

CIHAN UNIVERSITY/SULIMANIA,  
ARCHITECTURAL ENGINEERING DEPT.  
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FIRST SEMESTER    THESIS



CIHAN UNIVERSITY  
SULAIMANI

# Location Study

CHAPTER 2  
LECTURE 3

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Location study

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graph TD; A[Location study] --- B[Site analysis]; A --- C[Site selection]; B --- D[Considerations]; C --- E[Selection Criteria]
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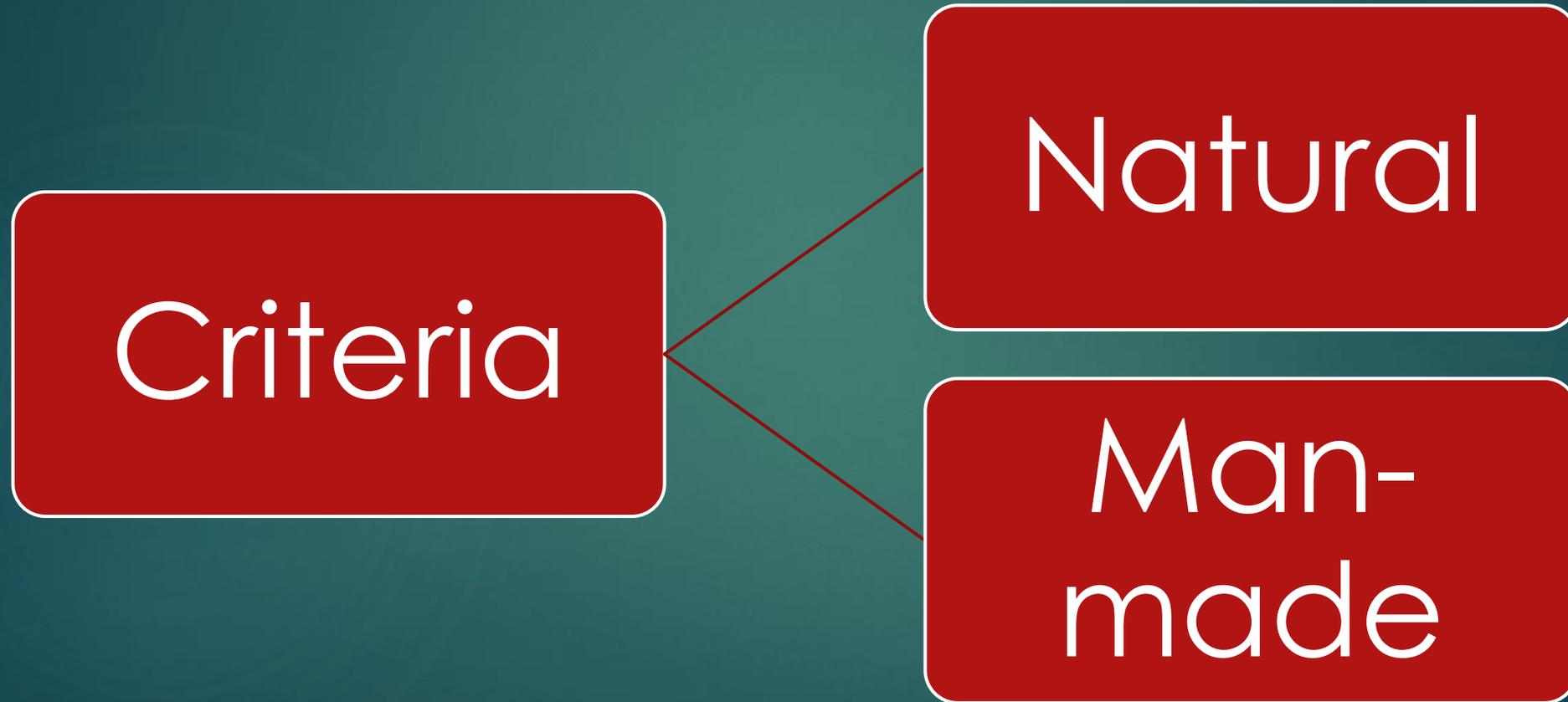
Site analysis

Site selection

Considerations

Selection  
Criteria

# Site selection criteria



# Natural criteria

Topology

Geography

Climate

Vegetation

Site topography

Site slope  
(section)

Kind of surface  
soil

Surrounded  
surfaces

Surface water

Sun path

Rain & snow

Wind

Inside

Outside location

# Man-made Criteria

Services

Site  
size

Land  
use

Circulation

Social & Culture

Sewerage system

Electrical system

Water supply

Other utilities

Actual size

Future extension

Surroundings

Restriction use

Car accessibility

Public transport

Pedestrian

Typology

Density

Noise

View &  
landmarks

# Site selection

- ▶ Site alternatives
- ▶ Criteria score (1, 2, 3, ...)





