



ARCH 322

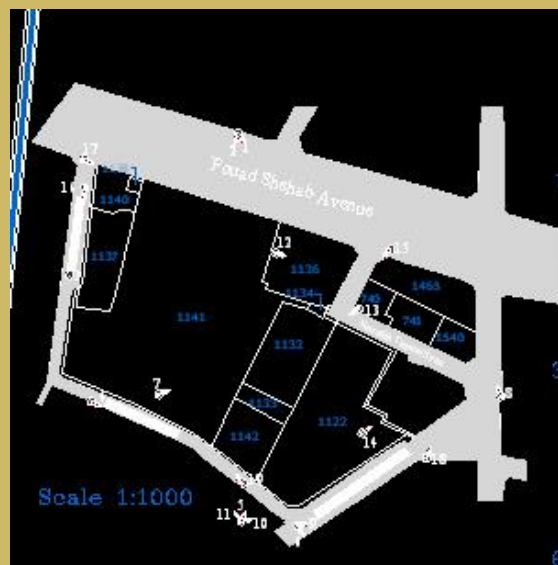
PRINCIPLES OF PLANNING I

1st Lecture

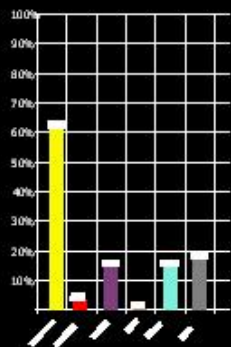
(Site Survey)

Soma A. Kareem





Building Usage:



scale 1/250



1215



1214



1213



1206



1203



1204



1224



1203



1205



1218



1217



1216



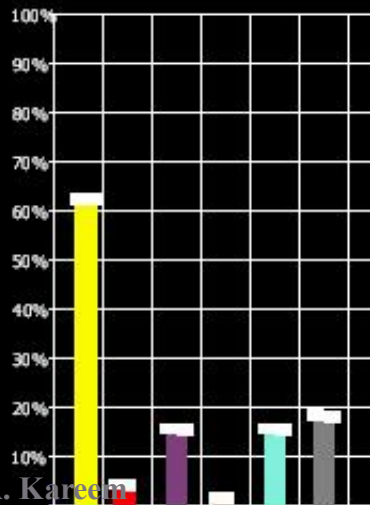
SHEET NO. 05

PLAN (SECTOR NO. 5)

Soma A. Kareem

9/2/2019

Land Use



Soma A. Kareem



LBCS

Land-Based Classification Standards

Land-Use Dimensions



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







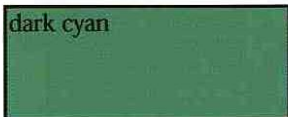

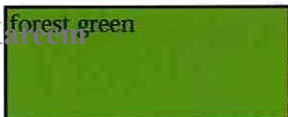


LBCSOwnership

- 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





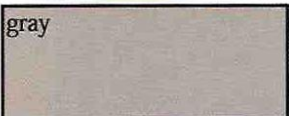



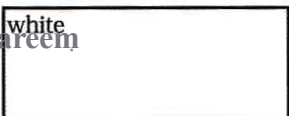
Function

Red, Green, Blue Values	Color*	LBCS Code
RGB(255,255,0) RGBHex(FF00FF)		1000 Residence or accommodation functions
RGB(255,0,0) RGBHex(FF0000)		2000 General sales or services
RGB(160,32,240) RGBHex(A0F020)		3000 Manufacturing and wholesale trade
RGB(190,190,190) RGBHex(BEBEBE)		4000 Transportation, communication, information, and utilities
RGB(144,238,144) RGBHex(9090EE)		5000 Arts, entertainment, and recreation
RGB(0,0,255) RGBHex(00FF00)		6000 Education, public admin., health care, and other inst.
RGB(0,139,139) RGBHex(008B8B)		7000 Construction-related businesses
RGB(85,26,139) RGBHex(558B00)		8000 Mining and extraction establishments
RGB(34,139,34) RGBHex(22228B)		9000 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) RGBHex(FF00FF)		1000 Residential buildings
RGB(255,0,0) RGBHex(FF0000)		2000 Commercial buildings and other specialized structures
RGB(160,32,240) RGBHex(A0F020)		3000 Public assembly structures
RGB(0,0,255) RGBHex(00FF00)		4000 Institutional or community facilities
RGB(190,190,190) RGBHex(BEBEBE)		5000 Transportation-related facilities
RGB(133,133,133) RGBHex(858585)		6000 Utility and other nonbuilding structures
RGB(255,192,203) RGBHex(FFCBC0)		7000 Specialized military structures
RGB(34,139,34) RGBHex(22228B)		8000 Sheds, farm buildings, or agricultural facilities
RGB(255,255,255) RGBHex(FFFFFF)		9000 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

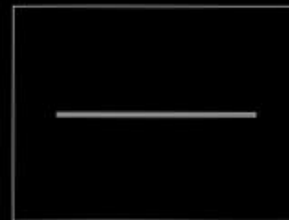
Red, Green, Blue Values	Color*	LBCS Code
RGB(144,238,144) RGBHex(9090EE)		1000 Site in natural state
RGB(245,245,220) RGBHex(F5DCF5)		2000 Developing site
RGB(205,183,158) RGBHex(CD9EB7)		3000 Developed site -- crops, grazing, forestry, etc.
RGB(139,126,102) RGBHex(8B667E)		4000 Developed site -- no buildings and no structures
RGB(139,90,43) RGBHex(8B2B00)		5000 Developed site -- nonbuilding structures
RGB(139,35,35) RGBHex(8B2323)		6000 Developed site -- with buildings
RGB(34,139,34) RGBHex(2228B)		7000 Developed site -- with parks
RGB(211,211,211) RGBHex(D3D3D3)		8000 Not applicable to this dimension
RGB(255,255,255) RGBHex(FFFFFF)		9000 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.

