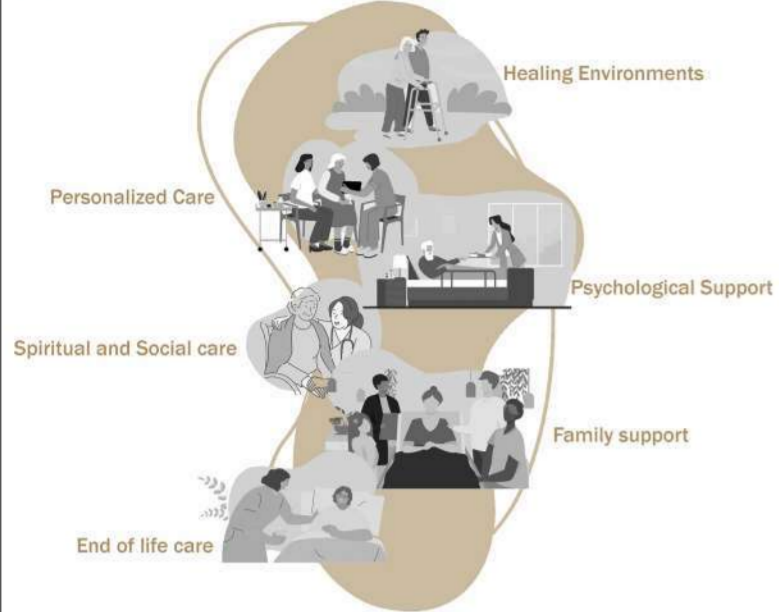


Hospice: An Overview

Understanding Hospice
Increasing Cancer Cases in India
Evolution of Hospice
Need for Hospice
Chronology of Design

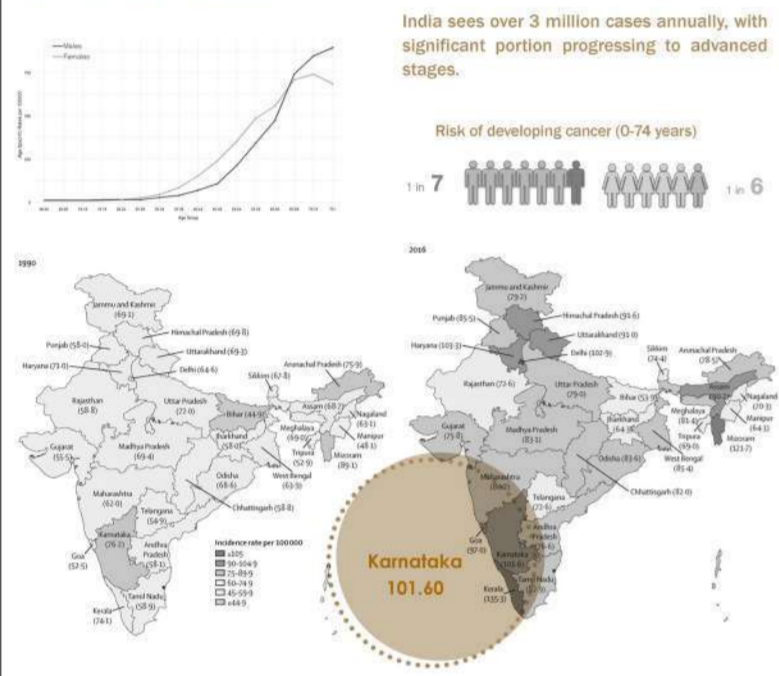
Hospice : A Place for Dignity, Comfort and Compassion

Hospice care is a specialized form of palliative care focused on providing comfort, dignity, and quality of life for patients in the terminal stage of an illness. It is typically offered when curative treatments are no longer effective, and life expectancy is limited.



India's Growing Cancer Burden

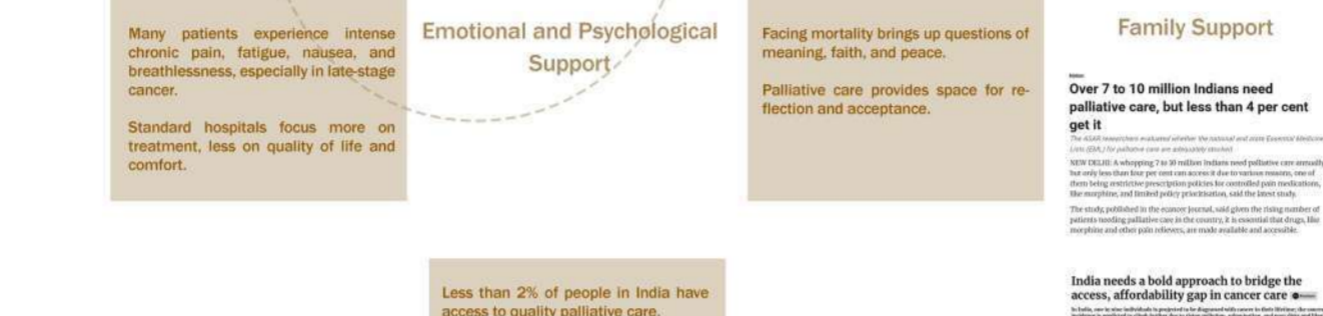
Cancer is a leading health concern in India. Over the past decade, the records of its incidence have been continuously increasing and have been projected to rise further in the upcoming years.



A Compassionate Journey: Evolution of Hospice and Palliative Care



Need for Palliative Care: "Beyond Cure, the silent urgency for palliative care"



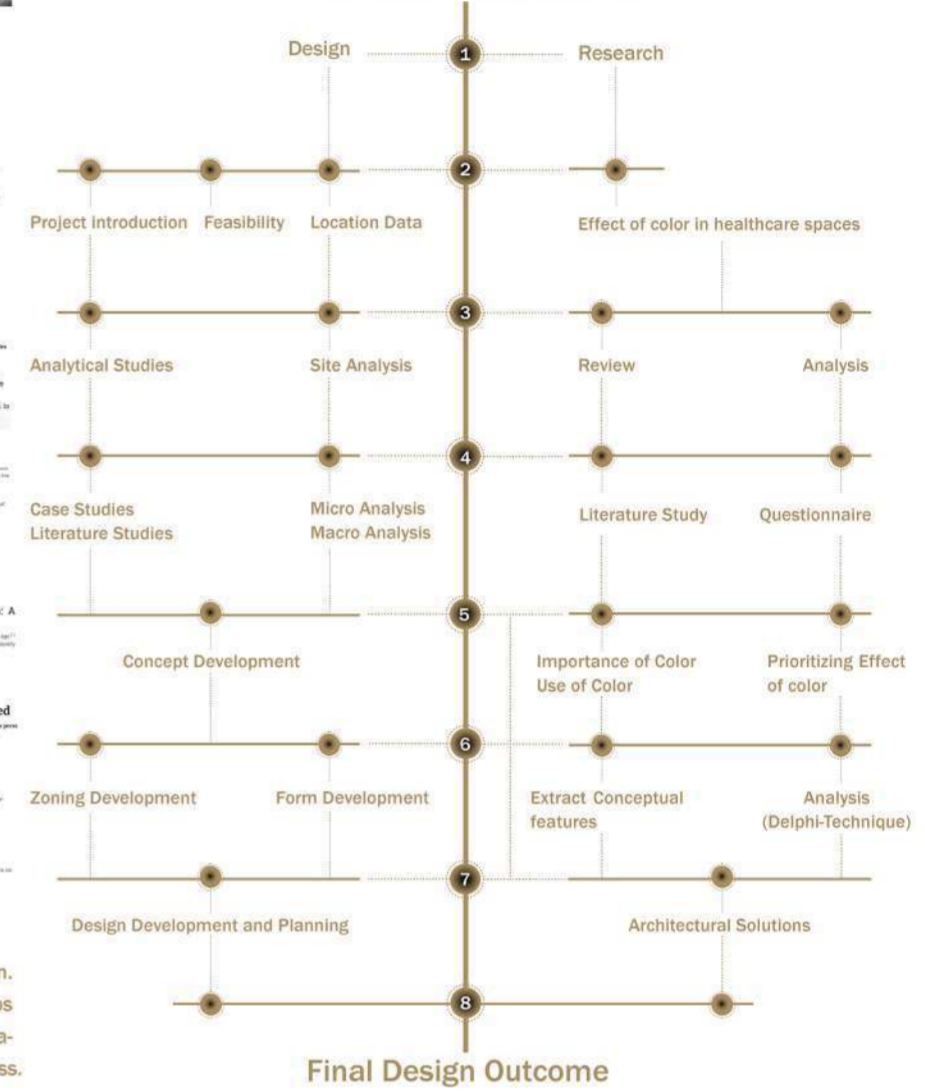
Chronology of Design

Aim: To design a cancer hospice that integrates the principles of healing architecture and the five elements of nature, fostering a supportive environment that alleviated pain, enhances emotional well-being, restores dignity in end-of-life care.

Objective: To design a cancer hospice that provides a peaceful, healing environment for patients To create spaces that support physical comfort, emotional care, and dignity at the end of life.

"Sanctuary of Hope"

