

The Electric Nemeton

The Electric Nemeton, an architecture with forest-like structure and inspired by the Celtic groves, was located in Granary Square beside King Cross and Pancras stations on November 2020.

The pavilion was a structure of hope to bring people together back to their social lives after Covid-19 isolation. The architect Sam Jacob Studio speaks about the outdoor public space as follows;

"It creates a space to walk through, **a stage for social life** and a sculptural object in Granary Square."

"As a big, elevated structurally expressive roof, it creates a **space for things to happen underneath.**"

"A structure that itself is an **event, somewhere to explore** and a platform for open ended use."



After looking at photographs of how people interacted with the space, I could conclude that the pavilion worked successfully on grasping people's attention from a far view point. People were **gathered around the space** as a sculpture to **take photos, pass through** and **sit around**. It was perceived as an EXTERIOR SPACE more than an INTERIOR SPACE.

Integrity: Conceptual

During Christmas, people take advantage to socialise and spend time together. As mentioned, The Electric Nemeton aimed to be a place to explore and a place for things to take place underneath and that requires 'time' to be spent.

I aim to focus on the interior space of the pavilion for people not to only be attracted by the exterior, walk through and observe the unaccessible beauty of the roof structure.

I plan to uplift the place of exploration once having people step into the tree structure, they'll explore an interactive space that might lead them to take more time, discover and share experiences.

The target is to upgrade the rigid wooden floor by being more responsive to people's movement and that is by making wood flexible.

Flexibility is experimented by two ways. First, by subtracting frgements from wood and second by adding another material to wood.

Driver: Social

EXPLORING A SPACE

INTERACTIVE SPACE

INTERACTIVE MATERIAL

RESPONSIVE TO MOVEMENT

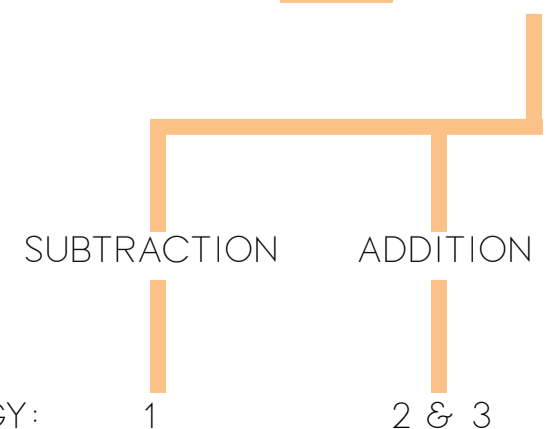
UPGRADE THE WOODEN DECK

RIGID WOOD — FLEXIBLE WOOD

Why wood?

The original floor of the pavilion is wood, so least changes will be altered.

Wood is a sustainable material that can be reused and reassembled easily.



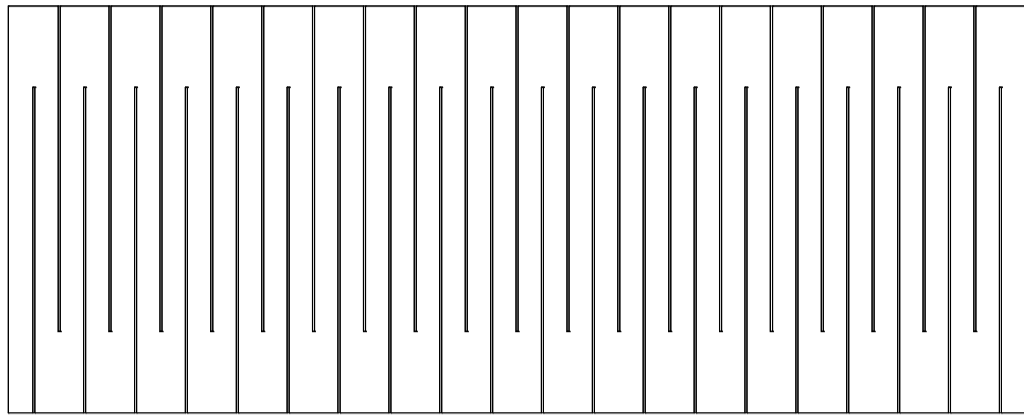
METHODOLOGY:

1

2 & 3

1

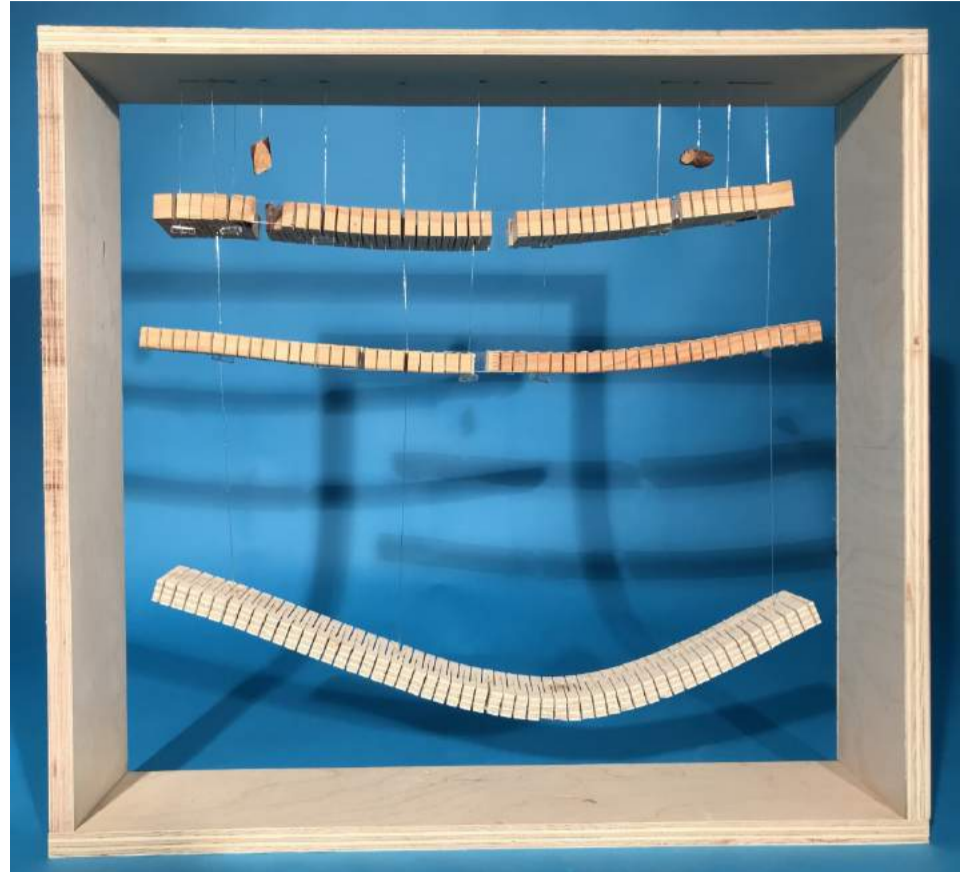
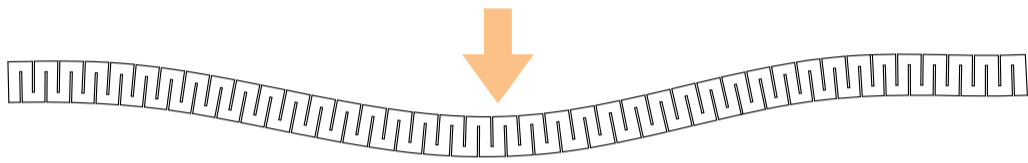
Subtracting Fragments from Wood



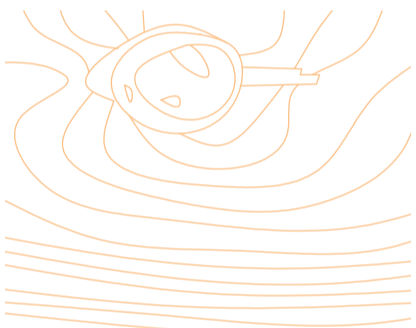
Top View



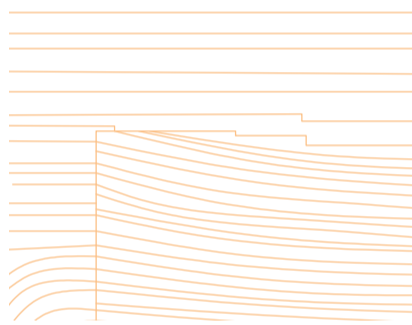
Side View



Materials Tested



Natural Pine Wood

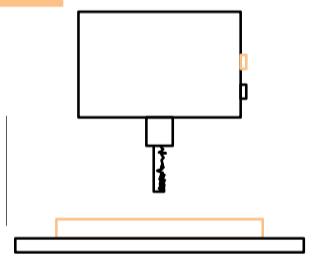


Engineered Pine Board



Plywood

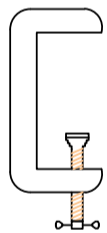
Tools Used



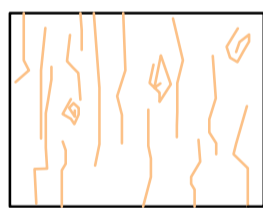
Startrite 401s Bandsaw



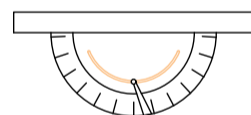
Earplugs



2x G clamps



300x200mm wood piece



Bandsaw ruler



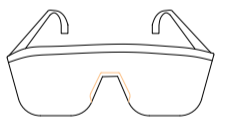
Ruler



400x50mm wood bar



Pencil

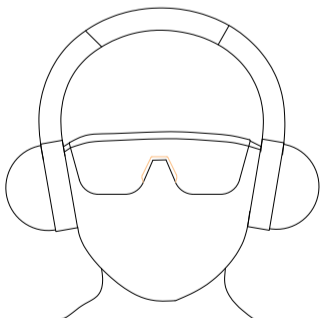


Safety glasses

Methodology 1

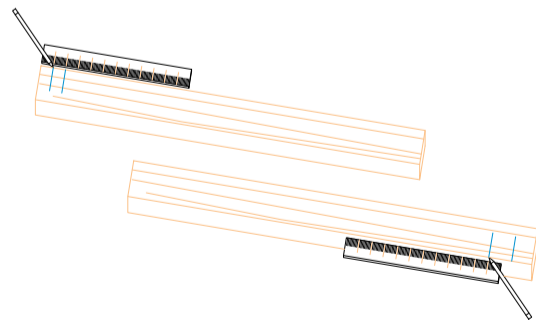
(The same method was applied on the above 3 materials mentioned.)

1



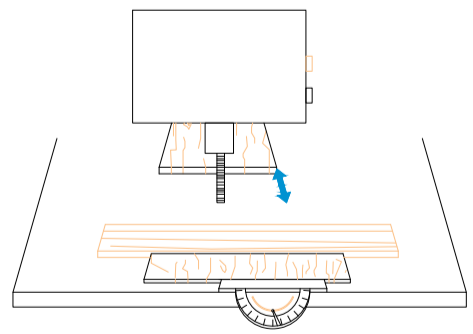
Put on the safety equipment.

2



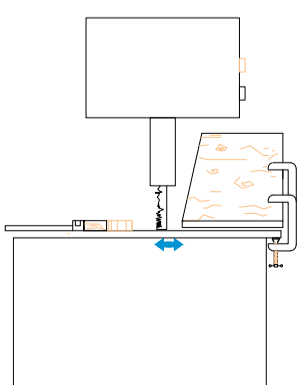
Measure the spacing on both sides of the sample or adjust it once on the wood bar piece. (400x50 mm).

3



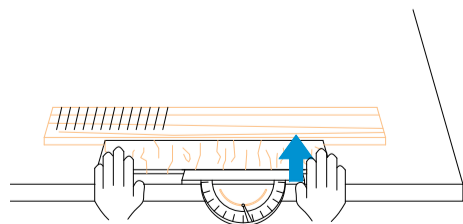
Set the distance between the blade and the rectangular wooden piece (300x200mm).

4



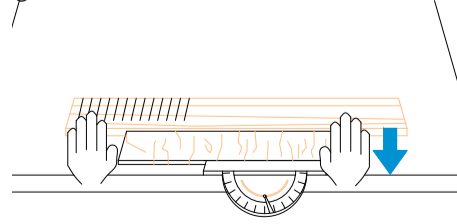
Adjust the blade's height and the G clamps to support the rectangular piece of wood.

5



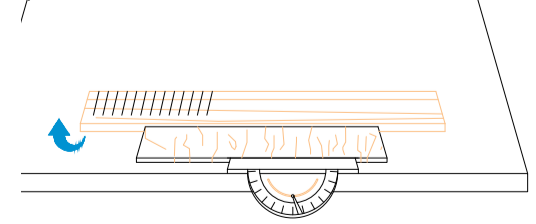
Turn on the Bandsaw, push the sample slowly through the blade to hit the rectangular wooden piece (it acts as a stopper).

6



Pull slowly back and straighten the sample.

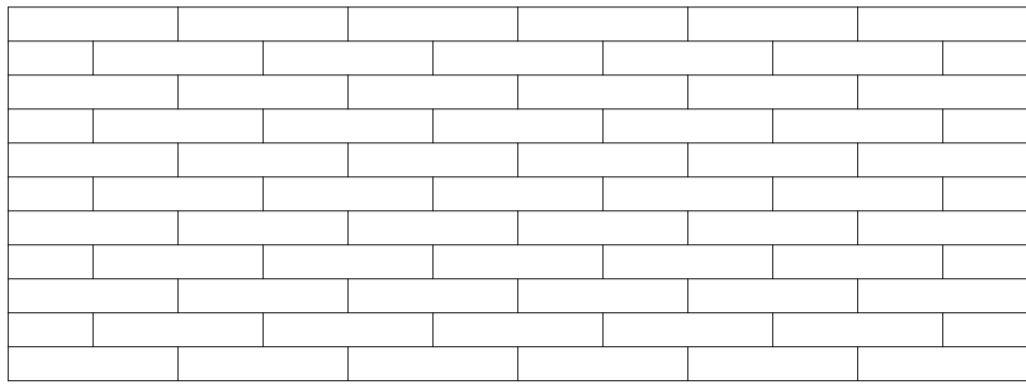
7



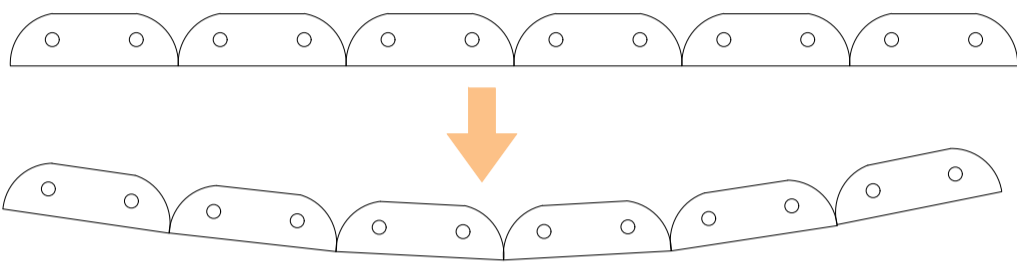
Flip the sample each time to do the same on the other side.

2

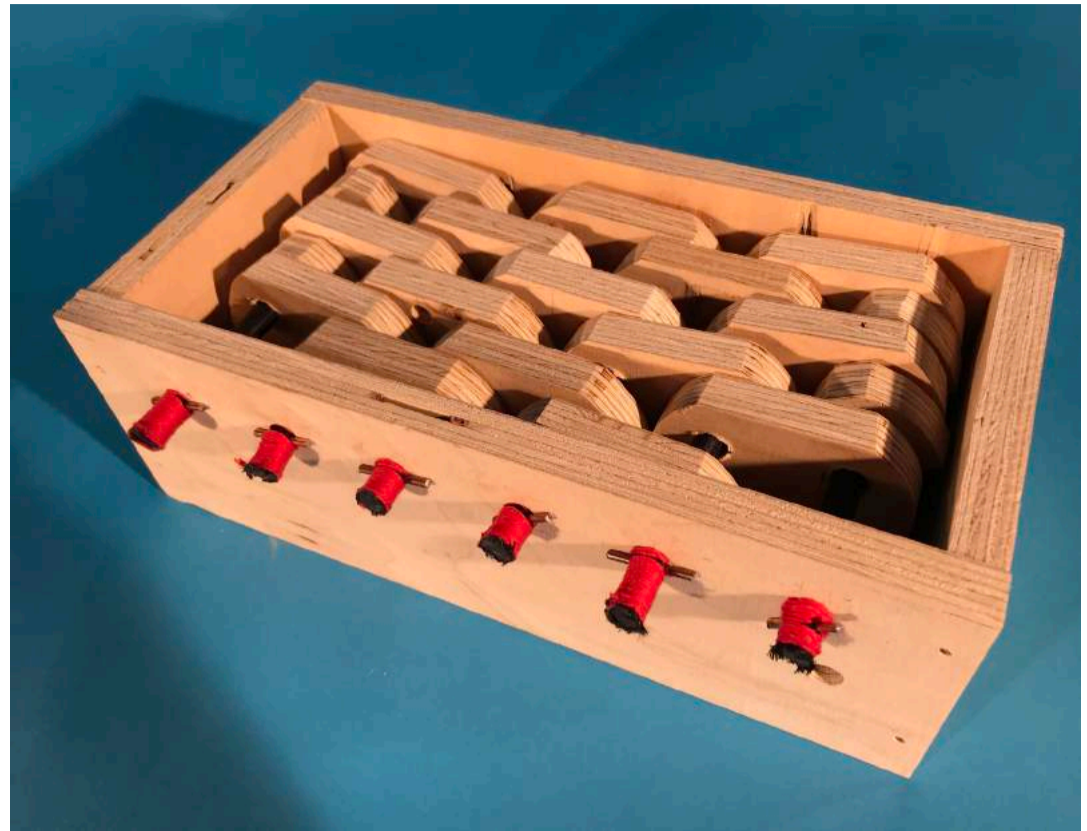
Integrating Bungee Rope & Wood



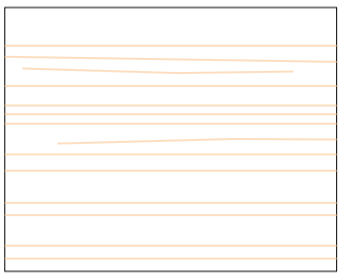
Top View



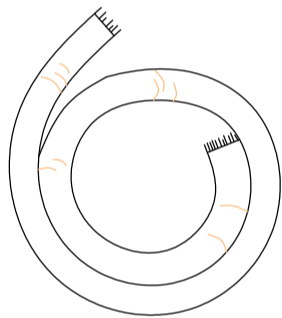
Side View



Materials

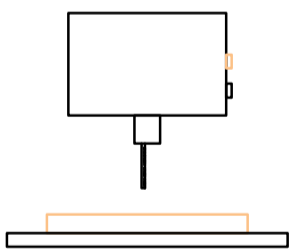


Plywood

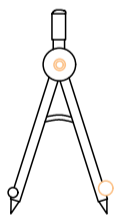


Bungee Rope

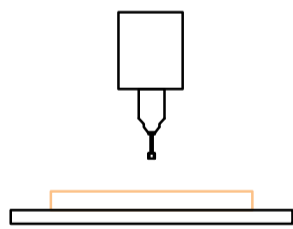
Tools Used



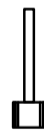
Sheppach basato 3H bandsaw



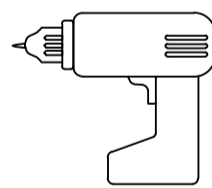
Compass



Drilling machine



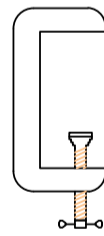
15 mm screw



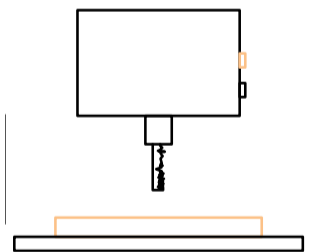
Power drill



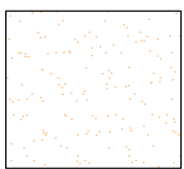
3 mm screw



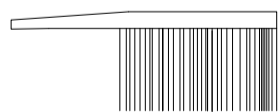
G clamp



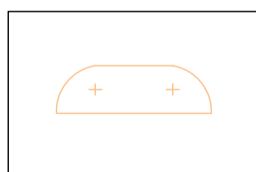
Startrite401s bandsaw



Sanding paper



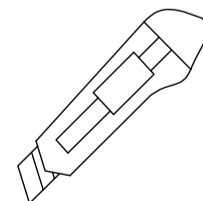
Brush



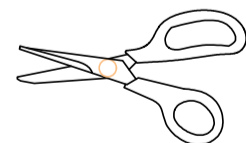
Cardboard



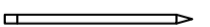
Screw driver



Cutter



Scissors



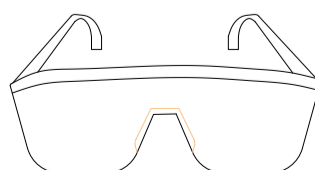
Pencil



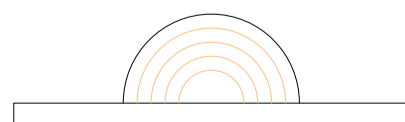
Ear plugs



Ruler

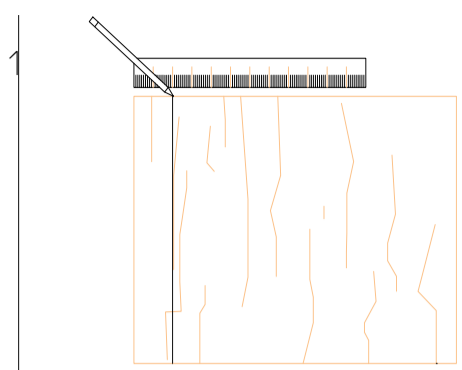


Safety glasses

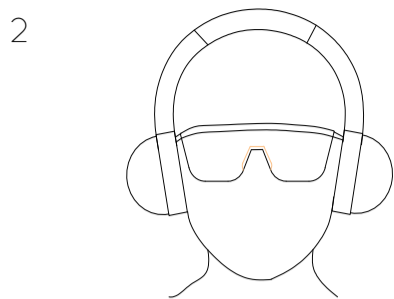


Sheppach disc sander

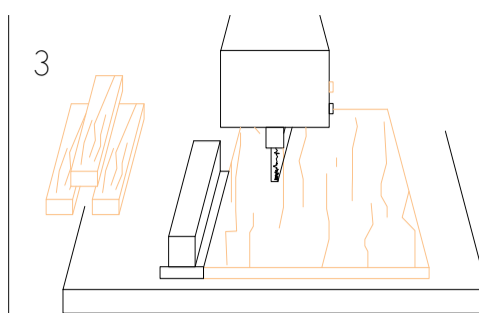
Methodology 2



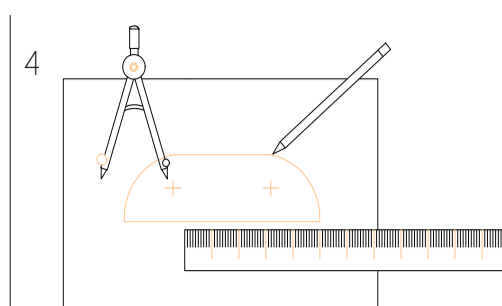
1 Take measures to divide a piece of plywood into bars.



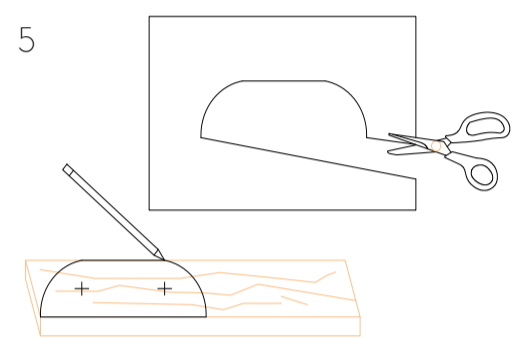
2 Put the safety equipment on.



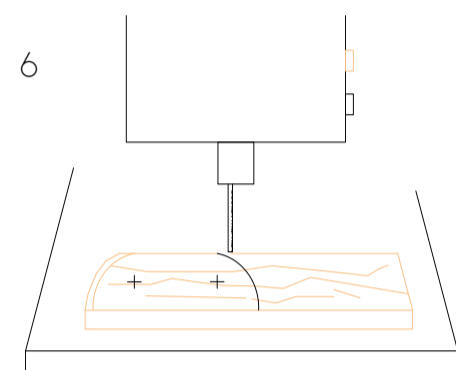
3 Use the Startrite 401s bandsaw to cut slowly the bars equally. The support to the left helps to cut straight and perpendicular.



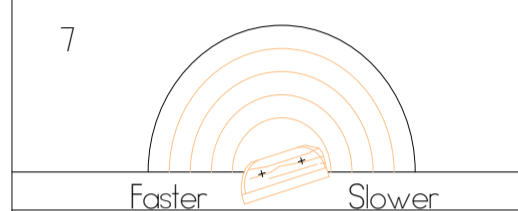
4 Make a template using cardboard to draw the wooden bead and mark centre points for the holes.



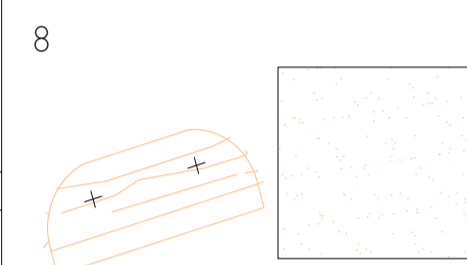
5 Cut the drawing and trace.



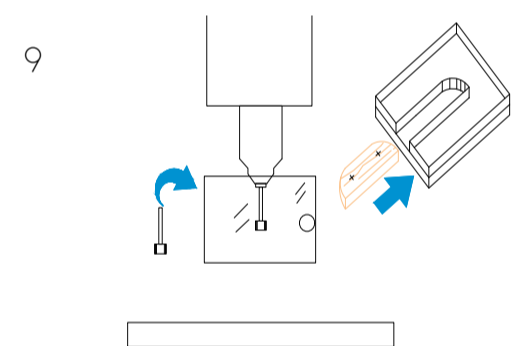
6 Use a thin blade to cut and rotate by hand the beads using the Sheppach basato 3H bandsaw.



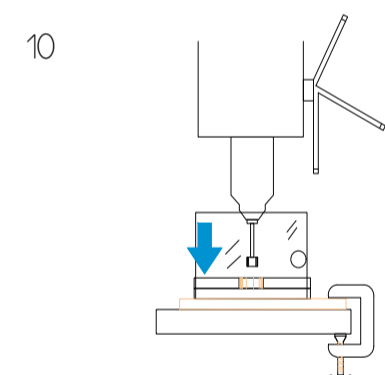
7 Sand the imperfect curves using the Sheppach disc sander. Slight bumps will need the right side of the disc to do the job.



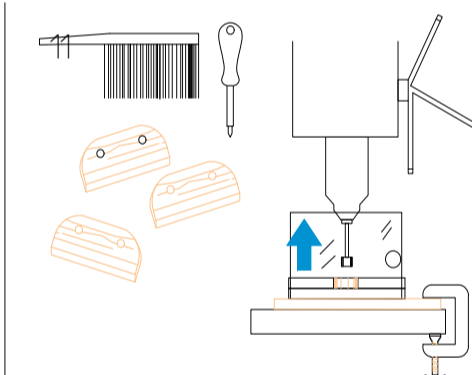
8 Use sand paper to neatly rub any excess wooden wool.



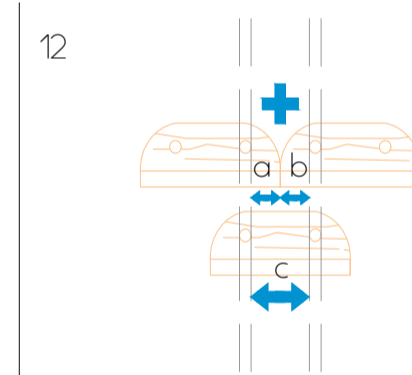
9 Insert the 15 mm screw into the drilling machine. Create a wood support that perfectly fits your bead to avoid close finger contact with the machine.



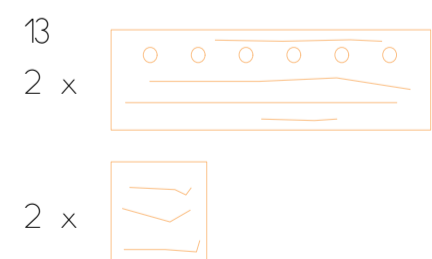
10 Fix the support on a piece of plywood using G clamps to avoid any rotation/side movement. Pull the wheel down gently and gradually to avoid cracks in the wood.



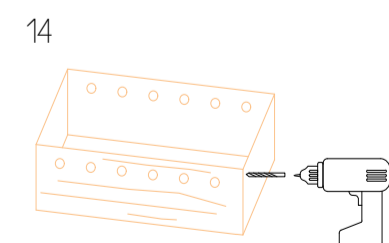
11 Use the brush to clean wood wool followed by using a screw driver to pull the stuck bead out. Brush afterwards too. Repeat steps for all beads.



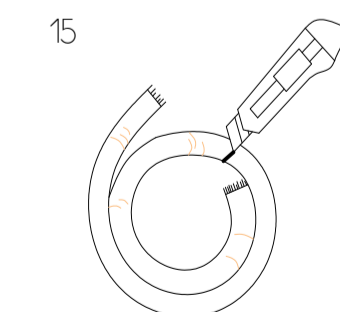
12 Consider sides $a + b = c$ before creating the template and arrange the beads temporary to check that the holes are aligned.



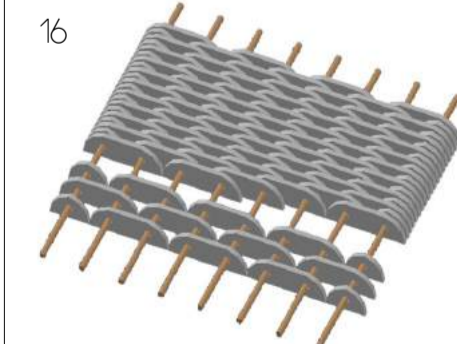
13 Cut wooden pieces to create a frame. Use the drilling machine to drill holes in 2 facing wooden pieces. Consider the width of the bungee rope when deciding on the screw size before drilling.



14 Combine the frame using either wood glue and clamps or a power drill and screws.



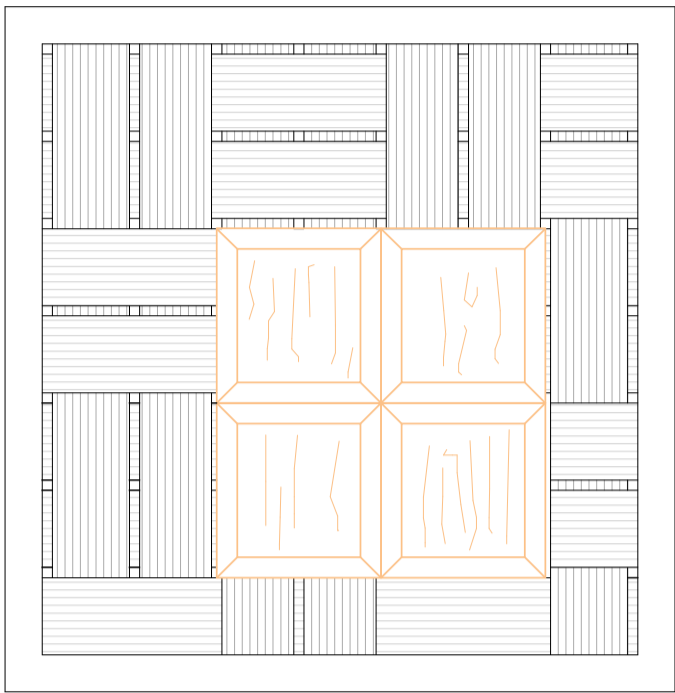
15 Use a cutter to cut strips of bungee rope.



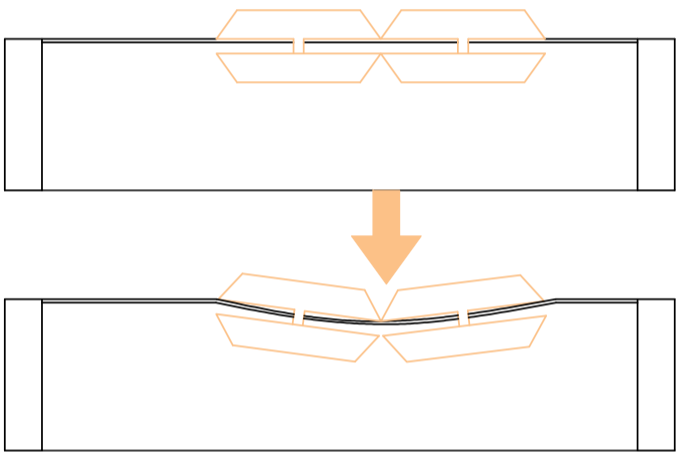
16 Organise the layout of the beads with the rope before inserting them into the frame. Support the rope at both ends.

