



GROUND

Youth Development Centre

SITE



Grounded Youth Development Centre aims to provide a safe space for children of all ages and a space where people can come together, in order to prevent loneliness and in turn depression.

The project aims to restore the Old Post Office in Derby and is part of the Derby regeneration scheme 2030, which aims to rebuild the Derby city centre. The building contributes greatly to the character of the street and is part of the collective memory of Derby. In preserving the Old Post Office, the long history and heritage of Derby is preserved.

The Design aims to provide an environment that is best suited for childrens' cognitive development and learning by creating a nature connected design. Biophilic Design is proven to have a positive effect on mental health and healing (Kellert, Heerwagen, Mador 2008 page 91-96).

The other component of the Child Development Centre is providing help with any issues children might experience, especially in school, such as learning disabilities, speech disabilities, any mental health issues, burnout and time management. Special care is taken to provide an environment that is suitable for children with disabilities.

Facilities include therapy spaces, spaces to learn, an indoor playground and a games room for older children. The secondary use of the space is a cafe on the ground floor and a library on the same floor.

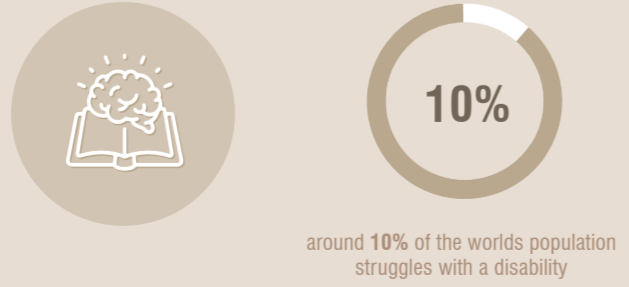
ISSUES



One of the biggest issues of the younger generation is depression, which has been exacerbated by the COVID19 pandemic. Depression can lead to suicide and is therefore an issue that should be taken very seriously. One of the biggest factors that leads to depression is loneliness, which is where this project comes in.

The aim of this project is to create a safe space for children of all ages (0-18 years) and a space where people come together, in order to prevent loneliness and in turn depression. Another way to treat depression is therapy, which is why this project incorporates therapy spaces.

Learning Disabilities



"Children with disabilities remain one of the main groups being widely excluded from quality education" (source Department for International Development) and the Youth Development Centre aims to provide an inclusive learning environment for them by providing versatile learning environments that can be adapted and trained teachers. Among the issues catered for in this project are Attention Deficit Hyperactivity Disorder, Dyslexia and speech disorders/difficulties, such as Apraxia and Dysarthria.

Lack of Sustainable Design



Lack of Nature Connectedness



People are less connected to nature than ever, which starts in early childhood. Most people live in urbanized environments that are often bleak and minimal but children need stimuli and are more naturally drawn to nature (Park and Lee, 2019).

Humans spend most of evolution outdoors and were shaped by their surroundings, which in turn shaped what spaces humans feel safest in (Park and Lee, 2019).

This project aims to bring children back to nature through Biophilic Design Elements and a nature connected design. It aims to educate children about the healing properties of nature and about preserving nature.

SOLUTIONS

The design is providing several different components, on the one hand it is providing a safe space to fight depression on the other hand it is also providing a safe space for play, development and learning:



Biophilia and Biomimicry

I am planning on bringing in nature elements, such as plants and trees and forms inspired by nature. Nature elements within architecture are proven to help mental health (Kellert page 4 and Guenther and Vittori page 68).

"Research revealed that children's wellbeing increased after they had spent time connecting with nature: the children showed an increase in their personal wellbeing and health over time, and they showed an increase in nature connection and demonstrated high levels of enjoyment." (Wildlife Trust, 2019.)



Learning through play

Another concept that influenced the design process is the concept of learning through play. Children learn through their environment and engage with it in a tactile way (Canter, 1974). In the proposed design I include multiple elements for tactile play, an indoor playground, as well as toys and books in every room.



