

Connection in Disconnection

Restructuring Mental Healthcare Institutions as Integrated Healing Environments



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Student number - 5281059
June 2026

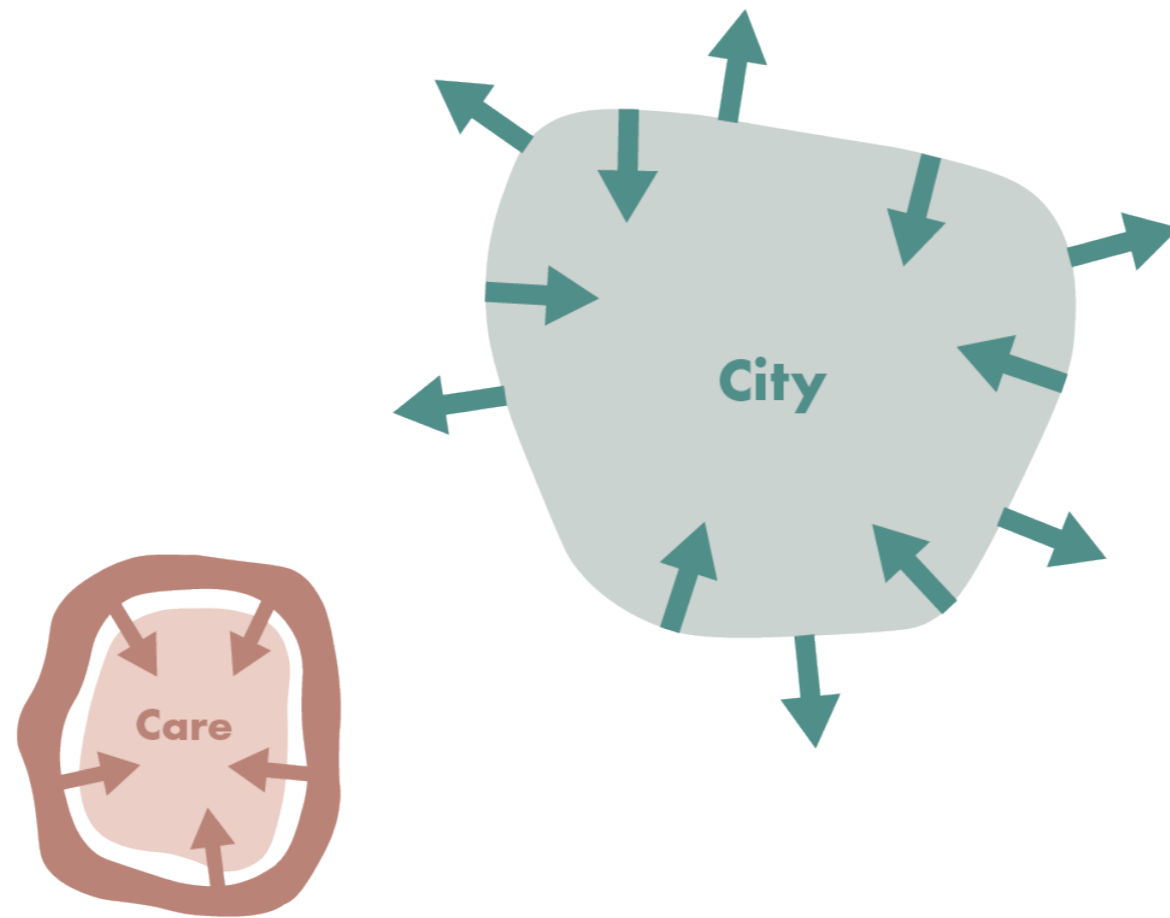
Delft Faculty of Architecture and the Built Environment
Department of Urbanism
Cluster: The Healthy and Inclusive City

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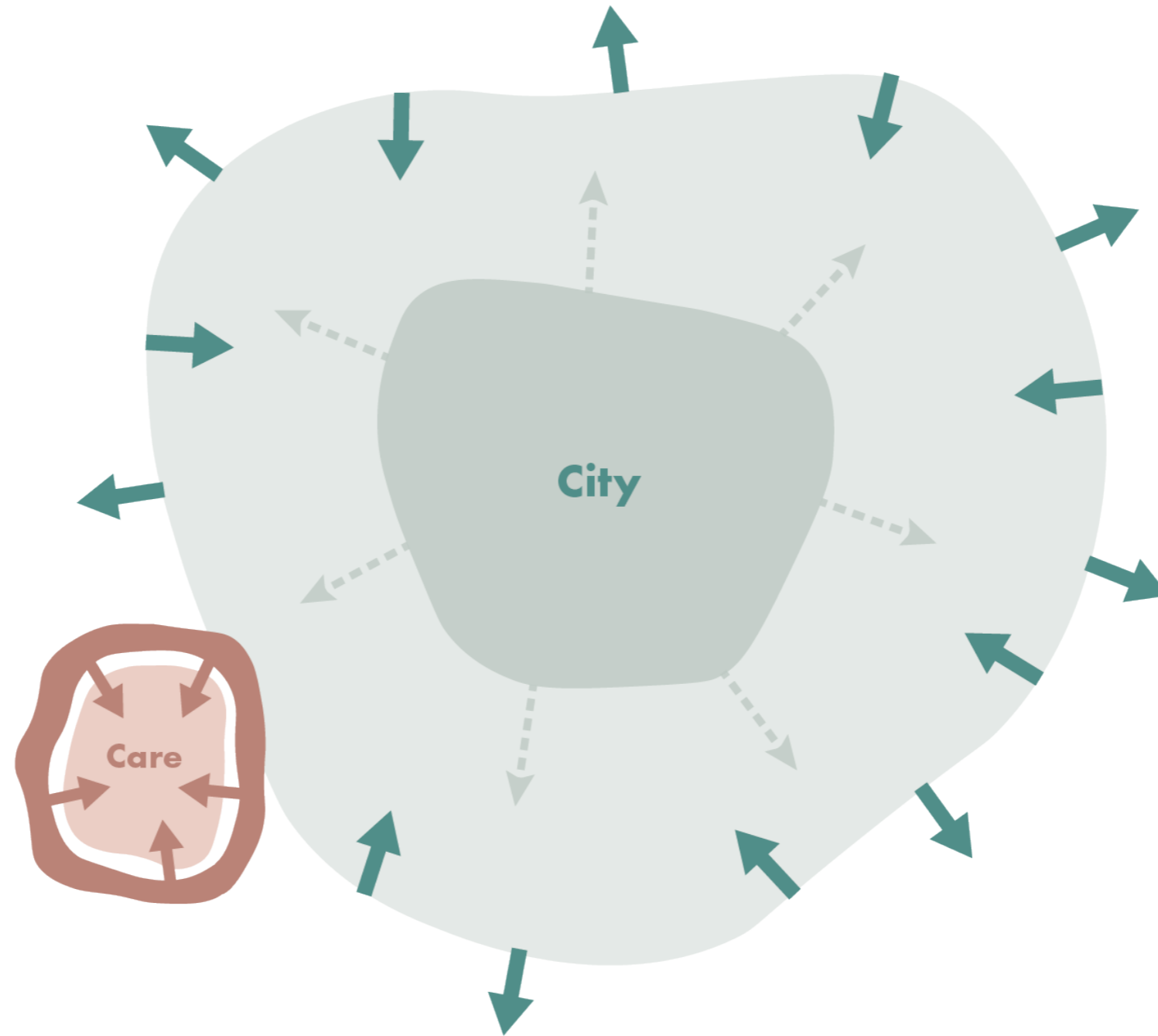
Problem Field