3

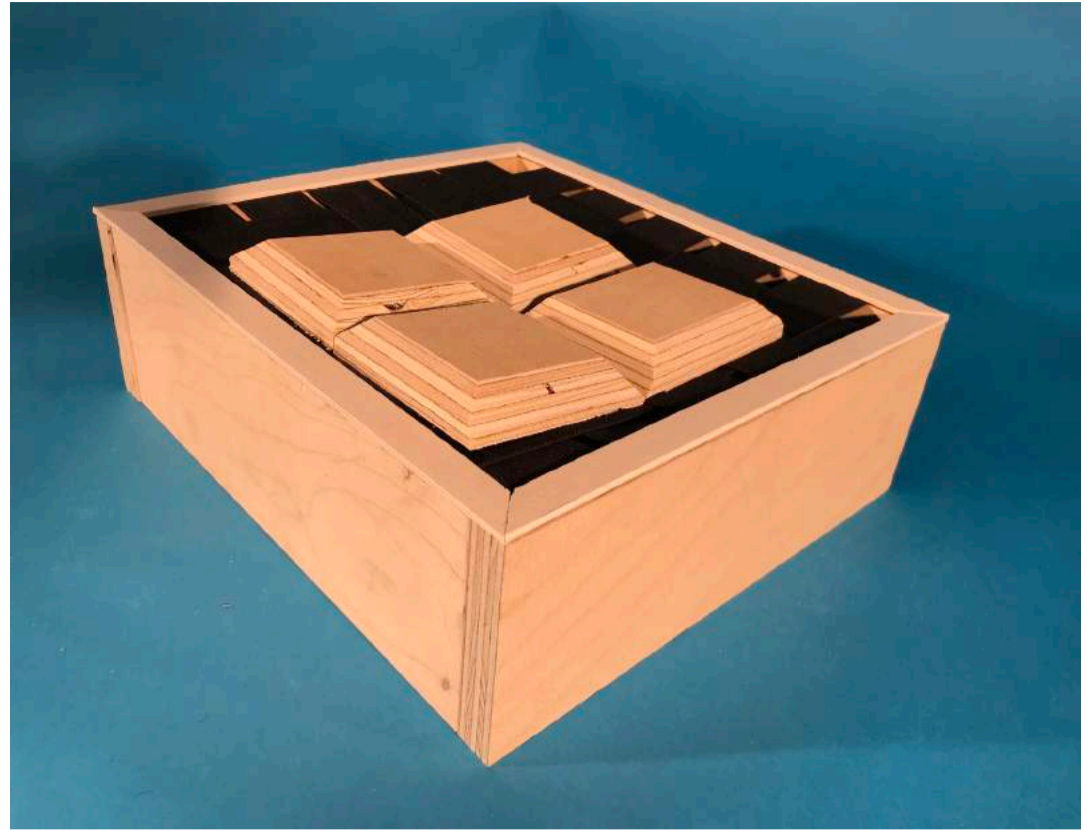
Integrating Elastic Fabric & Wood



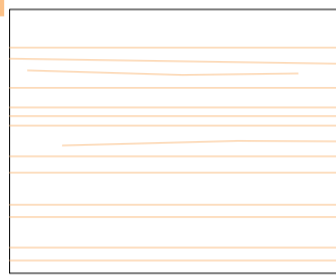
Top View



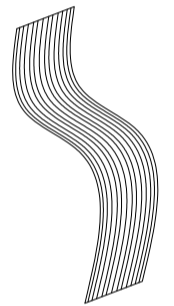
Section View



Materials

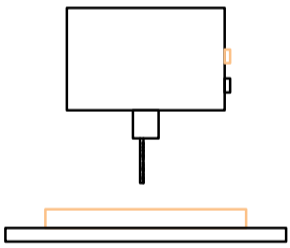


Plywood

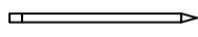


Elastic fabric

Tools Used



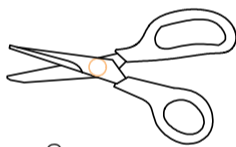
Sheppach basato 3H bandsaw



Pencil



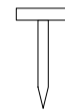
Eye protection



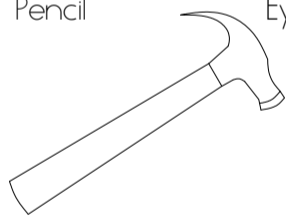
Scissors



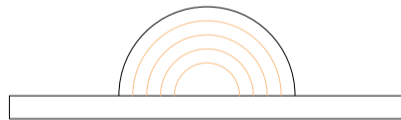
Ear plugs



Nails



Hammer



Disc sander



Ruler

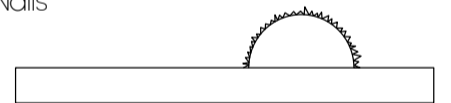
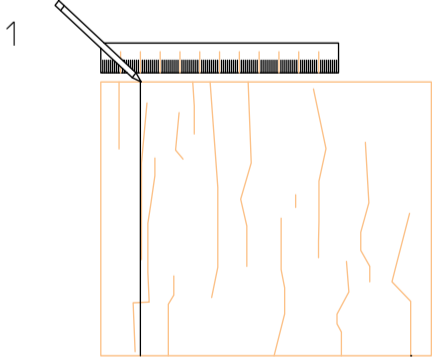
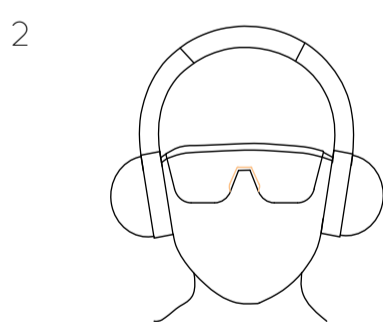


Table disc sawcutting machine

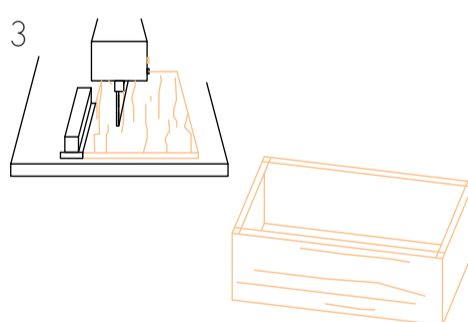
Methodology 3



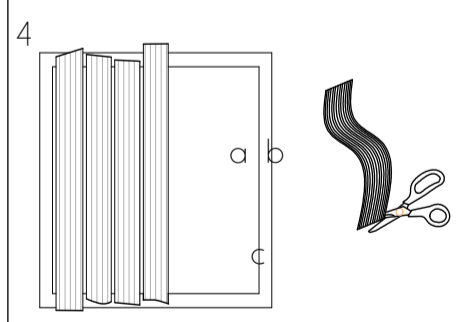
1 Take measures to create a frame.



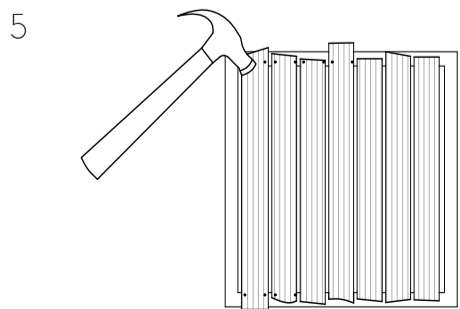
2 Put safety equipment on.



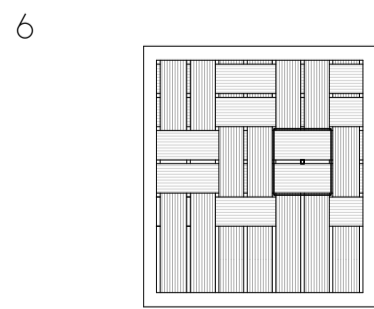
3 Join the frame pieces.



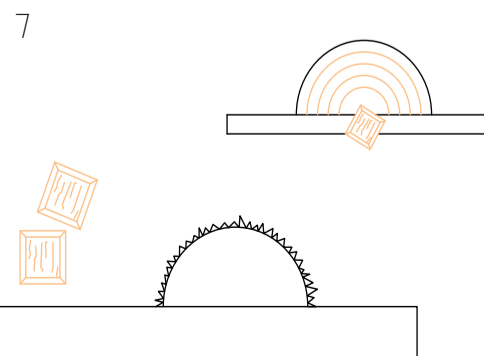
4 Cut elastic fabric and align them in one direction.



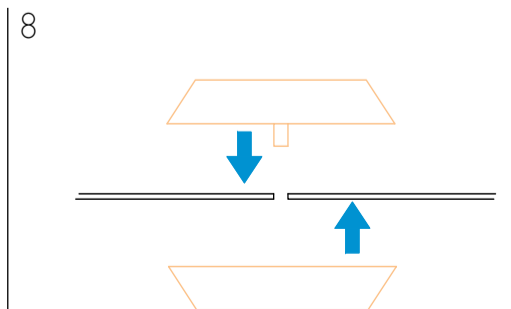
5 Pound the nails to fix the fabric.



6 Weave so that each 2 adjacent strips fold similarly.



7 Take measures of the hole and the area created by the weave to cut the wooden pieces.



8 Glue the wood together and fit the wood block into the hole.

Testing Results



Natural Pine

Although it appeared to be more solid and harder when cutting, it was the most fragile sample. Natural nodes in the wood were not suitable to divide into fragments and if they were skipped to be cut under the blade, the wood sample will have wide rigid fragments in between the cuts. It needed a thick blade to go back and forth through the wood. More attention, less force and slower hand push in and out movement was required. The sample broke into pieces before being tested under pressure.

Solid pine wood cannot be used to create the desired intention. Its natural beauty is best to be exposed and seen and not to be cut and fragmented.



Engineered Pine Block

Although this type of wood looks very neat (without any bumps or groves), it cannot be used in the social space due to its fragility.

The sample tended to successfully bend and turn, yet it had the weakest strength compared to the other two samples. The material lacks any strong routes that tend to combine the material to handle stress.

The sample broke during its first hand test and continued to break into smaller fragments without any force.



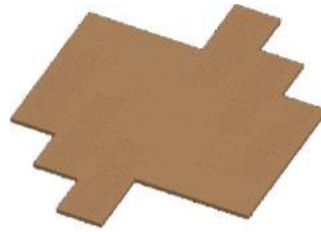
Plywood

Plywood was the successful sample, it can be used in the social space with considerations to its thickness, span (because whenever the span is long the deeper down it is going to bend), spacing between each cut and the depth of the cut through the wood.

The more cuts and fragments we get the more bendable the wood will be, thus the more delicate it will get. An average number of cuts is to be considered and it can be used with a low span as plates/tiles arranged to create a floor. Greater thickness of wood is required for creating the floor (considering to use a CNC machine or table saw to cut).

Plywood has the highest strength to weight ratio compared to the other 2 materials and its composition of thick layers protect it from being broken easily.

Impact on Social Quality



Untouched, the deck looks similar to a rigid wooden deck. It will surprise people walking through the pavilion for the first time, thus it can provide an instant experience.

Flexibility is only seen vertically. A plank will drop down once a person steps through and should lift straight back once stepped back.

For better strength a plank will not exceed 500 mm span and 200 mm width. Thick wood to be used. Support from 2 sides will be needed for each plank in a mechanical fixation.

Organisation of the planks layout has no impact on flexibility; however, it impacts social quality by the patterns they create based on people's movement walking upon.

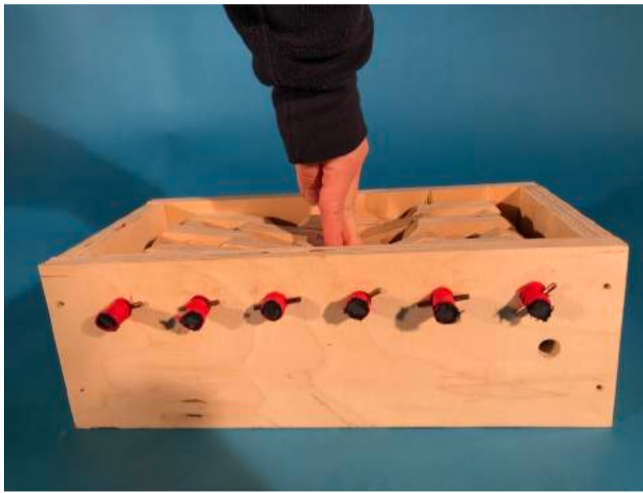
Note the design proposal might request frequent maintenance if it will be constructed.

2

Conclusion

Testing Results

Bungee rope added so much strength and flexibility to the wood. The sample does provide flexibility vertically and horizontally due to the bungee rope. It has more strength than flexible wood itself.



Impact on Social Quality

Untouched, the floor looks different than a regular wooden deck. A texture is created by the overlapping organisation of the wooden beads.

The floor will be interactive visually and physically. An experience and a place for things to happen is achievable, thus more time for people to spend in the space.

Things to happen:

- individual/ group jumps
- swinging action
- moving beads back and forth
- laying down

Less maintenance will be required compared to design 1. More time to create for 8.4 x 8.4 m² pavilion floor compared to design 1.

3

Elastic fabric provided more flexibility in movement on a 3 dimensional level, but the wooden beads were less stable and could not remain in a 100% exact position. The latter as well will move slightly back and forth more than design 2 during movement. Bungee also has more strength than elastic fabric.



Design 3 would be very interactive and flexible. The mechanism will be more hidden than design 2 for the user. Thus, greater level of surprise as stepped through the pavilion. Many things to happen and experiences to be shared.

Further safety testing will be required to make sure it would not lead people to tip over the groves between the blocks.

More maintenance might be required than design 2.

Subtraction of wood reduces rigidity and increases flexibility, but it lessens its strength. Addition to wood by a bendable material increases its flexibility and maintains the wood properties.

Samples 2 and 3 could be taken further into development. Sample 1 might be more suitable for partitions rather than floors.

The successful samples can provide a space to allow users to spend more time socialising and discovering the space.

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14834059

AIM36 Preliminary Design
2021-2022

Irianna Dimitriou, Nazek El Hariri, Rebecca Archer, Sreemoyee Ray, Trisha Dasgupta

Pleasure and Place

Brighton Seaside History - Case study

How and when did the development of certain infrastructures affect the pull and viability of "the seaside" as a site for urban workforce holiday makers?

PLEASURE & PLACE

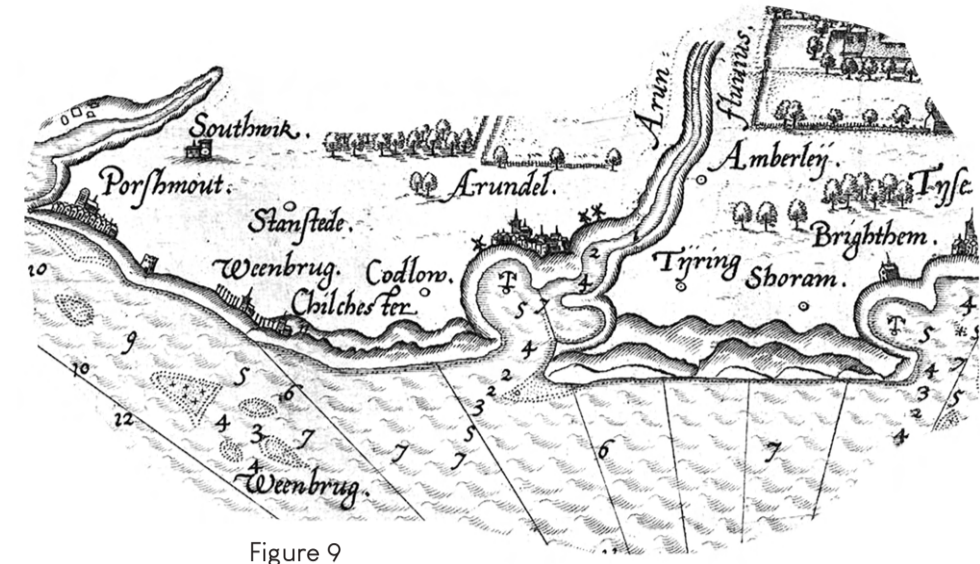


Figure 9

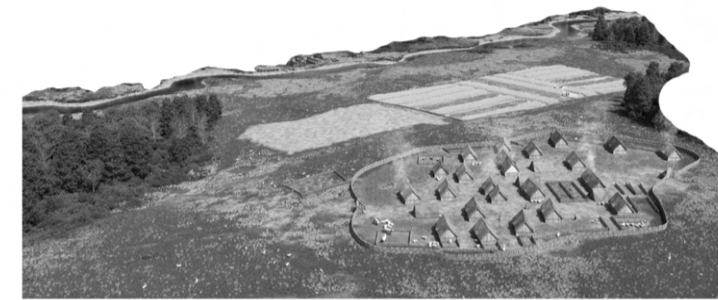


Figure 1

• **1185 AD**
St Bartholomew church in Brighton was first recorded

• **1514 AD**
French attack on Brighton. Almost nothing except the pattern of the streets survived the attacks, which is preserved in the layout of the narrow alleys of the lanes.

• **1559 AD**
Earliest record of a hostelry in Brighton. The name supposedly derives from the inn, having been constructed, at least partly from the timbers of an old vessel. (Old Ship Hotel)



Figure 4

1700's

• **2700 BC**
Evidence of the earliest settlement at Whitehawk, headquarters of a tribe of continental immigrants

• **500 AD**
Brighton began as a small Saxon village.

• **1313 AD**
Market charter granted by Edward II.

• Immigrant fishermen living in lower town build East Street and West Street in the upper town. Ship Street and Middle Street are also built at around the same time.

• **1660 AD**
Brighton, the modern name for the town was first recorded

• **1740 AD**
Building of the Castle Inn (it was originally built as a private house, but was converted into an inn in 1752)

• **1750 AD**
Dr. Richard Russell moves to Brighton. Writes about the recuperative effects of seawater, Brighton becomes a destination for people visiting the doctor, and visiting the seafront to take the air.



Figure 3

• **1759 AD**
After Dr. Russels death in 1759, Old Steine developed as the center for fashionable life in Brighton and later became an entertainment venue with puppet theaters, resident jugglers, and a camera obscura.

• **1774 AD**
As the town revived the first theatre opened in North Street

• **1780 AD**
Development of Georgian style terraces characterizing Brighton's streetscape started, and the town began to gain a 'fashionable' reputation.

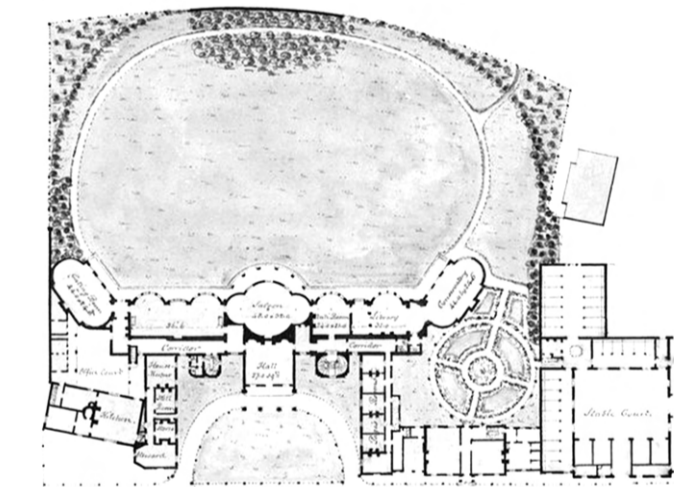


Figure 5

• **1783 AD**
The Prince of Wales (George IV-to-be) arrives in Brighton and acquires a farmhouse overlooking the Steine, to escape the pressures of his unpopularity in London.

• **1786 AD**
Opened by Sheikh Dene Mahomed and providing vapour or 'Turkish' baths (the first in the country). Mahomed published several books and pamphlets on his methods and was eventually appointed 'Shampooing Surgeon' to King George IV, an appointment continued by William IV.

• **1787 AD**
Henry Holland is hired to start turning George's farmhouse into The Marine Pavilion'

• **1815 AD**
George has the Marine Pavilion remodelled and enlarged by John Nash. It is fitted with an external shell with an embedded cast-iron frame to support additional extravagant building work and embellishments to eventually become the current Royal Pavilion.

• **1818 AD**
Regency square is built.



Figure 7

• **1800 AD**
By this time the town had 41 inns (one for every 30 houses and 178 residents)

• **1803-08 AD**
George has some land around the Marine Pavilion turned into an extravagant domed home for his horses. This building later becomes the Brighton Dome and the Brighton Museum and Art Gallery.

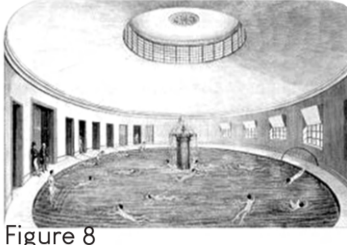


Figure 8

• **1806 AD**
Royal Pavilion construction complete.

• **1809 AD**
Brightelmstone Dispensary founded under the patronage of the Prince of Wales

• **1812 AD**
Sussex General Infirmary established

PRE 1500's



Figure 2

1800's

Figures

- Figure 1 - Reproduction of Saxon Village, Royal Pavilion & Museums, Brighton & Hove
- Figure 2 - Fish market, Brighton. Nibbs, Richard Henry; C Moody, 1846
- Figure 3 - Dr-Richard-Russell-by-Benjamin-Wilson-c-1755
- Figure 4 - Ship Hotel 1860, reproduced from The Regency Society
- Figure 5 - Marine Pavilion. Image reproduced from the Royal Collection Trust, July 180
- Figure 6 - Brightelmstone Dispensary in Middle Street, 1830
- Figure 7 -
- Figure 8 - https://brightondome.org/about/history_heritage/the_royal_stables_riding_house/

References

- 1 R. P. Ross Williamson (1930). "Excavations in Whitehawk Camp, Near Brighton" The Creation of Monuments: Neolithic Causewayed Enclosures in the British Isles. Swindon, UK: English Heritage. ISBN 978-1-873592-42-7
- 2 The Weald is an area of Southeast England between the parallel chalk escarpments of the North and the South Downs. It crosses the counties of Hampshire, Surrey, Sussex, and Kent and was covered with forest, and its name, Old English in origin, signifies "woodland". -Clifford Musgrave (2011), 'Life in Brighton', the history press
- 3 The survey was ordered by William the Conqueror at Christmas 1085 and was probably started around mid-January 1086. All England except the far north (still yet to come fully under Norman control) was divided into seven or more circuits. Each circuit was assigned three or four royal commissioners. Lists of manors and men for every county were compiled by the King's tenants-in-chief. -Clifford Musgrave (2011), 'Life in Brighton', the history press
- 4 John Ackerson Erredge (1862), 'History of Brighthelmston or Brighton as I View it and Others Knew it with a Chronological Table of Local Events', E. Lewis
- 5 Clifford Musgrave (2011), 'Life in Brighton', the history press
- 6 <http://hovehistory.blogspot.com/2015/11/old-ship-hotel-brighton.html>
- 7 David Muggleton (2016), 'Brighton Pubs', Amberley Publishing Limited
- 8 <https://www.mybrightonandhove.org.uk/places/placetreecastle-square/castle-square>
- 9 <https://www.mybrightonandhove.org.uk/people/peopin/dr-richard-russell/russell-dr-richard>
- 10 https://en.wikipedia.org/wiki/Anthony_Bourdain:_No_Reservations
- 11 https://en.wikipedia.org/wiki/History_of_Brighton
- 12 <https://www.liverpoolecho.co.uk/news/nostalgia/rememering-new-brighton-baths-how-14322791>

1800's

• 1823 AD

The **Royal Suspension Chain Pier is built**. The end of the pier allows a boat service to France. It's increasingly realised that the pier itself is being seen as a tourist attraction, which suggests a business case for a more tourism-friendly pier.

Brill's Baths opened at the corner of East Street in a circular domed building 53 feet across nicknamed 'the bunion'. Inside was the first communal swimming-bath in the town, as opposed to baths for personal bathing.

• 1826 AD

Royal Albion Hotel opens on the site where Russell House once stood.

• 1828 AD

St Peter's Church consecrated (foundation stone laid in 1824).

• 1828 AD

Brighton's popularity with the rich, famous, and royal saw the building of a number of imposing seafront hotels, including the Bedford Hotel

• 1832 AD

Completion of the current Brighton Town Hall (started in 1830).

• 1821 AD

A series of interconnected tunnels were built for King George IV so he could travel privately to visit his horses. One of which linked the Royal Pavilion and the Brighton Dome.

• 1822 AD

Thomas Read Kemp's workmen start laying out Kemp Town, a Regency-styled property development to the East of Brighton, designed by Charles Busby and Amon Wilde, and built on a consolidation of land inherited by Kemp in 1811. Building work finishes in 1855.

• 1837 AD

London and Brighton Railway Act passed on 15 July 1837

• 1840 AD

Opening of the Brighton-Shoreham railway line, with a small station building at Brighton. Brighton came to be of importance to the railway industry after the building of the Brighton railway works

• 1841 AD

Completion of the Ouse Valley Viaduct and London Road Viaduct.

Completion of the new Brighton Station, an Italianate building designed by David Mocatta.

The London-to-Brighton railway line opens. The resulting flood of tourists causes Brighton's economy and population to boom.

• 1844 AD

Queens Road is built as an extension of West Street up to the station. The road requires brick arches to raise the ground level in order to reach the station.

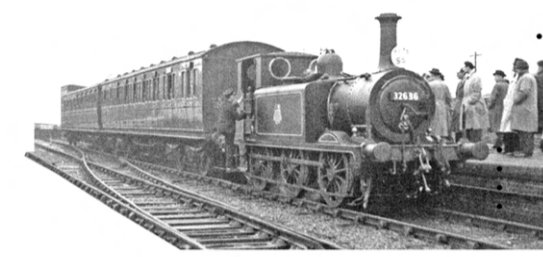
London to Brighton Railway opens- the first day excursion tickets were issued. For the cost of a single ticket, passengers could go to Brighton and back for the day.

• 1848 AD

St. Paul's Church, West Street, opens.

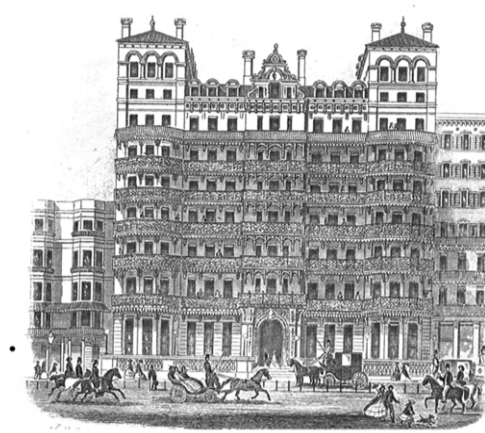
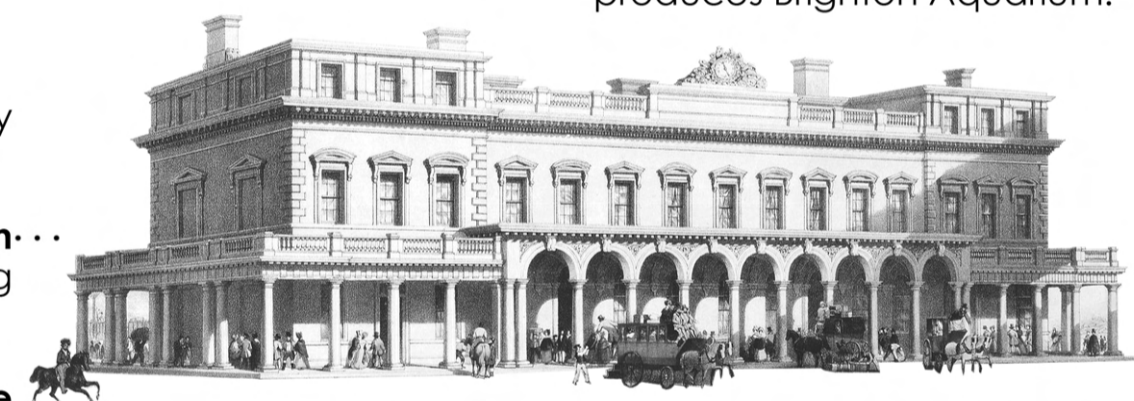
• 1850 AD

Brighton Pavilion is sold to Brighton Corporation, partly because Queen Victoria disapproves of the building, and partly because of the new influx of tourists makes it difficult to maintain Royal privacy there.



• 1869 AD

Kemp Town Railway Station opens. The line appears to be motivated as a 'spoiler' by the LBSCR to block other potential competing railway routes to London. Running from a junction off the Brighton to Lewes line between London Road and Moulsecomb stations. Work starts- rubble at the base of the seawall into a new road Madeira Road (now Madeira Drive) protects the base of the seawall from erosion. The work also produces Brighton Aquarium.



• 1864 AD

Brighton Grand Hotel completed:

• 1866 AD

New West Pier opens, designed by Eugenius Birch, and described as "the finest pier in Britain"

• 1867 AD

The Dome Concert Hall opens

• 1872 AD

Opening of Brighton Aquarium, designed by Eugenius Birch.

Under the Brighton Corporation Waterworks Act, the corporation purchased the Constant Service Water Company to supply Brighton, Falmer, Hangleton, Ovingdean, Patcham, Preston, and Rottingdean with water.

• 1874 AD

St. Bartholomews Church opens. **Sir John Hawkshaw designed a great seven-mile-long brick-lined sewer** to transport the sewage from Portobello on the Telscombe Cliffs.

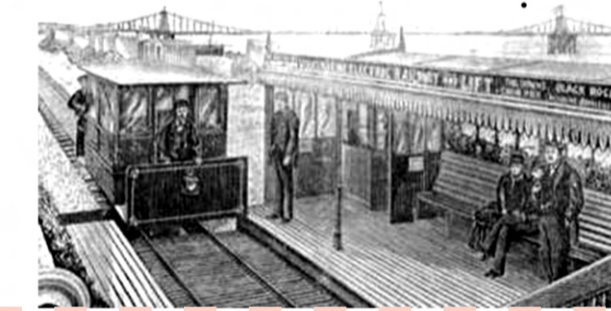


• 1883 AD

Volks Electric Railway opens, designed and built by Volk. Brighton had one of the first electric railways in the world, opened by Magnus Volk in 1883.

• 1884 AD

Brighton Bandstand built.



• 1887 AD

The Dyke railway station opened.

• 1888 AD

Jubilee Clock Tower built at the bottom of Queens Road, to mark Queen Victoria's Jubilee.

• 1890 AD

Grand Metropole Hotel established.



• 1893 AD

New steel-framed Pavilion and Concert Hall added to the West Pier.

• 1896 AD

Brighton and Rottingdean Seashore Electric Railway (a.k.a. the "Daddy Long-Legs") opens in November.

The front of the Grand Metropole hotel was the finishing post for the first London to Brighton car run. The cars left from the London Metropole, and the event is still held every year to celebrate the abolishment of the speed limit.

Royal Chain Pier destroyed by storm on December.

A storm wrecks the "Daddy Long-Legs"- Rottingdean extension to the Volks Railway, only weeks after its opening. The extension and car are repaired and reopen.

1900's

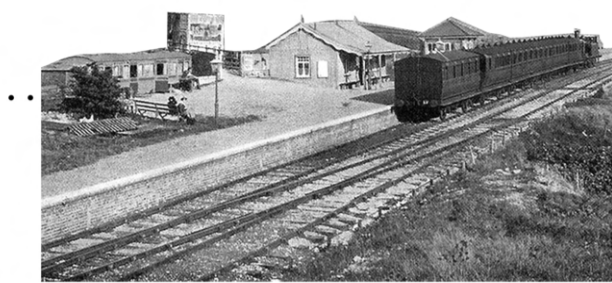
• 1897 AD

Victoria Gardens opens.

• 1899 AD

The Palace Pier has an opening ceremony (although its building works aren't yet finished).

Lewes road Dispensary for Women and Children was established.



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 Figure 40 - <https://www.flickr.com/photos/seadipper/3556865287/in/gallery-dominicpics-7215622647434786/>
 Figure 41 - [https://en.wikipedia.org/wiki/Royal_Albion_Hotel#/media/File:Royal_Albion_Hotel,_Brighton_\(toE_294536\).jpg](https://en.wikipedia.org/wiki/Royal_Albion_Hotel#/media/File:Royal_Albion_Hotel,_Brighton_(toE_294536).jpg)
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 Figure 54 - https://ichef.bbci.co.uk/news/976/cpsprodpb/573C/production/_88223322_gettyimages-1736320.jpg
 Figure 55 - https://m.media-amazon.com/images/I/71-qZ3akhoL_AC_SL1500_.jpg
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 Figure 60 - <https://www.visitsealife.com/brighton/media/cg2b5o3z/aquarium-history.jpg?anchor-center&mode=crop&width=900&height=900>

Figure 61 - <https://www.visitsealife.com/brighton/media/kwjiwcy/interior-design.jpg?anchor-center&mode=crop&width=900&height=900>
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 Figure 72 - <https://brightonandhovebuildinggreen.files.wordpress.com/2017/03/brighton-speed-trials-1905.jpg>
 Figure 73 - https://brightonandhovebuildinggreen.files.wordpress.com/2015/05/dms_ha902477_d01_ab10.jpg
 Figure 74 - http://www.bygoness.org.uk/images/uploaded/scaled/Pam-at-Black-Rock_web.jpg
 Figure 75 - https://photos.francisfrith.com/frith/brighton-west-pier-and-bandstand-1902_48506.jpg
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 Figure 77 - A train braves stormy seas as it runs along the wooden viaduct east of Banjo Grove in this old postcard view. c.1890
 Figure 78 - https://blog.railwaymuseum.org.uk/wp-content/uploads/2019/01/SSPL_10289065_HighRes.jpg
 Figure 79 - <https://blog.railwaymuseum.org.uk/wp-content/uploads/2019/01/pioneer3.jpg>
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 Figure 81 - Helen Boyle outside a House, Bain News Service, publisher - Library of Congress Catalog
 Figure 82 - http://www.simplonpc.co.uk/Brighton/PalacePier_PC-02_b.jpg

References

8. <https://www.mybrightonandhove.org.uk/topics/topicent/pubs-2/pubs>
 9. Gladwin, A. (2021). Sussex Live. Brighton's enormous underground tunnel network we may never see again. Retrieved [Online] from: <https://www.sussexlive.co.uk/whats-on/brightons-enormous-underground-tunnel-network-5825229>
 10. E.W. Gilbert (1949), "The Growth of Brighton", The Geographical Journal, pp30-52
 11. Architectural Review Oceans Issue (April 2019) 'Devised by pleasure-seeking Victorians but now undermined by social change and physical neglect, does the building that defined the seaside have a future'
 12. Drewry, Charles Stewart (1832). A Memoir of Suspension Bridges: Comprising The History Of Their Origin And Progress London: Longman, Rees, Orme, Brown, Green & Longman. pp. 69-74. Plate V, <https://archive.org/details/amemoirsuspensio1drewgoog/page/n92/mode/2up>
 13. "Sussex Piers - East Sussex - West Sussex - Ports, Piers - Ferry Photographs - Ferry Postcards". www.simplonpc.co.uk.
 14. <https://www.scienceandsociety.co.uk/results.asp?txtkeys1=Royal+Suspension+Chain+Pier>
 15. <https://spartacus-educational.com/DSphotosea6F2.htm>
 16. Brighton Polytechnic. School of Architecture and Interior Design (1987): A Guide to the Buildings of Brighton.
 17. Brighton Station/ Brighton Railway Station Terminus, London-Brighton line (1841-) (brightontoyuseum.co.uk)
 18. <https://brightonmuseums.org.uk/discover/2015/02/26/railways-in-brighton/>
 19. <https://www.mybrightonandhove.org.uk/topics/topictans/railways/railways-5>
 20. <https://historiceingland.org.uk/listing/the-list/list-entry/1381655>
 21. <https://www.thisbrighton.co.uk/culturepiers.htm>
 22. <https://www.expertskiphire.co.uk/brighton-pier-history-facts>
 23. <https://www.westpier.co.uk/history/>
 24. My Brighton and Hove (2008). Brighton Corporation Waterworks Act 1872. Retrieved [Online] from: <https://www.mybrightonandhove.org.uk/topics/public-services/water-supply/water-supply-3>
 25. <https://historiceingland.org.uk/listing/the-list/list-entry/1381698>
 26. <https://www.visitsealife.com/brighton/explore/history/>
 27. <https://www.visitsealife.com/brighton/explore/history/>
 28. <https://historiceingland.org.uk/listing/the-list/list-entry/1381699>
 29. http://www.bygoness.org.uk/page_id_134_img_515.aspx
 30. <https://historiceingland.org.uk/listing/the-list/list-entry/1381657>
 31. <https://brightonbandstand.co.uk/history>
 32. <http://www.urban75.org/railway/volks-electric-railway.html>
 33. <https://www.railwaywondersoftheworld.com/brightons-electric.html>
 34. <https://www.mybrightonandhove.org.uk/places/placesea/daddy-longlegs/daddy-longlegs>
 35. <https://blog.railwaymuseum.org.uk/daddy-long-legs-a-weird-and-wonderful-railway/>
 36. <http://www.urban75.org/railway/brighton-sea-railway.html>
 37. The Development of the Hospitals in Brighton and Hove by L W Lauste MD FRCS (Royal Sussex County Hospital, Brighton, Sussex)
 38. Carder T: The Encyclopaedia of Brighton: Lewes: 1990
 39. <https://historiceingland.org.uk/listing/the-list/list-entry/1381700>

1900's

- **1901 AD**
Statue of Queen Victoria, Grand Avenue, Hove.

- Rebuilding of the Market area, including the construction of Brighton's Floral Hall.

