# CANINE COMPANIONS

A facility designed for the autistic spectrum focused on the companionship of assistance dogs for autistic children and their family

# LOCATION



The chosen site is The Old Chapel located in Greylees, within the grounds of Rauceby Hospital. The hospital opened in 1902 and closed its doors in 1997 remaining vacant since. Many parts of the original structure have now been demolished.

# PROPOSAL

1:100 children in the UK are thought to be diagnosed with autism spectrum disorder. It affects how the brain functions, which can cause difficulty with communication, sensory processing and social interaction. Although the prevalence of autism is estimated to be three times higher than hearing, visual and physical impairments, it is often a forgotten disability when it comes to design. Spaces that are not designed for ASD can cause overstimulation with many children developing repetitive behaviours to cope.

The proposal is to provide a facility designed for the autistic spectrum, to help reduce autistic behaviours. Offering children and their network a space to interact and bond with trained assistance dogs. Observing if over time they can be beneficial for all the family. If so, families can become permanent owners of an assistance dog or, continue to visit the centre if their circumstances do not suit. The centre also strives to support the whole family's mental wellbeing and dayto-day life of looking after an assistance dog. Offering parents and carers the chance to talk to others in similar situations and seek support from volunteers, in hope to relieve any stresses or concerns they may have.





### **DESIGNING FOR AUTISM**



ACOUSTICS Controlling acoustics to reduce background noise, echoes and vibration.



SPATIAL SEQUENCING Logically ordering spaces so they seamlessly flow from one to another.



**ESCAPE SPACE** Quiet places for them to escape and readjust to their settings.



#### COMPARTMENTALISATION

Organising a space into different compartments with uses which is clearly defined.

nication





# CONCEPT

The conceptual approach has been influenced by the sites form. Through analysis of the existing and original structures that once formed the asylum, the curve emerged. Not wanting to strip away anymore of the site and retain its once connected structure, implementing this form internally and externally would be a way to bring together a disjointed site. This approach has been implemented in conjunction with the seven criteria to design for autism. Layering these strategies has allowed the design to be sympathetic to its surrounding and users.



# **USERS**



The users of the space are autistic children aged 4-11 and their families or carers. The space will also be used by volunteers to maintain the training of current assistance dogs and train up suitable puppies.



#### TRANSITION SPACES

Transition zones to give the children time to adjust whilst moving from one zone to another.



#### SENSORY ZONING

Spaces to be sequenced based on their sensory quality. Grouping high and low stimulus zones.



SAFETY Ensuring the space is safe for the autistic children.

# LAYOUT

The layout has been designed to allow each user to have their own space. High and low stimulus areas have been separated. Where these were placed was determined by the sun path, with low stimulus activities placed to the north in the shadiest part of the building and high stimulus to the south in the lightest part.





Parents / Carers and Volunteers

- Dogs
- All







#### Ground Floor 1:200

1 Reception

- 2 Waiting Area
- 3 Consultation Room
- 4 Breakout Space
- **5** Entrance Space
- **6** Transition Room

- 7 Escape Pods
  8 Main Interaction Room / Training Space
  9 Child Play Area
- 10 Dog Room
- 11 Accessible Toilet
- 12 Dog Outdoor Area

- 13 Outdoor Interaction Area
- 14 Children Outdoor Area
- 15 Observation Area and Volunteer Work Space

# MATERIAL, COLOUR PALETTE AND LIGHTING

Great care has been taken when deciding on materials, colour and lighting, as they can have a great influence on a person's psychology and a critical effect on how autistic users perform within a space. The main material that will be used is oak, chosen for its sound absorbing qualities and to create a warm environment. Rubber flooring will also be introduced to control acoustics. As well as being selected for safety, being softer underfoot for both the children and dogs and limiting any injuries if children fall. Additionally, it is durable and easy to clean. A different material palette has been applied in areas that are designed for different users and functions, guiding people through the space and providing clear segregation. A neutral colour palette has been applied, opting for tones of blue, green and purple for the most low stimulus areas. These colours have been selected as they can soothe and relax. To suit all users, indirect lighting will be selected, preventing bright glare. Although natural light is favoured so, utilising the large windows already provided will allow natural light to flood into the space.





Short Section B-B 1:100 Escape pods have been placed on a raised platform to the north allowing the children a separate space they can retreat to if they start to feel overwhelmed. Providing them with a sensory neutral space to accustom their senses. The wall that encloses the two pods has been insulated to help eliminate any noises. The two escape pods have been decorated differently, additionally giving the children choice of environments. Putting these pods on a raised platform provides clear separation from high stimulus areas and offers the children views onto the mature landscaping that surrounds the site.

Two other escape spaces have been inserted underneath the raised platform. Although choosing not to soundproof these, ensuring the varied needs of the children are met. These safe spots also offer the children and dogs a variety of spaces to sit and interact.



Escape Pod Acoustic Wall Detail Component

- 1 3mm plaster finished with BS4800 18C35 Corvette Blue Paint
- 2 V-Cut 12.5mm Flexiboard Plasterboard 2400mm x 1200mm Panels

100mm x 50mm timber studs placed at 400mm centres,cavity filled with 100mm Rockwool Acoustic Mineral Wool Insulation

- 4 V-Cut 12.5mm Flexiboard Plasterboard 2400mm x 1200mm
- 5 Black acoustic veil stapled to structure

8mm 2500mm x 1250mm Dukta Linear panels in Raw MDF
secured with headless pins and glue, finished with natural varnish after assembly.



#### Main Interaction Room / Training Space





#### Mezzanine



Breakout Space