CIRQUE DU FUTUR

At the Brighton Hippodrome

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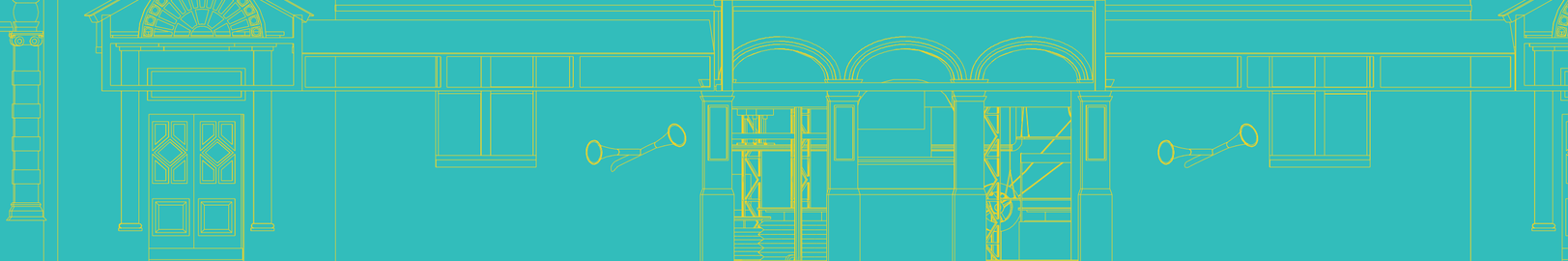
AD676 [Design 4 : Experience & Systems]
BA (HONS) Interior Architecture



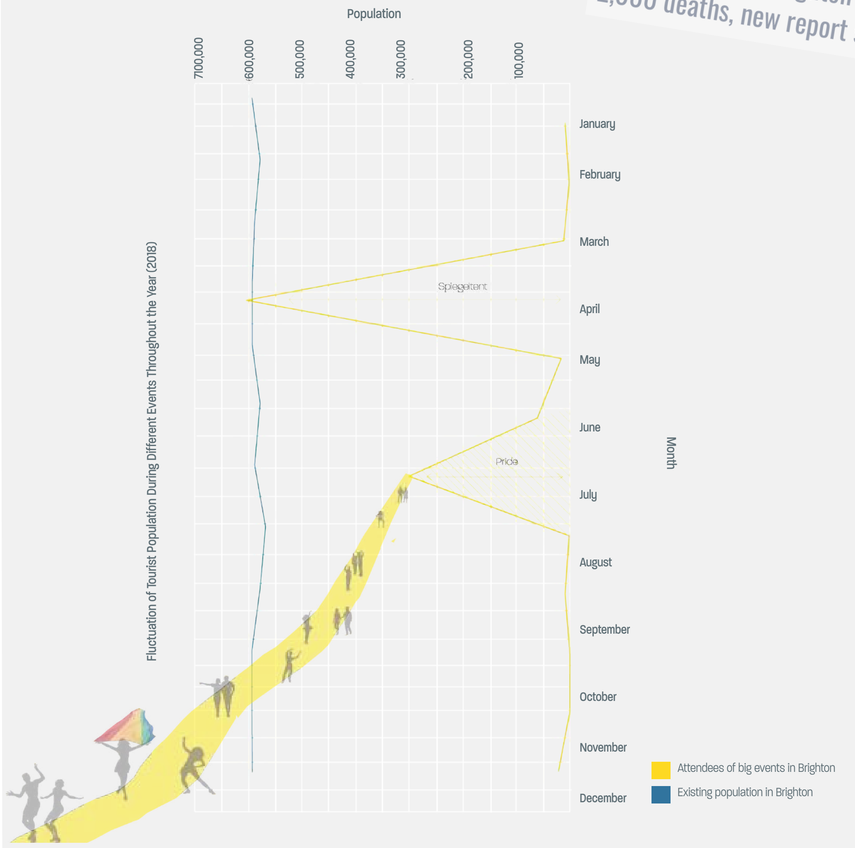
THE CLIMATE CRISIS

"Even in **Brighton and Hove** with its sea breezes, people are dying prematurely because of polluted air.

Brighton's air quality 'improving' but NO2 still at illegal levels

1st March 2019
North Street in Brighton is one of the most polluted in the UK

Dirty old town – Brighton's polluted roads to blame for 2,000 deaths, new report says

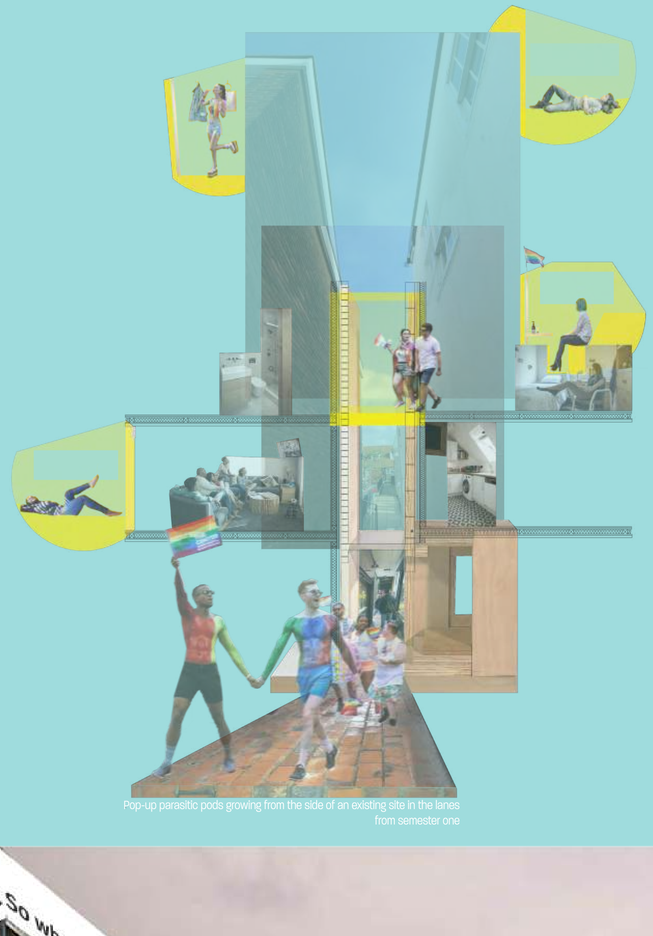


Graph from semester one

THE FLUCTUATING CITY

The term 'fluctuating city' refers to the idea of the constant change in the population within the city, in this case Brighton, due to many factors such as tourism.

Explored in semester one, the graph focuses on the key events which occur throughout the year and highlighting how many people attend the different venues, resulting in the population to peak at different points throughout the year. For example, the Pride weekend event brought over 250,000 people to Brighton in August 2019, causing a massive flux of people in the city in such a short period of time. With all these people flooding to attend the event, more traffic will appear on the roads, adding to the dangerous levels on co2 in the atmosphere.



Pop-up parasitic pods growing from the side of an existing site in the lanes from semester one

Sysmat paper structures from semester one

CRISIS? WHAT CRISIS?

As Brighton is a popular seaside town, the climate crisis poster (from semester one) shows an exaggerated picture of the city, full of traffic and smog, from the high levels of tourism from all across the UK and worldwide. As the number of tourist is constantly changing, it is important to consider the permanence or impermanence of a future activity. Especially how it can evolve and develop to meet new social needs.

For this semester, using similar ideas explored previously on events and entertainment, the key focus will be looking at creating a programme which can become a future tourist hotspot. A 'future circus' will emerge in the heart of Brighton in the Hippodrome, challenging what you would expect with a typical circus venue, it combines the idea of play and determination, as your involved in creating a spectacle of cleansing the polluted Brighton air.

Crisis poster from semester one

WELCOME TO THE HIPPODROME

Constructed in 1897 as an ice rink for Ellis and Humphrey Brammell and designed by Architect Lewis Karslake. However, the activity wasn't popular and closed after year from opening.

1897

Building was enlarged and converted by Architect Frank Matcham into a circus space and was formally named as the 'Hippodrome'. Once again this only lasted less than a year and closed in October, 1902

August, 1901

Following another conversion, the space turned into a Variety Theatre under the new management of Thomas Barrasford. The theatre was to host two evening performances at affordable prices so it was accessible to all.

December, 1902

Different acts/performances include: Musicians, comedians, plays, ballet, opera, singing etc... Perhaps the most famous was the comedian Max Miller, Brighton's own 'Cheeky Chappie', who regularly performed at the Hippodrome between the 1930s and 1950s

1903

The Hippodrome also hosted concerts by artist like The Beatles and Rolling Stones

1964

Despite all the effort, the Variety Theatre venue closes its door after over 60 years of entertainment in the city.

1965

The site was later used as a film and TV studio

1966

Converted to a Mecca bingo hall

1967

The Hippodrome Listed as a Grade II structure

1985

Bingo hall closes and venue has remained derelict, with major structure issues inside making the building too dangerous to access

2006

Cirque Du Futur at the Brighton Hippodrome opens

2050

Scale 1:1000

[Location]
52 Middle St

Scale 1:100

A JOURNEY BETWEEN TWO SITES

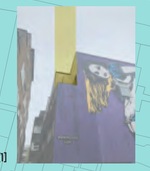
The Hippodrome In Brighton was built in 1897, originally intended to be an ice rink. However, this wasn't a popular choice for many in the city and only lasted for a year. In 1901, the site was enlarged and transformed in a circus space, hosting a variety of acts which included clowns, jugglers, animal acts and many more. Again, this failed to lift off in the city so the hippodrome in 1902 was changed to a variety theatre which lasted for around 60 years, hosting many different shows, musicals, bands etc... and was the hotspot for people in the city and beyond to enjoy.