Inclusive Design

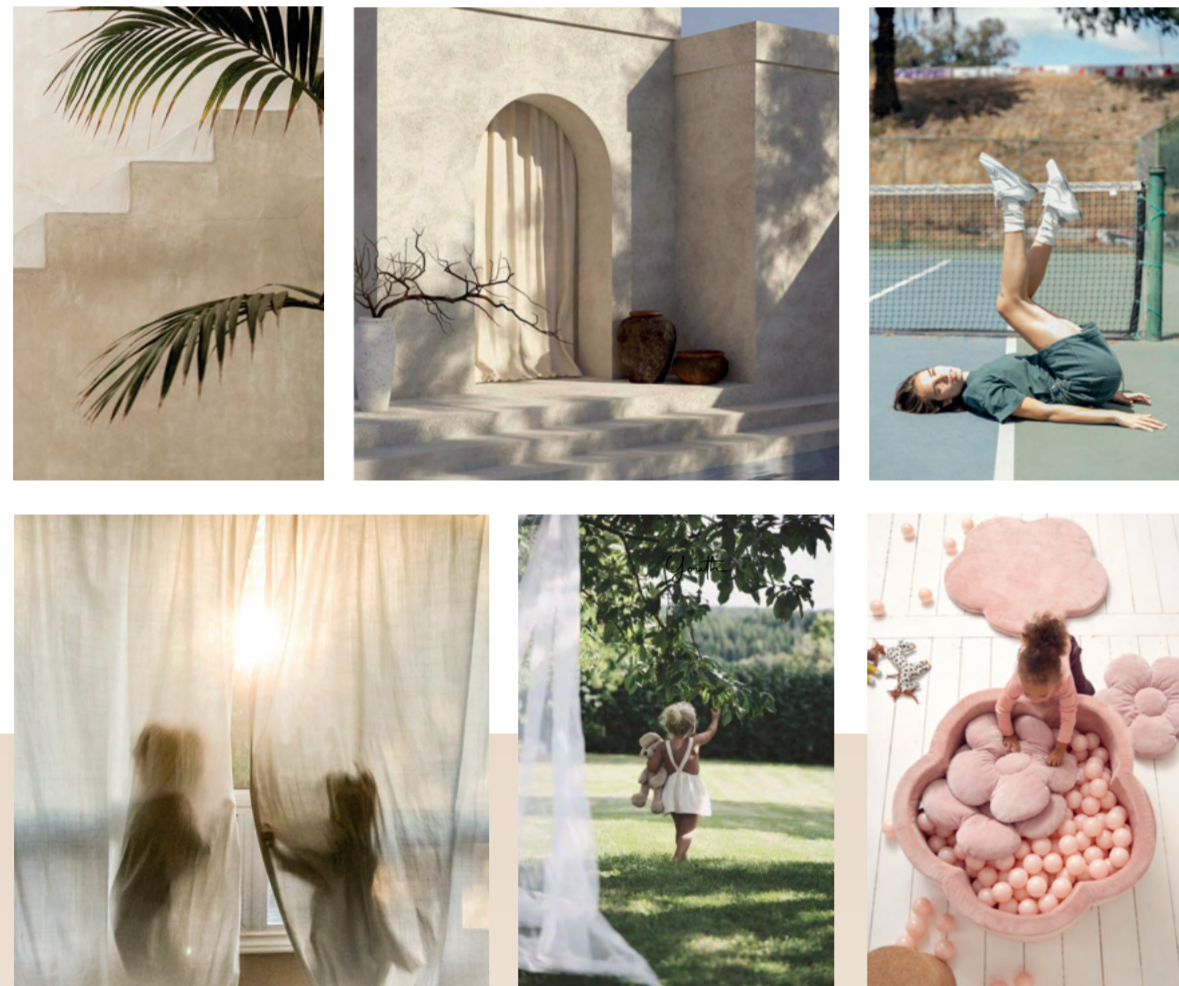
The Youth Development Centre aims to provide an inclusive learning environment by providing versatile learning environments that can be adapted and trained teachers. Among the issues catered for in this project are Attention Deficit Hyperactivity Disorder, Dyslexia and speech disorders/difficulties, such as Apraxia and Dysarthria.

