

Rehabilitation and care center for the physically disabled

Lana Shehada

About the project

The project of the Rehabilitation Center for the Physically Handicapped is a building that serves the category of the physically handicapped, care for them and rehabilitate them to face the society naturally. Its aim is to design a special building for the physically handicapped that provides the best service to them, taking into account the environmental factors surrounding the project site. Therefore, the site must be studied and analyzed. A complete analysis from all sides

Site analysis

Geographical location



The area proposed for the establishment of the center is located in the eastern industrial zone to the east of the city center of Nablus, near Hisham Al-Hijazi College, as it borders it to the east. The area is located east of Hisham Al-Hijazi College, and next to it are cultivated lands.

Accessibility



Ways to access the site from the city center. Ways to access the site from the villages south of Nablus.

Surrounding streets



We conclude from the street analysis that the site is surrounded by three streets, which helps in the design and provides us with greater ease of access with the presence of these streets, where we can distribute parking spaces more and allocate paths for service vehicles, which reduces walking distances to reach the center because it is for people with special needs who are supposed to provide them with the least distances for walking.

Surrounding Buildings



Project land

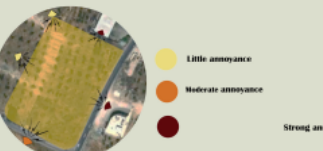
- Land area: 13,794 m²
- Tall buildings: There are no tall buildings around.
- Access to the site: Access is by car and public transportation, and it is also possible on foot to nearby areas.
- Minimum setbacks:
 - Front setback: 6 meters.
 - Side setback: 4 meters.
 - Back setback: 4 meters.
- The maximum height of the building: not more than 24 meters measured from the street level or the natural land, whichever is lower. The height excludes the parking floors and the roof floor.
- Maximum percentage: 50% of the land area.
- Maximum Floor Ratio: 300%.

Trees and vegetation



The land is planted with olive trees and some cypress trees on its outskirts, there is an aerial photograph showing the regular distribution of trees in the land

Nuisance and noise



Facilities connected to the site



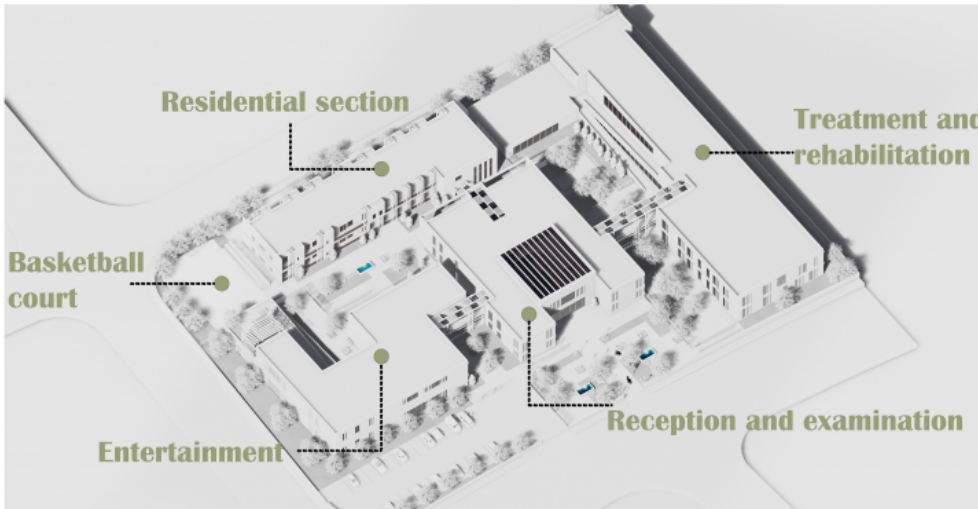
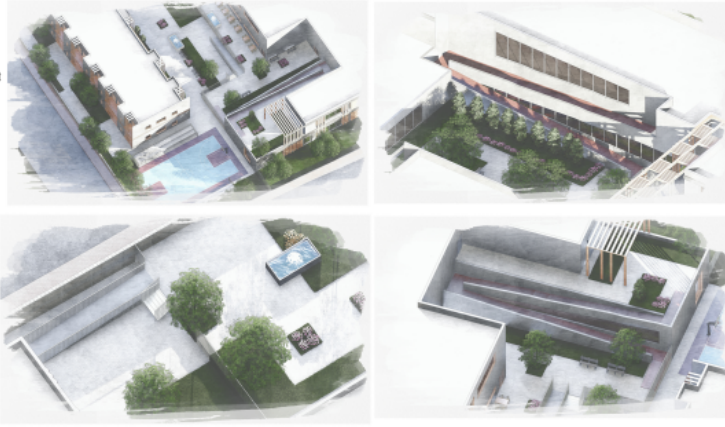
Design concept