Looking at the site today , it has remained derelict since 2007 and it is essential that we revive its history and bring the Hippodrome back to life by re-introducing some programmes which happened in its history. Creating a new entertainment space which differs from what is around the immediate site can create a point of intrigue for tourist and residence to enjoy.

A journey connecting the semester one site at the Lanes to the new site at the Brighton Hippodrome. Highlighting the key themes explored in the previous semester of voids and 'in-between' spaces between buildings and mapping them along a two different paths. Also, looking at types of entertainment spaces there are on the specific routes to understand the context around the site and what new tourist activity could fit within the existing social context.

Point A
The Lanes

Route One


[1]

[2]

[3]

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Route one exploring interstitial spaces

Route two exploring interstitial spaces

Showing different entertainment venues along the two routes:
Mainly music venues

[10] Casablanca Jazz Club

[11] DJ set at Hop Poles

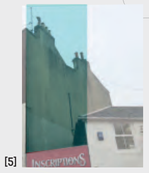
[12] Star Slam Karaoke

[13] Live music at the Black Lion

[14] Live music at the Cricketers

[15] Live music at the Mesmerist

Route Two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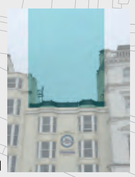
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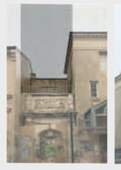
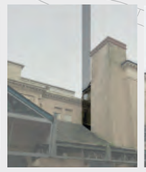
Point B
Hippodrome





CIRQUE DU FUTUR

AN IMMERSIVE AND INTERACTIVE FUTURE CIRCUS VENUE

MODE ONE

[AIR CLEANSING ACTIVITY]

Polluted city

This part of the programme will link directly to the climate crisis in Brighton, which aims to clean to polluted air in the city through a city of man powered mechanisms located within the Hippodrome.

The audience as the performer

The audience becomes the performer in the air cleaning process, as they will become responsible for activating a series of machines, which trigger a pump or fan system which drives the polluted air around a pipe system in a series of air filters.

Movements include:

-Jumping
-Pushing
-Pulling
-Running
-Turning

Cleaning the air

Once the air has reached the final machine, the clean, fresh air will be pumped into the auditorium space, creating pockets of refreshing, clean air for you to enjoy.

Show time

Now, the Cirque du Futur show can begin!

Pre show prep:

-Before the audience arrive at the Hippodrome, maintenance needs to be carried out on the structure to make sure everything a safe and ready to be used.
-Performers rehearse for their performance

MODE TWO

[THE CIRCUS PERFORMANCE]

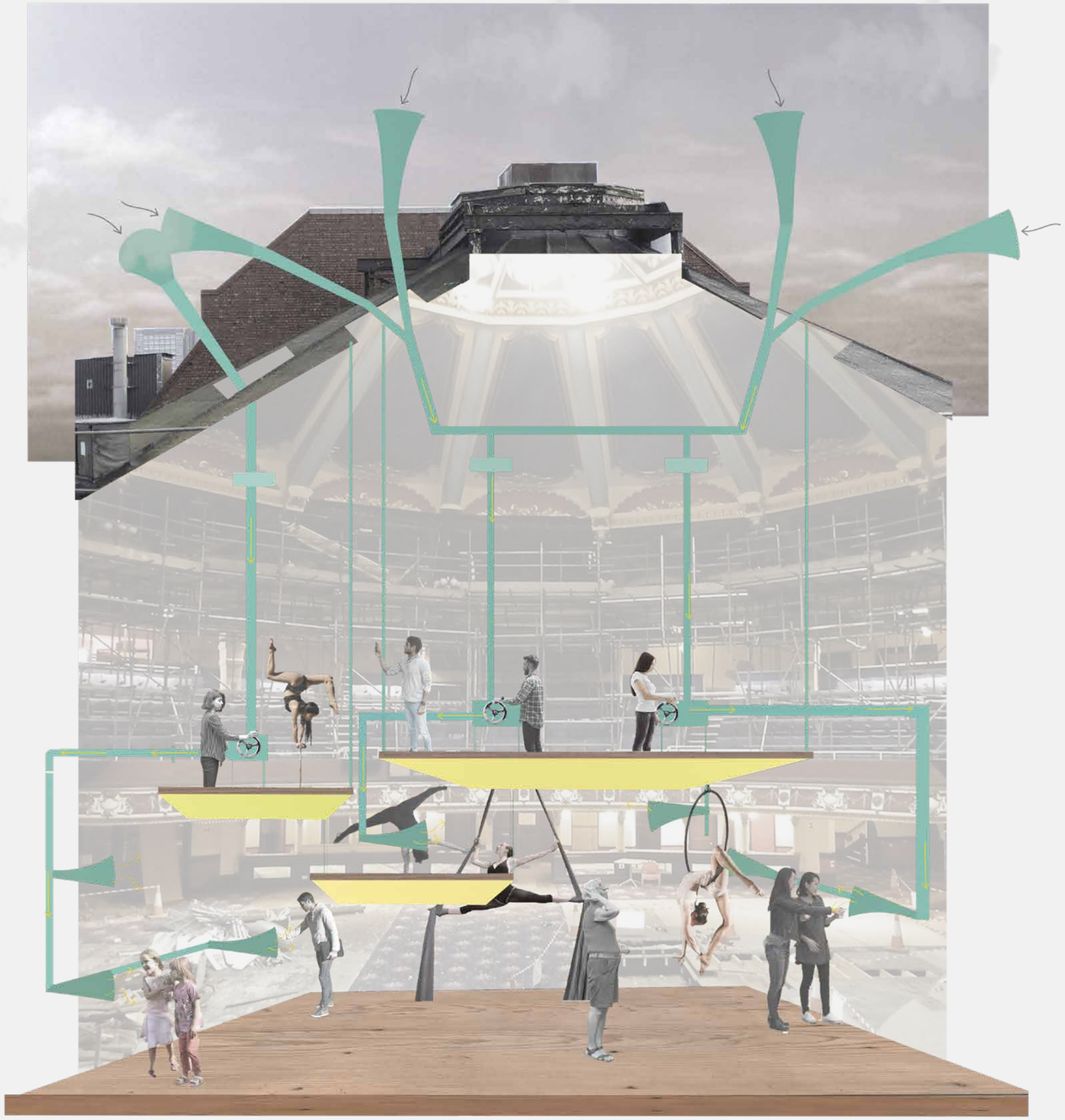
A purified auditorium

Now the auditorium is filled with the fresh filtered air, the circus show is ready to begin

The performance

The performances will take place on the suspended platforms within the structure, where by the audience can adjust the platforms through a pulley system which can bring them up and down, changing the way you view the acts

Performances include:
-Tight rope
-Ring Acts
-Aerial silk
-Hand balancing
-Contortionist



A SEQUENCE OF EVENTS

ACTIVITIES WITHIN SPACES

[BOX OFFICE]

-tickets sold here
-ticket pick up point
-customer information about shows/venue

[SET WORKSHOP]
-set and scenery construction for cirque show -prop construction

[FLY TOWER]
-located above the main stage; bars are used by all departments including set, lighting, sound and AV to rig elements such as lights, speakers and drapes, all hidden from view from the audience.
-technical team can easily move different elements using a series of cantilever pulley systems

[CONTROL ROOM]