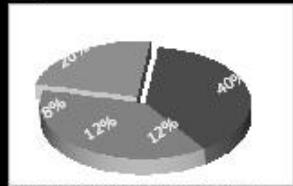
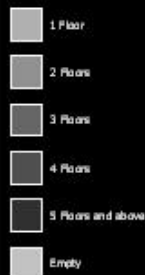
BUILDING HEIGHTS



- 1 FLOOR
- 3 FLOORS
- 4 FLOORS



Building Hights:



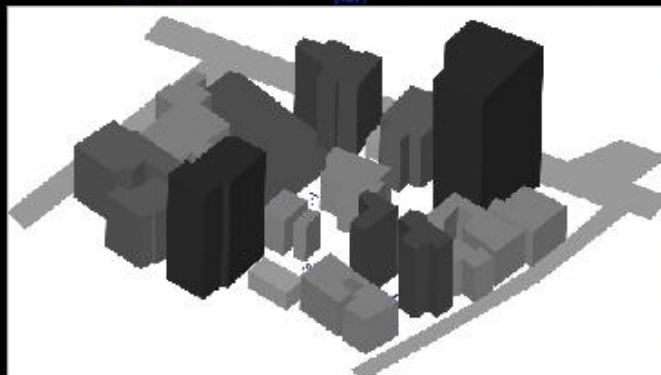
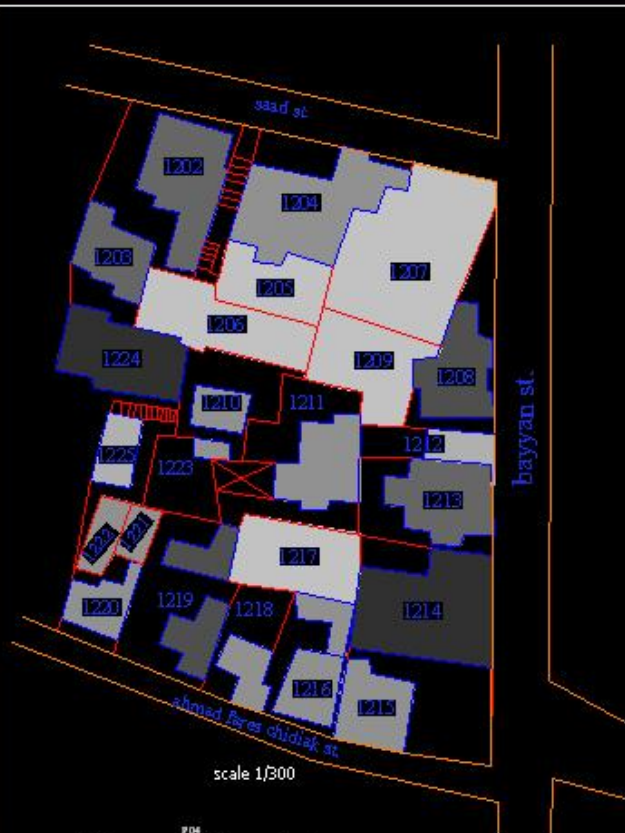
Pie chart representing building heights by % in No.

1 floor buildings	8%
2 floors buildings	40%
3 floors buildings	12%
4 floors buildings	12%
5 floors buildings & above	8%
Empty Space	20%

SHEET NO. 05

PLAN (SECTOR NO. 5)

Soma A. Kareem



Plot 1204 (4 story residential building with an commercial floor)



Plot 1208 (4 story residential building with an office for printing)



Plot 1213 (5 story residential building)



Plot 1201 (5 story residential building private villa)



Plot 1201 (5 story residential building with an office for printing)

9/2/2019

BUILDING CONDITIONS



- VERY GOOD
- GOOD
- FAIR
- BAD

Scale 1:500

BUILDINGS		
Building Type	Building situation	Notes
1-Villa	Good	Must be house-ready 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