# Alternative evaluation matrix

Consideration/criteria		Importance of criteria (5 highest, 1 lowest)	Site 1	Site 2	Site 3			
1.	Accessibility	4	4	16	3	12	3	12
2.	Safety	3	3	9	2	6	3	9
3.	Distance to houses	5	4	20	2	10	4	20
4.	Future extension	3	4	12	4	12	1	3
5.	surrounding	4	4	16	3	12	3	12
6.	noise	3	3	9	2	6	3	9
7.	topography	1	3	3	3	3	2	2
8.	utilities	2	3	6	3	6	2	4
TOTAL PERCENTAGE				91		67		71

# Kit for sites analysis check list

- ▶ <https://www.firstinarchitecture.co.uk/architecture-site-analysis-guide-2/>

# What kind of information are we collecting?

Neighbourhood context – the immediate surrounding of the site including data on zoning and buildings and other impacts on our project.

Zoning and size – dimensional considerations such as boundaries, easements, height restrictions, site area, access along with any further plans.

Legal information – ownership, restrictions or covenants, council related information, future urban development plans.

Natural physical features – actual features of the site such as trees, rocks, topography, rivers, ponds, drainage patterns.

Man made features – existing buildings, walls, surrounding vernacular, setbacks, materials, landscaping, scale.

Circulation – Vehicle and pedestrian movements in, through and around the site. Consider the timing of these movements, and duration of heavier patterns. Future traffic and road developments should also be considered.

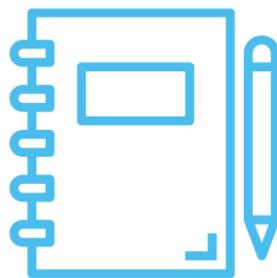
Utilities – Any electricity, gas, water, sewer and telephone services that are situated in or near the site, along with distances, depths and materials.

Climate – all climatic information such as rainfall, snowfall, wind directions, temperatures, sun path, all considered during the different times of the year.

Sensory – this addresses the visual, audible and tactile aspects of the site, such as views, noise, and so on. These again should be considered in time frames and a positive or negative factor can be attributed to the condition.

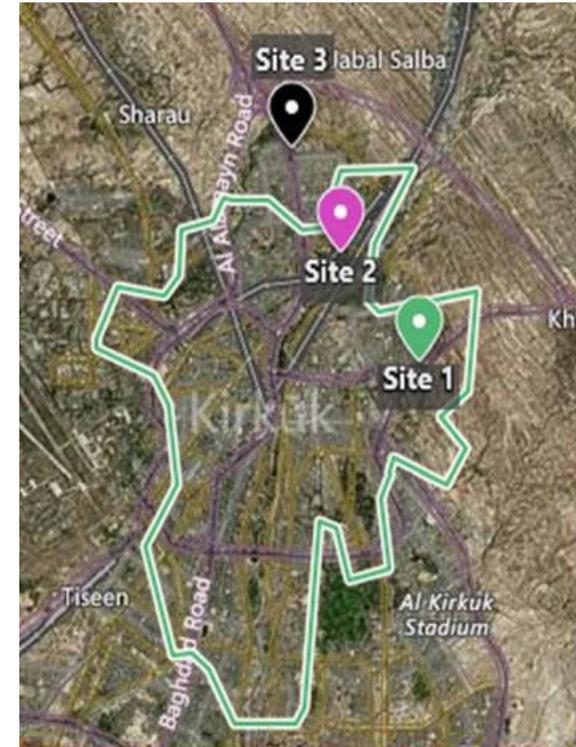
Human and cultural – the cultural, psychological, behavioural and sociological aspects of the surrounding neighbourhood. Activities and patterns, density, population ethnic patterns, employment, income, values and so on.

