



HEALTH HEART: VADSTENA FUTURE HEALTHCARE CENTRE

by

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REGION ÖSTERGOTLAND



VADSTENA




BIRGITTA SQUARE


INTRODUCTION	INTRODUCTION
STRATEGIES	SUSTAINABILITY GOALS DESIGN STRATEGIES CONCEPT DESIGN
SITE & ANALYSIS	WIDER CONTEXT EXISTING BUILDINGS AND SITE SITE PLAN
PROGRAMME	CHALLENGING THE BRIEF FLOOR PLAN CONCEPT
PROPOSAL	PLANS DEPARTMENT VIEW OF HEART SECTIONS ELEVATIONS STRUCTURE DETAIL SUSTAINABILITY PERSPECTIVE


SUSTAINABILITY GOALS





ACTIVE USE OF THE SDGs IN
DESIGN STRATEGIES AND BRIEF


**3** ENSURE HEALTHY LIVES AND PROMOTE WELLBEING FOR ALL AT ALL AGES

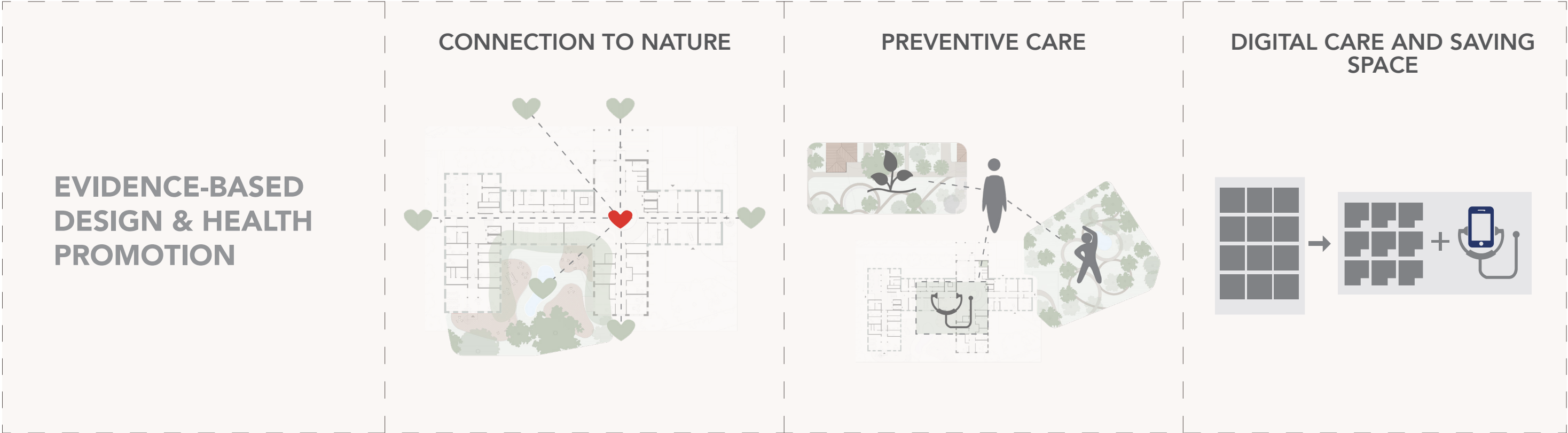
**4** ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

**5** ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

**11** MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

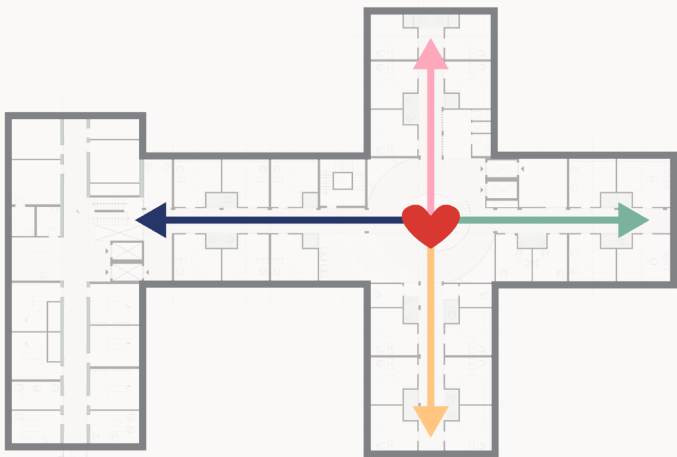
**12** ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