-Philosophy:

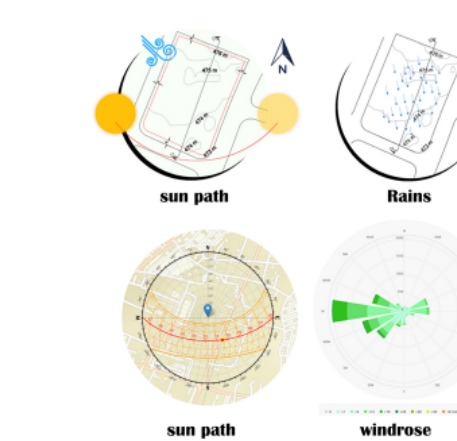
Movement is often the hindrance to this class. So I decided to overcome this obstacle through the idea of the project represented in the feeling of "freedom" in movement for these people and to focus on the continuity of easy movement with a unique experience that allows them to move through different levels and through different floors easily to experience what is new and not to be restricted to one floor or one level .. And also activating the role of society and social interaction between individuals, society and the individuals themselves.

-Strategies:

- Developing interactive spaces such as the gallery, which allows interaction with the community and displaying the skills of the disabled to the community.
- The use of ramps on the facades of some blocks in order to give the impression that this building is for the physically handicapped and achieving "freedom" in movement and granting a unique experience
- Green areas represented in the outer squares, indoor agricultural basins and green roofs that allow interaction with each other, and common entertainment areas that enhance environmental aspects.
- Dividing site into three graded levels from -1.00 to +1.00, similar to the nature of the contour.
- Defining functions and distributing them on the land in proportion to the relationships between them, and the feeling that the building belongs to whoever comes to it, "enhancing the sense of belonging to the place."



Environmental factors



Climatic information



Swot analysis for site

SWOT

Strengths:

- The slight sloping land that helps people with special needs move
- The diversity of services around the site helps to operate and support the project.
- The accessibility to social interaction and communication between the project and the community
- The area contains olive and cypress trees that help in the environmental and psychological aspects when designing.
- The space is commensurate with the requirements and needs of the project.

Weaknesses:

- The rigid movement of the main (eastern) street and the lack of expansion of the street formed point of security for pedestrians and thus affected the movement of individuals to the project.
- The type of clay soil that needs good study and structural design to avoid problems resulting from its swelling due to rains.

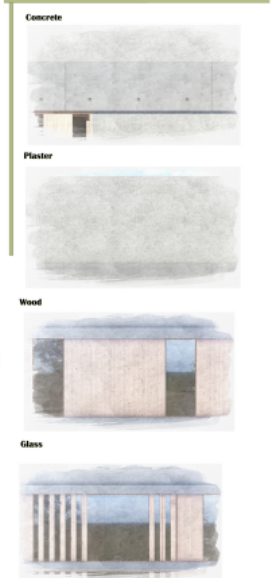
Opportunities:

- The future development of the area and receptors in the vicinity of residential and recreational buildings to assist in the development of the project area.

Threats:

- Fear of exploiting the neighboring areas as a negative way or using them to establish factories that will become sources of pollution and disturbance to the site.