- **1902 AD**
Goldstone football ground, becomes the home of Brighton & Hove Albion

- **1914 AD**
Royal Pavilion was used as a military hospital for Indian soldiers



- **1960 AD**
S.S. Brighton Swimming Stadium opens on West Street – the world's largest covered seawater pool.



- **1969 AD**
Regency Square Underground car park built

- **1978 AD**
Brighton Marina opens with an official opening in 1979.

- **1980 AD**
Brighton Marina Superstore and village square with shops and restaurants added, followed by flats and houses.



Brighton & Hove

- **2001 AD**
Brighton & Hove officially becomes a city.

NOW

- **1897 AD**
Victoria Gardens opens.

- **1899 AD**
The Palace Pier has an opening ceremony (although its building works aren't yet finished).

- Lewes road Dispensary for Women and Children was established.

- **1922 AD**
Brighton War Memorial unveiled.

- **1929 AD**
The Tudor Close Hotel: became popular in the 30's with Hollywood celebrities such as Cary Grant, who stayed at the hotel. The board game 'Cluedo' was inspired from the murder mystery games that were hosted at this venue.



- **1934 AD**
S.S. Brighton Swimming Stadium opens on West Street – the world's largest covered seawater pool.

- **1935 AD**
The Art Deco-styled Embassy Court block of flats opens on Brighton seafront, containing Britain's first penthouse apartments.

- **1936 AD**
Balsdean first electric station and now Brighton's largest water source.

- **1937 AD**
The Fish Market moves from the seafront to Circus Street.



- **1984 AD**
The IRA bomb The Grand Hotel, in an attempt to assassinate the then PM, Margaret Thatcher.

- **1988 AD**
Marina cinema complex completed.

- **1997 AD**
Brighton and Hove councils combine to form the Brighton & Hove Unitary Authority.

Figures

Figure 83 - http://www.simplonpc.co.uk/Brighton/PalacePier_PC-05_b.jpg

Figure 84 - http://www.simplonpc.co.uk/Sussex_Piers/Brighton-Palace_PC-08.jpg

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Figure 90 - <https://www.scienceandsociety.co.uk/results.asp?image=10316928&itemw=4&itemf=0001&itemstep=1&itemx=2>

Figure 91 - <https://saltdeanlido.org/new-gallery>

Figure 92 - http://news.bbc.co.uk/onthisday/hi/dates/stories/august/9/newsid_3906000/3906605.stm

Figure 93 - Google search - Brighton Pavilion

Figure 94 - Aerial view of treatment works

Figure 95 - Hove to Portobello Tunnel site

Figure 96 - https://upload.wikimedia.org/wikipedia/commons/thumb/3/33/West_Pier_April_2018_04.jpg/1920px-West_Pier_April_2018_04.jpg

Figure 97 - <https://cdn.ca.emap.com/wp-content/uploads/sites/12/2017/03/i360drawings.pdf>

Figure 98 - https://eu-assets.simpleview-europe.com/brighton2016/imageresizer/?image=%2Fdm5mgs%2FBritish-Airways-i360-site_1218730009.jpg&action=ProductDetail

Figure 99 - <https://www.thekeep.info/wp-content/uploads/2018/01/unbuilt-brighton-skydeck.jpg>

References

40. <https://www.thisbrighton.co.uk/culturepiers.htm>
41. Feigel, Lara (2009) 'Modernism On Sea: Art and Culture at the British Seaside', page 203
42. Fred Gray (2006) 'Designing the Seaside: Architecture, Society and Nature'
43. Barbara Jones (28 June 1947) 'The splendour of mile-long piers and the blowsy beauty of bandstands is in a class of its own'
44. John Rayner and Keith Mallory (4 May 1969) 'The pier provides a point of integration between townscape and seascape'
45. <https://saltdeanlido.org/brief-history>
46. <https://www.bbc.co.uk/sounds/play/p00j84cs> (audio link)
47. Gladwin, A. (2021). Sussex Live. Brighton's enormous underground tunnel network we may never see again. Retrieved [Online] from: <https://www.sussexlive.co.uk/whats-on/brightons-enormous-underground-tunnel-network-5825229>
48. Coastal Laned Ltd. (2021). The History of the Brighton Sewage System. Retrieved [Online] from: <https://www.coastaldrains.co.uk/blog/history-brighton-sewage-system/>
49. The Architectural Review, 'Julia Barfield sees the Bai360 as a descendant of Brighton's most adventurous 18th and 19th-century projects', 14 MARCH 2017, JAY MERRICK
50. <https://www.thisbrighton.co.uk/culturepiers.htm>
51. <https://www.thekeep.info/brighton-as-it-could-have-been-unrealised-plans-from-our-archives/>
52. https://www.jstor.org/stable/2595245?seq=1#metadata_info_tab_contents
40. <https://www.thisbrighton.co.uk/culturepiers.htm>
41. Feigel, Lara (2009) 'Modernism On Sea: Art and Culture at the British Seaside', page 203
42. Fred Gray (2006) 'Designing the Seaside: Architecture, Society and Nature'
43. Barbara Jones (28 June 1947) 'The splendour of mile-long piers and the blowsy beauty of bandstands is in a class of its own'
44. John Rayner and Keith Mallory (4 May 1969) 'The pier provides a point of integration between townscape and seascape'
45. <https://saltdeanlido.org/brief-history>
46. <https://www.bbc.co.uk/sounds/play/p00j84cs> (audio link)
47. Gladwin, A. (2021). Sussex Live. Brighton's enormous underground tunnel network we may never see again. Retrieved [Online] from: <https://www.sussexlive.co.uk/whats-on/brightons-enormous-underground-tunnel-network-5825229>
48. Coastal Laned Ltd. (2021). The History of the Brighton Sewage System. Retrieved [Online] from: <https://www.coastaldrains.co.uk/blog/history-brighton-sewage-system/>
49. The Architectural Review, 'Julia Barfield sees the Bai360 as a descendant of Brighton's most adventurous 18th and 19th-century projects', 14 MARCH 2017, JAY MERRICK
50. <https://www.thisbrighton.co.uk/culturepiers.htm>
51. <https://www.thekeep.info/brighton-as-it-could-have-been-unrealised-plans-from-our-archives/>
52. https://www.jstor.org/stable/2595245?seq=1#metadata_info_tab_contents

Nazek El Hariri

Palace Pier Alterations

Project Brief

Our concept of what constitutes an appropriate/acceptable Holiday has been subject to constant review since the early days of Brighton-Seaside culture. Most recently there would seem to be a willingness to not go abroad but instead stay in the UK. Another development has been an increased awareness of climate change and the subsequent changes to our natural environment.

Step 1

With close reference to the catalogue of the previous Serpentine Gallery Pavilions (SGP) projects, your task is to propose/ design a holiday dwelling, to be located somewhere on the body of the Palace Pier.

Step 2

With appropriate reference to SGP projects you are asked to develop an outline proposal for a research station (a place from which to observe, study and discuss) whose primary focus is climate change. Finally you are asked to bring Step 1 and Step 2 together so that for the duration of the summer season your Palace pier installation provides holiday accommodation for visiting holiday makers and for the autumn/ winter seasons your construction provides a research centre with space for observation, data collection and research presentation.

Brighton - a great British coastal resort town

Seafront in the Past

Seafront in the Present



Turkish baths and Mahomed's bath shampoo surgeoen
ZARR, G. 2018. The Shampooing Surgeoen of Brighton [Online]. AramcoWorld. Available: <https://www.aramcoworld.com/Articles/March-2018/The-Shampooing-Surgeoen-of-Brighton> [Accessed November 2021].



Seashore Electric Railway rides to see the water
https://blog.railwaymuseum.org.uk/wp-content/uploads/2019/01/Ellis_Kelsey_img_5_flipped.jpg



Meditate, enjoy nature and spend a weekend
TOMLIN, H. 1931. Crowds on the beach at Brighton, Sussex, 1931. [Online]. Science & Society Picture Library. Daily Herald Archive/National Science & Media Museum / Science & Society Picture Library. Available: <https://www.sciencesociety.co.uk/results.asp?image=10316928&itemw=4&itemf=0001&itemstep=18&itemx=2> [Accessed December 2021].

Privacy (Royal Pavilion & tunnels)
To enjoy a hobby (horses/ swimming)
To not be observed or monitored (to be free & do the uncommon or be the unordinary)
To escape society and be who you want to be
Healing purposes (fresh air & sea water)
Bathing, pubs & spa (Turkish bath)
Unloading (ships)
Entertainment (Pier, art theatre)
Fishing



Escaping reality and spending time privately (King's George's secret tunnels)
Gladwin, A. (2021). Sussex Live. Brighton's enormous underground tunnel network we may never see again. Retrieved [Online] from: <https://www.sussexlive.co.uk/whats-on/brightons-enormous-underground-tunnel-network-5825229>



A train braves stormy seas as it runs along the wooden viaduct east of Banjo Grove in this old postcard view. c.1890
URBAN75. 2006. Volk's Electric Railway, Brighton [Online]. Available: <http://www.urban75.org/railway/volks-electric-railway.html> [Accessed October 2021].



In 1984, The Noble Group bought the Pier and removed the entrance fee and replaced the activities with profitable arcade games.
http://www.simplonps.co.uk/Sussex_Piers/Brighton-Palace_PC-08.jpg

Open Houses, art and music scenes, events
Salsa dancing (at the band stand)
Shopping and night life (pubs/lanes)
Beach, Royal Pavilion, walks
Water sports (Hove)
Cycling
Fishing
Diversity
Meditation
To be free (less boundaries)
Swim

In conclusion, people visited Brighton for various reasons from throughout history and till today. Brighton's seafront is a great place to enjoy a hobby, escape reality and be who you want to be, a private place and a place to be seen at too. It is a great place to bath in the water for health reasons and to practice water sports.



Salsa dancing at the band stand.
DADSWELL, B. 2018. Swing storms Brighton seafront as dancers perform on bandstand [Online]. Available: <https://www.theargus.co.uk/news/16521511/swing-storms-brighton-seafront-dancers-perform-bandstand/> [Accessed 25 December 2021].



Watersports - Stand up paddle boarding.
Visit Brighton. 2021. Adventure & Outdoor Activities in Brighton [Online]. Available: <https://www.visitbrighton.com/things-to-do/sports-and-activities/adventure-and-outdoor/> [Accessed 25 December 2021].



Rollerblading and skating activities by the beach.
SPONG, J. 2021. TRY IT NOW... ROLLERBLADING ON BRIGHTON SEAFRONT [Online]. Coast. Available: <https://www.coastmagazine.co.uk/content/try-it-now-rollerblading-brighton-seafront/> [Accessed December 2021].



Enjoying watersports - surfing.
OCEANOGRAPHIC. 2019. Ocean Pollution Surfers Against Sewage publishes 2019 water quality report [Online]. Oceanographic. Available: <https://www.oceanographicmagazine.com/news/water-quality-report/> [Accessed December 2021].



Cycling near the beach.
OCEANOGRAPHIC. 2019. Ocean Pollution Surfers Against Sewage publishes TIMEOUTDOORS. 2021. London to Brighton Cycle Ride 2021 [Online]. Timeoutdoors. Available: <https://www.timeoutdoors.com/events/cycling/London-to-Brighton-Cycle-Ride-2021/> [Accessed December 2021].



Brighton's open houses during December.
FULLER, C. 2021. Artists showcasing work at Brighton and Hove Open Houses Christmas Festival [Online]. The Argus. Available: <https://www.theargus.co.uk/news/1970883-artists-showcasing-work-brighton-hove-open-houses-christmas-festival/> [Accessed December 2021].



Madeira Drive - terraces and an accessible walkway that included a smoking room, café, a skating ring, and a music conservatory. (Live music performances occurring regularly for all classes)
GREEN, B. H. B. 2017. The story of 'Maddy' - Brighton's historic Madeira Drive [Online]. Available: <https://building-green.org.uk/2017/04/18/the-story-of-maddy-brightons-historic-madeira-drive/> [Accessed December 2021].



People watched the cargo boats loading and unloading on the chain pier.
The Argus. Available: <https://www.theargus.co.uk/news/10691662/chain-reaction/> [Accessed October 2021].



A source of fascination for many before it had even been finished, it featured attractions such as "a regimental band, camera obscura, saloon, reading room, souvenir shops, kiosks, telescopes, a 'silhouettist', weighing machine, and shower baths."
HOVE, M. B. A. 1990. Completed in January 1823 [Online]. Available: <https://www.mybrightonandhove.org.uk/places/placesea/chain-pier/chain-pier-4> [Accessed October 2021].



Watching the murmurations.
GETTYIMAGES. 339 Birds Brighton Pier Premium High Res Photos [Online]. Gettyimages. Available: <https://www.gettyimages.com/photos/birds-brighton-pier>



Outdoor bathing during summer and special occasions
EXPRESS. 2014. Historic Christmas swim cancelled over health and safety fears [Online]. Express. Available: <https://www.express.co.uk/news/uk/545512/Christmas-swim-Brighton-cancelled-health-and-safety> [Accessed December 2021].



Meditation and yoga along the seafront.
O'BRIEN, R. 2021. Brighton Yoga and Well-being Festival 2021: When is it, where will it take place and what will the programme include? [Online]. Brighton & Hove Independent. Available: <https://www.brightonandhoveindependent.co.uk/whats-on/things-to-do/brighton-yoga-and-well-being-festival-2021-when-is-it-where-will-it-take-place-and-what-will-the-programme-include-3292588> [Accessed December 2021].



Doctor Brighton - a healing place to see the doctor.
WIKIPEDIA. 2020. Richard Russell (doctor) [Online]. Available: [https://en.wikipedia.org/wiki/Richard_Russell_\(doctor\)](https://en.wikipedia.org/wiki/Richard_Russell_(doctor)) [Accessed].



Fishing and fishing market.
PEARCE, L. 2016. Nostalgia: Brighton as a fishing village [Online]. The Argus. Available: <https://www.theargus.co.uk/news/14290755-nostalgia-brighton-as-a-fishing-village/> [Accessed].



Open Air Swimming Pool, 1930
TRIMMINGHAM, A. 2011. No cash to splash [Online]. Available: <https://www.theargus.co.uk/news/9141046-no-cash-to-splash/> [Accessed October 2021].



Private chats and escape from the world.
2020. Brighton Skies. Available: <https://en-gb.facebook.com/groups/343329786021733/media/> [Accessed].



Celebrating diversity and all classes.
UK, B. C. 2017. Brighton College celebrates diversity at Brighton Pride 2017 [Online]. YouTube. Available: <https://www.youtube.com/watch?v=a51bJ055s> [Accessed].



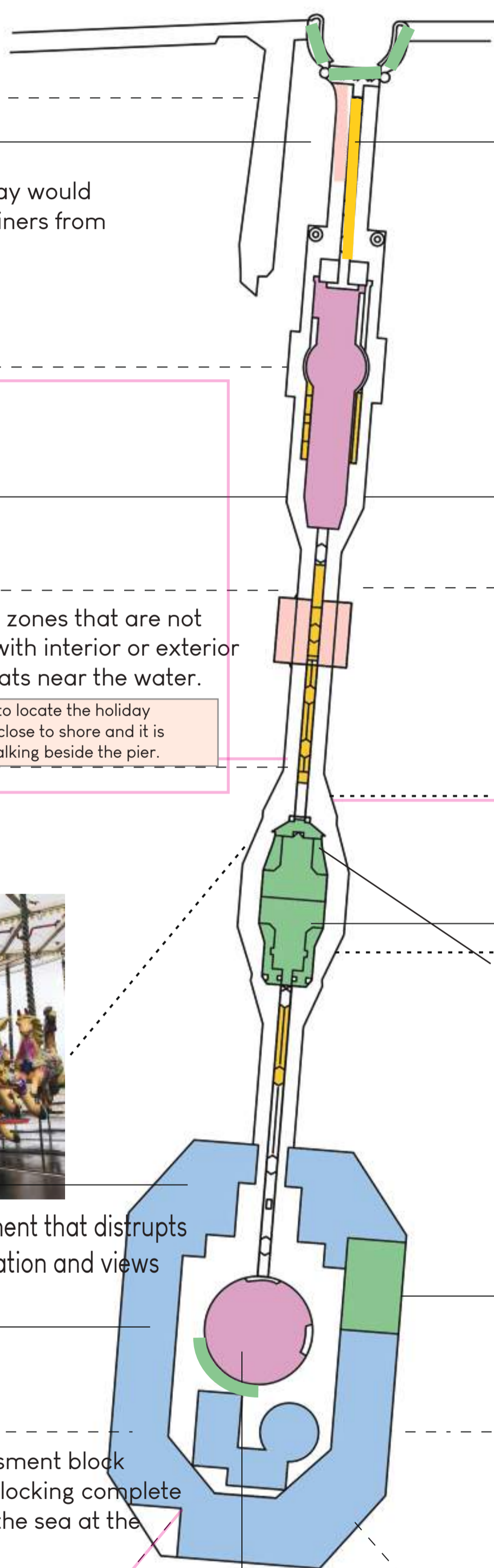
Walks along the pier and seafront.
WALKER, W. 2018. BRIGHTON WALK | Brighton Palace Pier in Glorious Sunshine | England [Online]. YouTube. Available: <https://www.youtube.com/watch?v=mvysr9w43g> [Accessed 2021].

Palace Pier 2021 Building Use Site Analysis

Legend

- Amusement Park
- Restaurants/ Pubs / Cafes
- Casino
- Gift shops
- Seating area

All photographs are Author's own.



Landing stage beside the pier providing side views of the pier structure.



Solid walls facing the sea. Inverted casino building at the entrance of the pier.



Standing at one point at the pier, one could see extended built exposed to the water.



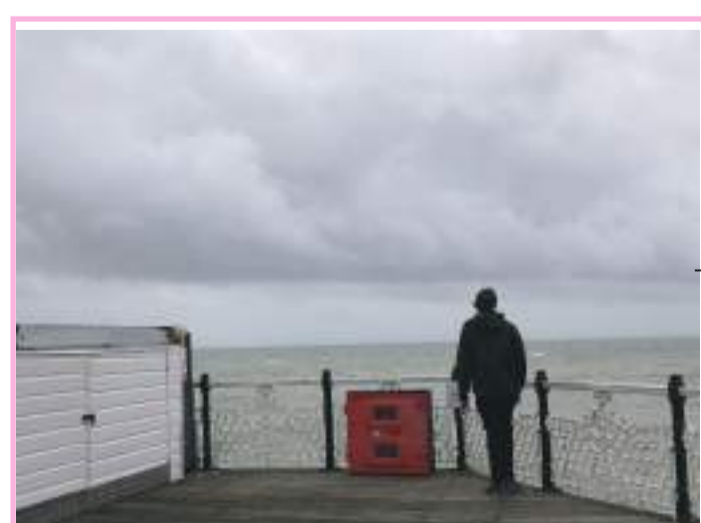
Seating areas are located on a central line. People are more encouraged to occupy them during less windy days.



A beautiful zone to connect with nature in between the park and the casino, but it's location is very windy.



Pedestrians need to walk behind the fun constructions to be able to escape to nature.



People who require further isolation go till the end of the pier where the maintenance rooms for the park are located.

Note: A great position to locate the holiday dwelling if located below the pier; however, it is the windiest location on the pier and one of the least climatic protective area.



People on holiday would like to buy souvenirs from gift shops.



Dead circulation zones that are not engaged either with interior or exterior due to lack of seats near the water.

Note: A great position to locate the holiday dwelling; however it is close to shore and it is very seen by people walking beside the pier.



Loud entertainment that distracts attention, circulation and views to nature.



A building amusement block (Horror Hotel) blocking complete connections to the sea at the end of the pier.



Dome to be removed - it is a mimic of the entrance's historic dome.



Seating area at the entrance of the pier, very connected with the streets and land more than nature. It is more like a waiting area.



Transitions between indoors and outdoors that effect can be included in the design concept.



Restaurants are needed for holiday makers.



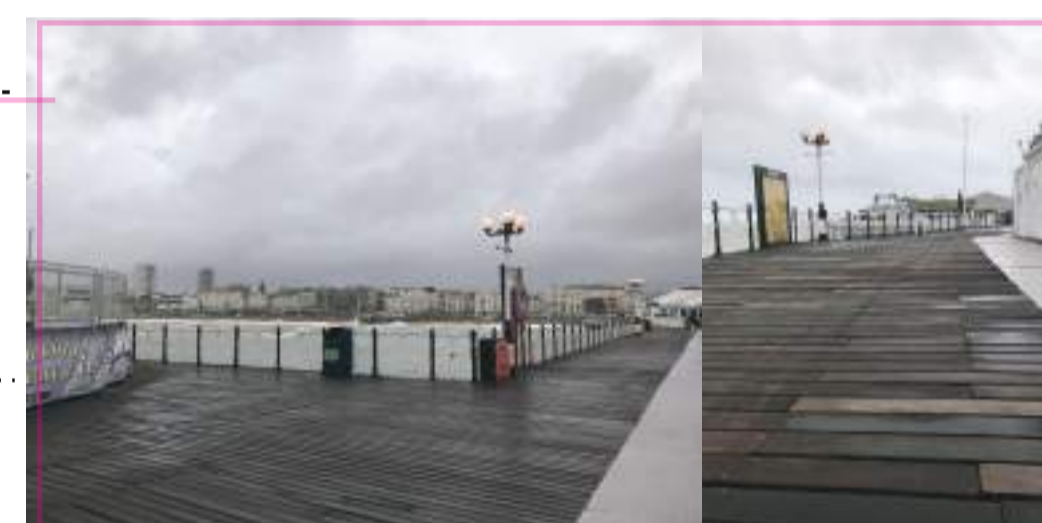
Restaurants take part of the occupied seated area on the pier.



A lot of action dominating the place. Very few ride them most of the year (exceptions: summer)



Spotted visual continuity between East and West part of the pier. (Concept)



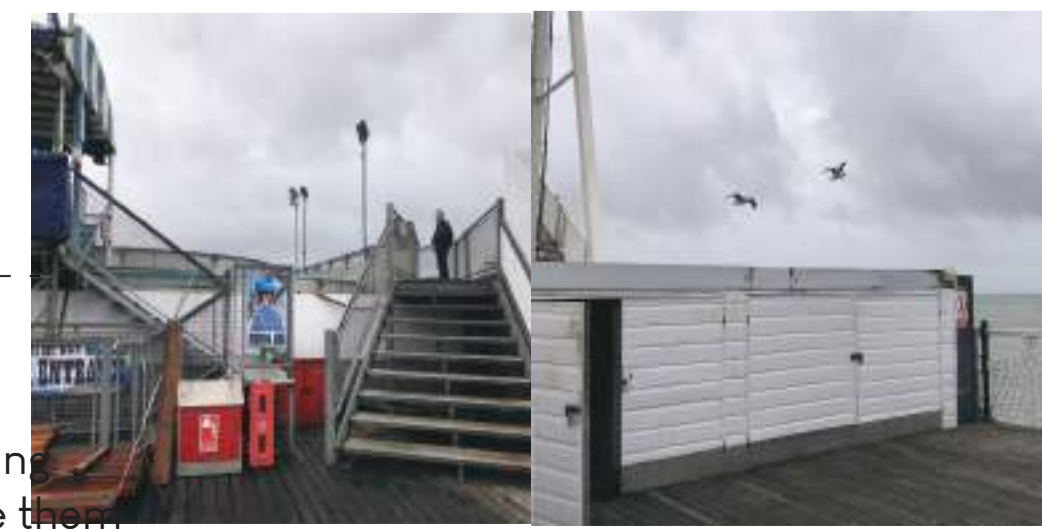
Less noisy good areas that should rather be occupied and lived on rather than passing across them.



Note: A beautiful position to locate the dwelling under the pier; however, I needed the dwelling to have 3 visual access (East, West & Sky). Plus, I needed people to walk through the end of the pier, which acts as a transition between city and nature. Thus, the more you walk in, the more disconnected from the city, business and stress; the more connected to nature.



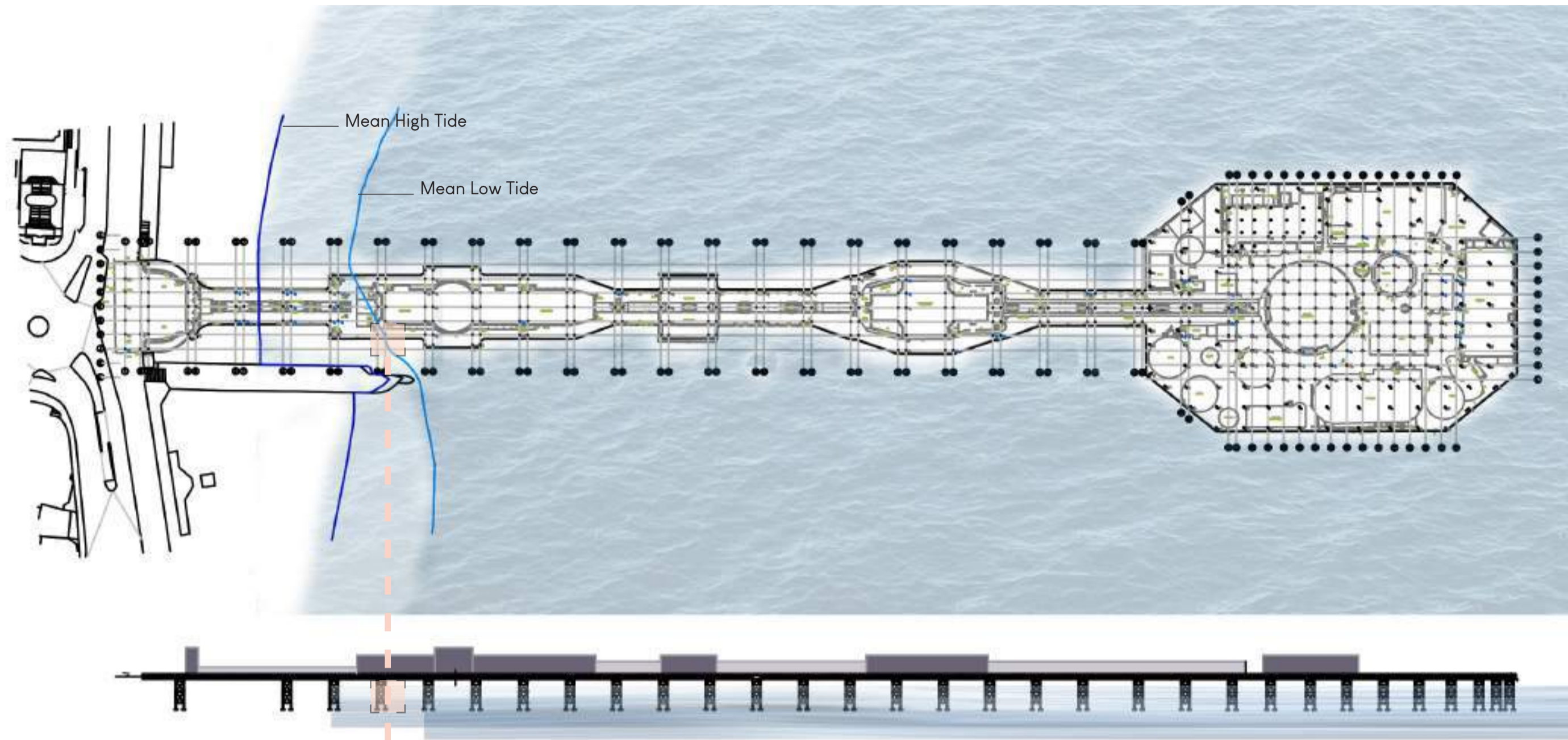
High stimulation at the end of the pier (focal point). Nature storms versus humanbuild wildli (Suggested to be removed)



Maintenance at the end of the pier - birds - access stairs to the game preventing complete isolation with nature

Strucutre

The Palace Pier (iconic Grade 2 listed pier) was intended as a replacement for the Chain Pier, which collapsed in 1896 during construction of the new pier. The pier was designed and constructed by R. St George Moore.¹ It was the third in Brighton, following the Royal Suspension Chain Pier in 1823 and the West Pier in 1866. The first screw-pile of the new Palace Pier was driven in November 1891. The first development of the Pier was done in 1901, it included 4 large minaret cast iron towers linked together by chains, smoking, dining and reading rooms in addition to a concert hall. A band stand was created in the centre and wind screens in 1906.⁴



Pier Plan and Section 1,2

Buildings on top of the pier are supported using a different structural system (an open web, single-span metal truss which takes the form of segmental arch) Roof with a central rotunda.⁶

Wooden deck with various wooden planks colours due to replacements of some and short gaps between planks exist where you could see the water underneath.

A series of perpendicular I-shaped steel beams create a surface for the wooden planks to support on and act to transmit the loads on the Pier into the below truss, columns and piles foundation.



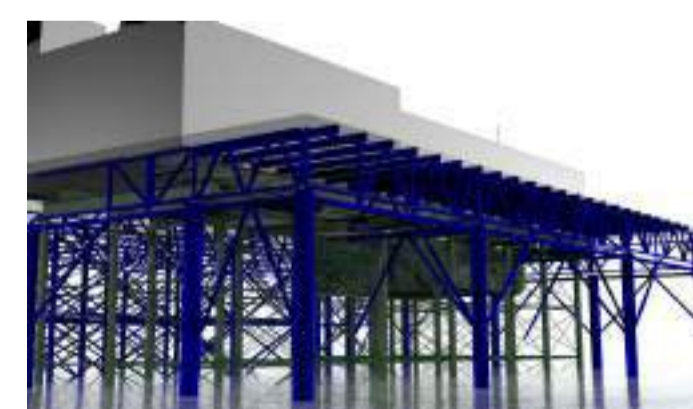
Historic image of the Palace Pier in the very early twentieth century showing the aquarium to the left and overlooking west.⁵

Iron truss lattice girder

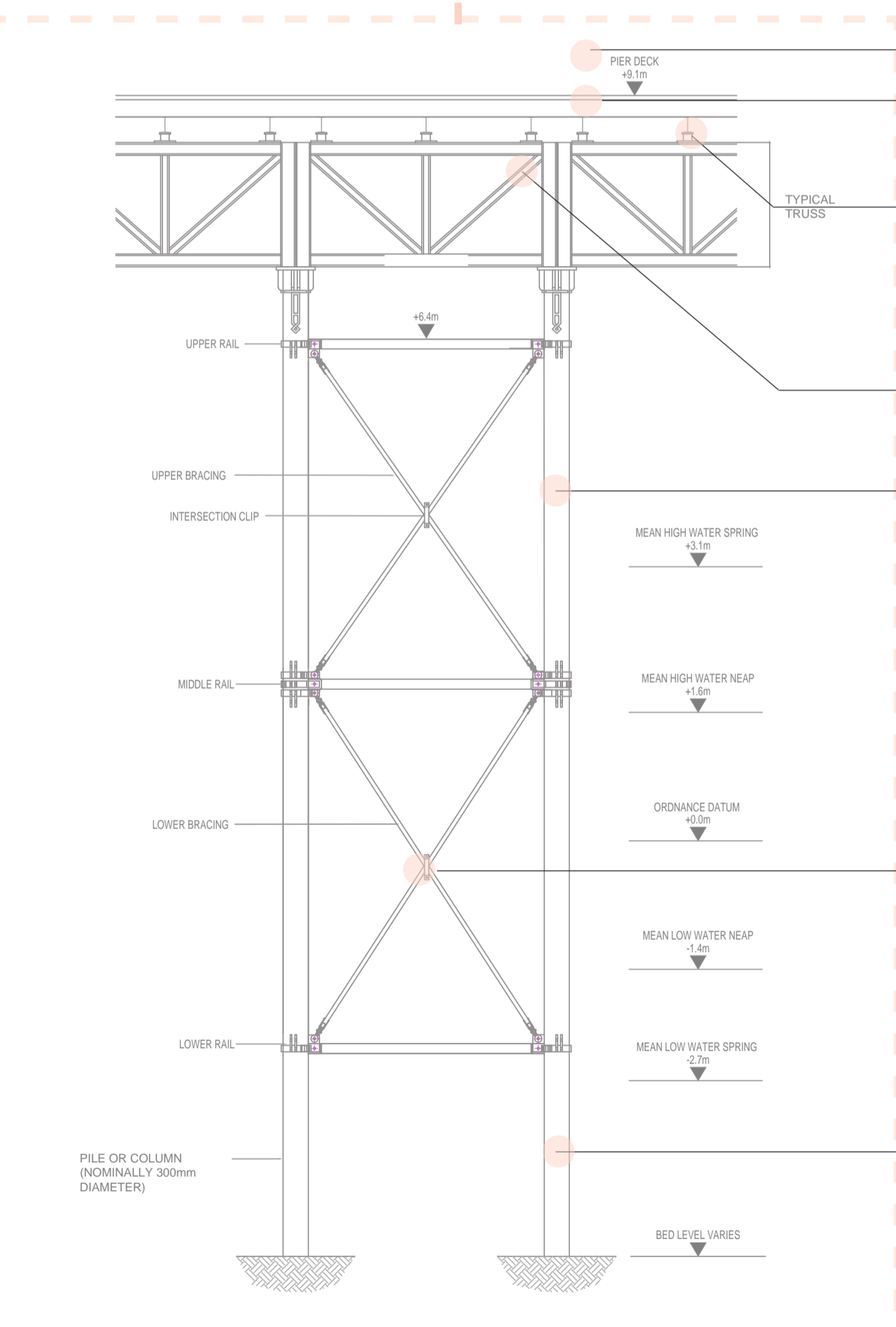
Cast-iron columns

Cross bracing is used to support the columns together. These bracing have rusted and collected some seaweed.

300 mm pile structure



3D image showing the pier structure below the pier.⁷



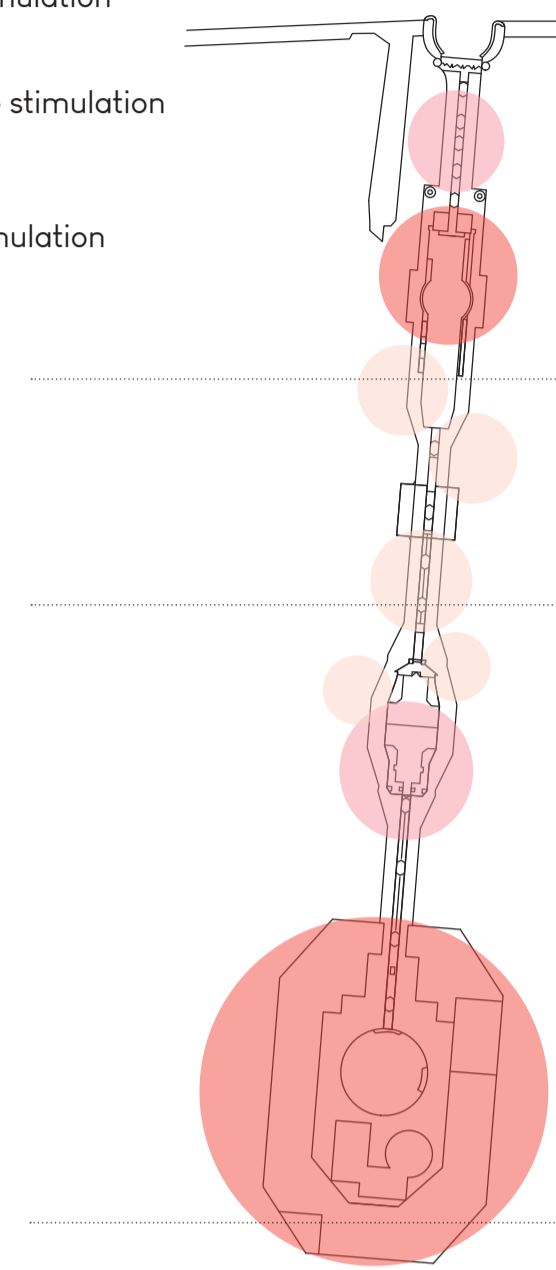
Detail of the Pier Structure 2 scale: 1/50

1 (From Irina Dimitriu) LILY STEPHENSON, HOP Consulting Civil and Structural Engineer, Pier Drawing
 2 Topographic-map.com (2021). Brighton. Accessed [Online] on 29/11/21. Retrieved from: <https://en-gb.topographic-map.com/maps/13/Brighton/>
 3 'Brighton Palace'. National Piers Society. Archived from the original on 5 August 2017. Retrieved 5 August 2017.
 4 HOVE, M. B. 2006. Opened to the public in May 1899 [Online]. Available: https://www.mybrightonandhove.org.uk/places/placeland/palace_pier/brighton-pier/
 5 Jerrald, Clare. Picturesque Sussex. Dundee: Valentine, 1906. Internet Archive. Contributed by University of California Libraries. Web. 25 April 2018/
 6 BANERJEE, J. 2000. Brighton Palace Pier, Brighton [Online]. The Victorian Web. Available: <https://victorianweb.org/art/architecture/iron1.html> [Accessed December 2021].
 7 ORGANISATION, T. N. 2011. BRIGHTON PIER- BOAT DECK REPLACEMENT.
 8 CRAIGIE, E. 2021. The cleanest and dirtiest beaches a two-hour drive from Reading [Online]. BerkshireLive. Available: <https://www.getreading.co.uk/whats-on/family-kids-news/cleanest-dirtiest-beaches-two-hour-20804531> [Accessed December 2021].