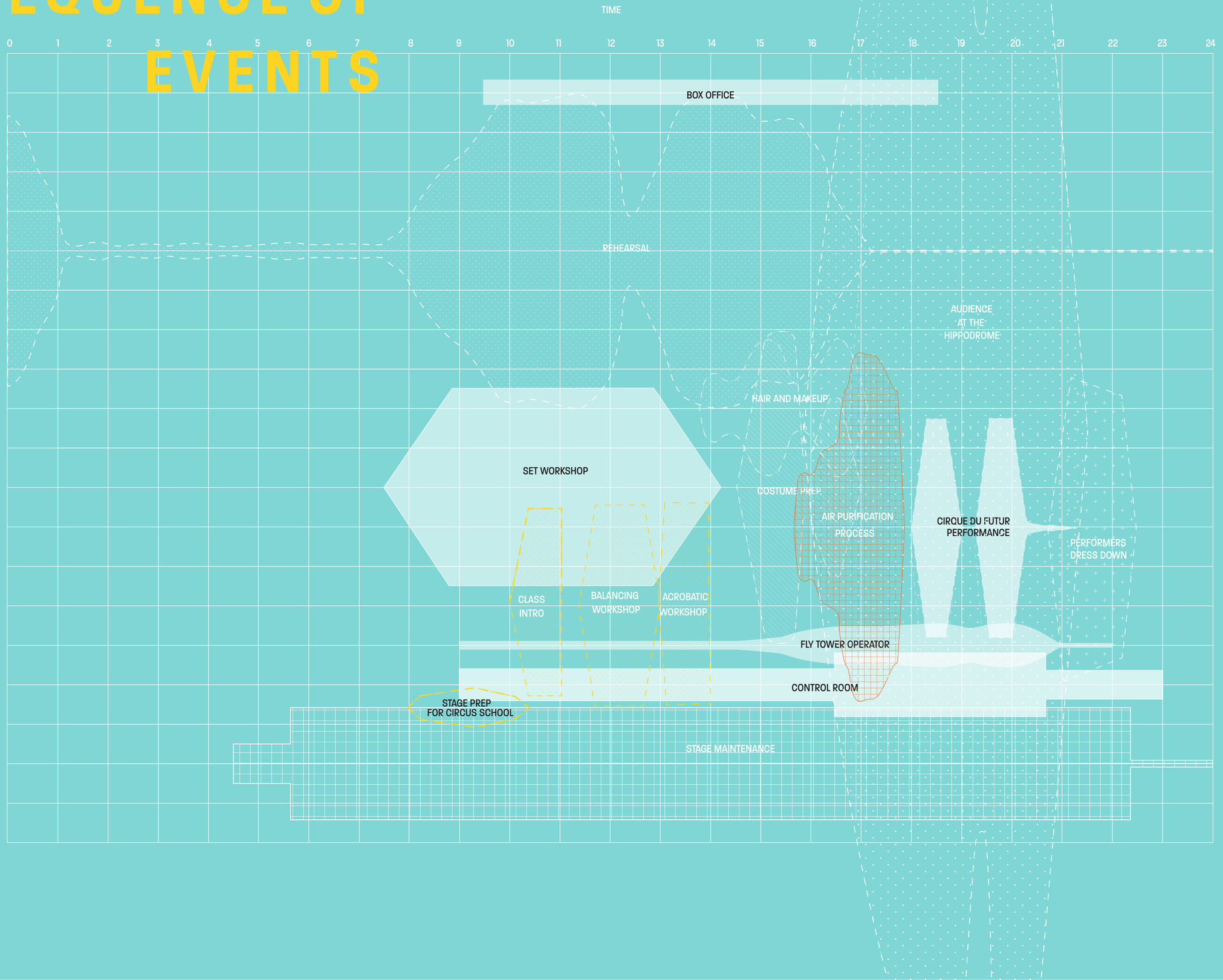
-sound and lighting room, used to control effects on stage

[PERFORMANCE]

-show offers a range of acts ranging from ground to aerial performances which occupy the different platforms
-added frames and rigging equipment surround stage for acts which require to be suspended in the air such as the trapeze or different ring acts
-the show often contains a 20 minute interval to allow guest to get refreshments or access other facilities

[AIR PURIFICATION]

- Audience are able to embark on a journey of cleansing the polluted Brighton air within the Hippodrome, through a series of man powered pumps and fans which push the air through a series of chambers and air filters, and finally releasing the clean air into the auditorium, ready for the circus show.



ACTIVITIES

SPACES

CIRCUS SCHOOL

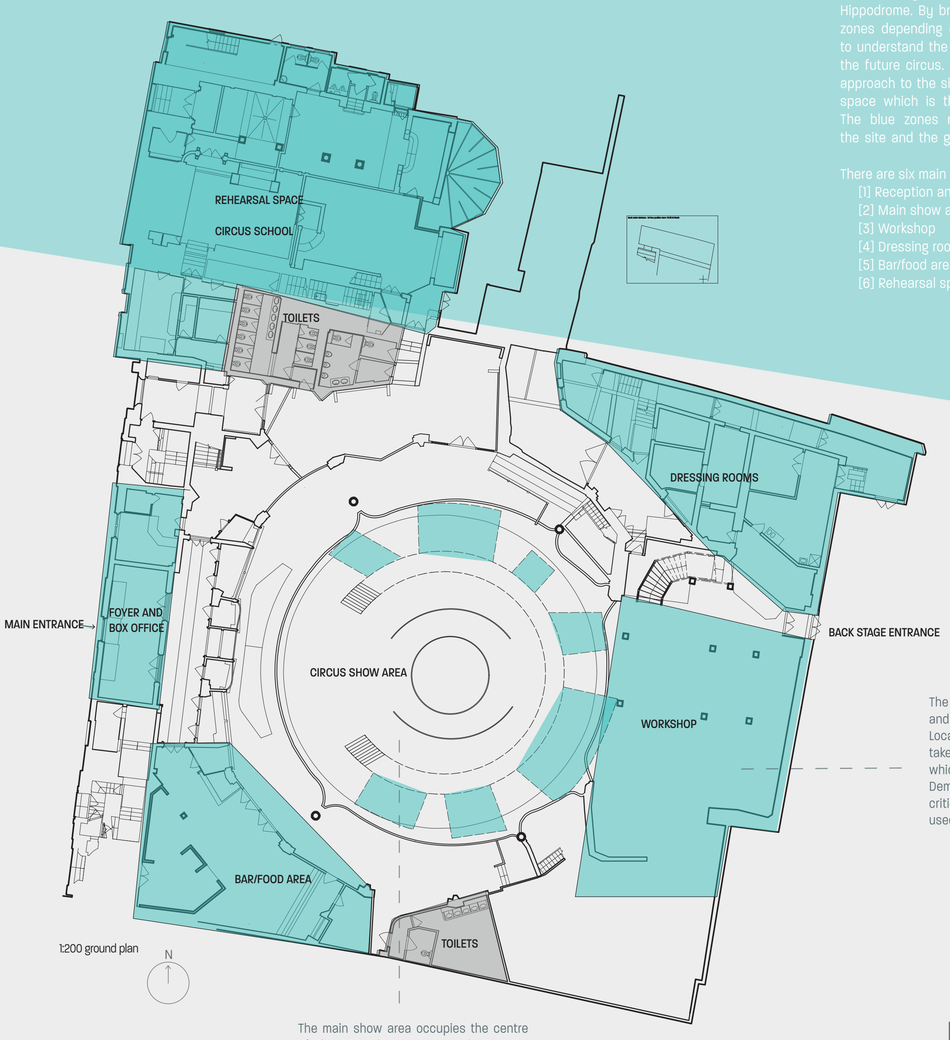
AIR CLEANSING

= 5 PEOPLE

SPATIAL EXPLORATION

The following iterations explore the space within the Hippodrome. By breaking down the site into different zones depending of the required activity, allows us to understand the wider strategy of the entire sit for the future circus. All of the strategies have a similar approach to the site, mainly altering the performance space which is the main focus of the programme. The blue zones represent the new proposal onto the site and the grey zone representing the existing.

There are six main spaces for the circus
- [1] Reception and box office
- [2] Main show area
- [3] Workshop
- [4] Dressing rooms
- [5] Bar/food area
- [6] Rehearsal space



1:200 ground plan

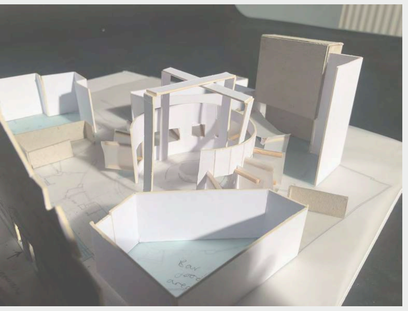
The workshop would be used for building and maintenance for the show area. Located where the stage us to be, it can take advantage of the existing fly tower which is located directly above the stage. Demolishing the mezzanine level will be critical to access this space This could be used to store different sets and equipments.

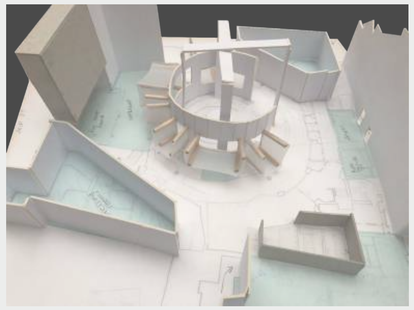
The main show area occupies the centre of the Hippodrome. A curved structure allows you to walk through the space, viewing the performances from the different pods coming out of the form. The centre included spaces for aerial acts to swing, hang and fly across, creating a spectacle as you pass through the space.

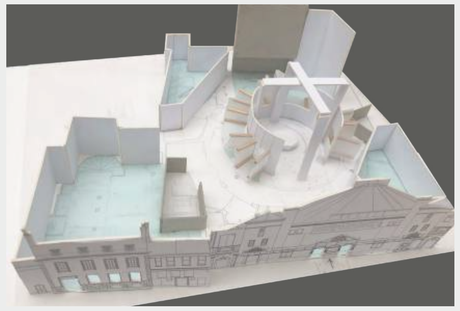
ITERATION ONE

The first strategy highlights the main spaces and rooms required for the programme. Located at the front of the site, the rehearsal space for the performers and circus school occupies the Hippodrome house. This is quite a large space as it needs to include all the different equipment needed for the performers to practice and store the apparatus.