Reducing clutter in the space and creating a very structured and clean environment helps to clear the mind and has been proven to help children with ADHD (Dewitz, n.d.).

CONCEPT SKETCHES



MOOD BOARD



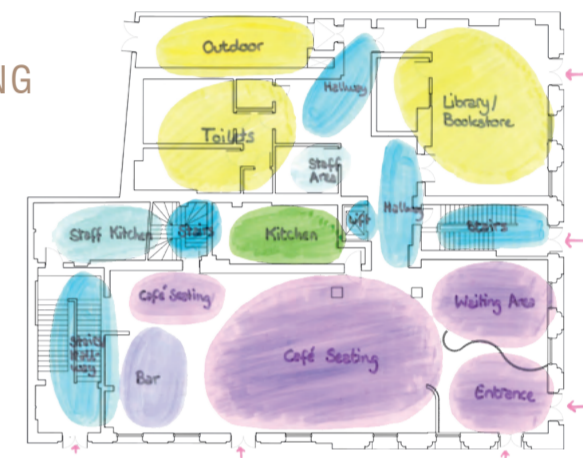
CONCEPT BOARD



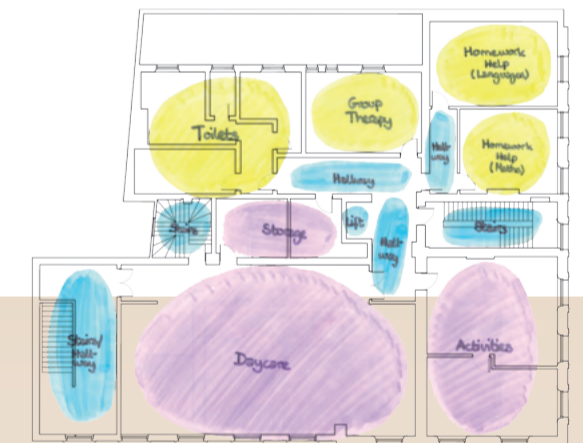
MATERIAL SPECIFICATION

- WOOD FLOOR FINISH**
Manufacturer: W by Woodpecker
Manufacturer Item Name: Dark Oak Solid Wood Flooring
Code: 184319
Colour: Dark Brown Oak
Size: 1200mm x 125mm x 18mm
- MARBLE PORCELAIN**
Manufacturer: Mandarin Stone
Manufacturer Item Name: Mimica Matt Porcelain
Colour: White, Marble
Size: 595mm x 295mm x 10mm
- VELVET FABRIC**
Manufacturer: MJannelJ
Manufacturer Item Name: Velvet Fabric Sephia Gold
Colour: Beige
Size: 1000mm x 1400mm
- EMULSION PAINT**
Manufacturer: Dulux
Manufacturer Item Name: Dulux Trade Durable Flat Matt
Colour: Dewy Lawn
Size: 15L
- LAMINATE**
Manufacturer: Formica
Manufacturer Item Name: Natural Cane
Code: F6930
Colour: Brown
Size: 2440mm x 1220mm
- EMULSION PAINT**
Manufacturer: Dulux
Manufacturer Item Name: Dulux Matt
Colour: Soft Truffle
Size: 15L
- HERRINGBONE WOOD FLOORING**
Manufacturer: Havwoods
Manufacturer Item Name: HW2010 Alzon
Colour: European Oak
Finish: Brushed, Stained and Oiled
Size: 725mm x 130mm
- EMULSION PAINT**
Manufacturer: Farrow & Ball
Manufacturer Item Name: Middleton Pink
Colour: Pink
Size: 30L
- EMULSION PAINT**
Manufacturer: Farrow & Ball
Manufacturer Item Name: Borrowed Light
Colour: Blue
Size: 5L
- LAMINATE**
Manufacturer: Formica
Manufacturer Item Name: Natural Cane
Code: F6930
Colour: Brown
Size: 2440mm x 1220mm
- EMULSION PAINT**
Manufacturer: Farrow & Ball
Manufacturer Item Name: Red Earth
Colour: Red
Size: 5L
- EMULSION PAINT**
Manufacturer: Dulux
Manufacturer Item Name: Dulux Paint
Mixing Matt
Colour: Teal Touch
Finish: Matt
Size: 5L