Noise

Legend

- High noise stimulation
- Medium noise stimulation
- Low noise stimulation

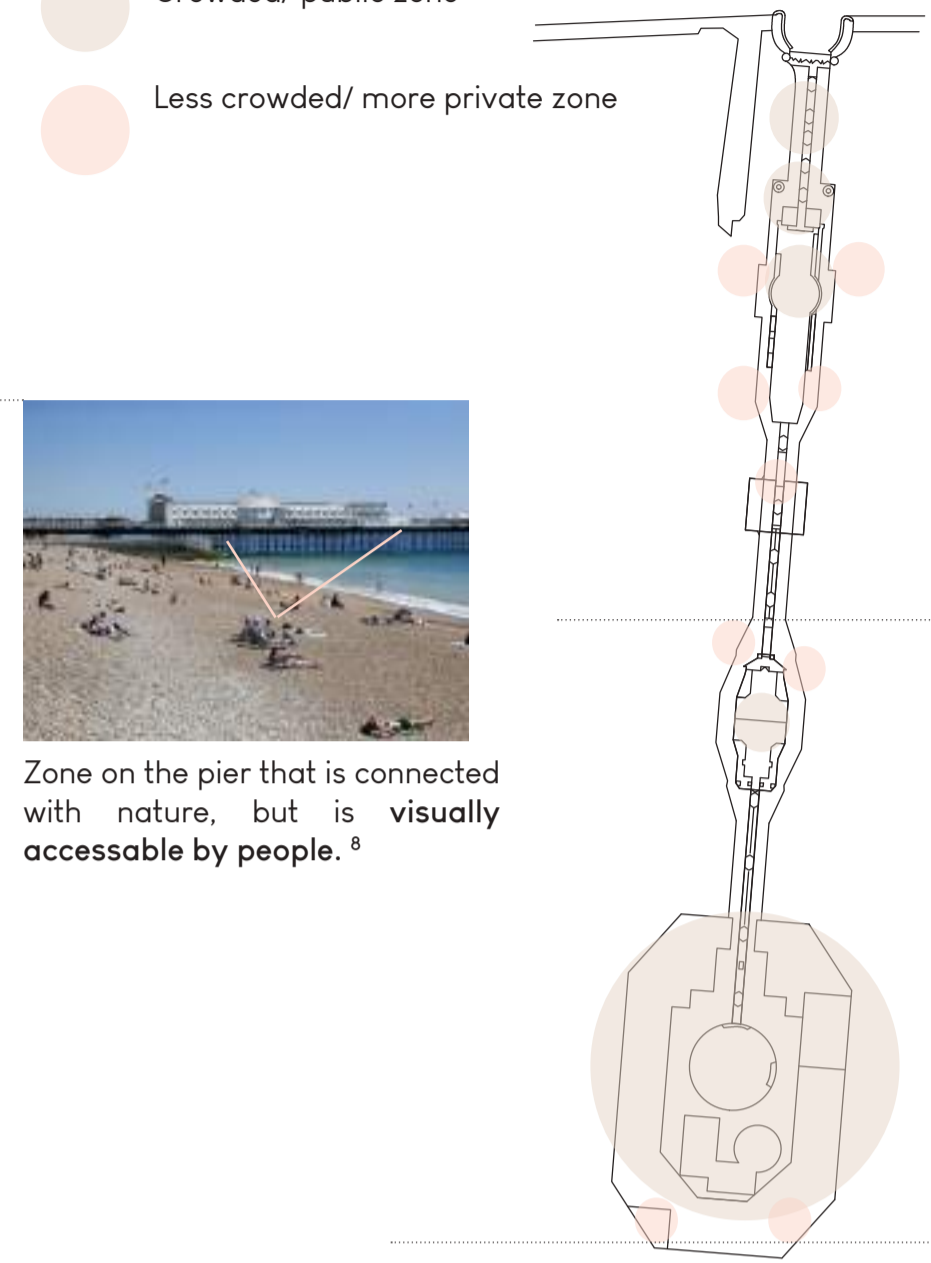


Good connections with nature for the research centre because it is visually and physically accessible by people for encouraging people's engagement in research. However, it is a less private zone for dwellers who wish to swim.

The very end of the pier is too noisy. If the "holiday dwelling" could be located below the pier with a reduction of the amusements at the very end of the pier to not feel the vibration of the rides.

Legend

- Crowded/ public zone
- Less crowded/ more private zone



Zone on the pier that is connected with nature, but is visually accessible by people.⁸

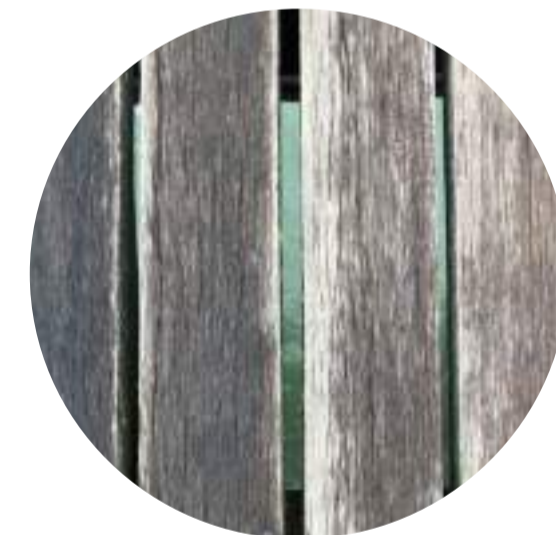
Quiet and beautiful connections to nature zones; however it is still very accessible by people to walking to reach the end of the pier.

A journey to nature - end of the pier for a more quiet place behind the scenes and behind the amusements.

Pier Elements & Features



White metal grid curved in arches at the entrance facade of the Pier.



Interesting connection that could be made with nature is also providing underneath views to the water by including transparency to floors for example.



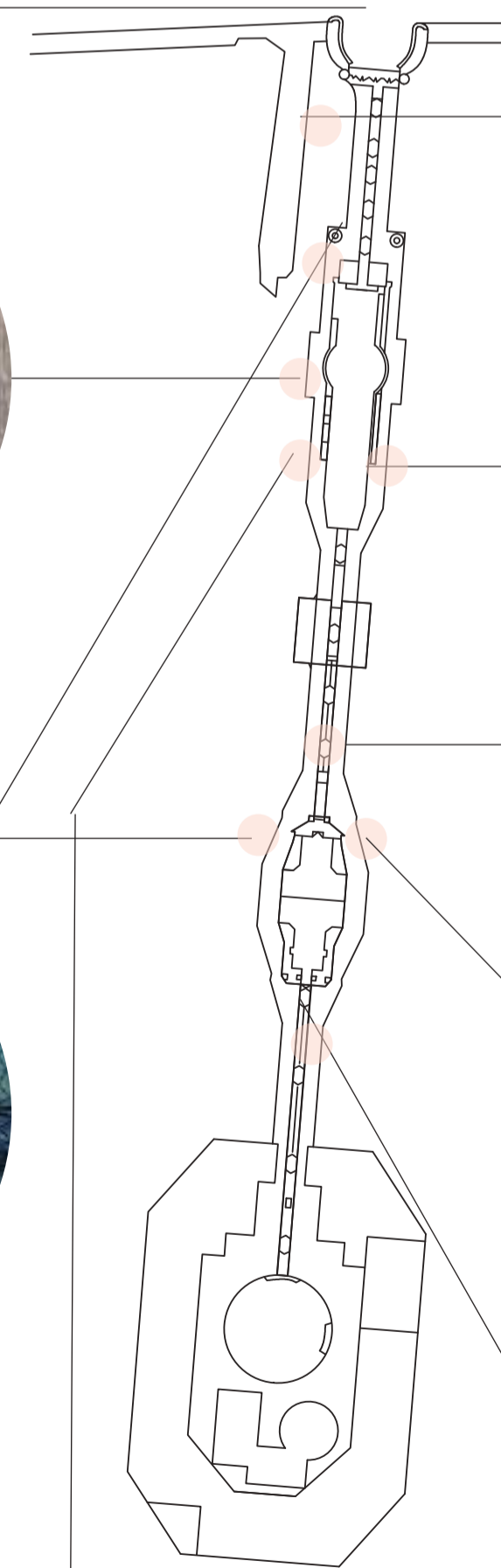
Organic ornamental cast iron fences along the whole promenade.



Change of material due to the weather as your eyes goes below the pier and hitting the water. More erosion and the presence of seaweed is noticed.



Difference in wood panels type and colours along the pier deck.



Organic ornaments versus linearity on benches.



Nature (white foam) hitting man-made (land, building, city, stress). I need my building to be part of nature with it's pure colours.



Picturesque scenes that can be created on the pier through wooden frames and transparency.



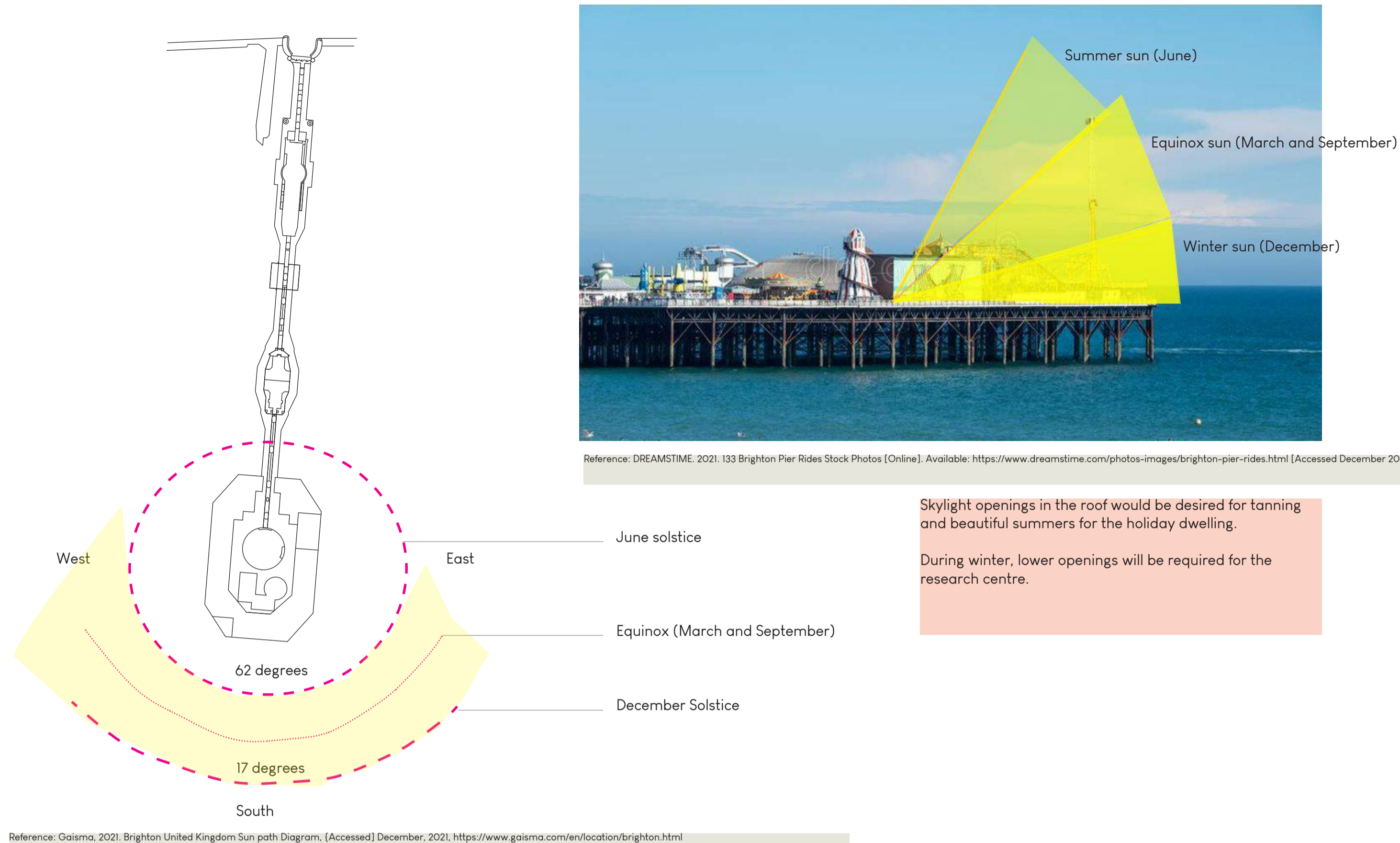
Rusted bits of iron on the pier. That can be considered as part of the design when choosing the material for my project.



Organic forms versus grids.

All photographs are author's own.

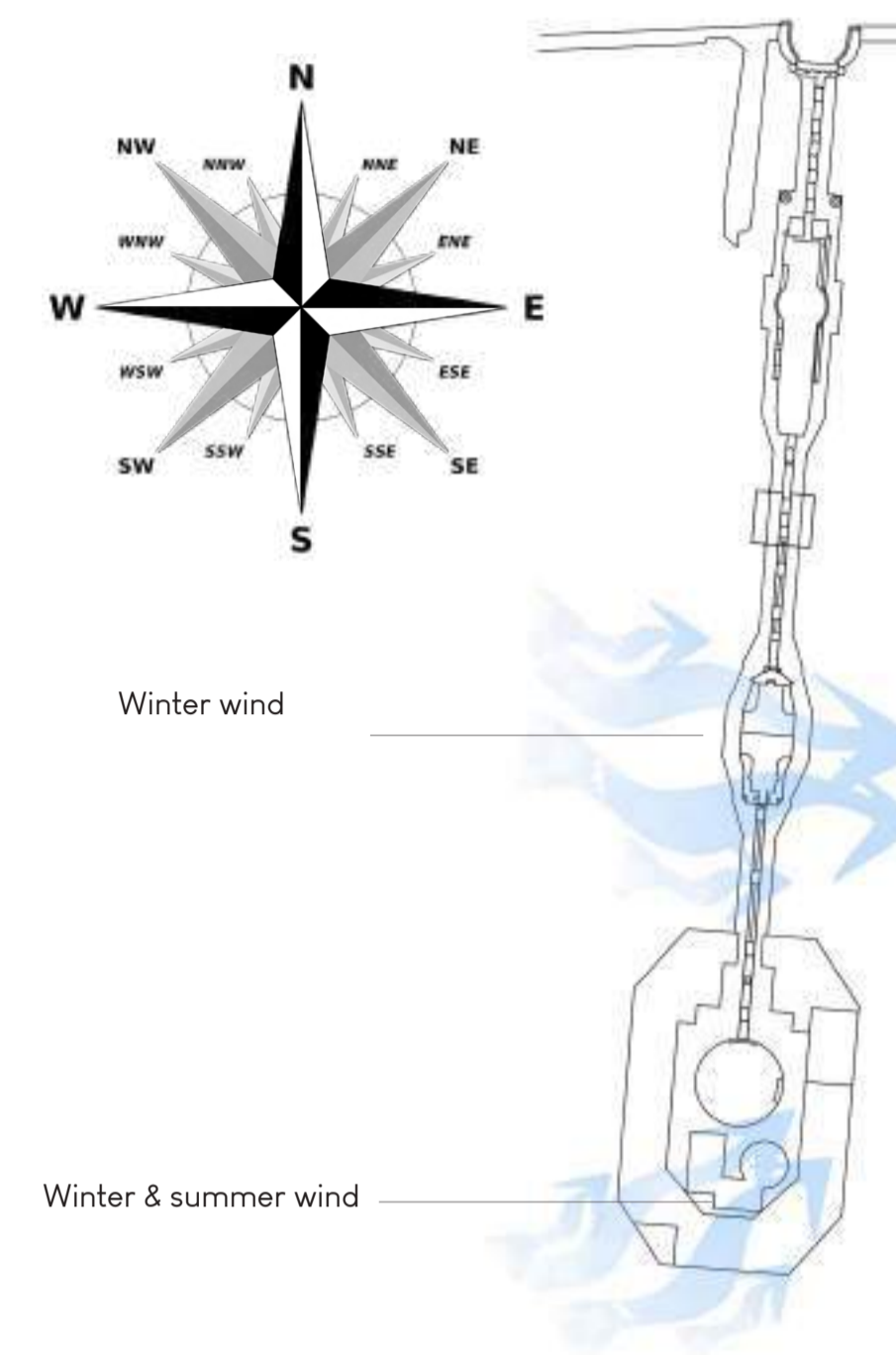
Sun Conditions



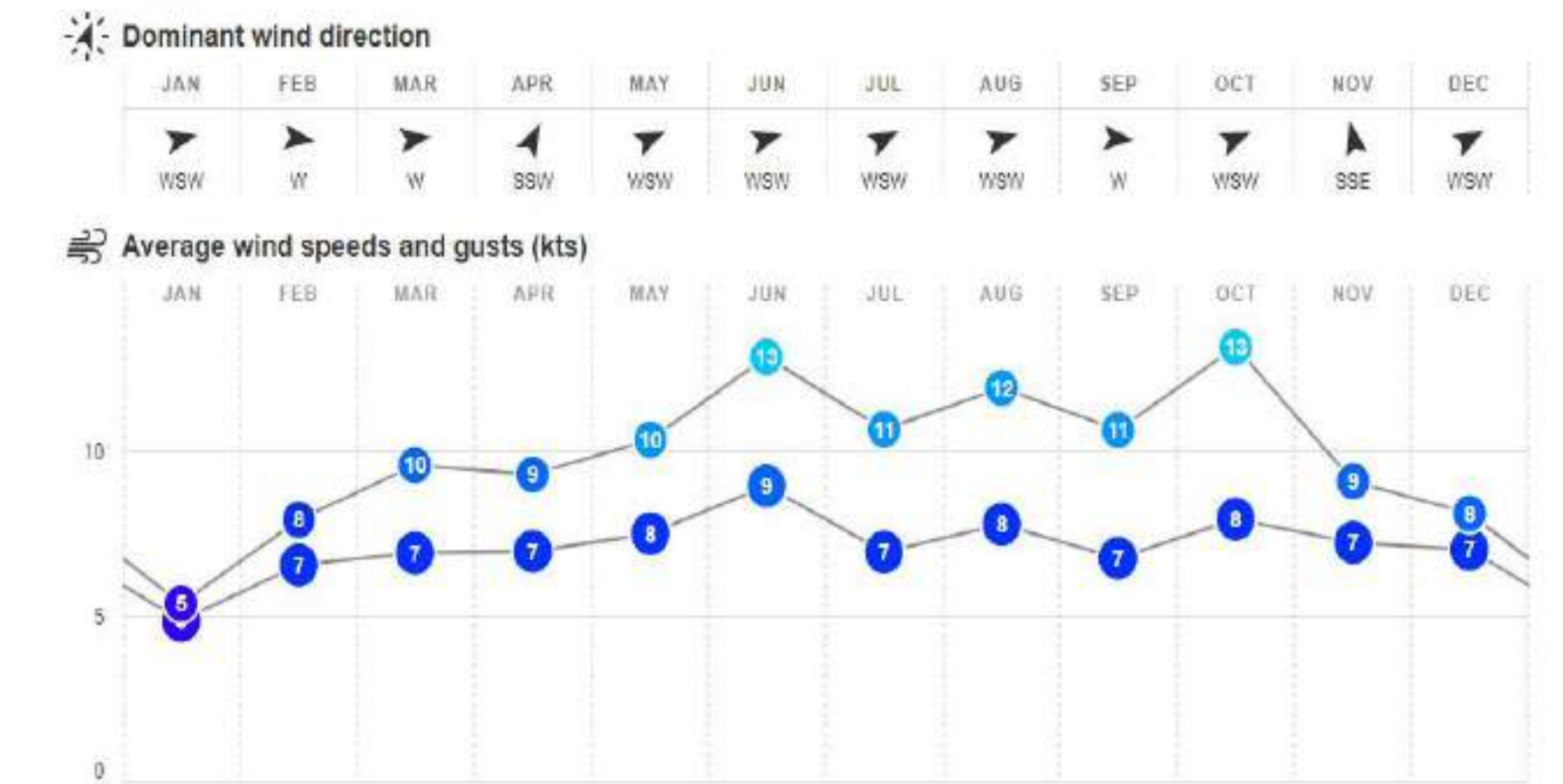
Skylight openings in the roof would be desired for tanning and beautiful summers for the holiday dwelling.

During winter, lower openings will be required for the research centre.

Wind Conditions



Monthly wind speed statistics and directions for Brighton



Reference: WINDFINDER. 2021. Annual wind and weather statistics for Brighton [Online]. Available: https://www.windfinder.com/windstatistics/brighton_beach [Accessed November 2021].

Trying to keep the building away from direct wind directions and allowing the user the choice to decide the amount of breeze to enter the space.

Tide Conditions

Brighton Annual Tide History for Year 2020			
Month	Low Tide (in m)	High Tide (in m)	Approximate Average (in m)
January	0.73	6.58	5-6
February	0.33	6.90	5-6
March	0.14	7.01	5-6
April	0.18	7.08	5
May	0.35	6.88	5
June	0.59	6.58	5
July	0.7	6.48	2-4
August	0.4	6.90	1.5-4
September	0.31	7.11	1-6
October	0.45	7.16	5-6
November	0.55	7.02	5-6
December	0.71	6.76	5-6

The above table was concluded from the following reference:
COUNCIL. B. H. C. 2020. Brighton & Hove Tide Times 2020 [Online]. Available: https://www3.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/14885%20Brighton%20Tide%20Times%202020_v3.pdf#?cid=waARIVcQDBByOCpzhV2XIMfWf80kxw4m_bmb9fcbYz0b5wv77hp23qBA2gjk [Accessed December 2021].

Conclusion:
Highest tide is 7.16 meters during October.

It is harder to swim during Spring.
Lifeguards at Brighton beach will be present from end of May till the first week of September.

Reference:
COUNCIL. B. H. C. 2021. Swimming sea safety [Online]. Available: <https://www.brighton-hove.gov.uk/libraries-leisure-and-arts/seafront/swimming-sea-safety> [Accessed December 2021].

Conclusion:
Swimming months are: June - July - August

Water Temperature Conditions

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Min °C	7.1	6.7	6.2	8	10.3	12.4	14.3	15.9	16.3	15.2	12.7	9.5
Max °C	10.4	10.3	9.8	11.3	13	15.2	16.9	18.7	18.6	17.4	16.4	13.7
Min °F	46.1	45.5	44.6	47.7	51.6	55.4	58.8	61.7	62.2	60.2	56.3	50.8
Max °F	49.4	49.1	48.2	51	54.3	58.2	61.4	64.5	64.5	62.4	60	55

Reference: SEATEMPERATURE.ORG. 2021. Brighton Sea Temperature [Online]. Available: <https://www.seatemperature.org/europe/united-kingdom/brighton.htm> [Accessed December 2021].

Conclusion:

Warmest water is during August & September.

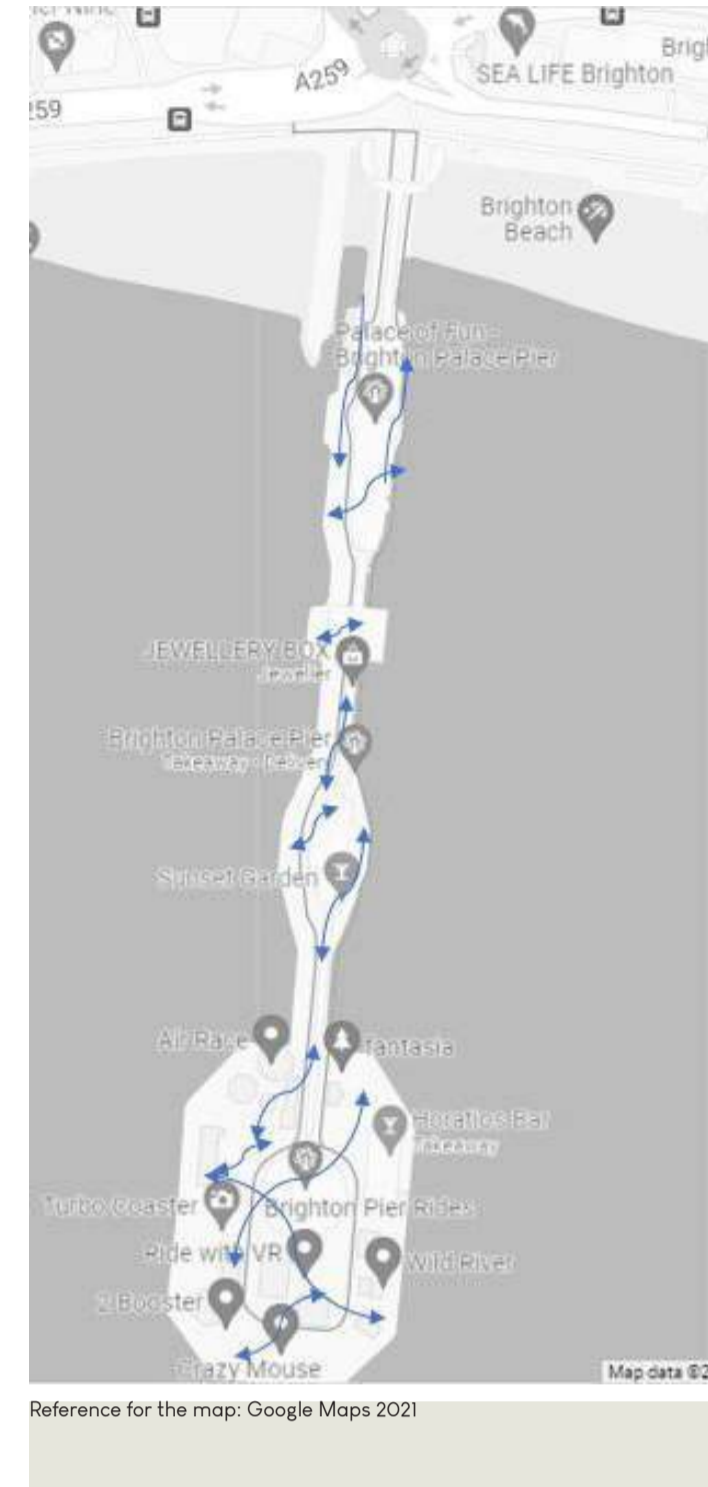
Surfers's Information

"Many surfers believe one of the best times to surf in Brighton and the surrounding areas is the mid-time between summer and Autumn. September to October are generally favourable months due to the beaches being less busy as the school children head back to school as the summer holidays draw to a close. The average sea temperatures for these months are some of the warmest temperatures year-round. September sees an average of 17.4°C/63.3°F and October sees an average of 16.3°C/61.3°F."

Reference: BLOG, J. E. Exciting Places To Surf In Brighton For First Timers - A 2021 Guide [Online]. Available: <https://jollyexplorer.com/where-to-surf-in-brighton-a-guide-for-first-timers/> [Accessed December 2021].

Conclusion:
Surfing time is best during September - October

Pedestrian's Circulation



People's movement on the linear pier is organic and inconsistent shifting between the different things to see and do. That shift is more done between East and West or keep going to reach the very end.



Reference: GUERIN, B. Available: https://unsplash.com/photos/Dusvsh_EpM.



People gather under the pier historically and till today and it is considered as a public space. However, the very front part of the pier is accessible so the end below the pier would be more private.

Richard St. George Moore, Detailed Plan, 1892, drawing, in Palace Pier, Brighton (Stroud: Sutton Publishing Ltd., 1999), 25.

People walk on the pier promenade back and forth for various reasons.

People also stay beside the pier during warmer weather to spend a day at the beach.

Fauna

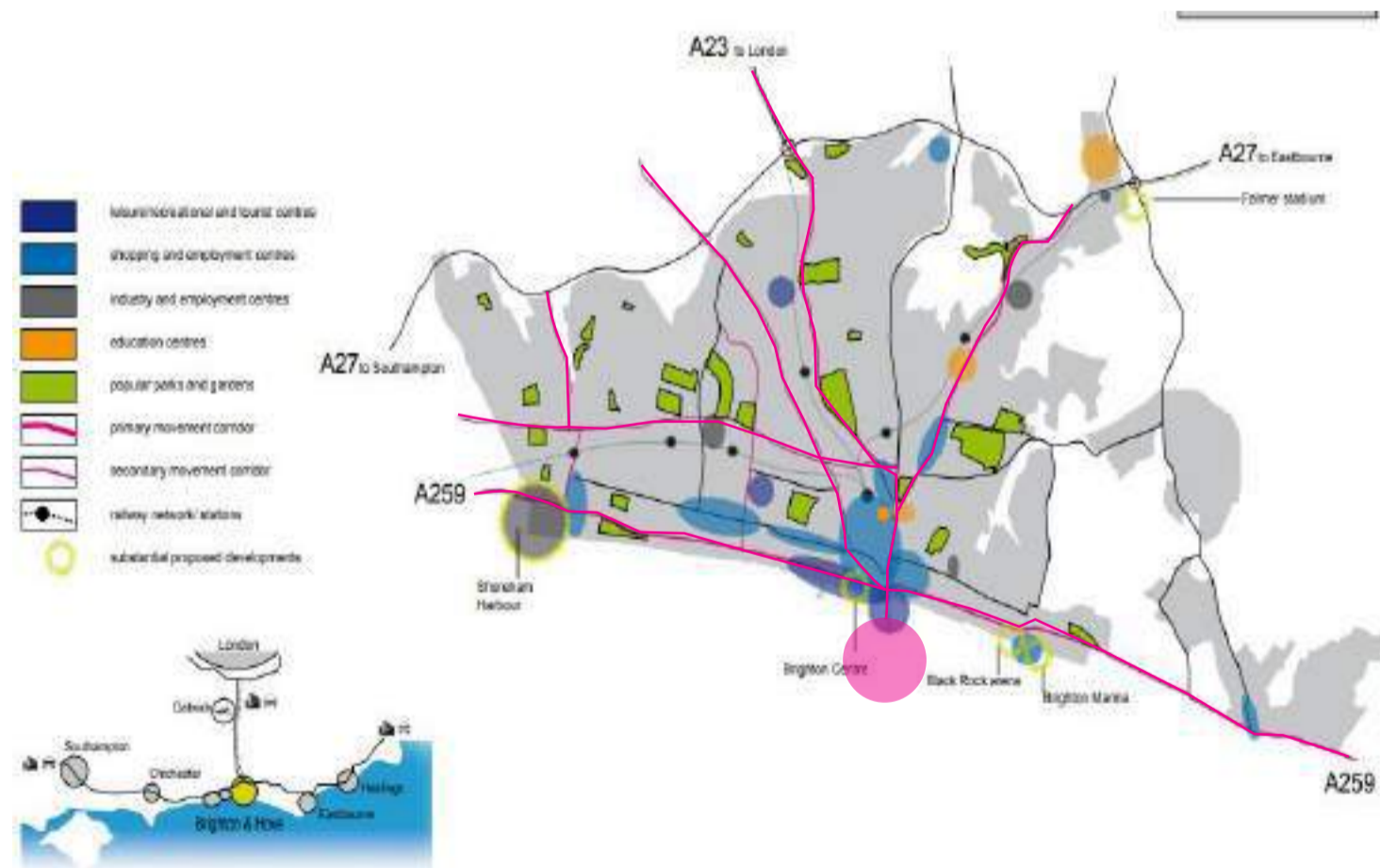


Some people intend to see the sunrise and sunset near the pier, while others await to see the starlings too. Like a cloud of celebration in Brighton skies and around the pier. Here we can also relate how linearity is hitting with organic forms on the pier.

Birds starlings sightseeing is during the following months:
September (sometimes) - October - November - December - January - (End in February)

Reference: BULLMORE, H. 2020. When is the best time to see Brighton starling murmurations? [Online]. Available: <https://www.theargus.co.uk/news/19140495-best-time-see-brighton-starling-murmurations/> [Accessed November 2021].

Movement



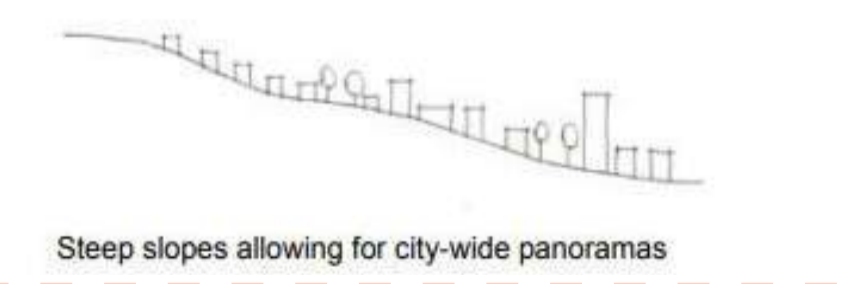
Reference: COUNCIL, B. H. C. 2009. Brighton & Hove Urban Characterisation Study [Online]. Brighton & Hove City Council. Available: <https://www.brighton-hove.gov.uk/content/planning/heritage/urban-characterisation-study> [Accessed November 2021].

Approaches to Brighton from London, Hastings and Southampton including the inner corridors in Brighton lead to recreation and leisure of Brighton located at the seafront. The pier one of Brighton's landmarks is also seen as focal point that connects the inner and outer towns and cities to nature.