A Holistic Hospice for Cancer Care

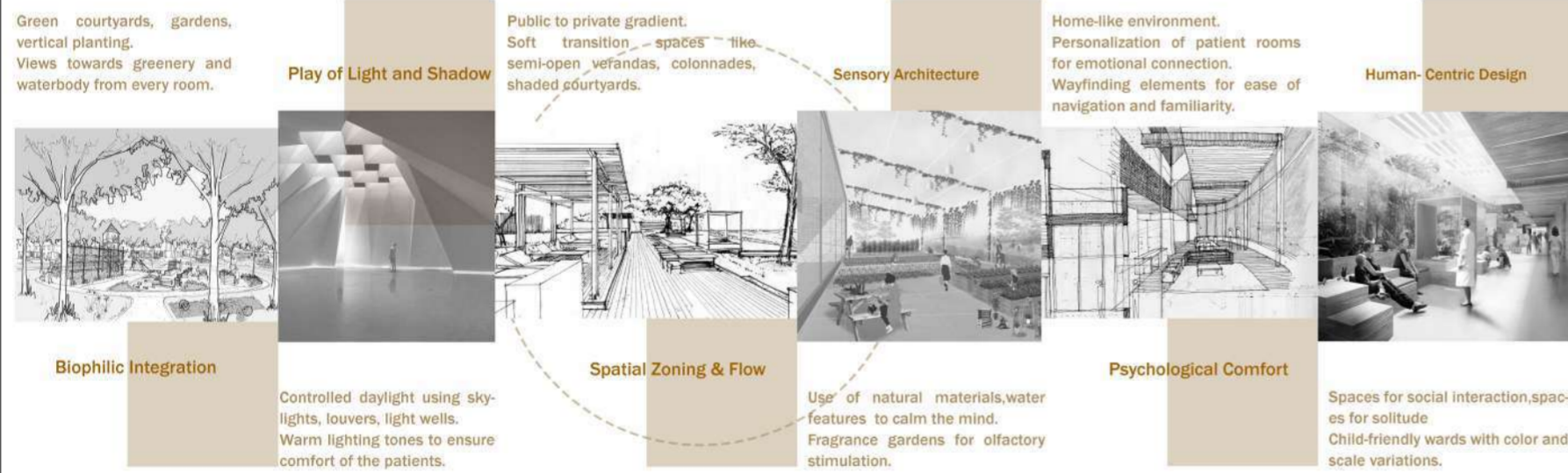


Design Approach

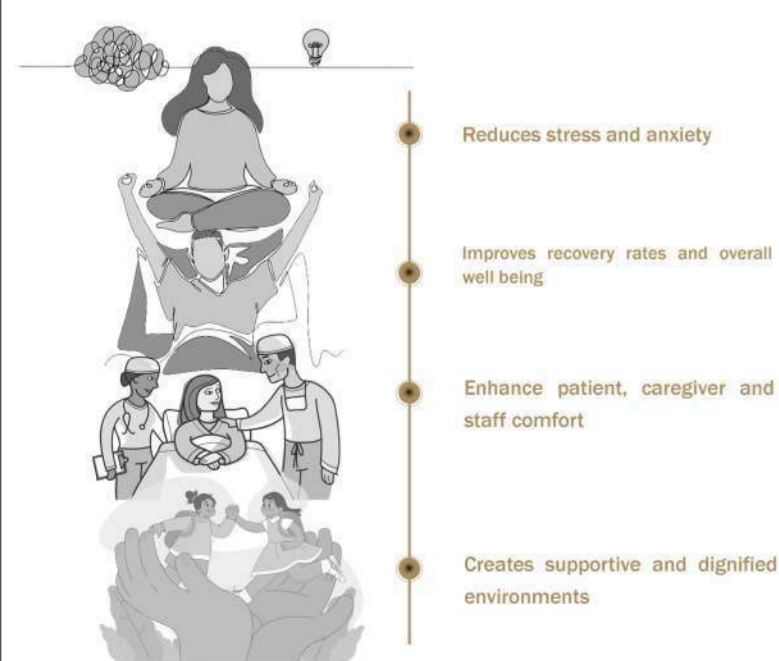
Healing Architecture as Design Approach
Principles of healing architecture
User group analysis

Aim: To create a therapeutic and compassionate built environment through healing architectural principles that enhances the quality of life for cancer patients, their families, and caregivers by fostering a deep connection with nature, promoting emotional well-being, and ensuring dignity in palliative care.