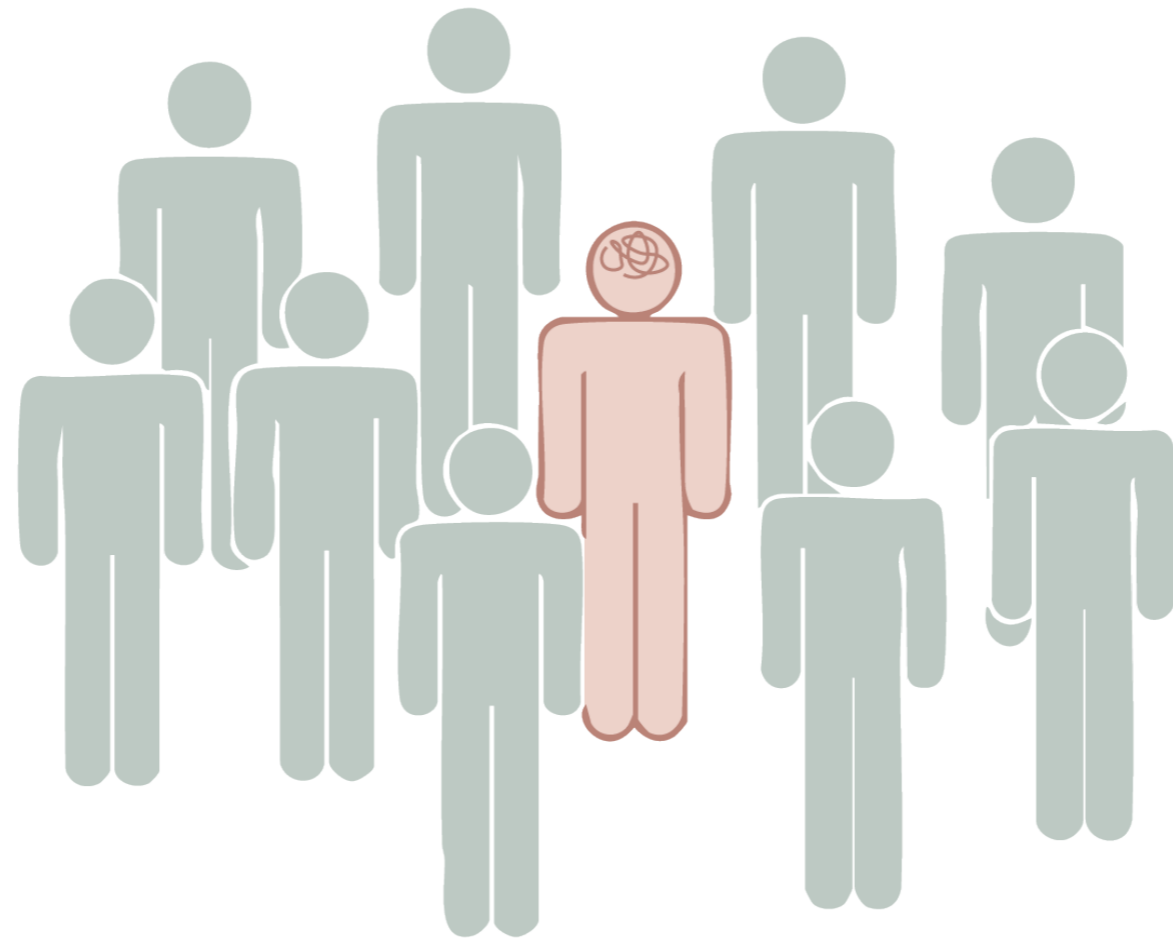
Problem Field



Problem Field



Problem Field



Steeds meer Nederlanders kampen met angst of depressie, waarschuwen experts

HART VAN NEDERLAND - ZORG
Vandaag, 10:40

NOS Nieuws • Vandaag, 07:00

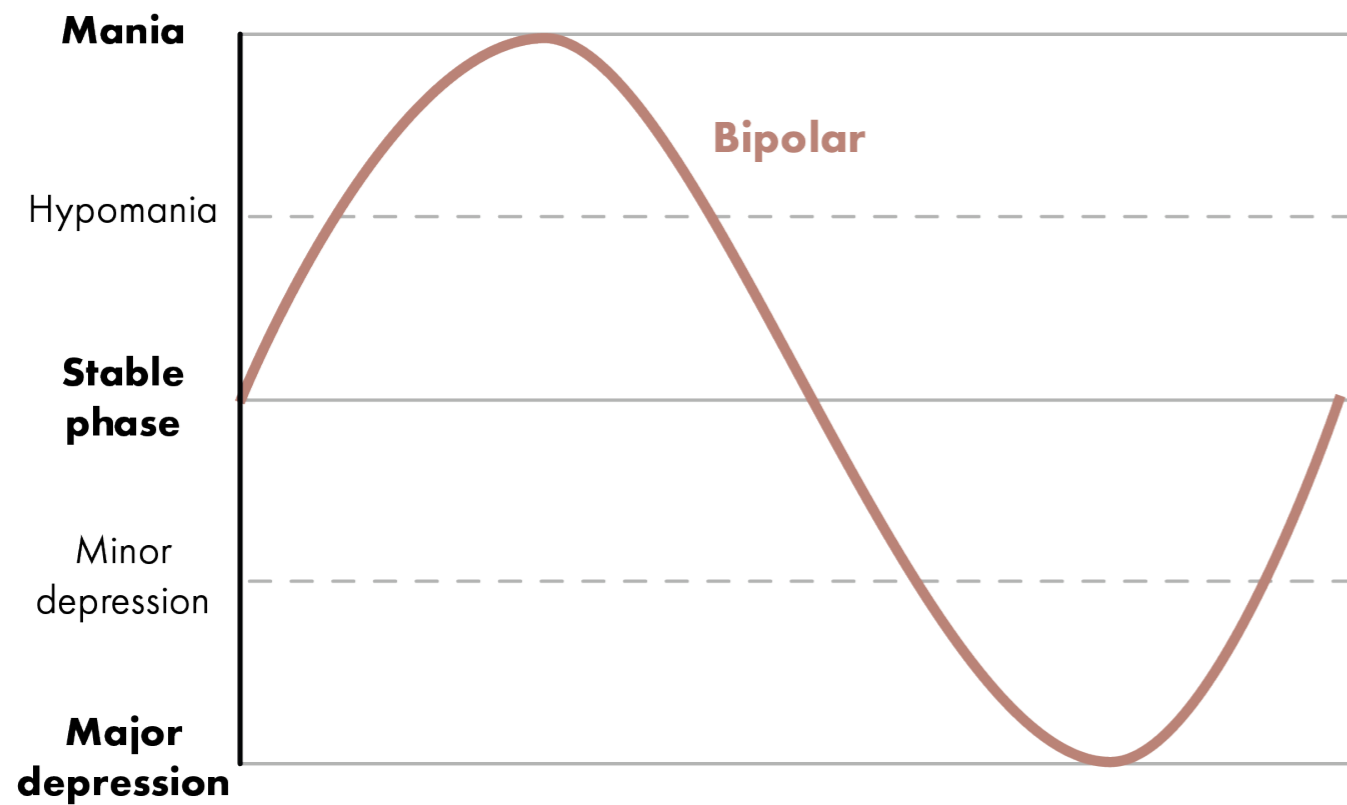
