

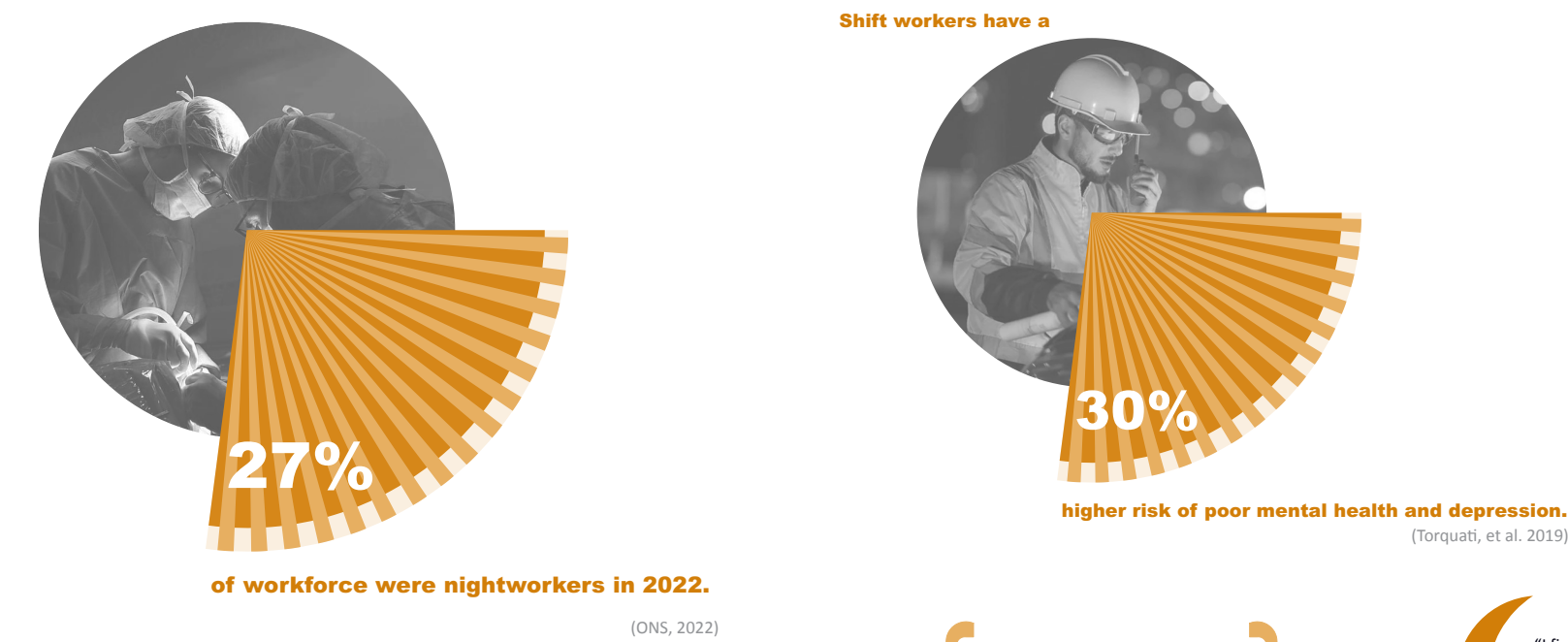


WHAT IF YOUR DAYS AND NIGHTS WERE REVERSED?

Solstice is a wellness hub set in the year 2030, designed specifically for night shift workers, an essential yet often overlooked part of society. Despite their growing presence across healthcare, logistics, and public services, night workers remain underserved by traditional infrastructure. Solstice addresses the three key aspects of life commonly neglected by this group: social, nutritional, and physical wellbeing. The space, open 24/7, allows individuals on similar schedules to connect and access targeted support, helping them maintain their natural rhythms. Light therapy supports circadian alignment and vitamin D production, counteracting the lack of sunlight often experienced by night workers.

“We need night shift workers in the world, but there is nowhere that accommodates them.”
(Paddock, 2025)

THE CURRENT PROBLEM



“Yes, I definitely feel lonely, as I socialise less. I am either at work or asleep.”

“I find it hard to distinguish the difference between day and nights, as my ‘day’ is everyone else’s night.”

“My body clock feels all over the place, I don’t find it easy to sleep in the day.”

“I rarely see anyone, leaving me feeling alone.”

“Things aren’t open during the night such as the gym classes I like to do or going for a food shop.”

“My meal routine is impacted, I rarely eat 3 meals a day. My breakfast is everyone else’s dinner, I find it hard to keep to a nutritional routine.”

“I have less of a life outside work, it is difficult to balance. I don’t have a very good work/life balance.”

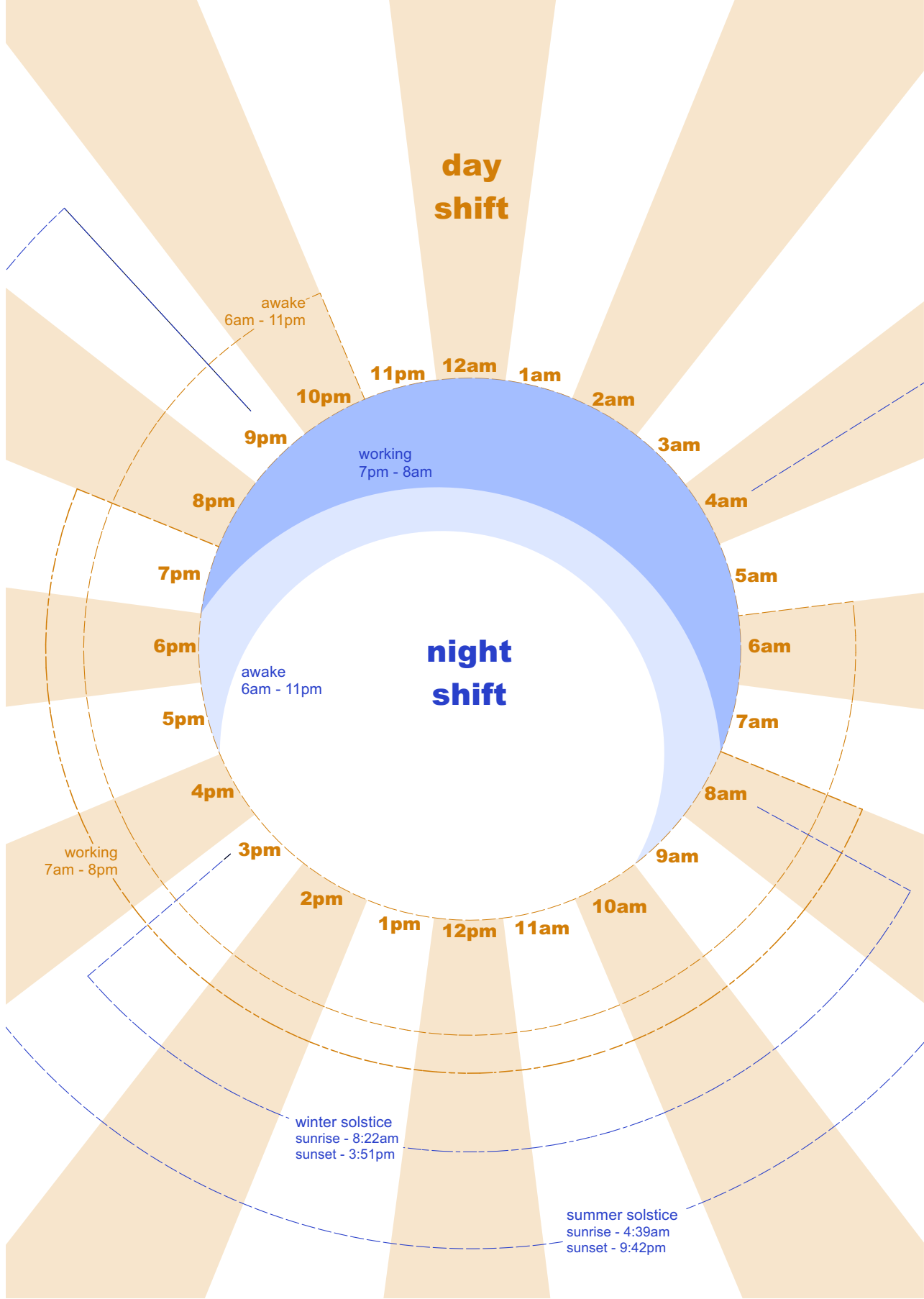
“There’s a lack of spaces that accommodate the times for night workers.”
(Paddock, 2025)

Night shift workers currently face a range of negative health impacts, including disrupted sleep patterns, cardiovascular issues, and increased rates of depression and anxiety. Despite making up a significant portion of the workforce, a trend unlikely to reverse, this group remains underserved by current systems and spaces. The future must begin to accommodate their unique needs and schedules.

Primary research was conducted to gain a deeper understanding of the challenges night workers face. A key finding was the lack of exposure to natural daylight, often resulting in vitamin D deficiency. Sun path analysis revealed that night workers, particularly in winter, receive little to no natural light, sharply contrasting with the experience of day shift workers. Social isolation, poor access to nutritious meals, and limited opportunities for exercise were also recurring themes.