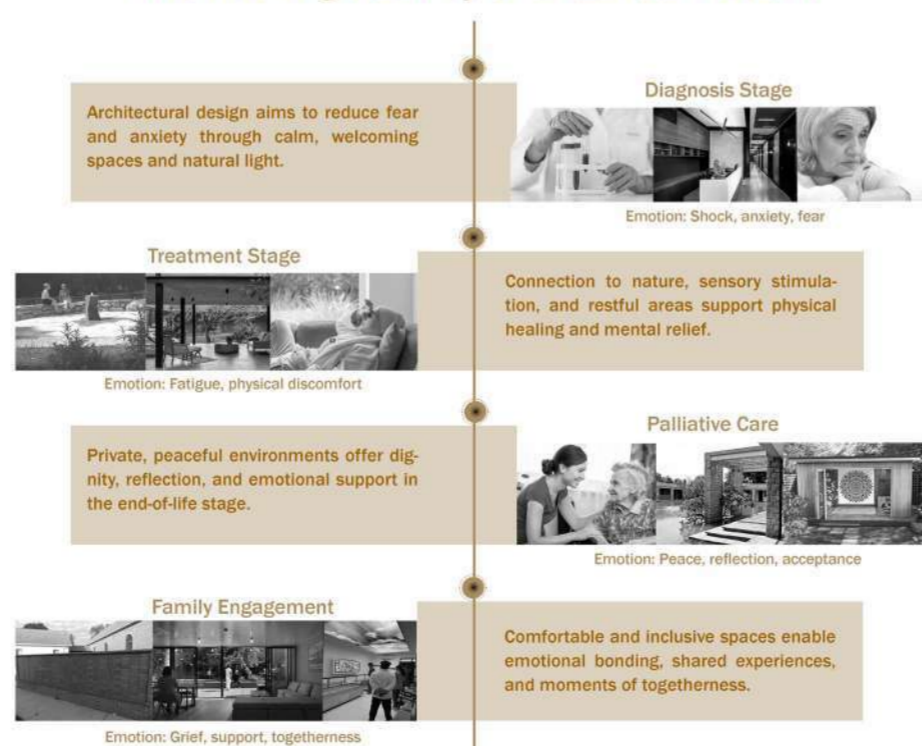
Principles of Healing Architecture



Benefits of Healing Architecture

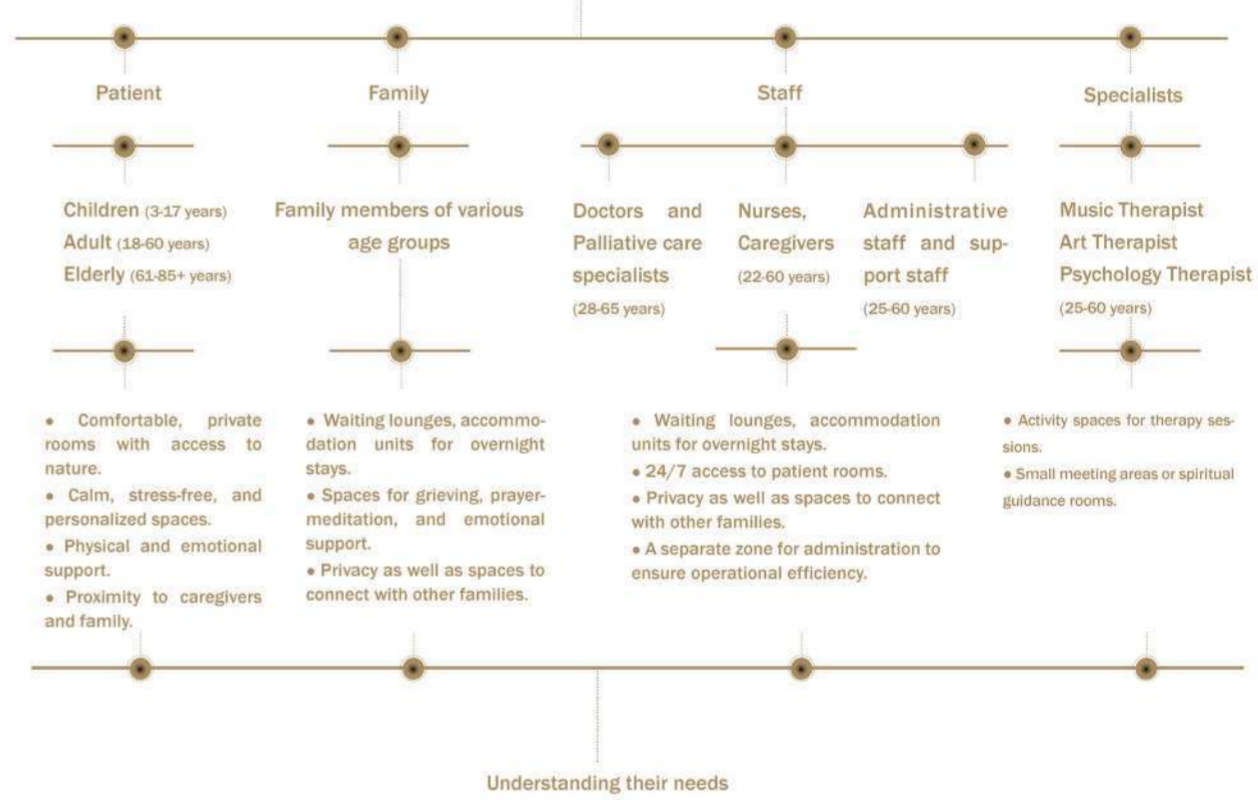


The Healing Journey of a Cancer Patient

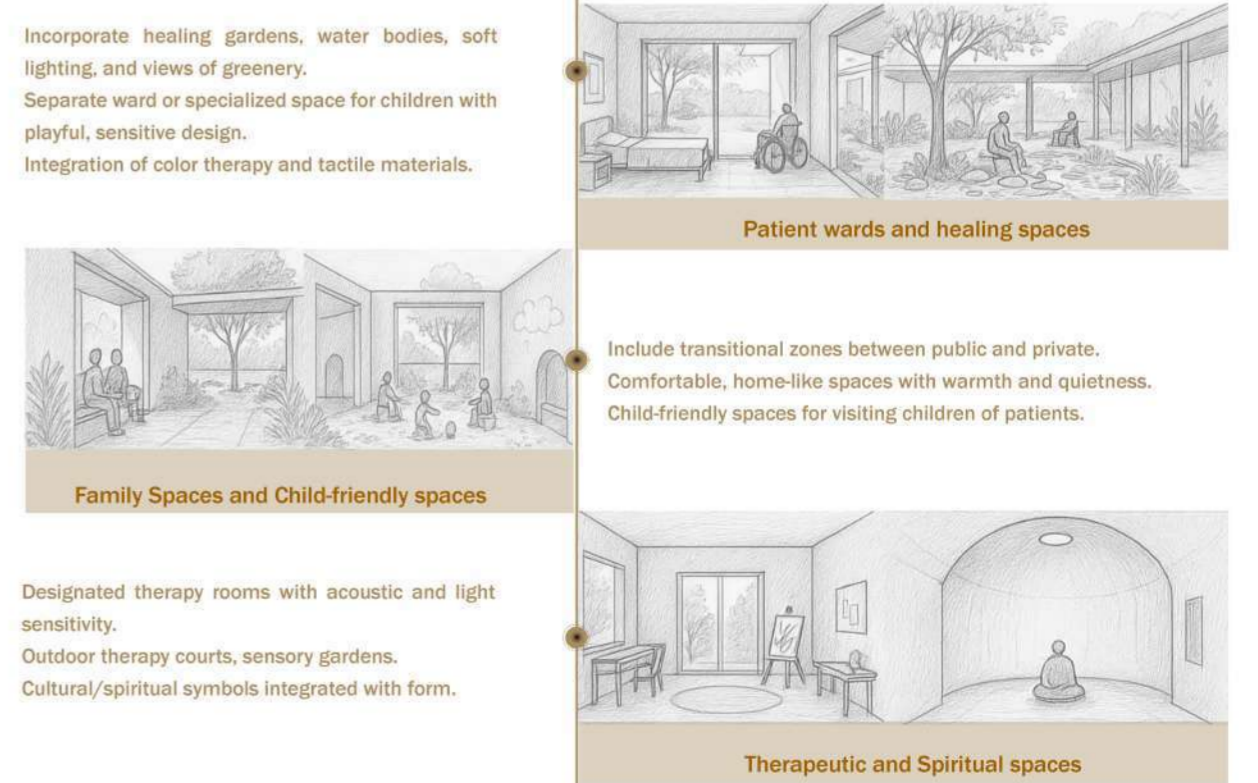


User group Analysis

Sanctuary of Hope

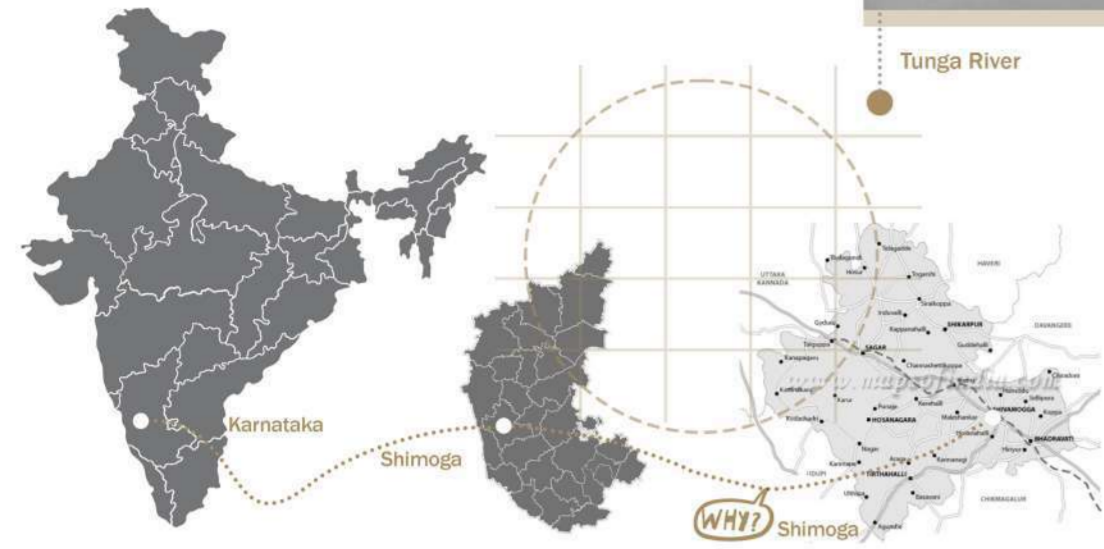


Designing for Dignity : Spatial Response to Patient-Centered Healing



Macro Context

Shimoga as feasible location
Climate of Shimoga
Landmarks close to the site
Proximity of the hospitals
SWOT Analysis



Shimoga: The Gateway Of Malnad



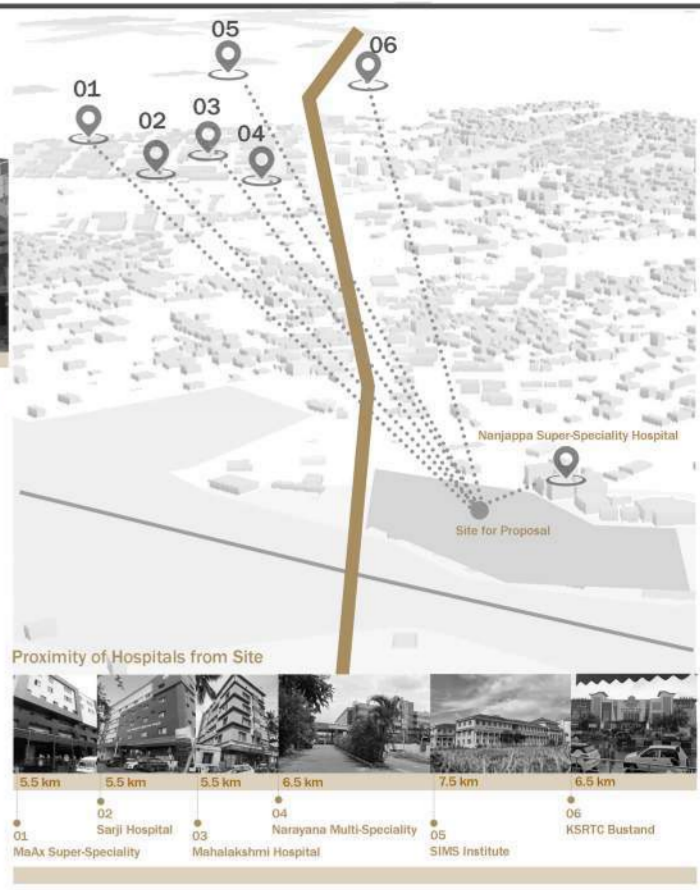
Shimoga (Shivamogga) is a major city in Karnataka with good connectivity to other districts via road and rail, making it accessible for patients coming from nearby rural areas.

Proximity to towns like Thirthahalli, Sagar, Bhadravathi, and rural belts ensures outreach to underserved populations.

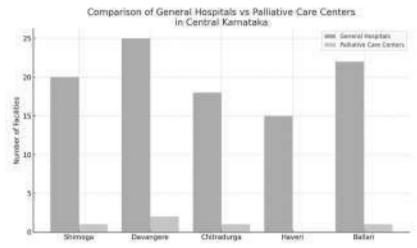
A cancer hospice in Shivamogga would bridge the palliative care gap in Central Karnataka, reducing the burden on visiting Bengaluru.

Karnataka to address rising cancer incidence with 5 new hospitals in underserved regions

Health Department, Bengaluru
Karnataka Government
Karnataka Government
The Karnataka Government has decided to build five new hospitals for cancer patients across the state to address the rising incidence of cancer. The initiative is a part of a broader effort to address the rising incidence of cancer and promote better healthcare infrastructure in underserved regions. The initiative aims to reduce the burden on patients traveling to Bengaluru for treatment. The five new hospitals will be located in Shimoga, Bidar, Channarayana, Channarayana, and Channarayana. The government has allocated a total of 100 acres of land for the construction of these hospitals. The first hospital is expected to be completed by 2025. The government is also planning to build a cancer hospital in the Bengaluru region of the state. The government is also planning to build a cancer hospital in the Bengaluru region of the state. The government is also planning to build a cancer hospital in the Bengaluru region of the state.



Regional Health Gap



Shimoga has limited cancer-specific palliative care infrastructure despite being a district with rising cancer cases due to lifestyle changes and environmental factors.

A hospice here bridges the gap between urban cancer care centers (like in Bangalore or Mangalore) and the rural population that lacks access to continuous care.

Natural Environment Suited for Healing



The environment around Shimoga resonates with spiritual calm and natural beauty, essential for end-of-life care and emotional healing.

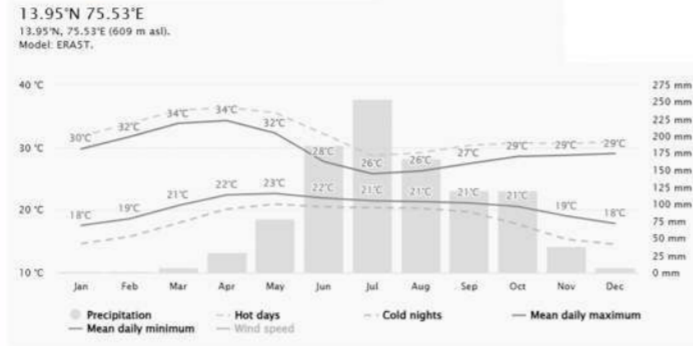
Opportunity for Community Outreach and Awareness



A hospice here can become a center for awareness, training, and community-based cancer support in the Malnad region. It can serve not just as a treatment facility but as a model for healing environments in semi-urban India.

Climate of Shimoga

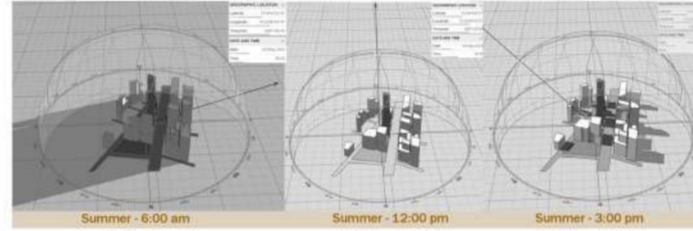
Average temperature and precipitation



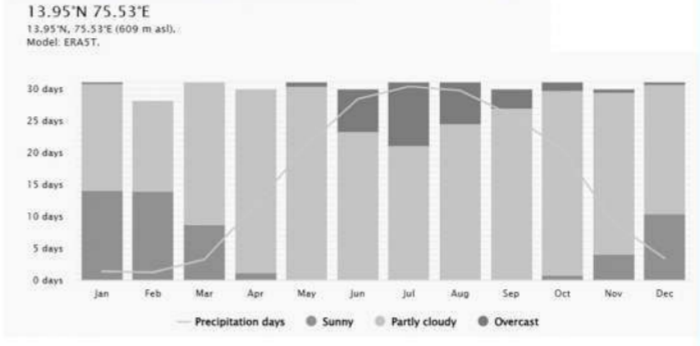
Summer peaks around 34°C in March–May. Monsoons bring temperatures down to 26–28°C. Winters are pleasant with temperatures ranging 18–21°C. Use passive cooling techniques like shaded courtyards, water bodies, and green roofs.

Orient patient rooms north-east to reduce direct summer heat gain while receiving diffused light. Include verandahs and buffer zones to create thermal insulation around patient care areas.

Solar analysis



Cloudy, sunny, and precipitation days



Heavy rainfall from June to September, peaking in July (>250mm). Integrate sloped roofs with deep overhangs, pergolas, and covered walkways to promote movement during rain. Rainwater harvesting systems and bioswales can enhance sustainability. Design semi-open therapeutic spaces for healing during monsoon.

Wind Rose



Alignment of windows and open courts to capture prevailing WSW cross-breeze for natural ventilation. Stack ventilation and ventilated roof cavities will help cool internal spaces. Place aromatic medicinal gardens in wind corridors for therapeutic olfactory stimulation.