Fence



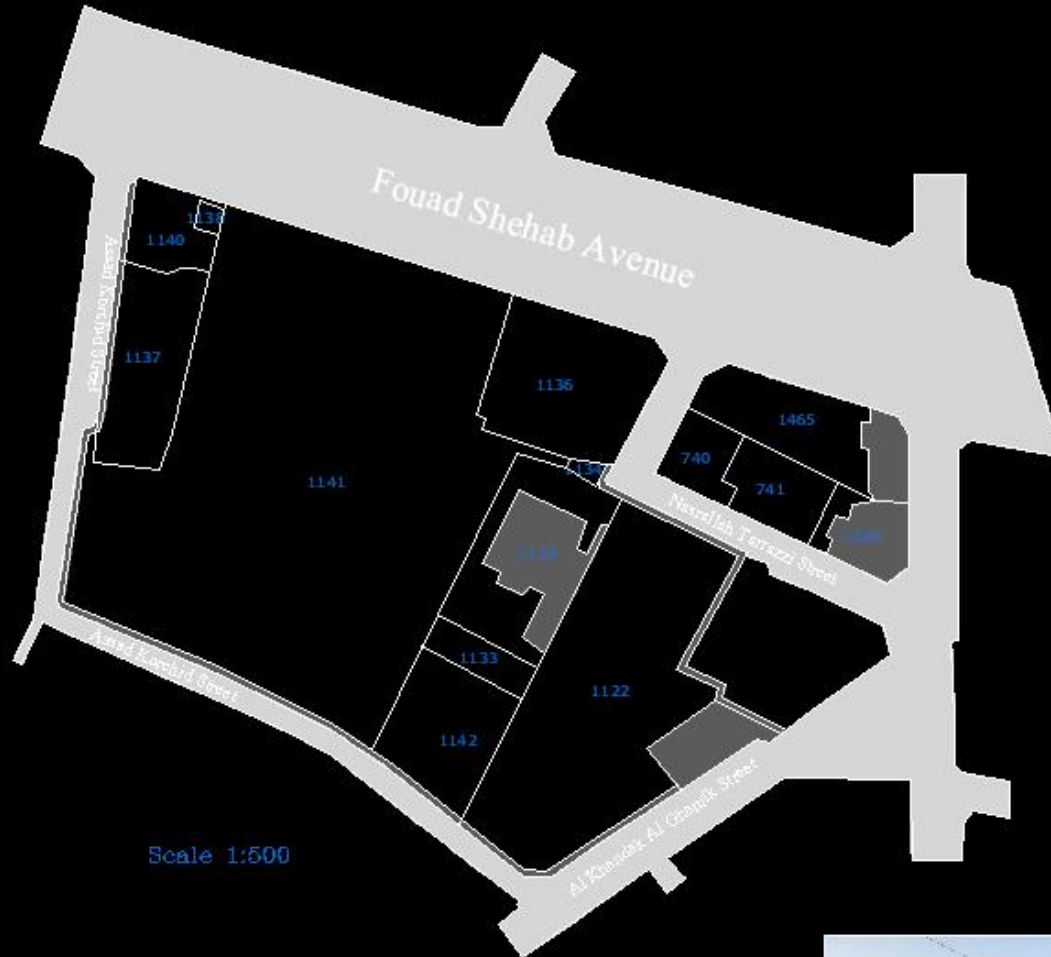
Commercial Building



Industrial Building



EXISTING BUILDINGS



Scale 1:500

■ BUILDINGS



14

9/2/2019

SERVICE BUILDINGS



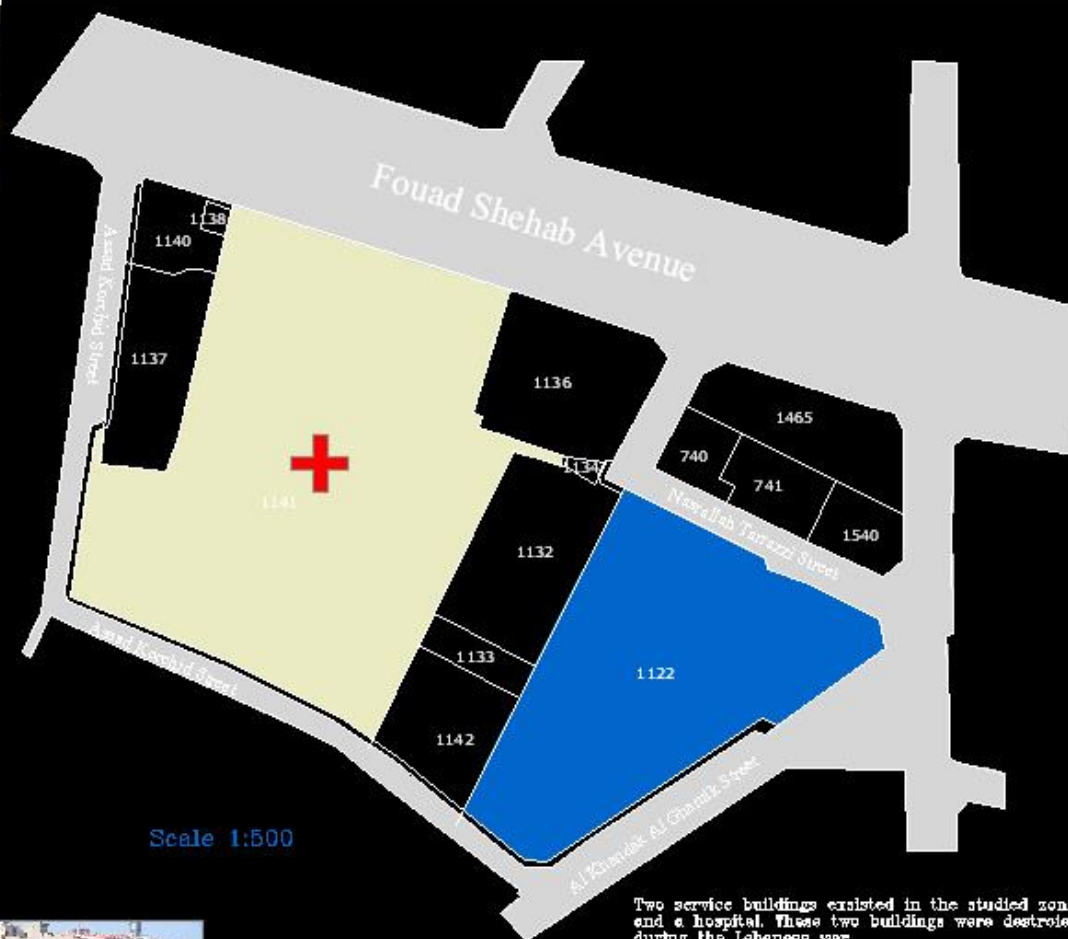
Scale 1:500



Hospital Site



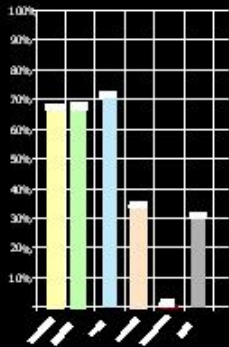
School Site



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.