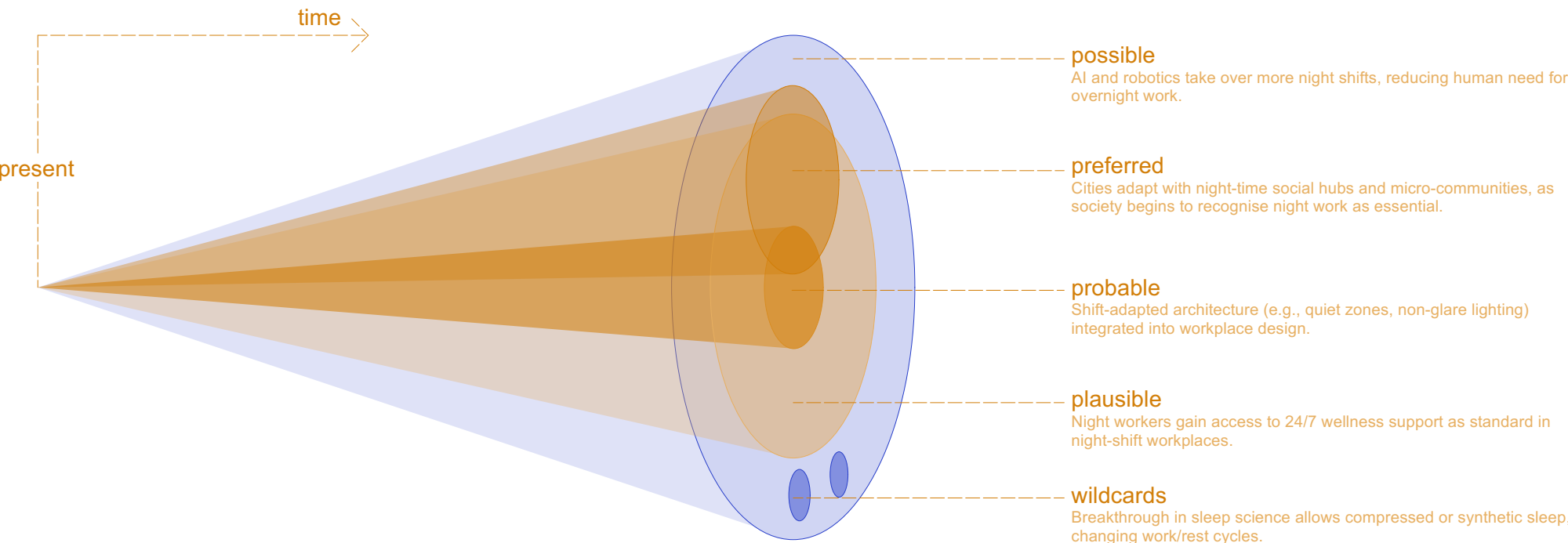
These insights directly informed the design of **Solstice**, a wellness hub tailored to the realities of night work. The space promotes social connection, supports physical and nutritional wellbeing, and incorporates light therapy to aid circadian alignment and boost vitamin D levels, all during hours that truly fit the lifestyle of night workers.

PRIMARY RESEARCH



FUTURE FORECAST

This future cone illustrates key forecasts surrounding night work. In the future, cities will ideally evolve to better accommodate night shift workers through thoughtful, inclusive design. **Solstice** responds to these projections by creating an environment tailored to the needs of night workers, addressing the challenges they face due to irregular shift patterns and limited access to supportive infrastructure.



PROTAGONIST NEEDS

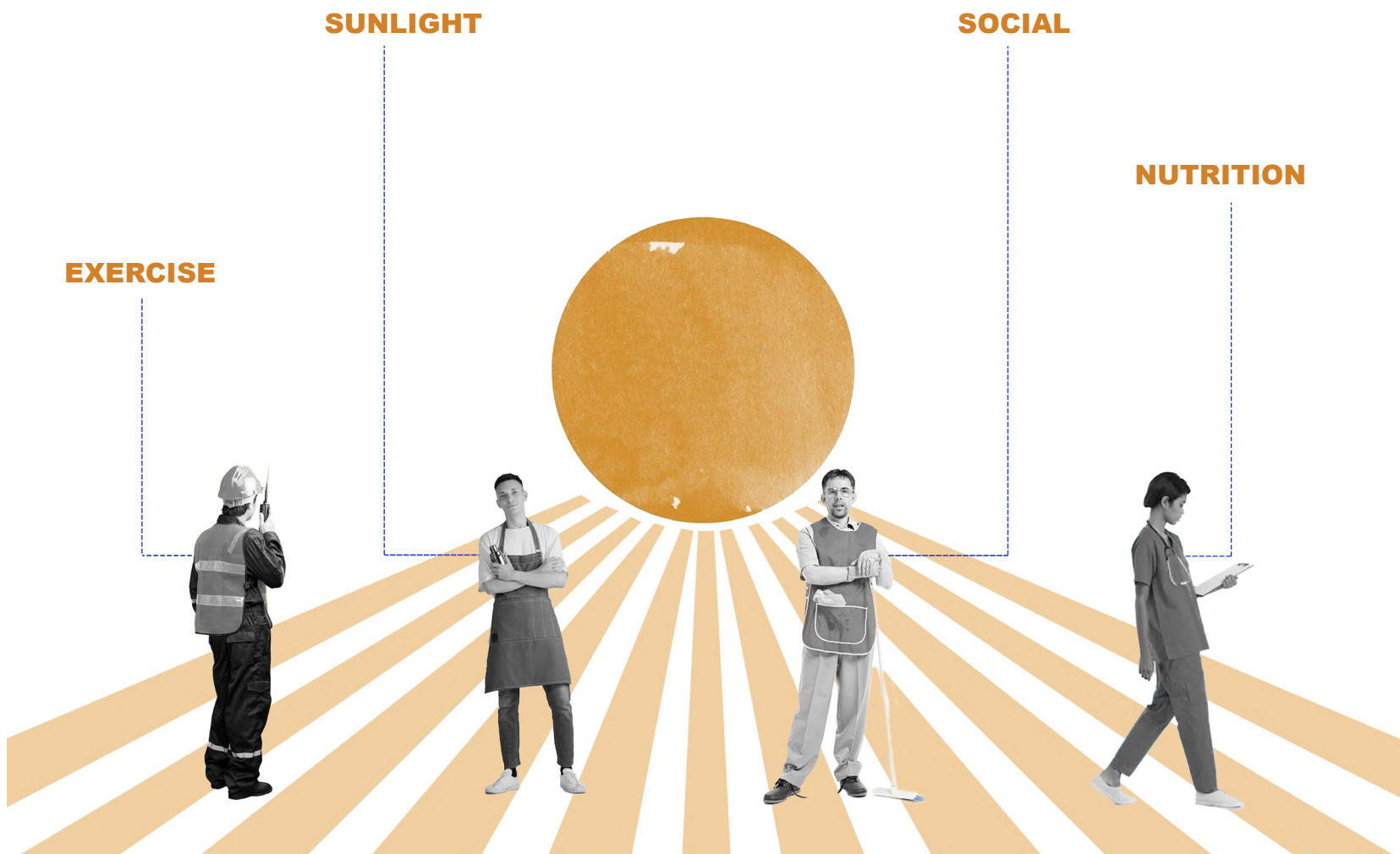
Drawing from both primary and secondary research, alongside future trend forecasting, the core needs of the space’s protagonists, night shift workers, were identified. These include:

Exercise – Irregular sleep patterns and demanding schedules often make it difficult for night workers to maintain consistent fitness routines, with limited access to round-the-clock exercise facilities.

Sunlight – Limited exposure to natural light significantly impacts vitamin D production and disrupts circadian rhythms, especially during winter months.

Social Connection – Opposing schedules frequently lead to social isolation, making it challenging for night workers to connect with friends or family.

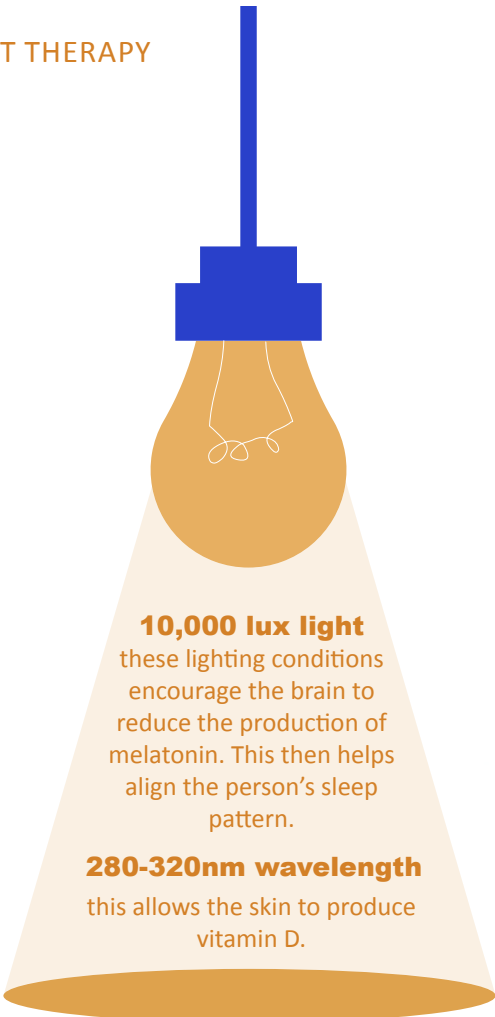
Nutrition – A lack of time, energy, or available options often results in skipped meals or poor dietary habits, impacting overall health and wellbeing.



