads:



## BUILDINGS HIGHER THAN 40m

For a building to be higher than 40m it should have the following characteristics:

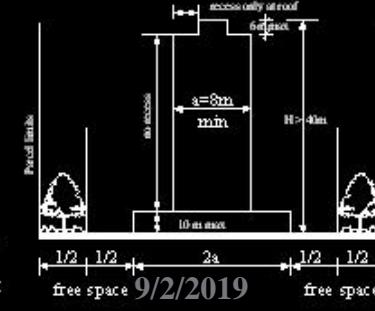
### \* Minimum building dimensions:

- Minimum facade width = 8 m (excluding balconies)

- Ground Floor can be double the width of typical floor

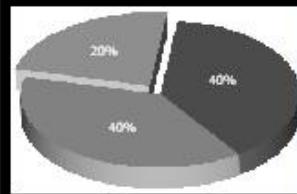
- width should be continued for all floors, excepting roof (because of presence of service core)

- Half the area of "free spaces" around the building should be used as green areas.



## Population

- Populated buildings
- Deserted buildings
- Empty



Pie chart representing buildings populated in % by no. of buildings.

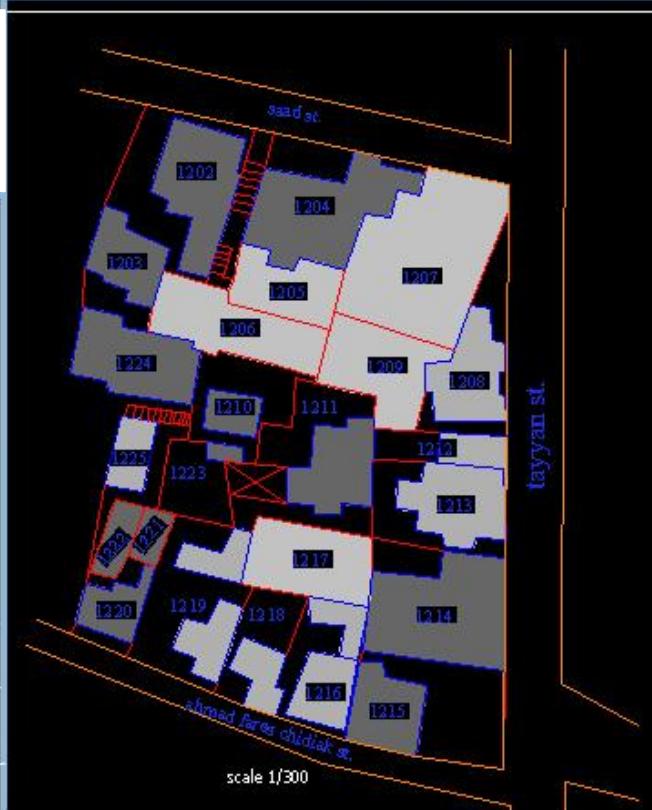
|                     |     |
|---------------------|-----|
| Populated buildings | 40% |
| Deserted buildings  | 40% |
| Empty Space         | 20% |

**NOTE:**  
We observed through our second visit to the area, that all populated buildings are heavily populated as observed in the photos on the far right.

SHEET NO. 05

PLAN ( SECTOR NO. 5 )

Soma A. Kareem



| PLOT NO. | NO. OF FLOORS | NO. OF APP. / FLOOR | AV. NO. OF PERSONS / APP. |
|----------|---------------|---------------------|---------------------------|
| 1 1224   | 1             | 3                   | 5                         |
| 2 1223   | 2             | 2                   | 5                         |
| 3 1221   | 2             | 2                   | 5                         |
| 4 1220   | 2             | 1                   | 5                         |
| 5 1215   | 2             | 1                   | 5                         |
| 6 1214   | 3             | 3                   | 5                         |
| 7 1211   | 2             | 1                   | 5                         |
| 8 1210   | 2             | 1                   | 5                         |
| 9 1204   | 2             | 1                   | 5                         |
| 10 1203  | 1             | 1                   | 5                         |
| 11 1202  | 3             | 1                   | 5                         |

FORMULA FOR CALCULATING POPULATION OF AREA ( ASSUMING 5 PERSONS PER APP. )

$$\text{POPULATION} = E \text{ [no of floors * no. of app. per floor * 5]}$$

$$\Rightarrow \text{POPULATION} = (6*3*5) + (2*2*5) + (2*2*5) + (2*1*5) + (2*1*5) + (8*3*5) + (2*1*5) + (2*1*5) + (2*1*5) + (3*1*5) + (3*1*5)$$

$$\Rightarrow \text{POPULATION} = 330 \text{ pers.}$$

$$\text{ZONE AREA} \approx 8000 \text{ m}^2$$

$$\Rightarrow 0.8 \text{ acre}$$

$$\Rightarrow 415 \text{ pers / acre}$$



Plot 1202  
example of deserted build.