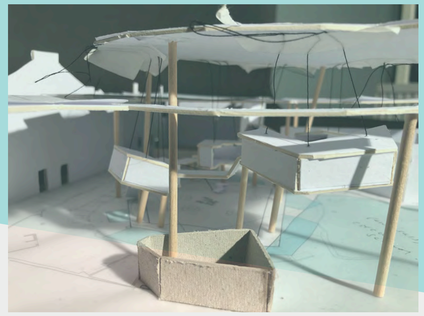
As the House has lots of smaller rooms inside, it would be important to demolish these spaces and create an open space for people to easily move around. Being located at the front, facing the street, allows passers by to peak inside to view the performers, giving them an idea of what sort of shows will appear inside.

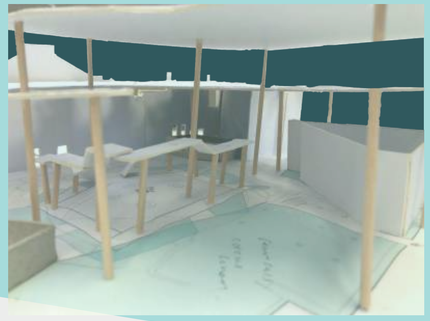


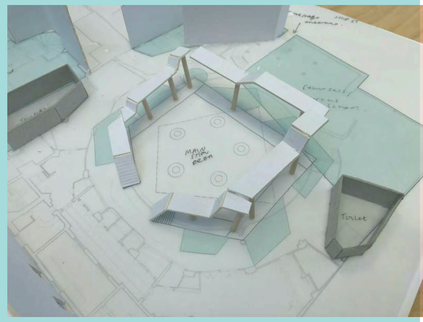




1:200 sketch model representing the space





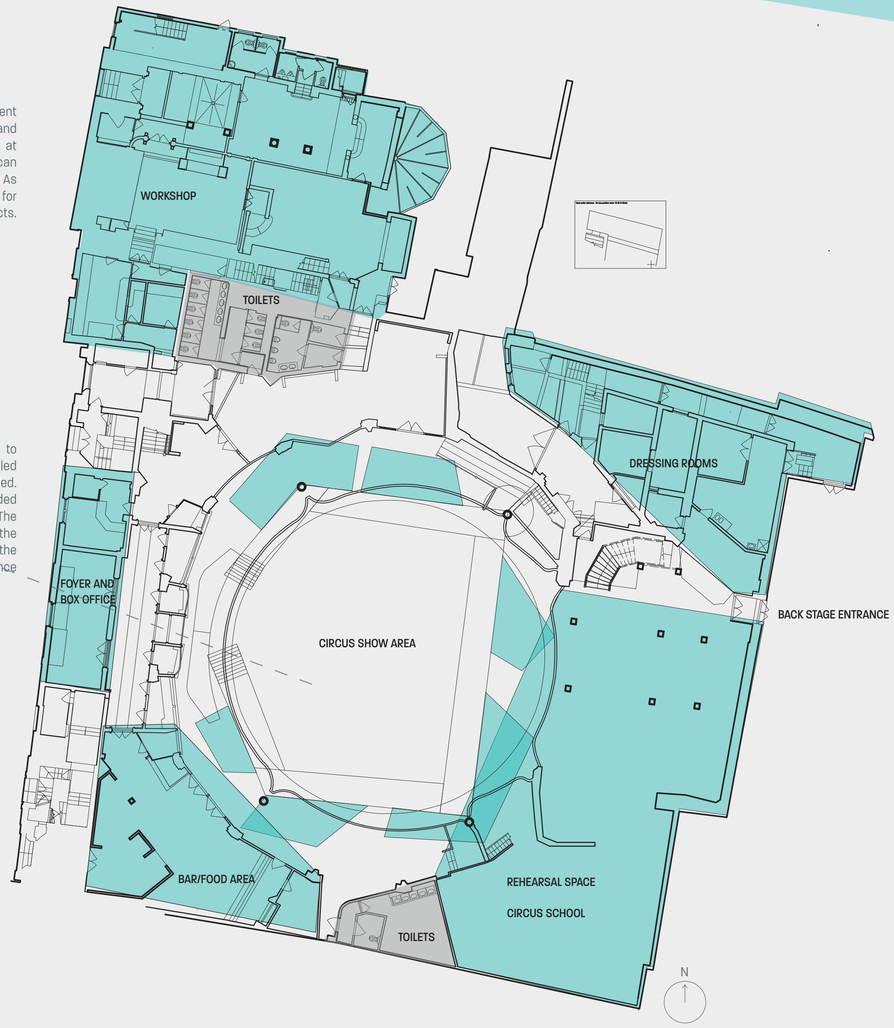


1:200 sketch model representing the space

ITERATION TWO

The second strategy is similar to the first. The key different is switching over the spaces where the workshop and rehearsal space are. By having the rehearsal space at the back, both the circus space and rehearsal space can become quite fluid and almost become connected. As the performers can practice in both space, one being for the ground performances and the other for aerial acts.

The circus show area is more of a frame compared to iteration one, which is more open and can be assembled and dismantled depending on when the show is needed. The idea of the pods is so that they can be suspended from the dome, creating weightlessness effect. The audience are able to once again, walk through the structure to view the show, capturing glimpses of the other performances as you filter through the performance



1:200 ground plan

EXPLORING THE CIRCUS

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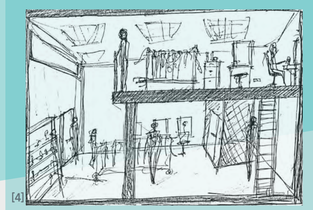
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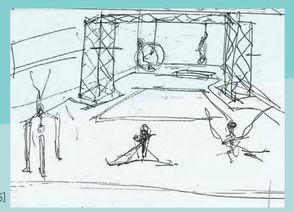
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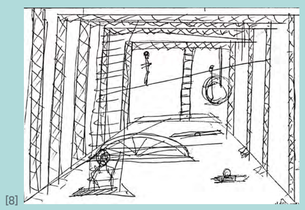
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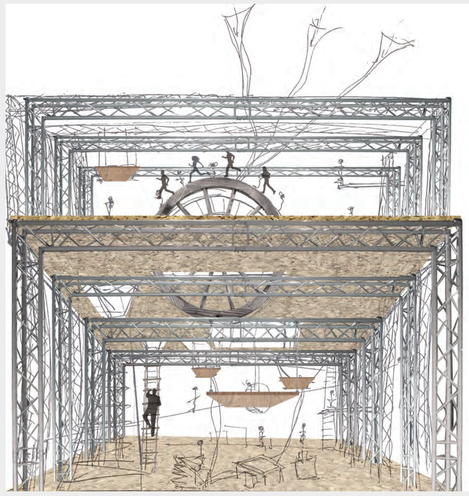
1:200 ground plan

The main show space in the Hippodrome is a large pier like platform which is inserted into the centre of the dome area. The idea of the frame is that it can be assembled and dismantled when there is a show in the site, so it leaves minimal marks of the historic building.

Set across two levels, the activities inside will break down the stages of air purification, with activities such as running and turning the wheel which will generate a turbine to bring in the polluted air into a series of chambers which will connects to other mechanisms like pumps, trampolines, coggs and many more interactive pieces.

1:200 sketch model representing the space



ITERATION THREE

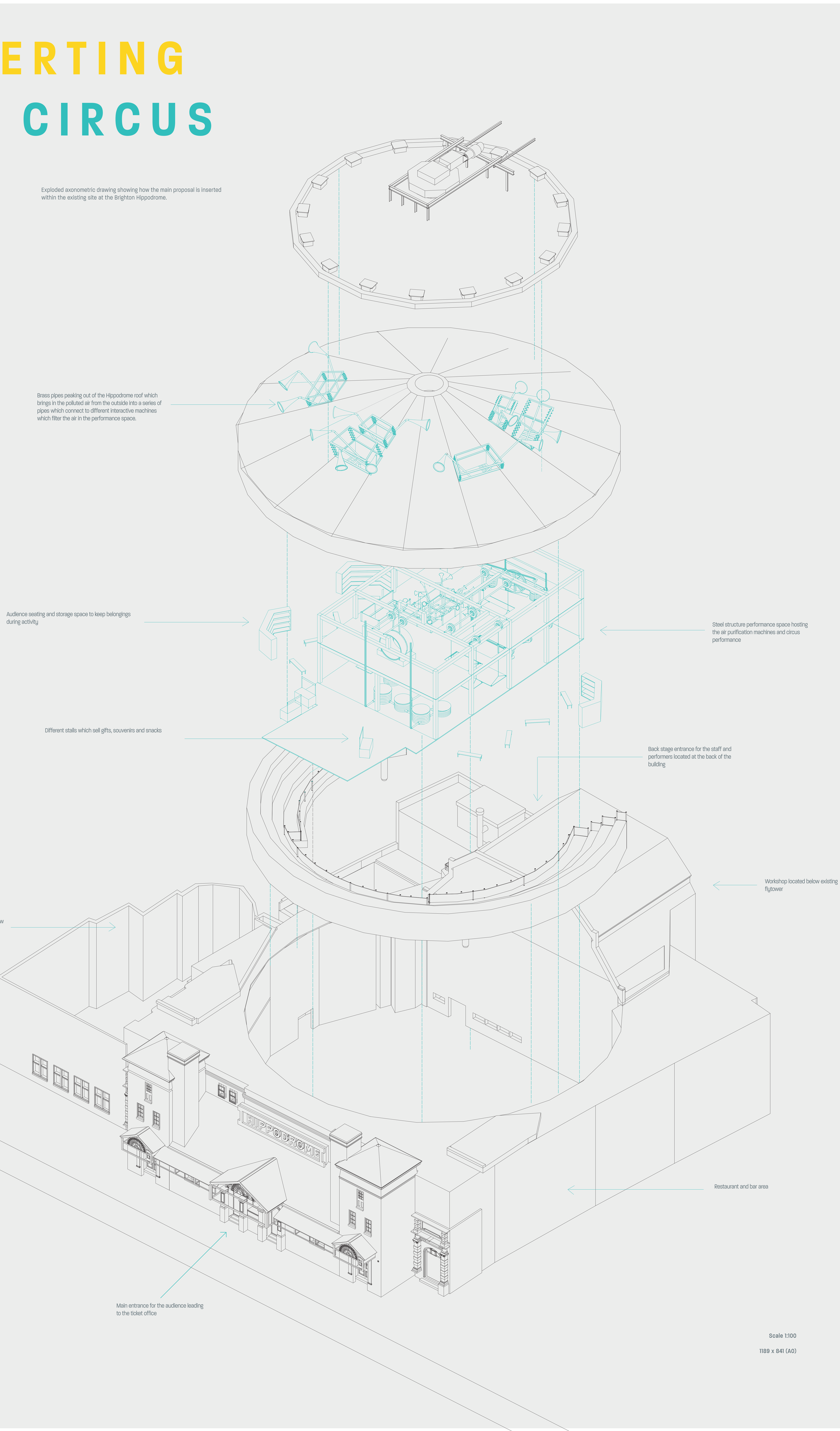
The final interation will form the foundations for the rest of the proposal. Unlike the other two strategies, it will incorporate both the circus theme but with the idea of the climate crisis. This design looks into what the future circus is and challenge the we normally interact with a circus.