Verslechtering mentale gezondheid zet door, vooral zorgen over jongeren

RIVM en Trimbos

Aantal angstige en depressieve Nederlanders stijgt, vooral meer jongeren en vrouwen

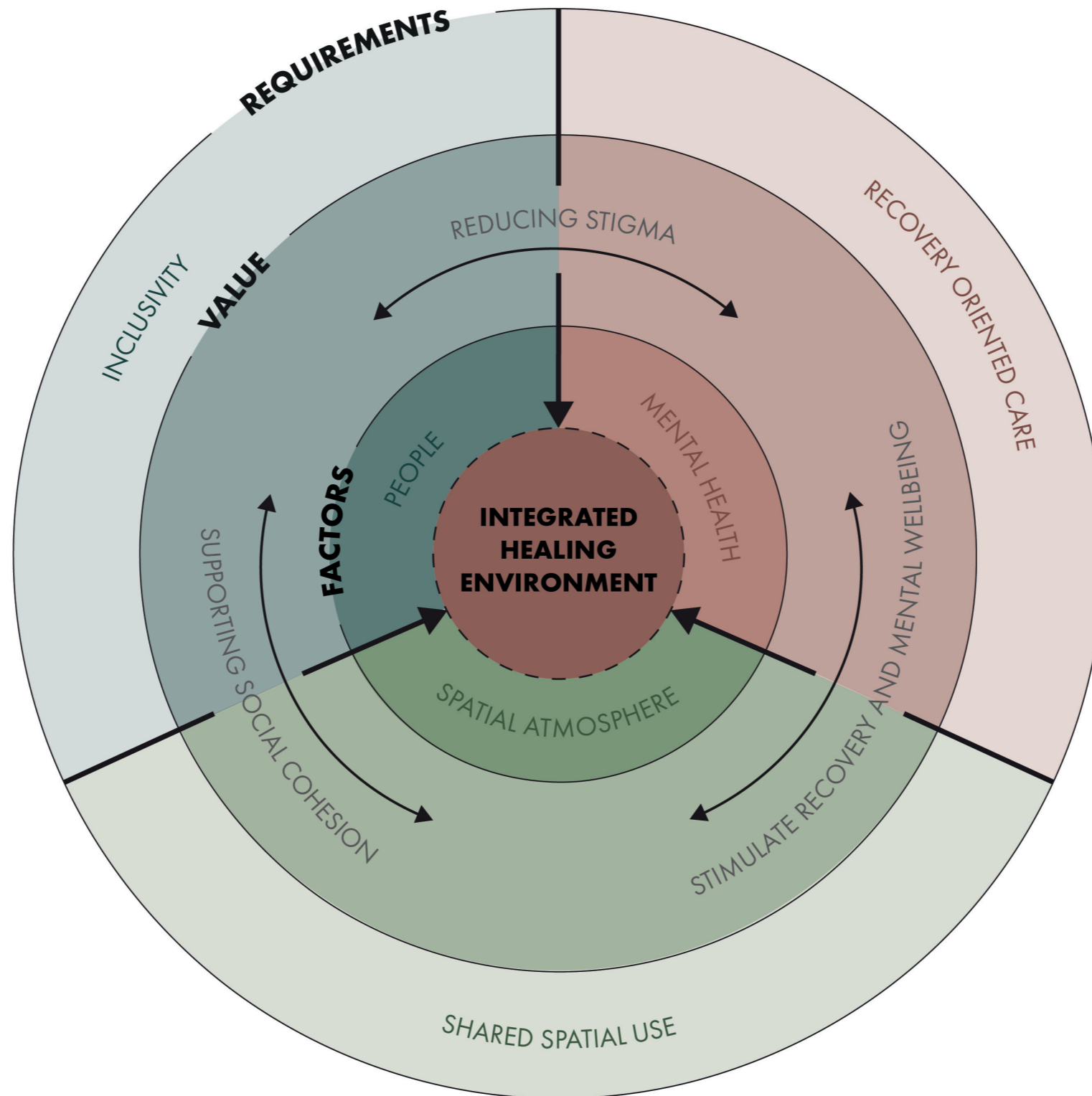
Door RTL Nieuws / ANP • 6 uur geleden • Aangepast: 3 uur geleden