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VEHICLE & PEDESTRIAN  
MOVEMENT



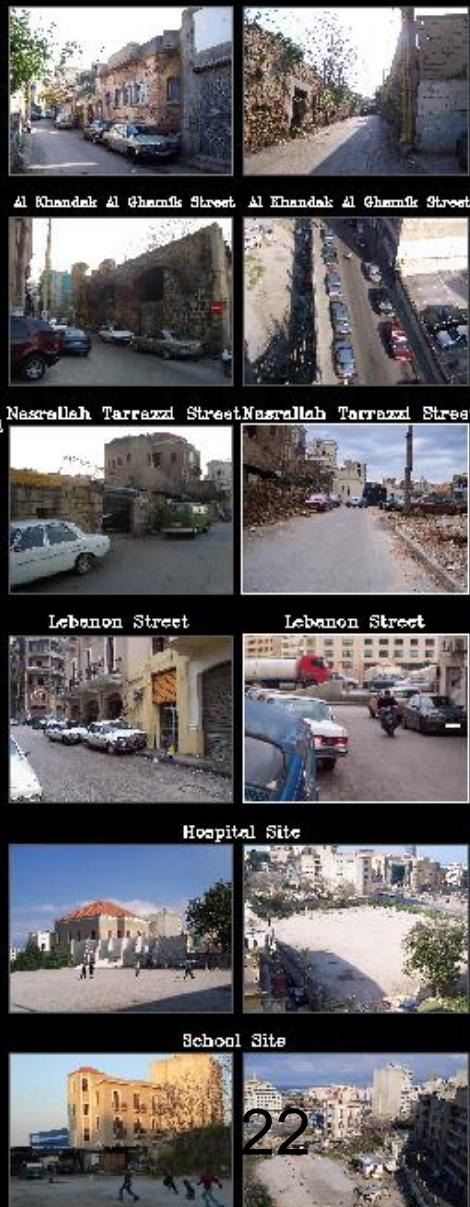
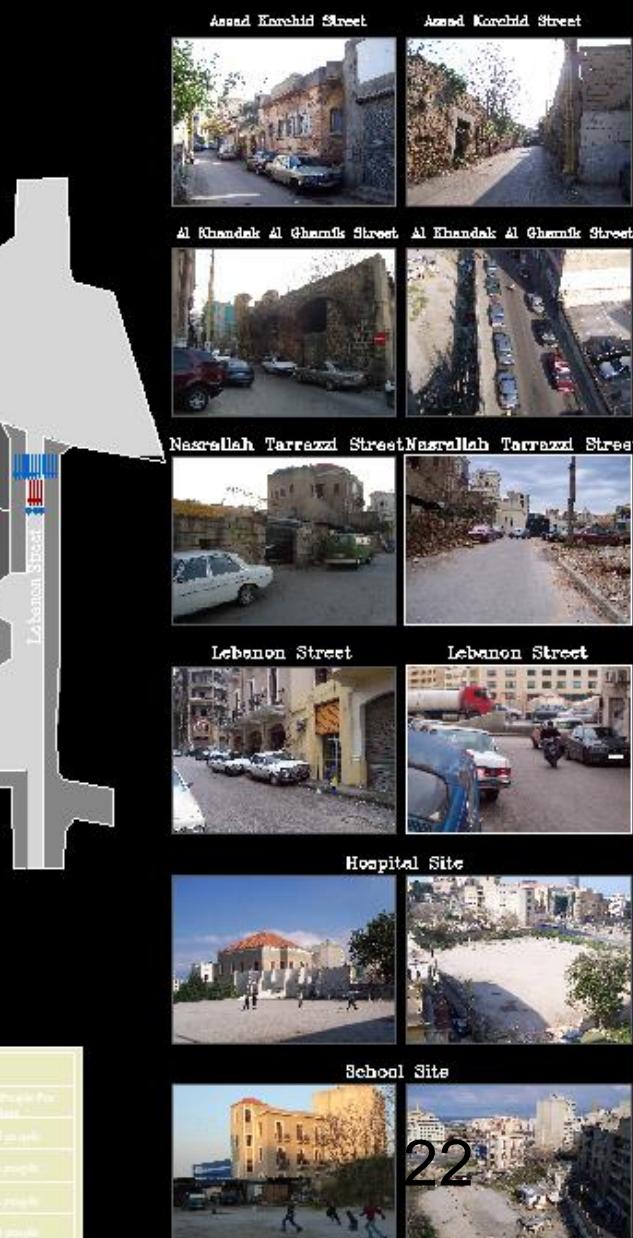
- ACTIVE LANE
- PARKING LANE
- 10 CARS
- 6 BIKES
- 5 PEOPLE
- NODES