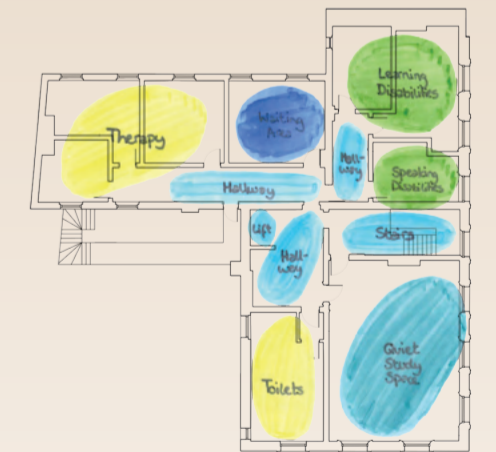
ZONING



GROUND FLOOR - ZONING



FIRST FLOOR - ZONING

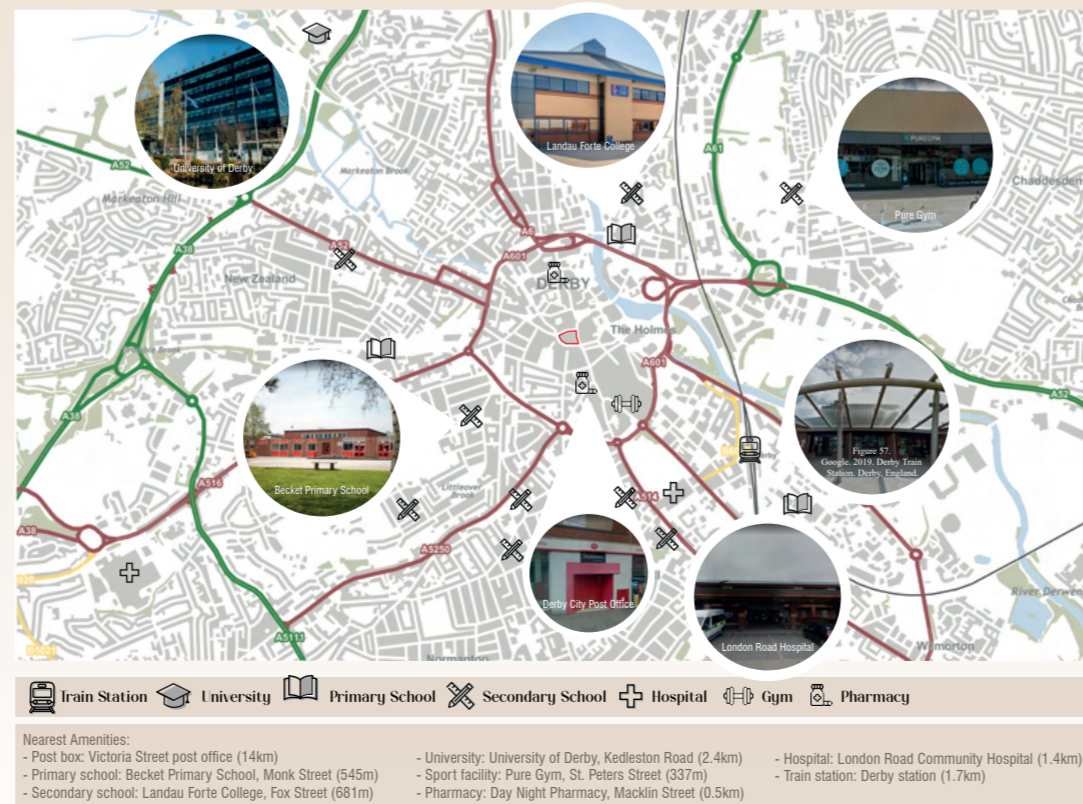


SECOND FLOOR - ZONING

COMPETITION



LOCAL AMENITIES



LOCAL LAND USE MAP



LIST OF REFERENCES

Canter, D., 1974. *Psychology for architects*. London: Applied Science, pp.67-68.

Dewitz, A., n.d. *Classroom Designs to Accommodate ADHD and Learning Disabled Students*. pp. 1-2.

Guenther, R. and Vittori, G., 2013. *Sustainable healthcare architecture*. Hoboken (New Jersey): Wiley, pp.65-79.

Kellert, S., Heerwagen, J. and Mador, M., 2008. *Biophilic design*. Hoboken, N.J.: Wiley, pp.3-103.