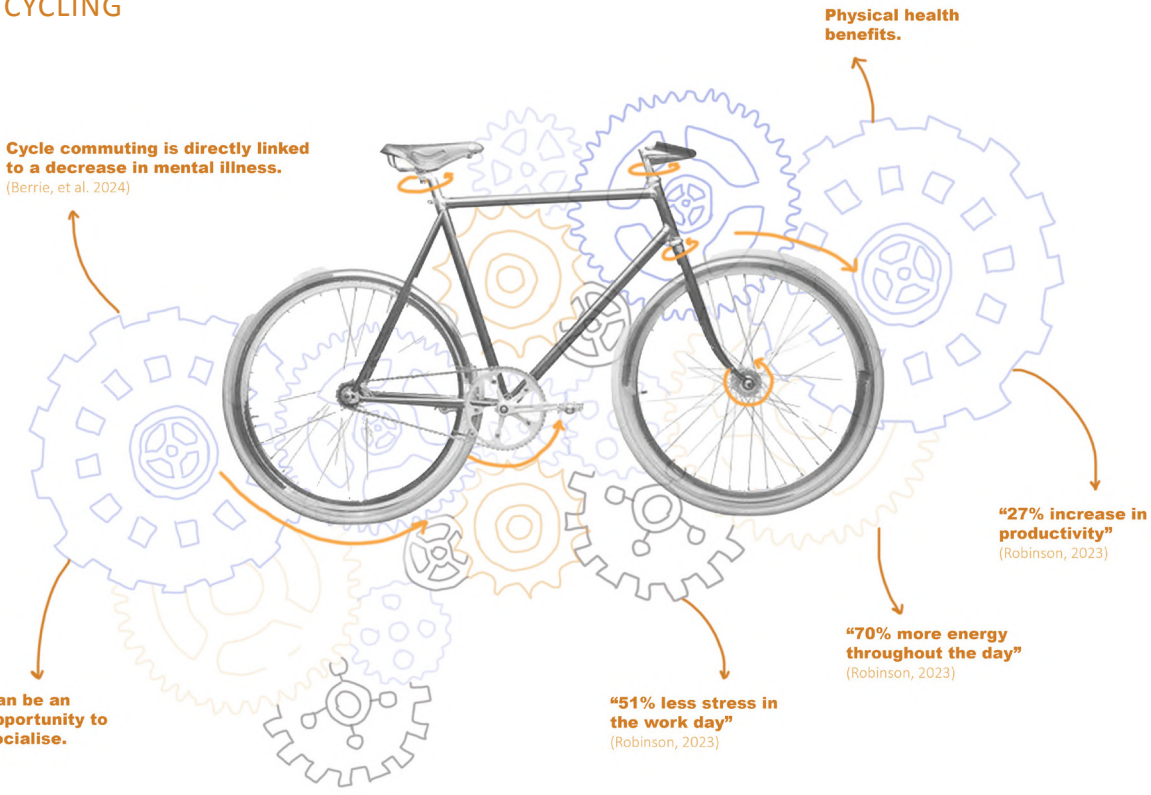
FUNCTION RATIONALE

Light, exercise, and social connection are key aspects that Solstice aims to enhance. The space addresses these needs through integrated light therapy to support vitamin D production and circadian rhythm alignment. Cycling is encouraged within the space, not only for its physical and mental health benefits but also as a means of fostering social interaction.

LIGHT THERAPY



CYCLING



This table illustrates how **Solstice** addresses the present problem through future-focused solutions.

the problem

Sleep schedule is often disrupted by switching between night and day sleep patterns.

Tasks and hobbies enjoyed are not open throughout the night.

Often feeling lonely.

Lack of vitamin D due to lack of sunlight.

Difficulty maintaining nutritious diet.

Lack of exercise.

the solution

Create a hub open throughout the night, even 24/7, to encourage night workers to continue with their sleep patterns when having days off.

Provide facilities and activities throughout the night.

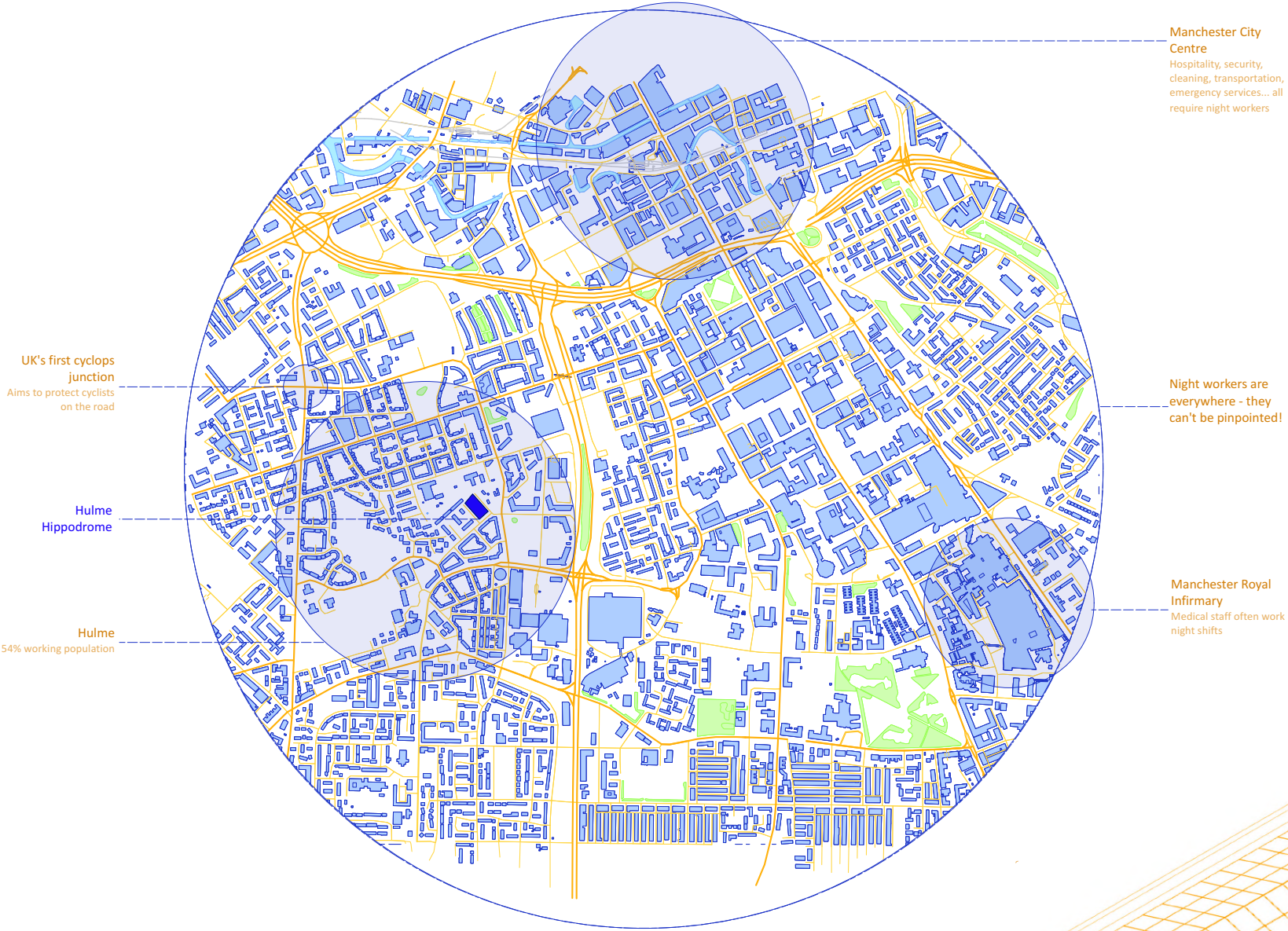
Create a community for night workers or people on the same work schedule.

Implement custom lighting to act as light therapy which will help produce vitamin D as well as correct circadian rhythm.

Provide cooking facilities, including recipes and ingredients which allow workers to cook together.