Materials used



Bubble Diagram



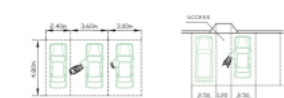
Design elements rules

The most important design elements rules:

- **Ramps:**
 - Width: not less than 1.5 m
 - A handrail must be installed if the height is more than 50 cm
 - Its surface is rough, non-slip
 - The best slope ratio is 1:20 and not more than 1:12
 - The width of the landing shall not be less than the width of the ramp

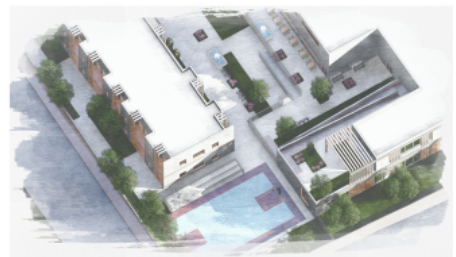
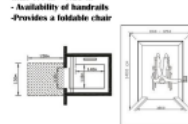


-Parking:

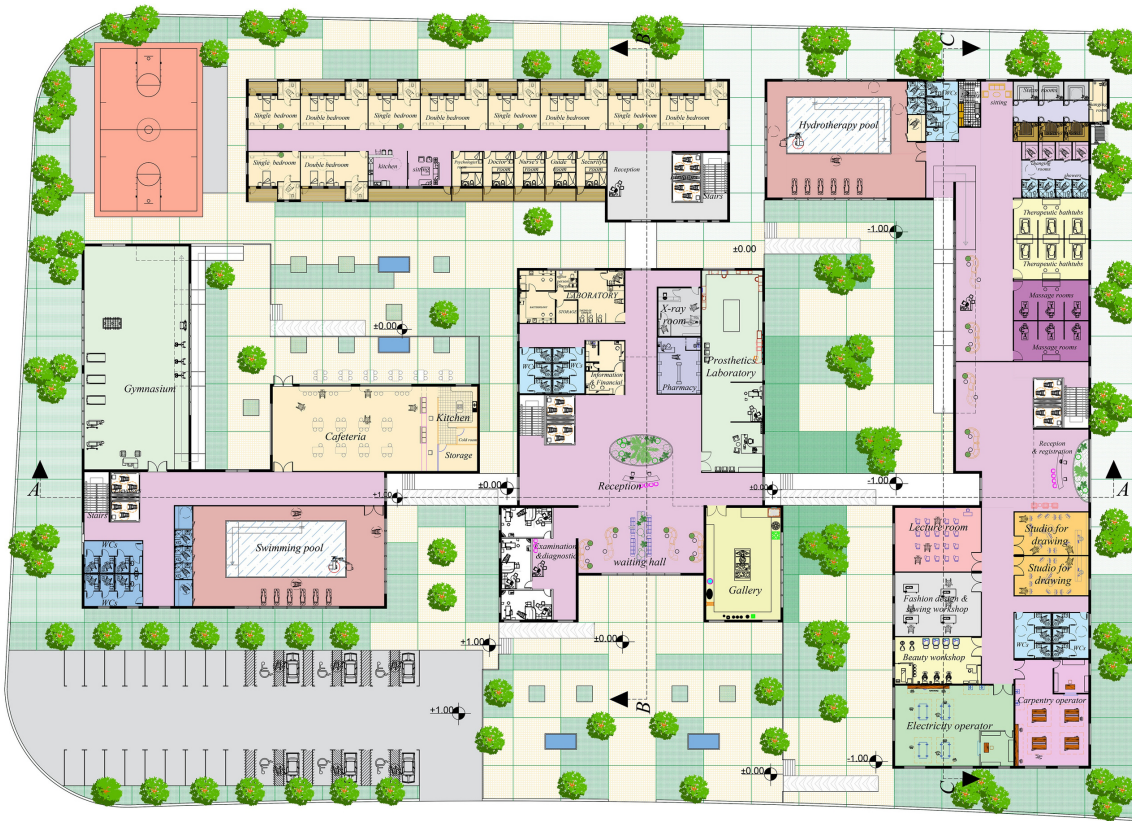


-Elevators:

- Area in front of it not less than 1.5 x 1.5 m, or 1.5 m wide in the case of crowded floors.
- The area of the elevator shall not be less than 1.4 m x 1.25 m
- Availability of handrails
- Provides a foldable chair