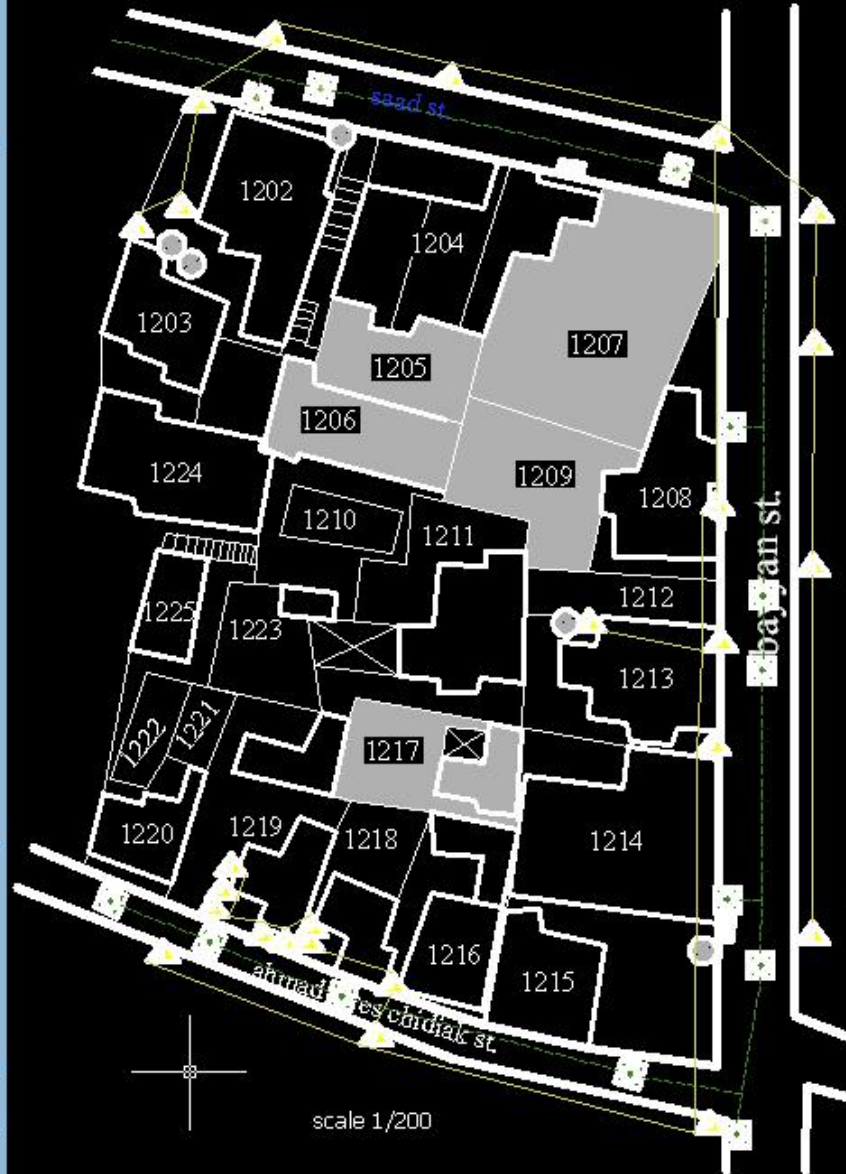
Building Services:



SHEET NO. 06

PLAN (SECTOR NO. 5)

Sana A. Kareem



scale 1/200



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



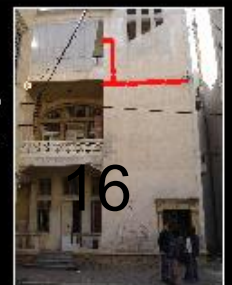
While buildings that age over 50 years all are supplied with electricity illegally



Same is applied for water instalments. 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 inordarly fashion



9/24/2019

INFRA-STRUCTURE



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



VISUAL ASPECTS



VISUAL ASPECTS :

-Landmarks (none)

-Edges: There are two types of edges;

1. Physical

a. Major: Fouad Shehab highway is the major physical edge defining zone 1.



b. Minor: Internal streets form the minor physical edges defining zone 1.



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, where several activities take place especially football.

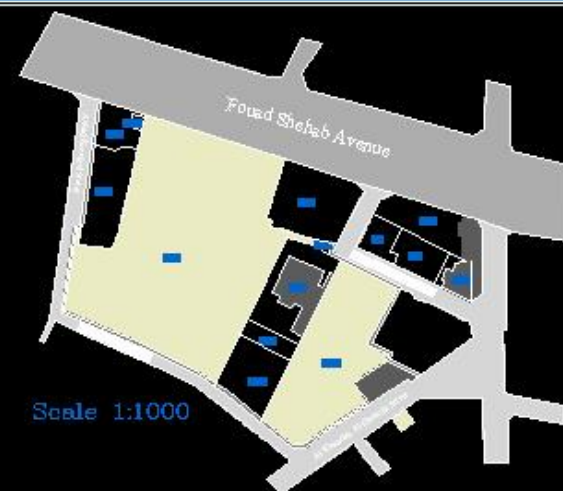
2. Internet Cafe:

The second important node on site is on the common street between zone 1 & zone 3 (khandak al ghamik), where 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. Where they do some of their work on the street.



Scale 1:1000

■ NODE

■ MINOR PHYSICAL
EDGE (STREETS)

■ MAJOR PHYSICAL
EDGE (HIGHWAY)

■ VISUAL & PHYSICAL
EDGE

■ BUILDINGS

LAND PRICES



SCALE 1:1000



Land Price List

	Zone Number	Price
	1	3500-5000 Per Dina
	2	3000-3500 Per Dina
	3	1500-3000 Per Dina
	4	700-1000 Per Dina
	5	300-700 Per Dina

Building Price List

Street Name	Price
1- Fouad Shehab	1500 \$ above per square meter
2- AL Istiklal	1000 per square meter
3- AL Barhouva & Zikab AL Hlat	800 to 1000 per square meter
4- AL Barwa AL Taha	700 per square meter
5- Khazalak EL Ghannik	450 per square meter



ZONE No. 2		
LOT PARCEL AFTER DIVISION		
minimum surface	minimum facade	minimum depth
250 m ²	10 m	10 m

ZONE No. 2		
CONSTRUCTIBLE PARCEL		
minimum surface	minimum facade	minimum depth
100 m ²	9 m	7 m