# Visiting The Site



# Selected site analysis

- ▶ Site information (description)



# Site picture and maps



## Circulation system analysis



--- Main road- ( car, bus, motor way)

--- Secondary road ( car, bicycle, way)

— District road( car, footway )

Land use and surroundings



Site



Open area



Residential unit



Schools



Culture center



11 azar school



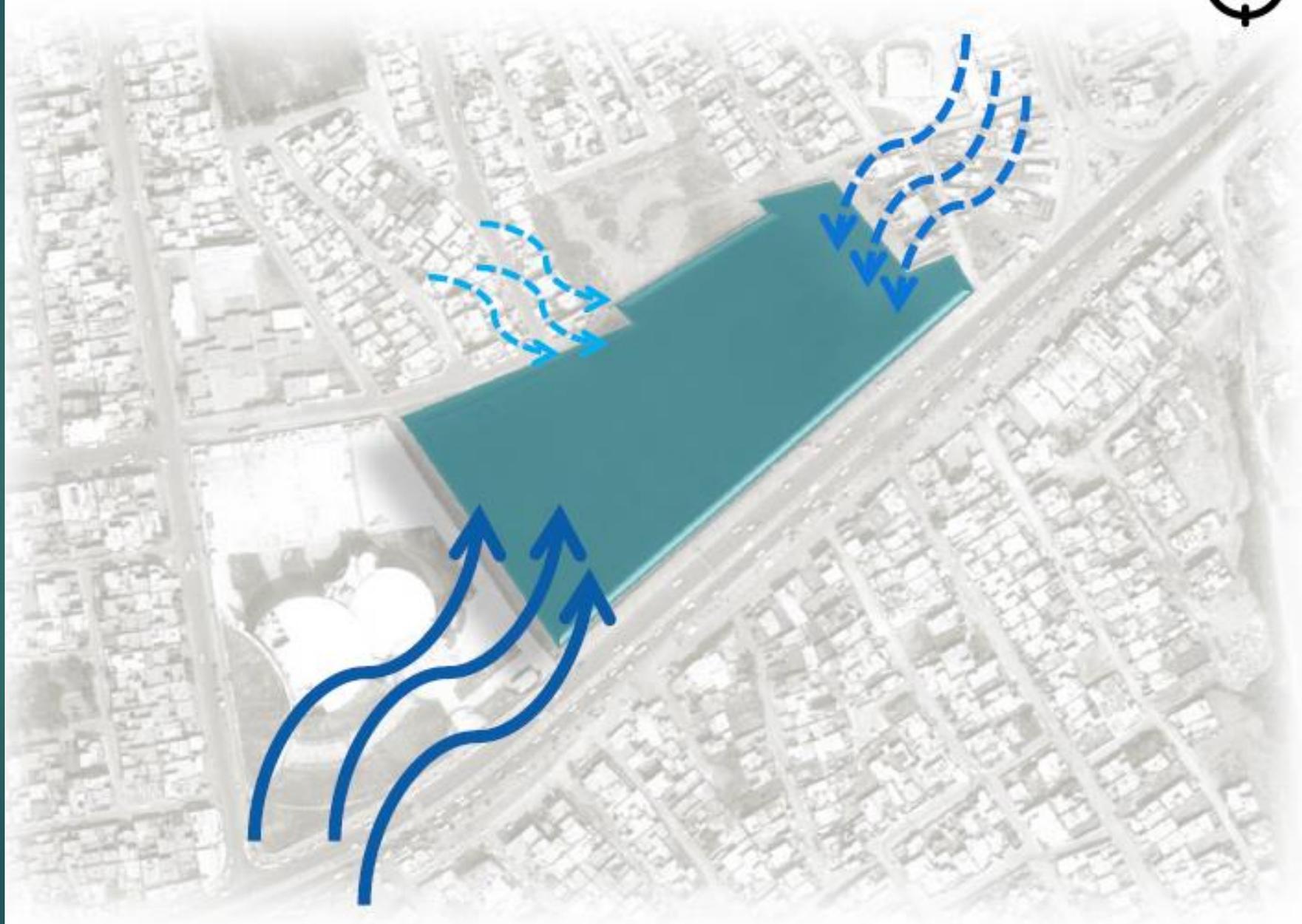
Azadi hospital



- Wind



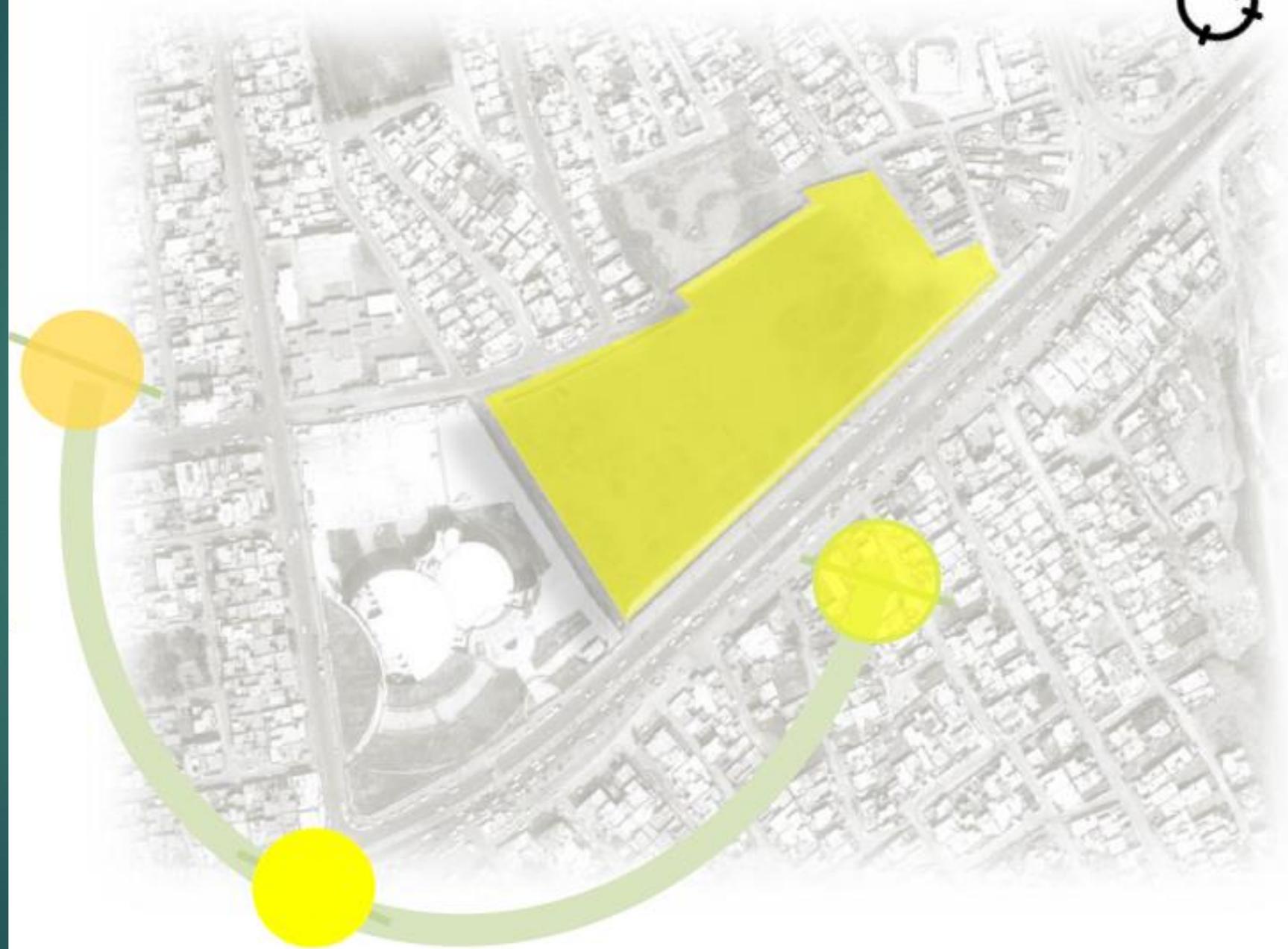
▶ Wind study



## ■ Sun Path



▶ Sun path



- **Noise**

Noise sources  
analysis



## 2.4.5 Conclusion

Conclusions

Zoning

Activity distribution

Entrances

Landscape

Protection

Parking



# References

Sources of data

1- Authorization

2- Data references

3- Web sites

4- Books and journals