



GREEN BUILDING

Supervised by:
mrs.lana abubakr

Prepared by:
Honas salih
Diman mawlood
Asya Abdulla
Kazhaw jaffar
Sumaya husen
Sarwar sarkawt

Contents:

- Introduction
- Site plan
- Plans
- Tables
- Result



Introduction:

The report is about analyzing the site and plans of Shahid Fahir Mergasory School which is located in 100m street in Erbil. Our analyzing is to get the result if the building is a green building or not a green building.

General information :

Location:
Iraq-erbil-100m street
Total area:
70,000
Architect:
Mac architects



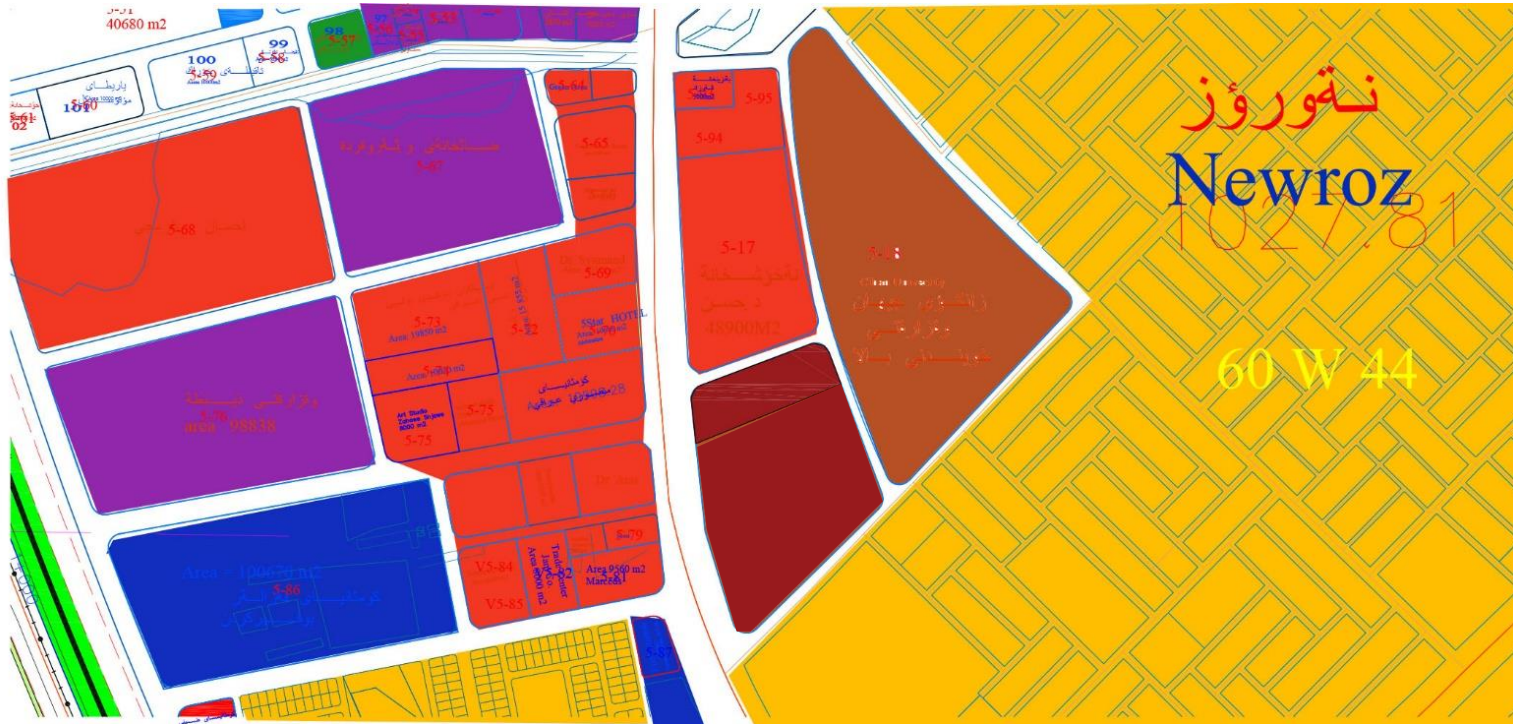
Fakhir Mergasori International School (FMIS) is a highly academic, non-selective, co-educational, English-medium, independent day school for students from the ages of 4 to 18 years. It provides top-quality education to children of different races, nationalities, and backgrounds.