ZONE No. 2		
MINIMUM PERCENTAGE OF FACADE OPEN	PERCENTAGE OF FACADE OPEN	COEFFICIENT OF EXPLOITATION
Road	45m	70%
Side street	30m	70%
Back yard	15m	70%
MAX. HEIGHT BUILDINGS	5	5

PERCENTAGE OF CONSTRUCTION & COEFFICIENT OF EXPLOITATION

a) Balconies, terraces, & roof:



Calculated if Area > 5% of exploitation coefficient

b) Columns Floors



Calculated if Area > 5% of exploitation coefficient

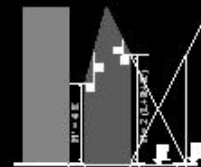
c) Service Core & water tanks at roof



Not Calculated if: Total Area ≤ 35m² + 15m² for every additional elevator. H ≤ 4 m

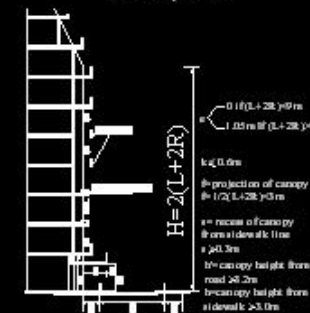
ENVELOPE LINES

*Building height:

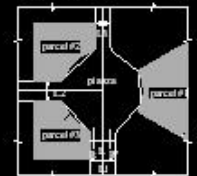


PROJECTION FROM ENVELOPE LINES

* The allowed length of elements projecting outside envelope lines are:



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

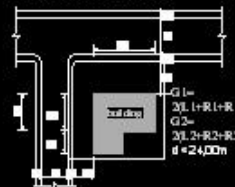


$$L1=L+R+R'$$

$$L1>L2>L3$$

Height of facades facing plaza H= 2L1

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



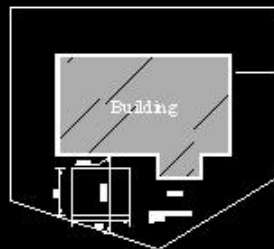
$$G1=2L1+R1+R2+R3$$

$$G2=2L2+R2+R1+R3$$

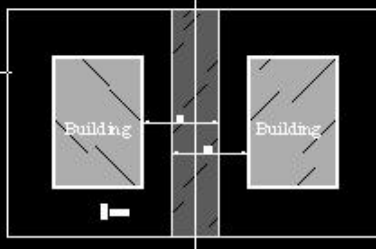
$$G=2L3+R3+R1+R2$$

$$d=24.00m$$

* The zone in front of the openings

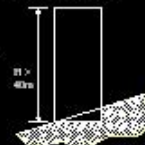


* The common zone b/w two buildings



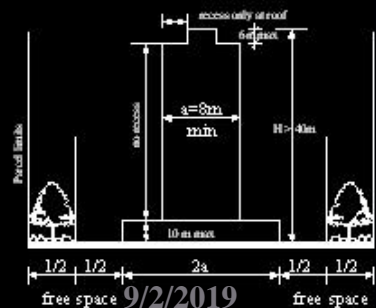
BUILDINGS HIGHER THAN 40m

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



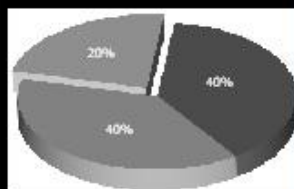
*Minimum building dimensions:

- 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 build.

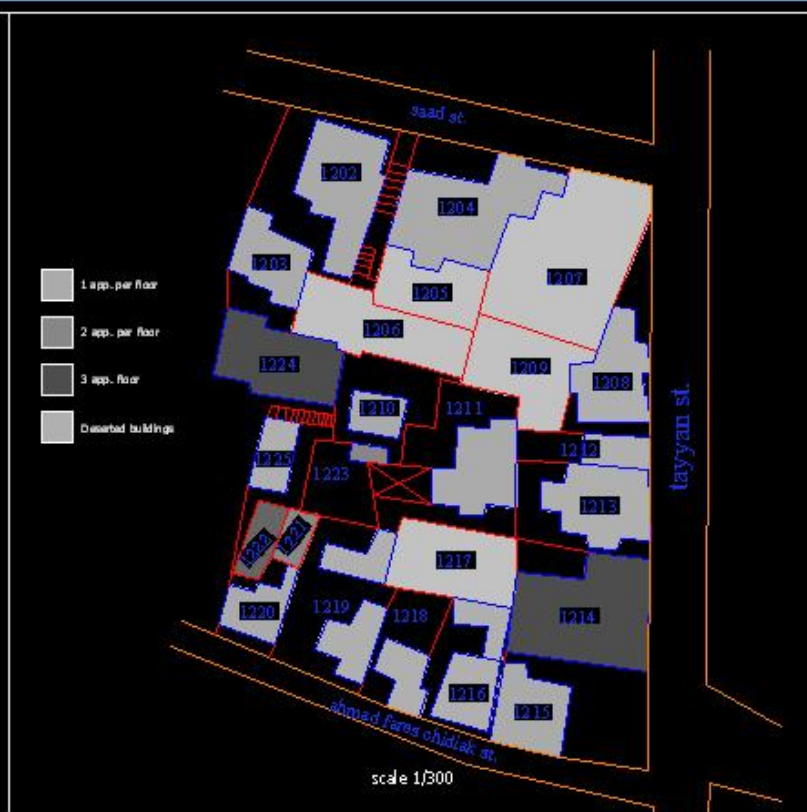
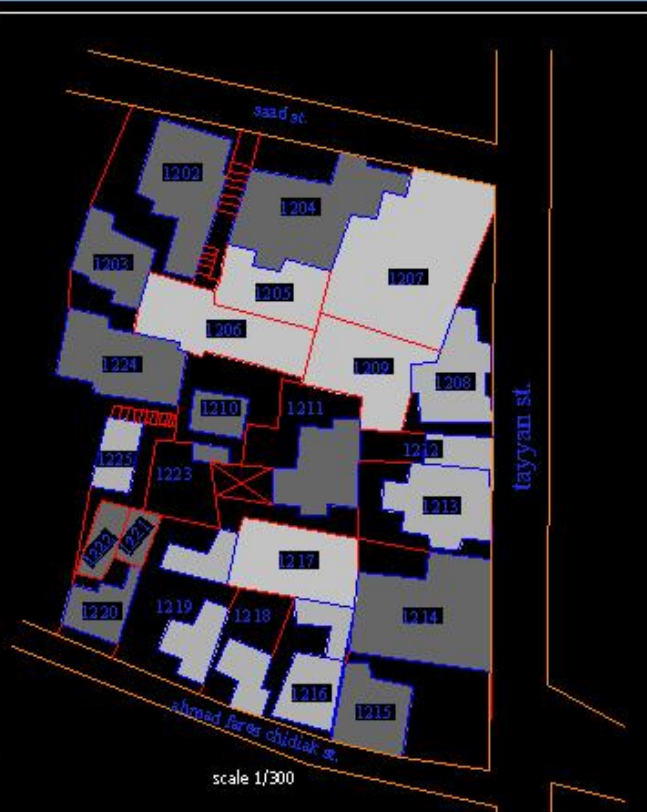
Populated buildings	40%
Deserted buildings	40%
Empty Space	20%