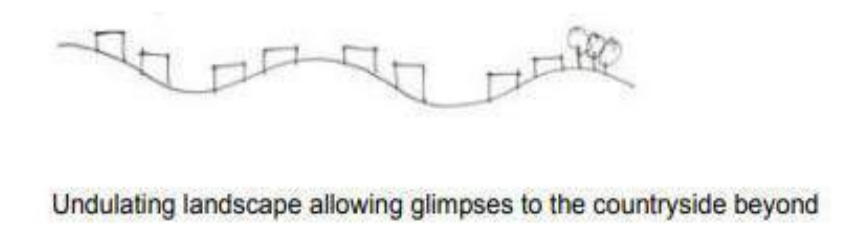
Visual Character



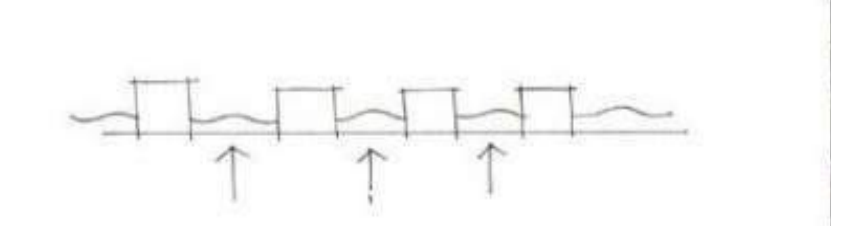
Developed valleys with views out to surrounding downland



Steep slopes allowing for city-wide panoramas



Undulating landscape allowing glimpses to the countryside beyond



Gently sloping landscape allowing glimpses down to the sea

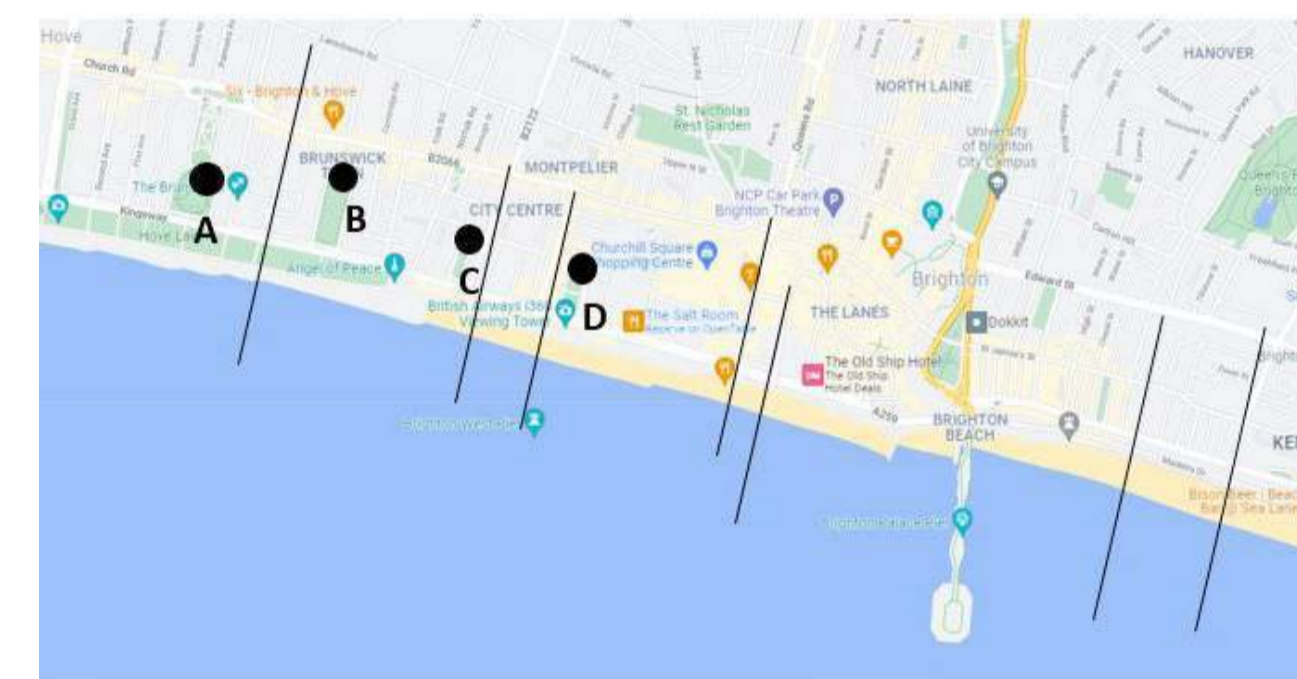
Reference: COUNCIL, B. H. C. 2009. Brighton & Hove Urban Characterisation Study [Online]. Brighton & Hove City Council. Available: <https://www.brighton-hove.gov.uk/content/planning/heritage/urban-characterisation-study> [Accessed November 2021].

Relationship between topography & views

Part of Brighton's topography includes slopes that overlook at one point which is the sea. Similar to how the pier is which is a one line that hits and goes into the sea visually and physically.

The image represents the urban plan of Brighton's seafront. Relationships between solid and void and how there is a space between building blocks for the breeze to pass through and for the eyes to see the sea at any point on the coastline.

Urban Tissue



Reference: Google Maps 2021

Linearity is widely seen in the urban tissue of Brighton and Hove. All the busy streets of the city seem parallel and when they meet the seafront. Extended views to the sea are also seen throughout the following squares below.



A - Palmeria Square



B - Brunswick Square



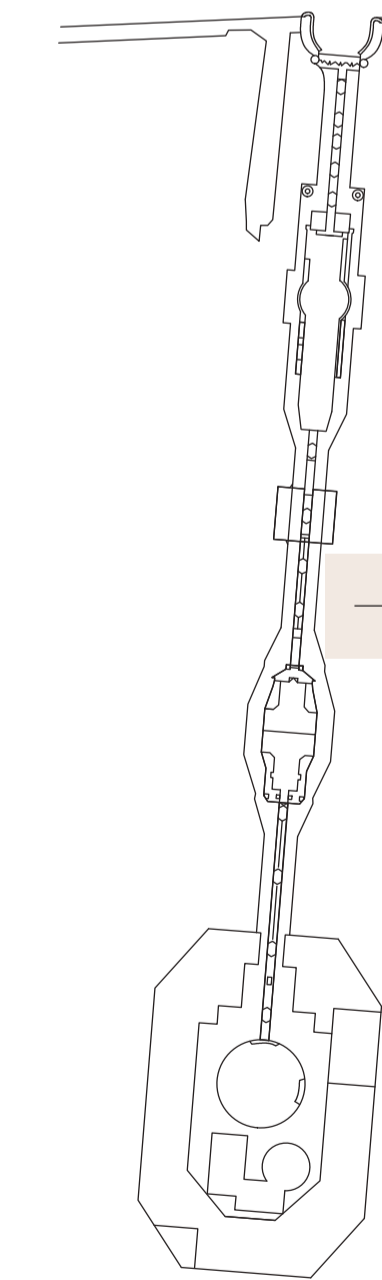
C - Bedford Square



D - Regency Square

A - WINKWORTH, 2021. Palmeria Square [Online]. Available: <https://www.winkworth.co.uk/properties/sales/palmeria-square-hove-east-sussex-bn3/61N180222> [Accessed November 2021].
B - <https://www.brunswicksquarehotel.co.uk/>
C - <https://www.studentbrighton.co.uk/accomm--odation/bedford-square-beds-studios/>
D - https://www.tripadvisor.co.uk/LocationPhotoDirectLink-g186273-d264214-i99601685-Prince_Regent_Hotel-Brighton_East_Sussex-England.html

Project Location



Project's Location

- Reasons:
- Less wind
 - Morning Sun
 - East and West views for the building part below the pier.
 - A private separate walkway that connects to nature and lead's to the unit.
 - Sea view
 - Accessible still to the pier
 - Quiet & private

Inspiration Research: Serpentine Gallery Pavilions

Serpentine Gallery Pavilion 2013 by Sou Fujimoto



Inspired by:

- A latticework pattern that forms a cloud organic form from a set of grid that is played with.
- Using polycarbonate circular transparent discs to shelter from rain that are barely seen and did not interfere with the design.
- It meets my concept of forming a building that is part of the landscape, in which it can be used at various levels.
- Inspired by the curiosity and experimentation that the pavilion provides to its users; it is like a playground (bars), some steps and other places to see.
- Steps are part of the furniture. Flexibility of spaces is very important.
- The structure looks very lightweight and merges perfectly with nature.

- Describing his design concept, Fujimoto said: "For the 2013 Pavilion, I propose an architectural landscape: a transparent terrain that encourages people to interact with and explore the site in diverse ways. Within the pastoral context of Kensington Gardens, I envisage the vivid greenery of the surrounding plant life woven together with a constructed geometry. A new form of environment will be created, where the natural and the man-made merge; not solely architectural nor solely natural, but a unique meeting of the two."¹



If the Serpentine pavilion was placed in the pier context, it is also able to provide people with various experiences and views.

The central hollow space of the pavilion is closer to the water, it could be an enclosed private zone for dwellers to swim.

High levels of the pavilion can be used for observation purposes and since they are at same level with the pier ground, the latter could be dedicated more for the public.

The structure goes smoothly with the geometry of the pier and the organic forms of fauna and climate conditions on the pier.

References:
¹SERPENTINE. 2013. Serpentine Gallery Pavilion 2013 by Sou Fujimoto [Online]. Available: <https://www.serpentinegalleries.org/whats-on/serpentine-gallery-pavilion-2013-sou-fujimoto/> [Accessed October 2021].
 ETHERINGTON, R. 4 June 2013. Serpentine Gallery Pavilion 2013 by Sou Fujimoto. dezeen. dezeen.
 PORTILLA, D. 2013. Serpentine Pavilion / Sou Fujimoto. ArchDaily.

Serpentine Gallery Pavilion 2018 by Frida Escobedo



Inspired by:

- Little spaces that happen one step to another
- Multiple entrances
- a gallery space and then a second corridor that leads to another space
- You can see sometimes planes and sometimes you see diagonals. Sometimes you'll have intimate spaces and sometimes there will be collective spaces
- Opaque and transparent depending on the light hitting.
- The alignment in the ceiling is parallel to the Greenwich meridian and you could experience time in the pavilion.
- Corridor facing pool and you can see the reflection of the water
- Material: simple and common (concrete roof tile)

Produced locally and creating a pattern – using simple material in a very sophisticated way it helps to create lattice instead of a wall

- It also is opaque in some ways and inspired by arab privacy
 Breeze wall play a double wall
 Juxtaposition layering (putting things side by side and on top of one another)



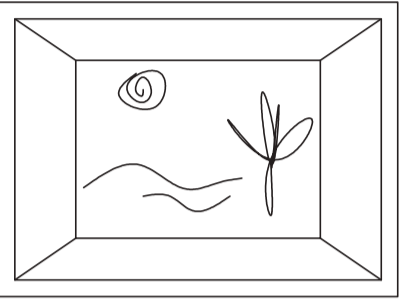
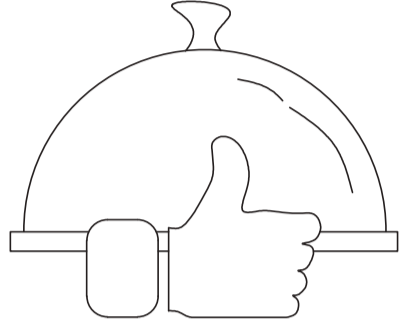
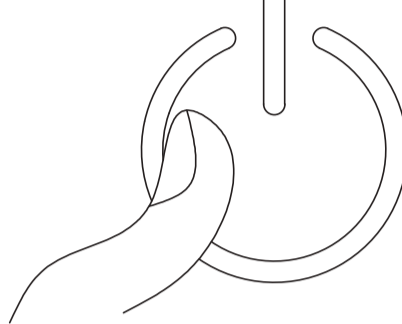
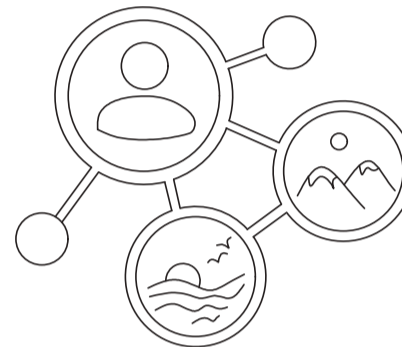

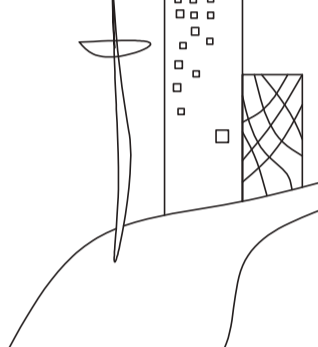
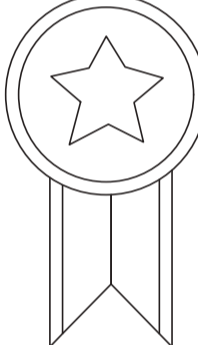
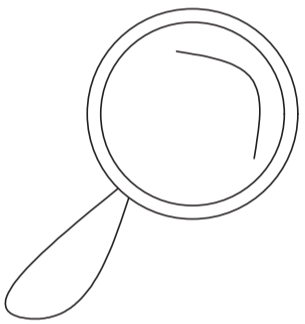
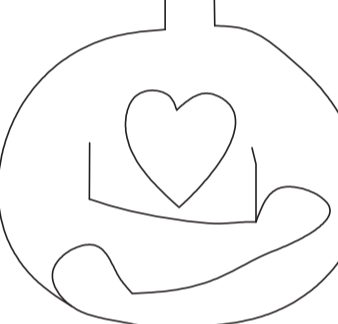
Reference
 SERPENTINE. 2018. Architect Frida Escobedo, celebrated for dynamic projects that reactivate urban space, was commissioned to design the Serpentine Pavilion 2018. [Online]. Available: <https://www.serpentinegalleries.org/whats-on/serpentine-pavilion-2018-designed-frida-escobedo/> [Accessed October 2021].

Holiday Makers

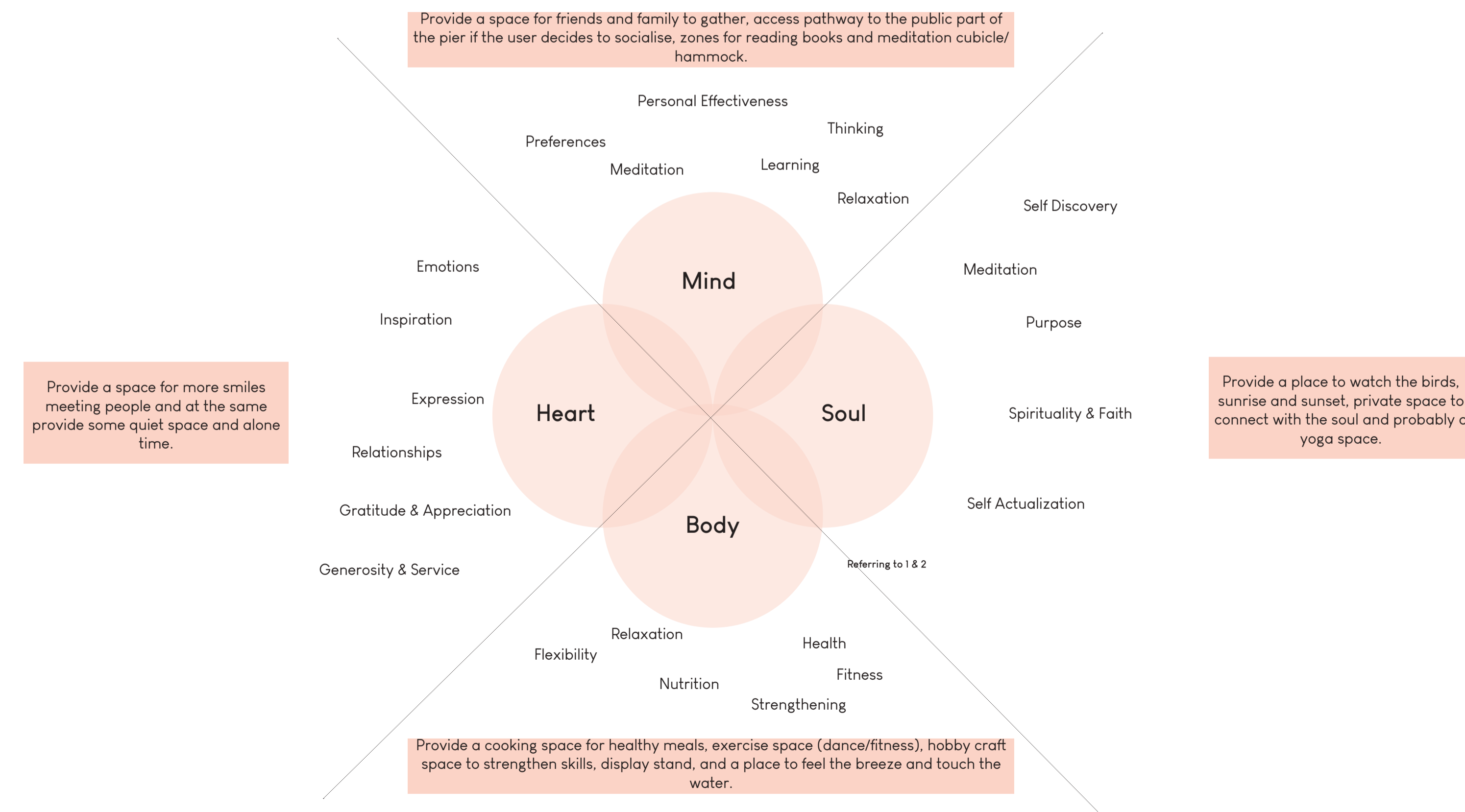
Definition of the word "holiday"

Holiday (noun)
a time when someone does not go to work or school but is free to do what they want, such as travel or relax
(Cambridge Dictionary, 2021)

What makes a place a holiday?

 Nice views	 Good food	 Switching off from work, calls, emails, noise, crowd and busy life
 Connection with nature	 O	 Access to the city, landmarks, events when wanting to
 A special place that fits my preferences	 A place for exploration	 Taking care of the self

Core Dimension Dynamics incorporates all 4 facets of self: Mind - Body - Heart - Soul



References:
1 ODYSSEY, D. S. Core Dimension Dynamics [Online]. Available: <https://destinyodyssey.com/core-dimension-dynamics/> [Accessed December 2021].
2 MOTT, T. July 17, 2020. Health of Our Whole Person - Mind, Body, Heart, and Spirit [Online]. Available: <https://www.linkedin.com/pulse/health-our-whole-person-mind-body-heart-spirit-turpin-mott/> [Accessed December 2021].

Project Scope

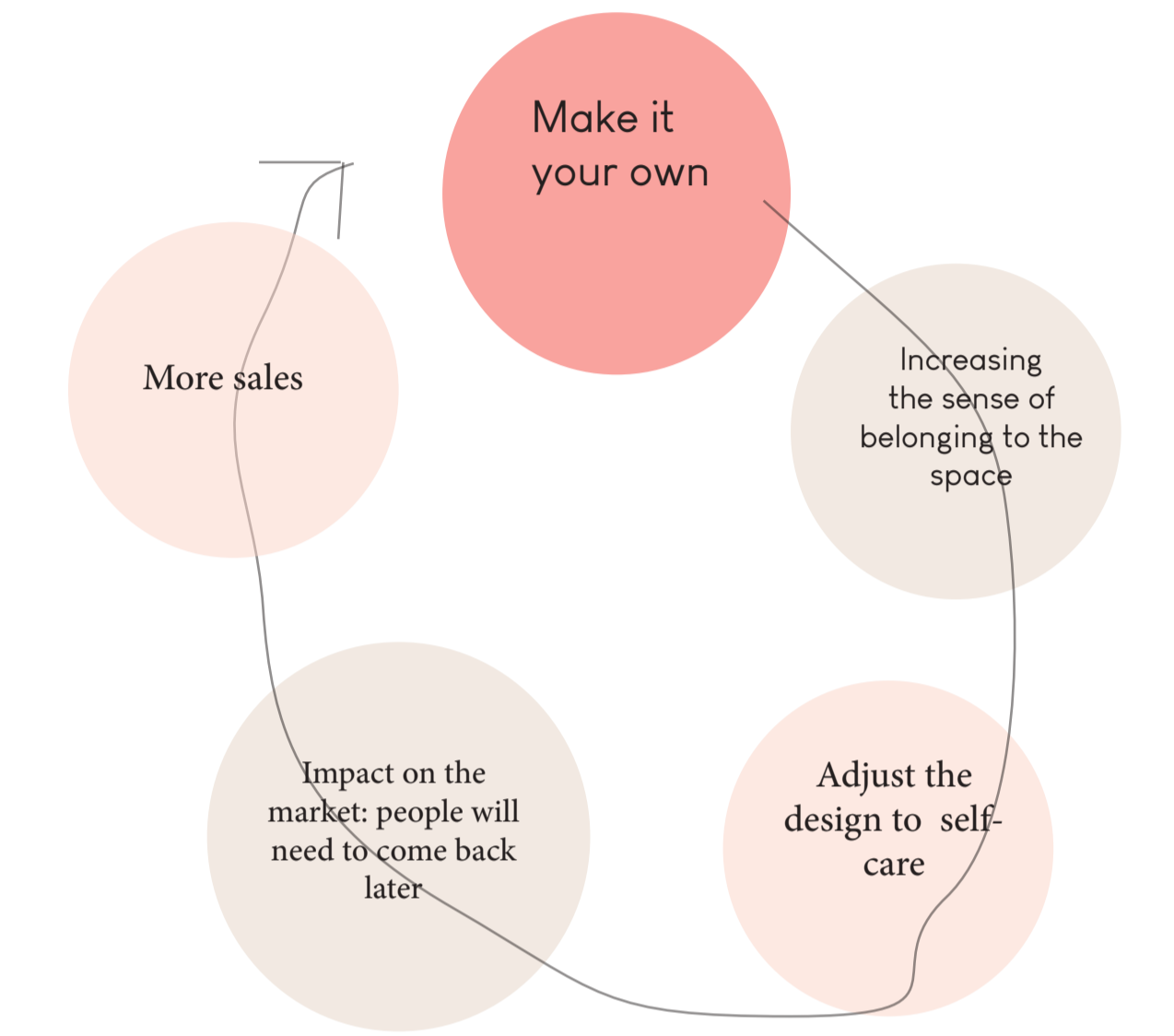
A "holiday"

A holiday is a place to escape to from reality, it aids to change and a transitional space where I could spend a couple of days in to be able to start a new life after moving out of it. It's like a recovery machine that you walk into.

Before moving forward for any change in life (new job, new house, etc.), it is best agreed to take care of the self and invest in the self.

Features of the self-care machine

A "you" matter approach is followed, where the user can change part of the design depending on their usage and preference. It is a space that gives more control to the user. Flexibility in design is an example of interaction and engagement of the occupant with the space.



The machine is for self-care, thus it aims to trigger personal development by optimizing personal growth and effectiveness. In philosophy, it is a principle that is applied to make us grow known by the "Core Dimension Dynamics". It is based on working on four factors to exert our energy for being more effective afterwards.¹

Scientists, Council & Community

Researchers concerns in England: Erosion

56% of coastline is at risk and especially the East Coast.

"A shocking map reveals the English coastal towns most likely to collapse into the sea as shores erode over the next 20 years."

"Alongside this, around a third of the coast in the south of England is being actively eroded - threatening such areas as Norfolk, Suffolk and East/West Sussex."³

What is coastal erosion?

"The occurrence of coastal erosion is dependent upon the balance between the resistance, or erodibility, of the coastline and the strength, or erosivity, of the waves and tides affecting the area."³

Researchers on the pier will have to measure:

- Measure tides and sea levels
- See if there is a change in surface elevation
- Sediment collection to study
- Wave study (height, period, direction, fetch)
- Groundwater
- Wind, precipitation

What sediments do?

Sediments will increase turbidity and will block sunlight and photosynthesis for plants. Reduces oxygen. And increases water temperatures from water and affect water animals.⁴

When is erosion highest storms?

During February and March.⁴

How do they test samples?

1- Collecting samples:

A vibra-corer - a device which vibrates at a high frequency to push a plastic pipe two metres into the thick mud on the seabed - to retrieve undisturbed samples.

2- Labelling the samples and testing them

The samples were then x-rayed, and slices of each core were dated and fingerprinted to identify where the mud came from, and what type of land practice caused it to come loose.⁵

Note: sediments could be rocks, mud, shingles, seashells



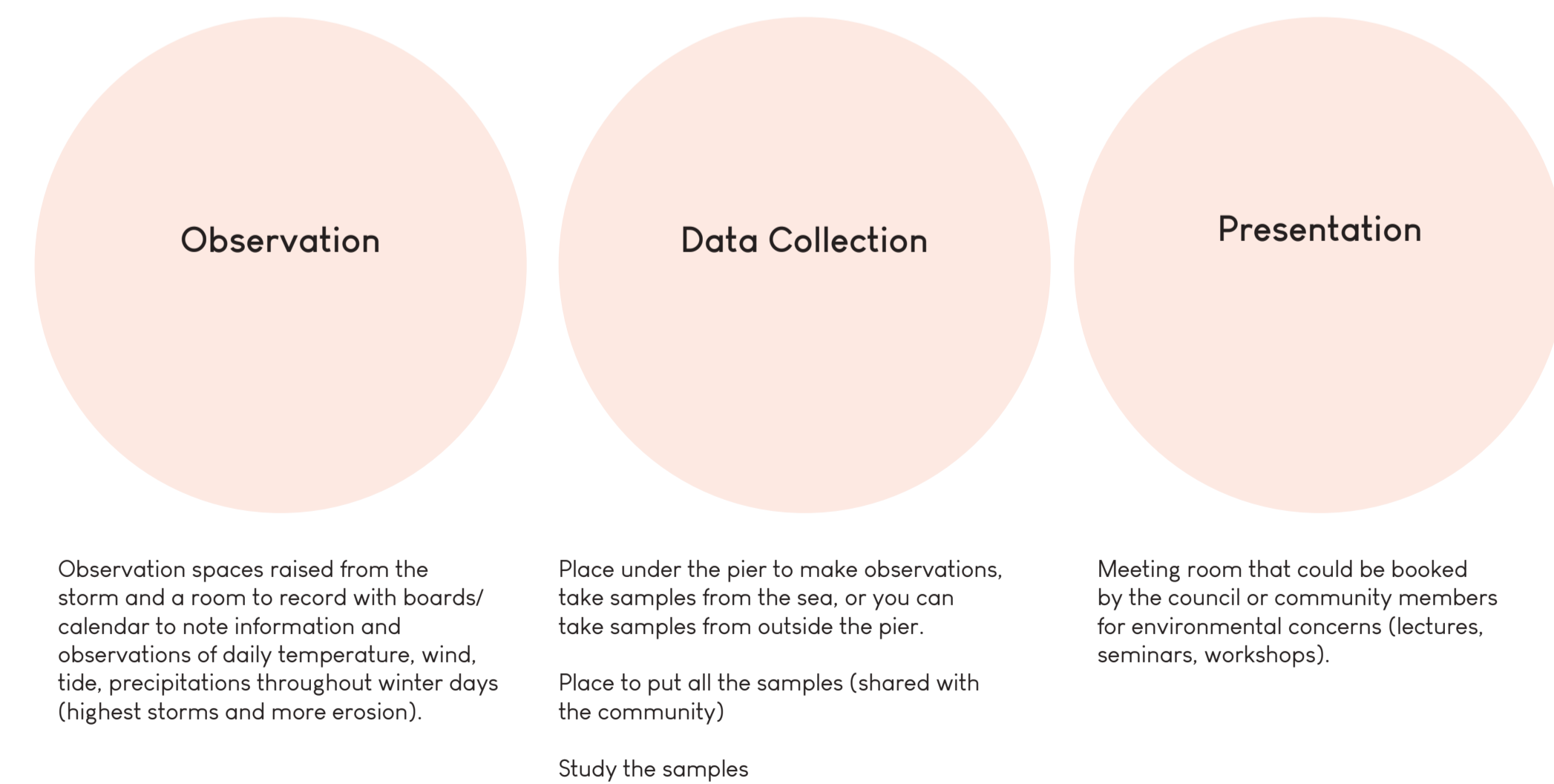
A map revealing the English coastal towns that are most likely to collapse into the sea as shores erode over the next 20 years.³



Video showing how sampling is taken by a machine.⁵

Sediments collection for testing.³

What to consider in the program?



Reference
3 RANDALL, I. 2019. England's disappearing coastline: Shocking map reveals coastal towns at risk of being wiped out over next 20 years - and suggests 7,000 homes will fall into the sea by end of century. Available: <https://www.dailymail.co.uk/sciencetech/article-7702717/Shocking-map-shows-UK-coastal-towns-risk-wiped-20-years.html> [Accessed 1 December 2021].
4 GEOGRAPHYPODS. Erosional Features [Online]. Available: <https://www.geographypods.com/12-coasts-management.html> [Accessed December 2021].
5 REPORTER, C. R. L. D. 2021. Erosion, farming and forestry identified as Sounds mud sources [Online]. National Local Democracy Reporting. Available: <https://www.stuff.co.nz/national/politics/local-democracy-reporting/300426133/erosion-farming-and-forestry-identified-as-sounds-mud-sources> [Accessed December 2021].

Inspiration

User-friendly & Flexible Designs

NA House, Tokyo by Sou Fujimoto



Figure 1



Figure 2

It was Sou Fujimoto's inspiration for the Serpentine pavilion. A couple's house designed on a limited meter squared lot. Slabs were in furniture size and overlapped and shifted to create a tree house like feel. Each slab had a specific function and users were capable to experience the space at different levels. The house also worked as having single rooms and collective rooms at the same time. Other means of flexibility is shown in this example.



Figure 5

A sky garden in the centre of Istanbul engaged it's users by pulling down the pots, experiencing the botanical species and playing with the layout of the display by lifting them up at different levels. The garden was shaped by the users and very friendly.



Figure 6

Modular 6x6 house by Younghun Chung created a merging of space and promoting functionality. Some rooms are kept undetermined for the user to shape. Another example of integrating nature and users to meet climatic changes and people's needs.



Figure 7

Street engaging multi-tiered platform in Croatia, engaged people to interact with the space, use the space for different purposes, get together and relax. I was inspired by the simplicity and the flexibility of the structure.

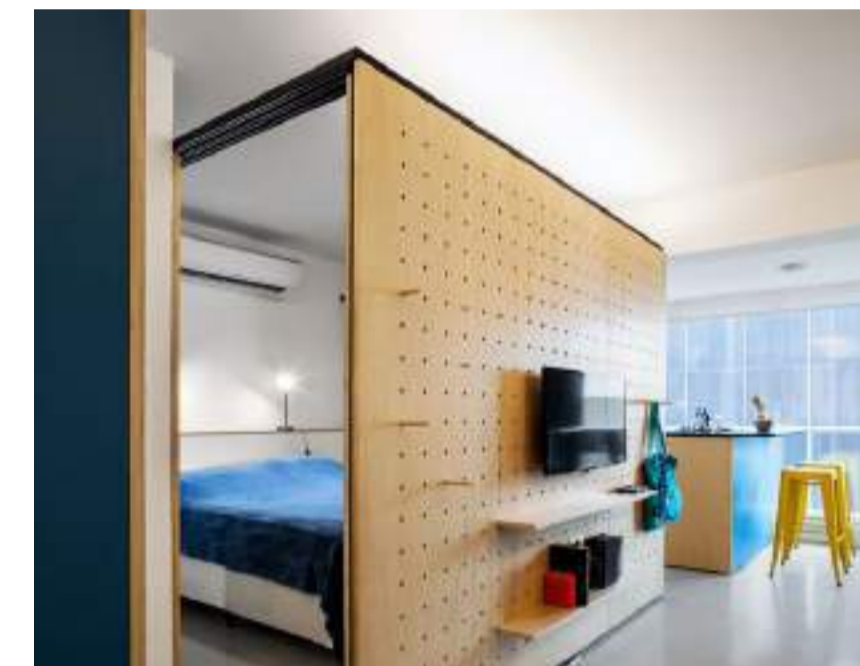


Figure 8

Embracing new changing demands in the modern world. A very user-friendly and transformable furniture and space that considers the user and adjust easily to fit their needs. The image presents one simple example of how a board can be adjusted. Further great examples are present in the reference for more contemporary Brazilian flexible interiors.

Lattice Book House by Xiaofeng Zhu & Shan Liang



Figure 3

Lattice Book House was capable to create a scene between artificial (structure) and nature (forest). Lattice structure was used to display books as well.

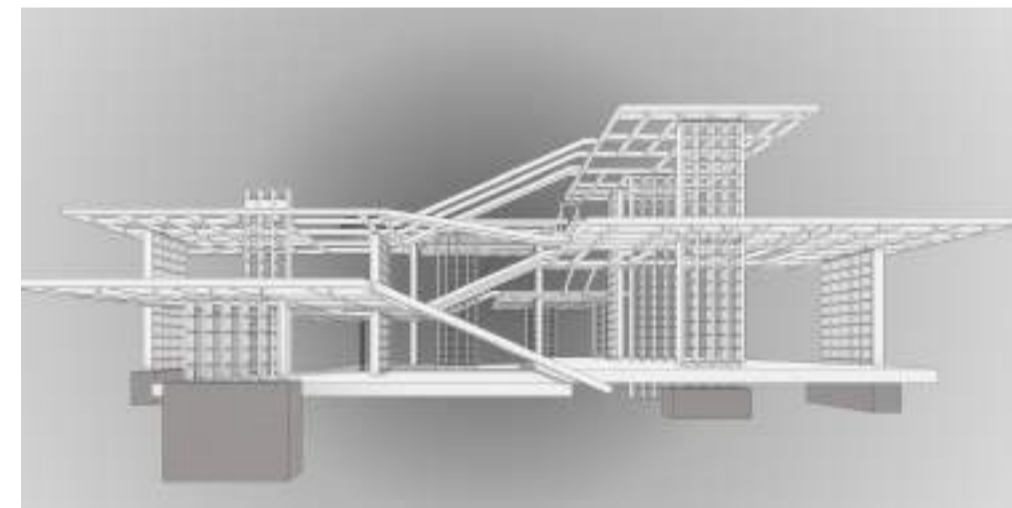


Figure 4



Figure 9

Farming Architects designed the library and city farm hybrid as a way for children to learn about self-sustaining ecosystems. What inspired me was the flexibility of the structure itself, where it can be used as decorative purposes, used as furniture and storage. It is easily accessible by children to play, lay planters, sit and store their books.



Figure 10

A summer complex housing located in Bodrum. What inspired me was its great integration with nature and the flexibility of the use of space to openness.

Wakehurst - Kew Gardens Glow Exhibition 2021



Type of shingles and samples that can be gathered by scientists and community members to study in my building.



A case study of how parts of my building would look over time and due to climate conditions.



Example of what might be in the glass pool after long periods of storm and maintenance. Seaweed and other water creatures might grow inside.



All exhibition images are author's own.