Site analysis :

Neighborhood context :

Land use:



Residential



commercial



Site plan



Educational



Governmental



Health



Vacant

Surrounding site:



vacant



Faxir mergasury school



Cihan university

Site analysis :

Accessibility:

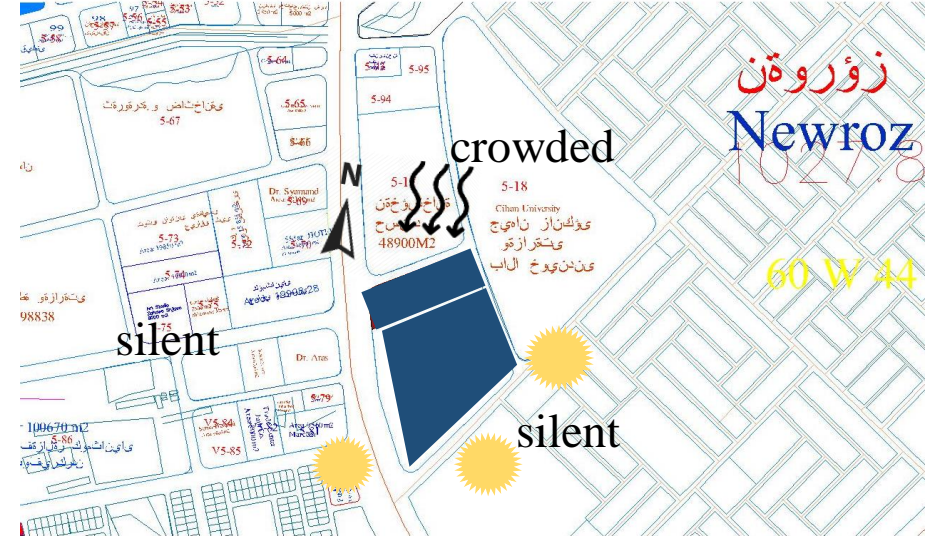


Main street



Secondary street

Effect of sun and prevailing wind and noise:



Wind direction

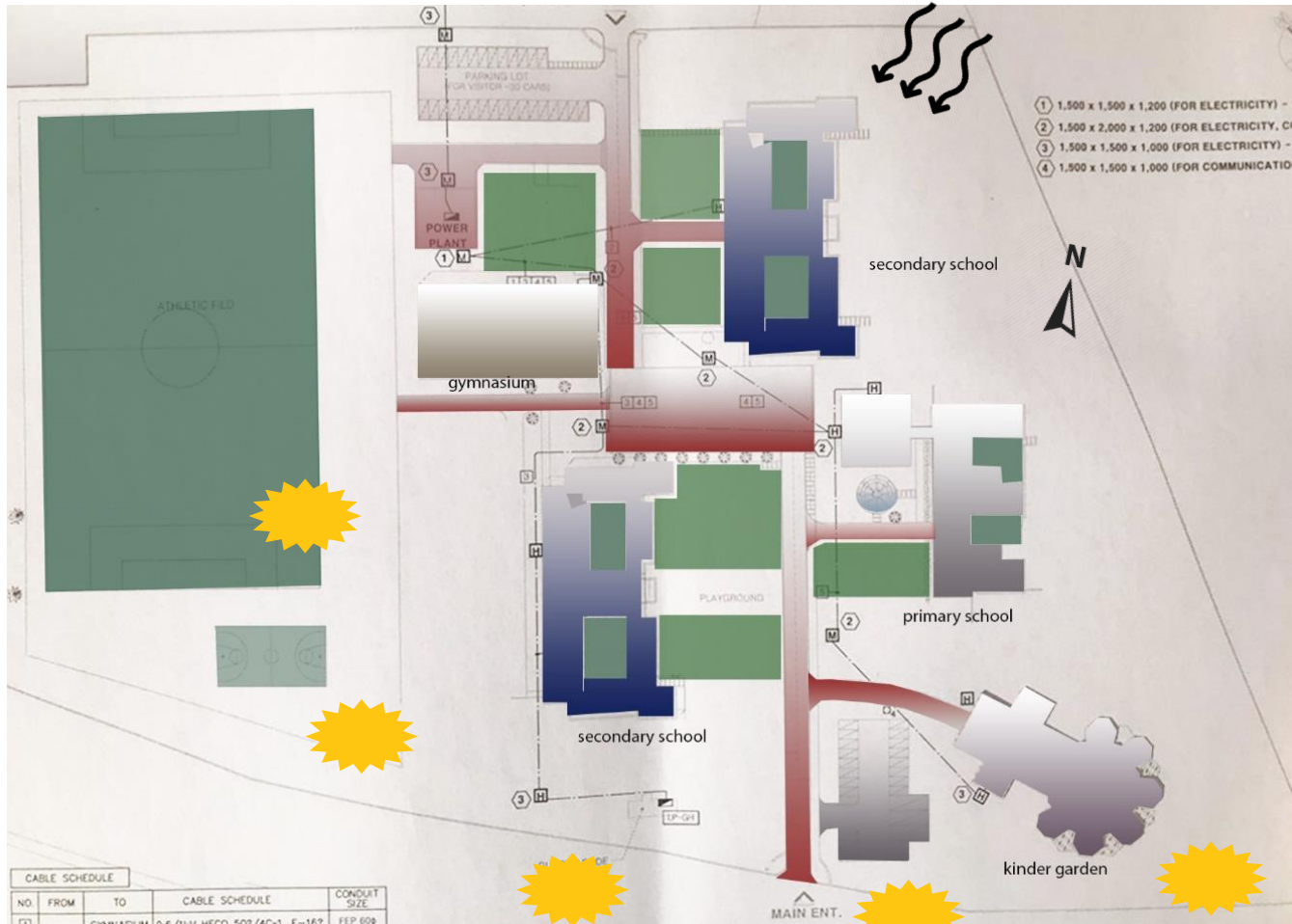


North direction



Sun path

master plan:



Sun direction

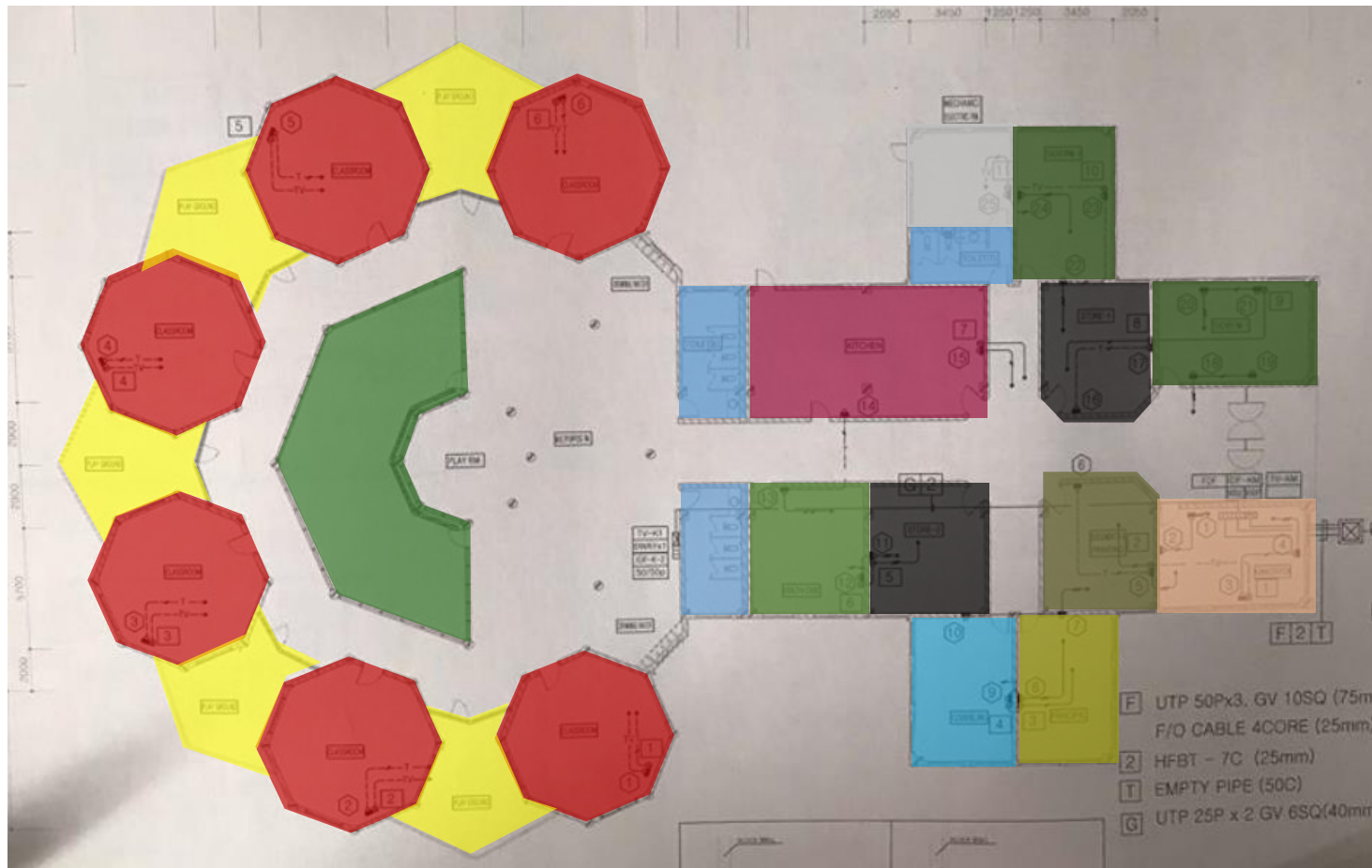


Wind direction



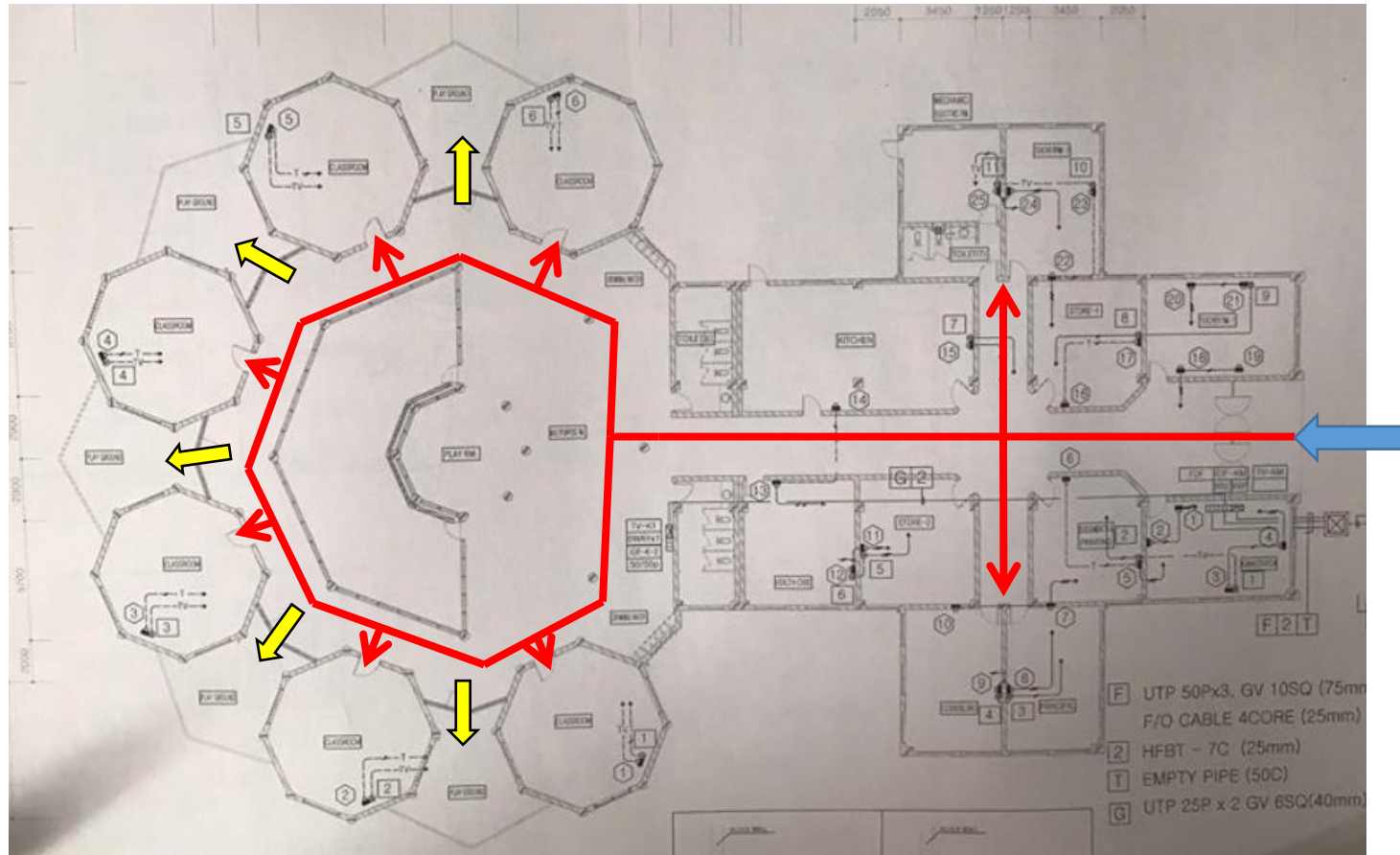
North direction

Kinder garden plan:



- | | | |
|--|---|---|
| Class room | Kitchen | Document Printing |
| Play ground | Health care | Administration |
| Courtyard | Storage | Principal |
| Toilet | Teacher RM | Consultant |