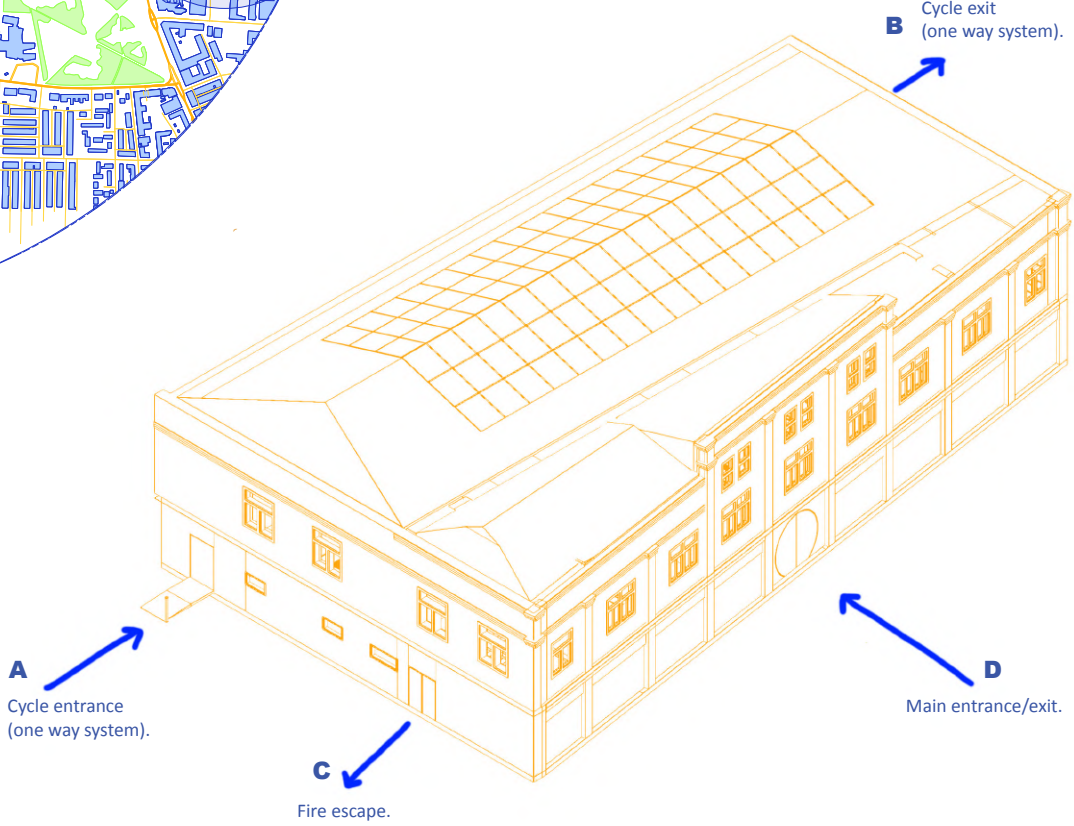
Offer physical activities throughout the night.

THE SITE
HULME HIPPODROME

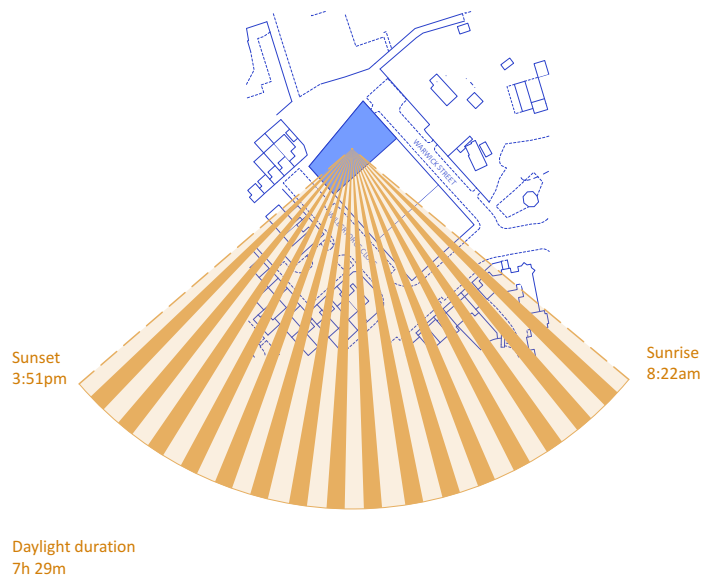


Considering the needs of night workers, the Hulme Hippodrome presents an ideal canvas for addressing their challenges. Night workers span sectors such as hospitality, transport, and emergency services, making their presence citywide rather than location-specific. With Manchester's city centre continuing to grow, it's likely the number of night workers will increase in the future. Hulme is also home to the UK's first Cyclops junction, designed to improve cyclist safety, which aligns with Solstice's goal of encouraging cycling as a healthy and social activity.

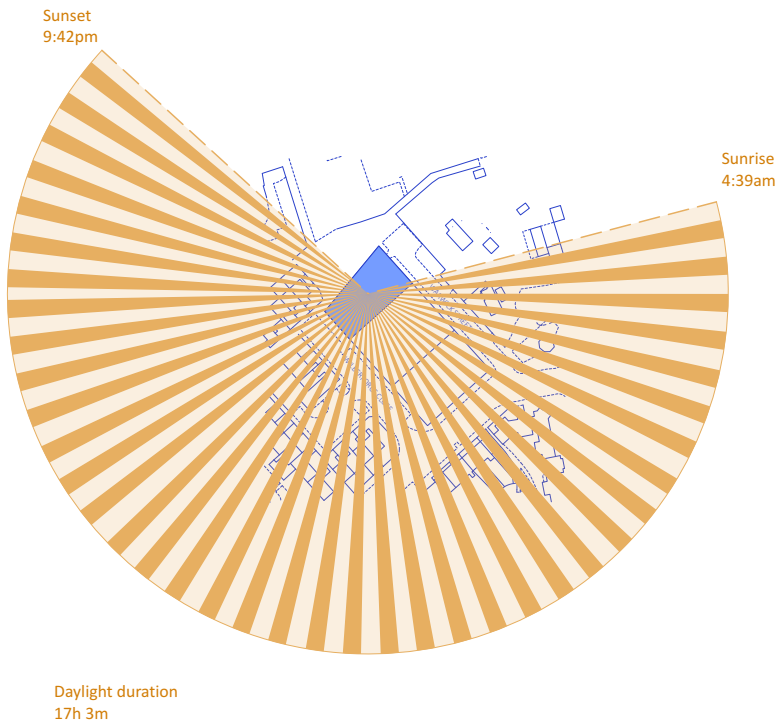
The Hulme Hippodrome site is accessible from three angles, with four key entry points, each serving a specific function aligned with the needs of the space, such as a dedicated one-way cycle lane. As the number of night workers is expected to grow in the future, this one-way system offers a practical solution to ensure safe and efficient cycling flow throughout the site.