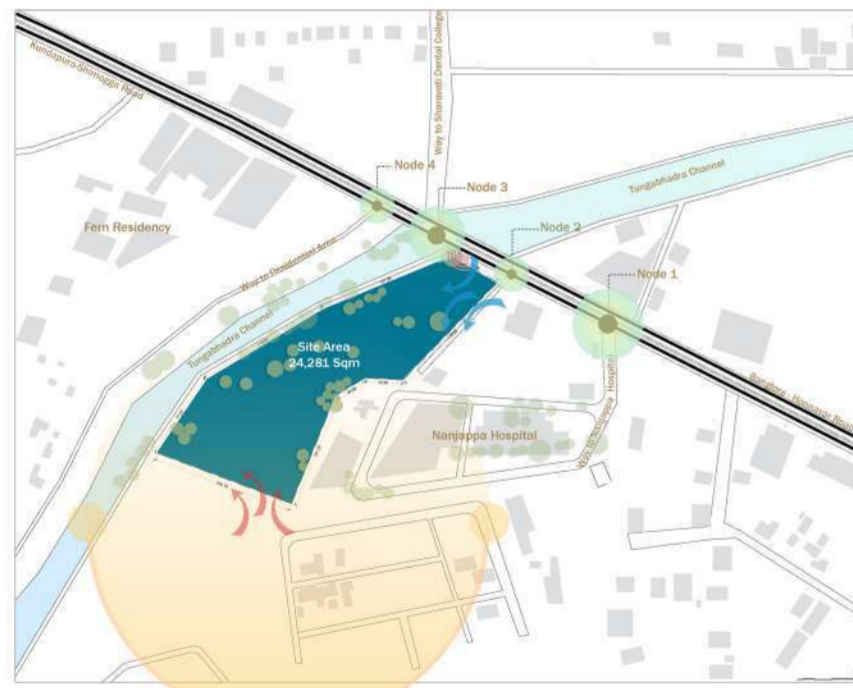
SWOT Analysis

<p>Good Accessibility: Close proximity to Shimoga Bus Stand and city center.</p> <p>Ample Space for design Exploration: Less dense urban fabric provides flexibility to incorporate courtyards, green pockets, and zoning of programs in harmony with the five elements.</p> <p>Hospital in the closer proximity: Within 15–20 minutes of major health-care hubs like Maax Hospital, Sarji Hospital, and SIMS.</p>	<p>Limited accessibility via public transport: May affect convenience for daily staff and visitors.</p> <p>Channel maintenance issues: Possible seasonal water level fluctuations or water quality concerns.</p> <p>Lower urban activity nearby: Could make it harder to integrate commercial support units.</p>
<p>Developing a healing prototype: Ideal for showcasing how smaller water-channels can be used in palliative design.</p> <p>Community involvement: Opportunity to involve local craftspeople and natural materials in construction.</p> <p>Sustainability integration: Can incorporate natural water management, solar orientation, and green buffers.</p> <p>Future connectivity improvements: With Shimoga expanding, better roads and services may come up.</p>	<p>Encroachment risks: Channel sides might be one to future informal development or disputes.</p> <p>Climate-related impacts: Water scarcity in dry seasons or flooding in extreme monsoons could affect site stability.</p> <p>Urban sprawl: Unplanned development around the site may disturb the peaceful environment in the future.</p>

Micro Context

Site and its Surroundings
Environmental Conditions
Movement and Circulation
Vegetation Analysis
Topography Analysis

Site and its Surroundings



The site lies adjacent to a major hospital (Nanjappa Hospital), enhancing emergency support. The site is located in a relatively low-density zone, away from the chaos of the city center. This offers a peaceful atmosphere, ideal for palliative care.

Site



Total Site Area : 24,281 sqm
Road width : 17 m
Setbacks : Front - 6 m
Right Side - 6 m
Rear side - 6 m
Towards channel - 9 m

Zonal Regulations

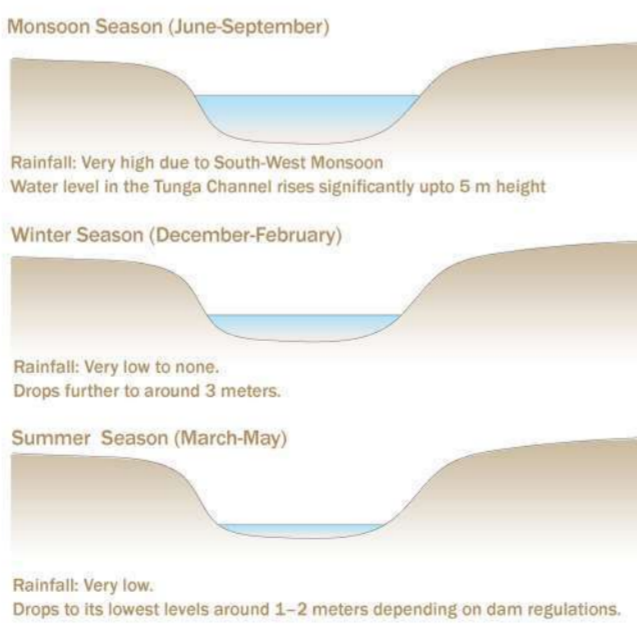
Zonal Classification : Public or Semi-Public zone (considering its proximity to the healthcare facility)
Floor Area Ratio (FAR) : 2.0 - 3.0
Ground coverage : 40 - 50 % (to ensure proper ventilation, open space and circulation)
Parking regulation : One parking space per 50 sqm of floor area.
Environmental considerations :
Mandatory installation of rainwater harvesting systems for plots larger than 200 sqm.
At least 10 % of the total plot area should be allocated for landscaping.

Contour Analysis



The site demonstrates a mild and consistent slope pattern, with contour intervals ranging from approximately 0.2 to 1.0 meters. The central and southern portions of the site show relatively flat zones, making them the most suitable areas for primary building placement. The gradual slope direction appears to lead towards the Tungabhadra Channel, allowing for natural stormwater runoff.

Water Level Analysis



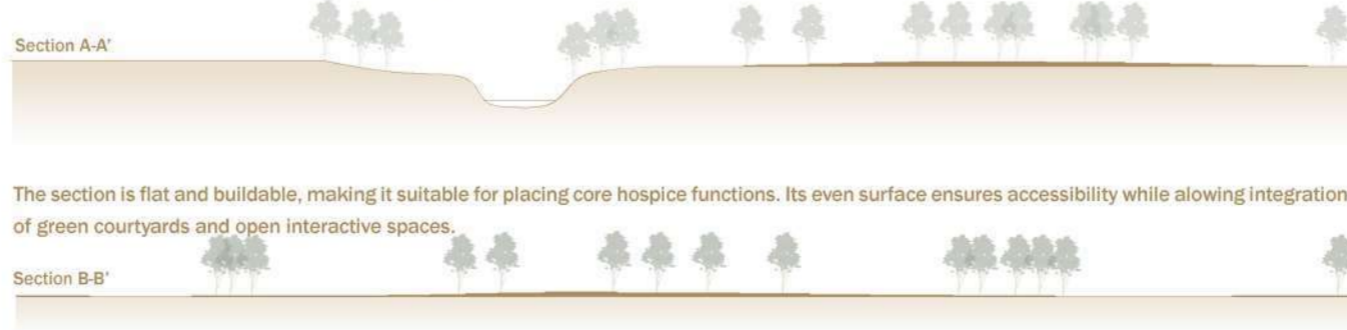
Monsoon Season (June-September)
Rainfall: Very high due to South-West Monsoon
Water level in the Tungabhadra Channel rises significantly upto 5 m height

Winter Season (December-February)
Rainfall: Very low to none.
Drops further to around 3 meters.

Summer Season (March-May)
Rainfall: Very low.
Drops to its lowest levels around 1–2 meters depending on dam regulations.

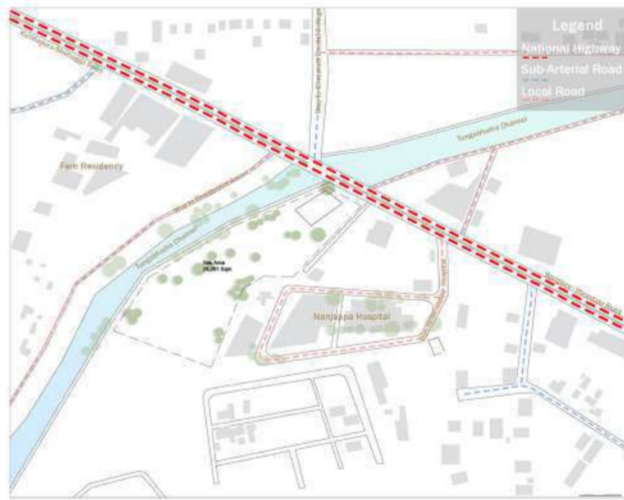
Sections across the site

Section shows a natural slope leading to the Tungabhadra channel, offering a serene setting ideal for healing landscapes and reflective spaces. This terrain can be used to create sensory pathways, viewing decks, and therapeutic zones connected to water.



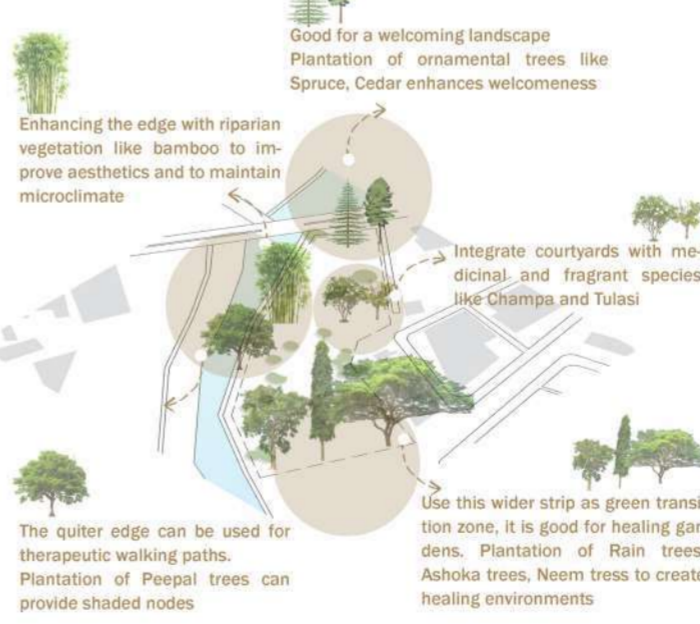
The section is flat and buildable, making it suitable for placing core hospice functions. Its even surface ensures accessibility while allowing integration of green courtyards and open interactive spaces.

Accessibility



The site is highly accessible and strategically located, offering excellent connectivity across multiple levels of road hierarchy. It is directly abutting the Bangalore-Hannavara Road, a National Highway, which ensures smooth regional and intercity connectivity. The surrounding local road network ensures last-mile connectivity to local neighborhood.