TRAFFIC DIRECTION  
& NUMBER OF LANES  
Scale 1:1000

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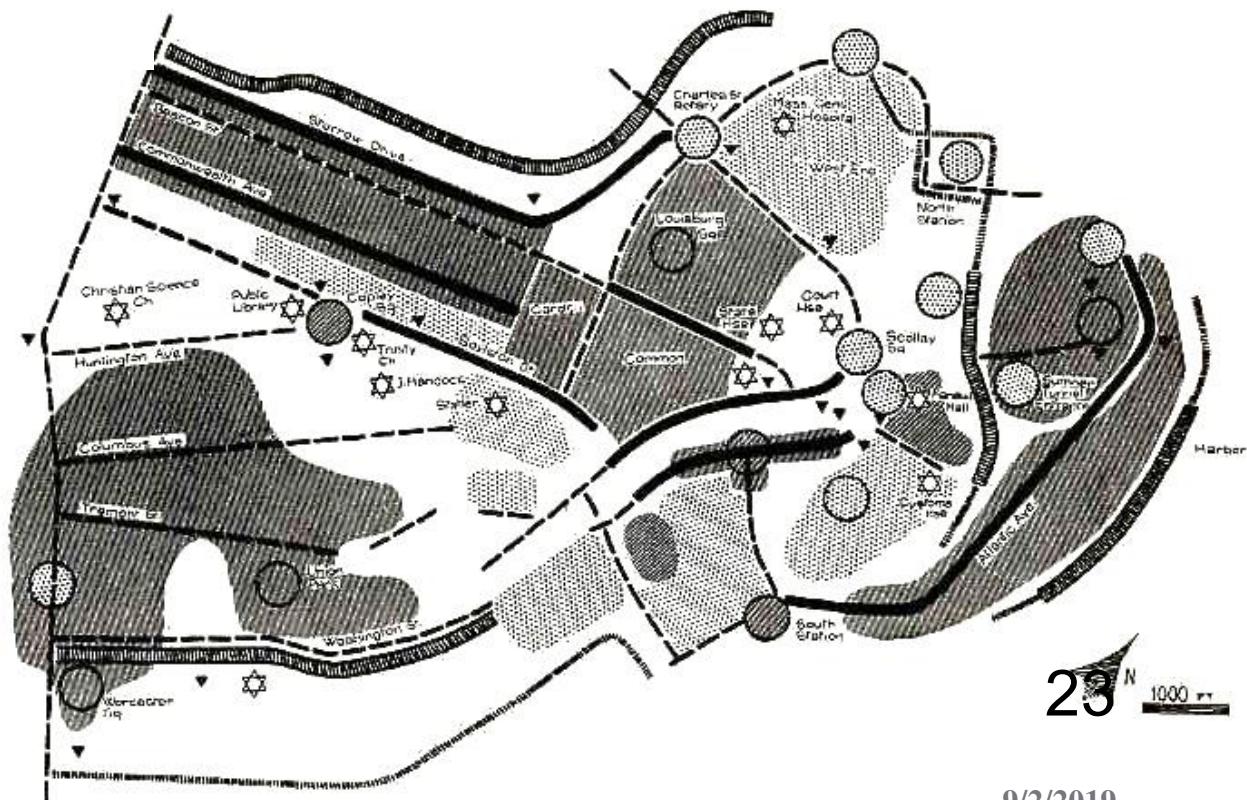
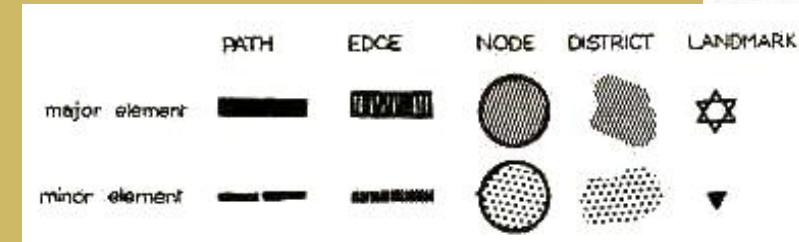
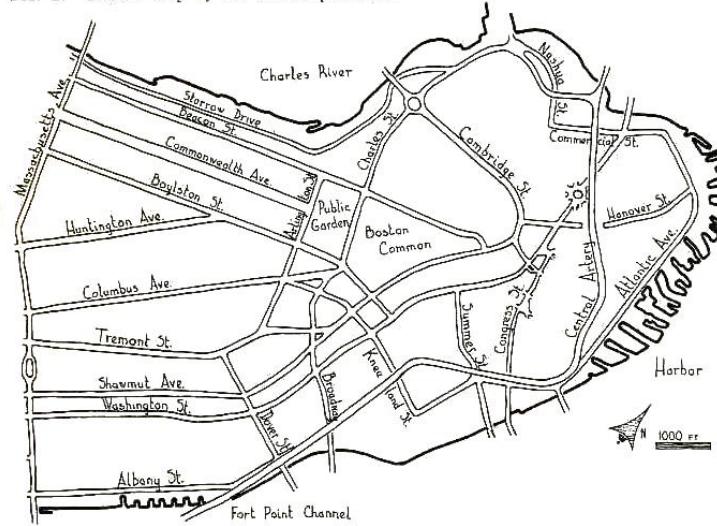
Scale 1:500