winter solstice
21st December 2025

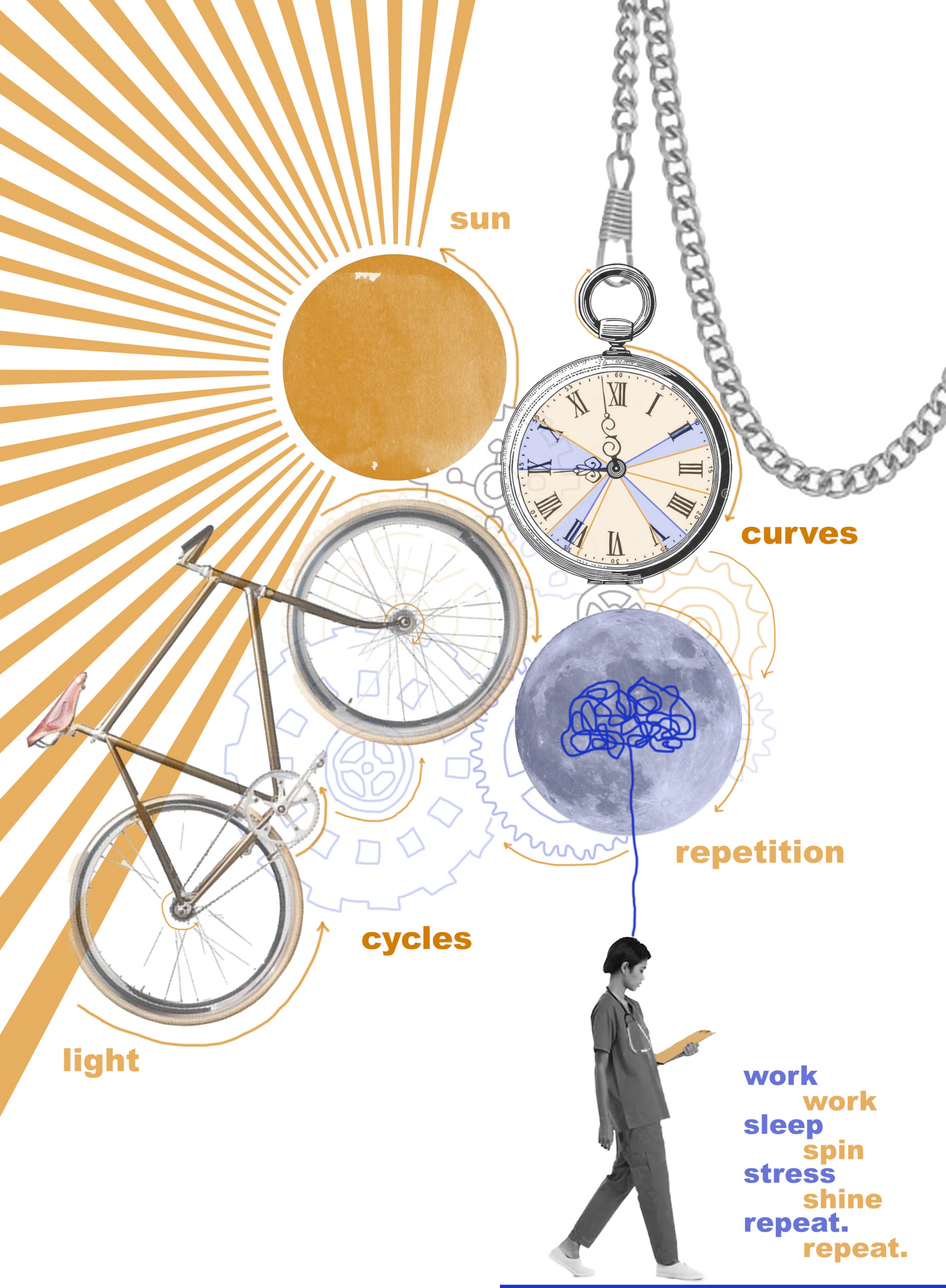


summer solstice
21st June 2025

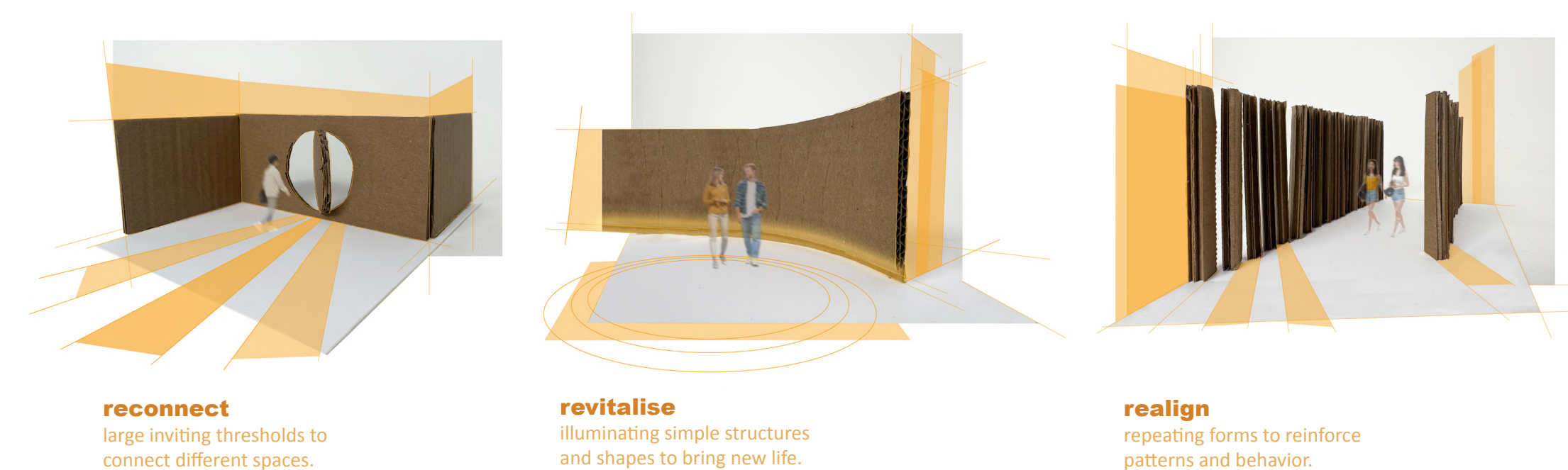


SUN ANALYSIS

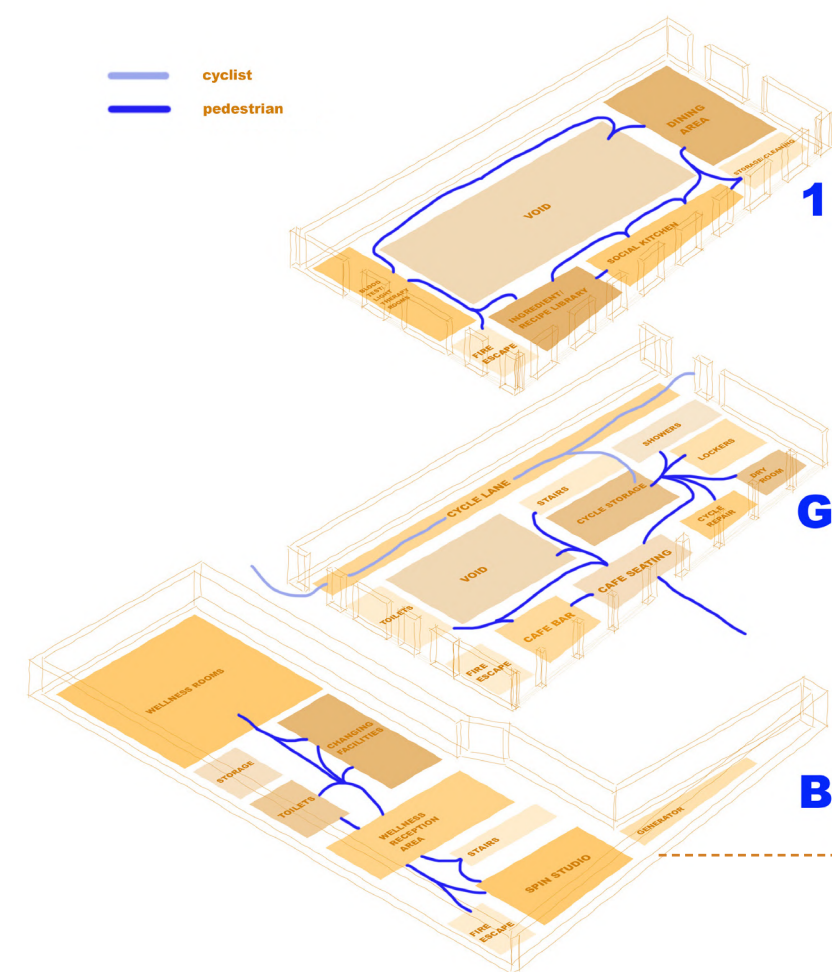
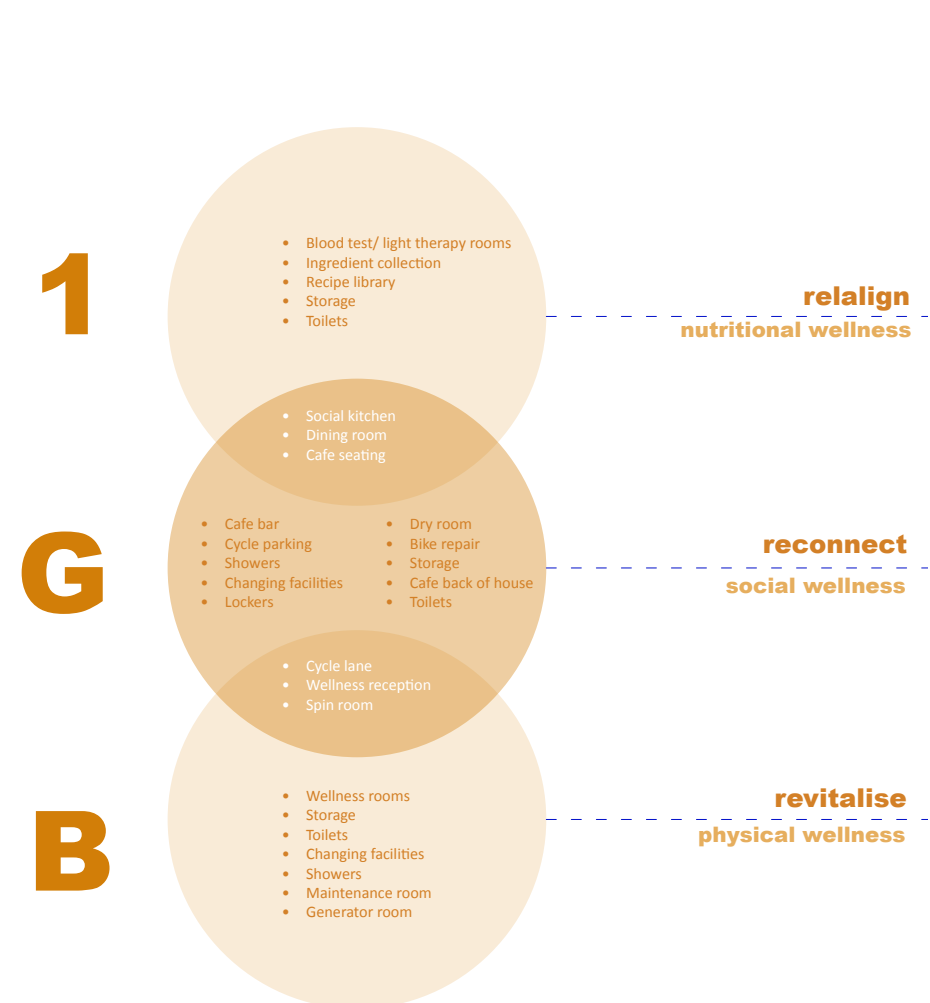
These diagrams illustrate the sun paths at the Hulme Hippodrome during the longest and shortest days of the year. Given the importance of natural light, it is crucial to maximise sunlight exposure across the site. These insights directly inform the design, guiding window placement, spatial orientation, and material selection, to create brighter, healthier environments that support circadian rhythms and enhance overall well-being for users. As the number of night workers continue to rise, these design interventions will remain relevant, offering long-term benefits that promote sustainable health and comfort in a future increasingly shaped by non-traditional working hours.