Park, S. and Lee, H., 2019. *Spatial Design of Childcare Facilities Based on Biophilic Design Patterns*. Sustainability, 11(10), pp.1-15.

Wildlife Trusts. 2019. *New report shows how nature nurtures children* | The Wildlife Trusts. [online] Wildlifetrusts.org. Available at: <https://www.wildlifetrusts.org/news/new-report-nature-nurtures-children> [Accessed 9 December 2021].



RESTAURANT BAR



RESTAURANT SEATING



RESTAURANT SEATING

Zone 1 The Cafe

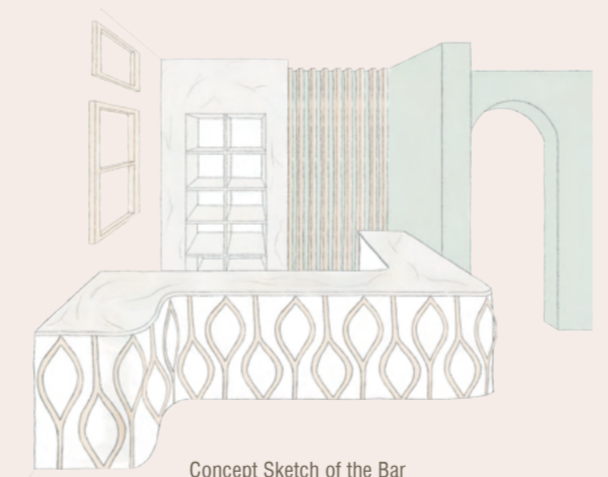
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1. Oak Laminate Solid Wood Flooring
Floor
- 