**15** PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

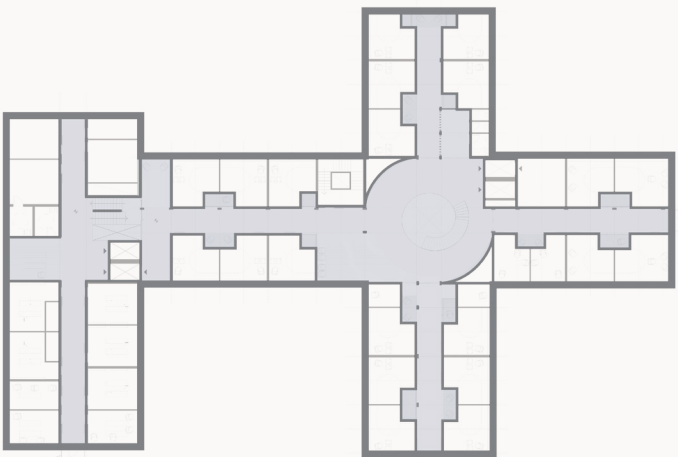


BRIEF & LOGISTICS

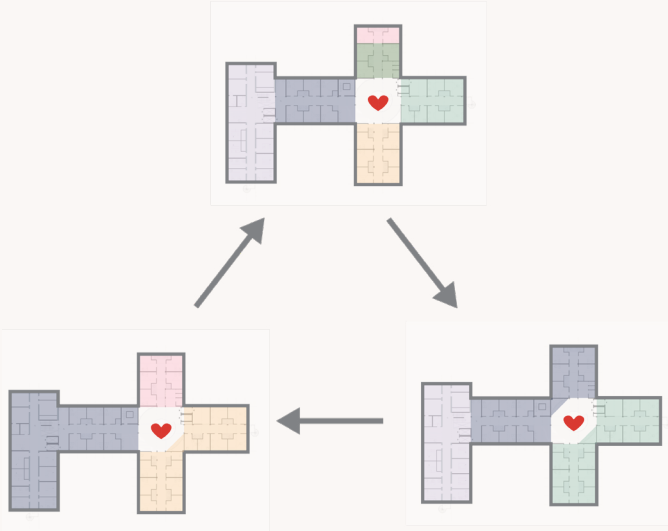
PEOPLE-CENTRED DESIGN:
WAYFINDING



EFFICIENT FLOWS AND
AVOIDING LONG CORRIDORS



FLEXIBILITY OF FUNCTIONS



SITE & CONTEXT

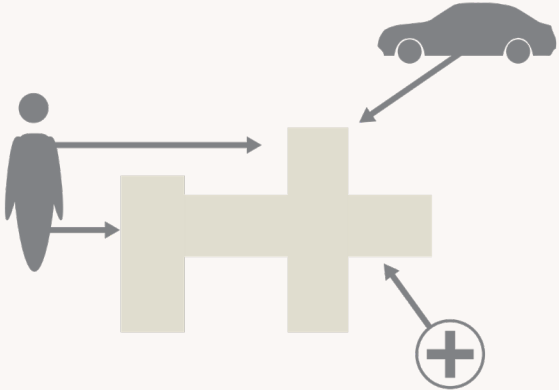
COMMUNITY FUNCTIONS

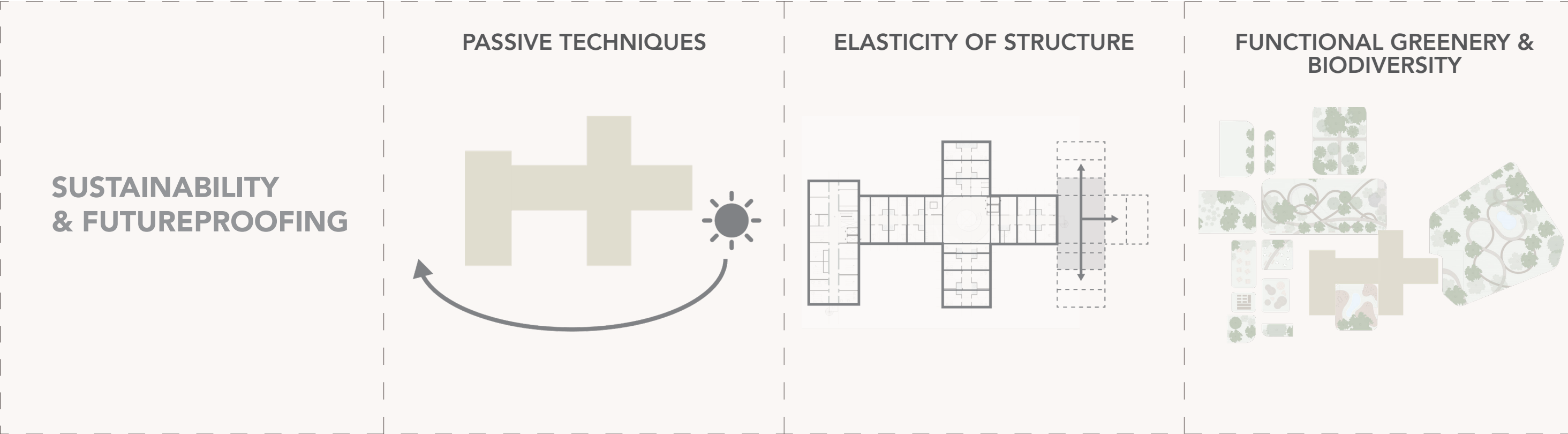


RESPECT THE HISTORIC GRID




CLEAR FLOWS TO SITE



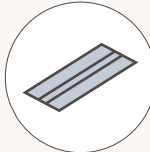


REUSING BUILDINGS

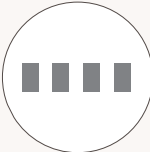
CHALLENGES OF RE-USE



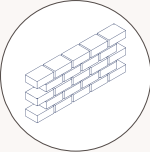
DIFFERENT LEVELS



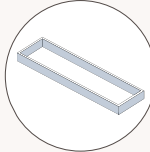
NARROW CORRIDORS




RESTRICTED WINDOW GRID



STRONG EXISTING CHARACTER



EXISTING WALL BOUNDARIES



RESTRICTED BUILDING HEIGHT



STRATEGY:
RESPECT THE
HISTORIC
CONTEXT

OPPORTUNITIES OF RE-USE



SUSTAINABLE REUSE



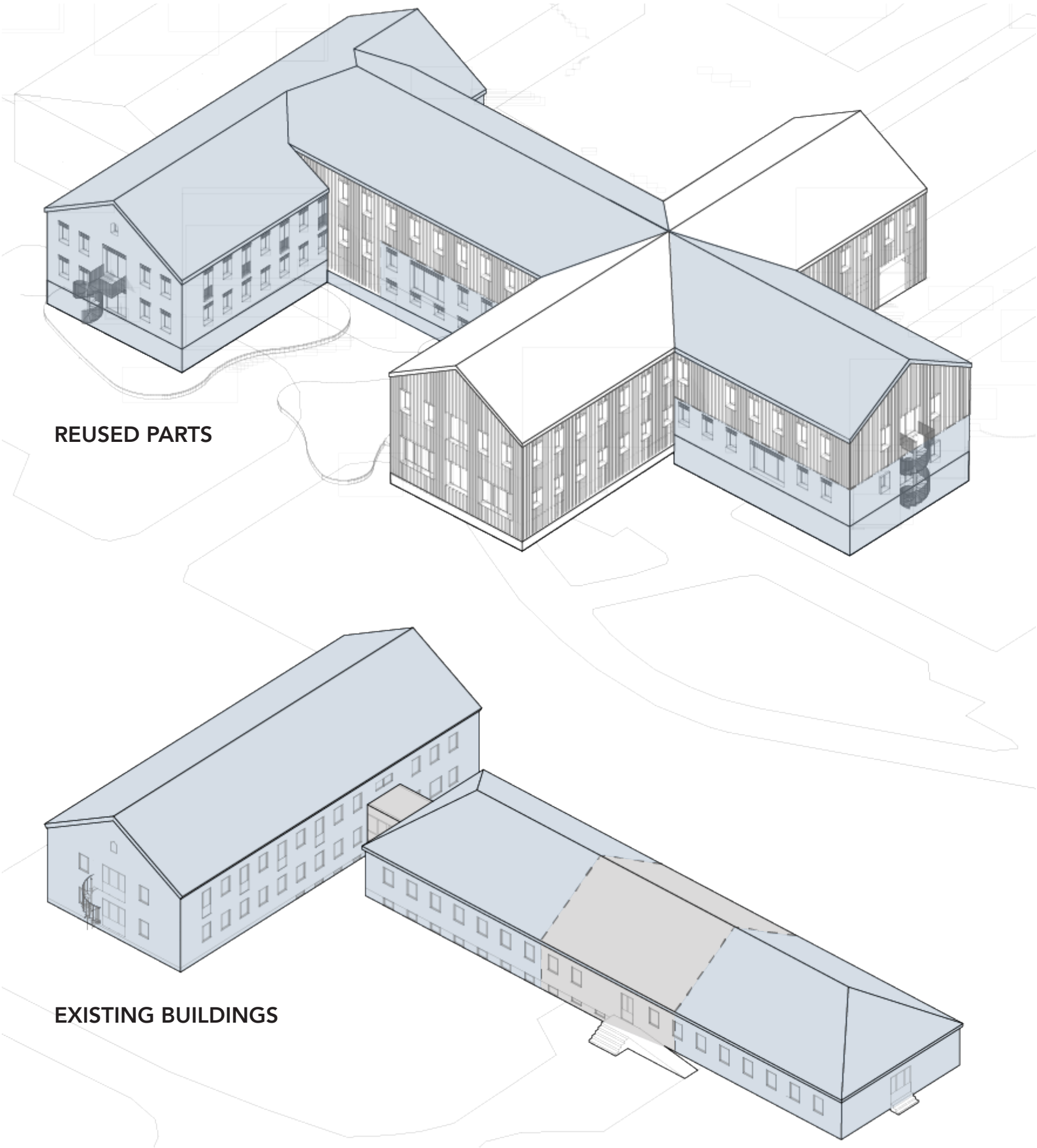
LOWER CO₂ FOOTPRINT BY REUSING BASEMENT AND FOUNDATION



LOWER COST AND LESS CONSTRUCTION TIME

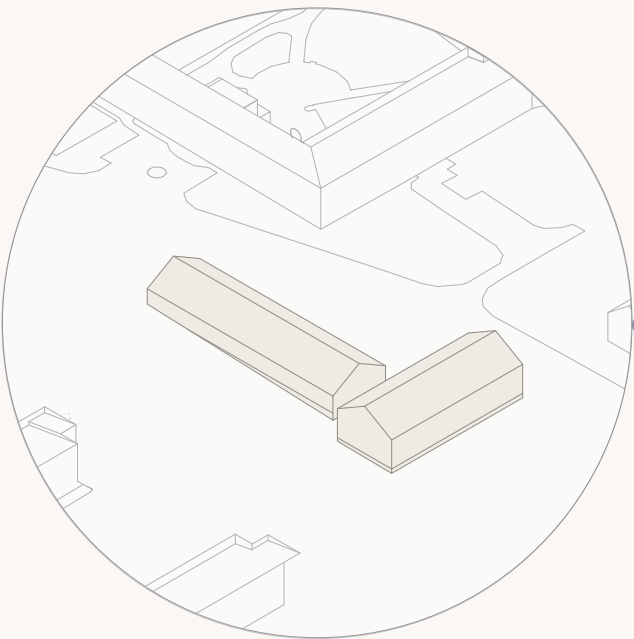


MATCHES THE HISTORIC GRID

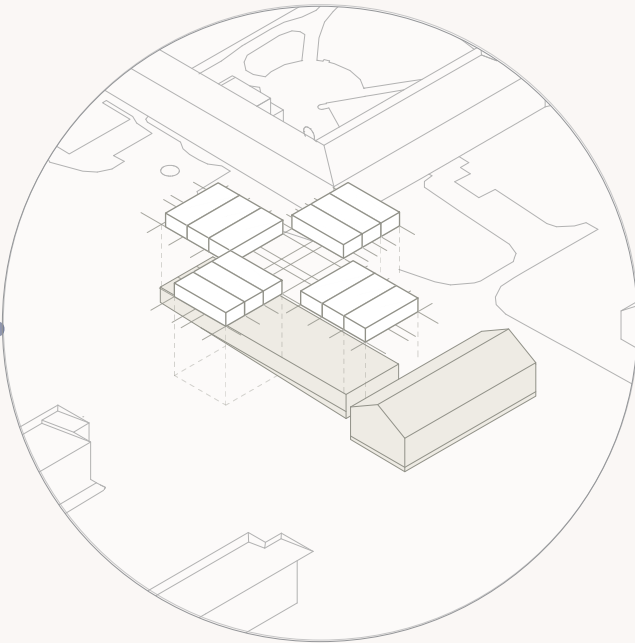


CONCEPT: HEALTH HEART

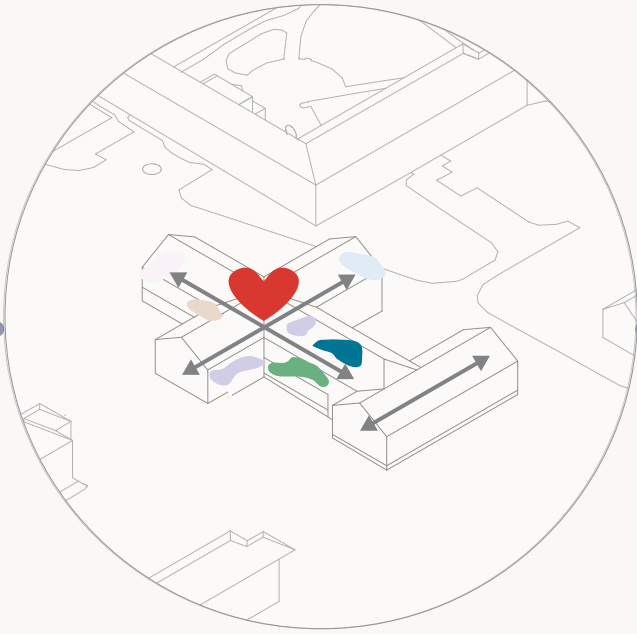
RE-USE EXISTING BUILDINGS



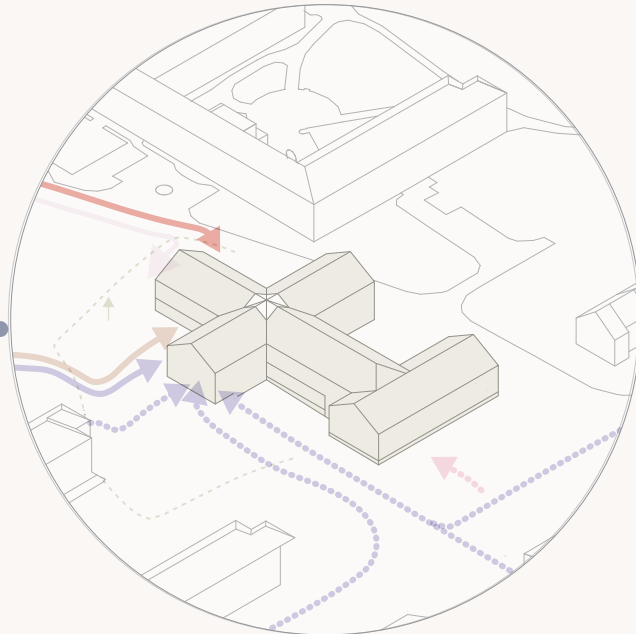
CREATE FLEXIBLE GRID



HEART AND BRANCHES

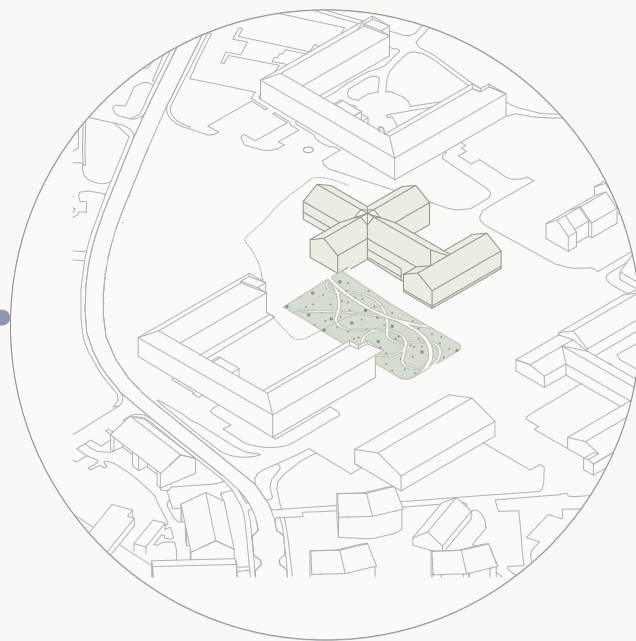


SAFE AND EFFICIENT ACCESS

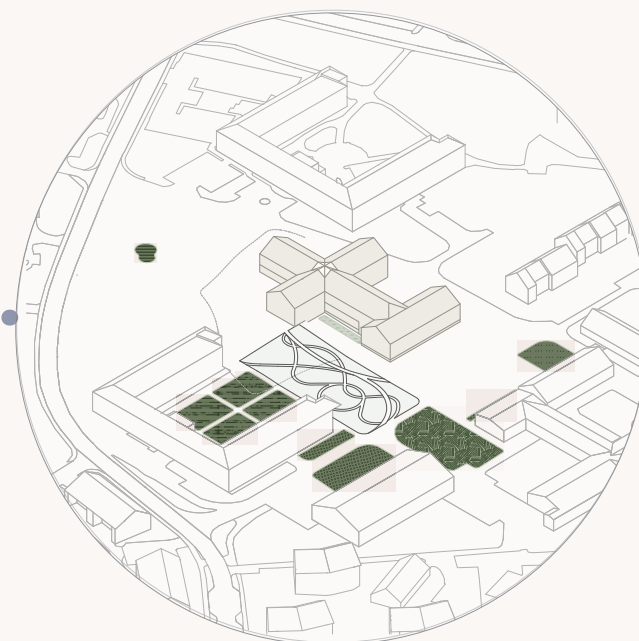


CONCEPT: GREEN HEART

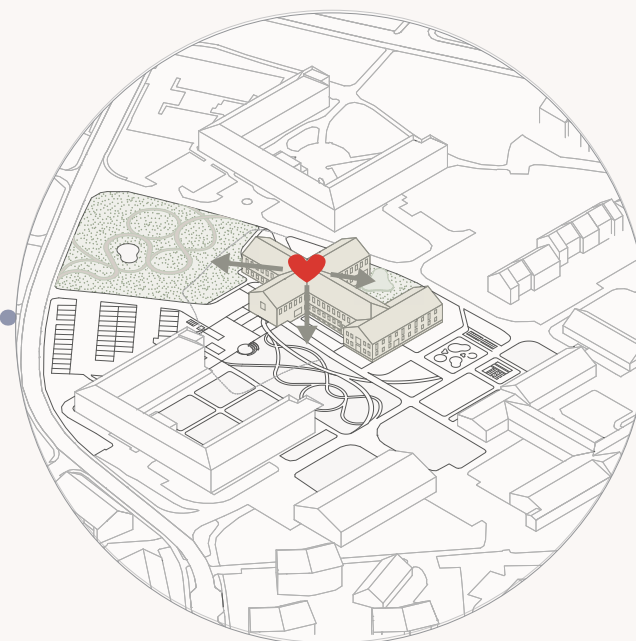
BIRGITTA PARK



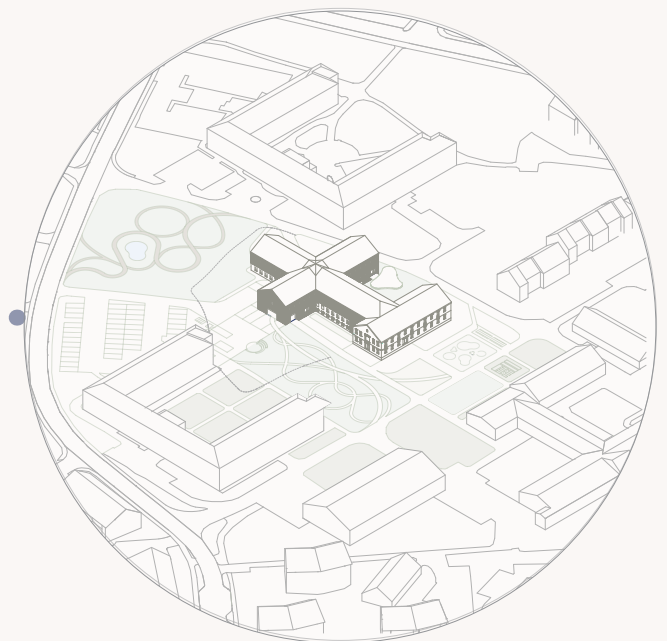
INCREASE BIODIVERSITY



HEALING NATURE

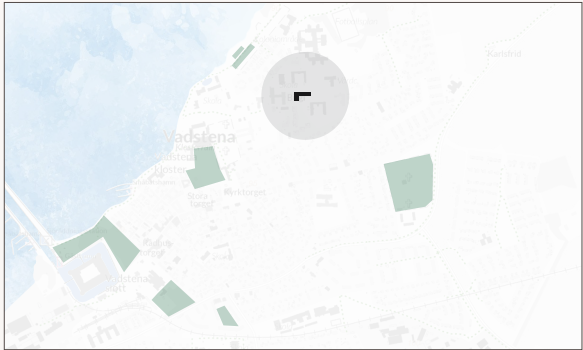


GREEN HEART OF VADSTENA

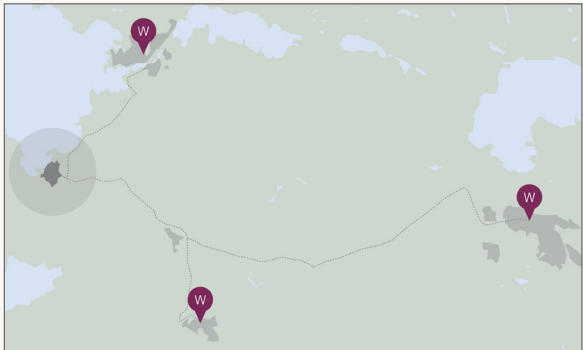


ANALYSIS

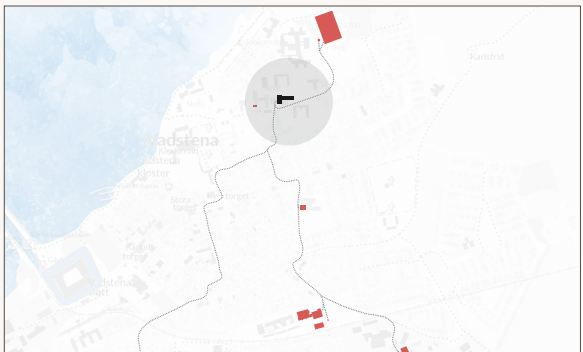
- HISTORY - BIRGITTA HOSPITAL
- CLEAR GRID AND AXIS
- GREEN SPACES WITHOUT FUNCTION