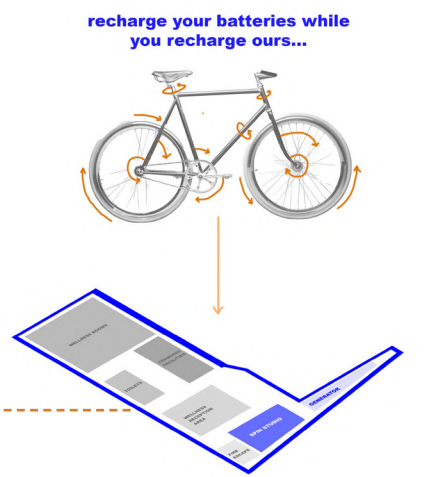
DESIGN CONCEPT



DESIGN DEVELOPMENT



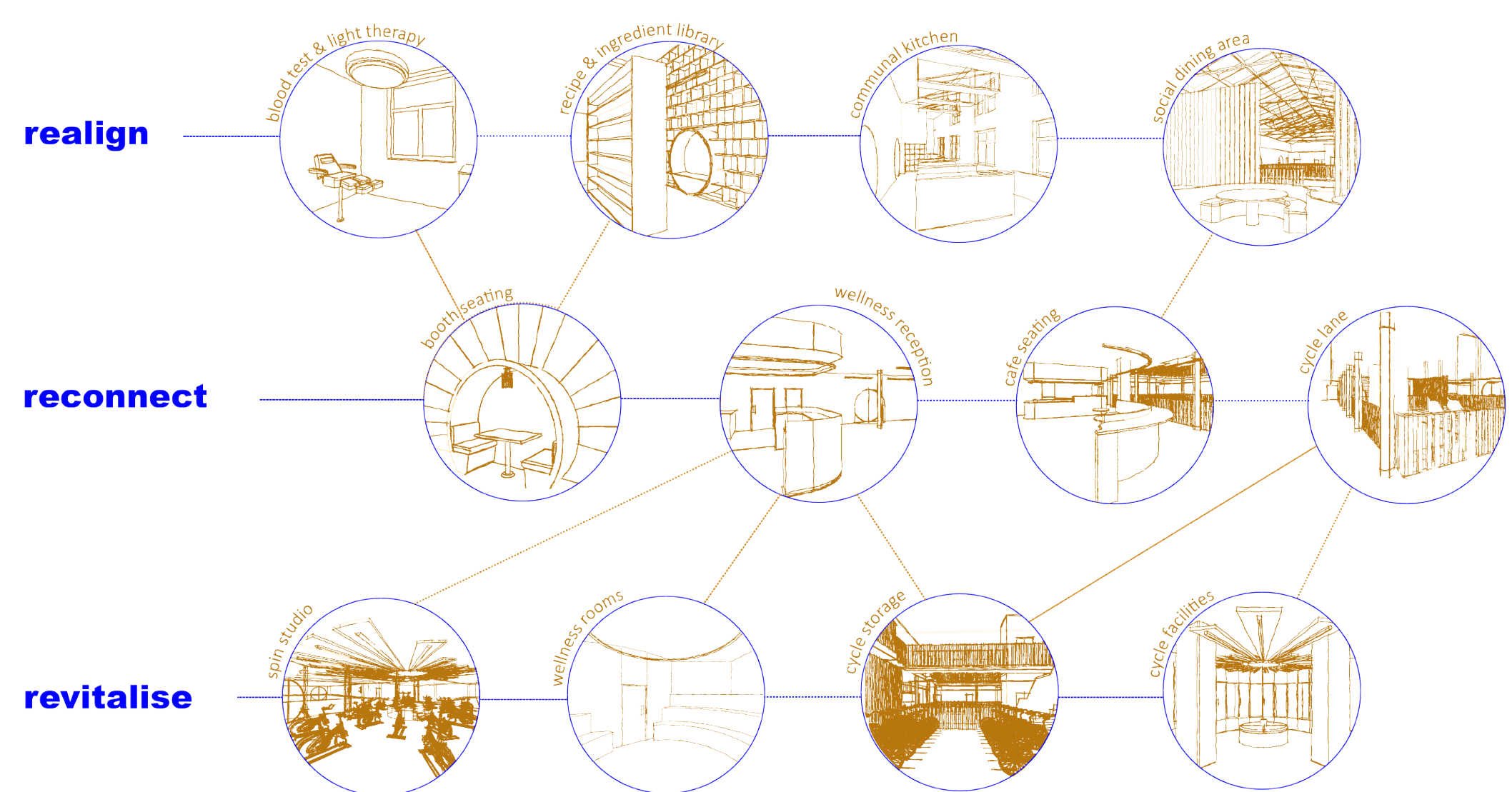
To support a sustainable future, Solstice harnesses kinetic energy from its spin studio, converting users' cycling into electricity that helps power the building. This encourages active engagement while promoting energy-conscious behaviour.



The schedule of accommodation was developed to reflect the evolving needs of night workers and translated into zonal plans that incorporate both cycle paths and cyclical pedestrian routes. These layouts encourage seamless movement, echoing the project's core concept of cycles and repetition. Organised across three floors, each level is anchored by a key theme, social, nutritional, and physical wellbeing.

Protagonist journeys map how users engage with and move between these overlapping zones, illustrating a cohesive and interconnected experience. Designed with future adaptability in mind, the layout ensures that as night work becomes more prevalent, the space remains relevant, flexible, and supportive.

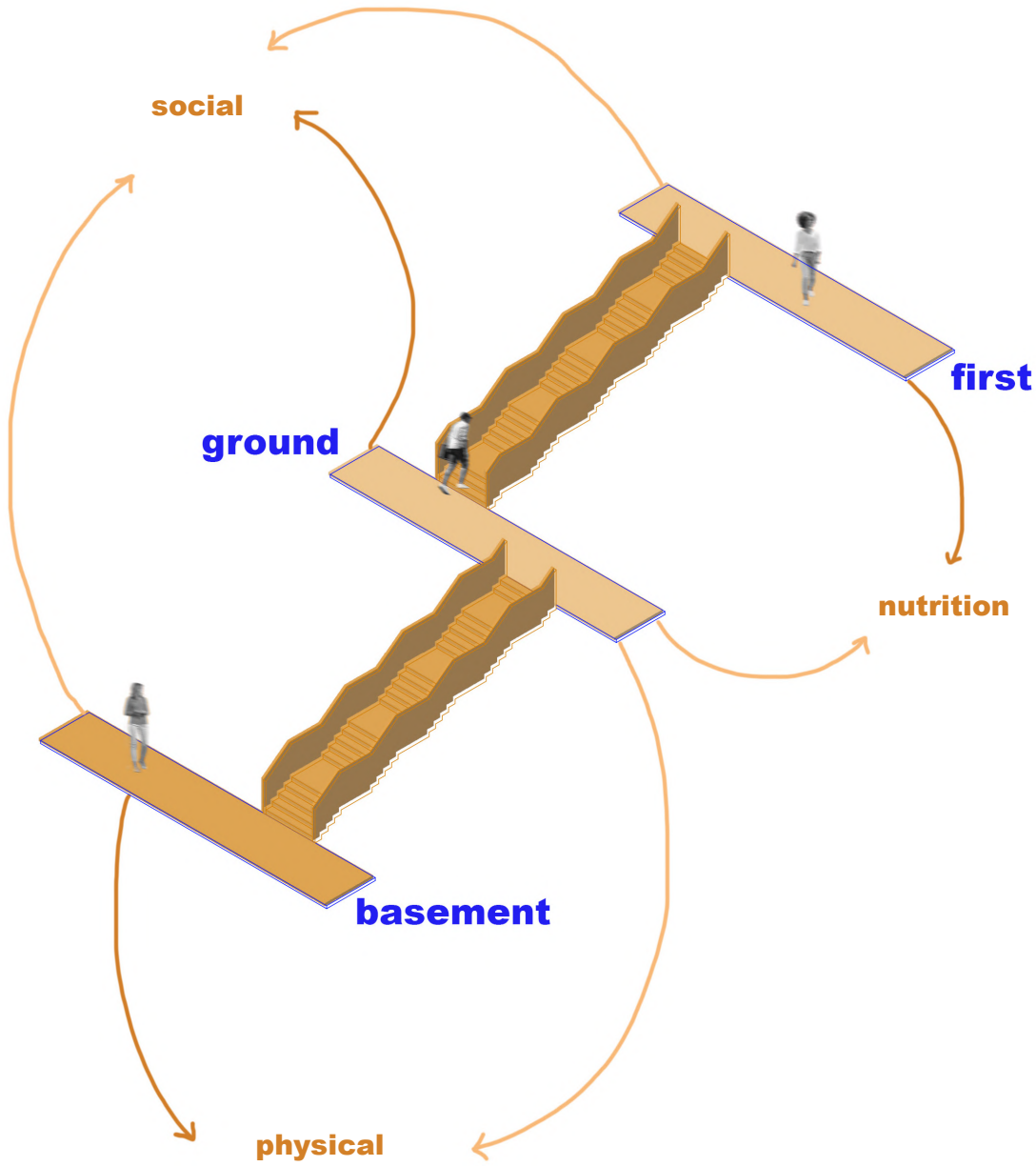
Solstice is designed with scalability in mind. Its core concept and functions can be replicated and implemented across the country, extending its impact to support even more night workers in the future, ensuring long-term relevance as the demand for night-time infrastructure continues to grow.