Vegetation



Good for a welcoming landscape
Plantation of ornamental trees like Spruce, Cedar enhances wellness

Enhancing the edge with riparian vegetation like bamboo to improve aesthetics and to maintain microclimate

Integrate courtyards with medicinal and fragrant species like Champa and Tulasi

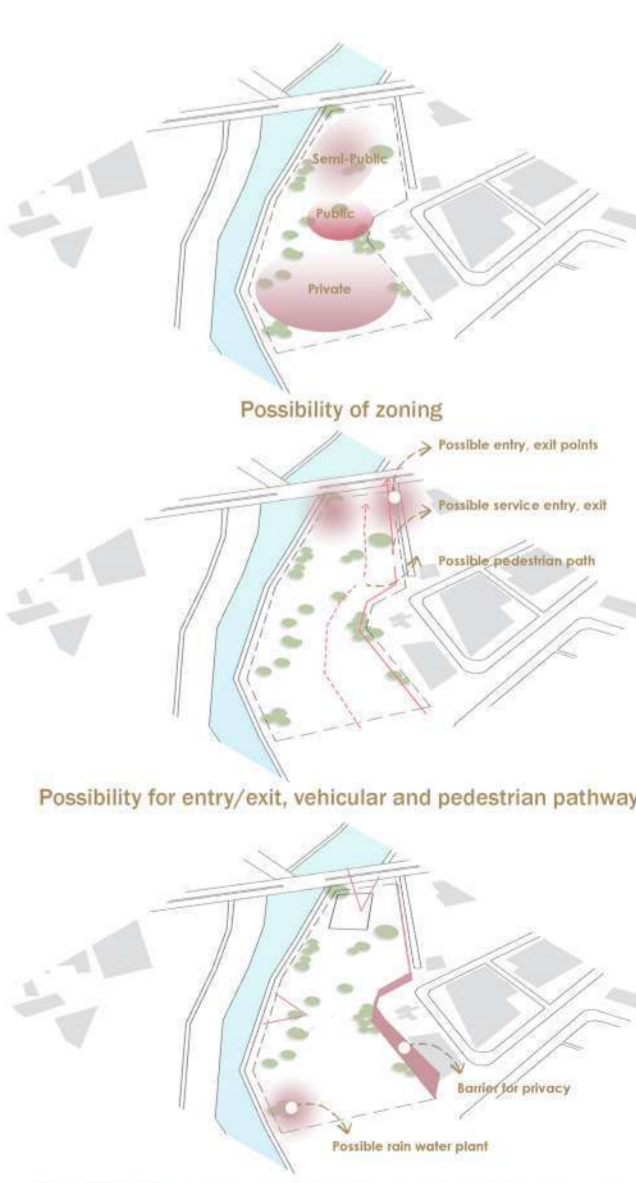
The quieter edge can be used for therapeutic walking paths. Plantation of Peepal trees can provide shaded nodes

Use this wider strip as green transition zone. It is good for healing gardens. Plantation of Rain trees, Ashoka trees, Neem trees to create healing environments

Vegetation Analysis



The site and its immediate surroundings feature sparse and scattered vegetation. The existing trees can be retained to maintain the ecological balance of the place. New plantations can be introduced along the boundary of Nanjappa-hospital that acts as the natural buffer between the hospital and the hospice.



Possibility for entry/exit, vehicular and pedestrian pathway

Possibility for wrapping as barrier, views, rain water plant

SANCTUARY OF HOPE

A Cancer Hospice, Shivamogga

Programme

Basic standards and guidelines for designing a Cancer Hospice, which includes recommendations for space planning, layout, and dimensions to ensure comfort, accessibility, and healing for patients and visitors.

The proposed built-up area of 8,344 sqm accounts for approximately 34.37% of the total site area of 24,280 sqm. This moderate ground coverage reflects a conscious design approach that prioritizes open spaces, natural light, ventilation, and integration with the landscape. By limiting the footprint of the built mass, the project ensures sufficient room for healing gardens, courtyards, circulation paths, and buffer zones, which are essential components in a therapeutic environment like a cancer hospice. This balance between built and unbuilt space

Area Statement for the proposed Cancer Hospice

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
ADMINISTRATION					
Director Room	1	40	40	6	Standard workspace with meeting corner
Communication and PR	1	50	50	6	For coordination with donors/media, noise-insulated
CC TV and Server Room	2	20	40	4	Secure, climate-controlled, no public access
Cafe	1	200	200	60 People	For staff & visitors, universal height counters
Common Toilet	3	10	30	6 People	1 accessible, 2 gender-neutral; 1.8m x 2.2m layout with turning radius
Total			450 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
ACCOMMODATION					
Patient Wards (4 Bed) + Toilet + Nurse Station	5	80	400	24 Patients	Balances privacy and companionship with common toilet
Pediatric Ward (10 Bed) + Toilet + Nurse Station	1	130	340	10 Patients	Balances privacy and companionship with common toilet
Doctor's Accommodation	2	25	50	2 Doctors	Emergency access, en-suite units
Day Care Room	1	136	136	6 Patients	Chemo/dialysis recliners with space between beds
Physiotherapy Room	1	200	200	12 Patients	Equipment + mat area + 1.5m wide clear path
Indoor Play Area	1	40	40	10 Kids + 2 Staff	For pediatric patients, safe surfaces, low furniture
Total			1866 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
AMENITIES FOR PALLIATIVE CARE					
Meditation Area	1	70	70	8 - 10 People	Promoting emotional and mental well-being
Grieving Room	1	25	25	4 Family members	For terminal stage privacy and family time
Medical Gas Room	1	80	80	6	Houses oxygen and emergency gas with safe ventilation
Pharmacy	1	25	25	4 Staff	Medicine dispensation and minor storage, barrier-free counters
Total			240 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
KITCHEN AND LAUNDRY					
Kitchen	1	70	70	8 Staff	Industrial, separate veg./non-veg. prep, 2m aisle width
Storage	2	15	30	2	Dry + cold stores, adjacent to kitchen
Dining Space	1	150	150	60 People	2 sqm/person with circulation for wheelchairs
Wash Area	1	100	100	-	Includes industrial washing machines, water-resistant finishes
Drying Area	1	120	120	-	Open/semi-open zone with ventilation
Total			470 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
RESEARCH AND TRAINING CENTER					
PUBLIC SPACES					
Admin Workstation	1	40	40	6	Training coordination desk
Staff Pantry	1	35	35	6	For internal team
Conference Space	1	40	40	16	Seminars & internal meetings
Total			295 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
RESEARCH AND TRAINING ZONE					
Data Analysis Room	1	12	12	4	Shared workstation for researchers handling patient data
Archive and Documentation Room	1	10	10	0	Secured document storage with racks and temperature control
Seminar/ Training Room	1	60	60	40	Mid-sized seminar hall with AV setup and movable furniture for awareness sessions
Library and Resource Center	1	100	100	20-25	Reading zone with medical journals, digital access, and small discussion booths
Multipurpose Research Lab	1	25	25	12	Can be used for presentations, experiments and training
Total			207 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
SERVICES					
General Storage	1	20	20	0	Storage for training materials, books, medical models, charts
Toilet Women	1	18	18	6	-
Toilet Men	1	18	18	4	-
Total			56 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
PARKING					
Car Parking (Staff)	8	15	150	-	2.5 x 6m standard
Car Parking (Visitor)	8	15	120	-	2.5 x 6m standard
Bike Parking (Staff)	10	2.5	25	-	Two-wheeler slots
Bike Parking (Visitor)	10	2.5	25	-	Two-wheeler slots
Total			320 Sqm		

Programme space	No. of Units	Area Per Unit	Total Area (Sqm)	Total People Accomodated	Justification
OPEN SPACES					
Courtyards and Gardens	-	-	1360	-	Passive healing spaces, seating & trees
Waterbody	-	-	2500	-	Reflective space for calm
Recreational Spaces	-	-	580 Sqm	-	-
Total			4440 Sqm		

ADMINISTRATION	535
ACCOMMODATION	2055
AMENITIES FOR PALLIATIVE CARE	310
KITCHEN AND LAUNDRY	470
RESEARCH AND TRAINING CENTER	207
PARKING	385
TOTAL BUILT UP AREA	3904 Sqm

Total Site Area	24,280 Sqm
Total Built-up Area + Open Spaces	8344 Sqm
Percentage of Total Built-up Area	~34.5% Coverage

Standards for the healthcare settings

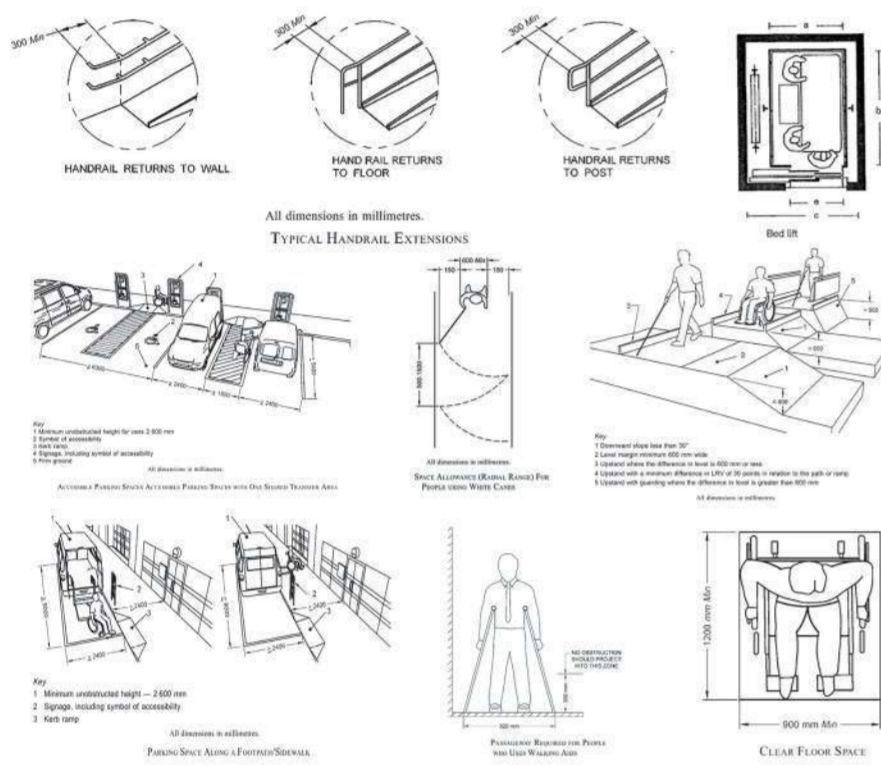
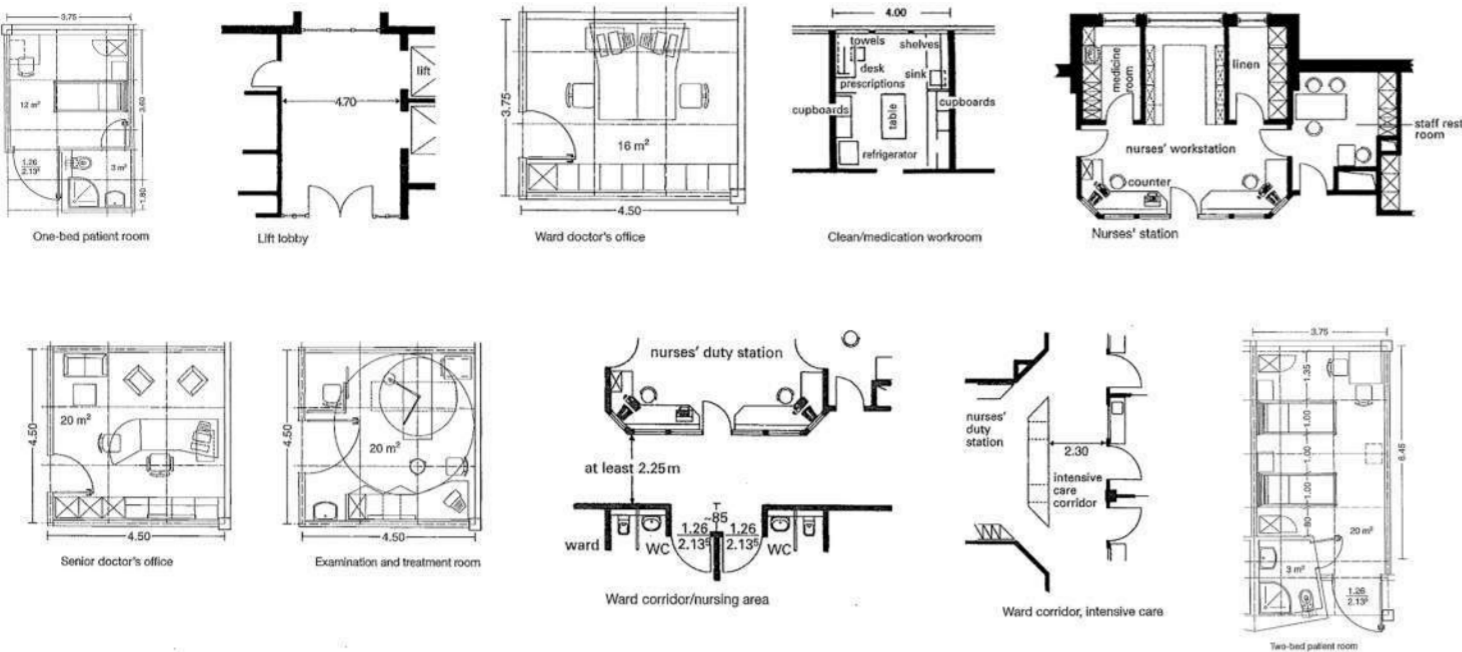