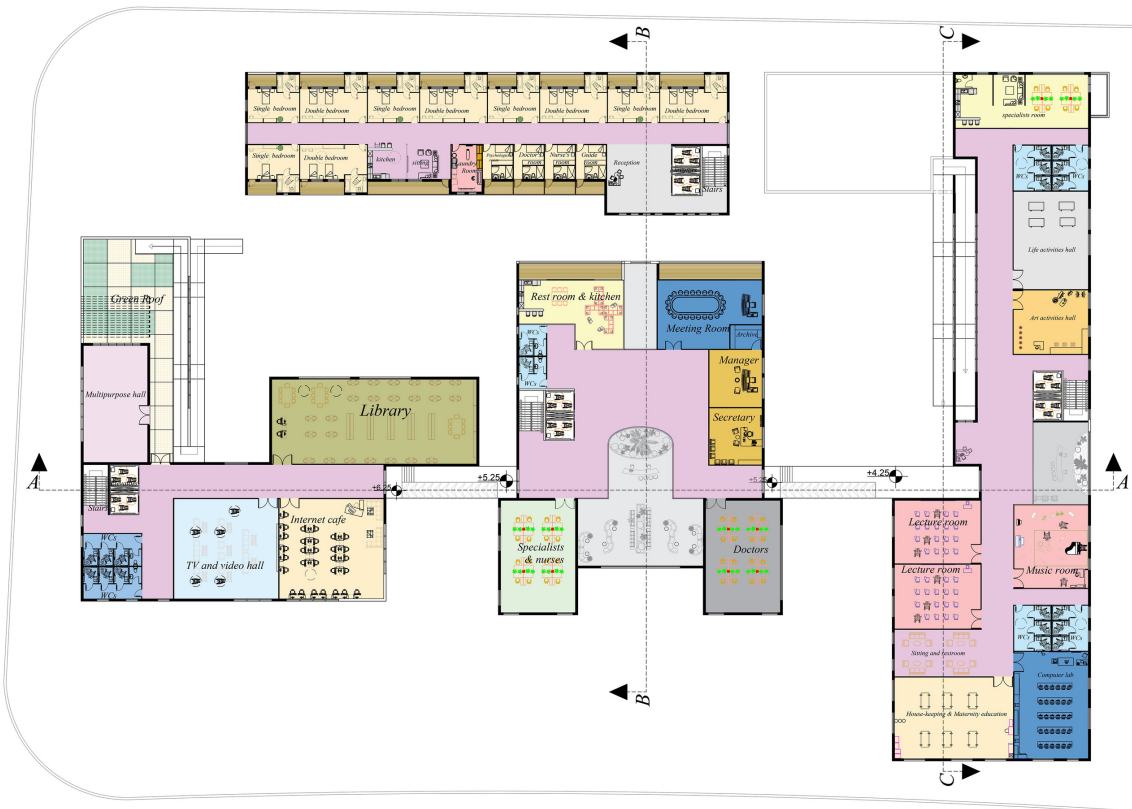


Master Plan-Ground Floor



Master Plan-Ground Floor
1:200

First Floor Plan



First Floor Plan
1:200

Site Plan



Site Plan
1:200



Elevations



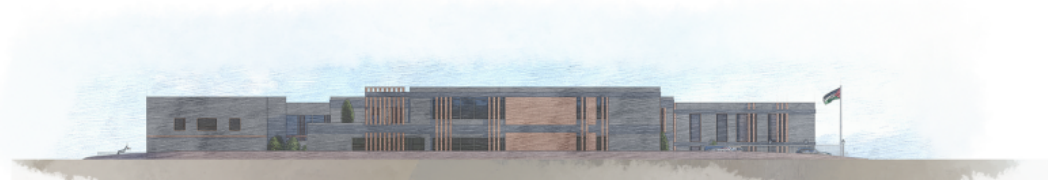
Southeast Elevation- Front
1:200



Northwest Elevation- Back
1:200



Northeast Elevation- side
1:200



Southwest Elevation- side
1:200

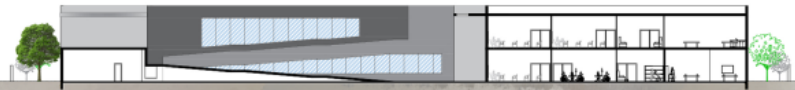
Sections



A-A Section
1:200

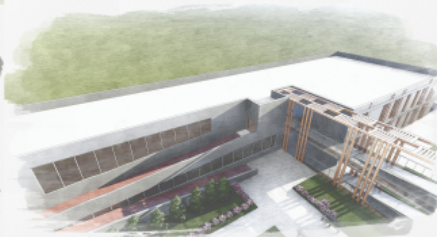
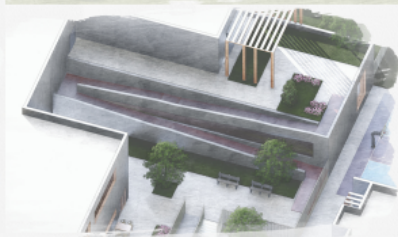


B-B Section
1:200



C-C Section
1:200

3D Shots



3D Shots



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About the project

The project is a rehabilitation and care center for the physically disabled, located in the heart of the city. It aims to provide a safe, accessible, and comfortable environment for the residents, with a focus on social interaction and recreational activities. The center will include a range of facilities, including a gym, a library, a cafe, and a community room, all designed to be fully accessible to people with physical disabilities.

Site analysis

Topographical section

Orientation

Surrounding context



Design concept

Introduction

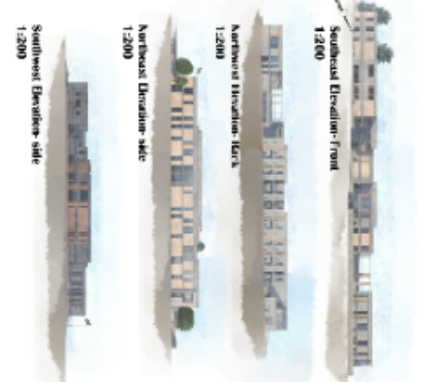
The design concept is based on the idea of creating a community where people with physical disabilities can live, work, and play together. The building is designed to be a hub of activity, with a central courtyard and a range of outdoor spaces. The architecture is modern and functional, with a focus on accessibility and inclusivity. The design is inspired by the principles of universal design, which aims to create products and environments that are usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.