Bipolar Disorder



SENSORY SENSIVITY
SOCIAL PARTICIPATION
IDENTITY FORMATION STRUCTURE
AUTONOMY DIGNITY
PROTECTION VS INCLUSION STABILITY
FLEXIBILITY **MOOD FLUCTUATIONS**
PERSONAL MEANING
PREDICTABILITY REGULAR ROUTINES
SAFETY **SENSE OF BELONGING**
LEGIBILITY DEGREE OF ANONYMITY

Integrated Healing Environment



Observations

Park Bloemendaal, Den Haag



GGZ Delfland, Delft



Duin en bosch, Castricum



Poortmolen, Capelle aan den IJssel



GGZ Delfland, Schiedam



- Care facilities and care related housing
- Amenities
- Regular housing

Observations

Park Bloemendaal, Den Haag



GGZ Delfland, Delft



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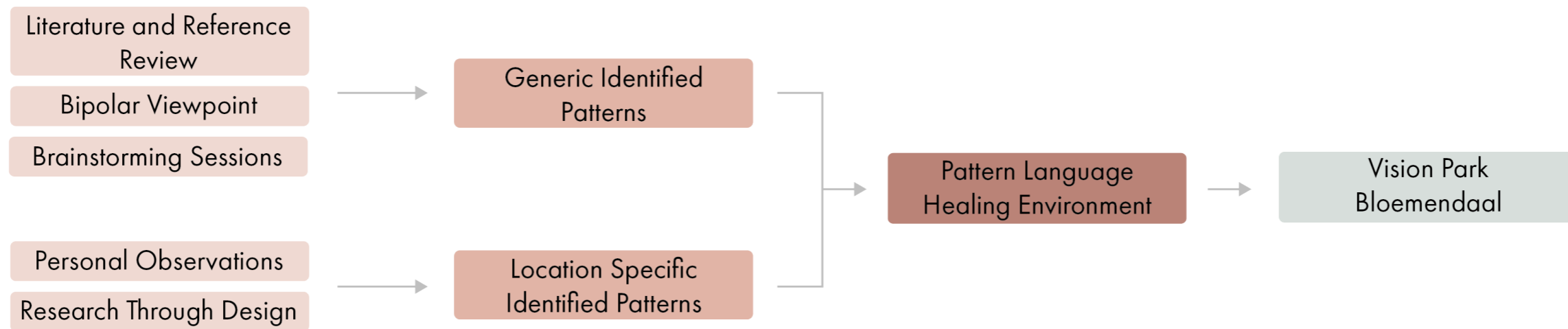