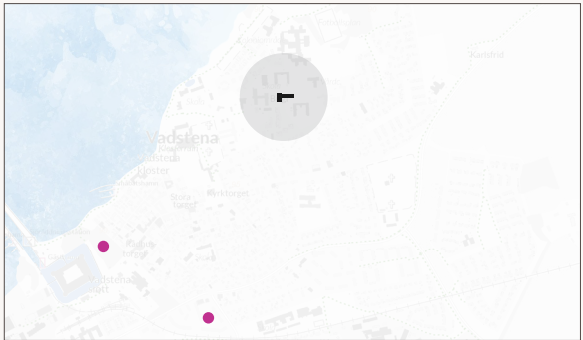
- NO WOMENS CLINIC



- LACK OF EXERCISE FACILITIES IN THE AREA



- LACK OF PLAYGROUNDS



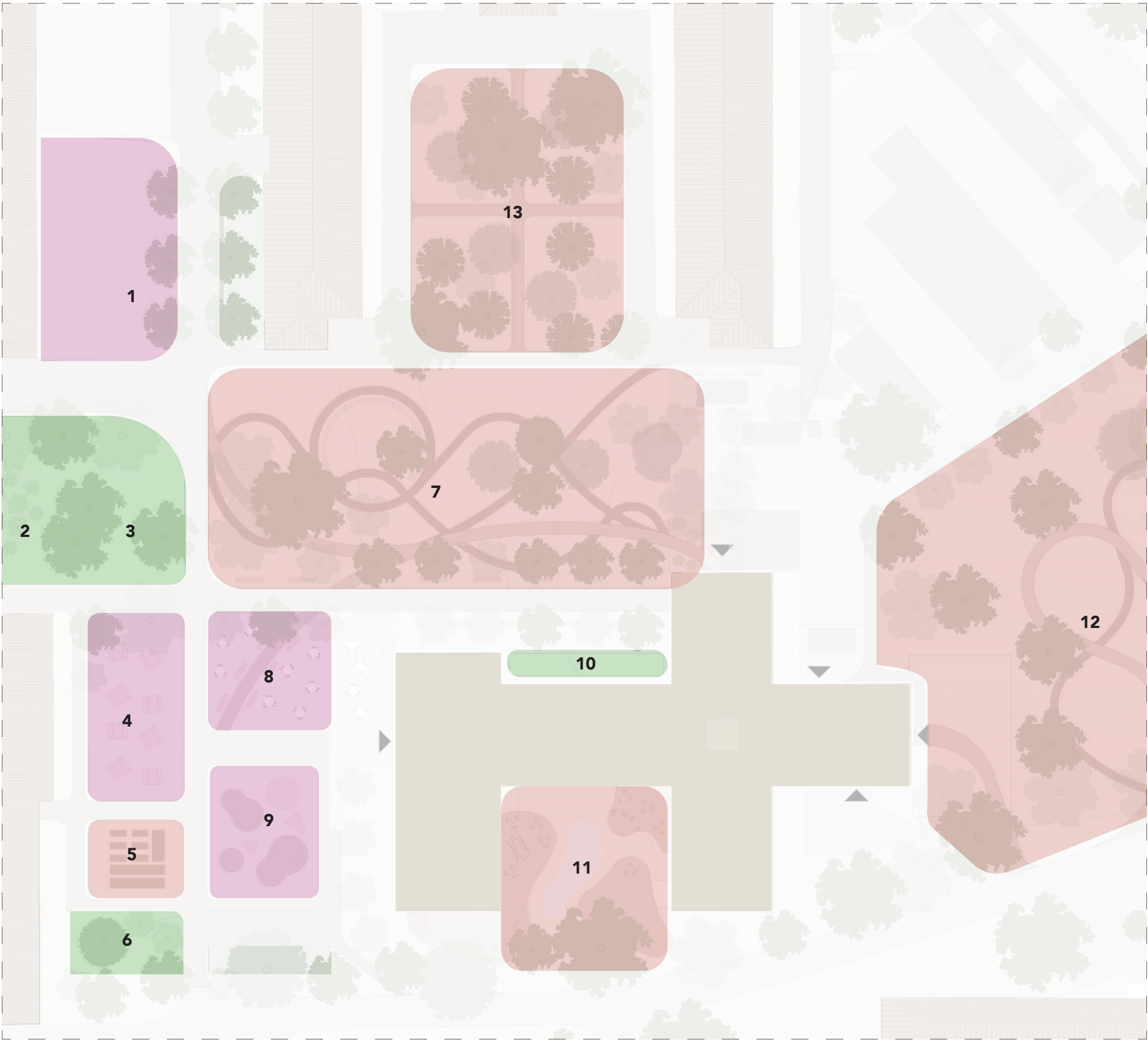
RESPONSE

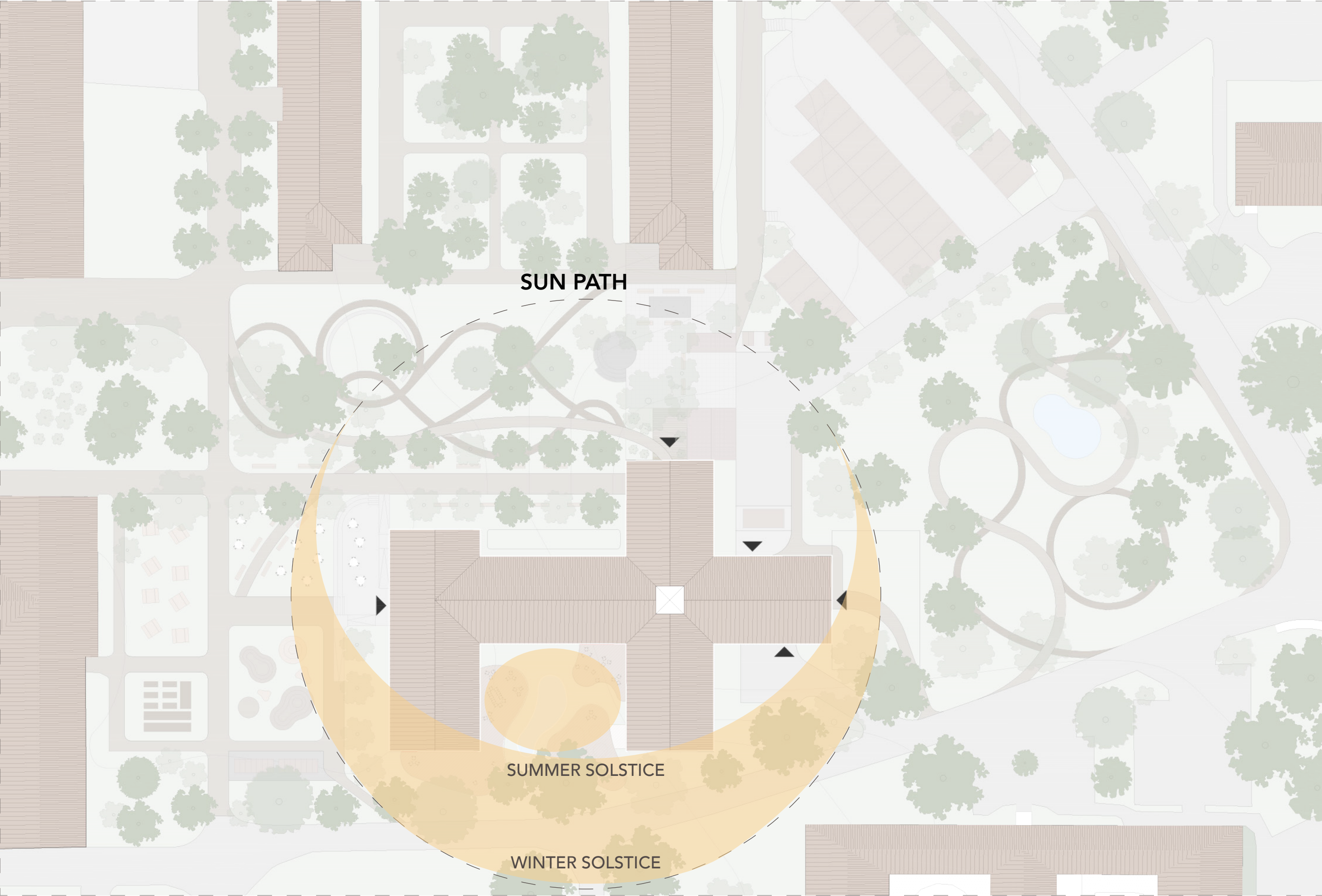
- REGENERATE GREEN SPACES WITH HEALTH-PROMOTING ACTIVITIES
- CREATE BIRGITTA PARK ALONG A GREEN CORRIDOR FOCUSING ON BIODIVERSITY AND SOCIAL VALUE
- CREATE A WOMENS CLINIC AT THE HEALTH CENTRE

FUNCTIONAL GREENERY

- 1 COMMUNITY GARDEN
- 2 RAIN GARDEN
- 3 BIRD HOUSES
- 4 PICNIC AREA
- 5 COMMUNITY GROWING
- 6 INSECT GARDEN
- 7 BIRGITTA PARK - SENSORY GARDEN
- 8 GATHERING
- 9 PLAYGROUND
- 10 WILD MEADOW
- 11 SUN GARDEN
- 12 EXERCICE PARK
- 13 ORCHARD

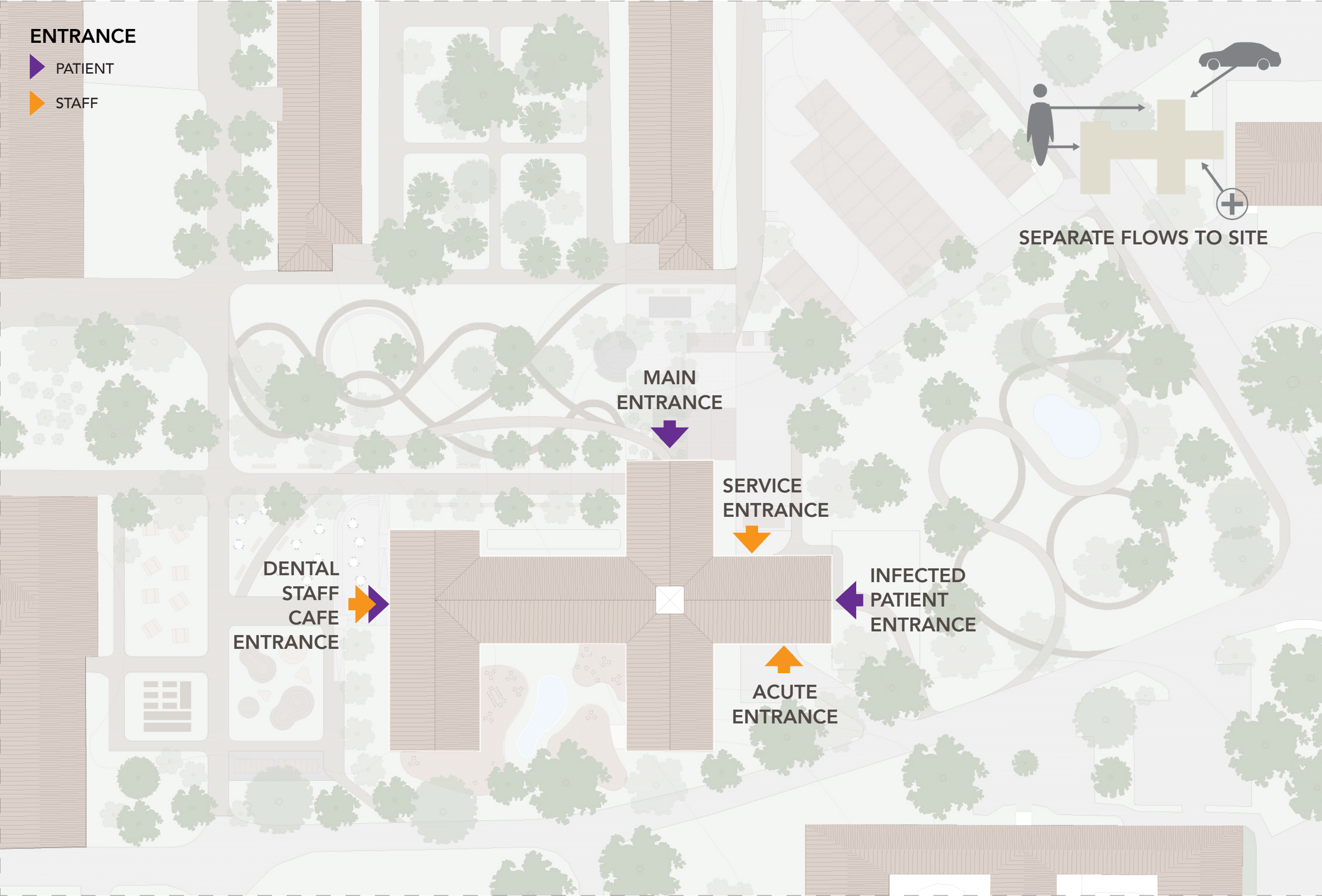
- BIODIVERSITY
- SOCIAL
- HEALTH PROMOTING