Table 18 Requirements for Ramp
(Refer: B-4-2.2)

Sl. No.	Level Difference (m)	Maximum Gradient of Ramp (%)	Ramp Width (m)	Handrail on Both Sides	Other Requirements
(1)	0.15	1:12	1.20	1	Landings shall occur 1.5m of ramp run
(2)	0.30	1:12	1.50	2	Landings shall occur 1.5m of ramp run
(3)	0.45	1:12	1.80	2	Landings shall occur 1.5m of ramp run
(4)	0.75	1:12	2.10	2	Landings shall occur 1.5m of ramp run
(5)	More than 0.90	1:12	2.40	2	Landings shall occur 1.5m of ramp run

Design Concept

Concept and Strategies
Case Explorations
Spatial Zoning
Zoning

Elemental Harmony:

A Healing Journey through Nature's Five Forces

"In Earth, we find the quiet strength beneath our feet, In Water, the gentle rhythm that soothes the soul, Fire dances with light, warming hearts and paths alike, Air whispers through courtyards, carrying breath and life, While Space opens to a pause, a prayer, a sky within. Together, they weave a sanctuary where healing begins."



EARTH Stability & Grounding

Healing aspect: Supports emotional release, refreshes the mind, and promotes sensory therapy through sound and movement.

Strategy: Integrate reflecting pools, lily ponds, and flowing rills along circulation paths to evoke calm and contemplation.

Strategy: Use natural materials like exposed brick, rammed earth, laterite, and stone cladding to provide a sense of warmth and groundedness.

Strategy: Sunken courtyards and green mounds to connect patients with the tactile quality of soil.

Strategy: Organic, earth-toned palettes for interiors to reduce clinical harshness.

Healing aspect: Provides emotional anchoring and a sense of connection to nature and place.

FIRE Energy & Transformation

Healing aspect: Encourages deep breathing, relaxation, and respiratory comfort, crucial for cancer patients.

Strategy: Employ cross-ventilation, courtyards, and ventilated louver systems for continuous airflow.

Strategy: Use vertical green walls and breezeways to filter air and refresh interiors.

Strategy: Plant aromatic herbs and flowering trees (e.g., Tulsi, Champa) that purify and uplift the air.

Strategy: Emphasize visual connections to the sky, open terraces, and uncluttered spatial planning.

Strategy: Include quiet nooks and pause points to evoke introspection and spiritual awareness.

Healing aspect: Symbolizes vitality, inspires hope, and supports the body's circadian rhythm for better rest and recovery.

AIR Breath & Movement

Healing aspect: Encourages deep breathing, relaxation, and respiratory comfort, crucial for cancer patients.

Strategy: Employ cross-ventilation, courtyards, and ventilated louver systems for continuous airflow.

Strategy: Use vertical green walls and breezeways to filter air and refresh interiors.

Strategy: Plant aromatic herbs and flowering trees (e.g., Tulsi, Champa) that purify and uplift the air.

Strategy: Emphasize visual connections to the sky, open terraces, and uncluttered spatial planning.

Strategy: Include quiet nooks and pause points to evoke introspection and spiritual awareness.

Healing aspect: Symbolizes vitality, inspires hope, and supports the body's circadian rhythm for better rest and recovery.

SPACE Consciousness & Freedom

Healing aspect: Encourages deep breathing, relaxation, and respiratory comfort, crucial for cancer patients.

Strategy: Employ cross-ventilation, courtyards, and ventilated louver systems for continuous airflow.

Strategy: Use vertical green walls and breezeways to filter air and refresh interiors.

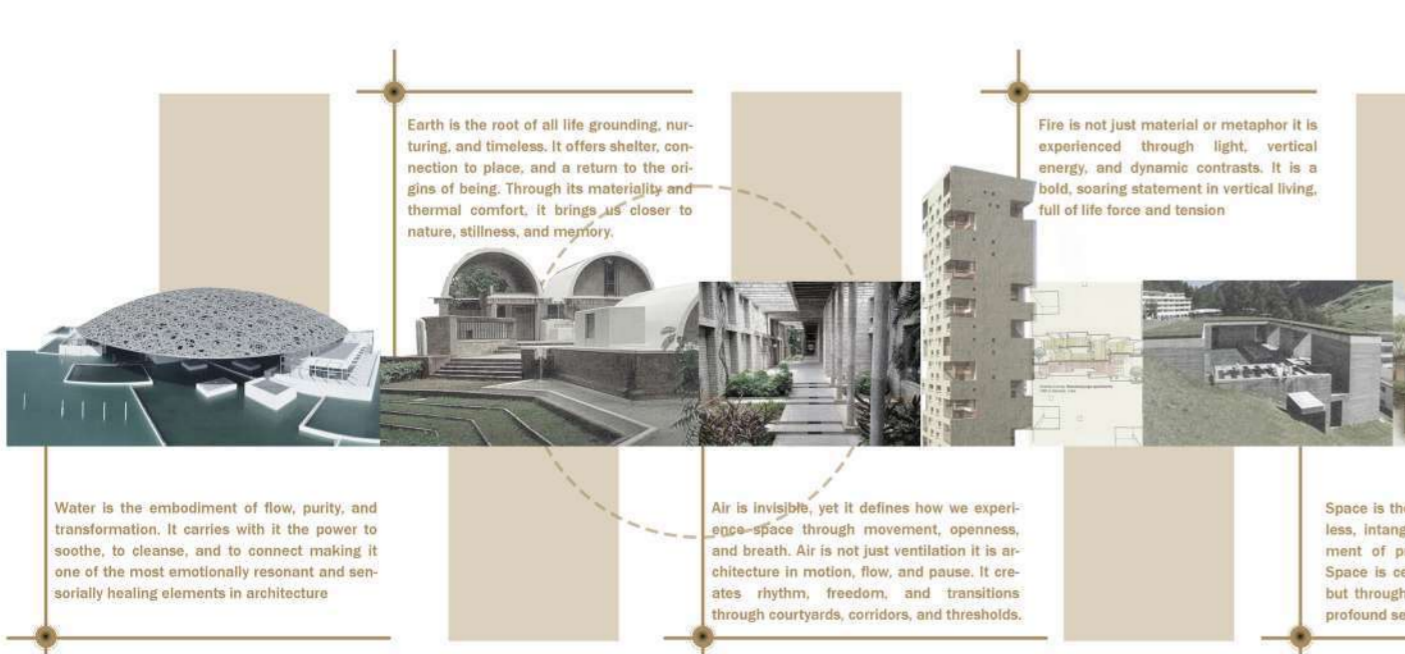
Strategy: Plant aromatic herbs and flowering trees (e.g., Tulsi, Champa) that purify and uplift the air.

Strategy: Emphasize visual connections to the sky, open terraces, and uncluttered spatial planning.

Strategy: Include quiet nooks and pause points to evoke introspection and spiritual awareness.

Healing aspect: Symbolizes vitality, inspires hope, and supports the body's circadian rhythm for better rest and recovery.

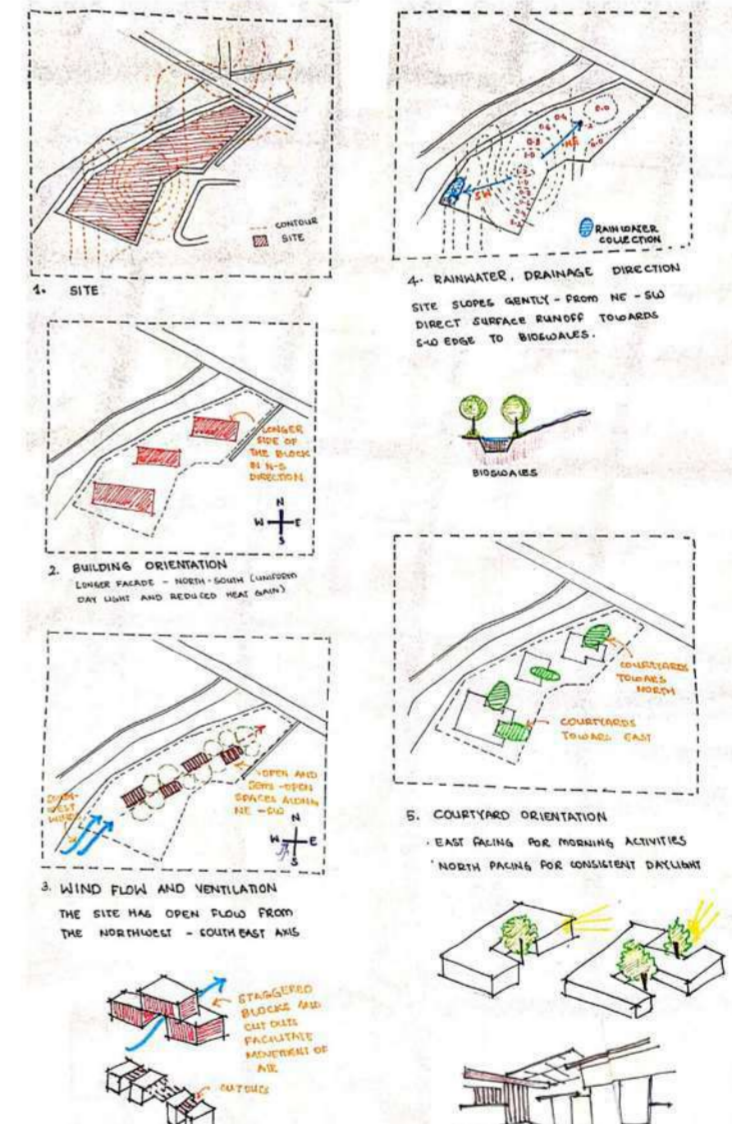
Designing Through Nature's Wisdom: Case Explorations in Elemental Architecture