GGZ Delfland, Schiedam

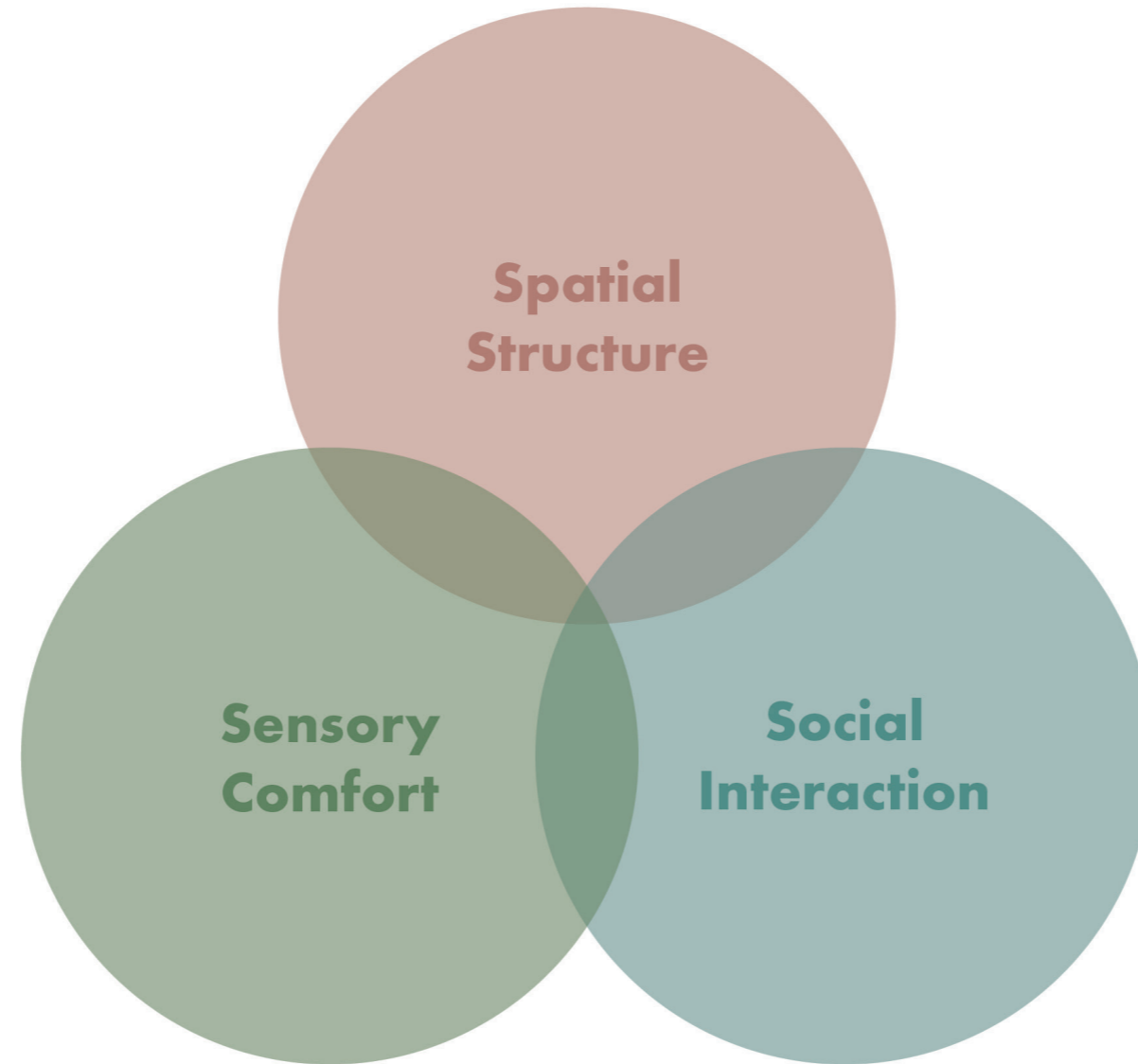


- Care facilities and care related housing
- Amenities
- Regular housing

Pattern Language



Pattern Language



Pattern Language



CITY
SCALE



NEIGHBOUR-
HOOD SCALE



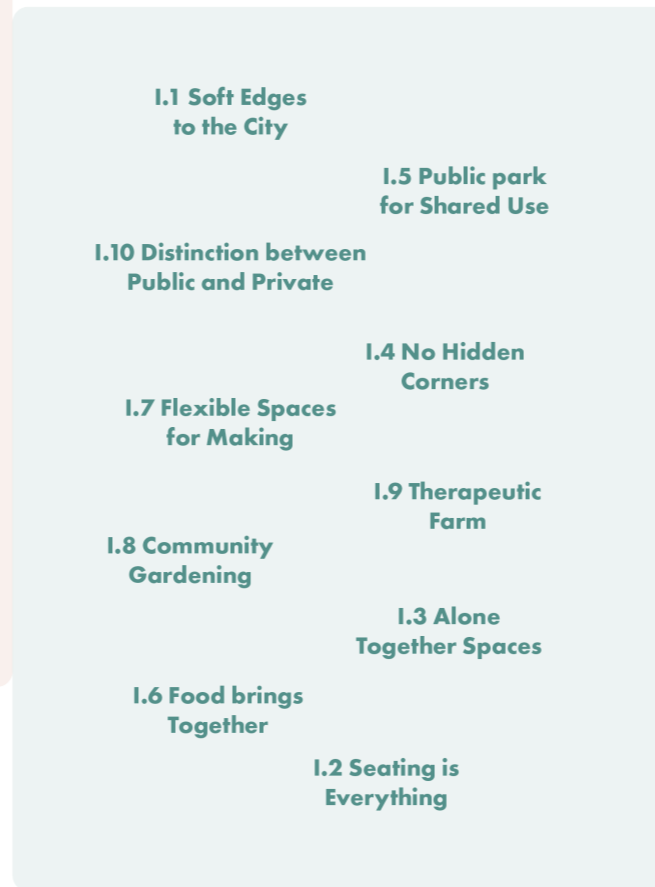
STREET
SCALE



OBJECT
SCALE



SPATIAL STRUCTURE



SOCIAL INTERACTION



SENSORY COMFORT

Pattern Language

S.1 Accessible Site

Care sites should be easily accessible through clear infrastructure and public transport connections so that the site feels open and integrated, rather than isolated.



Theoretical back-up
Historically, mental healthcare institutions were located far away from cities and daily life, resulting in spatial and social isolation. Contemporary mental healthcare research emphasizes integration with the urban fabric, as accessibility reduces stigma and allows care residents to remain connected to everyday society (Roe et al., 2021). Additionally, accessible environments improve independence and participation for care residents.

Practical implication
Care sites should be connected to public transport networks and bicycle routes, entrances should be visible and welcoming, and pedestrian access points should be clearly identifiable. The site should avoid gated or closed appearances that discourage entry, support the institutional character and stigma.

Related patterns
S.7 Fast mobility outside Care area, C.1 Soft Bounded Safety, I.1 Soft Edges to the City.

S.2 Clusters of Care and Housing

Care and regular housing should be spatially clustered to maintain privacy for care residents, while still allowing interaction with everyday urban life.



Theoretical back-up
Research on deminstitutionalisation emphasizes that people with bipolar disorder benefit from living environments that are integrated into society, rather than being fully isolated (Owen et al., 2016; Veseh et al., 2017). At the same time, individuals with mental health disorders often require spaces where they can retreat and recover from overstimulation.

Practical implication
Housing typologies for care residents should be grouped together to provide a sense of safety and familiarity, while regular housing can be located nearby. Shared public spaces between these clusters can create opportunities for interaction without forcing constant social exposure.

Related patterns
S.3 The Heart of the Site, S.4 Gradients of Social Intensity, S.7 Fast Mobility Stream outside Care area, C.1 Soft Bounded Safety, I.10 Distinction between Public and Private.

S.3 The Heart of the Site

Every care site should have a central collective space where amenities and social interaction come together, forming the recognizable heart of the community.



Theoretical back-up
Research in public spaces shows that clustering activities increases the likelihood that people will gather, interact, and use the space. According to Whyte (1980), vibrant public spaces emerge when multiple functions are concentrated in one location, creating a natural attractor for social life.

Practical implication
Facilities such as cafes, restaurants, shops, community centres, and small services should be clustered on a central location. This central area should be easily accessible from all parts of the site and connected to main walking routes.

Related patterns
S.2 Clusters of Care and Housing, S.4 Gradients of Social Intensity, S.6 Continuous Path, I.6 Food Brings Together, I.7 Flexible Spaces for Making, I.8 Community Gardening, I.9 Therapeutic Farm.

S.4 Gradients of Social Intensity

Care environments should provide a range of spaces with different levels of social intensity so residents can choose their level of engagement based on their emotional state.



Theoretical back-up
People with mood disorders, such as bipolar disorder, often experience fluctuating energy levels and social needs. Environments that allow individuals to control their level of social exposure, can support emotional regulation and reduce stress (Owen et al., 2016; Veseh et al., 2017).

Practical implication
The spatial layout should include active social interaction spaces, semi-social transitional areas, and quiet retreat spaces. These zones should be connected through a walking route that allows residents to move between them easily.

Related patterns
S.3 The Heart of the Site, S.5 Sensory Zoning, I.5 Public park for Shared use, I.2 Seating is Everything, I.3 Alone Together Spaces, I.6 Food Brings Together, I.7 Flexible Spaces for Making, I.8 Community Gardening, I.9 Therapeutic Farm.

S.9 Green Edges

Green landscape structures can function as natural edges that define spaces and support orientation.



Theoretical back-up
Edges help people understand spatial boundaries and organize their mental map of an environment (Lynch, 1960). Green edges can work as natural orientation points on care sites.

Practical implication
Use hedges, tree lines, or planted buffers to define spatial boundaries. Usually on historical care institutions these green structures already exist.

Related patterns
S.6 Continuous Path, S.10 Blue Edges, S.12 Sightlines as Orientation, I.1 Soft Edges to the City, I.10 Distinction between Public and Private, C.1 Soft Bounded Safety.

S.10 Blue Edges

Water structures can act as natural spatial edges while also providing restorative landscape qualities.