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)

Sana 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	8	3	5
7	1211	2	1	5
8	1210	2	1	5
9	1204	2	1	5
10	1203	2	1	5
11	1202	2	1	5

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

POPULATION = E [no. of floors * no. of app. per floor * 5]

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

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

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

$$\Rightarrow 0.8 \text{ acer}$$

$$\Rightarrow 415 \text{ pers. / acer}$$



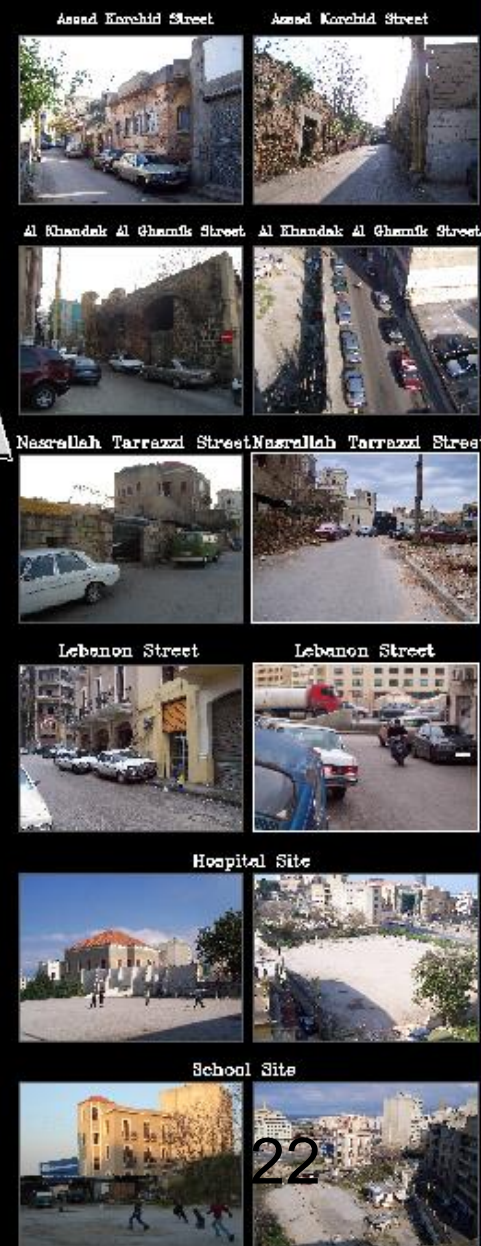
Plot 1202
example of deserted build.

9/2/2019

VEHICLE & PEDESTRIAN MOVEMENT



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



Traffic Schedule			
Location	No. of Cycles Per Hour Per Lane	No. of Buses Per Hour Per Lane	No. of People Per Hour
Lebanon Street	100 cycles	10 buses	10 people
Nasrallah Tarrazzi Street	50 cycles	5 buses	5 people
Al Khandak Al Ghannik Street	20 cycles	2 buses	2 people
Assad Korchid Street	10 cycles	1 bus	1 person