Kinder garden plan:

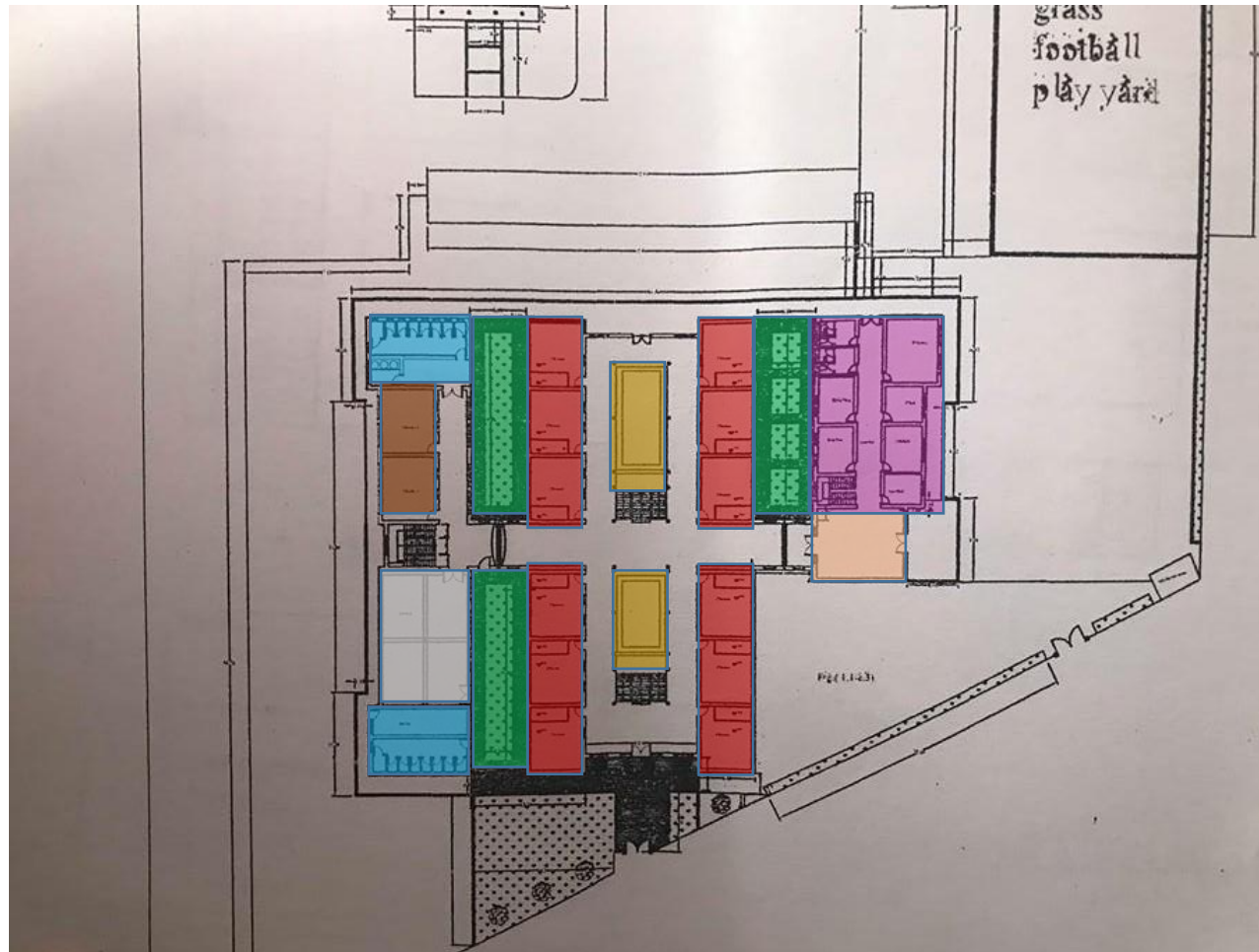


 Horizontal circulation









 Main entrance

 Exit

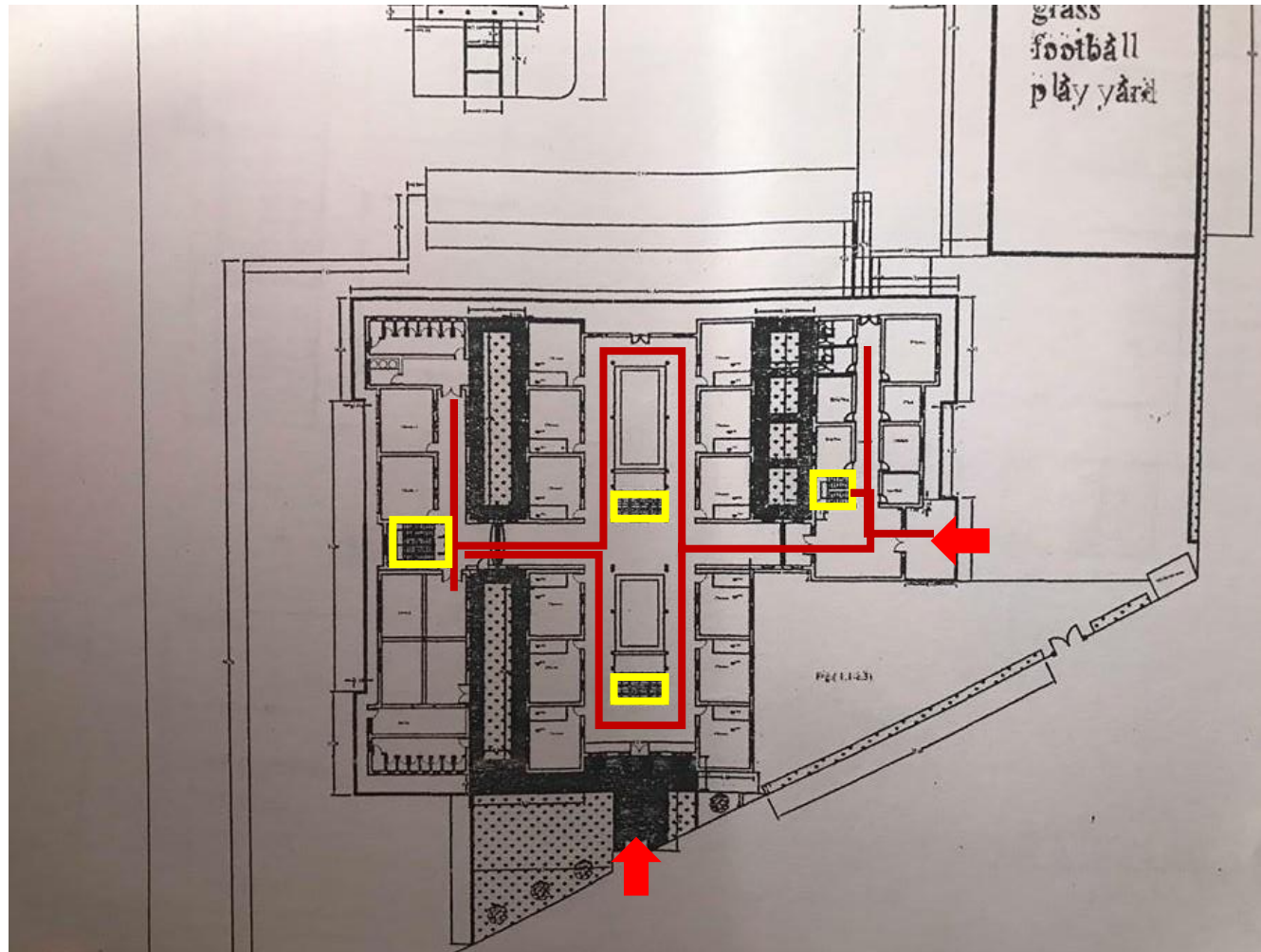
Primary school plan:



ground and first floor of primary school

- | | | |
|---|---|--|
|  Class rooms |  Teacher lab |  administration |
|  courtyard |  Green areas |  Mechanical rooms |
|  toilets |  lobby | |

Primary school plan:











Plan of primary school circulation

- Horizontal circulation
- Vertical circulation
- Main entrance
- Exist entrance

Secondary school plan:













Ground floor plan

- | | |
|---|--|
|  classroom |  storage |
|  Art room |  Toilet |
|  Court yard |  Music room |
|  Teachers room |  Lobby |