The audience and performers become one, as they embark on a journey and spectacle of cleaning and filtering the polluted Brighton air. The idea is that the process of air filtration will be broken down into several steps which translate to a specific activity/movement, and the final spectacle will release all this clean air into the Hippodrome creating a fresh atmosphere inside.

The rehearsal space will be located in the Hippodrome House, similar to iteration one. This is an ideal location as it can become a large open space to allow for all the acts to have enough space to practice.

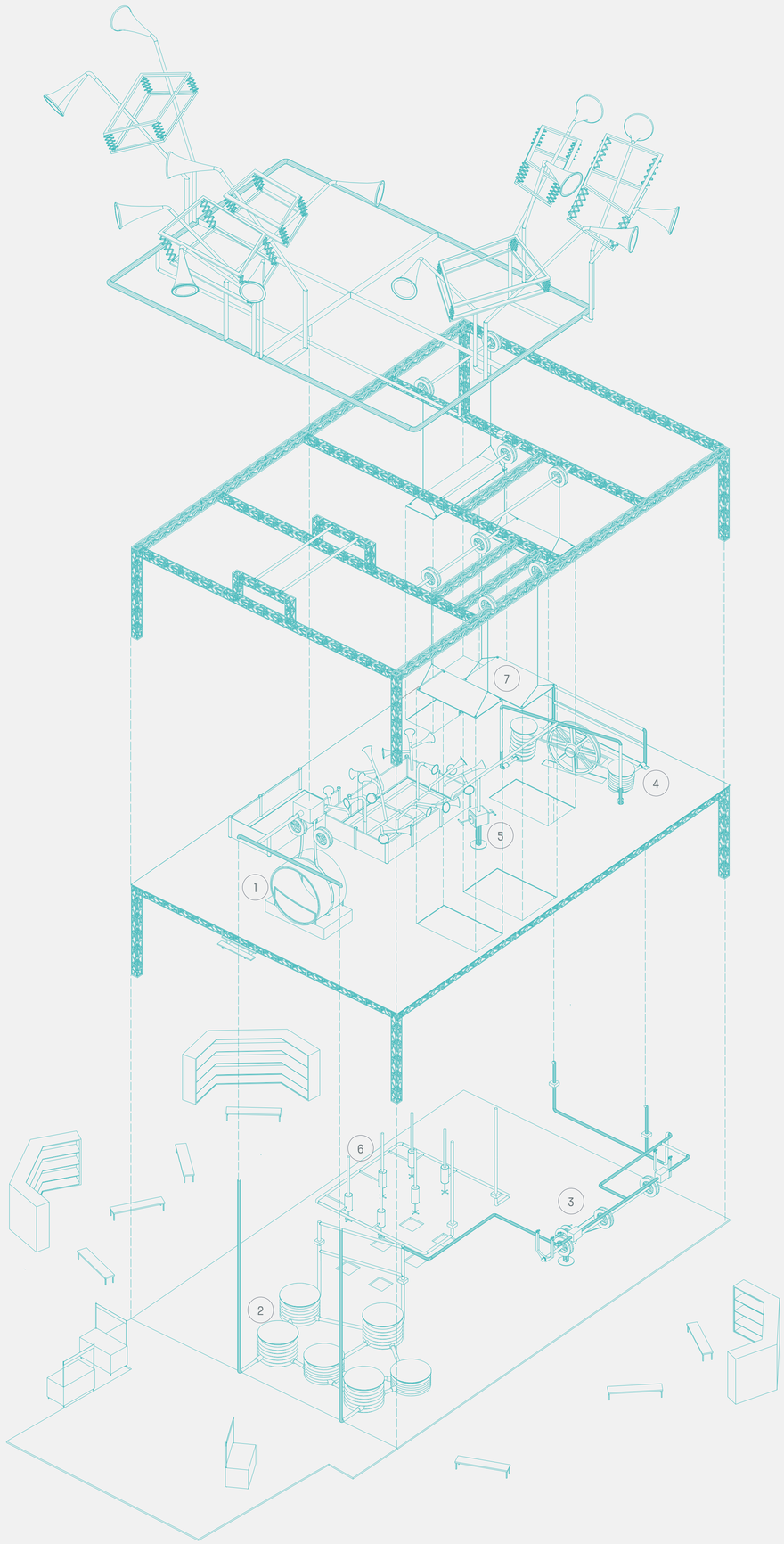
INSERTING THE CIRCUS

Exploded axonometric drawing showing how the main proposal is inserted within the existing site at the Brighton Hippodrome.



Scale 1:100

1189 x 841 (A0)



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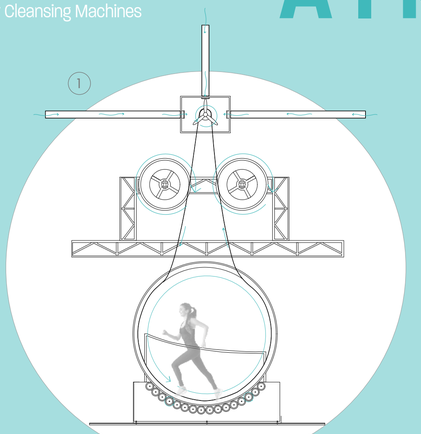
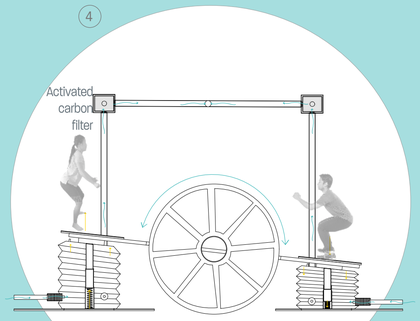
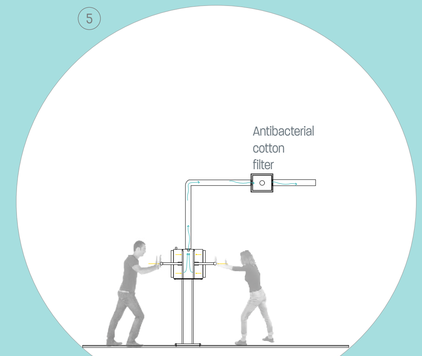
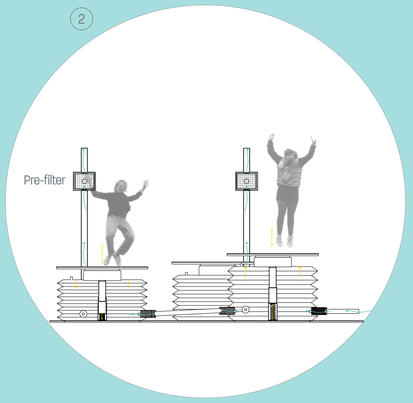
A JOURNEY OF AIR PURIFICATION