FIG. 2. Outline map of the Boston peninsula

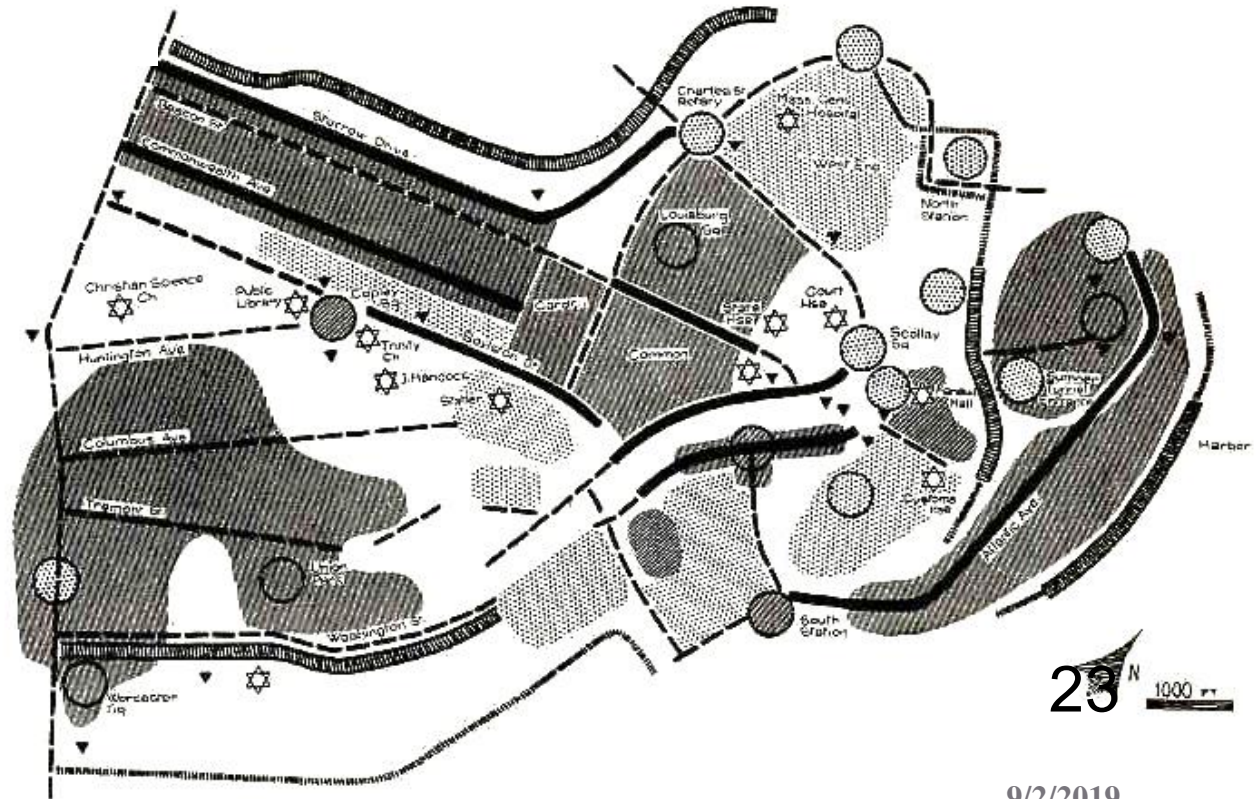
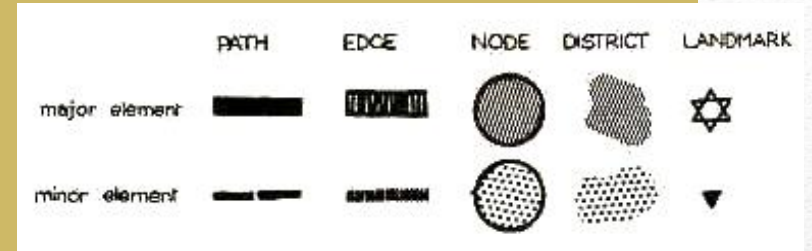
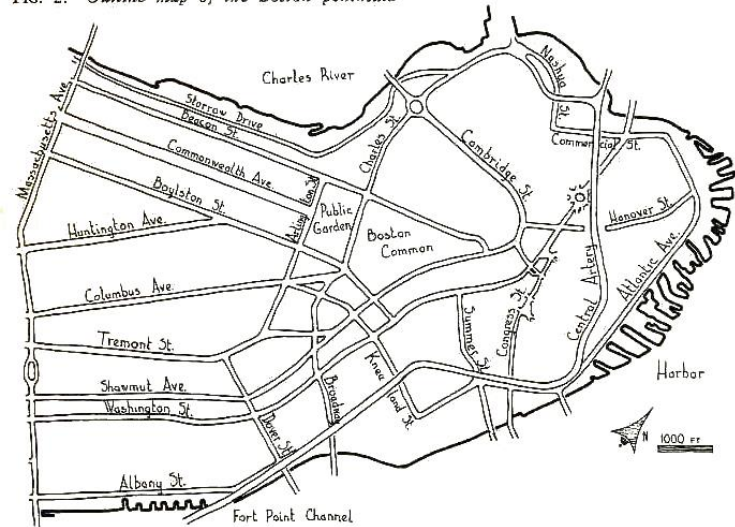
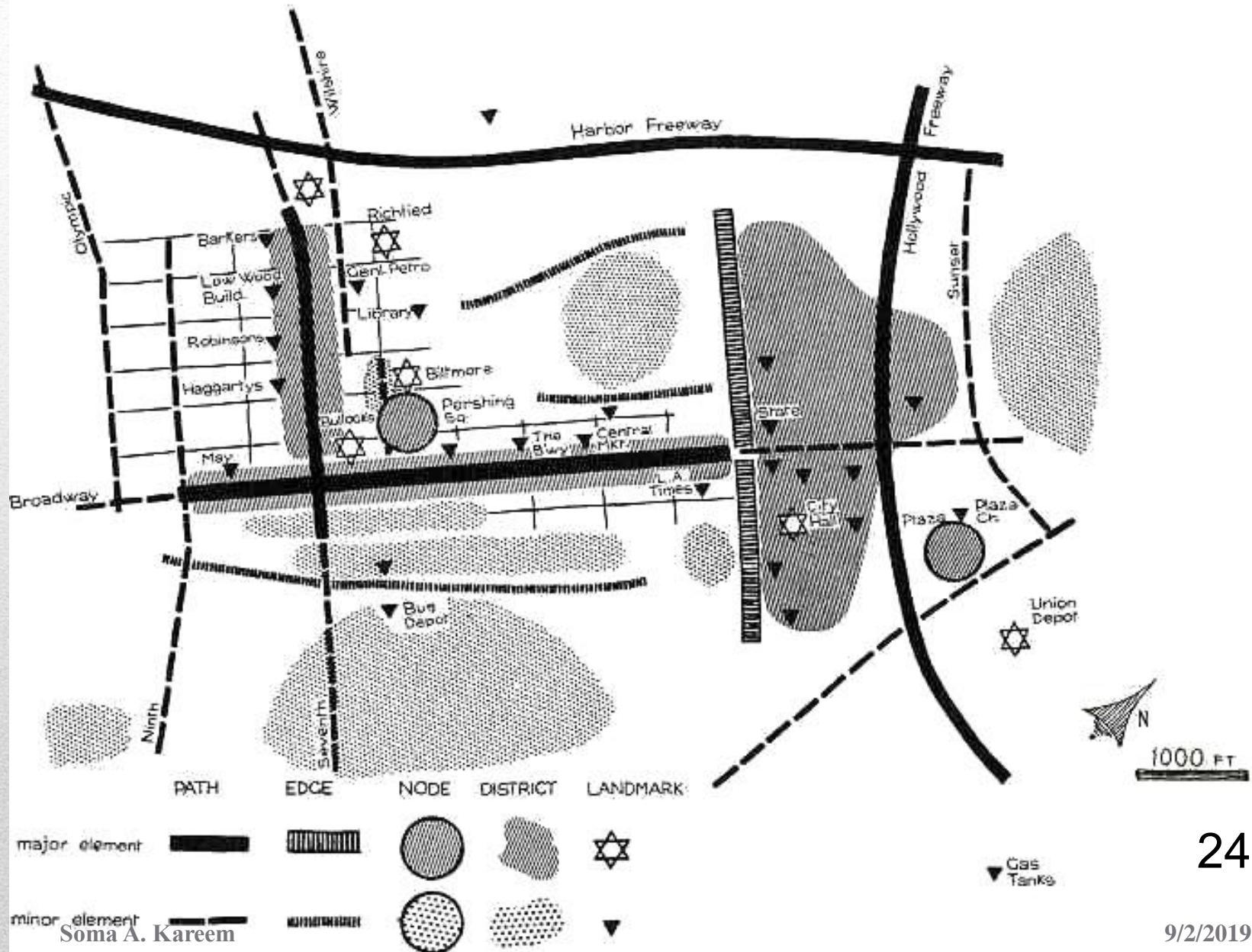