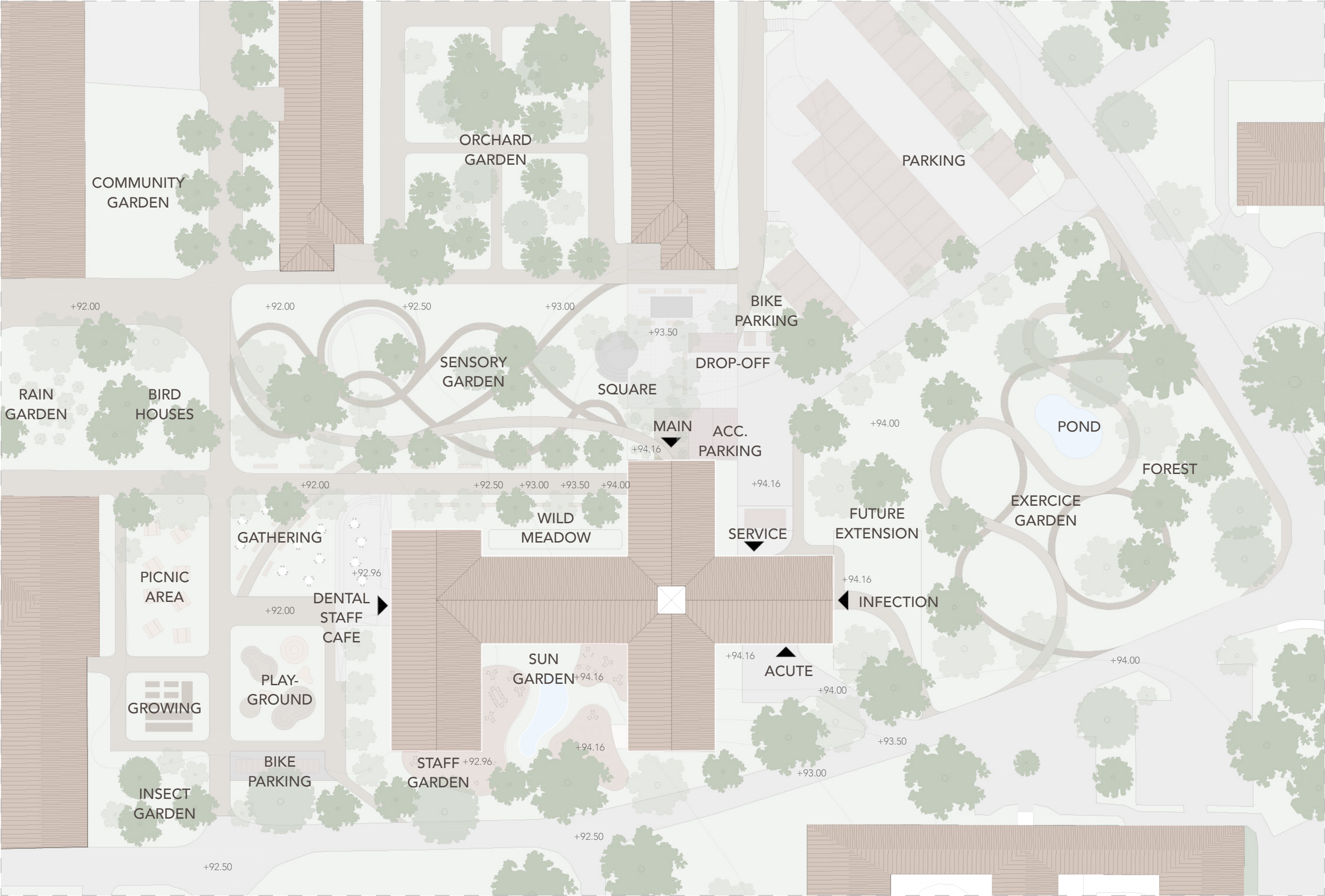




0 10 20 30 40 50 m



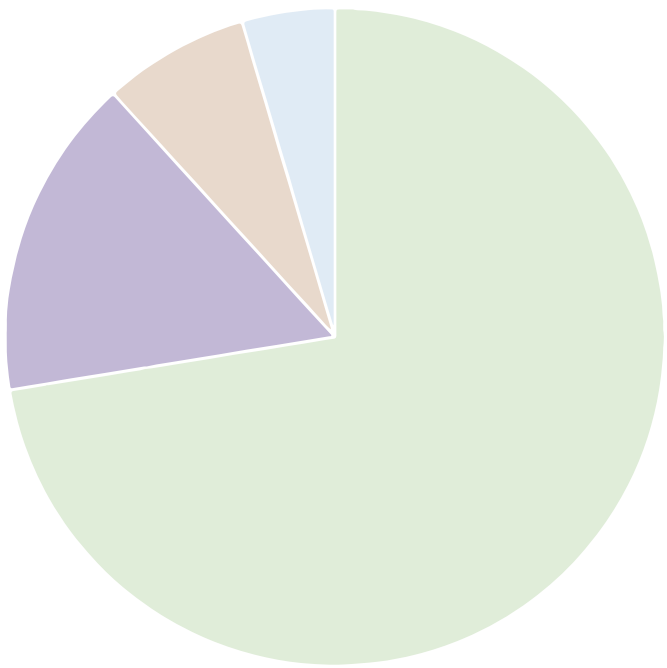




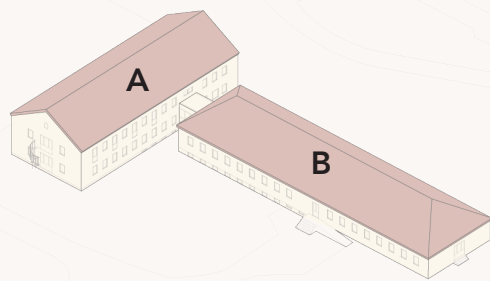
CHALLENGING THE BRIEF

-  WOMEN'S CLINIC
-  COMMUNICATION CENTRE
-  DIGITAL CARE
-  PREVENTIVE CARE
-  MOBILE CARE HUB
-  INFECTION CARE
-  CAFÉ
-  STAFF WELLBEING

ORIGINAL BRIEF



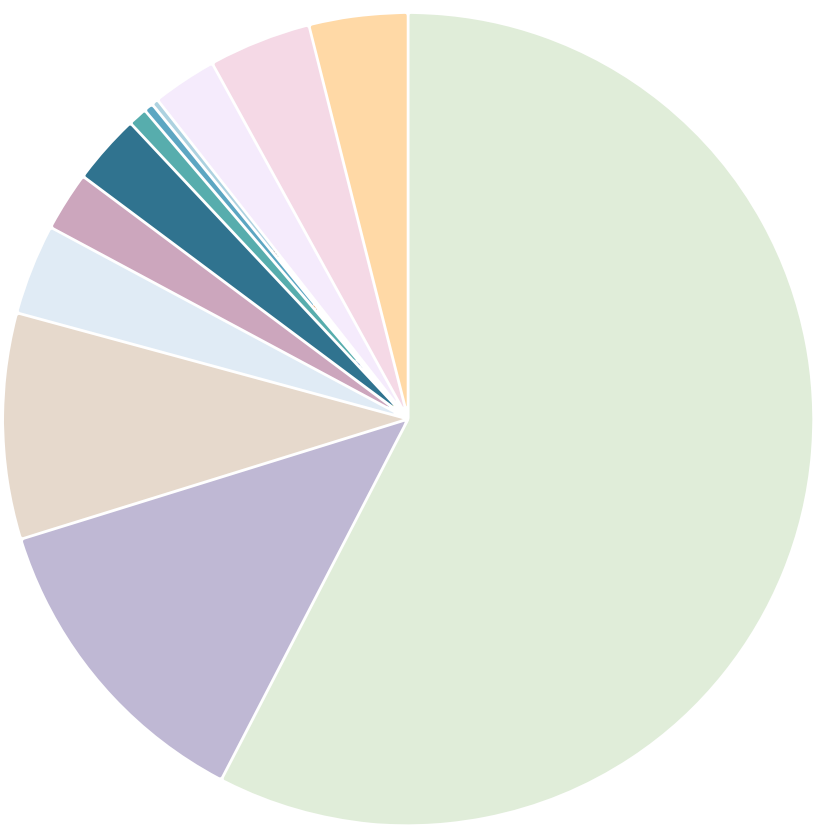
ORIGINAL BRIEF		
PRIMARY CARE	1098	m ²
DENTAL CARE	240	m ²
SERVICE SPACES	109	m ²
FAMILY CENTRE	69	m ²
TOTAL	1516	m ²



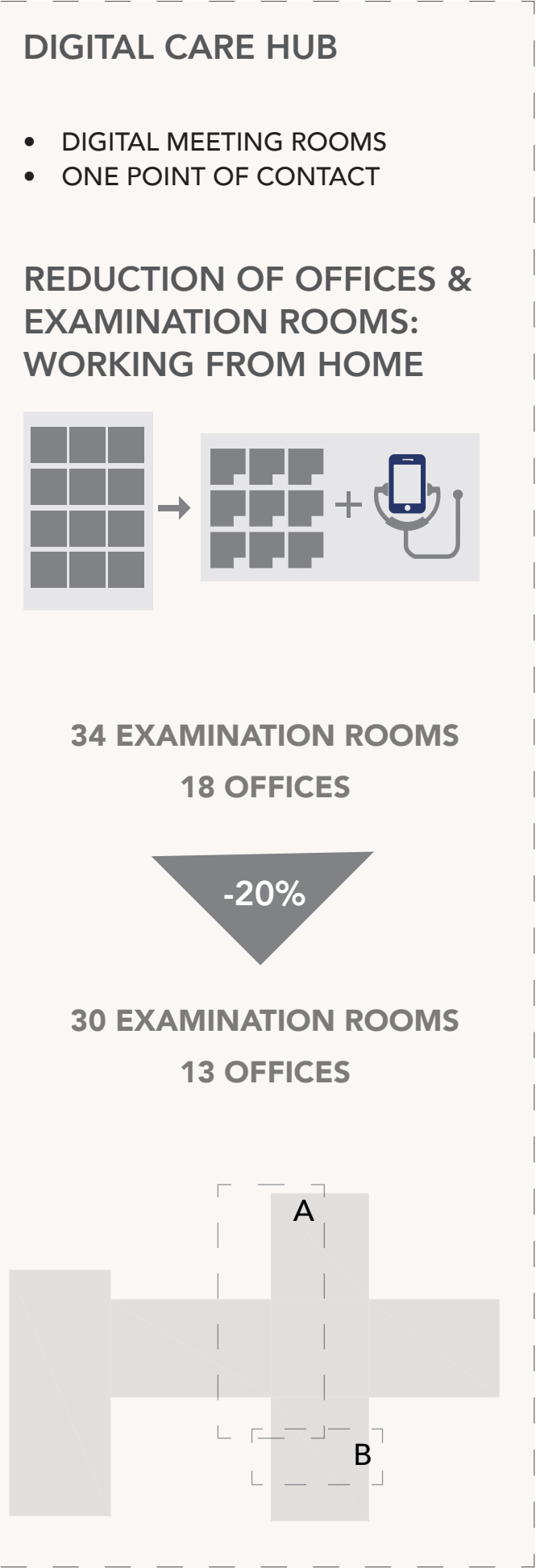
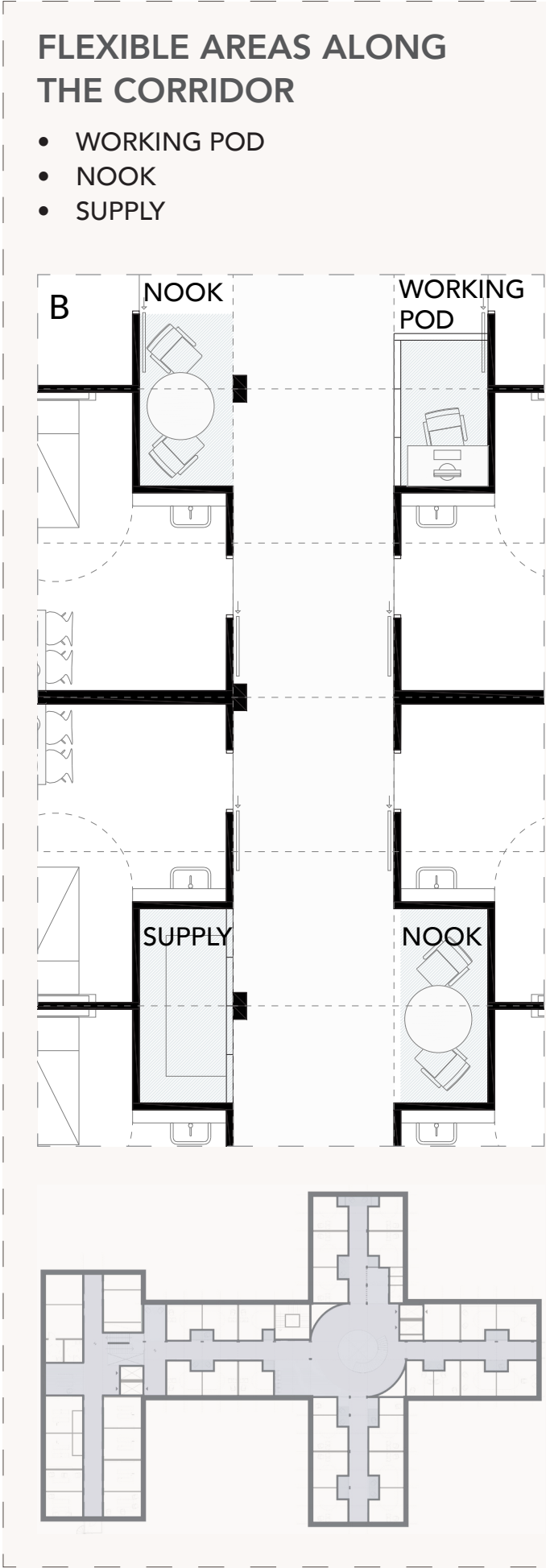
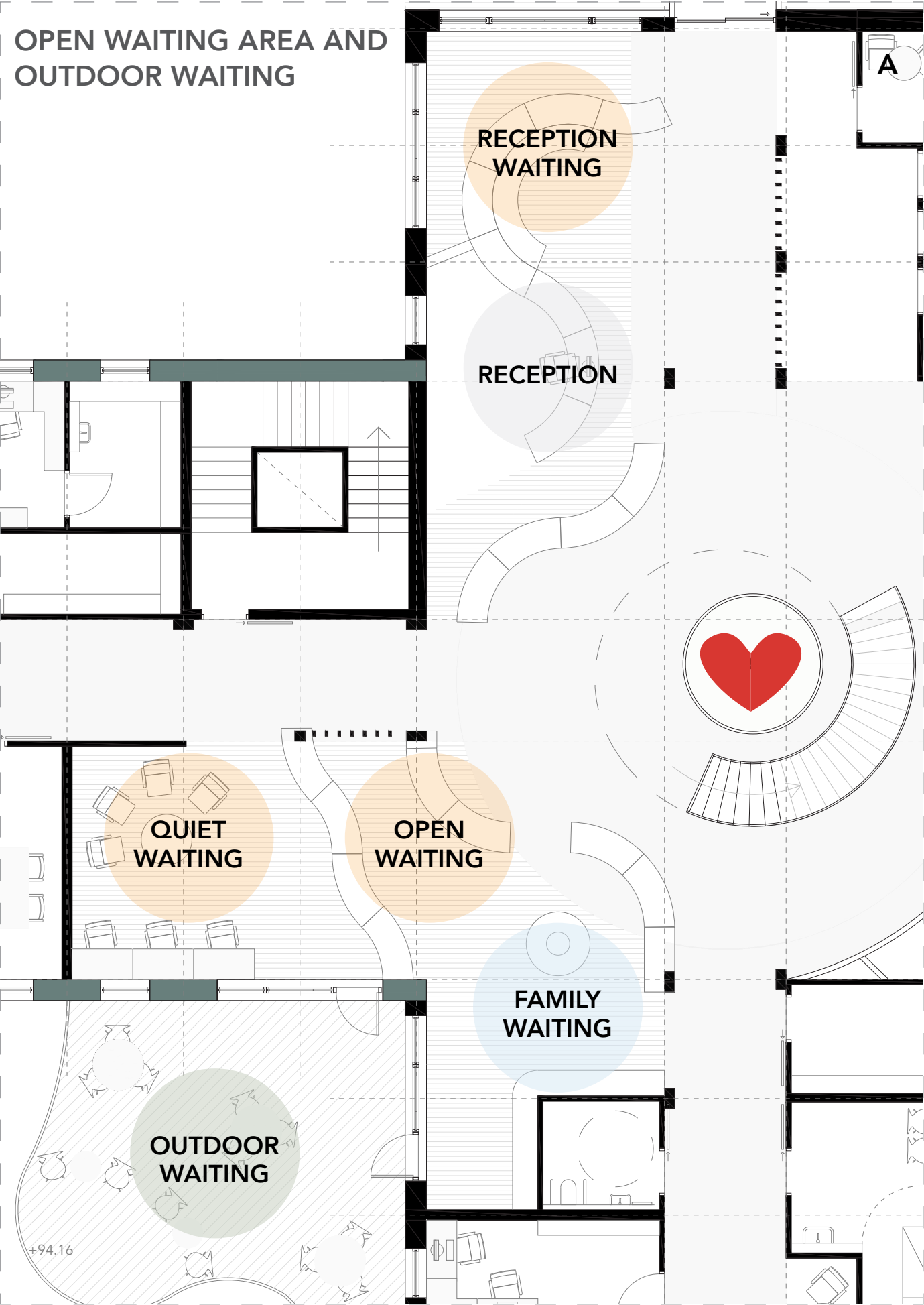
EXISTING BUILDINGS BTA: 2 457 m²
BUILDING A: 417 m² x 3
BUILDING B: 603 m² x 2