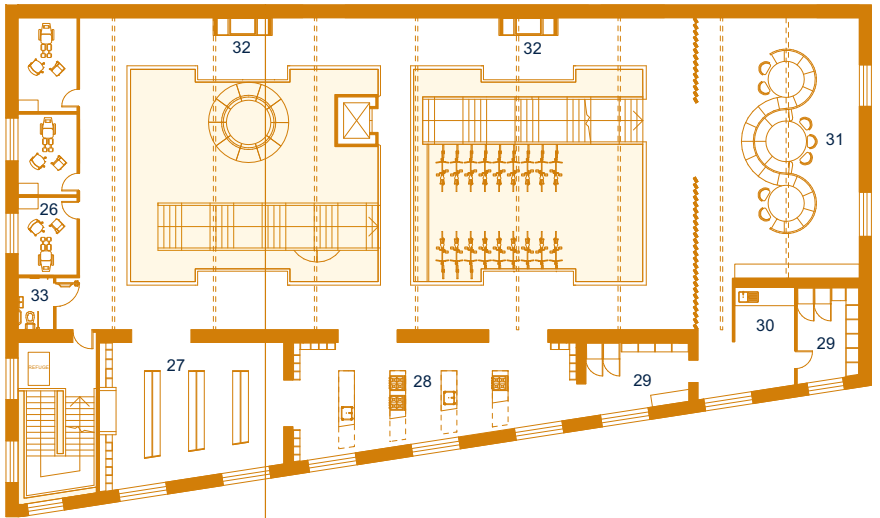
STAIR DESIGN

The linear stair design seamlessly connects the three key focal aspects; physical, social and nutritional wellness, through the central voids. These voids not only anchor the circulation but also foster a strong sense of connection between levels, allowing people to visually and spatially engage with each other throughout the building.

Designed with future behaviours in mind, the linear stair design weaving through the central voids subtly encourages accidental exercise, an increasingly important consideration as daily life becomes more sedentary. The extra-wide stairs are carefully planned to reduce collisions and support smooth circulation throughout the building, making Solstice adaptable, accessible, and aligned for future users.



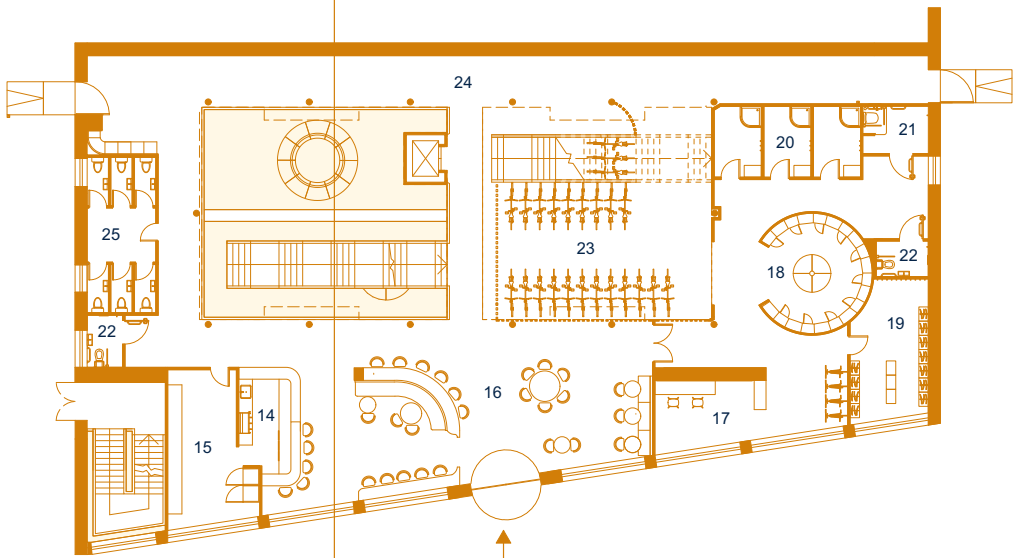
Linear stairs
Ground floor cycle storage within void



First floor plan
Not to scale

realign
nutritional wellness.

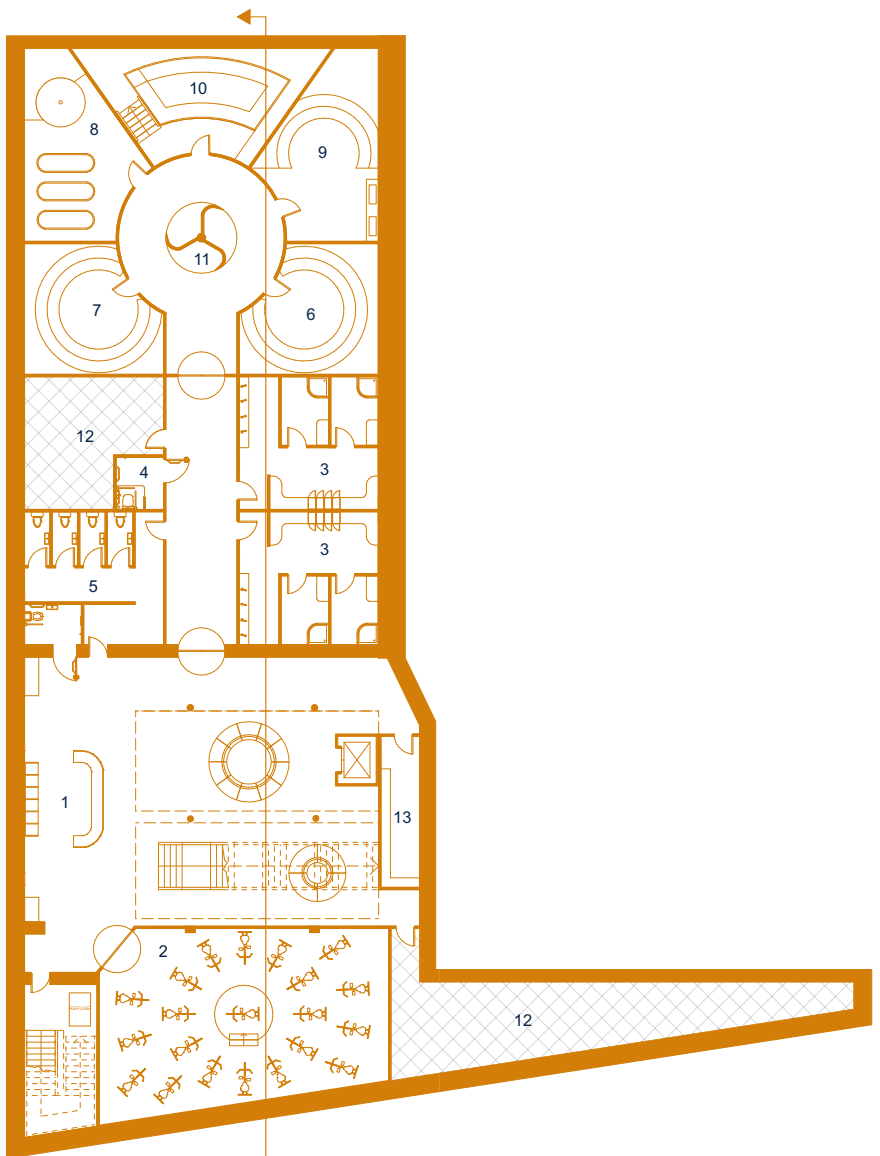
- Key
- 26 - Blood Test / Light Therapy Rooms
 - 27 - Recipe and Ingredient Library
 - 28 - Social Kitchen
 - 29 - Storage
 - 30 - Pot Wash Station
 - 31 - Social Dining
 - 32 - Booth Seating
 - 33 - Accessible Toilet



Ground floor plan
Not to scale

reconnect
social wellness.