Figures References:

- Figures 1 & 2 ARCHDAILY. 2021. House NA / Sou Fujimoto Architects [Online]. Available: <https://www.archdaily.com/230533/house-na-sou-fujimoto-architects> [Accessed December 2021].
- Figures 3 & 4 WONG, J. 2016. Lattice Book House / Scenic Architecture Office [Online]. ArchDaily. Available: <https://www.archdaily.com/885791/not-ready-lattice-book-house-scenic-architecture-office> [Accessed January 2021].
- Figure 5 YERÇEKİM. 2016. SO? architecture suspends interactive sky garden in istanbul's ortaköy square [Online]. DesignBoom. Available: <https://www.designboom.com/architecture/so-architecture-and-ideas-sky-garden-istanbul-06-09-2016/> [Accessed December 2021].
- Figure 6 KHUĐAIRI, S. 2014. younghun chung visualizes modular 6x6 house [Online]. DesignBoom. Available: <https://www.designboom.com/architecture/younghun-chung-visualizes-modular-6x6-house-02-15-2014/> [Accessed December 2021].
- Figure 7 STINSON, L. 2019. Tiered platforms create nifty street furniture [Online]. Curbed. Available: <https://archive.curbed.com/2019/2/21/18234143/public-furniture-street-rijeka-croatia> [Accessed December 2021].
- Figure 8 https://www.archdaily.com/952036/brazilian-interiors-8-projects-with-flexible-furniture?ad_medium_gallery
- Figure 9 ASTBURY, J. 2019. Climbing-frame library in Vietnam has a thriving aquaponics system [Online]. Dezeen. Available: <https://www.dezeen.com/2019/01/20/vac-library-farming-architects-hanoi/> [Accessed December 2021].
- Figure 10 HERNÁNDEZ, D. 2017. Bodrum Demirkuyu Houses Club House / Erginoglu & Cal lar [Online]. ArchDaily. Available: <https://www.archdaily.com/900685/bodrum-demirkuyu-houses-club-house-erginoglu-and-cal-lar> [Accessed December 2021].

Design Process

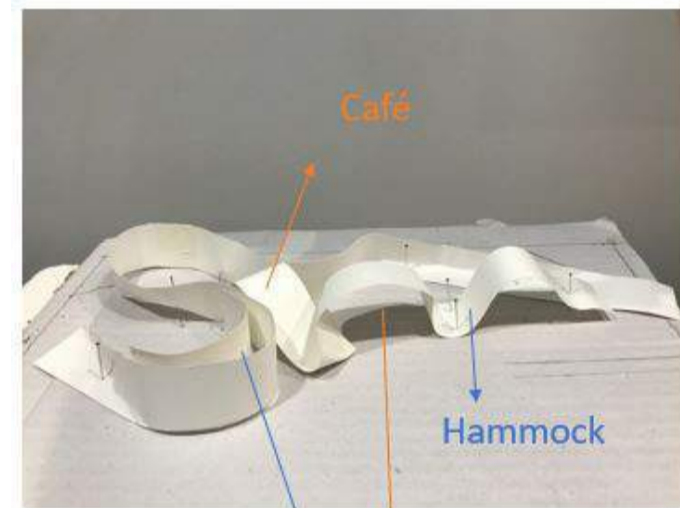


- Fingers extended to the water.
- Height variety of the ribbons allow sunlight movement where you could feel time.
- Each finger in the water is a specialized dwelling for certain visitors.

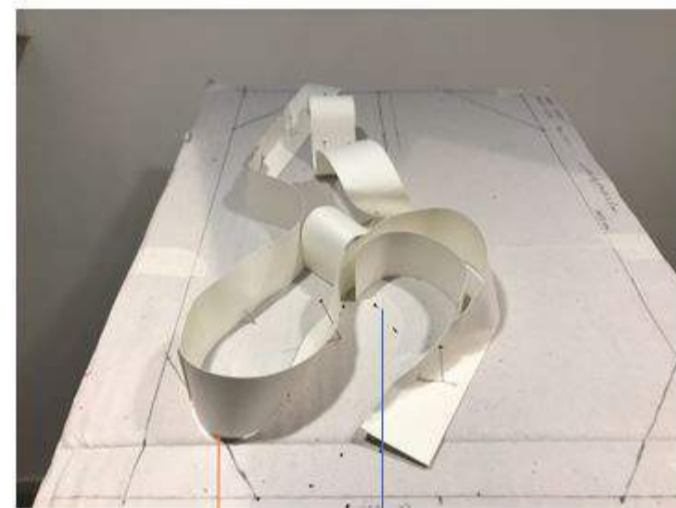


Swimmers' deck Researchers Yogis Starling watchers

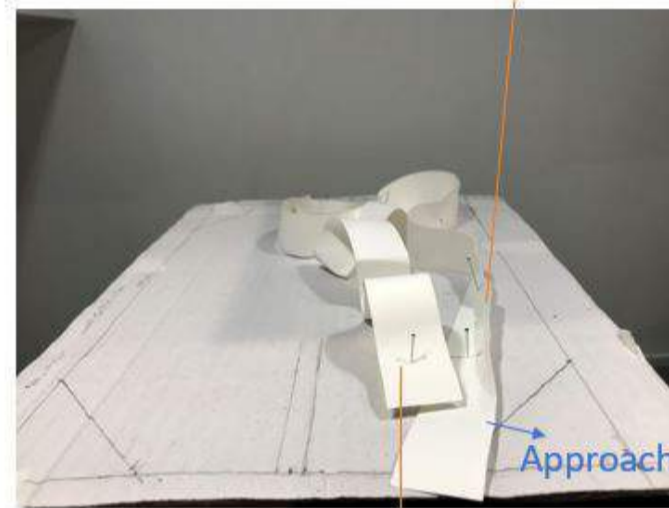
2



East Elevation
Café
Hammock
Semi-private areas for chats
Dwellings units



South Elevation
Gallery protected from the wind all year round

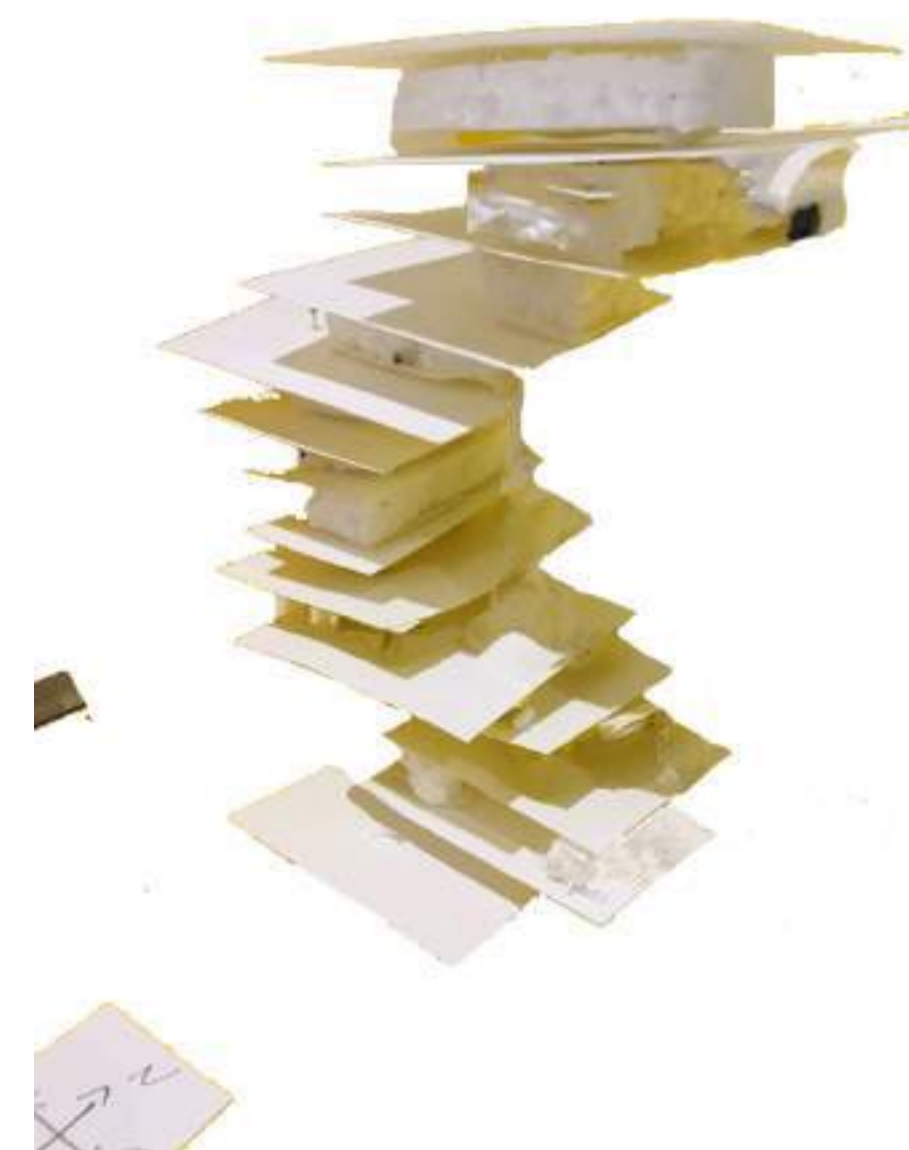


North Elevation
Seating for the people watching the activities on the pier

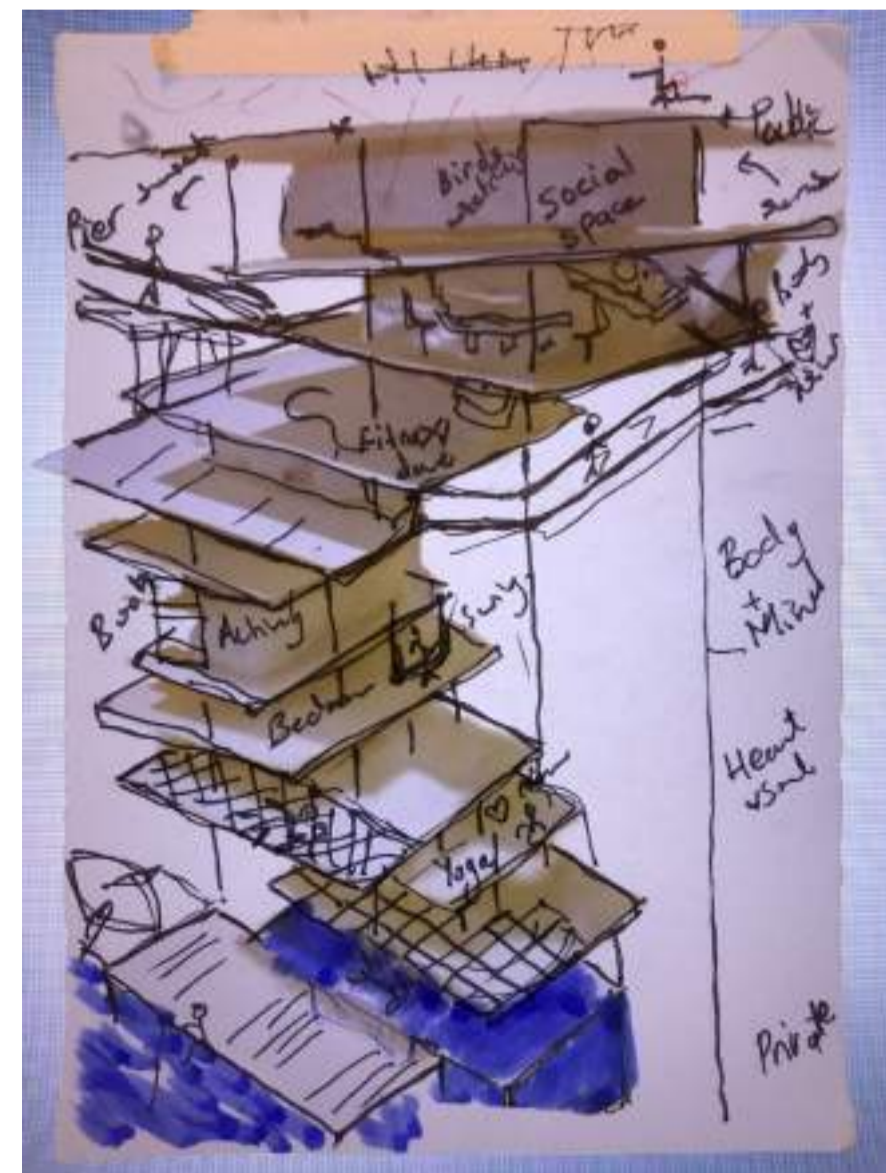
Cubicles on the corridor to see what is on the pavilion and to watch the water.

- Dwellings units with a round deck facing the water
- Privacy achieved

3

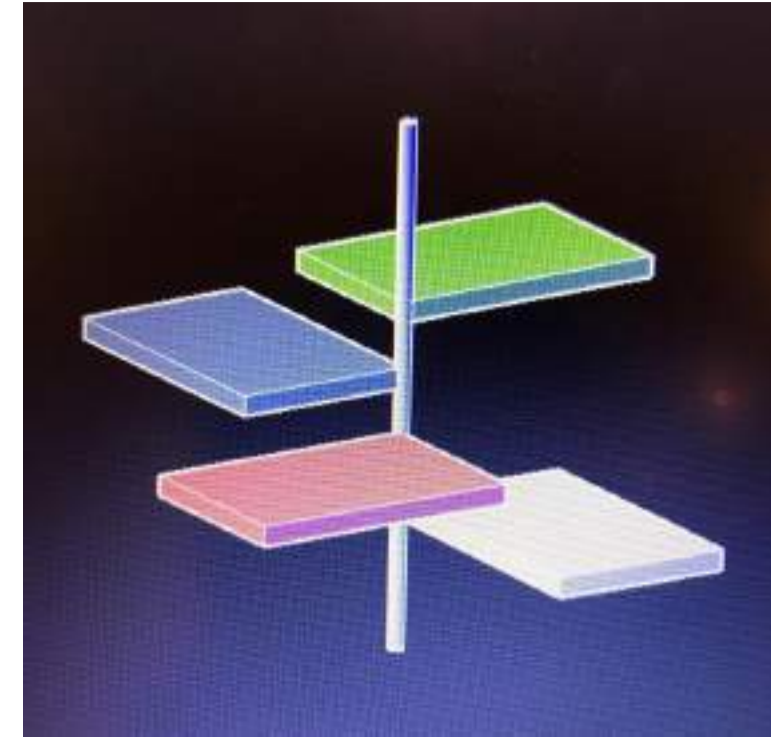


Taking the movement of the natural environment (starling) and stacking squares of various sizes to achieve a form. Aiming on providing various experiences on multi levels.

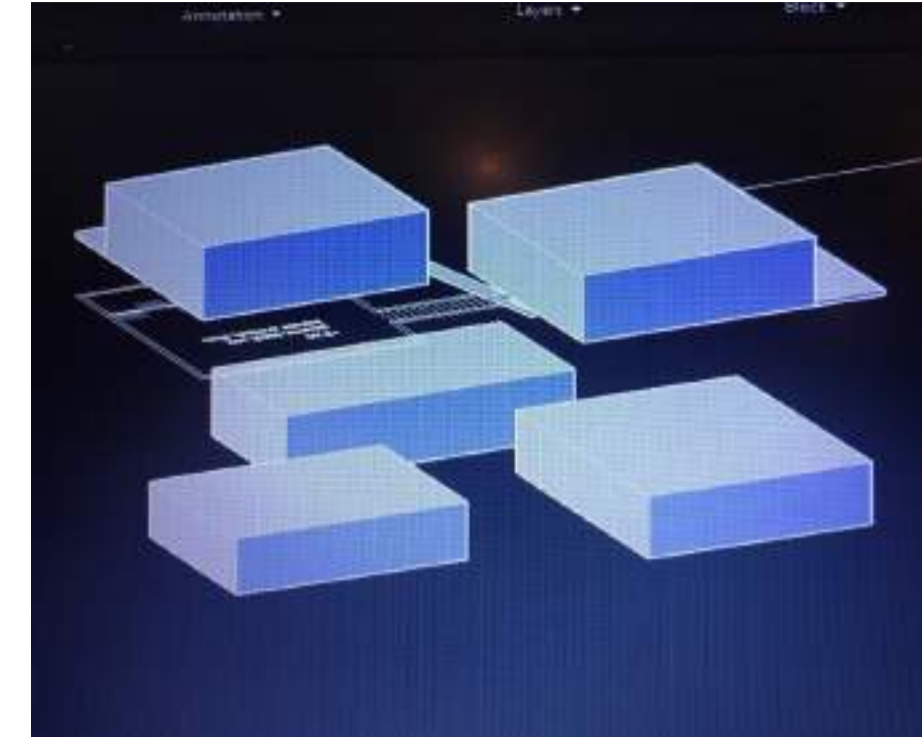


Creating a vertical graduation between what is public (at the top) and more city/ social related to what is private and more nature connected (at the bottom of the pier). Active and loud zones are at the top and the spaces gradually become quieter as you go down to meet the water.

4

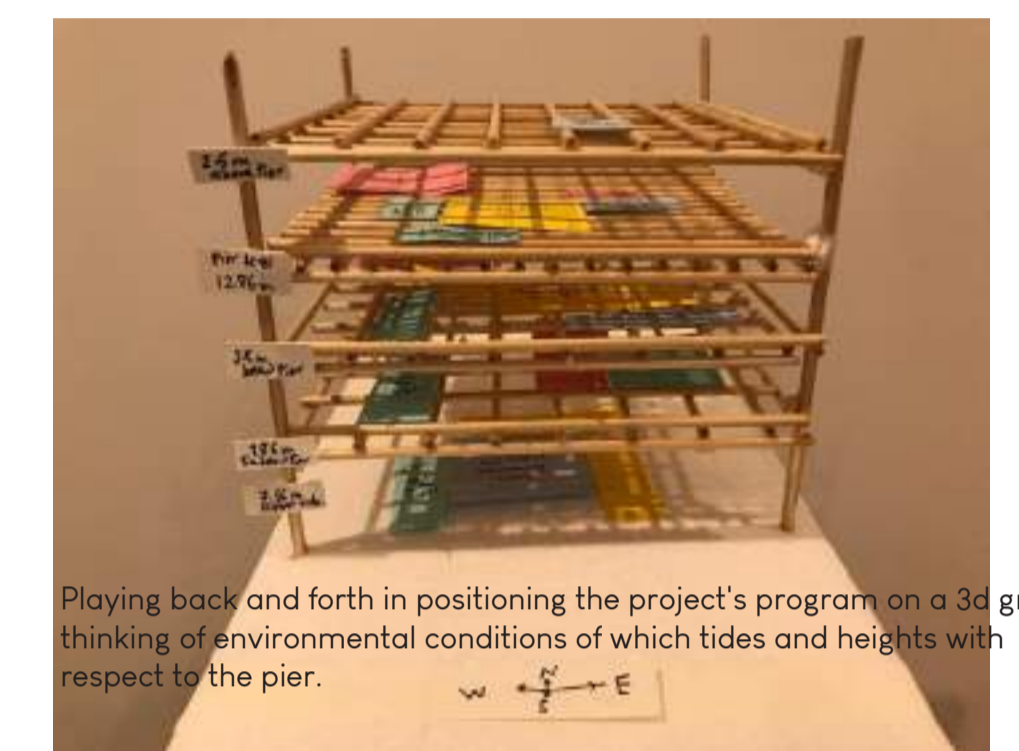


Simplifying the multiple squares into 4 rotative squares.



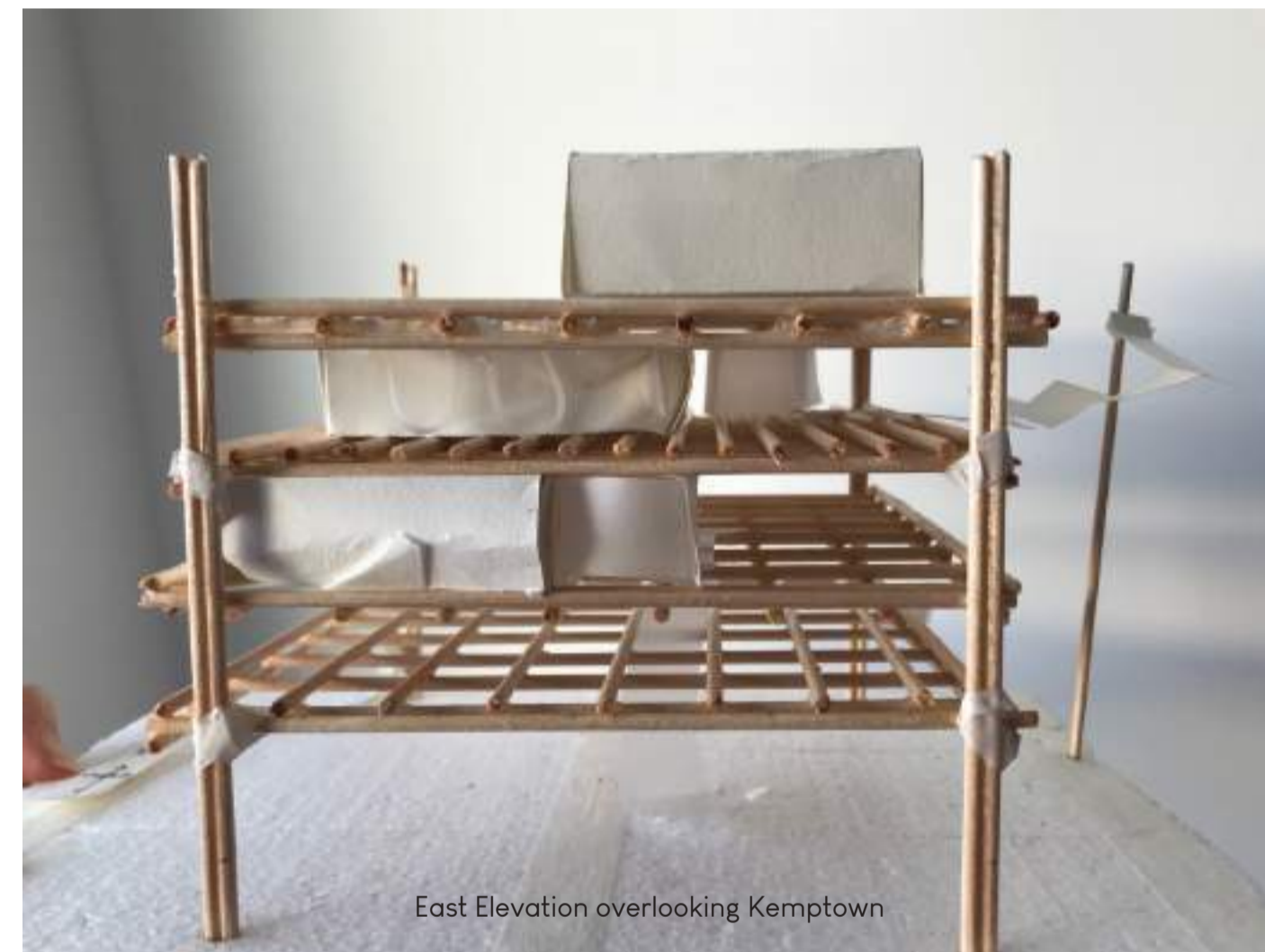
Overlapping the rectangular prisims/ cubes and indicating various functions in each and relating them together.

5



Playing back and forth in positioning the project's program on a 3d grid thinking of environmental conditions of which tides and heights with respect to the pier.

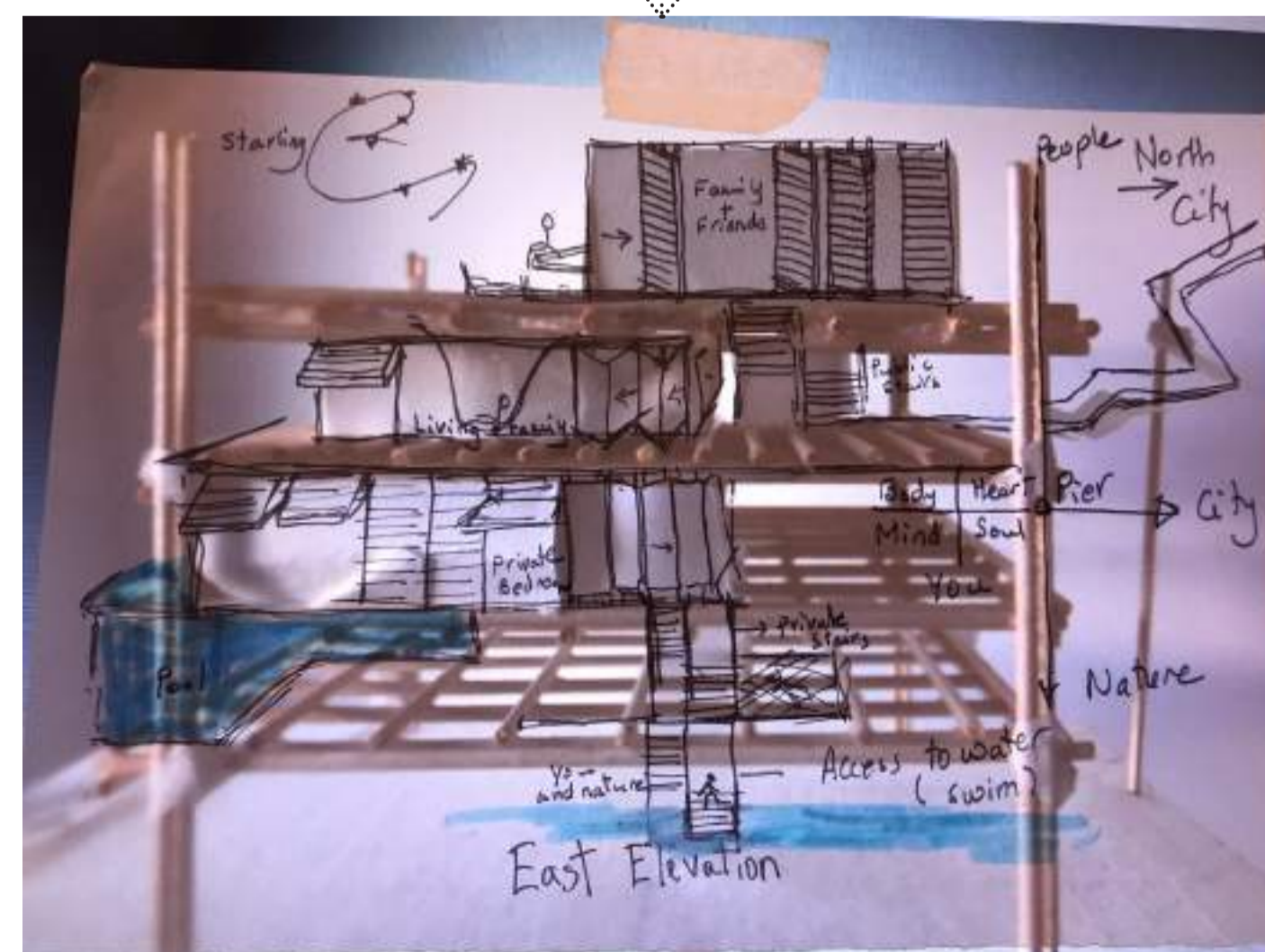
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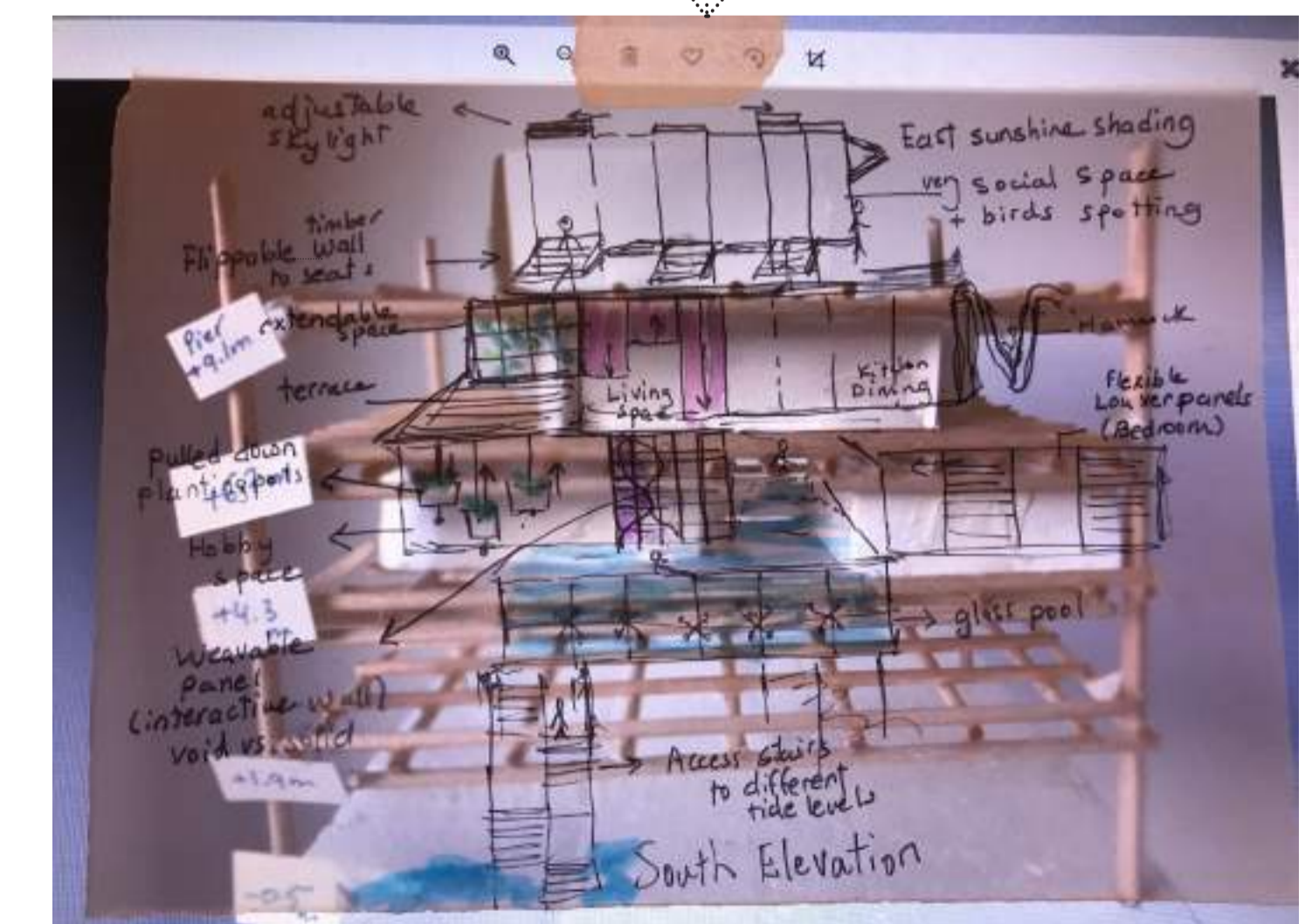
East Elevation overlooking Kemptown



South Elevation overlooking the water



East Elevation



South Elevation

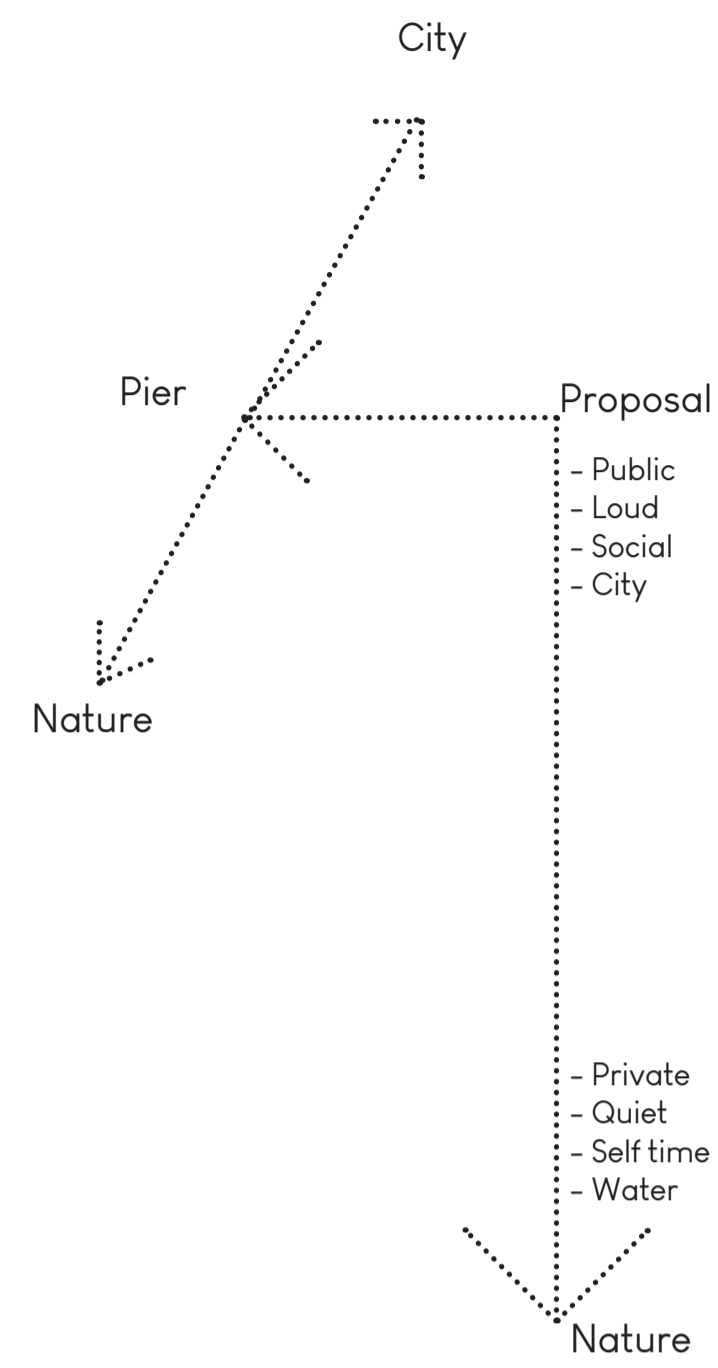
Design Concept

Creating a flexible space that can be used both ways in summer versus winter in addition to creating a space that is user friendly that considers the human and the environment in shaping space. The project considers 4 main aspects in designing for the dwelling which are the body, soul, heart and mind and 3 main aspects for the research centre which are observation, study and presentation.

The dwelling is a rented house suitable for couples, families and friends from various ages. It occupies a place to sleep for a maximum of 4 to 6. The research centre is mainly for scientists, but it includes a floor for community engagement if they wish to experience what it is like to test erosion. The building helps scientists to gather and observe samples from the building itself and off the building. It also includes a place for the council to rent for public events and science related exhibitions, workshops and seminars.

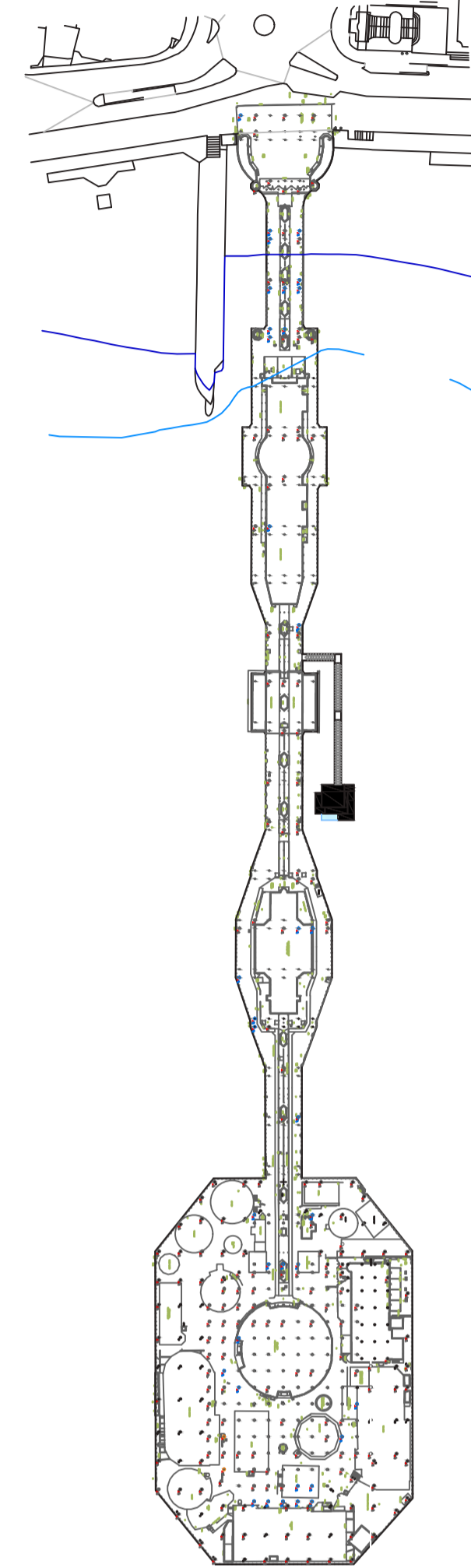
As the pier is a transitional space between city and nature on a horizontal level. The project elongates the latter transition on a vertical level.