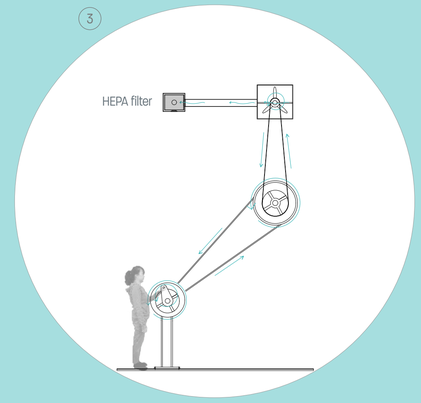
Air Cleansing Machines

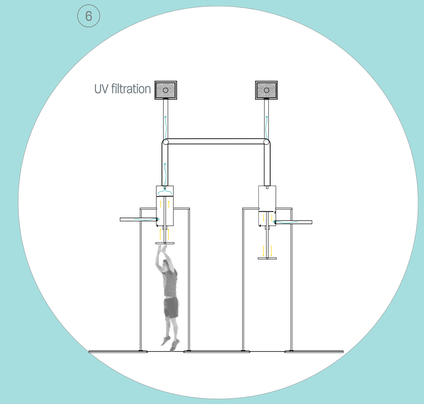




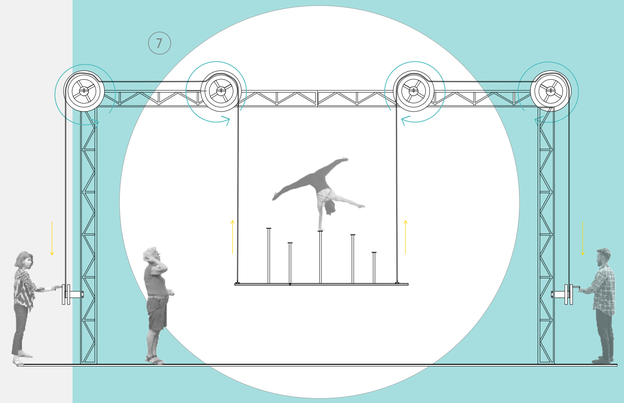








The Performance System



A series of different man-powered mechanical movements designed to aid the process of air purification. The journey takes you around the structure as you jump, push, hang or run across these specially designed components, which pumps and circulates the air, and eventually releasing the fresh, clean air t inside the Hippodrome, ready for the performance

There are six main mechanical movements which relate to a certain process or air filter:

[1] This step is critical for the whole process to begin. This wheel works like a hamster wheel. As you run inside it drives a band which is connected to a fan and drives the polluted air from the outside, into the Hippodrome through a series of chambers.

[2] The pumps will be responsible for circulating the air onto the other components and into the first filter. The pre-filter is the first step in cleansing the air and removes larger particles from the air such as pollen, dust and dander.

[3] The third mechanism is a crank which activates a fan to produce wind towards the HEPA (high-efficiency particulate absorbing) filter. One of the most efficient filter up yo 99.97% of airborne particles like dust mites and smoke.

[4] This see-saw motion works similar to the bellow style pumps and relies on two people using the system. This connects to the activated carbon filter traps chemicals, ordures and other harmful gasses.

[5] This piston style pump creates a pressurised air which connects to the antibacterial cotton filter which destroys cell walls from bacteria, preventing bacterial growth.

[6] The final stage is allows the audience to jump on trampolines to push up onto the pump and into the UV filtration, killing viruses, germs, other harmful bacterial and sterilises the air. This is the final stage of the air filtration before getting released into the performance space, creating pockets of fresh air.

Scale 1:150

594 x 841 (A1)

ESTABLISHING THE CIRCUS:

GROUND PLAN

Space Breakdown

[1] Main entrance to the Hippodrome for the audience

[2] Ticket office and information point

[3] Variety of stalls sells gifts and snacks

[4] Bar/ Restaurant space

[5] Kitchen

[6] Seating and storage for audience belongings

[7] Main performance area

[8] Rehearsal space for the performers

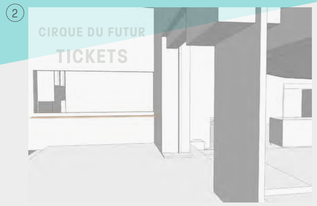
[9] Dressing rooms

[10] Workshop

[11] Backstage entrance

1

2



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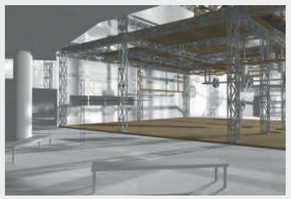

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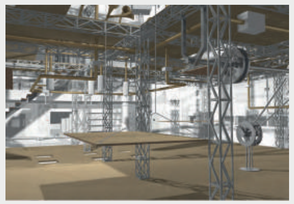


Movement of the audience from entering the hippodrome and through the air purifying activity

Movement of the backstage team (maintenance and performer)

Performance locations

Ground floor plan

Scale 1:200

841 x 420 mm

1:200

4m 0 4m 8m 12m 16m 20m

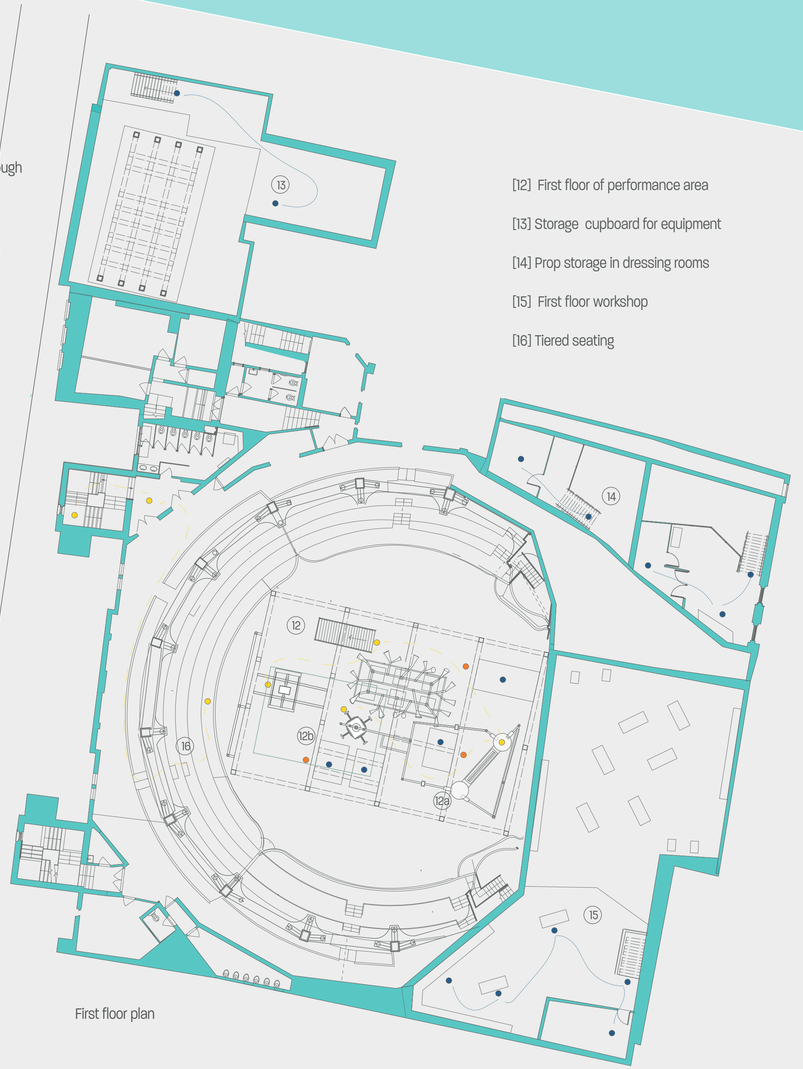
ESTABLISHING THE CIRCUS:

FIRST FLOOR AND ROOF PLAN

Movement of the audience from entering the hippodrome and through the air purifying activity

Movement of the backstage team (maintenance and performer)

Performance locations



First floor plan

[12] First floor of performance area

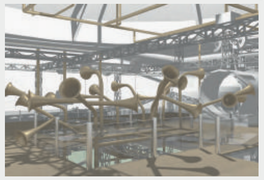
[13] Storage cupboard for equipment

[14] Prop storage in dressing rooms

[15] First floor workshop

[16] Tiered seating

12



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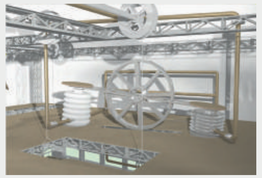
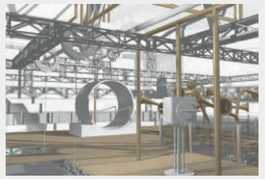


12b



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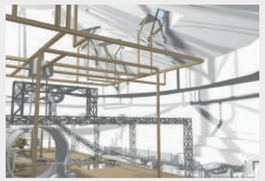