- Key
- 14 - Cafe Bar
 - 15 - Prep and Storage
 - 16 - Seating
 - 17 - Bike Repair Shop
 - 18 - Lockers
 - 19 - Dry Room
 - 20 - Shower Facilities
 - 21 - Accessible Shower
 - 22 - Accessible Toilet
 - 23 - Cycle Parking
 - 24 - Cycle Lane
 - 25 - Toilets



Basement plan
Not to scale

revitalise
physical wellness.

- Key
- 01 - Welcome Desk
 - 02 - Spin Studio
 - 03 - Changing Facilities
 - 04 - Accessible Changing
 - 05 - Toilets
 - 06 - Sauna
 - 07 - Steam Room
 - 08 - Ice Bath
 - 09 - Cold Room
 - 10 - Hydrotherapy Pool
 - 11 - Showers
 - 12 - Facility Maintenance
 - 13 - Storage

LIGHTING DESIGN

Lighting plays a central role in **Solstice**, with natural light acting as a foundational design principle. Where daylight is limited, carefully considered artificial lighting fills the gap.

Focal points- LED strip lights arranged in circular formations around key features, such as lockers, spin bikes, and seating areas, mimic the sun’s radial pattern, drawing focus and creating a warm, energising atmosphere.

Wayfinding- To support navigation, LED strips line primary circulation routes and trace the dedicated cycle lane, guiding users intuitively through the space while enhancing visibility and flow.

Light therapy- On the first floor, multifunctional rooms combine blood testing with light therapy. These spaces are equipped with 10,000 lux lighting to help regulate circadian rhythms and support vitamin D production, critical for night shift workers.

As night work becomes increasingly common in future cities, this layered approach to lighting ensures **Solstice** remains both functional and revitalising, promoting wellbeing through intentional, responsive illumination.



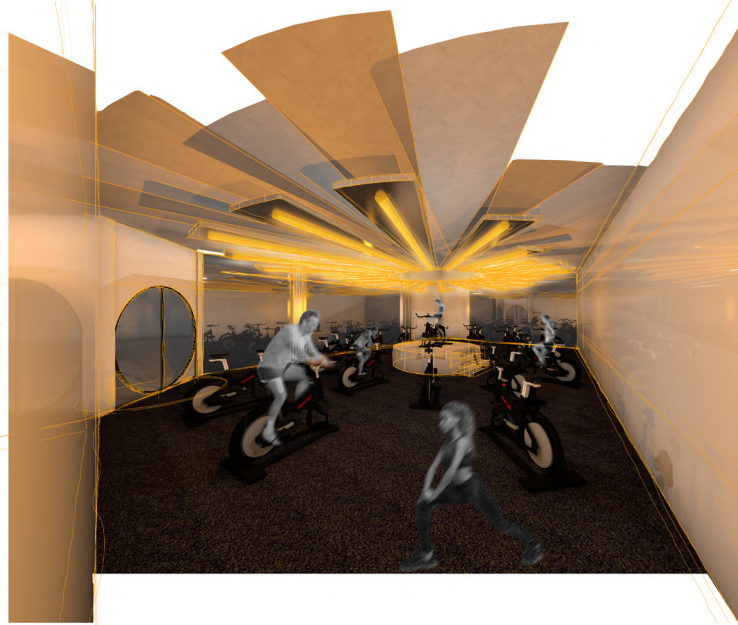
Focal lighting
Lockers



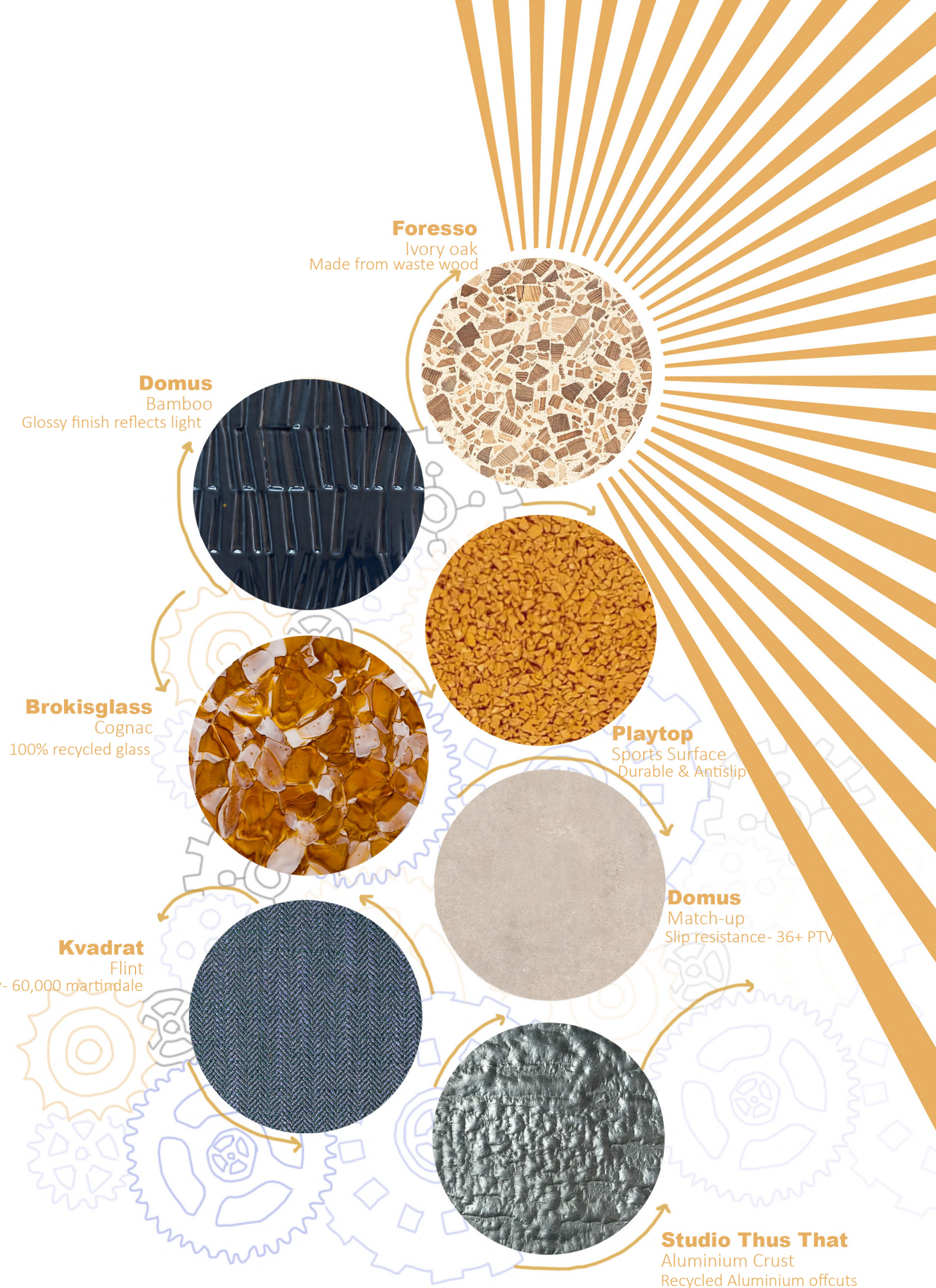
Wayfinding
Cycle lane



Light therapy
Blood test/ light therapy room



Focal lighting
Spin Studio



As outlined, the linear stair design weaves through the central voids, physically and visually connecting each floor, creating continuity between the project’s three key wellness pillars: physical, social, and nutritional. For night workers who often experience isolation, these open voids foster a sense of connection and visibility across levels, encouraging moments of interaction and shared presence.

Looking ahead, this spatial connectivity supports a future where buildings must work harder to counteract social isolation. Solstice anticipates this by creating inclusive, connected environments that prioritise both movement and meaningful engagement.



Section

Not to scale

Key

- | | |
|--------------------------------------|--------------------------|
| 01 - Recipe & Ingredient Library | 06 - Wellness reception |
| 02 - Blood test/ Light therapy rooms | 07 - Changing facilities |
| 03 - Cafe bar | 08 - Sauna |
| 04 - Cycle lane | 09 - Showers |
| 05 - Spin studio | 10 - Hydrotherapy pool |

MATERIALITY

Solstice approaches materiality with both aesthetic and functional intent. Materials were chosen to reflect the tones and qualities of the sky and sun, using soft finishes that shift with changing light. Reflective and diffusive surfaces, such as brushed aluminium and recycled glass, enhance the interaction with daylight, creating spaces that evolve throughout the day and night.

Durability, sustainability, and safety were equally prioritised. Materials were selected for their low environmental impact, durability, and appropriate slip ratings, ensuring long-term performance for the future and user wellbeing across varied conditions.



flythrough

Scan the QR code to view a 3D flythrough of the space, an engaging way to experience its flow and see how it meets the needs of its future users.