FIG. 3. The visual form of Boston as seen in the field

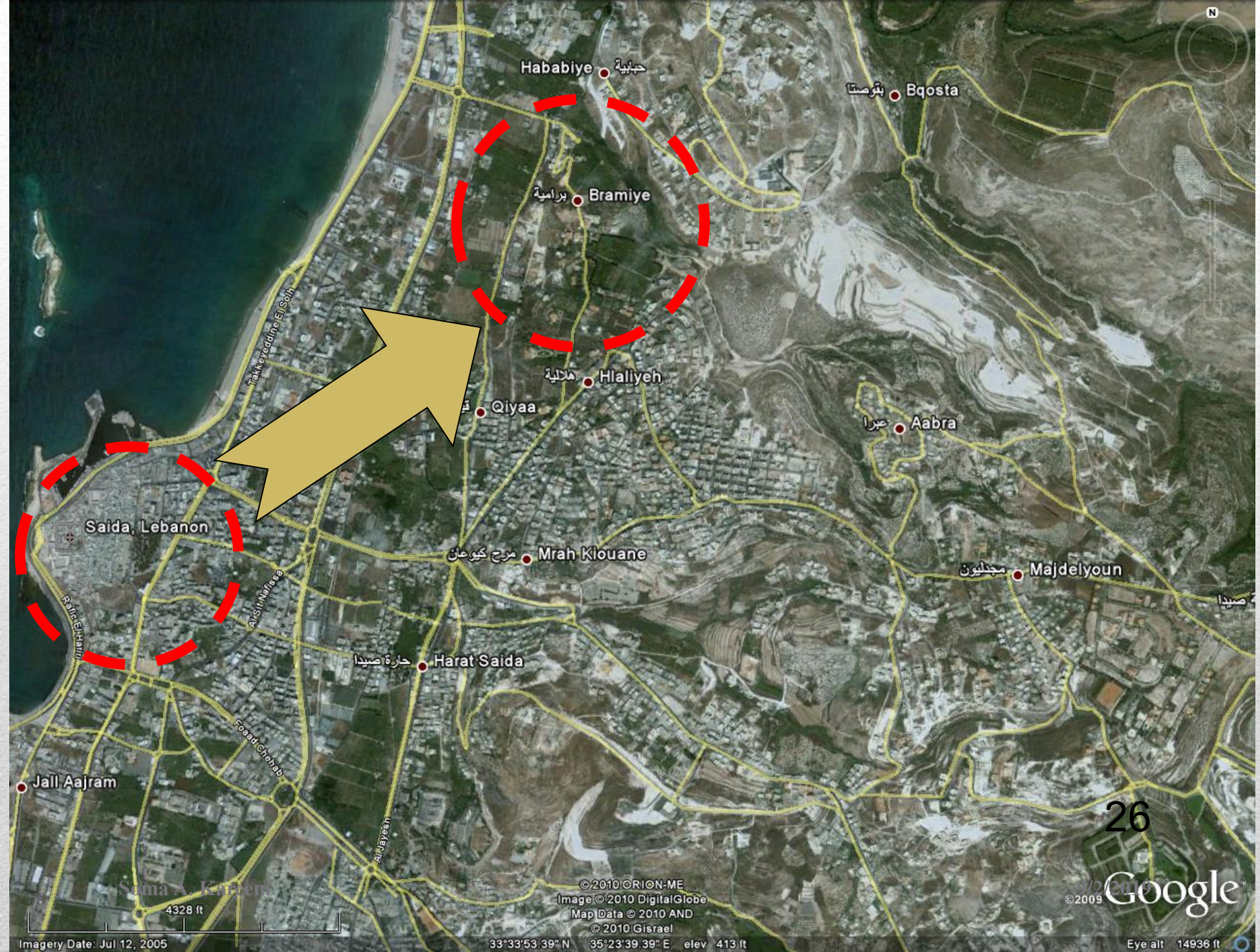
14. The visual form of Los Angeles as seen in the field



An aerial photograph of a city coastline, likely San Francisco, showing a dense urban area with a grid street pattern, a harbor, and a bridge in the distance. A black rectangular box is overlaid on the top left portion of the image, containing the title text.

Planning Maps

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



Thank you for your attention...