Theoretical back-up
Water elements contribute to restorative environments and can improve mental well-being. Blue edges help to understand spatial boundaries and the creation of a mental map of the environment, and works as a natural orientation point (Lynch, 1960; Roe et al., 2021).

Practical implication
Integrate canals, ponds, or other water structures as spatial boundaries and orientation elements. On historical care institutions these water structures usually already exist.

Related patterns
S.6 Continuous Path, S.9 Green Edges, S.12 Sightlines as Orientation, I.1 Soft Edges to the City.

S.11 Identifiable Neighbourhoods

Different neighbourhood identities within a care site can strengthen spatial recognition and create a sense of place.



Theoretical back-up
Distinct neighbourhood identities help individuals to aggregate spatial information and navigate through environments more easily (Lynch, 1960). It helps to create orientation points and mental maps of the environment.

Practical implication
Use different building typologies, materials, or landscape styles to distinguish neighbourhoods.

Related patterns
S.6 Continuous Path, S.13 Recognisable Landmarks, I.10 Distinction between Public and Private, C.2 Seasonal Planting provides Diversity, C.8 Natural Materiality and Form.

S.12 Sightlines as Orientation

Alternating open and sheltered spaces can improve spatial orientation by creating clear visual connectors between different parts of the site.



Theoretical back-up
Visual clarity helps individuals understand spatial relationships and navigate through environments more confidently. Additionally, it supports the safety on the site by a clear overview (Lynch, 1960; Huaman et al., 2021).

Practical implication
Design landscapes with controlled sightlines where landmarks or destinations remain partially visible from key points along the route. Create open viewpoints, where necessary, as safety measurements.

Related patterns
S.6 Continuous Path, S.9 Green Edges, S.10 Blue Edges, I.1 Soft Edges to the City.

S.5 Sensory Zoning

Care sites should be organized into zones with different sensory intensities to accommodate varying levels of stimulus tolerance.



Theoretical back-up
Mental healthcare environments must address sensory sensitivity, as excessive stimuli can increase stress or anxiety for some individuals. Healing environments research highlights the importance of calm, low-stimulus spaces that allow psychological recovery (Huaman et al., 2021; Roe et al., 2021).

Practical implication
Design the site with quiet zones, transitional zones, and active zones. Quiet zones can include gardens or small courtyards, while active zones may contain social amenities or community activities, each zone has its own sensory experience.

Related patterns
S.4 Gradients of Social Intensity, I.3 Alone Together Spaces, C.5 Green Streetscapes, C.3 View on Green Structures, C.6 Microclimate Comfort, C.4 Accessible and Filtered Daylight Zones, C.7 Soft Soundscapes, C.9 Safe Evening Lighting.

S.6 Continuous Path

A continuous walking route should structure the site and help residents orient themselves while allowing them to move around more independently.



Theoretical back-up
Clear paths are a fundamental element of spatial orientation, Lynch (1960) demonstrated that recognizable routes help people create mental maps of their environment, increasing their confidence and autonomy.

Practical implication
Design a looped walking path that connects important destinations across the site. The route should be continuous, clearly marked, and easy to follow so residents can always find their way back to their starting point.

Related patterns
S.3 The Heart of the Site, S.8 Prioritising Walking, S.12 Sightlines as Orientation, S.13 Recognisable Landmarks, S.11 Identifiable Neighbourhoods, S.14 Nodes as Recognition points, S.9 Green Edges, S.10 Blue Edges.

S.7 Fast Mobility Stream Outside Care area

Fast mobility routes such as car traffic should be kept outside the primary care environment to reduce noise and improve safety.



Theoretical back-up
Traffic noise and vehicular dominance can increase stress and discourage outdoor activity by care residents. Creating pedestrian-oriented environments improves both safety and mental wellbeing (Noelle et al., 2024; Huaman et al., 2021).

Practical implication
Locate main vehicular roads along the outer edges of the site, while keeping the central care environment primarily pedestrian-oriented.

Related patterns
S.1 Accessible Site, S.2 Clusters of Care and Housing, C.7 Soft Soundscapes, C.9 Safe Evening Lighting.

S.8 Prioritising Walking

Walking should be the primary mode of movement within care sites to support both safety and mental health.



Theoretical back-up
Research shows that moderate physical activity, such as walking, can reduce symptoms of depression and improve emotional wellbeing (Noelle et al., 2024). Walking environments also encourage social encounters and daily movement routines.

Practical implication
Design the site with pedestrian priority at crossings and intersections. Walking paths should be comfortable, well lit, and clearly separated from vehicular traffic.

Related patterns
S.1 Accessible Site, S.14 Nodes as Recognition points, C.2 Seasonal Planting provides Diversity, C.9 Safe Evening Lighting.

S.13 Recognisable Landmarks

Distinct buildings, sculptures, or landscape elements can function as landmarks that support spatial recognition and orientation.



Theoretical back-up
Landmarks are essential elements in the creation of a mental map and helps individuals remember locations and routes within complex environments (Lynch, 1960).

Practical implication
Place recognisable elements such as sculptures, unique buildings, or large trees along main walking paths to support orientation.

Related patterns
S.6 Continuous Path, S.11 Identifiable Neighbourhoods, S.14 Nodes as Recognition Points.

S.14 Nodes as Recognition points

Different types of nodes can act as spatial reference points that structure movement across the site.



Theoretical back-up
Nodes are strategic points where paths intersect and where social or functional activities occur. These different types of nodes can stimulate the orientation ability of care residents, especially for individuals with bipolar disorder, and also other users (Lynch, 1960).

Practical implication
Design nodes such as squares, garden intersections, road crossings, or activity spaces at key connections to walking routes.

Related patterns
S.6 Continuous Path, S.8 Prioritising Walking, S.13 Recognisable Landmarks.

I.1 Soft Edges to the City

Care sites should have gradual transitions to the surrounding city, rather than hard physical boundaries in order to support integration and reduce social isolation and stigma.



Theoretical back-up
Historically, many mental healthcare sites were designed as isolated institutions separated from urban life. Contemporary mental healthcare research emphasizes the importance of integration and social inclusion, as participation in everyday urban environments can reduce stigma and improve recovery outcomes (Roe et al., 2021).

Practical implication
Use landscape elements, gradual spatial transitions, and shared public spaces instead of big water bodies, fences or walls to reconnect the care site to surrounding neighbourhoods.

Related patterns
S.1 Accessible Site, S.9 Green Edges, S.10 Blue Edges, S.12 Sightlines as Orientation, I.10 Distinction between Public and Private.