Fouad Shehab Avenue

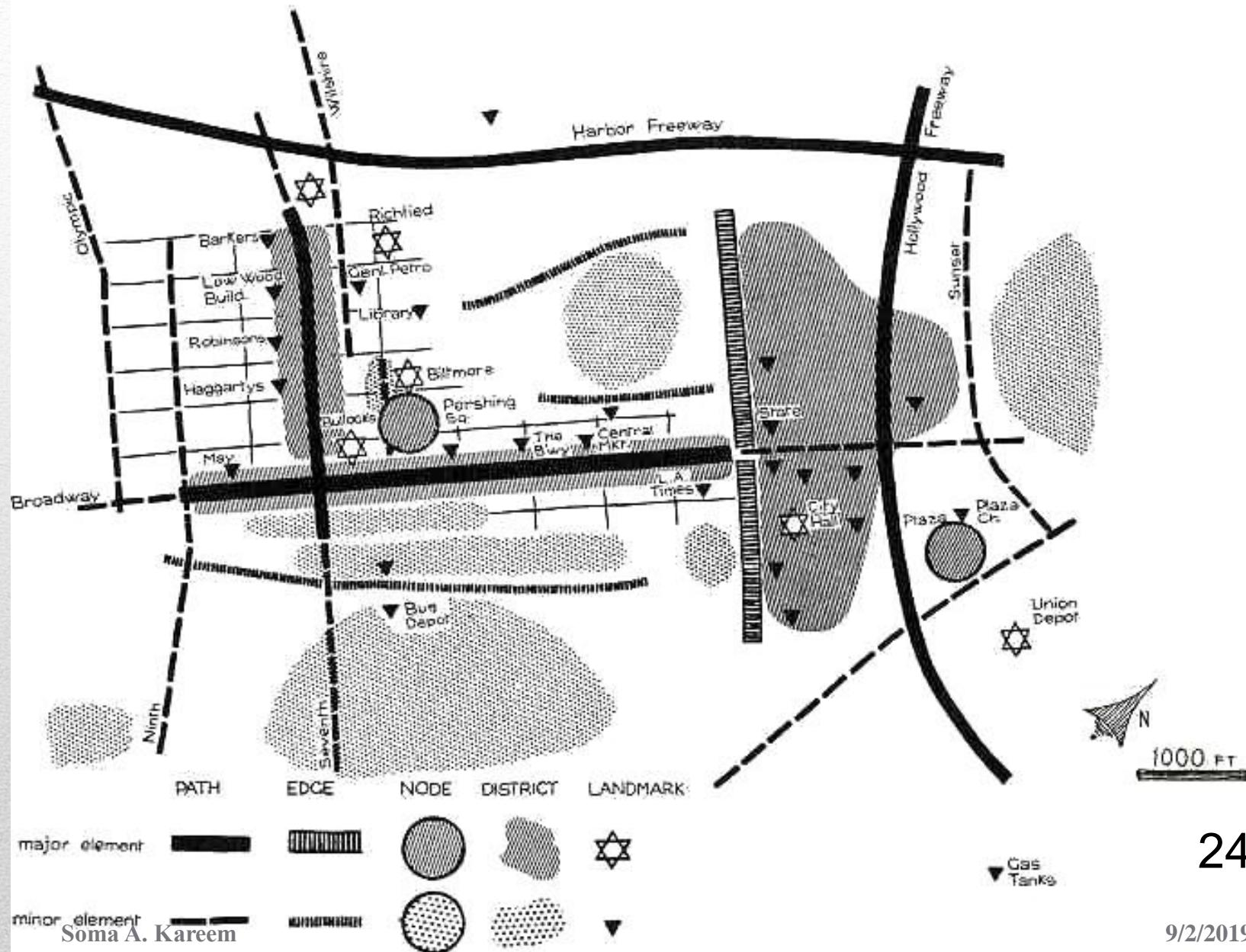


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FIG. 2. Outline map of the Boston peninsula



