

Aoibhneas Competition - MM874

Background Analysis

The Brief

When we analysed the brief the main points we highlighted were as follows

- Create a centre that feels like a safe and secure home -a safe haven from domestic violence
- create an environment whereby children can reclaim their trust and feelings of safety.
- Include age appropriate play areas, homework, art and therapy rooms, as well as space for children to spend time alone and with their families
- While in the refuge, children have the opportunity to address in a safe and supportive environment the effects of domestic violence on them and on their relationships with both parents.
- To work with the child through therapy and play that is designed to meet the needs of children of different ages, to support the relationship between mother and child, and to advocate for the child in their relationship with the outside world and in the unfamiliar world of the refuge.

Design informers

Response to site...

- We need to respect the fact that the site is in a mostly residential area
- The existing building is in essence single storey and explores through its design in section opportunities to bring in natural light from above.
- The existing building has a fully enclosed courtyard/play area, which is a key space to the working of the existing building
- The site is almost fully enclosed by a wall and access is restricted and controlled. This sense of enclosure and privacy must be maintained and enhanced. Overlooking should be minimized.
- The existing site and in particular the two left over triangular spaces are not attractive or well organized at present- there is an opportunity to make more of the existing play area.

Response to context...

- Respond to context of residential area with two storey semi detached houses immediately to the northern boundary; 5 storey apartments across the Kilmore road to the west; and approval for 3 storey building on the site of Woodville house.
- If the children's centre is to be higher than single storey or close to 3rd party boundaries, the development's impacts on access to daylight and sunlight and level of shadowing generated needs to be assessed.



View of the existing site and building

Concept and Design

Development of Concept

- The idea of the comfort and protection of the child was foremost in our design decisions and we were interested in the concept of the reinforcing the wall enclosures of the site in an arm like gesture or embrace
- A more abstract and organic form developed which we felt would contrast with the other urban forms and space, but still feel comfortable for the end user

Response to Human Scale

- The human scale is both adult and child and we wanted to make reference to the child in particular.
- We wanted to connect into the existing building subtly at the existing link. The new roof folds and slides under the existing eaves at the existing fire exit and allows the new building to puncture the existing at this point
- The idea of movement through from a narrow corridor into the light of the link interested us

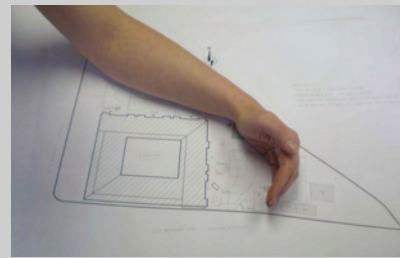
Lighting

natural

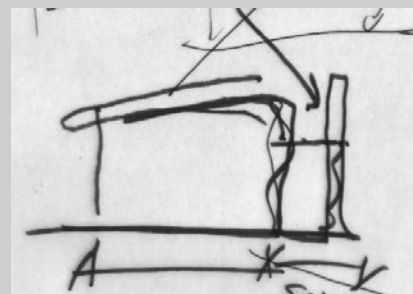
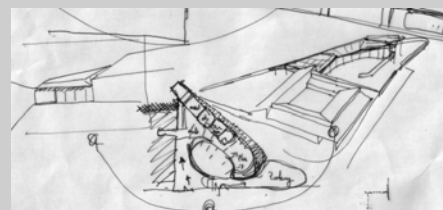
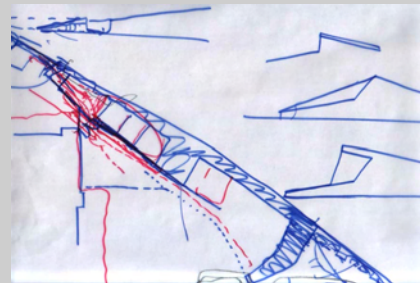
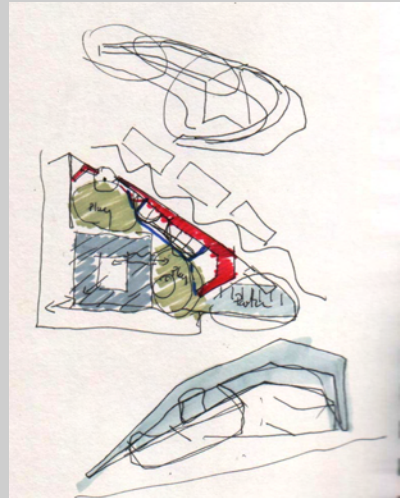
- We wanted natural light to play a significant role in the building and even though our concept was to place the building along the boundary wall we still considered it possible to use the south facing aspect to our advantage and bring additional light in from the roof
- We wanted skylights to mimic the ceilings playful geometries and bounce natural light throughout the central rooms.
- The roof was to be a visually stimulating folded plane with the roof overhanging the windows on the southern aspect enough to shelter the windows from direct sunlight in the summer and allow the winter sun.