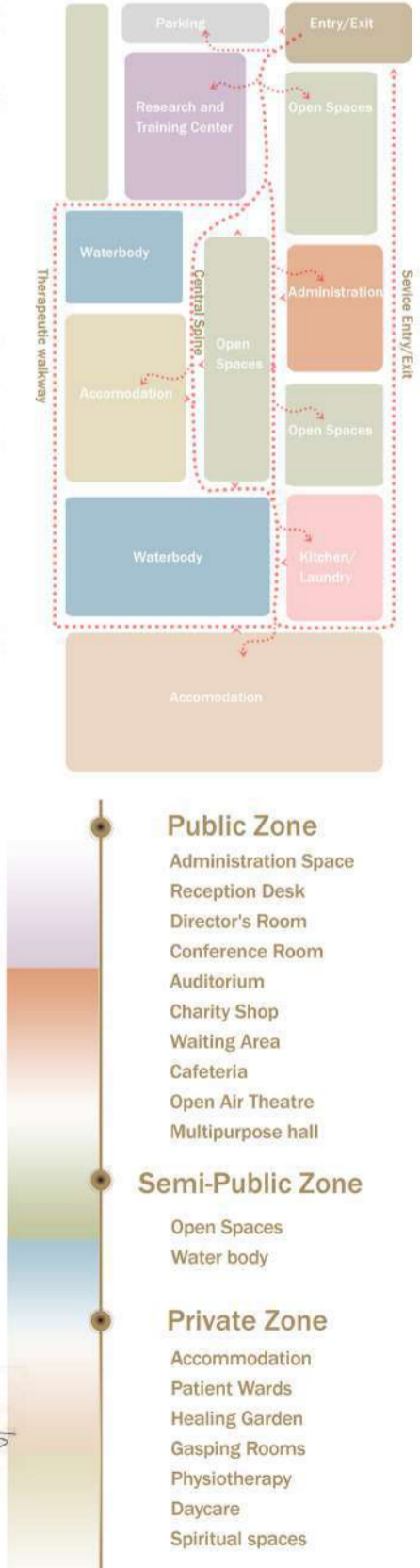
SANCTUARY OF HOPE

A Cancer Hospice, Shivamogga

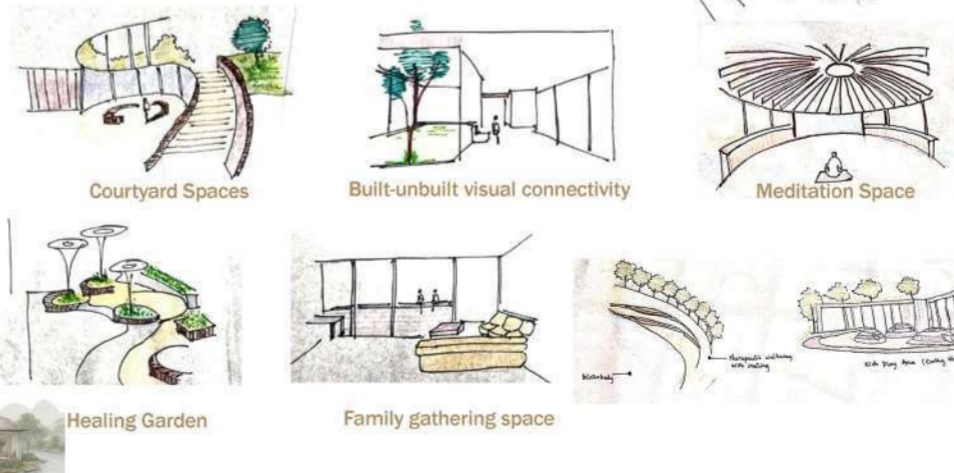
Site Strategies



Spatial Zoning



Design Ideas



Inference: Zones are clearly demarcated into Service, Administration, Research, Accommodation, minimizing conflicts in movement and ensuring functional clarity. A central spine ties the campus together, generous open spaces are interspersed strategically, improving daylight, ventilation, and access to nature crucial for psychological and physiological healing. From public zones (Entry, Parking, Research) to semi-private (Admin, Service) and private (Accommodation, Therapy), the spatial layout supports emotional comfort and gradual transition.

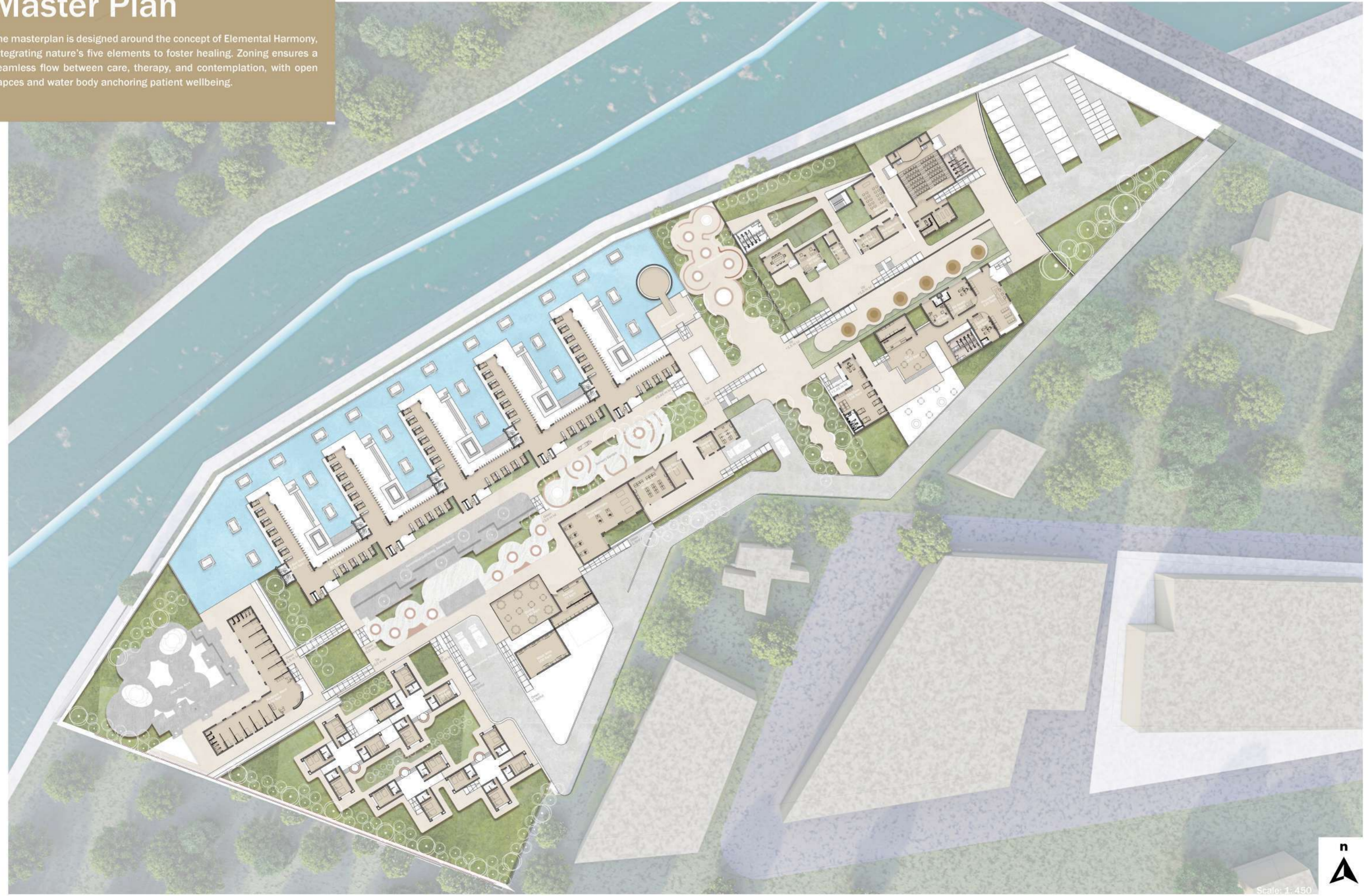
Site Plan

The site is situated near the Tungabhadra Canal in Shivamogga, adjacent to Nanjappa Hospital, offering seamless medical connectivity. Surrounded by a mix of residential zones, green cover, and water bodies, the context fosters a calm, healing atmosphere, its urban-rural edge supports both accessibility and tranquility which is ideal for a cancer hospice.



Master Plan

The masterplan is designed around the concept of Elemental Harmony, integrating nature's five elements to foster healing. Zoning ensures a seamless flow between care, therapy, and contemplation, with open spaces and water body anchoring patient wellbeing.



SANCTUARY OF HOPE

A Cancer Hospice, Shivamogga

2025-259

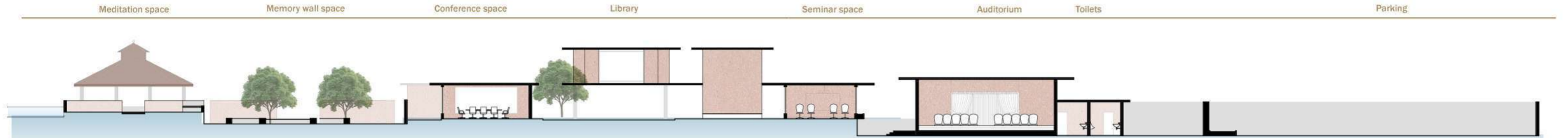
Sections

The site sections highlight the volumetric clarity and spatial flow, enhancing natural light and ventilation throughout the design

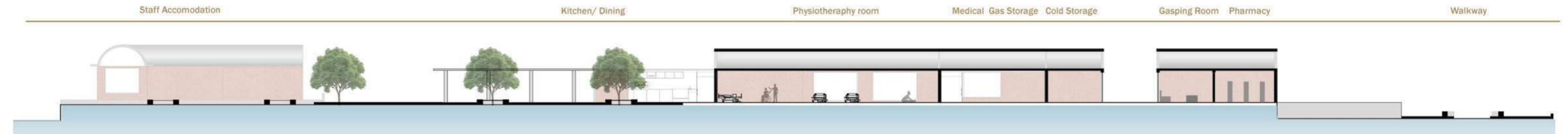
The site sections articulate the spatial experience and architectural intent, emphasizing volumetric balance and human-scale design. Each section captures the seamless flow between interior and exterior spaces, showcasing how natural light, ventilation, and open views are integrated into the planning. The varying roof profiles and carefully proportioned spaces reflect sensitivity to function and user needs, especially for patients and caregivers. Healing gardens, courtyards, and landscape buffers are aligned alongside circulation corridors to promote interaction with nature.