The building is a place of exploration and discovery. It evolves around the user and it involves their engagement. It is a building that acts as a transition that transitions users from the pier (transition) to another transition from public to private into the views and into the water depending on how and when the user takes the decision to and in consideration of people's self health and development.

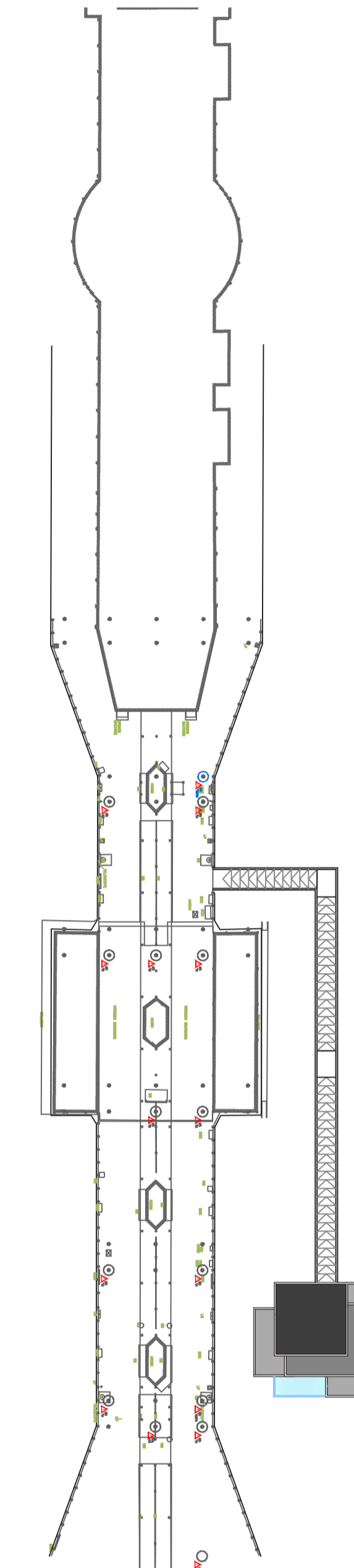


North Elevation - Entrance

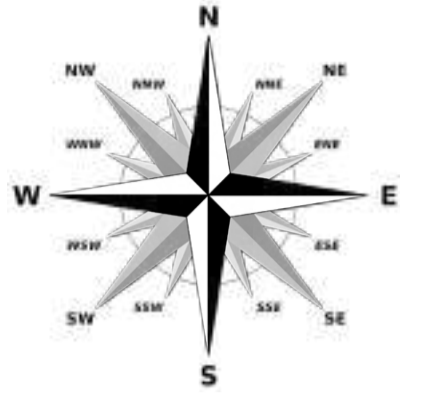
Design Proposal



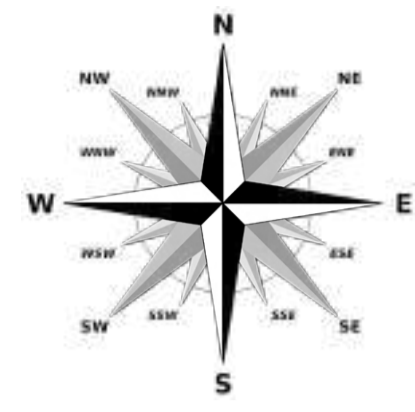
Site Plan (1/2000)



Top View (1/500)



Summer Dwelling

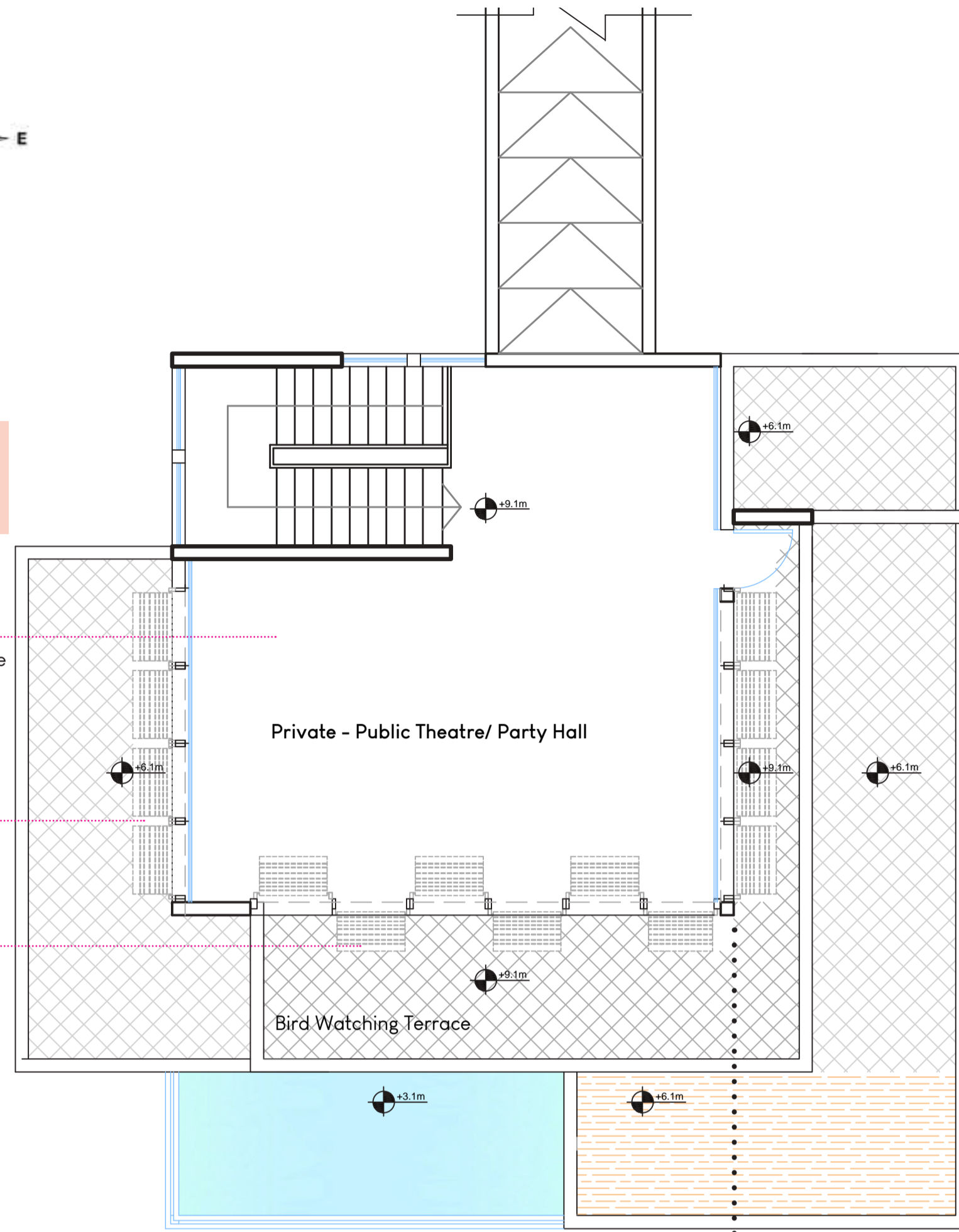


The floor can mostly be completely open, partially or completely closed.

A place to party or watch a movie for friends and family situated at the same level with the pier with panoramic views.

Foldable wooden doors that turn into overshades on both East and West.

Foldable wooden doors that fold into indoor and outdoor looking seats.



First Floor Plan (1/100)

Historical Influence:

Multi terraces were created as influenced by the Georgian Terraces 1780 AD when Brighton became a fashionable city.

Party hall is a place to see and be seen similar to why people visited Brighton in the past.

The private zones are situated below the pier level (ground and basement floors), which provide free views to nature.

If a dweller decides to connect with people and visit the city, he can accept visitors from the wider circle on the first floor or choose to access the ramp to reach the pier.

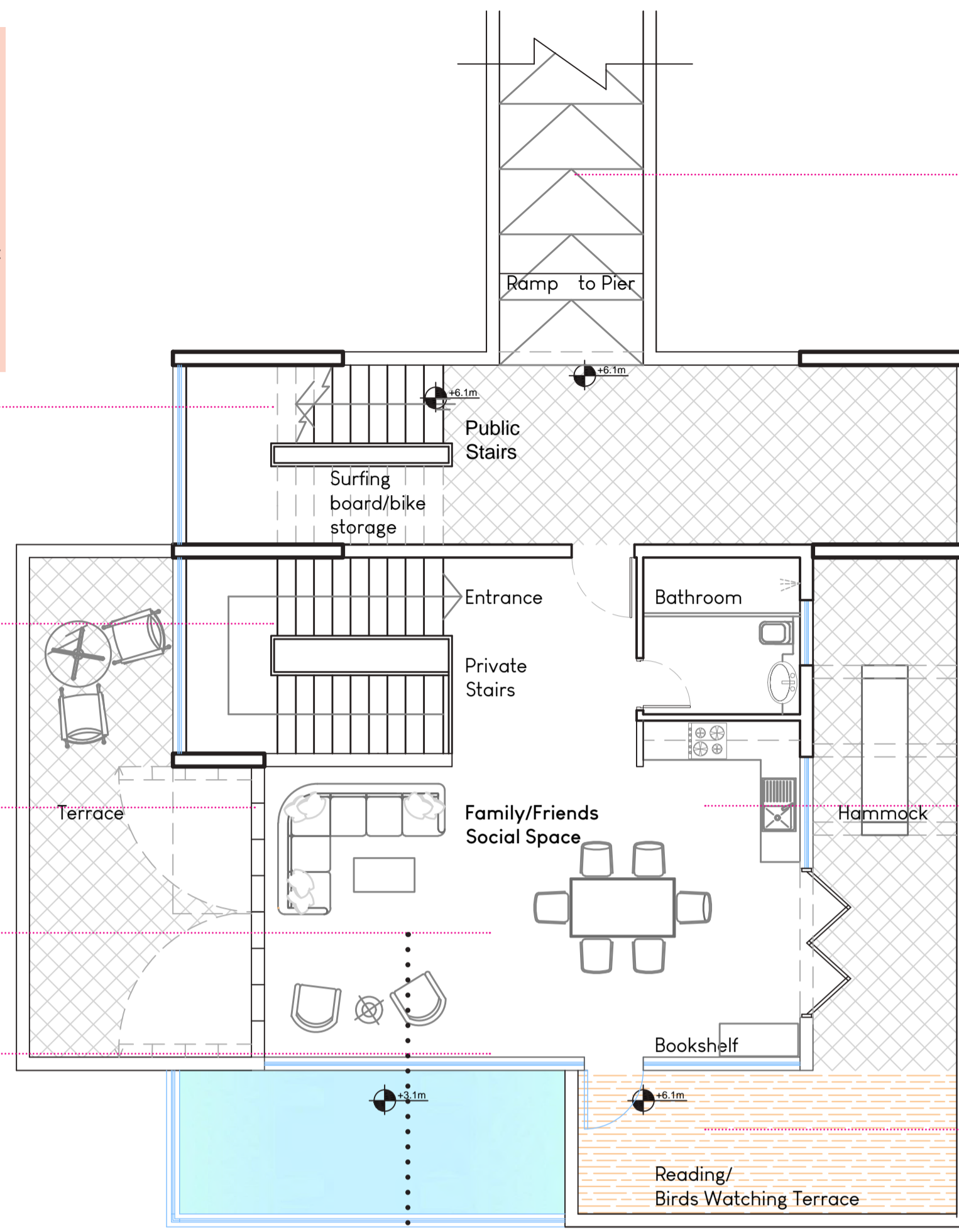
Public stairs

Private stairs

Extendable shelves like doors for expanding the living space and greater openness to nature.

Quieter social space for a smaller group. Healthy cooking facility (body, mind & heart).

Views to the water and pool and a place to see the sunrise and sunset.



Ground Floor Plan (1/100)

Historical Influence:

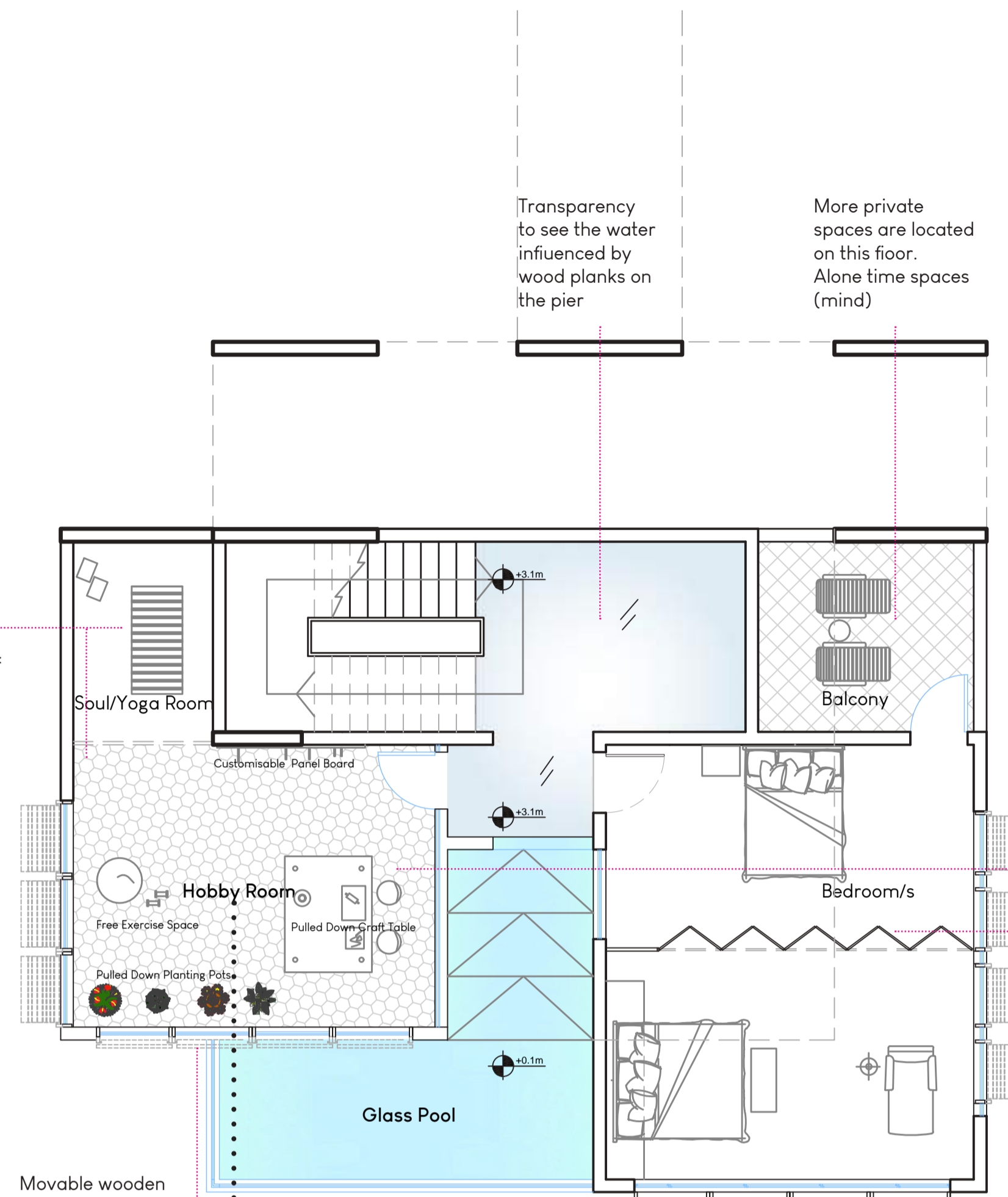
The pool and breeze control in addition to self-care is influenced by Brighton a place to get fresh air for bathing and healing purposes. (1750 AD). Brighton Baths (1769 AD)

A private ramp takes pedestrians into a walk in nature to reach the dwelling.

Providing a free personalised space for the soul, body and mind by developing skills of the self.

Kitchen located at a far point from the wind direction to prevent cooking smells indoors.

Morning terrace for reading and being mindful (mind, soul) with hammock and interactive wooden floor.



Basement Floor Plan (1/100)

Historical Influence:

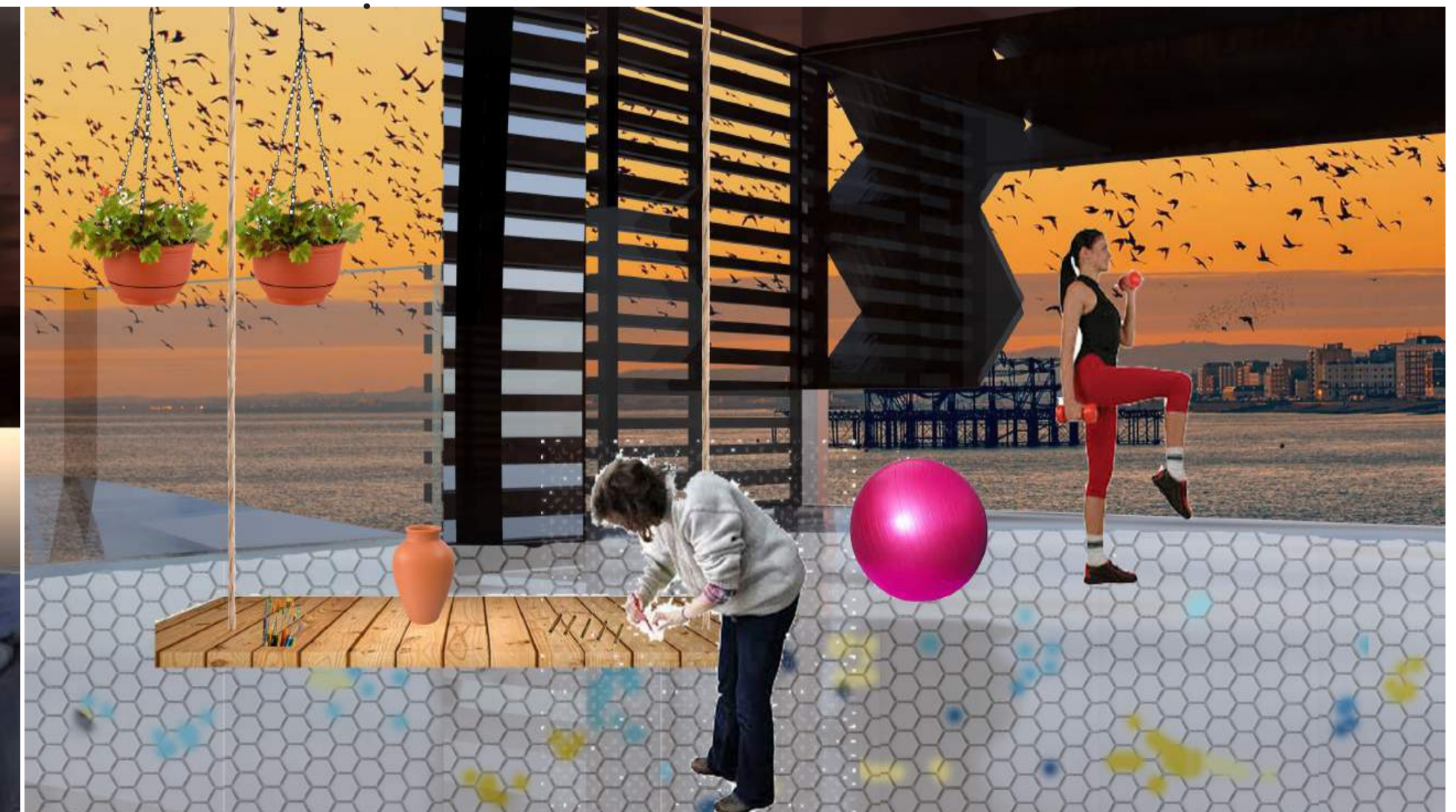
Quiet and alone space is influenced by Brighton being a place to escape the pressure of the city (1783 AD). A choice to not to be seen.



First Floor Terrace



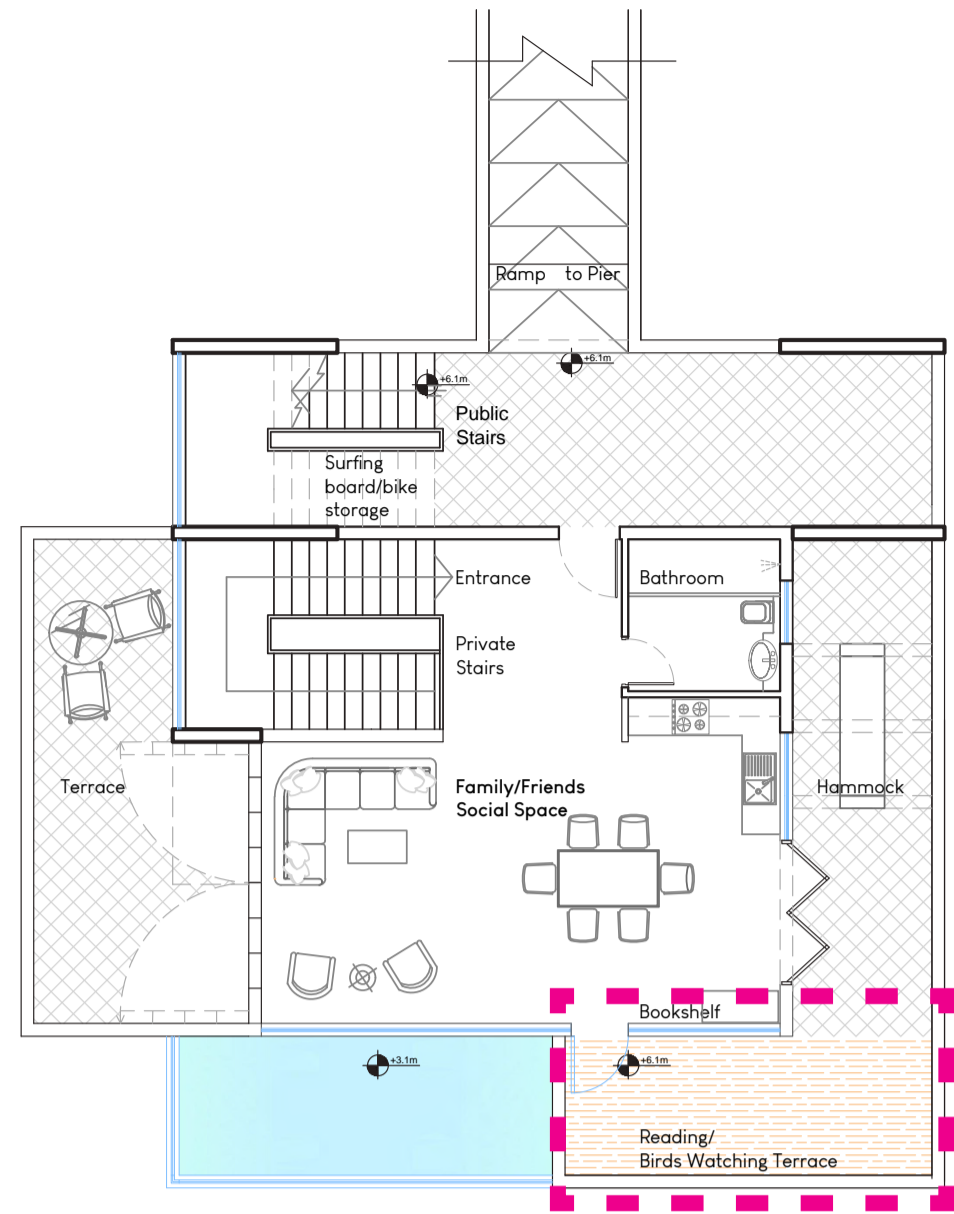
Family Space



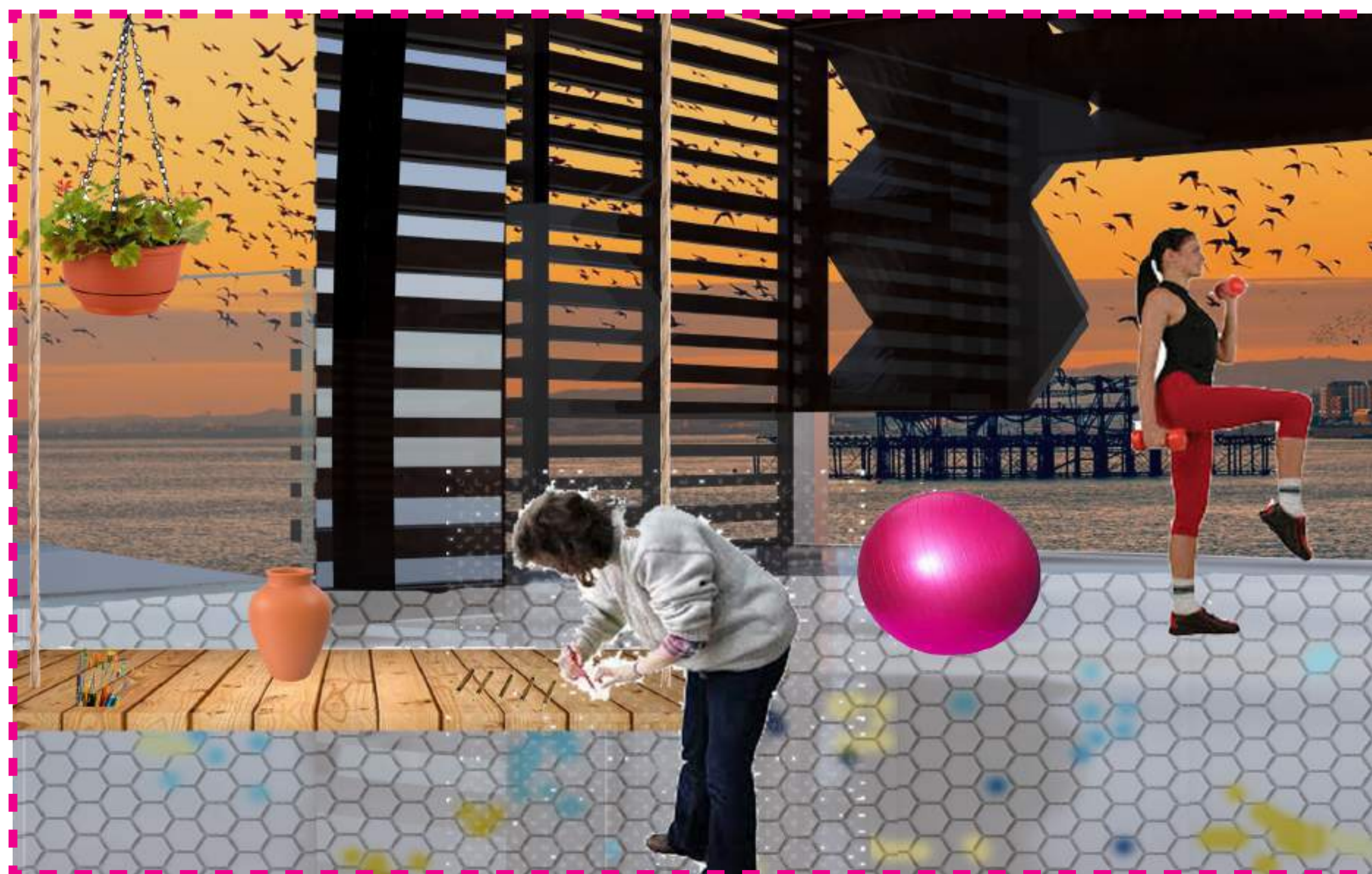
Hobby Room

Reference:
Background sunset image is from: Facebook (Brighton Skies group)
People and furniture PNG images are from: pnggg.com and skalgubbar.se

Floor Material



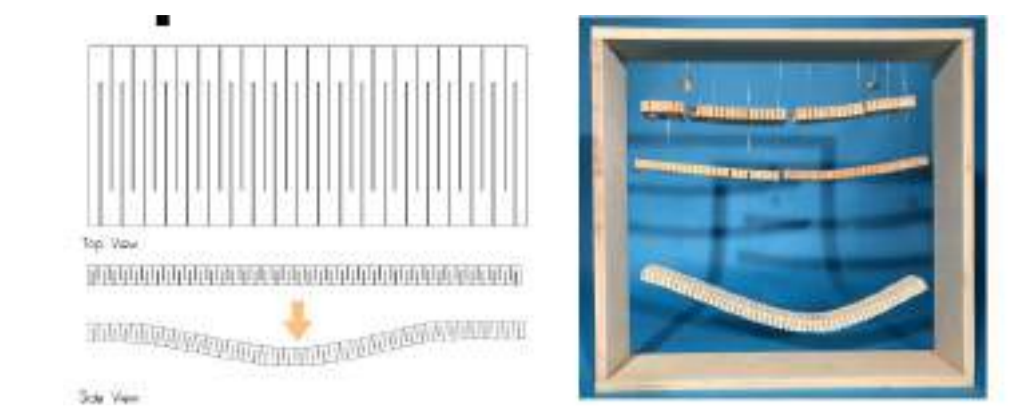
Ground Floor Reading Terrace Floor



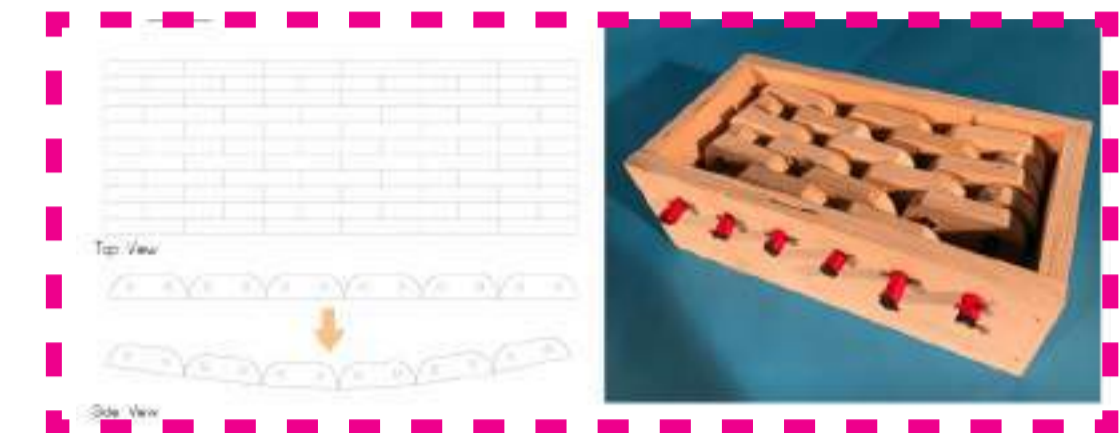
Basement Floor Hobby & Lab Floor

Relating to the Materials Practices module, I tested three different methodologies to make wood flexible and user interactive. Bendable wood that respond to movement was tested by the following:
The second method is adapted in dwelling proposal because it was the most reliable.

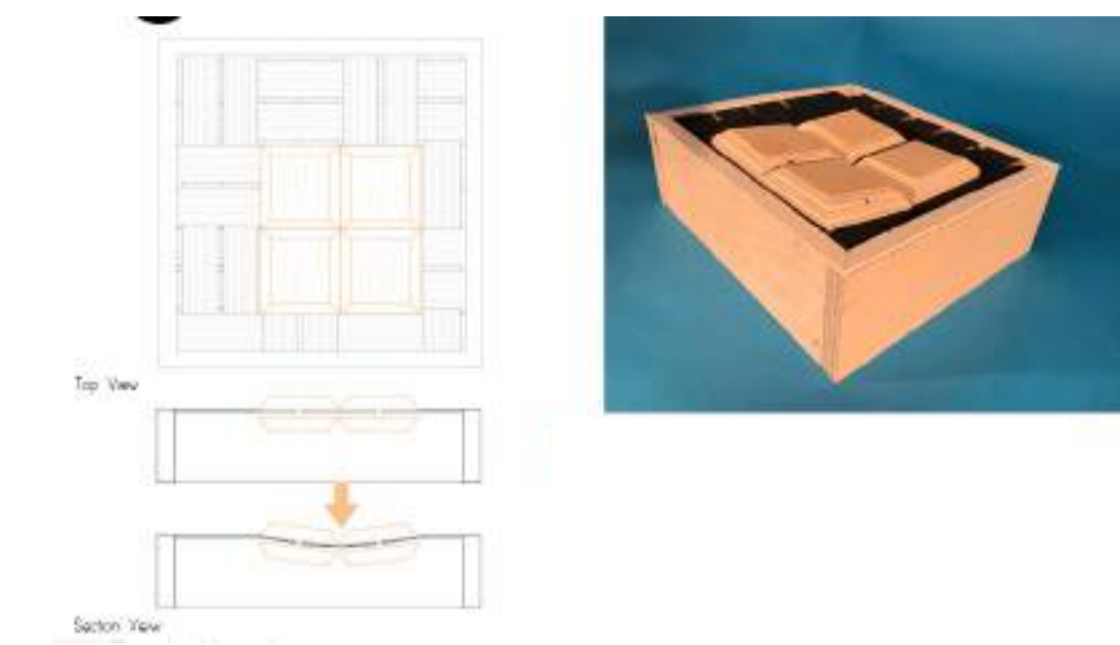
1- Subtracting fragments from wood



2- Integrating bungee rope & wood



3- Integrating elastic fabric & wood

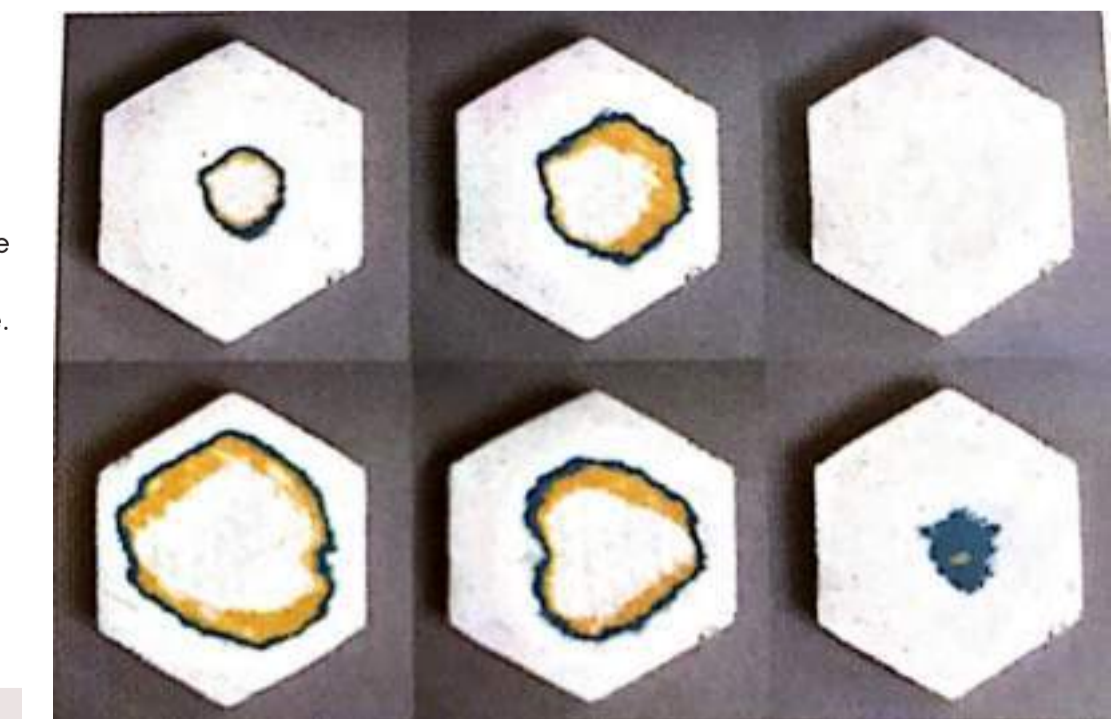


Hexagonal Millefeuille tiles are assigned for floors of the proposal. They look as standard white tiles, but it also is a millefeuille of coloured terracotta which will be revealed with time and by wear in a clustered pattern.