Master Plan-Ground Floor



Elevations



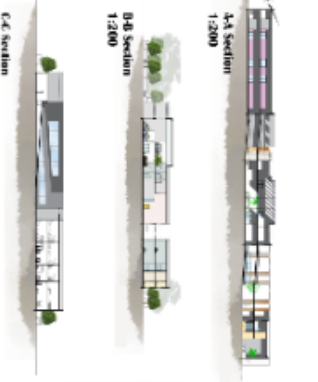
3D Shots



First Floor Plan



Sections



Interior shots



Lana Shehadah

Site Plan



Materials used



Double Diagram



Design elements rules



Orientation

Topographical section

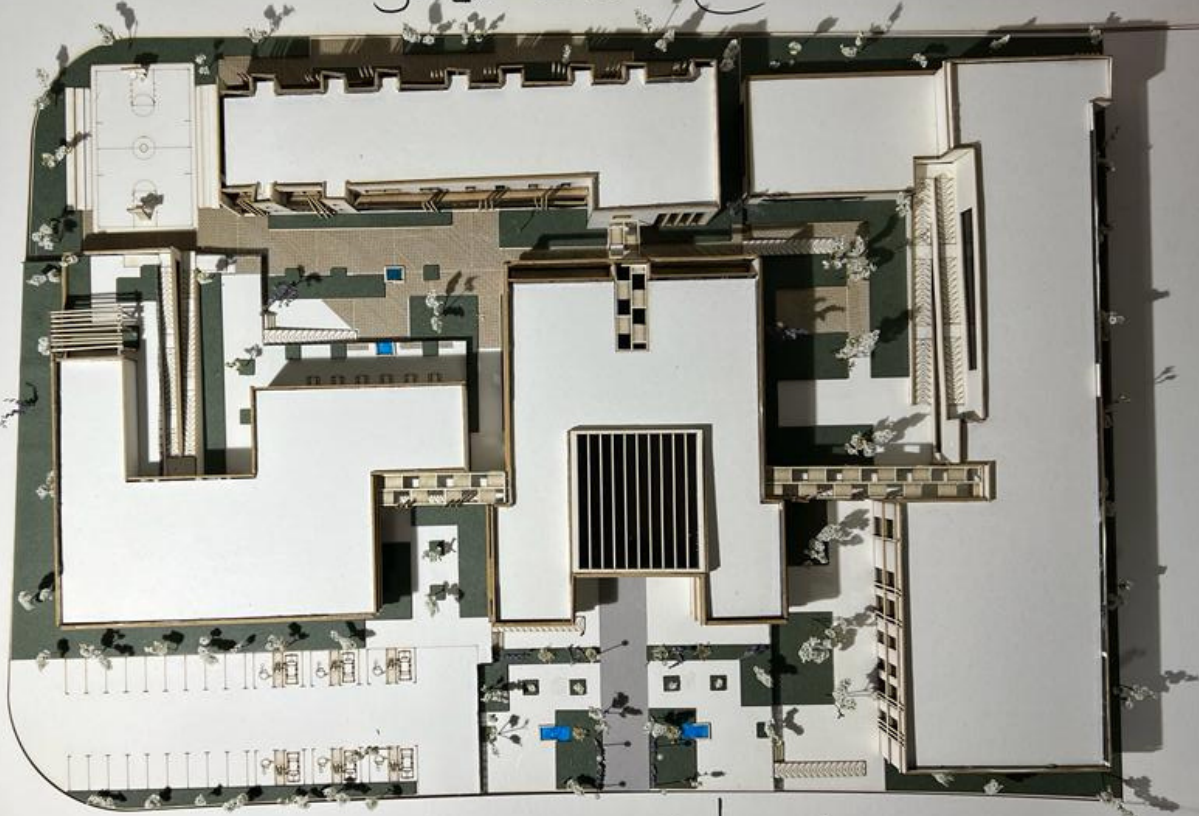
Surrounding context

Project team

Materials and color

Facilities compared to the site

شارع بعرض 12 متر



شارع بعرض 15 متر

مركز تأهيل
ورعاية
المعاقين حركياً
- لانا شحادة



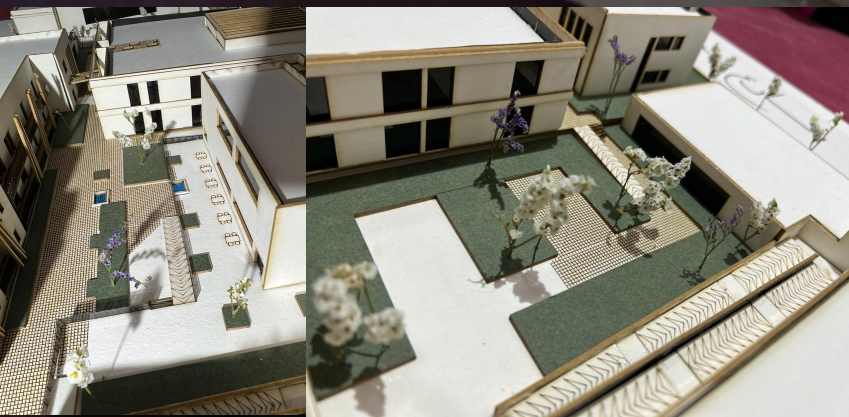
1:200

شارع بعرض 30 متر



مركز تأهيل
ورعاية
المعاقين حركياً
- لانا شحادة

شارع بعرض 30 متر



Rehabilitation and care center for the physically disabled

Lama Shehadeh

About the project

Site analysis



Design concept



Master Floor-Plan



Elevations



3D Model



Site Plan



Level Floor Plan



Sections



Material details



Lama Shehadeh