SECTION @ AA'



SECTION @ BB'



SECTION @ CC'

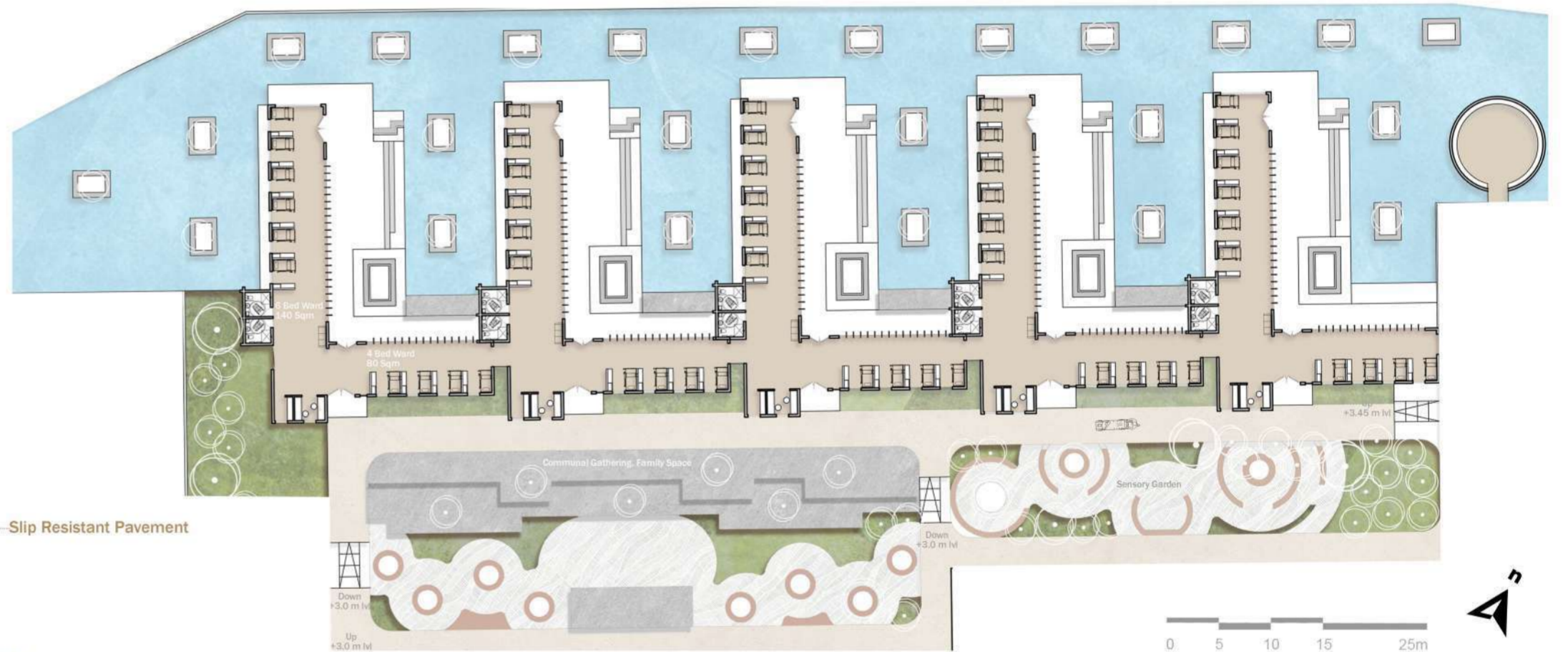


SECTION @ DD'

Patient Ward

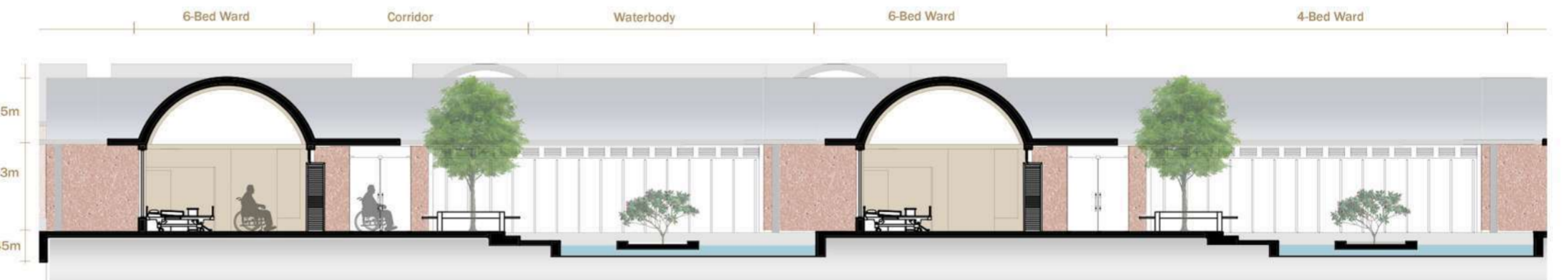
The pediatric ward is a warm, child-friendly space designed to ease anxiety and promote healing. It includes playful elements, soft colors, and access to nature to create a comforting environment.

Materiality



Block Plan of the Patient Wards

1. Glazed Clerestory - Allows ample natural daylight into the space while maintaining privacy and ventilation.
2. Concrete Plastered Roof - Provides strong thermal mass and durability, ensuring longevity and temperature control.
3. Glazed Door - Enhances visual connectivity with outdoor spaces while allowing light penetration.
4. Laterite Stone for Walls - Offers excellent thermal insulation and blends aesthetically with natural surroundings.
5. Champa Tree in Between the Waterbody - Brings soothing fragrance and visual tranquility, enhancing healing through nature.
6. Slip-Resistant Pavement - Ensures safety and ease of movement for all users, especially patients and elderly.



Section along patient wards

Entry to ward



Patient Wards facing the waterbody



Patient Wards facing the waterbody



Communal gathering and family space



Patient ward entrance



Sensory garden

Block plans

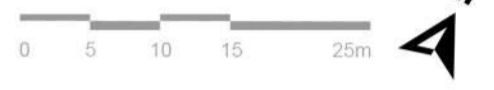
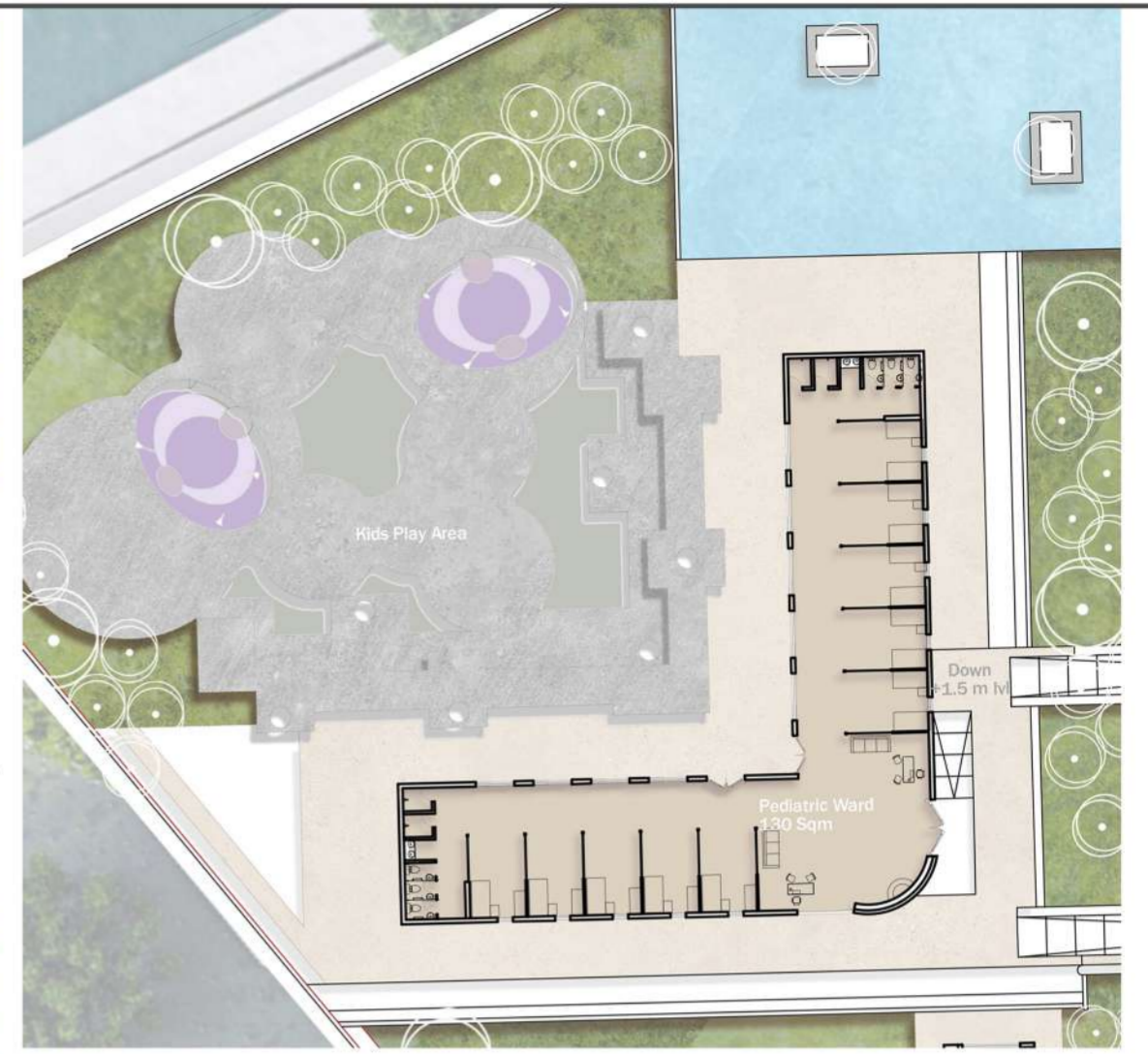
Pediatric Ward
Administration and Research Block

PEDIATRIC WARD

The pediatric ward incorporates vibrant colors, playful forms, and interactive elements to create a child-friendly environment that reduces anxiety and promotes positivity. With dedicated spaces for caregivers, family interaction, and therapeutic play, the ward balances medical functionality with emotional well-being, making it a warm, secure, and hopeful space for children on their healing journey.



Pediatric ward with the play area



Section of Pediatric Ward

ADMINISTRATION AND RESEARCH BLOCK

The Admin and Research Block in the Sanctuary of Hope is organized with the administration spaces positioned at the bottom and the research functions located at the top, linked through a central entry plaza that forms the heart of arrival and orientation. The central entry plaza not only acts as a visual and physical anchor but also gently transitions users toward the inner healing spaces and wards, setting a calm and dignified tone for the hospice environment.



Section of Administration and Research block