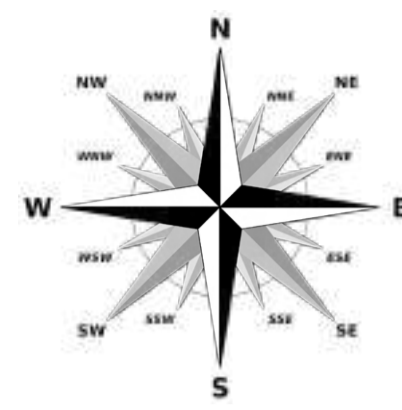
It would be interesting to also see how interior finishes of the building can evolve over time and by use. The tiles can wear naturally or intentionally yellowish to reddish and blue colours will be revealed due to people's interaction with space.

The tiles are 8mm thick and designed by Sandrine Clavel.

Reference:
CLAVEL, S. 'Millefeuille' hexagonal tiles. Material World 3. Frame Publishers.

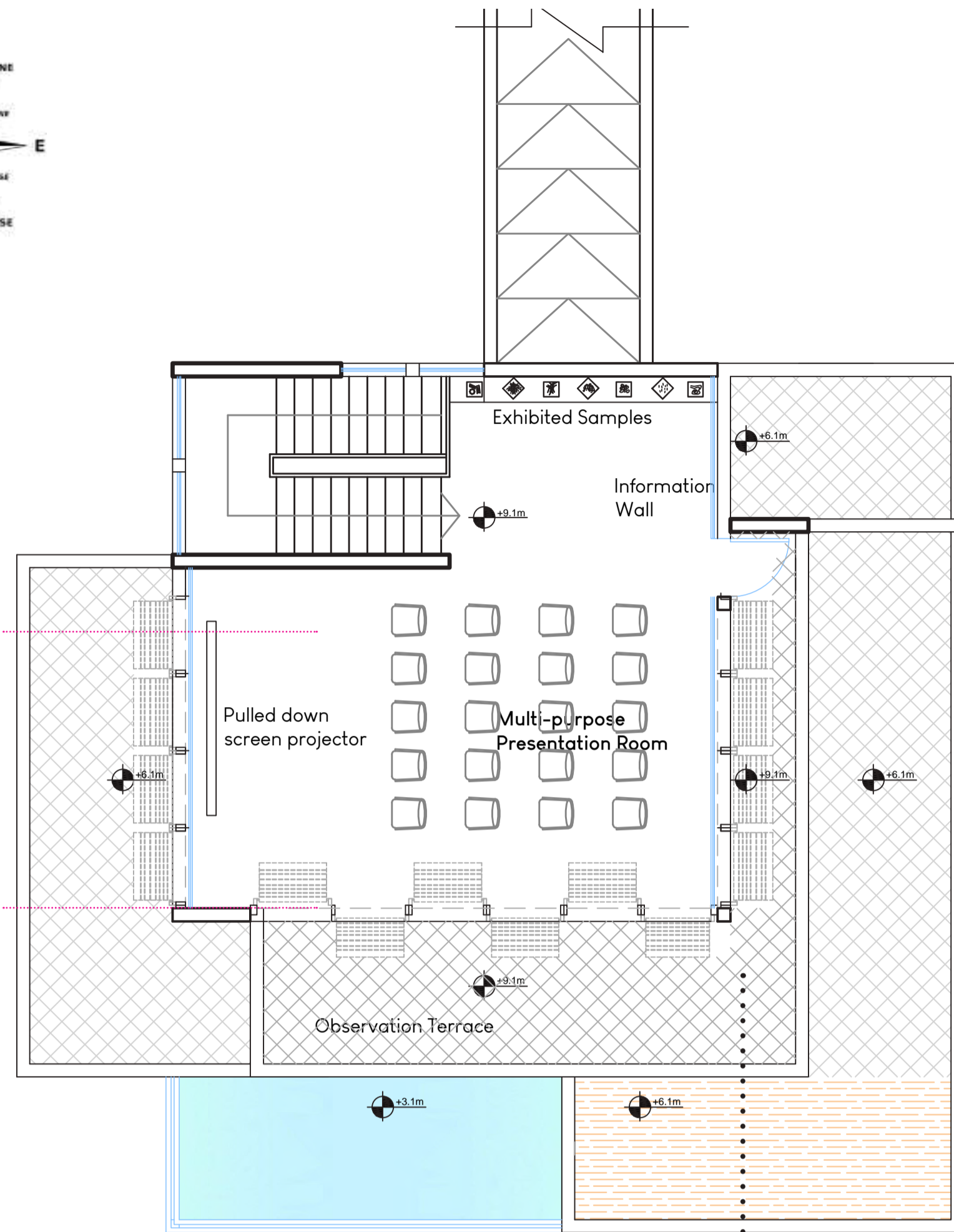


Research Centre



A multi-functional space that can be booked by the council to discuss any issues. The first floor is an exhibition space or a workshop space or a place to lecture. The decision is in the hands of the user.

Doors can be completely shut in cold weather and for LCD screen display to darken the room.



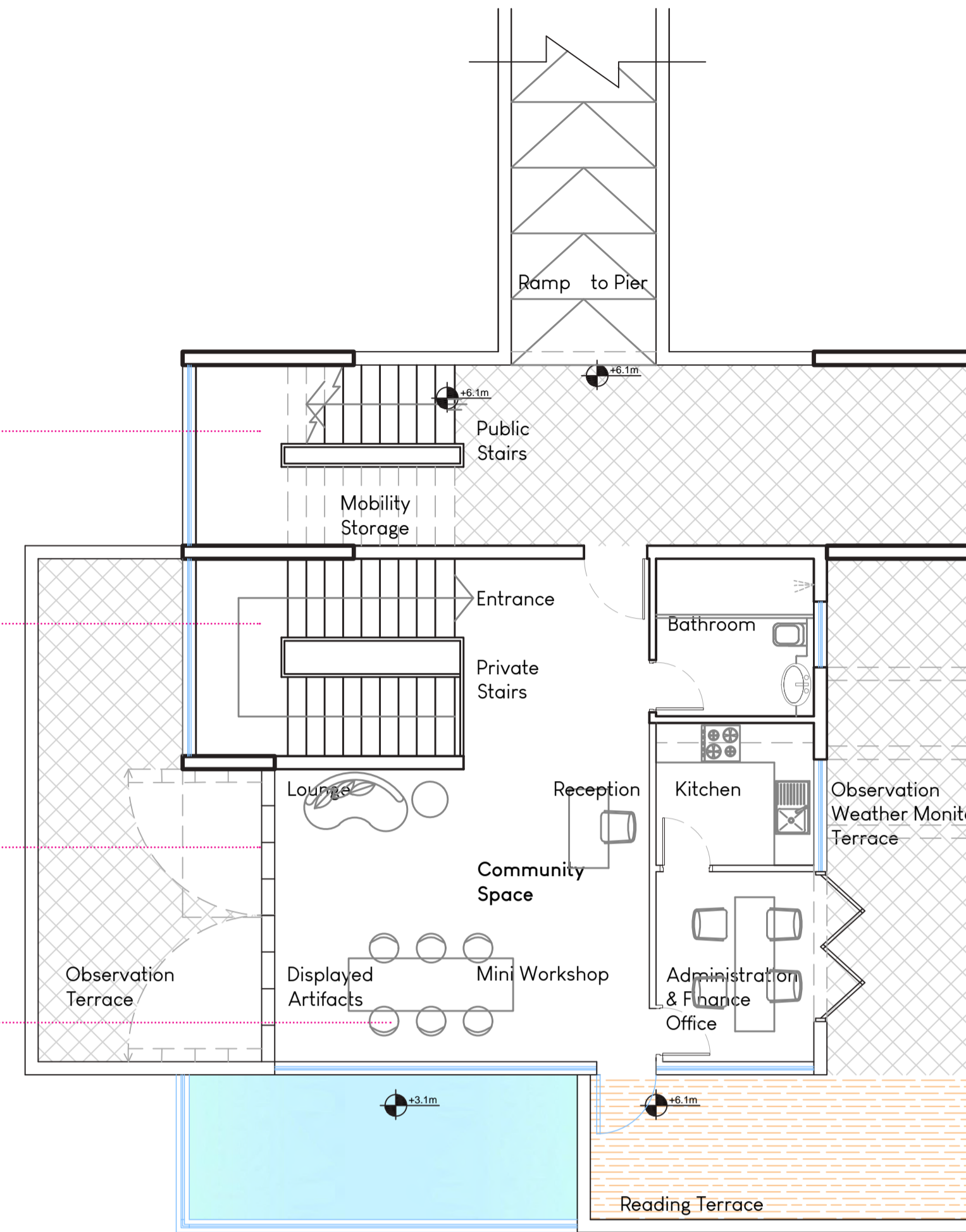
First Floor Plan (1/100)

Public stairs for people attending seminars, lectures, or intend to visit the exhibition space upstairs.

Private stairs for scientists and only individuals who applied to have a day access to the basement floor.

Shelving in the doors can be used to display artefacts and doors could remain shut in winter. West views to the west pier and sunset can still be seen through the glass.

Small scale experimentation and workshop space for individuals who book a visit to collect and study sediments.

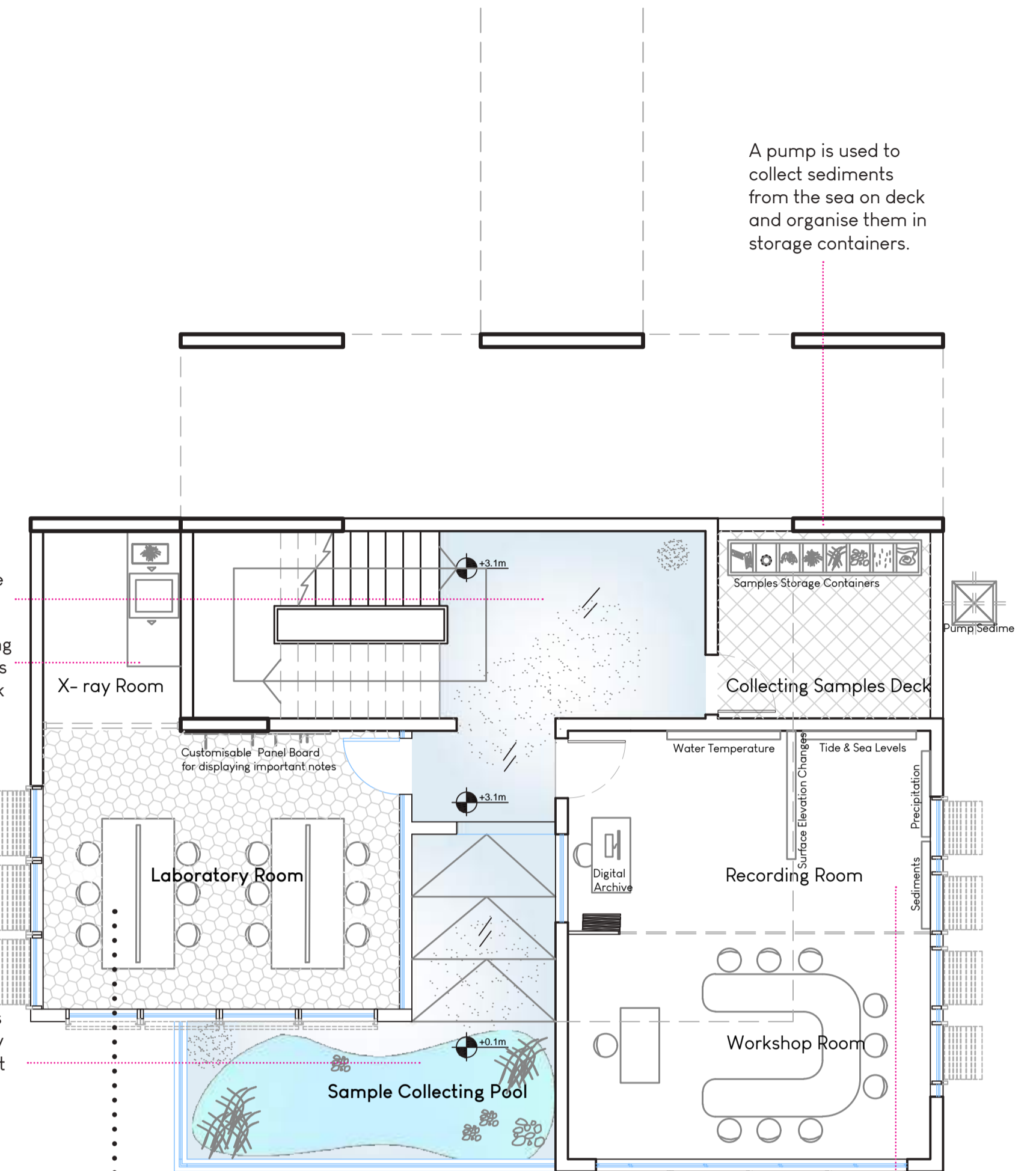


Ground Floor Plan (1/100)

Transparent glass becomes muddy and scratched due to the harsh environment.

X-ray room for testing and checking samples is positioned in a dark isolated room.

The pool can gather sediments during storms and high tides which makes it handy for scientists to collect and test.



Basement Floor Plan (1/100)

A pump is used to collect sediments from the sea on deck and organise them in storage containers.

Walls that include the monthly graphs and charts of climatic conditions recorded observations.



First Floor Terrace



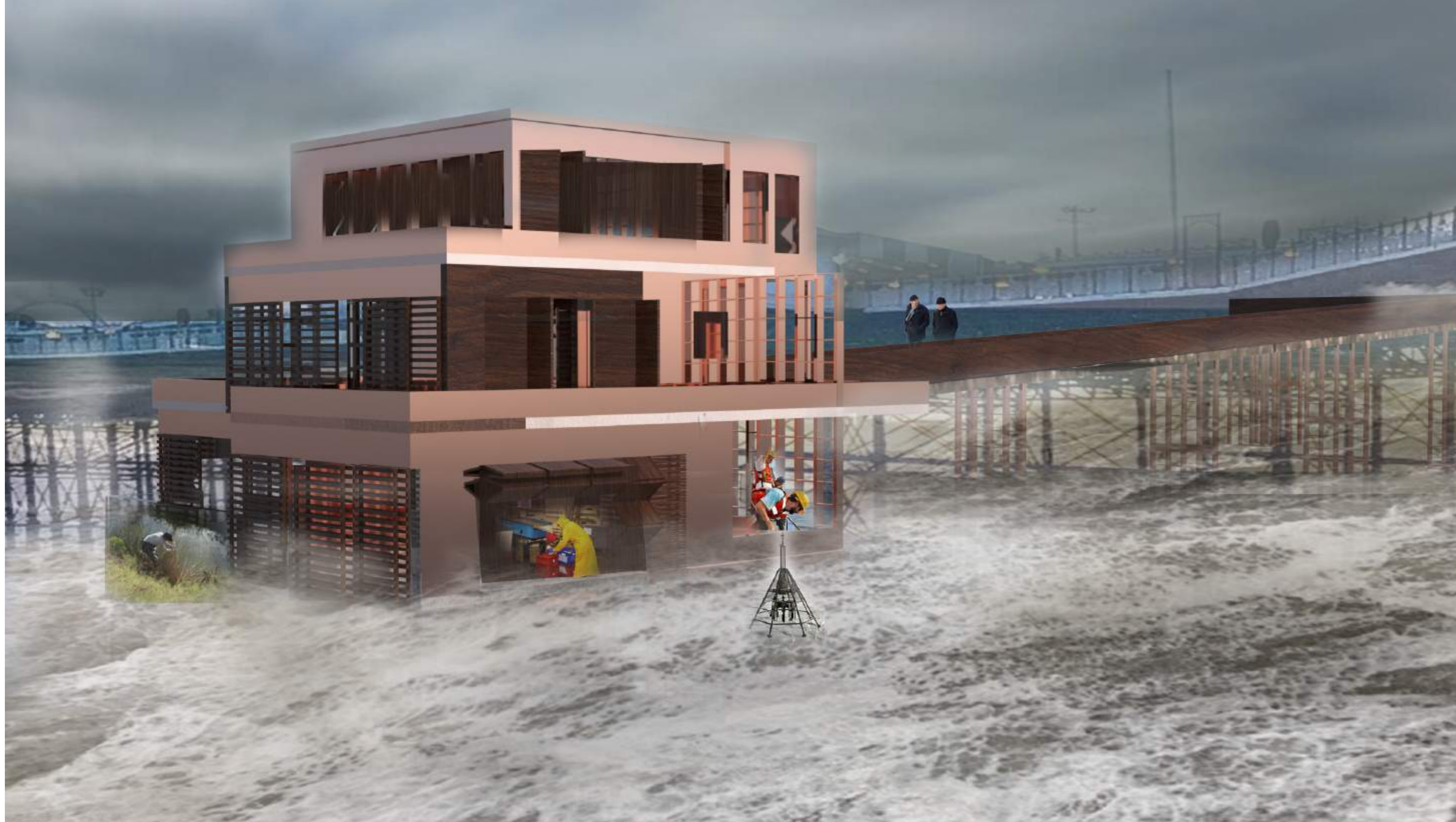
Laboratory Room

South East Perspective during Summer



A basement 2 floor is present for pool maintenance and for a fishing deck to access the water. Paddles and other water sports activities can have an easier access to the water.

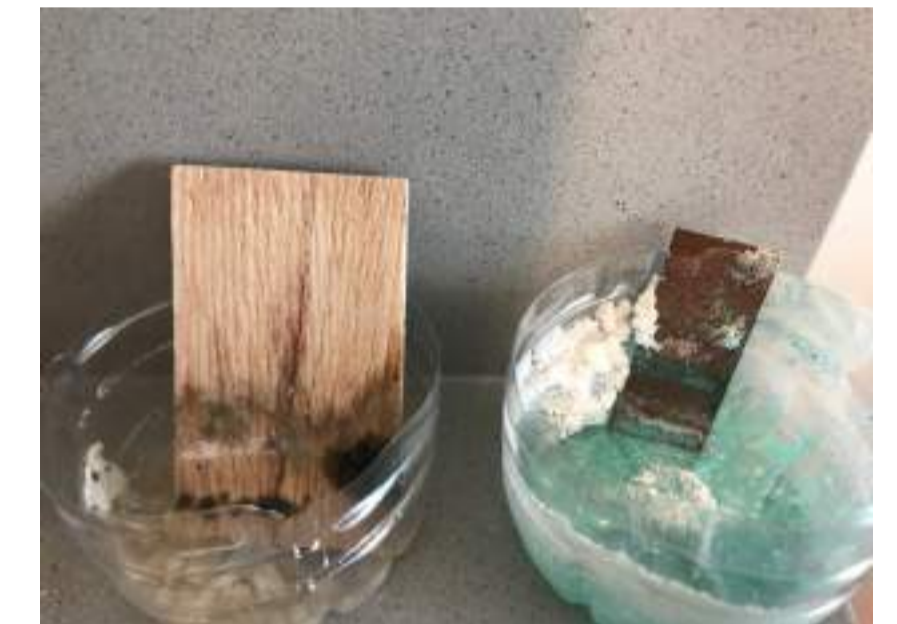
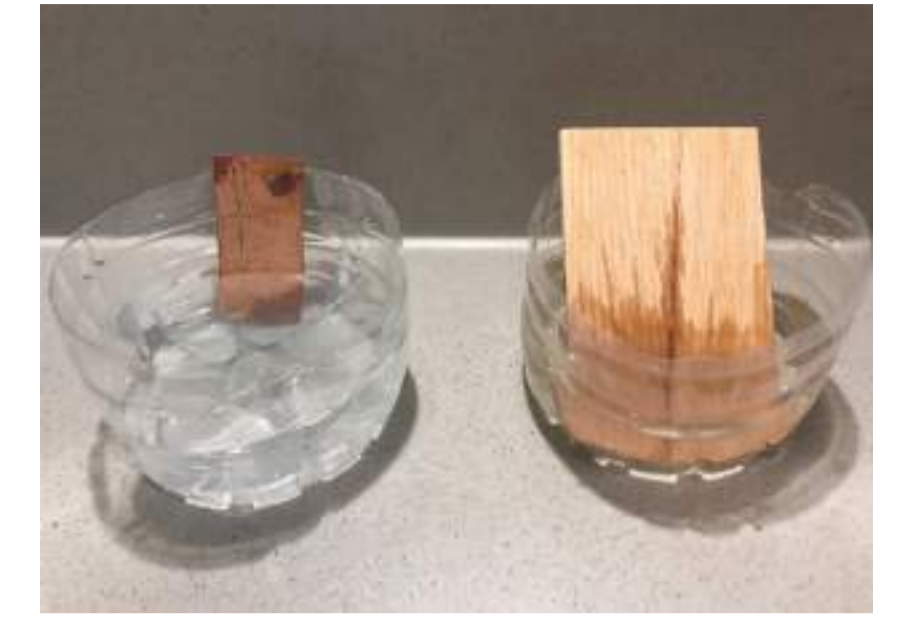
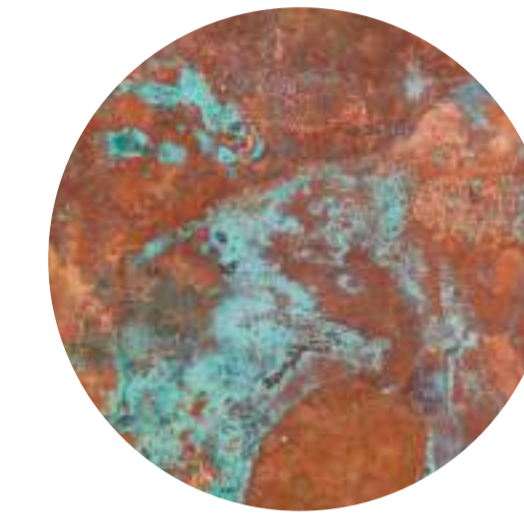
South East Perspective during Winter



Reference:
Storm image is from: <https://www.brightonandhove news.org/2020/12/26/storm-bella-blows-in/>
People and furniture PNG images are from: pnggg.com and skalgubbar.se



South West Perspective Material Change Over Time



The shiny copper will scratch, get darker and imperfections of the material will start to show on the building.



Nature will adjust the building with its conditions and both start to become as one. Not fully nature and not fully man-made but a combination of both in the water. The copper will turn green.

The pool becomes muddy and scratched and seaweed will start to show along other shingles.

Testing of copper and timber over a month period with salty water. Wood (untreated) sucked the water and moss and fungus started developing with dark spots. Copper gradually turned to green with crystal formations. Wood was used because it was tested on the pier and copper is replacing cast iron on the pier that adds further changes to study by scientists due to climate.

Reference:
Kemptown image is from: Facebook group (Brighton Skies)

People and furniture and effects PNG images are from: pngegg.com and skalgubbar.se

Copper texture is from: <https://stock.adobe.com/au/search?k=copper%20texture>

Bibliography

2020. Brighton Skies. Available: <https://en-gb.facebook.com/groups/343329786021733/media> [Accessed].

ARCHDAILY. 2021. House NA / Sou Fujimoto Architects [Online]. Available: <https://www.archdaily.com/230533/house-na-sou-fujimoto-architects> [Accessed December 2021 2021].

ASTBURY, J. 2019. Climbing-frame library in Vietnam has a thriving aquaponics system [Online]. Dezeen. Available: <https://www.dezeen.com/2019/01/20/vac-library-farming-architects-hanoi/> [Accessed December 2021].

BANERJEE, J. 2020. Brighton Palace Pier, Brighton [Online]. The Victorian Web. Available: <https://victorianweb.org/art/architecture/iron/1.html> [Accessed December 2021].

BLOG, J. E. Exciting Places To Surf In Brighton For First Timers A 2021 Guide [Online]. Available: <https://jollyexplorer.com/where-to-surf-in-brighton-a-guide-for-first-timers/> [Accessed December 2021].

BRIGHTON, V. 2021. Adventure & Outdoor Activities in Brighton [Online]. Available: <https://www.visitbrighton.com/things-to-do/sports-and-activities/adventure-and-outdoor> [Accessed 25 Deecember 2021].

BULLMORE, H. 2020. When is the best time to see Brighton startling murmurations? [Online]. Available: <https://www.theargus.co.uk/news/19140495.best-time-see-brighton-startling-murmurations/> [Accessed November 2021].

CAMBRIDGE DICTIONARY. 2021.. Holiday [Online]. Available: <https://dictionary.cambridge.org/dictionary/english/holiday> [Accessed 2021, December 12].

CLAVEL, S. 'Millefeuille' hexagonal tiles. Material World 3. Frame Publishers.

COUNCIL, B. H. C. 2020. Brighton & Hove Tide Times 2020 [Online]. Available: https://ww3.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/14885%20Brighton%20Tide%20Times%202020_v3.pdf?fbclid=IwARIVcQDBJyOOCpEhV2XIMbfw8Okow4m_bmb9c8y2oBsvwF7lhp23qBA2gjk [Accessed December 2021].

COUNCIL, B. H. C. 2021. Swimming sea safety [Online]. Available: <https://www.brighton-hove.gov.uk/libraries-leisure-and-arts/seafront/swimming-sea-safety> [Accessed December 2021].

COUNCIL", B. H. C. 2009. Brighton & Hove Urban Characterisation Study [Online]. Brighton & Hove City Council. Available: <https://www.brighton-hove.gov.uk/content/planning/heritage/urban-characterisation-study> [Accessed November 2021].

CRAIGIE, E. 2021. The cleanest and dirtiest beaches a two-hour drive from Reading [Online]. BerkshireLive. Available: <https://www.getreading.co.uk/whats-on/family-kids-news/cleanest-dirtiest-beaches-two-hour-20804531> [Accessed December 2021].

DADSWELL, B. 2018. Swing storms Brighton seafront as dancers perform on bandstand [Online]. Available: <https://www.theargus.co.uk/news/16621511.swing-storms-brighton-seafront-dancers-perform-bandstand/> [Accessed 25 December 2021].

DREAMSTIME. 2021. 133 Brighton Pier Rides Stock Photos [Online]. Available: <https://www.dreamstime.com/photos-images/brighton-pier-rides.html> [Accessed December 2021].

ETHERINGTON, R. 4 June 2013. Serpentine Gallery Pavilion 2013 by Sou Fujimoto. *dezeen*. *dezeen*.

EXPRESS. 2014. Historic Christmas swim cancelled over health and safety fears [Online]. Express Available: <https://www.express.co.uk/news/uk/545512/Christmas-swim-Brighton-cancelled-health-and-safety> [Accessed December 2021].

FULLER, C. 2021. Artists showcasing work at Brighton and Hove Open Houses Christmas Festival [Online]. The Argus. Available: <https://www.theargus.co.uk/news/19710883.artists-showcasing-work-brighton-hove-open-houses-christmas-festival/> [Accessed December 2021].

GEOGRAPHYPODS. Erosional Features [Online]. Available: <https://www.geographypods.com/12-coasts--management.html> [Accessed December 2021].

GETTYIMAGES. 339 Birds Brighton Pier Premium High Res Photos [Online]. Gettyimages. Available: <https://www.gettyimages.ae/photos/birds-brighton-pier> [Accessed].

GHISLENI, C. 2020. Brazilian Interiors: 8 Projects with Flexible Furniture [Online]. ArchDaily. Available: https://www.archdaily.com/952036/brazilian-interiors-8-projects-with-flexible-furniture?ad_medium-gallery [Accessed December 2021].

GREEN, B. H. B. 2017. The story of Maddy Brighton s historic Madeira Drive [Online]. Available: <https://building-green.org.uk/2017/04/18/the-story-of-maddy-brightons-historic-madeira-drive/> [Accessed December 2021].

GUERIN, B. Available: https://unsplash.com/photos/DusxsFh_EpM [Accessed].

HERNÁNDEZ, D. 2017. Bodrum Demirbuku Houses Club House / Erginoglu & Çal lar [Online]. ArchDaily. Available: <https://www.archdaily.com/900685/bodrum-demirbuku-houses-club-house-erginoglu-and-calislar> [Accessed December 2021].

HOTEL, B. S. [Accessed].

HOVE, M. B. 2006. Opened to the public in May 1899 [Online]. Available: https://www.mybrightonandhove.org.uk/places/placeland/palace_pier/brighton-pier [Accessed].

HOVE, M. B. A. 1990. Completed in January 1823 [Online]. Available: <https://www.mybrightonandhove.org.uk/places/placesea/chain-pier/chain-pier-4> [Accessed October 2021].

KHUDAIRI, S. 2014. younghan chung visualizes modular 6x6 house [Online]. DesignBoom. Available: <https://www.designboom.com/architecture/younghan-chung-visualizes-modular-6x6-house-02-15-2014/> [Accessed December 2021].

MOTT, T. July 17, 2020. Health of Our Whole Person Mind, Body, Heart, and Spirit [Online]. Available: <https://www.linkedin.com/pulse/health-our-whole-person-mind-body-heart-spirit-turpin-mott/> [Accessed].

O'BRIEN, R. 2021. Brighton Yoga and Well-being Festival 2021: When is it, where will it take place and what will the programme include? [Online]. Brighton & Hove Independent. Available: <https://www.brightonandhoveindependent.co.uk/whats-on/things-to-do/brighton-yoga-and-well-being-festival-2021-when-is-it-where-will-it-take-place-and-what-will-the-programme-include-3292588> [Accessed December 2021].

OCEANOGRAPHIC. 2019. Ocean Pollution Surfers Against Sewage publishes 2019 water quality report [Online]. Oceanographic. Available: <https://www.oceanographicmagazine.com/news/water-quality-report/> [Accessed December 2021].

ODYSEY, D. S. Core Dimension Dynamics [Online]. Available: <https://destinysodysey.com/core-dimension-dynamics/> [Accessed December 2021].

ORGANISATION, T. N. 2011. BRIGHTON PIER- BOAT DECK REPLACEMENT.

PEARCE, L. 2016. Nostalgia: Brighton as a fishing village [Online]. The Argus. Available: <https://www.theargus.co.uk/news/14290755.nostalgia-brighton-as-a-fishing-village/> [Accessed].

PORTILLA, D. 2013. Serpentine Pavilion / Sou Fujimoto. ArchDaily.

RANDALL, I. 20 November 2019. England's disappearing coastline: Shocking map reveals coastal towns at risk of being wiped out over next 20 years - and suggests 7,000 homes will fall into the sea by end of century. Available: <https://www.dailymail.co.uk/sciencetech/article-7702717/Shocking-map-shows-UK-coastal-towns-risk-wiped-20-years.html> [Accessed 1 December 2021].

REPORTER, C. R. L. D. 2021. Erosion, farming and forestry identified as Sounds mud sources [Online]. National Local Democracy Reporting. Available: <https://www.stuff.co.nz/national/politics/local-democracy-reporting/300426133/erosion-farming-and-forestry-identified-as-sounds-mud-sources> [Accessed December 2021].

SEATEMPERATURE.ORG. 2021. Brighton Sea Temperature [Online]. Available: <https://www.seatemperature.org/europe/united-kingdom/brighton.htm> [Accessed December 2021].

SERPENTINE. 2013. Serpentine Gallery Pavilion 2013 by Sou Fujimoto [Online]. Available: <https://www.serpentinegalleries.org/whats-on/serpentine-gallery-pavilion-2013-sou-fujimoto/> [Accessed October 2021].

SERPENTINE. 2018. Architect Frida Escobedo, celebrated for dynamic projects that reactivate urban space, was commissioned to design the Serpentine Pavilion 2018. [Online]. Available: <https://www.serpentinegalleries.org/whats-on/serpentine-pavilion-2018-designed-frida-escobedo/> [Accessed October 2021].

SPONG, J. 2021. TRY IT NOW ROLLERBLADING ON BRIGHTON SEAFRONT [Online]. Coast. Available: [coastmagazine.co.uk/content/try-it-now-rollerblading-brighton-seafront](https://www.coastmagazine.co.uk/content/try-it-now-rollerblading-brighton-seafront) [Accessed December 2021].

STINSON, L. 2019. Tiered platforms create nifty street furniture [Online]. Curbed. Available: <https://archive.curbed.com/2019/2/21/18234143/public-furniture-street-rijeka-croatia> [Accessed December 2021].

TIMEOUTDOORS. 2021. London to Brighton Cycle Ride 2021 [Online]. Timeoutdoors. Available: <https://www.timeoutdoors.com/events/cycling/London-to-Brighton-Cycle-Ride-2021> [Accessed December 2021].

TOMLIN, H. 1931. Crowds on the beach at Brighton, Sussex, 1931. [Online]. Science & Society Picture Library: Daily Herald Archive/National Science & Media Museum / Science & Society Picture Library. Available: <https://www.scienceandsociety.co.uk/results.asp?image=10316928&itemw=4&itemf=0001&itemstep=1&itemx=2> [Accessed December 2021].

TRIMINGHAM, A. 2011. No cash to splash [Online]. Available: <https://www.theargus.co.uk/news/9141046.no-cash-to-splash/> [Accessed October 2021].

TRIMINGHAM, A. 2013. Chain reaction [Online]. The Argus. Available: <https://www.theargus.co.uk/news/10691662.chain-reaction/> [Accessed October 2021].

UK, B. C. 2017. Brighton College celebrate diversity at Brighton Pride 2017 [Online]. YouTube. Available: <https://www.youtube.com/watch?v=a451bJlOsSs> [Accessed].

URBAN75. 2006. Volk s Electric Railway, Brighton [Online]. Available: <http://www.urban75.org/railway/volks-electric-railway.html> [Accessed October 2021].

WALKER, W. 2018. BRIGHTON WALK I Brighton Palace Pier in Glorious Sunshine I England [Online]. YouTube. Available: <https://www.youtube.com/watch?v=myvsr9Jw43g> [Accessed 2021].

WIKIPEDIA. 2020. Richard Russell (doctor) [Online]. Available: [https://en.wikipedia.org/wiki/Richard_Russell_\(doctor\)](https://en.wikipedia.org/wiki/Richard_Russell_(doctor)) [Accessed].