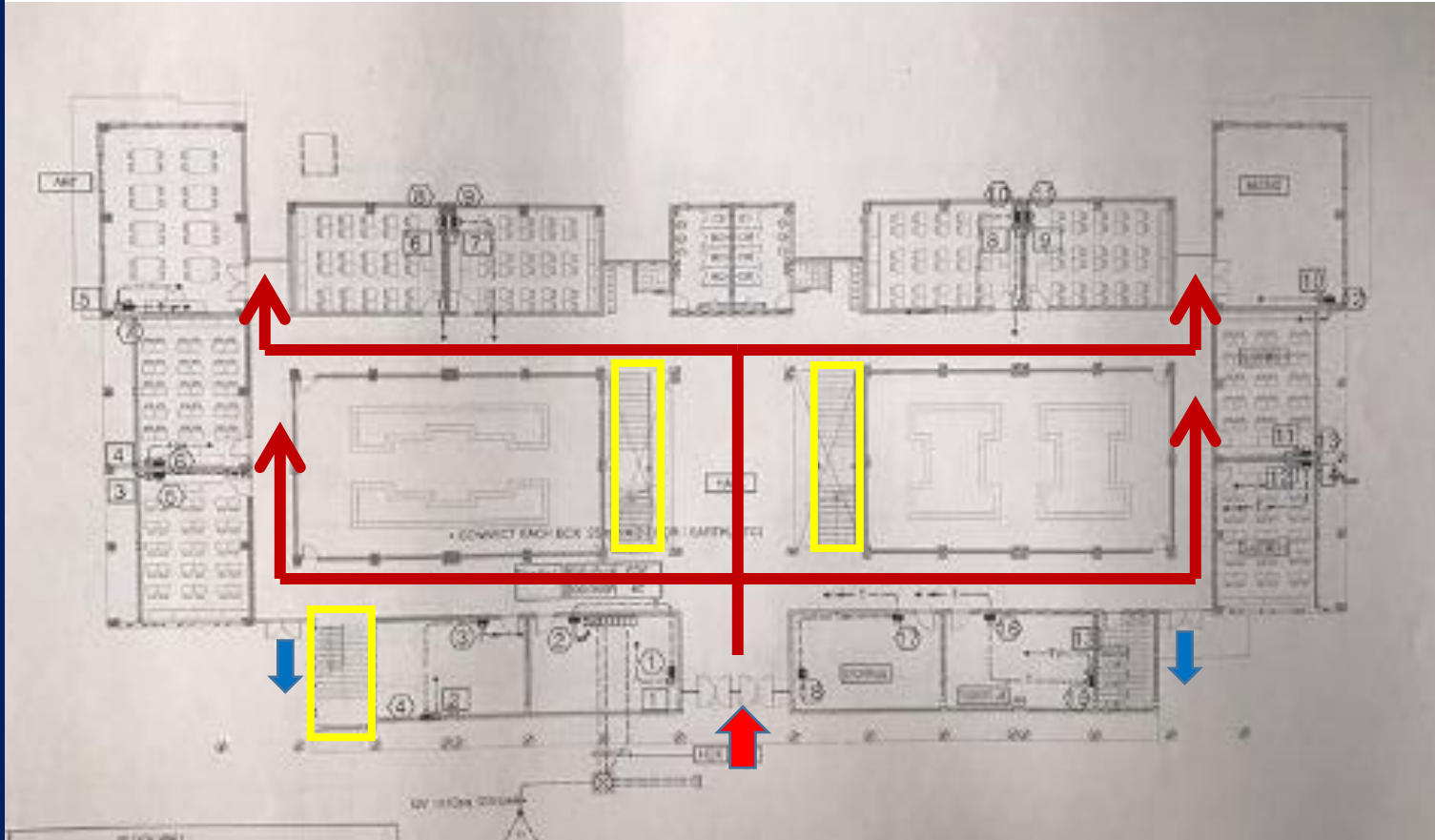
Secondary school plan:







First floor plan


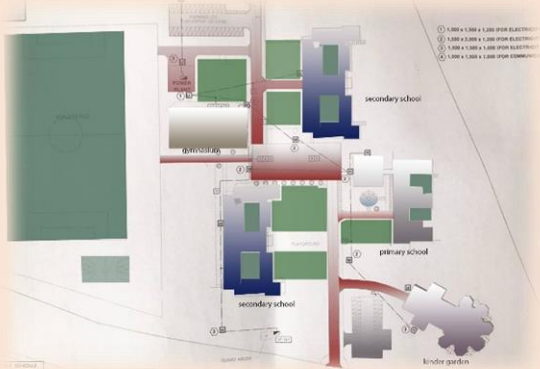


- | | | | |
|---|---------------|---|----------------|
|  | classroom |  | storage |
|  | Art room |  | Toilet |
|  | Court yard |  | Science room |
|  | Teachers room |  | Administration |
| | |  | Principal |
| | |  | Health care |



Secondary school plan:







Circulation plan


-  Horizontal circulation
-  Vertical circulation
-  Main entrance
-  Exist entrance