I.2 Seating is Everything

Providing diverse seating options is essential, because seating supports social interaction, observation, and individual retreat.



Theoretical back-up
Observations of successful public spaces show that seating is one of the most important factors determining whether people stay in a space. According to Whyte (1980), people are more likely to use spaces where they can comfortably sit and observe others.

Practical implication
Provide a variety of seating types, including benches, edge seating, and sheltered seating areas. These different seating options need to provide different levels of social exposure.

Related patterns
S.4 Gradients of Social Intensity, I.4 Public park for Shared use, I.3 Alone Together Spaces, I.4 No Hidden Corners.

I.3 Alone Together Spaces

Spaces that allow individuals to be present near others without direct interaction are essential to support participation without social pressure.



Theoretical back-up
Whyte (1980) observed that people often prefer to sit near others, even when they are not directly interacting. This allows care residents to feel socially connected to a broader community, while maintaining personal space (Owen et al., 2016).

Practical implication
Create spaces such as terraces, gardens, or seating edges where individuals can observe social life without actively participating. A place to retreat, but still a visible place, because of safety measurements.

Related patterns
S.4 Gradients of Social Intensity, S.5 Sensory Zoning, I.2 Seating is Everything, I.4 No Hidden Corners.

I.4 No Hidden Corners

Care environments should avoid isolated or hidden spaces in order to maintain safety and a sense of spatial overview.



Theoretical back-up
Clear sightlines and visible spaces improve perceived safety and encourage people to use public areas more confidently. Especially on care sites safety is very important, care residents should not be able to hide away (Huaman et al., 2021).

Practical implication
Design open spaces with clear visibility and avoid dark or isolated areas that may create feelings of insecurity.

Related patterns
C.6 Microclimate Comfort, I.2 Seating is Everything, I.3 Alone Together Spaces.

I.5 Public Park for Shared use

A shared public park can function as a communal space where care residents, local residents, staff, and visitors can interact and participate in everyday activities.



Theoretical back-up
Public spaces that allow informal social interaction help to create inclusive communities and reduce social stigma. Access to shared green spaces also supports mental well-being and social participation (Owen et al., 2016; Berman et al., 2012).

Practical implication
Design a central park that is accessible for all stakeholders while still maintaining safe and comfortable areas for care residents.

Related patterns
S.4 Gradients of Social Intensity, I.2 Seating is Everything, I.6 Food Brings Together.

I.6 Food Brings Together

Food-related spaces can function as strong social attractors that bring care residents, visitors, and local residents together.



Theoretical back-up
Whyte (1980) observed that food vendors and cafes significantly increase the use and liveliness of public spaces because food naturally attracts people and encourages informal interaction.

Practical implication
Introduce small restaurants, bakeries, or cafes in the central area of the site where both care residents and other users can meet and interact.

Related patterns
S.3 The Heart of the Site, S.4 Gradients of Social Intensity, I.5 Public park for Shared use.

C.2 Seasonal Planting provides Diversity

Seasonal planting should introduce subtle variation throughout the year, encouraging people to experience the outdoor environment repeatedly.



Theoretical back-up
Natural variation and seasonal change can stimulate interest in the outdoor environment while maintaining a calm and restorative atmosphere on the site (Kaplan & Kaplan, 1989).

Practical implication
Use diverse planting schemes with trees, bushes, plants, and flowers that change across seasons.

Related patterns
S.8 Prioritising Walking, S.11 Identifiable Neighbourhoods, C.1 Soft Bounded Safety, C.5 Green Streetscapes, C.8 Natural Materiality and Form.

C.3 View on Green Structures

Visual access to greenery is essential to support recovery from mental health disorders and improves mental wellbeing.



Theoretical back-up
Studies show that views of natural landscapes can reduce stress and support emotional recovery (Ulrich, 1984; Guidolin et al., 2024). This is especially relevant for the recovery process of individuals with bipolar disorder.

Practical implication
Ensure that buildings, paths, and seating areas provide views toward trees, gardens, or natural landscapes.

Related patterns
S.5 Sensory Zoning, C.5 Green Streetscapes.

C.4 Accessible and Filtered Daylight Zones

Accessible and filtered daylight should ensure a comfortable visual experience of natural light while preventing overstimulation caused by direct and intense sunlight.



Theoretical back-up
Soft and natural lighting conditions contribute to restorative environments by reducing sensory stress and overstimulation. In addition, the circadian rhythm is supported by accessible exposure to daylight. This is essential for emotional regulation (Guidolin et al., 2024; Ulrich et al., 2008).

Practical implication
Design spaces where daylight is both present and easily accessible. Use trees, pergolas, or shading structures to filter and soften direct sunlight, and create transitional zones between direct sunlight and shade.

Related patterns
S.5 Sensory Zoning, C.6 Microclimate Comfort, C.7 Soft Soundscapes.

C.5 Green Streetscapes

Green streetscapes can create a visual and ecological connection between care areas and residential areas.



Theoretical back-up
Green urban environments have been shown to improve mental health and reduce stress among urban and care residents (Roe et al., 2021).

Practical implication
Plant trees and vegetation along streets and pathways to create continuous green corridors.

Related patterns
S.5 Sensory Zoning, C.2 Seasonal Planting provides Diversity, C.3 View on Green Structures.

I.7 Flexible Spaces for Making

Spaces for creative or productive activities allow care residents to participate in meaningful work without rigid schedules.



Theoretical back-up
Participation in meaningful activities can strengthen identity, self-esteem, and daily structure for people with mental health disorders. It can create a sense of belonging for care residents, this has a positive influence on the recovery process (Veseh et al., 2017; Roe et al., 2021).

Practical implication
Provide workshop spaces such as woodworking studios, bike repair shops, or creative ateliers where residents can work at their own pace.

Related patterns
S.3 The Heart of the Site, S.4 Gradients of Social Intensity.

I.8 Community Gardening

Community gardens allow individuals to participate in shared activities while maintaining personal autonomy.



Theoretical back-up
Gardening activities can support recovery processes and the overall mental health by creating a daily routine, providing a sense of purpose and belonging, and allowing social interaction in a low-pressure setting (Veseh et al., 2017; Roe et al., 2021).

Practical implication
Create garden plots where residents can garden individually while still being part of a shared environment, where social interaction is possible but not mandatory.

Related patterns
S.3 The Heart of the Site, S.4 Gradients of Social Intensity.

