Explanatory note

Our proposal for Karin-Dom's new building facility responds directly to:

i. The programmatic demands and requirements
ii. Prioritizing spatial sequencing for easy wayfinding
iii. Future planning and uncertainty
iv. The unique site features
v. Budget

a. Starting point
The focus of our design is on two critical aspects : simple zoning that is easy to navigate and creating a built form that has a comfortable, human scale.

By grouping together functions of similar character and keeping in mind high-stimulation and low-stimulation spaces for children, we arrive at the basic framework to build the plan upon. The design looks at minimizing clutter, providing ample break-out spaces, transition zones, multiple open-to sky courts etc. in order to align itself to the short and long term routines of children, their teachers and visitors.

With the dense tree cover within the permissible building area, cutting some trees became unavoidable. To limit the extent of this damage, we identified areas of the site that had the least density of vegetation -- where our building would sit. This exercise helped define dense pockets of trees to 'protect'. The footprint geometry wraps around these pockets, creating courtyards and interlocking building-landscape. Our strategy preserves 60% of the on-site trees.

b. Massing
The building footprint began to resemble a combination of small three volumes tied together by a narrow strip. The three blocks, articulated into 14x14m square-form plans sit on compact/ optimal 7m deep structural grids, which are economical built in RCC. Using this opportunity, we created a compact, human-scale building. The entire program is fitted in a stepping G+2 volume.

c. Context
Surrounded by large scale institutional buildings and small scale residential structures, our building massing feels like an in-between hybrid; appropriate for the institutional/ residential characteristic of the organization.

The adjacent dormitory buildings stand to lose their park as a result of this project. In our proposal, the entrance court may be linked to the plaza in front of the adjacent dormitory building's entrance; allowing them access to a park.

d. Site circulation
The brief requires a secured compound with only one entrance/ exit, at the NW corner of the site. We propose a narrow, one-lane peripheral road that steps down with the natural gradient of the land into the basement level, and back up to the exit. Built in grass paver blocks which are driveable, it would remain a porous surface for water runoff.

Using the natural site levels, the requirement for temporary parking for vehicles is accommodated as a stilt floor on the basement floor itself.

The vehicular and pedestrian entry to the building is via a welcoming canopy on the NE, protected from the adjacent streets.

e. Landscape
The entrance courtyard is envisioned as a sculpture park, with monoliths inspired by 'Pobiti Kamani'.

The second courtyard by the reception and waiting has a sand pit/ play space for children. It may also be accessed by the Montessori users.

The last courtyard is shielded by an especially dense cluster of Cypress trees, and we propose a small chapel in this mini-forest, as a place for comfort and refuge.

The terrace gardens face south and are dedicated to low-height vegetation that apart from creating a pleasant, 'green' environment, would also aid by creating thermal insulation and decreasing incident heat-gain.

f. Plan logic
Design decisions have been structured around meeting the demand for an efficient, compact structure. Double-loaded corridors, like the organization's existing facilities, are particularly well-suited; as they allow for decreasing overall circulation area. Usually, long corridors without access to natural light are created in the process.

In our proposal, the footprint/ massing allows for a clear central 'spine' of circulation with frequent openings facing the courtyards; while not sacrificing on the efficiencies of a deep, double-loaded plan.

g. Modular/ flexible
The double-loaded corridor strategy allows for a 'generic' plan which can be adapted to suit various needs. The inherent flexibility of the system is apparent in how the different floor plans adapt to the brief, with very basic design moves.

The building has been designed on a strict grid of 1x1m, with a system:
a. 450mm external walls in plastered blockwork/ brick and insulation;
b. 150mm internal walls which shall receive plumbing/ electrical fittings;

c. 75mm lightweight gypsum partitions that may be moved/ reconfigured easily. They may have additional acoustic/ thermal insulation as required.

Apart from this, the plan has decentralized infrastructure: two lifts and staircases, and accessible toilets in various locations. This allows building to even be partly rented out without affecting its functioning.

h. Program

We have tried to achieve logical grouping/ distribution of program, with an emphasis on clear navigability/ wayfinding. The program has been organized as 7 distinct ‘zones’ across the three floors. Entering from the reception area, one can access the physiotherapy + hydrotherapy; clinic; and montessori zones on the ground level.

Going up a floor, one encounters the diagnostics and therapy+intervention zone on one half of the floorplate, while the other is dedicated to training facilities.

The final floor has rooms for individual work with children and parents, along with the staff/ administrative facilities.

i. Elevation/ material

The elevational strategy reflects the plan logic, with a uniform series of deep punched openings along the program spaces, and larger/ deeper openings along the corridors.

The restrained palette of white stucco and local sandstone cladding creates a soft, warm backdrop for the facility. Roofs are covered with standing-seam copper tiles which would age gracefully.

j. Sustainability

The primary goal of the scheme is to build the ‘least’ possible -- by creating a compact, efficient solution.

The generic nature of the architecture can be adopted to local material/ construction practices, reducing the carbon footprint and costs.

The design incorporates various strategies to ensure naturally light and ventilation. It uses thermal insulation to reduce heat gain/ loss.

Apart from these passive techniques, various technological interventions may be adopted like Sewage treatment plant for reusing gray water; water-conserving equipment and fittings, and rainwater harvesting systems. Solar water heaters / electricity panels may be used to reduce dependency on the grid.

k. Looking ahead

While we did conduct a quick, basic research on sensory experiences and design, we feel underqualified to propose an interior treatment at this juncture. We hope the inherent flexibility of our layout would allow various possibilities, and look forward to developing them in tandem with the caregivers, members of the Karin-Dom team, the parents and most importantly, the children.

Estimated cost of implementation

Overground construction cost : Euro 900,000
Underground construction cost (including ramps) : Euro 200,000
Landscape and exterior site development cost : Euro 200,000
Miscellaneous costs : Euro 50,000
Total cost : Euro 1,350,000