Artificial

- We were also interested in the possibility of artificial lighting providing mood and colour in certain areas of the building. Both static and colour changeable lights will be built into the proposed structures.
- Whilst ensuring that health and safety levels are maintained, we must avoid over lighting the space and detracting from the feature lit structures.
- Smaller lights will be built into the exterior spaces to provide natural surveillance at night.
- All lighting proposed is a low energy type. The feature lights are all LED technology ensuring a low energy consumption and minimum maintenance



Initial concept



Initial concept development sketches

Development of Design

General

- it was important for us to establish a link between the existing refuge and the new centre. This link would be used to reinforce the movement of staff and users from car park to buildings and also retain movement from refuge to north play area.
- The movement patterns of people through the site were analyzed and reflected. This will encourage movement through the site from the pedestrian entrance through the exterior spaces and from one exterior space through to another.
- The character of the scheme allows the site to effortlessly transform from an unattractive space to a beautiful landscaped space.
- The wall will act as a service wall and will also provide structure and contain storage areas, seats and relaxation areas.
- We wanted to allow users to move through and along side the new play area when entering the new building.
- We wanted to improve the quality of the existing play area.

The refuge centre

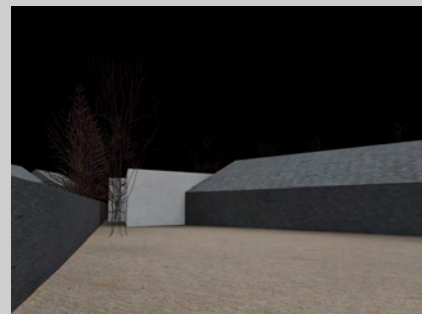
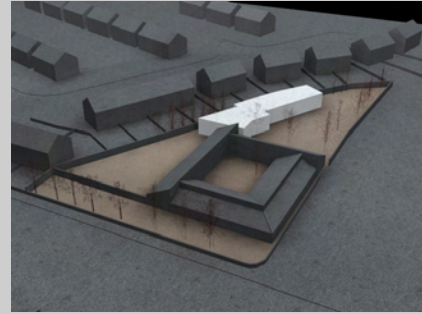
- We envisaged that this building would remain largely unchanged other than reinforcing the access and exit from the former fire exit out through the new building to the playground

The childrens centre

- We decided to place the building along the wall at the existing car park area, and have the building no more than one room wide.
- We realised that the rooms would have one aspect but this allowed us to have what we called servicing rooms such as office, staff room, toilets and kitchen placed directly on the wall and entered off a corridor
- We wanted a circulation route to run along the southern aspect and this would feed the service rooms and bleed into the open plan adaptable space, art space and indoor play area.
- We wanted all rooms in the buildings to have easy access to the new entrance/play area

Materiality and colour

- Investigation was carried out to determine the most appropriate materials for the construction. We wanted them to be contextual as well as sustainable.
- We wanted a palette of natural materials of wood, glass, concrete and grass. We wanted to express these materials in the interior to accentuate differences: rough and smooth; hard and soft; cut and molded.
- We wanted to introduce colour to stimulate the users.