NEW BUILDING TOTAL BTA: 3799 m²
NEW ADDITION: 1341 m²

PROPOSED BRIEF



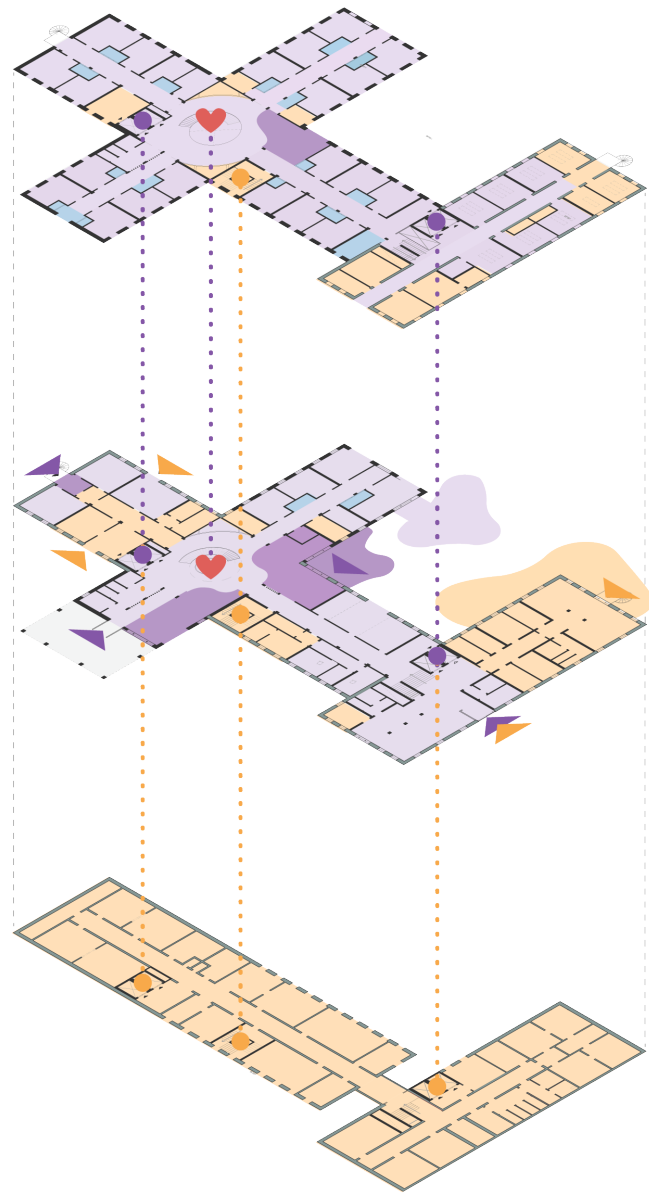
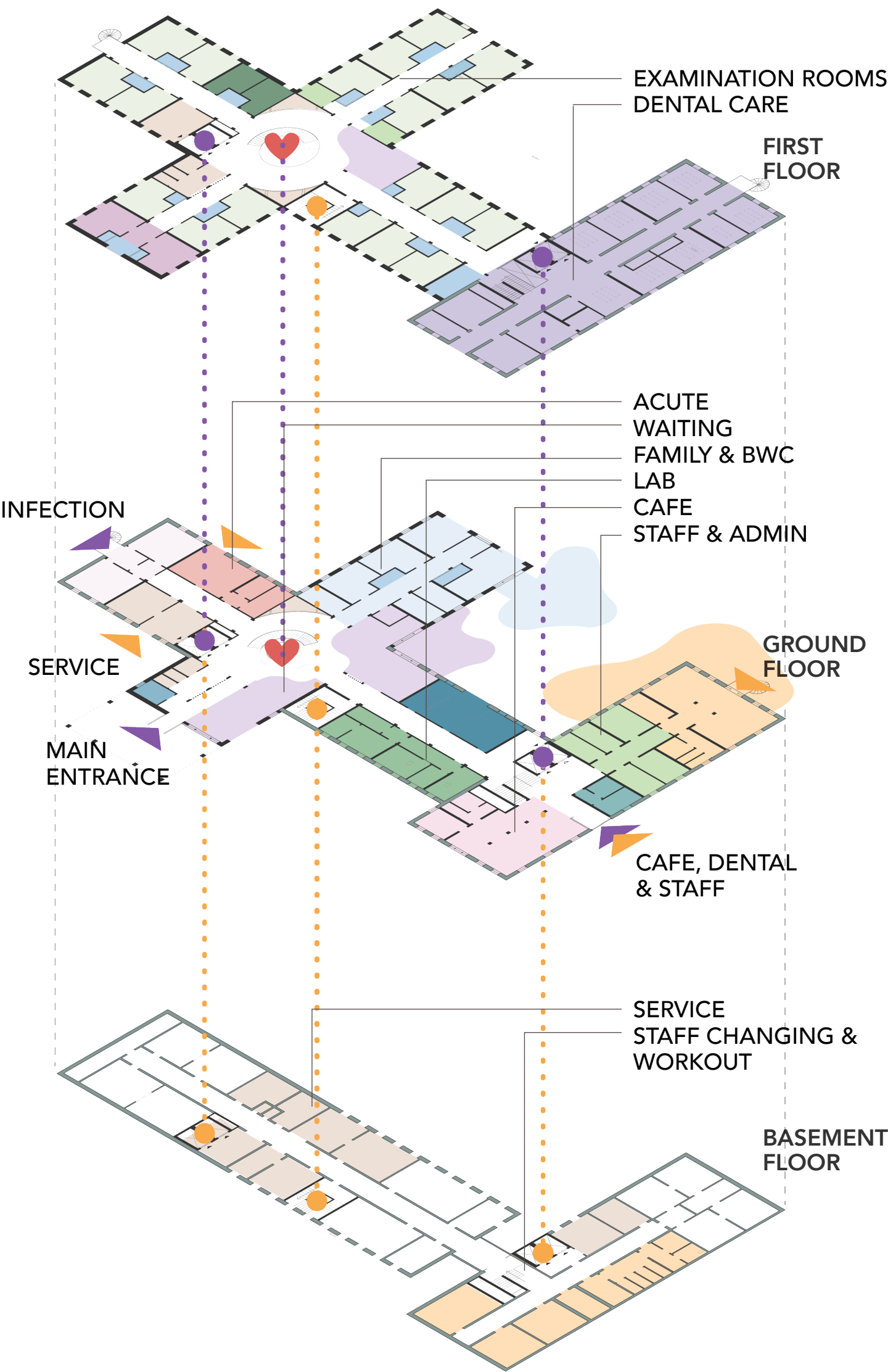
PROPOSED BRIEF		
PRIMARY CARE	1070	m ²
DENTAL CARE	234	m ²
SERVICE SPACES	167	m ²
FAMILY CENTRE	67	m ²
WOMEN'S CLINIC	44	m ²
COMMUNICATION CENTRE	52	m ²
DIGITAL CARE	14	m ²
PREVENTIVE CARE HUB	7	m ²
MOBILE CARE HUB	5	m ²
INFECTION CARE	48	m ²
CAFÉ	76	m ²
STAFF WORKOUT AREA	73	m ²
TOTAL	1858	m ²
+	342	m ²



FLOOR PLAN CONCEPT

- ACCESS POINTS TO SITE AND ENTRANCES ARE SEPARATED FOR FLOW AND EFFICIENCY
- THE HEART AND DEPARTMENTS
- THREE CORES

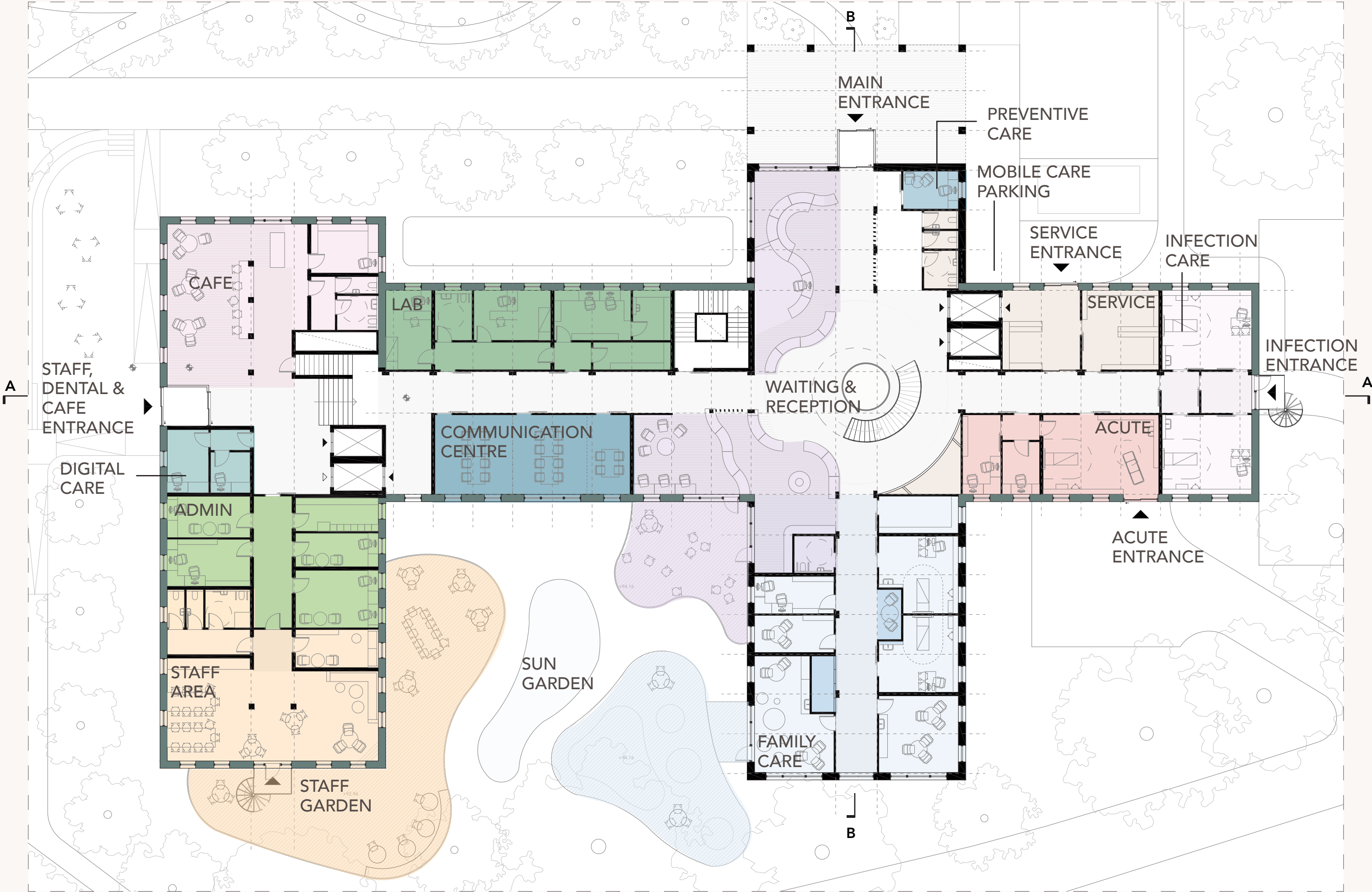
- ♥ HEART
- WAITING AREA
- EMERGENCY
- CAFE
- INFECTION CARE
- STAFF AREA
- SERVICE SPACES
- ADMINISTRATION
- LAB
- DIGITAL CARE
- PREVENTIVE CARE
- COMMUNICATION CENTRE
- FAMILY CENTRE WITH BWC
- FLEXIBLE AREAS
- DENTAL CARE
- EXAMINATION ROOMS
- PSYCHOSOCIAL RECEPTION
- WOMEN'S CLINIC