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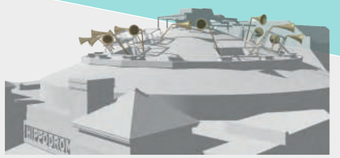
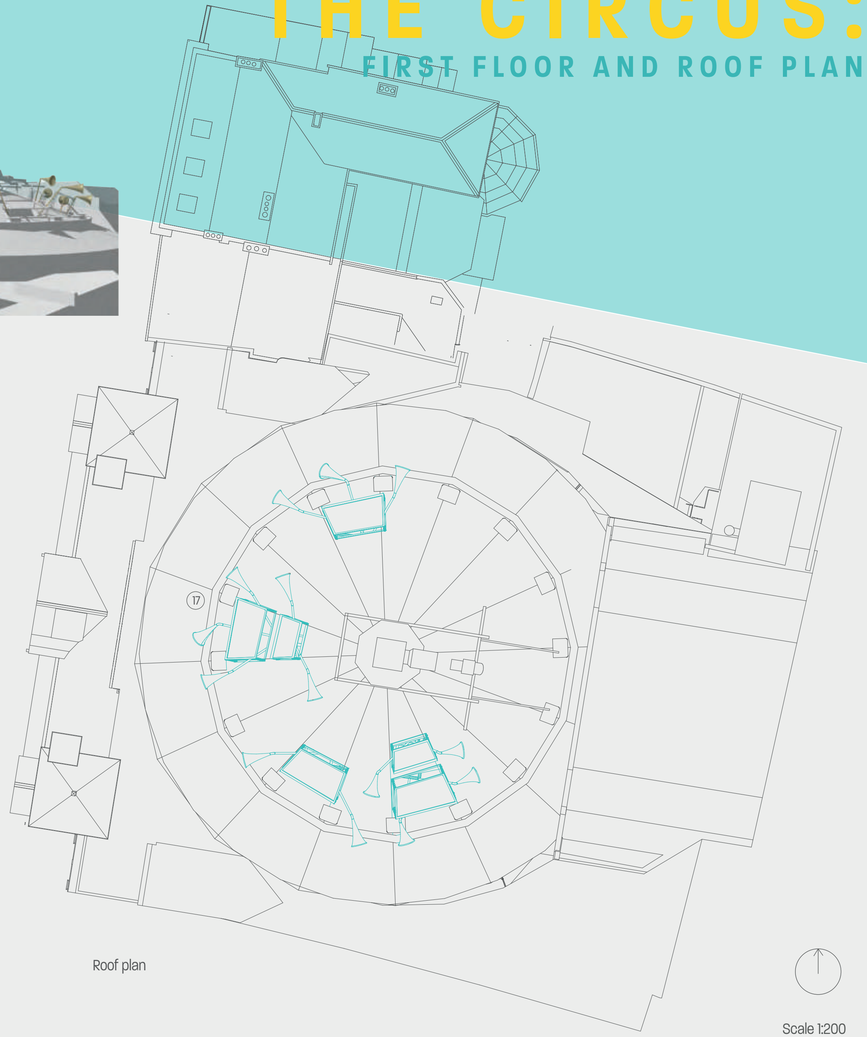


[17] Roof pipes



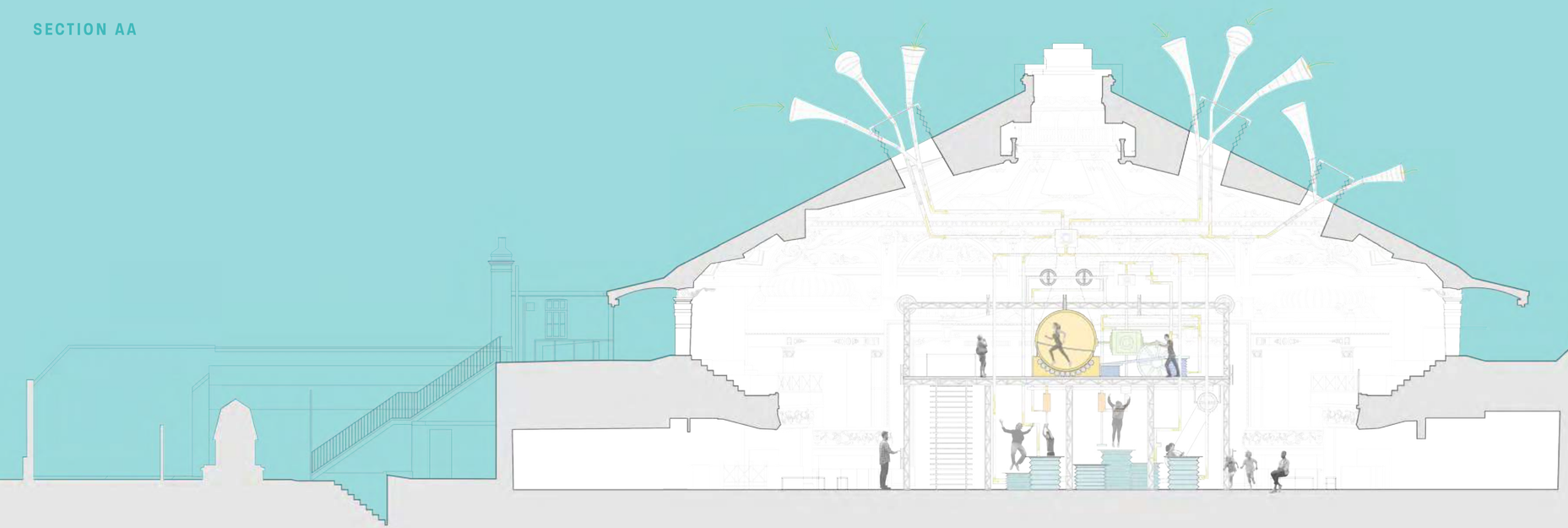
Roof plan

Scale 1:200

841 x 420 mm

MODE ONE:
AIR PURIFICATION

SECTION AA



CLICK HERE TO BRING PERFORMANCE TO LIFE

[GIF best played on loop setting]

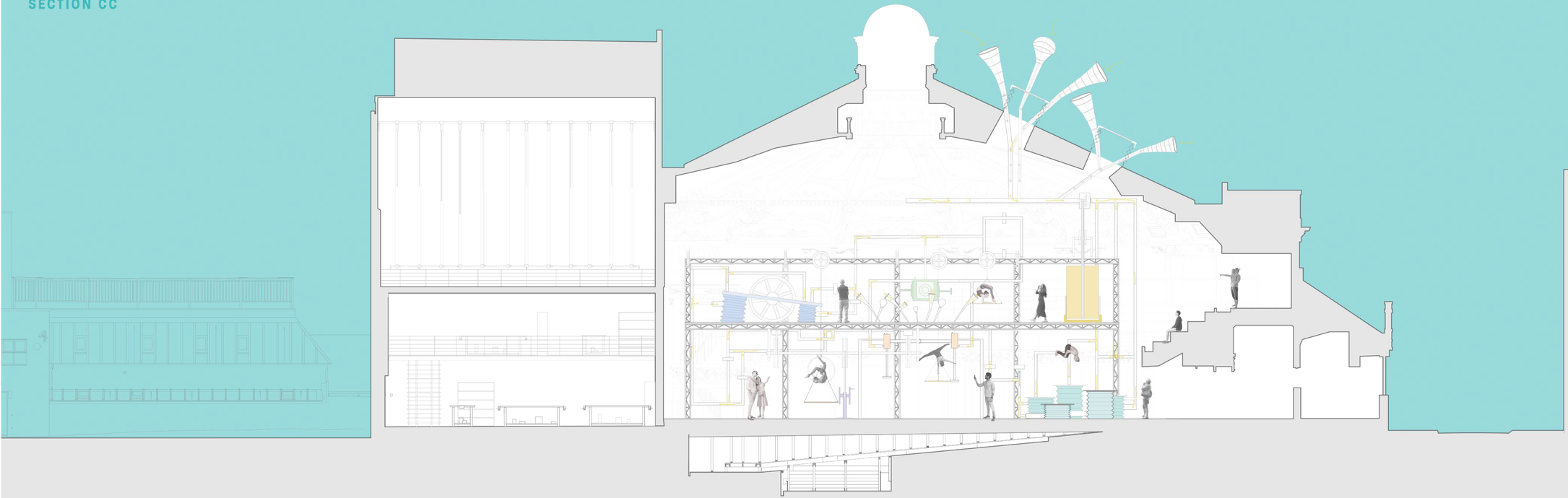
GIF NTS

Scale 1:100

841 x 330mm

MODE TWO:
THE PERFORMANCE

SECTION CC



CLICK HERE TO BRING PERFORMANCE TO LIFE

[GIF best played on loop setting]

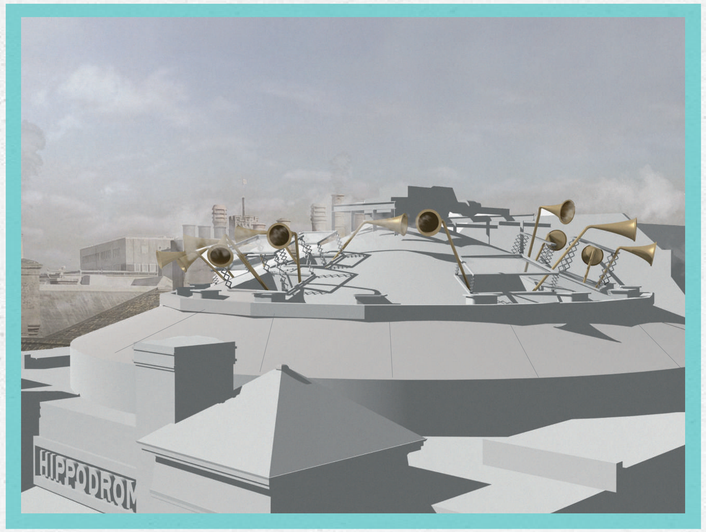
GIF NTS

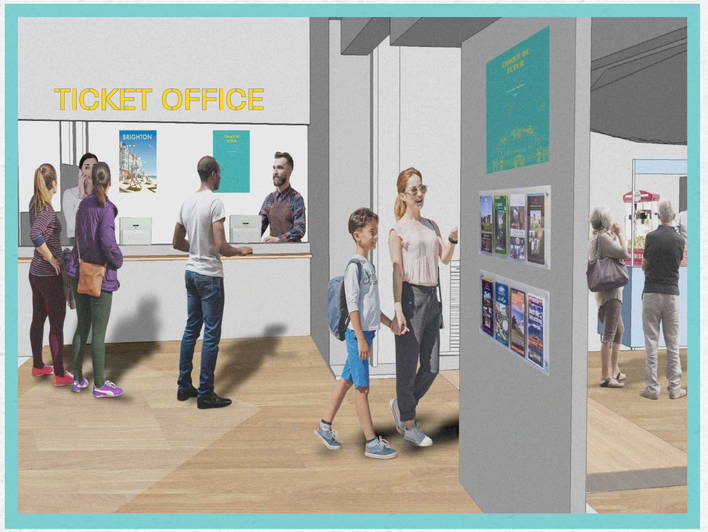
Scale 1:100

841 x 330mm

EXPERIENCE ONE:

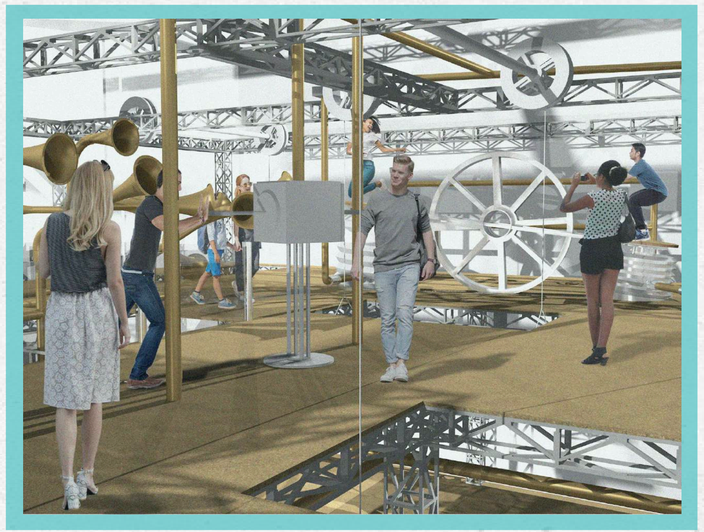
THE POLLUTED CITY AND ARRIVAL

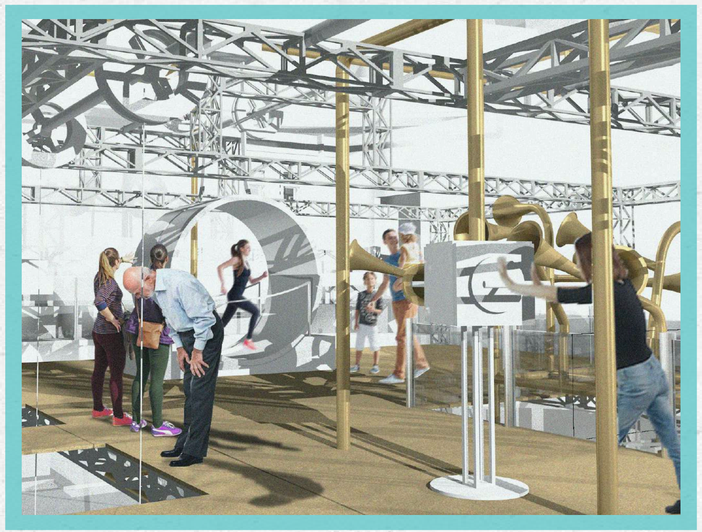




EXPERIENCE TWO:

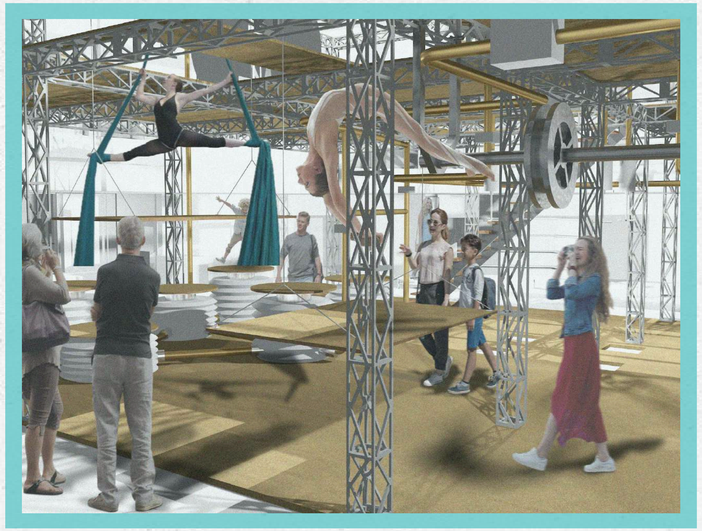
MODE ONE: AIR PURIFICATION





EXPERIENCE THREE:

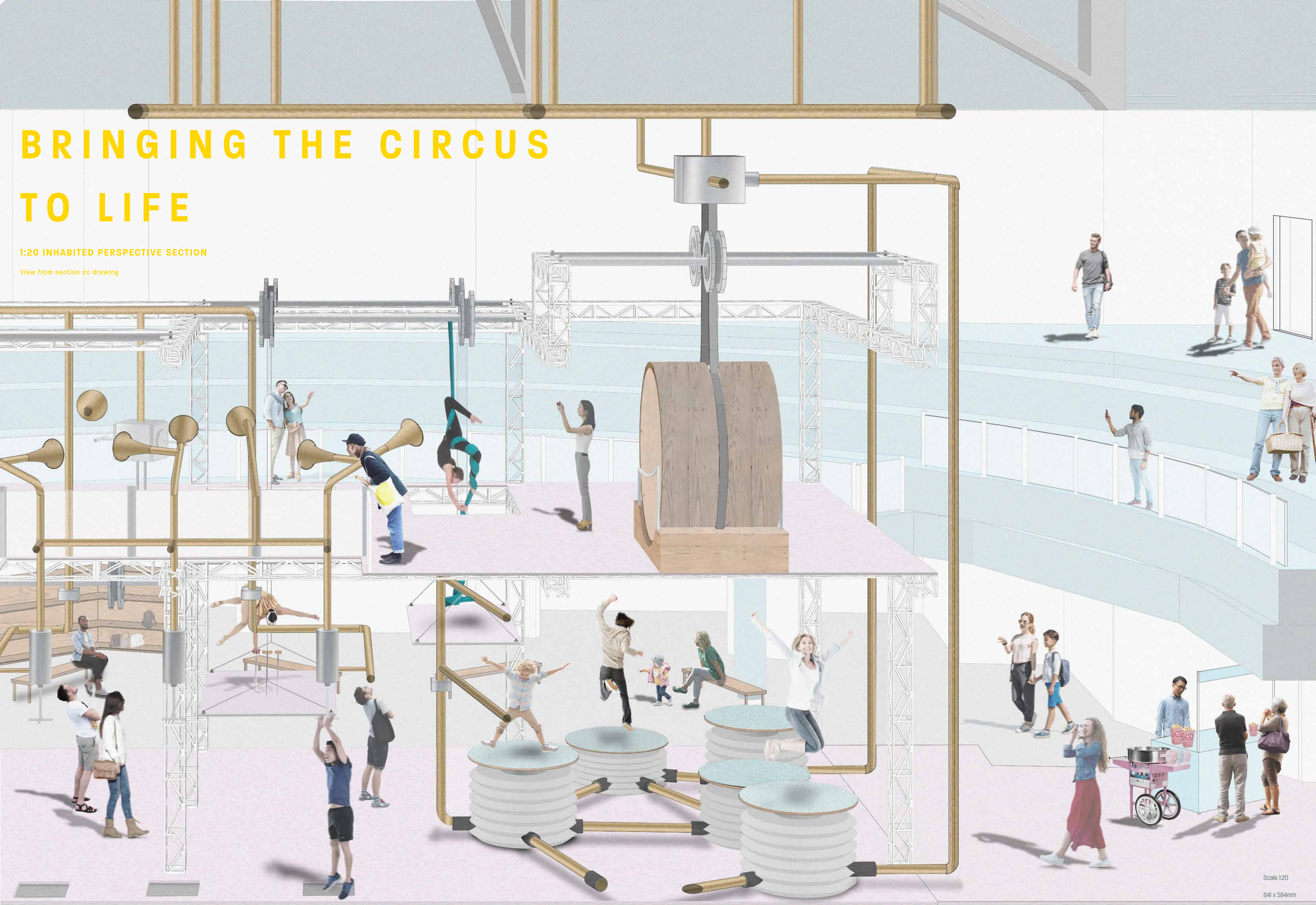
MODE TWO: THE PERFORMANCE



BRINGING THE CIRCUS TO LIFE

1:20 INHABITED PERSPECTIVE SECTION

View from section cc drawing



Scale 1:20

841 x 594mm

BRINGING THE CIRCUS TO LIFE

1:20 INHABITED PERSPECTIVE SECTION

View from section aa drawing

A0 [1189x 841}