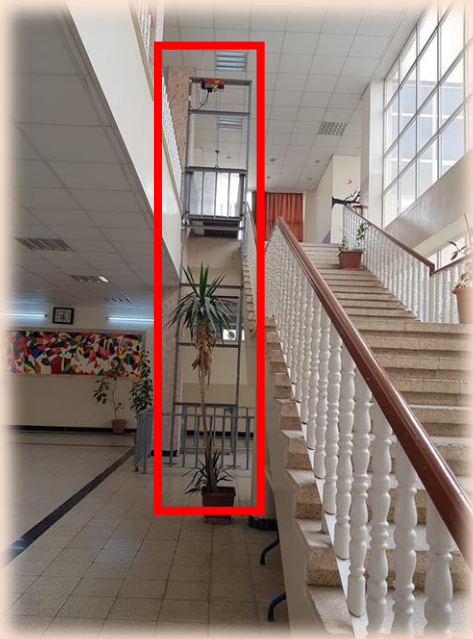

factors	Sub-Factors	Good Satisfac tion Design	Neutra l	Not Good Satisfac tion Design	Detail, photo , Description, Schematic Drawings
1- Site	1-1- Layout and form		●		<p>overall form is good which has most of the school requirements such as repition in the façade and unity in color</p>  
	1-2 -Open Spaces	●			<p>it has a lot of open space which are used for sitting areas,playground and fountains</p>  



factors	Sub-Factors	Good Satisfac tion Design	Neutra l	Not Good Satisfac tion Design	Detail, photo , Description, Schematic Drawings
1- Site	1-3- green spaces		●		<p>it has a good amount of green spaces 2/4 of it is green spaces and trees which provides good environment and view</p> 
	1-4 –school building orientation	●			<p>one of the most important point in school is class orientation, which is applied in this school where all of the classes oriented to south and south-east.</p> 


factors	Sub-Factors	Good Satisfac tion Design	Neutra l	Not Good Satisfac tion Design	Detail, photo , Description, Schematic Drawings
1- Site	1-5- using any natural resources as active energy			●	<p>no natural resources used as active energy instead used petroleum and electrical power for cooling and heating.</p> 
	1-6 –others (gates)	●			<p>it has more than one entrance</p> 


factors	Sub-Factors	Good Satisfac tion Design	Neutra l	Not Good Satisfac tion Design	Detail, photo , Description, Schematic Drawings
1- School building conservation	2-1- passive heating	●			<p>used petroleum and electrical power for heating as passive heating</p> 
	2-2 passive cooling	●			<p>used conditioner and fans for passive cooling</p> 

factors	Sub-Factors	Good Satisfac tion Design	Neutra l	Not Good Satisfac tion Design	Detail, photo , Description, Schematic Drawings
1- School building conservation	2-3- natural ventilation	●			<p>using large windows and courtyards for natural ventilation</p> <div style="display: flex; justify-content: space-around;">   </div>
	2-4 horizontal and vertical gardening		●		<p>they used free standing vertical gardening</p> <div style="display: flex; justify-content: space-around;">   </div>

factors	Sub-Factors	Good Satisfaction Design	Neutral	Not Good Satisfaction Design	Detail, photo , Description, Schematic Drawings
1- School building conservation	2-3- others (elevator for disabled students)	●			<p>it's the first school in Erbil which used lift for disabled students which in turn encourages education.</p>  

factors	Sub-Factors	Good Satisf action Design	Neutr al	Not Good Satisf action Design	Detail, photo , Description, Schematic Drawings
3- Material Conserva tion	3-1- Use of recycled Materials			●	there is no use of recycled materials.
	3-2 –Use of Non-conventional materials		●		<p>the material is used for exterior is (marble , concrete , glass) which is conventional material and is generally used in almost of all the buildings .</p> <div style="display: flex; justify-content: space-around;">   </div>

factors	Sub-Factors	Good Satisf action Design	Neutr al	Not Good Satisf action Design	Detail, photo , Description, Schematic Drawings
3- Material Conserva tion	3-3-Type of glass used in openings		●		<p>The type of glass is used single glass</p> 
	Others				

factors	Sub-Factors	Good Satisf action Design	Neutr al	Not Good Satisf action Design	Detail, photo , Description, Schematic Drawings
4- water Conservation	4-1- Rain water collection and reuse them			●	<p>This building is not used rain water collection and reuse them , and the average of green area is High but they didn't use any system to save the Rain water to reuse it for garden watering system</p> 
	4-2 –Gray water collection and reuse them			●	<p>there is no system for reusing the gray water system ,the gray water running from toilets sink to sewer.</p>
	4-3-Reduce toilet water			●	

Result :

As a result shahid fakhir mergasory school some how considered as a green building because of having good points for materials , open spaces ,green areas ,layout and form , school building orientation .





thank you