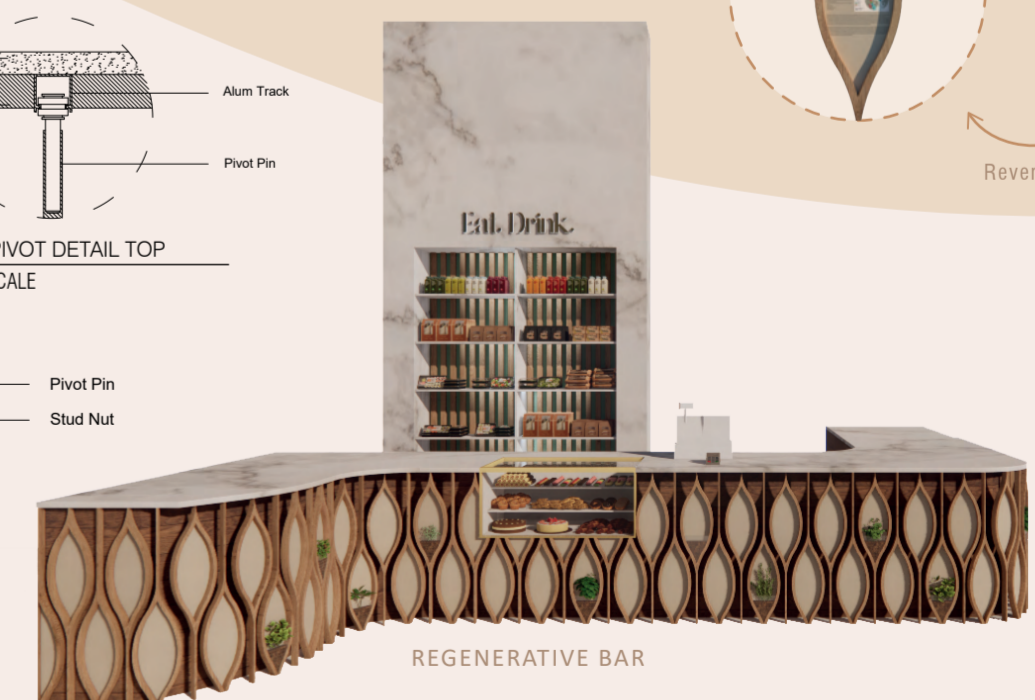
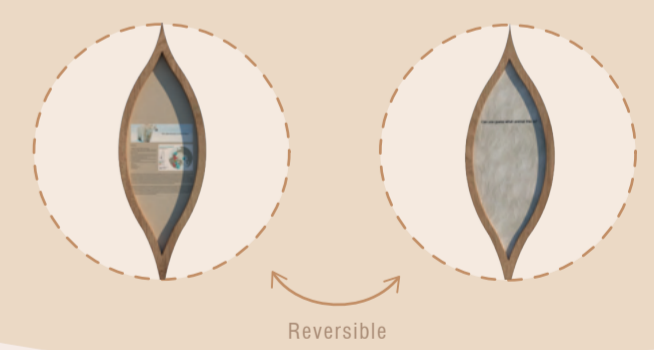
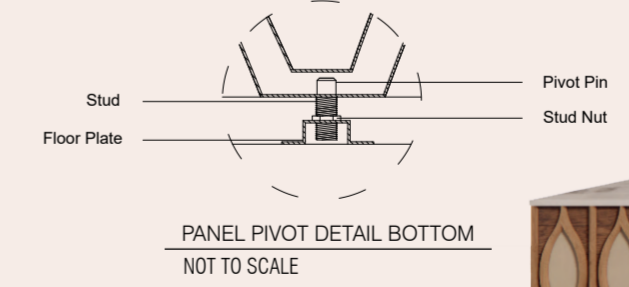
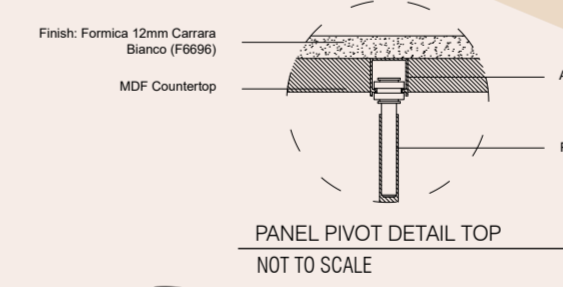
2. Marble Laminate Table Tops & Bar Counter Top
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3. Beige Velvet Fabric Booth Seating
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4. Sage Paint Walls



Bar Detail



The design on the ground floor brings with it a lot of curves instead of rigid lines. Curves can be found in nature whereas angles can not. I brought in curves, in order to provide the benefits that Biophilic Design and Biomimicry have on child development.

The bar design will have panels that mimic tree hollows. The panels rotate, one side of the panel will comprise of fake fur from endangered species with the question: "Can you guess what animal is this?". The other side of the panel will have the answer to that question and some information about the animal, why it is endangered and what can be done about it.

