- These sites should be **specified** from the <u>municipality</u> or from any <u>governmental offices</u> to <u>be fit for the project that you have chosen</u>.
 - If there is no indication to such projects sites so; you must select one specified for <u>a similar</u> projects <u>or close to it (in function).</u>
 - If there is no any site that specified from government so you have to select one to be the site for your own project ((after analyzing it)).
- The site must **suit the size** of your project **components & function**.

Site analysis in architecture

• Site analysis in architecture is part of the programming / predesign stage and is composed of three phases: research, analysis, and synthesis



How to do Site Analysis?

The more context you can gather from your site analysis, the better informed you'll be to produce your design.

1-Research

- The first step to beginning site analysis is to research your site before you get there, doing so will allow you to approach the site with questions in mind.
- Site analysis should consider the current physical condition of the site and its surroundings, as well as any relevant historical information about what the site looked like previously.



No.	Questions			
1	Have there been any significant changes to the physical or architectural landscape?			
2	What does the site neighbor ?			
3	How long has the surrounding context been the way it is today?			
4	What is the significance of this site to the community it sits within?			
5	Does the site have a specific attractive point ? Or some important building beside?			
Generally this information can be acquired via google maps or cad files				

2-Analysis Questions??

- Why do you carry out an architectural site analysis?
- What is Site Analysis?
- How to do Site Analysis?
- Research!!
- What to Take with You?
- Once you Arrive at the Site?
- What's included in a site analysis?
- Where does site analysis fit in the project delivery process?

SITE ANALYSIS CHECKLIST

:scale

-	SITE DIMENSIONS
	BUILDING HEIGHTS> DIGIMAP
	NEIGHBOURHOOD
	SITE ACCESS / CONSTRAINTS \longrightarrow O/C DIAGRAM
	TRANSPORT LINKS
	NATURE
-	HOW BUSY THE SITE IS
	CLIMATE
	COMMUNITY PROFILE



Once you Arrive at the Site

- **First impressions**: take notice of any initial responses to the site, sensory data collection, points of entry.
- <u>Ask questions</u>.???
- How did you arrive at the site?
- Is it accessible?
- Is there parking?
- Nearby traffic or transit?
- Does that traffic carry sound?









Once you Arrive at the Site

- Take note of existing spatial relationships:
- How do people move about the space?
- Where do people settle naturally?
- Is there a relationship between this movement and sunlight or shade?



- Take any necessary measurements
- Visual documentation:
- **photographs**, **sketches**, **video** it's good practice to have photos of the site itself as well as looking out from the site.
- These images can be used for **explanations** or for setting in later perspectives and renderings.



Analysis





- Once you have visited the site and collected your information, you will begin the process of examining your findings.
- This will mostly consist of sitting with the information you've gathered, putting your findings alongside one another, and exploring their <u>relationships</u>.
- The analysis stage can be visual, and for some is the iterative stage of site analysis diagramming.
- Consider the **goals of your project and** the impacts of the site's **characteristics**, what have you learned, and how will it guide you moving forward?

3-Synthesis

- The synthesis of your collected information and conclusions drawn throughout the stages of site analysis will <u>inform</u> each project with context at every step and scale.
- While it is important to collect data, data collection is useless unless transcribed into relevant and digestible content.
- Through the **process of analysis** you will find that certain **site conditions** will have **greater influence** over design parameters and decision making.
- Combining your research, observations, and any newfound limitations, you will be ready to apply your findings and begin the schematic design.

What's included in a site analysis?

- Site analysis should include the climatic, geographical, historical, social, legal, and infrastructural context of a given site.
- **Presentation of site analysis** should include;
 - visual representation of the site in the form of annotated photographs,
 - initial sketches of the site, site mapping and site analysis diagrams.
- Site analysis diagrams are the tools that begin to illustrate the origins of the design process, what is possible, and what are the conditions that influence decision making

Site Analysis?

- Listing of Site Elements.
- Information about everything in, out, surrounding the site.
- Analyze the features and incorporate them in to the design.



 In order to select a(site) & before the evaluation process ...we should analyze the three selected ones:-



Why we should analyze the three selected sites?

• If we couldn't analyze the site & **indicates the negative & positive points**we couldn't know which one is the **best to create our project on it**.... so we should analyze them according to several elements (**criteria**).

• Before indicating your own site!!

• For example we have (Hospital project)...what I should do to chose the site and how?



• **The need** of the project

What kind of information are we collecting?

• Our analysis data can be split into two main categories;

Hard data

• Hard data looks at more concrete elements such as site boundaries, site areas, utility locations, contours, dimensions, site features, climate, legal information.

soft data.

• Soft data looks at site conditions that can be changed.