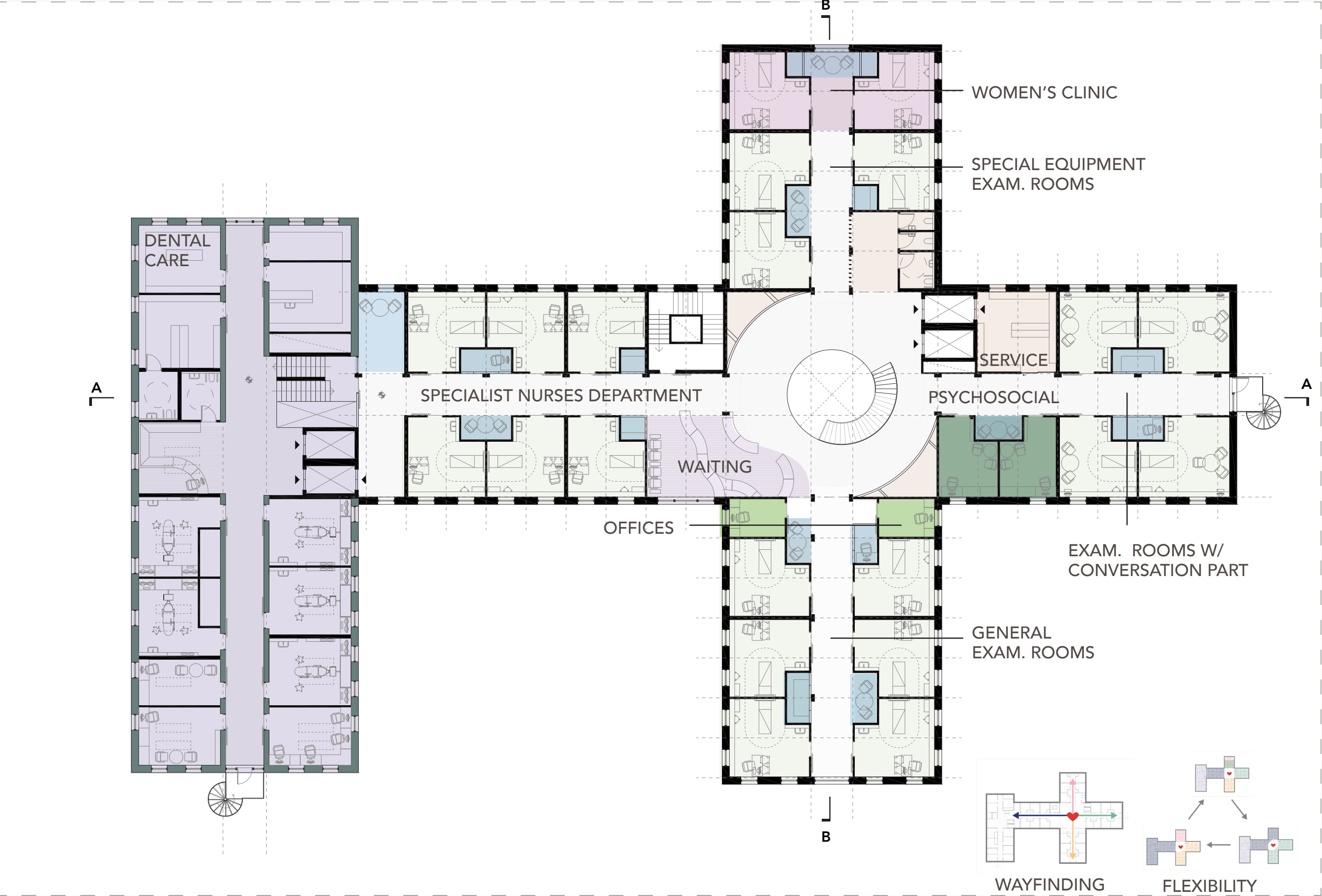


ZONES

- SHARED CORRIDOR
- STAFF
- SHARED CORE
- STAFF CORE
- ▶ ENTRANCE PATIENT
- ▶ ENTRANCE STAFF AND SERVICE

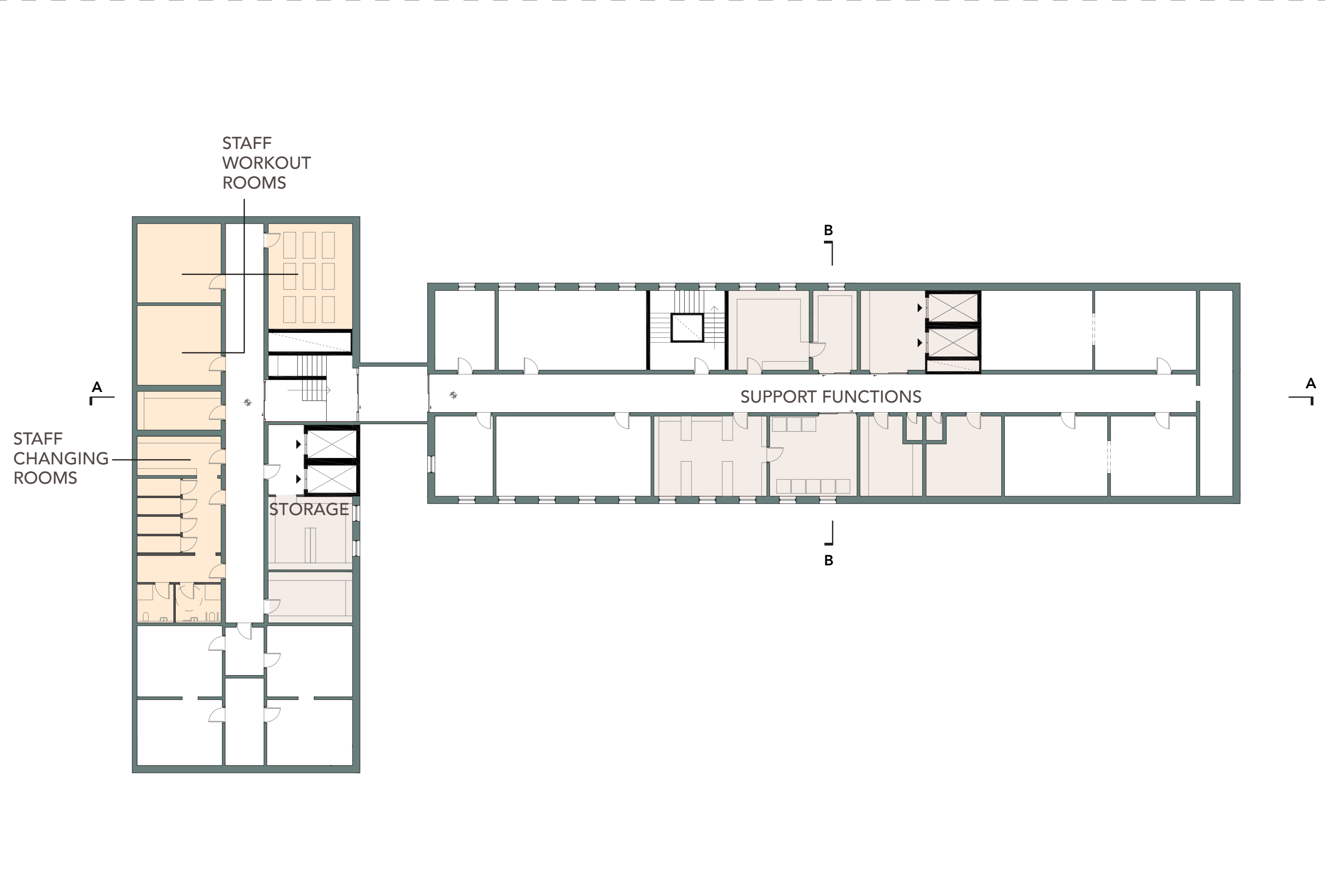






0 5 10 15 20m



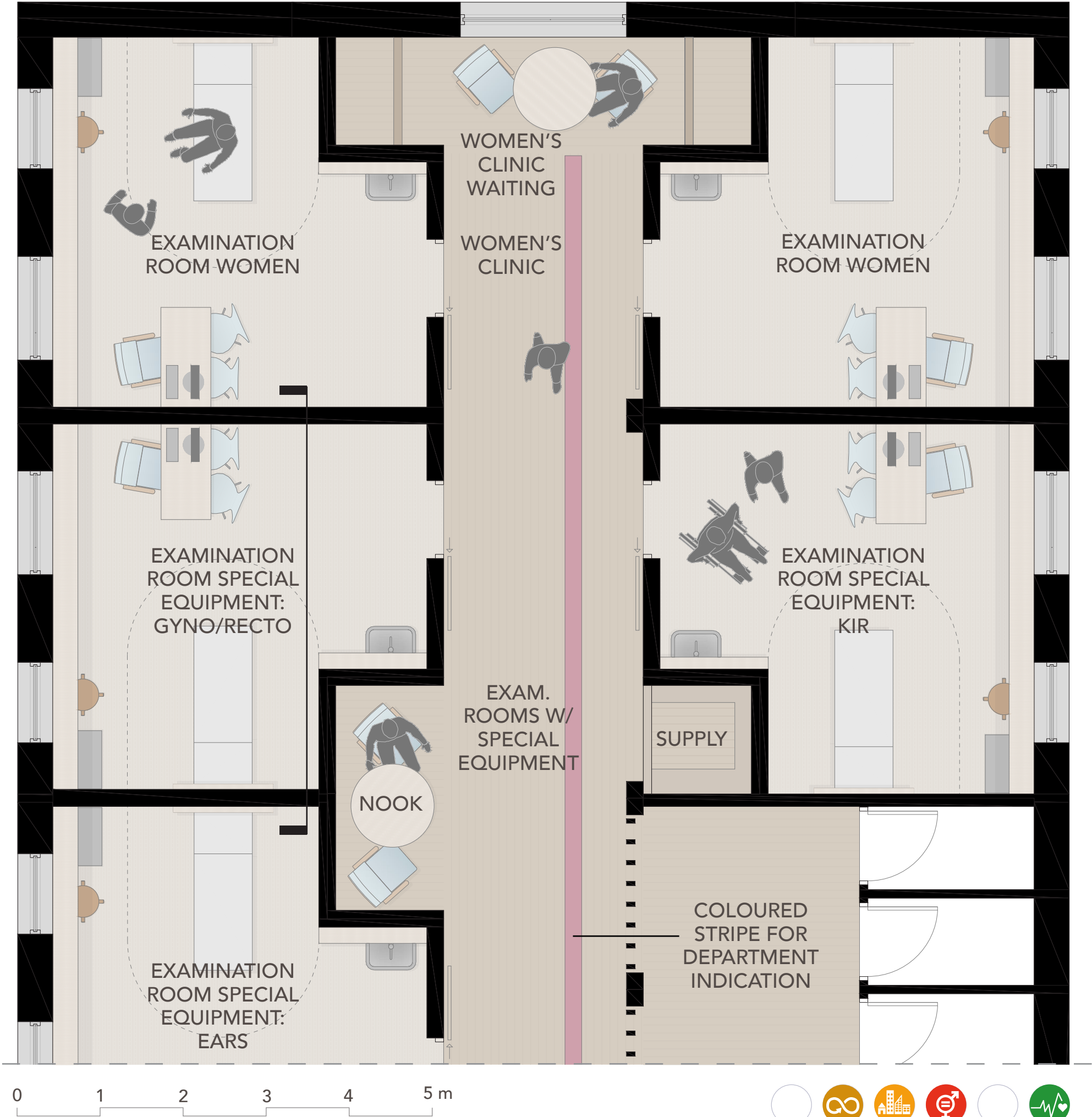
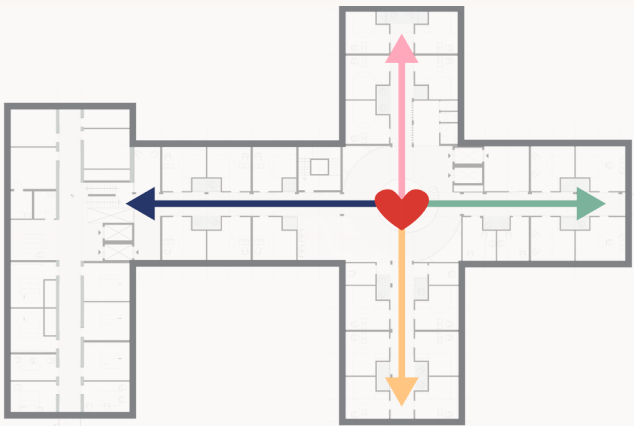