Initial massing 3d model



Physical Model testing

Technical Factors

Structure

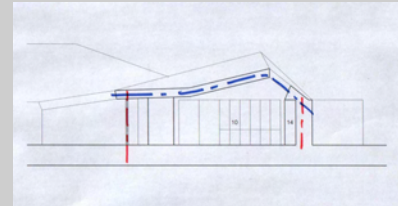
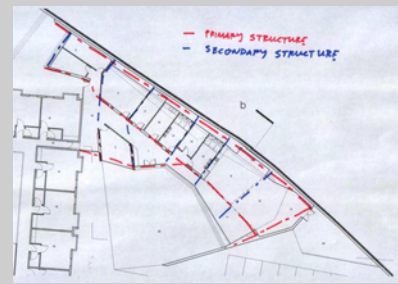
- As stated previously the idea of emphasizing the protective walls is to form part of the concept of the building extending through to structure.
- We decided to make the main wall the structural anchor of the scheme and the roof would be hinged off this. We were interested in the structural wall and the roof being integrated as one homogeneous element.
- As the building is primarily single storey and one room wide in essence we see the structural elements being domestic in scale and complexity.

Building envelope and roof

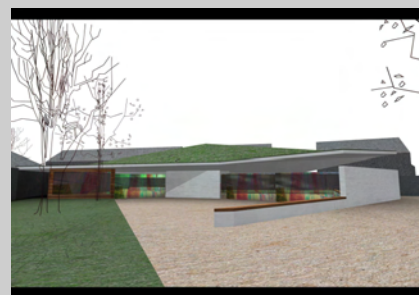
- We envisaged that the roof structure would be concrete and that the covering would be softened with grass.
- We wanted the main walls to be board marked concrete with pockets formed for activities, storage and services.
- We wanted to use sophisticated floor to ceiling glazing to the southern aspect and use coloured glass in certain areas to give life to interiors and exteriors. We also wanted the glazing to be contained within natural timber frames of differing heights and depths responding to heights of different users.

Environmental Response

- We recognized the need for the building to have a strong social, cultural and environmental character.
- Ensure where possible the use of local resources.
- We wanted to embrace the southern aspect in the siting and orientation of the building.
- We wanted Concrete floors and walls that act as a heat sink and we were particularly interested in the floors being capable of retaining and emitting heat naturally.
- We wanted a palette of natural materials of wood, glass, concrete.
- We wanted a grass roof that not only allowed the folded planes of the roof to blend sympathetically with the site but collect rainwater and allow this to be stored in the service wall and fed back into the building.
- The playgrounds are to be like central rooms in the scheme and are seen as the social and community heart of the buildings.
- Natural ventilation is to be employed throughout the building.
- The building shall be supplemented with Radiant heating together with passive shading in summer and passive solar in winter



Structural strategy sketches



More advanced models

COST PLAN – Aoibhneas Children’s Centre Architectural Competition

This Cost Plan must be completed in full and returned with the competition submission.
All costs are to be in Euro. Competitors should assume a budget of €2,800 per m² (exclusive of Value Added Tax and other costs – refer to notes 1 – 3).

Net Usable Area: 250 m² Circulated Area: 35 m² Gross Area: 285 m²

1.	Substructure	€60,000.00
2.	Structure	€200,000.00
3.	Completion	€100,000.00
4.	Finishes	€70,000.00
5.	Mechanical Services	€70,000.00
6.	Electrical Services	€60,000.00
7.	Fittings	<u>€45,000.00</u>
	Sub total	€605,000.00

Add

8.	External Works (Drainage)	€15,000.00
9.	External Play Area	€85,000.00
10.	CCTV installation	€7500.00
11.	Door Access Control	€5000.00
12.	Relocate existing CCTV	€2500.00
13.	Preliminaries	<u>€70,000.00</u>
	Sub total	€185,000.00

Budget Estimate excluding the following

14.	Project Contingency	
15.	Professional Fees	
16.	Planning fees and fire certificate application	
17.	Local Authority Fees (To be confirmed)	
18.	Value Add Tax (VAT)	_____
	TOTAL	€790,000.00

Position (i.e. Architect/QS) QS
(Please Print)

Date 6-5-10

NOTE 1. The costings noted above are construction costs only. Costs such as value added tax, planning charges, local authority contributions, design fees, publicity / advertising costs etc. should be excluded.

NOTE 2. Costs are present day and should exclude future inflation.

NOTE 3. The costings should include for all delivery charges, excise duties etc. associated with the delivery of materials to Coolock, Dublin.