Another aspect of this bar will be that some other panels will have plants in them. The panels will have engaging questions written on them in order to get children to smell and guess what plants they are. The back of the panel will have the correct answer, the use of them and what meals in the restaurant are being cooked with that plant. Some of the proposed plants include strong smelling plants, such as basil, camomile, mint, eucalyptus, thyme, rosemary and lavender.

This project is promoting sustainability by teaching children, that you need to be aware of your surroundings and act now in order to preserve the future. It also promotes nature connectedness by letting the user engage and think more deeply about nature. Nature connectedness for children plays an important part in preserving nature.



INDOOR PLAY AREA



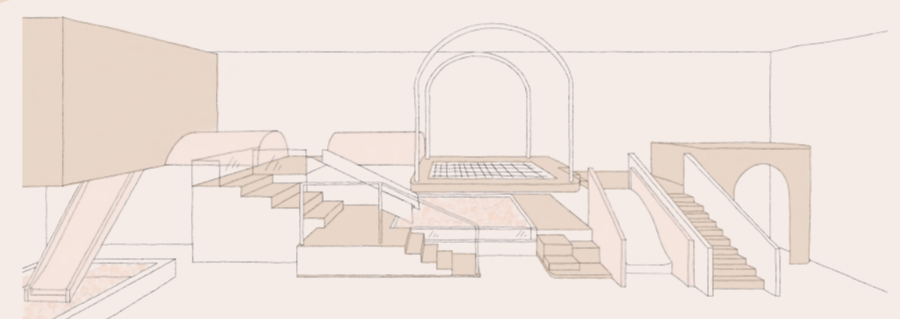
INDOOR PLAY AREA



INDOOR PLAY AREA - TACTILE PLAY



INDOOR PLAY AREA



Concept Sketch of the Play Area



NOT TO SCALE

The Play Area takes inspiration from Biophilic Elements and such as tree hollows and leaves to bring children closer to nature and to provide the best environment for a child's cognitive development. The use of plants is meant to bring nature in and have a positive impact on child development.

Zone 2

The Play Area

- 5. Natural Cane Laminate Jungle Gym
- 6. Emulsion Paint (Soft Truffle) Walls
- 7. European Oak Solid Wood Herringbone Flooring
- 8. Emulsion Paint (Middleton Pink) Jungle Gym
- 9. Emulsion Paint (Borrowed Light) Wall Paneling



LEARNING AREA



LEARNING AREA



PLAY AREA WITHIN THE LEARNING AREA

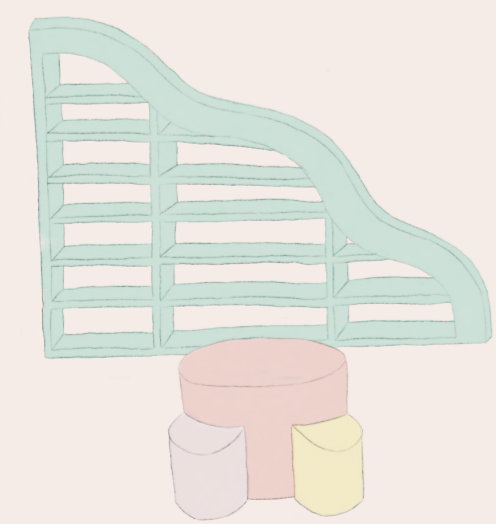


LEARNING AREA



Zone 3
Learning Space

- 10. Natural Cane Laminate Desks
- 11. Emulsion Paint (Red Earth) Bookcase
- 12. Emulsion Paint (Citron) Bookcase
- 13. Emulsion Paint (Teal) Bookcase



Concept Sketch of the Play Area

The partitioning and the light in the learning areas represent the way a leaf is shaped and the veins of a leaf. The learning area is created with children in mind that might struggle with a disability such as ADHD. They need some form of stimuli, lots of natural light and versatile seating, all of these aspects are incorporated into the design: There is different seating and playful elements, such as the curved shelves that are painted in colourful colours and playful seating.