DEPARTMENTS

SECTION - EXAMINATION ROOM

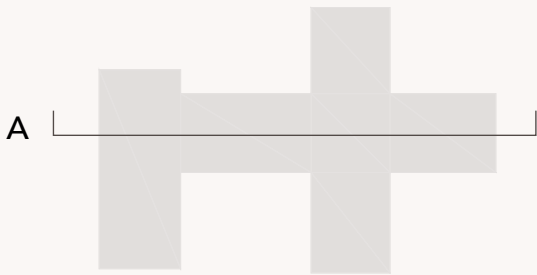
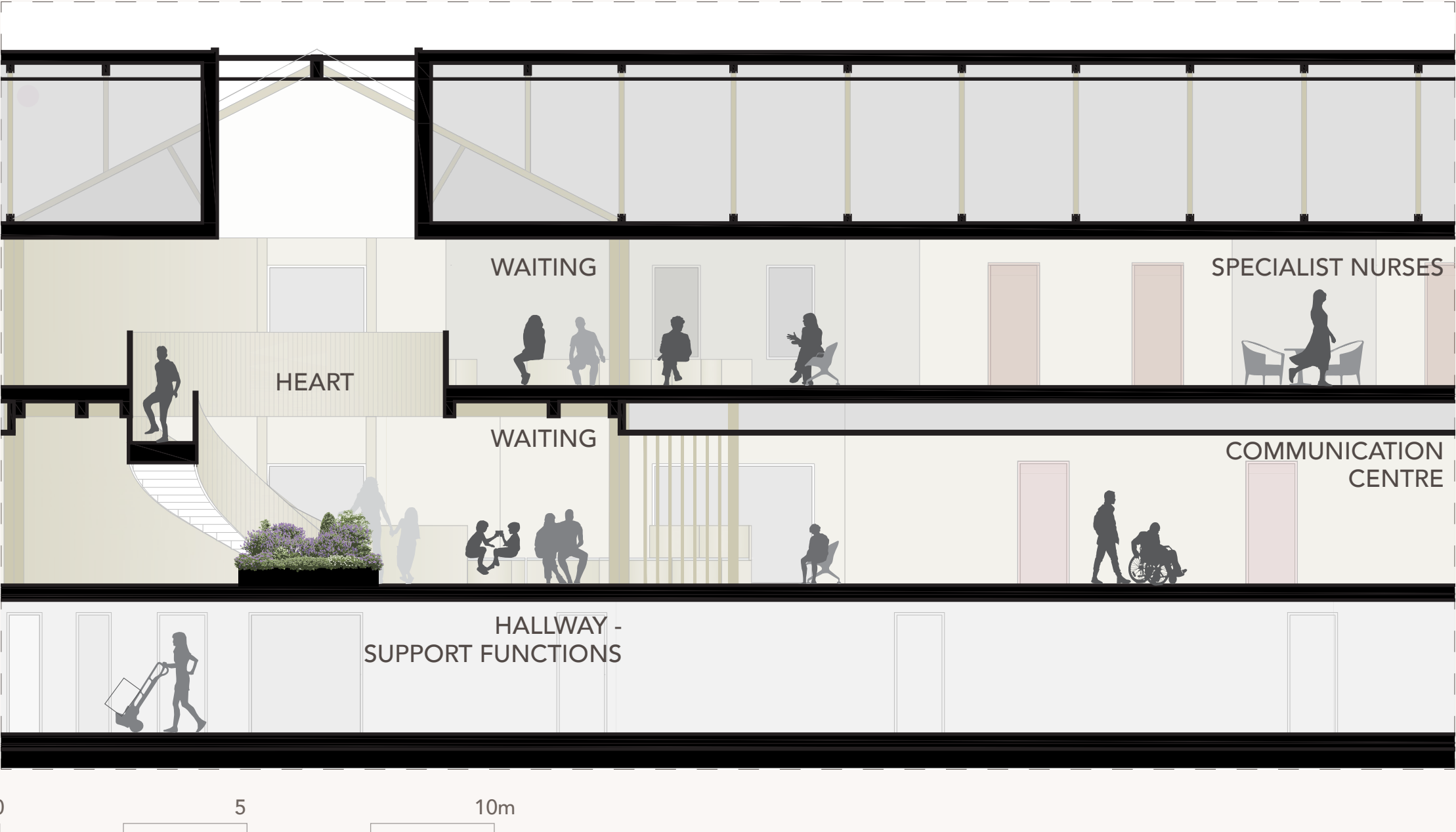
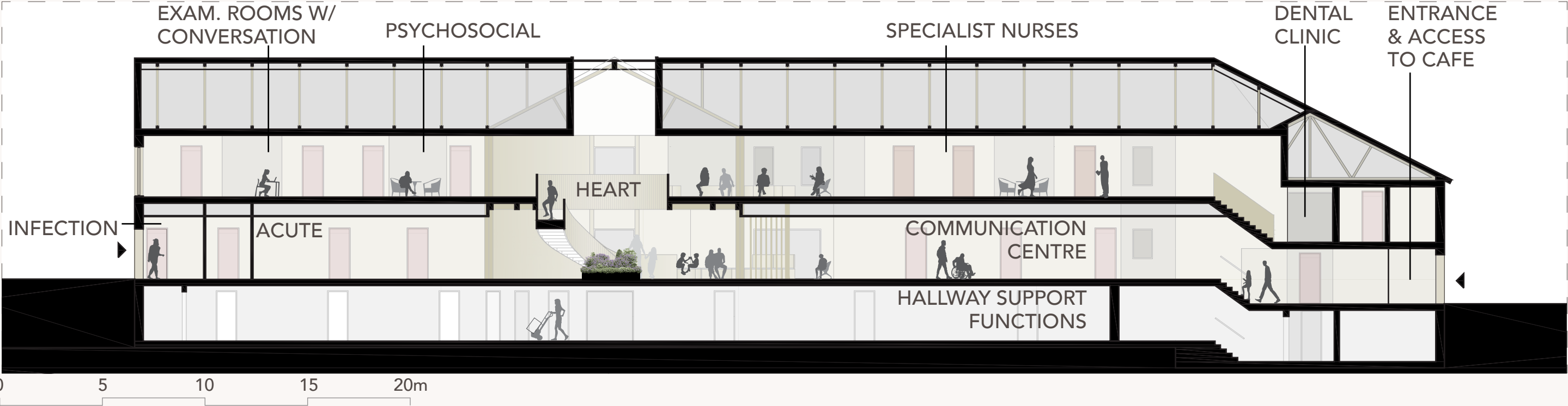