- Early site investigations should look at hard data.
- we are able to establish which elements we consider to have a negative impact on the site or proposed design and which conditions have a more positive influence.
- This allows us to create a hierarchy and gives a more systematic approach to understanding our data and developing the design.

Analyzing the chosen sites:

What is the purpose of site analysis?

<u>In order to inform design process & achieve a successful</u> <u>project</u>.

<u>Site analysis elements (criteria) include:-</u>

- 1. Location.
- 2. Neighborhood context.
- 3. Site & zoning.
- 4. Legal elements.
- 5. Natural physical features.
- 6. Man made features.
- 7. Circulation.
- 8. Utilities.
- 9. Sensory (**Sensory** describes something relating to sensation something that **you** feel with your physical senses).
- 10. Human & cultural.
- 11. Climatic elements.

So we will indicates the:-



1-location of site in the city

2- distance & travel time between city center & the site.

<u>2-Neighborhood context:-</u>

- Indicates the zoning of the neighborhood (get this information from <u>municipal</u> or <u>from site visit</u>) this will <u>include:-</u>
- Architectural feature.
- Condition of the existing building.
- Site relations with the surroundings , <u>important</u> buildings & there functions, any elements that affected the <u>site.</u>

3-size & zoning:-

- Shape of the site.
- Indicates the site boundaries & dimensions.
- Indicate suitable entries for the site.
- Zoning classifications and uses.
- Set backs.
- Height specifications.
- Allowable site coverage.
- Parking requirements.
- Dimensions of street & walkways around the site.



<u>4-Legal description:-</u>

- Special laws for ownership.
- **Required limitations** on the site.
- <u>Future expansion plans.</u>

<u>5-Natural physical features:-</u>

- **Topography** feature on the site.
- The **contours** map.
- Natural features (**vegetation**); trees, ground cover, ground texture & soil conditions of the site.

<u>6-Man made feature:-</u>

Any features are located at the site such as:-

- Buildings.
- Walls.
- Fences.
- Patios.
- Colors.
- Visual axis.





Off site feature.

• <u>7-Circulation:-</u>

The uses of:-

- Roads.
- Sidewalks.
- Plazas.



• <u>8-Utilites:-</u>

• The location of (water , electric , gas...etc.), around or on the site itself.

• <u>9-Sensory:-</u>

- Indicating all the visual auditory viewing.
- The negative & positive points.
- It is important analyze cause it depends on taking decisions.



- <u>10-Human & cultural:-</u>
- Include information about people & there activities on <u>the site</u>, there relation to these activity, analyzing society around the site & there behavior.

<u>11-Climatic elements:-</u>

- First indicate the North direction.
- Sun path.
- Wind direction.
- Rain fall.
- Snow fall.
- Humidity.
- Temperature.

 Now We have finished analyzing our (three selected sites)...what will we need to do now?

Evaluation

<u>Site analysis elements (criteria) :-</u>

- 1. Location.
- 2. Neighborhood context.
- 3. Site & zoning.
- 4. Legal elements.
- 5. Natural physical features.
- 6. Man made features.
- 7. Circulation.
- 8. Utilities.
- 9. Sensory.
- 10. Human & cultural.
- 11. Climatic elements.

The evaluation:-

- You will select several criteria & standards according to your project as we told you before:-
- 1-We have three selected sites (alternatives).
- 2-We have elements (criteria).
- **3**-We shall give a **specific weight** for each **criteria** from
- (1-10) & according to its importance to your own project.
- 4-For each criteria & according to its relation to the 3 sites , will give a value from (1-3) low, medium & high according to each site & its suitable for the standard we have gave before.
 5-Now flapped the weight with the value (1-3) for each
- standard & for the all alternatives.
- **6**-Finally **collect the results** for <u>each site</u> & compare it with the other alternatives in order to **select a site with the higher sum**.

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Standard (criteria)	wej	Site NO.1		Site NO.2		Site NO.3			
Legal elements	3	3	9	2	6	1	3		
location	5	1	5	3	15	2	10		
Area	4	2	8	1	4	3	12		
Functional relation with other project	5	3	15	2	10	1	5		
Accessibility	3	1	3	3	9	2	6		
Vegetation	2	3	6	1	2	2	4		
Topography	2	1	2	3	6	2	4		
Security	1	2	2	3	3	1	1		
			40		52		45		

• So... the evaluation indicates that the site NO.2 got the higher value then it will be the best alternative for your project.

Note:-

1-These values No. is not lasting for all the projects, every project has his own criteria & standard.
2-It is important to had a good different values between the three selected sites to insure that our weight is reasonable.

3-Some project had its own special different criteria, ex.. Security....