14. *The visual form of Los Angeles as seen in the field*



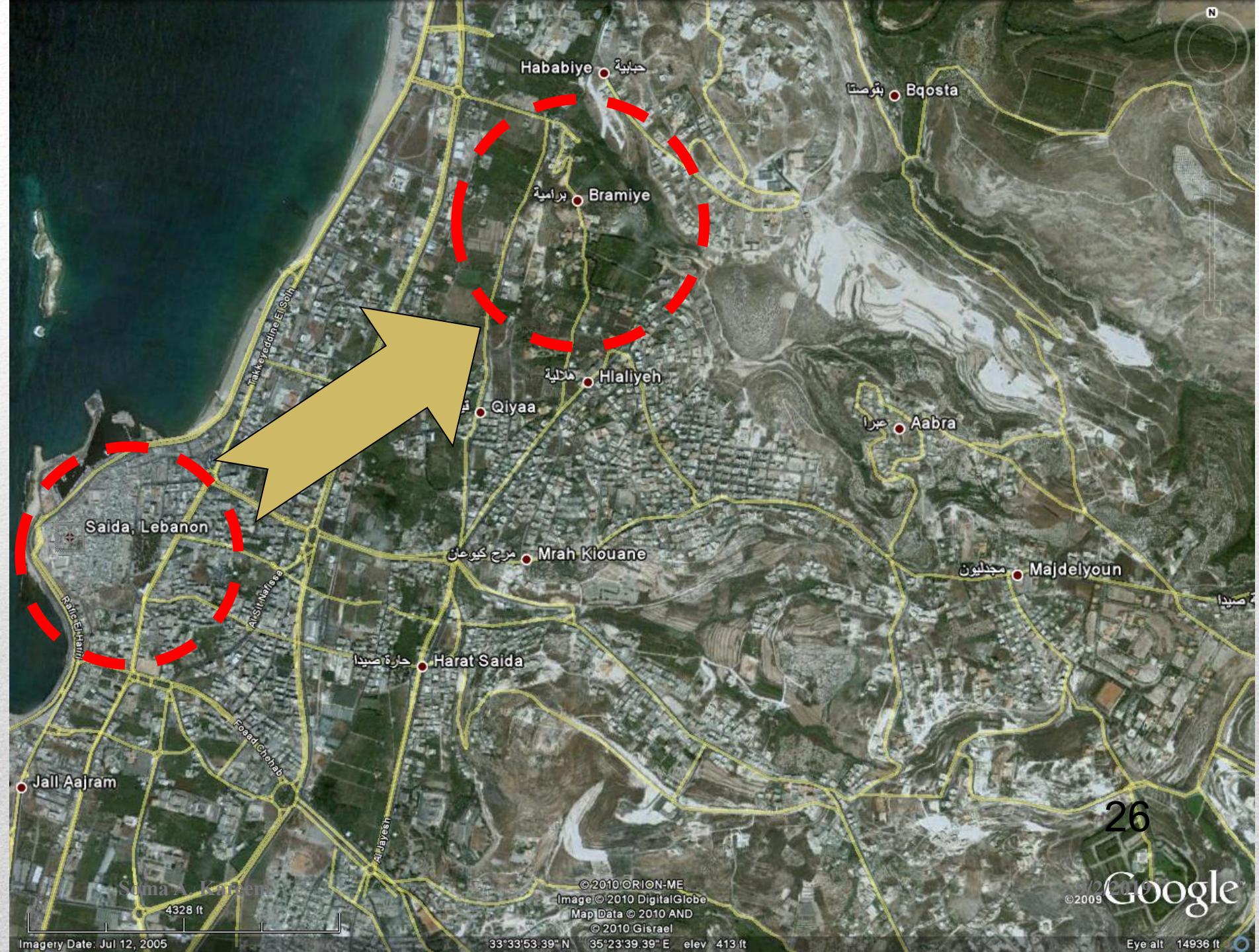
# Planning Maps

- Land Use
- Building Heights
- Building Conditions
- Densities
- Transportation
- Visual Aspects
- Infrastructure
- Model

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**Thank you for your attention...**