EASY WAYFINDING

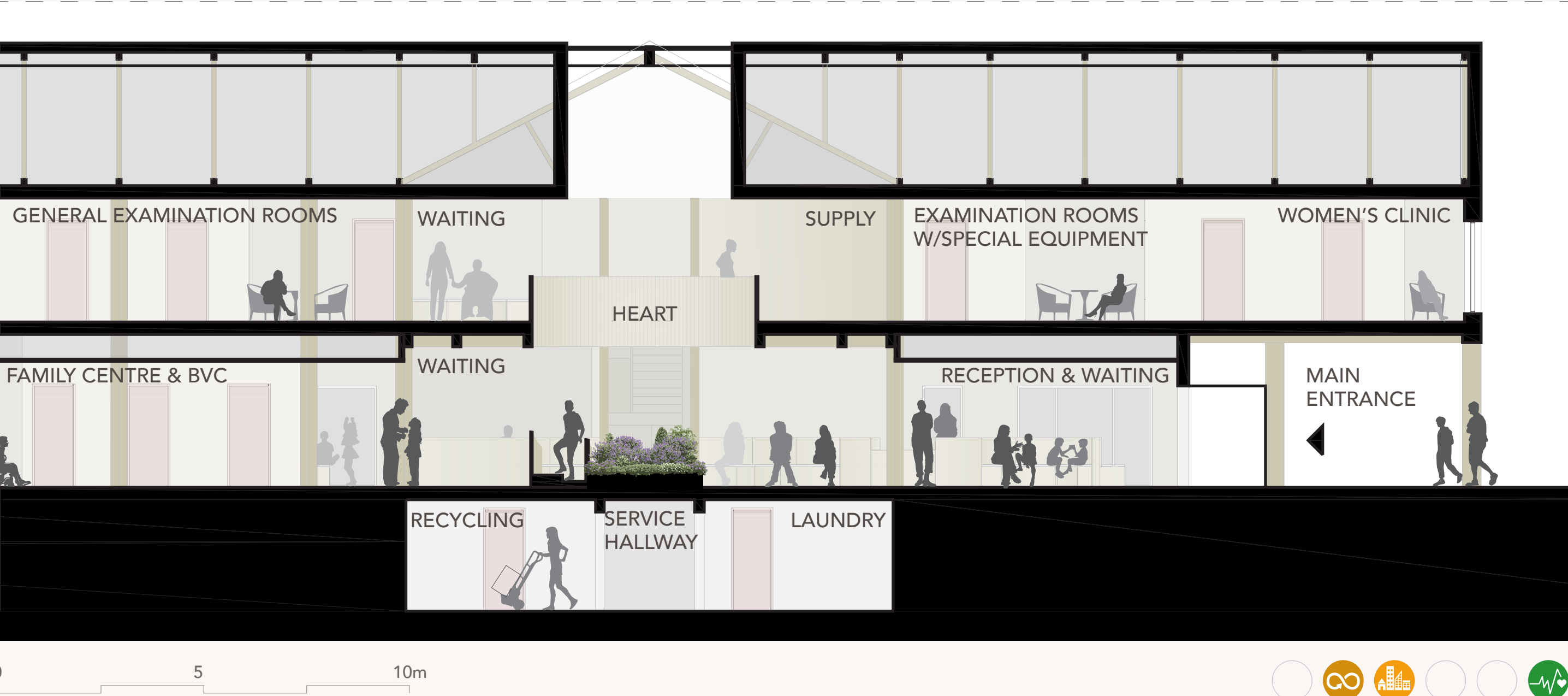




SECTION A-A



SECTION B-B





0 5 10 15 20m





0 5 10 15 20m



STRUCTURE

EXISTING & MODULAR

- MODULAR CLT-STRUCTURE
- REUSE THE EXISTING FOUNDATION, BASEMENT AND STRUCTURAL WALLS
- ADDITIONAL STRUCTURAL COLUMNS

CLT: ELASTICITY & FOOTPRINT

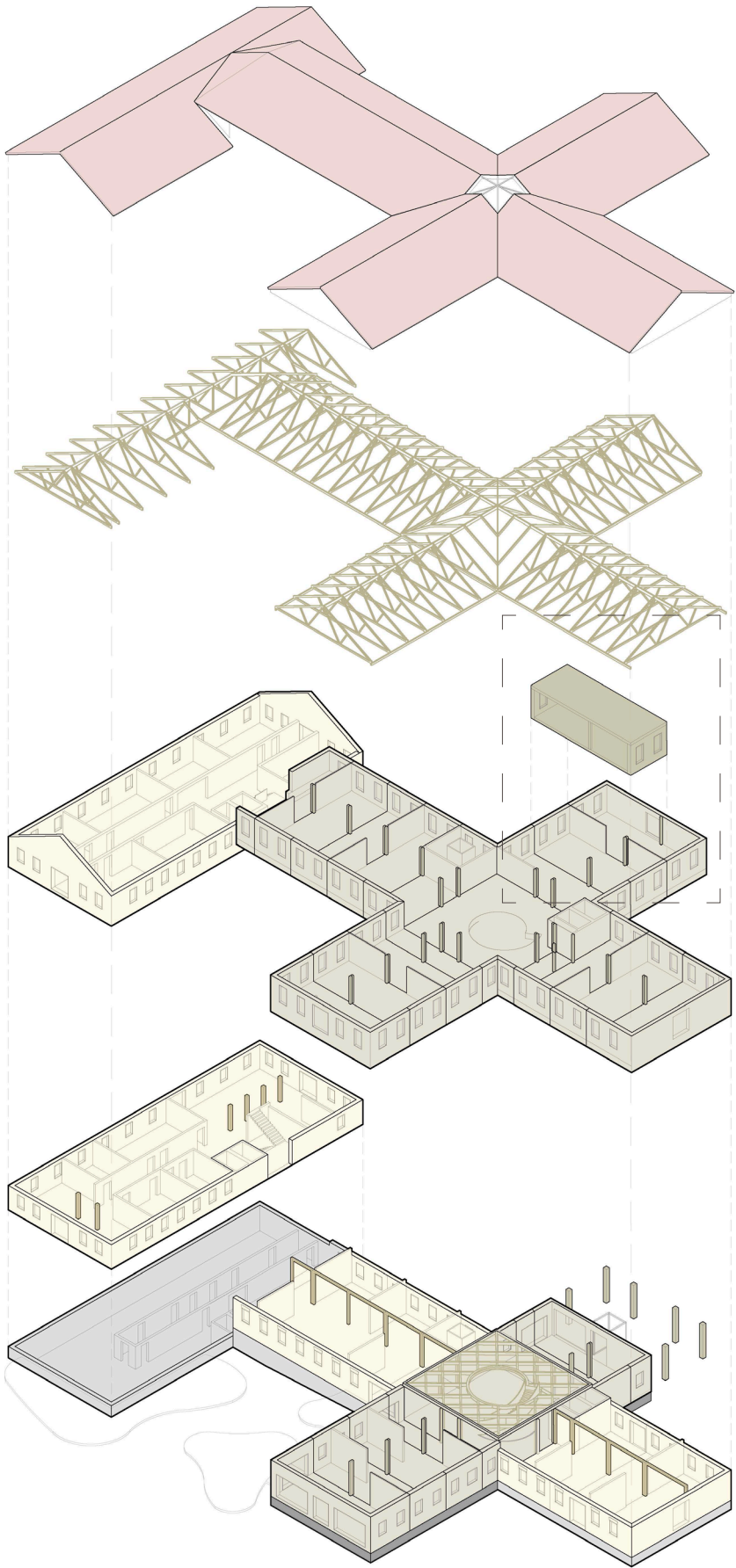
- POSSIBILITY FOR EXPANDING OR DECONSTRUCTION
- LOW CARBON FOOTPRINT



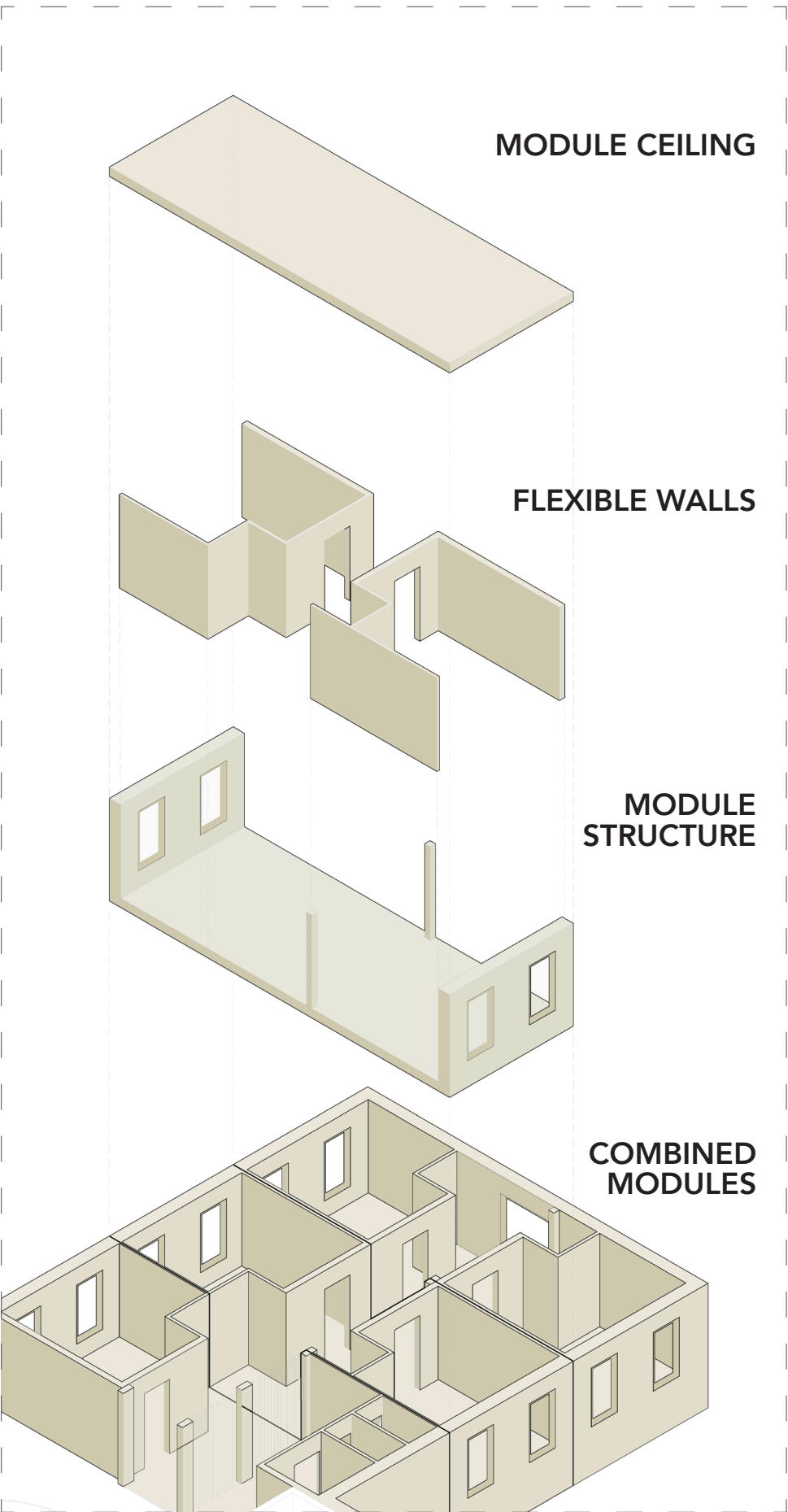
STRUCTURAL ELEMENTS

- REUSED AND NEW ROOF TILES
- ▧ TIMBER TRUSS STRUCTURE
- EXISTING LOAD BEARING BRICK WALLS
- NEW CLT MODULES
- EXISTING CONCRETE FOUNDATION
- NEW CONCRETE FOUNDATION
- ▮ ENGINEERED TIMBER COLUMNS

STRUCTURAL AXONOMETRIC

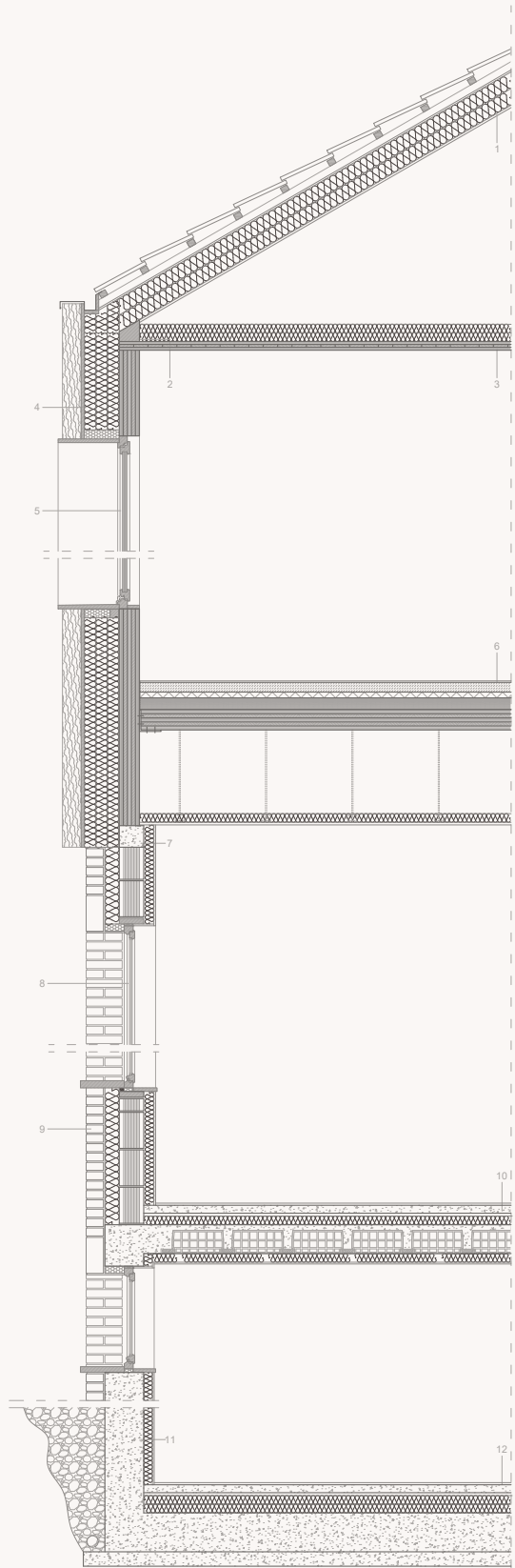


MODULE AXONOMETRIC

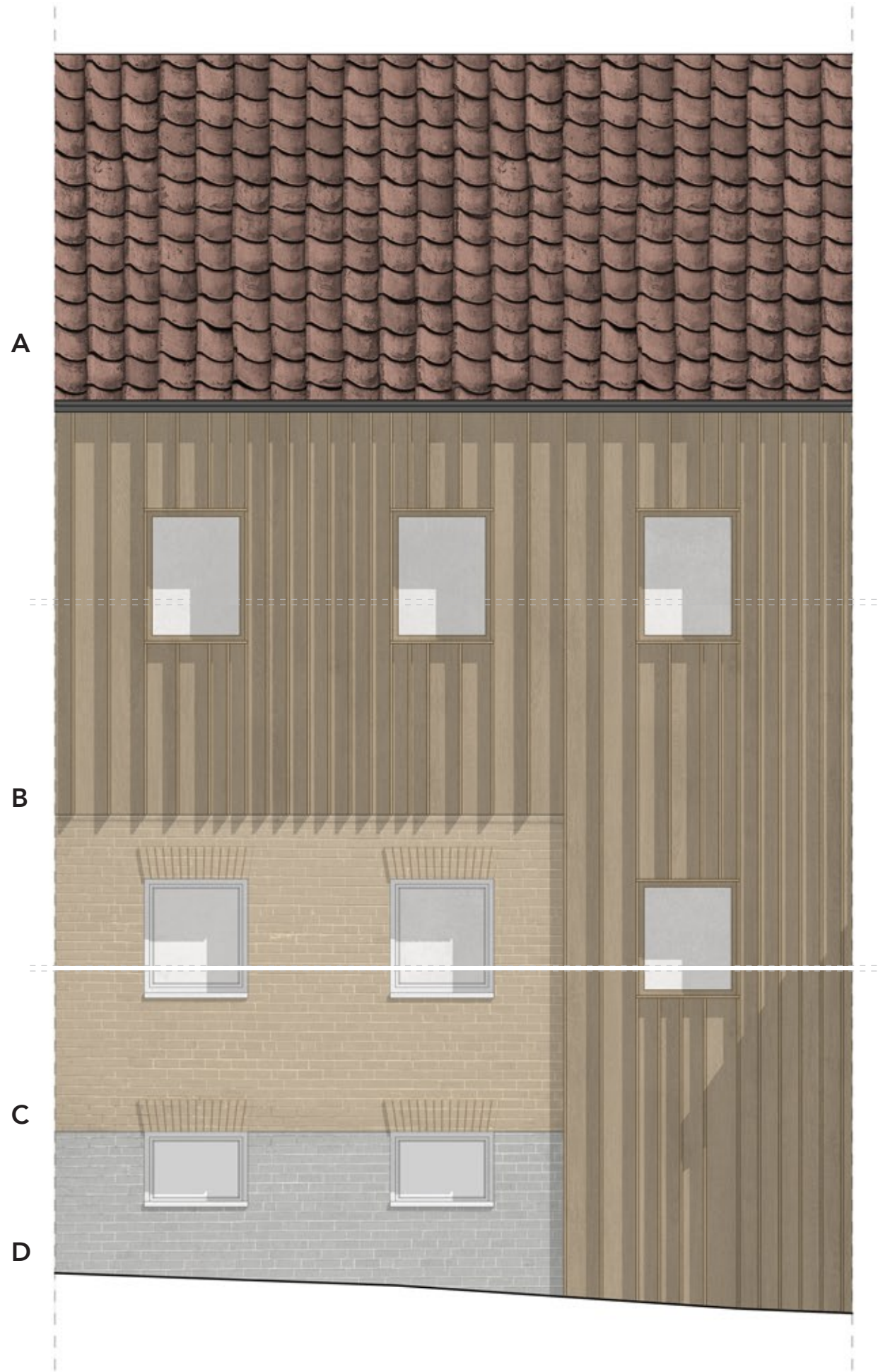


STRUCTURAL DETAIL

- MODULAR STRUCTURE ADDED ONTO THE EXISTING BRICK WALL



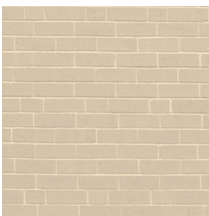
ELEVATION DETAIL



A SINGLE-CUP BRICK



B LARCH TIMBER



B BRICK WITH MUD PLASTER, COLOURED IN YELLOW



B CONCRETE AND STONE BRICK, MOLDED AND PAINTED GREY

SUSTAINABILITY

ECONOMIC

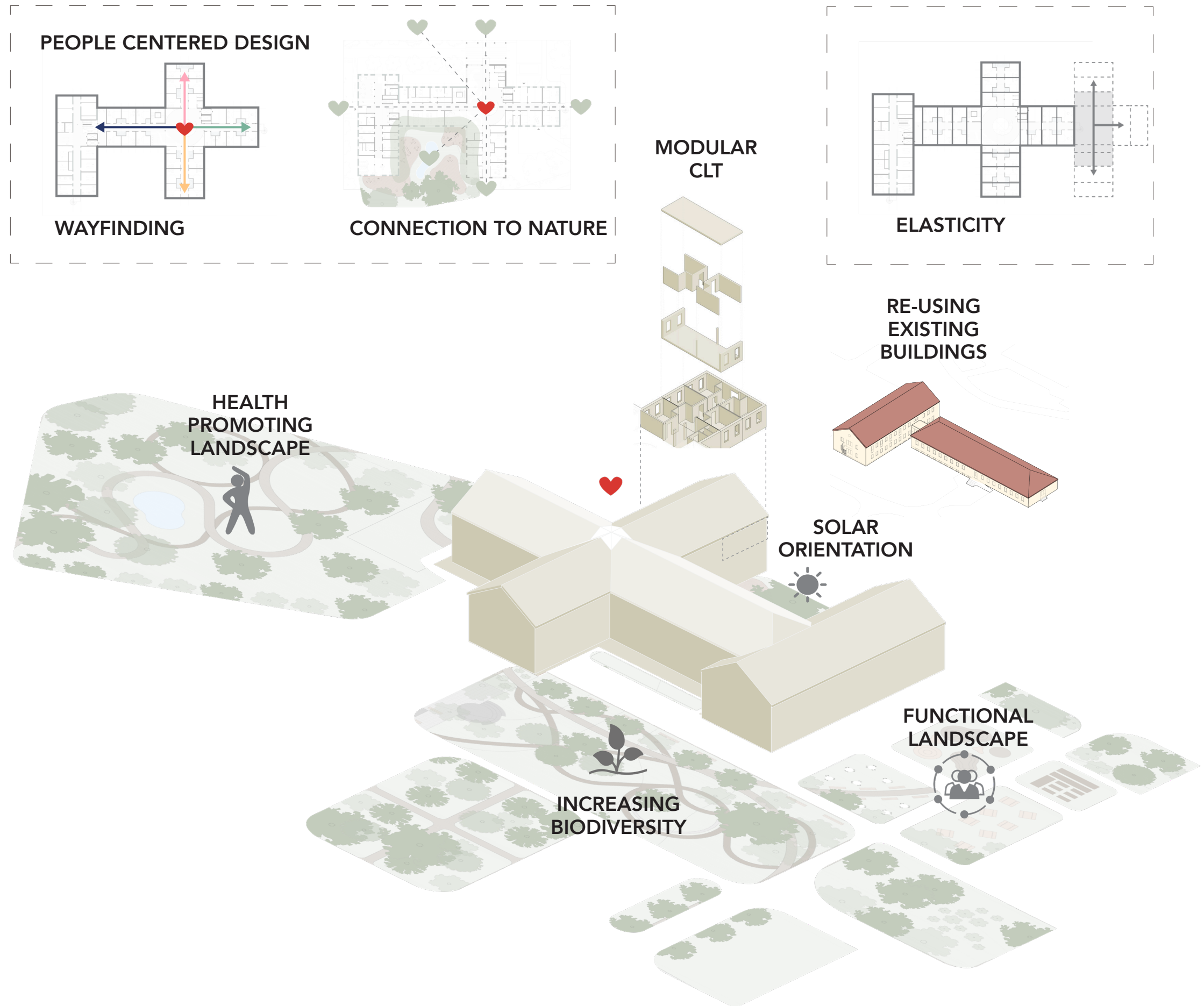
- REUSING EXISTING BUILDINGS
- MODULAR STRUCTURE
- ELASTICITY

SOCIAL

- FUNCTIONAL GREEN SPACES
- COMMUNITY FUNCTIONS
- WOMEN'S CLINIC
- PERSON-CENTERED DESIGN
- STAFF WELLBEING

ECOLOGICAL

- INCREASING BIODIVERSITY
- LOW CARBON FOOTPRINT



SUN GARDEN



VADSTENA FUTURE HEALTHCARE CENTRE