I.9 Therapeutic Farm

Interaction with animals can support emotional wellbeing and provide opportunities for social interaction and meaningful activity.



Theoretical back-up
Animal-assisted interventions have been shown to reduce stress and improve mood among individuals with mental health conditions, such as bipolar disorder, by fostering emotional connections and responsibility (Fine, 2019).

Practical implication
Introduce a small therapeutic farm or animal area where residents can observe or participate in caring for animals.

Related patterns
S.3 The Heart of the Site, S.4 Gradients of Social Intensity.

C.1 Soft Bounded Safety

Soft landscape boundaries are essential to create safety while reinforcing an institutional or restorative atmosphere.



Theoretical back-up
Institutional environments can negatively affect mental wellbeing and increase stigma. Healing environments aim to provide safety while maintaining a welcoming and natural character (Liu et al., 2020; Ulrich et al., 2008).

Practical implication
Use hedges, trees, or landscape features instead of fences, wherever possible, to define boundaries on the site. For safety measures fences are sometimes required, natural elements can be used to hide them. This reduces the institutional character from the outside view on care environments.

Related patterns
S.1 Accessible Site, S.2 Clusters of Care and Housing, S.9 Green Edges, I.10 Distinction between Public and Private, C.2 Seasonal Planting provides Diversity, C.8 Natural Materiality and Form.

C.6 Microclimate Comfort

Comfortable microclimates encourage people to spend time outdoors and interact with their surroundings.



Theoretical back-up
Environmental comfort strongly influences how public spaces are used, particularly in terms of sunlight, wind, and temperature (Roe et al., 2021; Guidolin et al., 2024).

Practical implication
Provide seating and amenities with different environmental conditions, such as sun exposure and wind protection.

Related patterns
S.5 Sensory Zoning, C.4 Accessible and Filtered Daylight Zones, I.4 No Hidden Corners.

C.7 Soft Soundscapes

Natural sound environments can reduce stress and enhance the calming qualities of outdoor environments.



Theoretical back-up
Natural sounds, such as water or rustling leaves, can reduce stress levels and improve emotional wellbeing (Guidolin et al., 2024; Roe et al., 2021).

Practical implication
Introduce water features, vegetation, and quiet zones that buffer traffic noise and provide calming environments.

Related patterns
S.5 Sensory Zoning, S.7 Fast Mobility Stream outside Care area, C.4 Accessible and Filtered Daylight Zones.

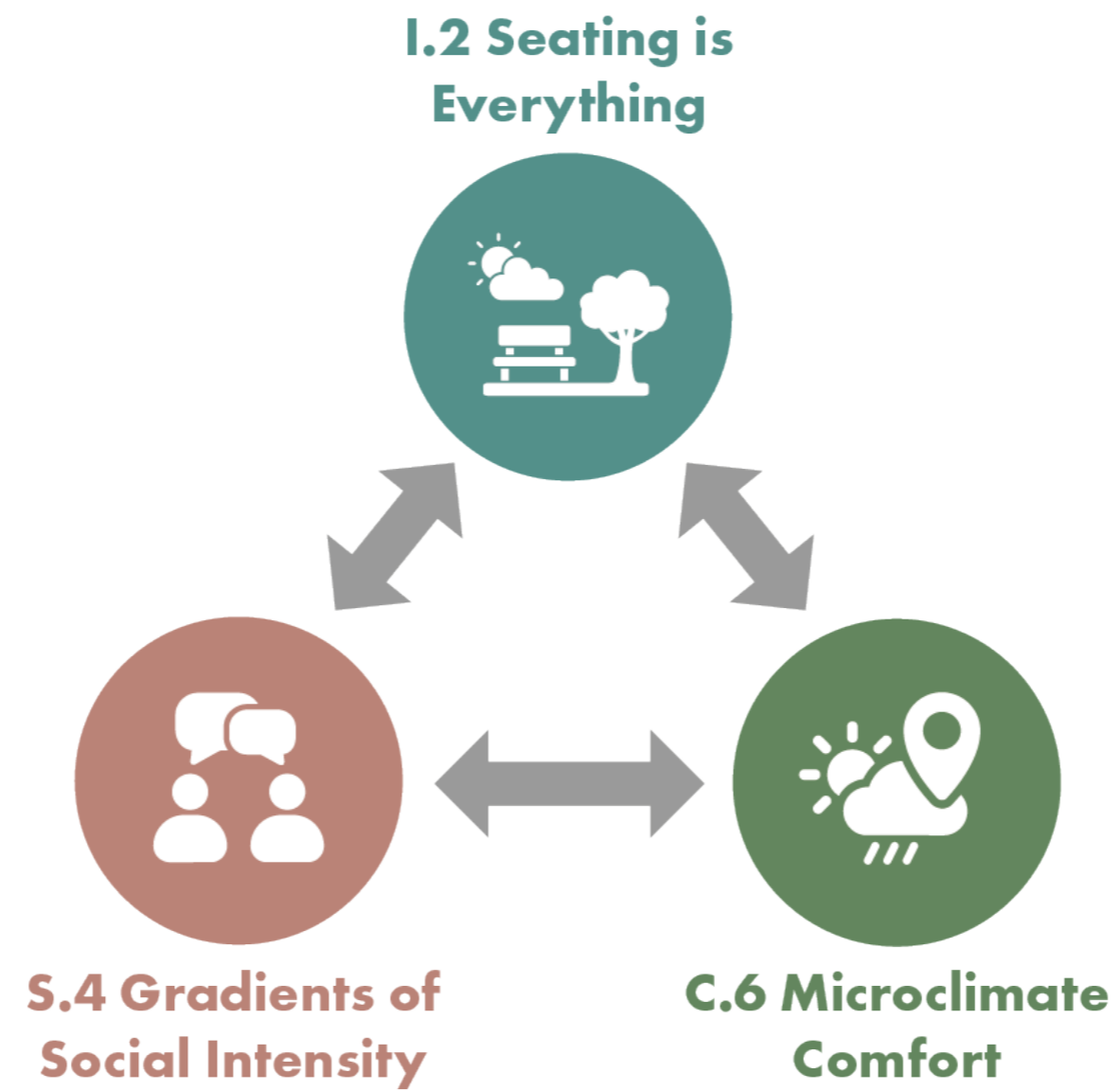
C.8 Natural Materiality and Form

Natural materials create a comforting and less institutional atmosphere compared to artificial materials.



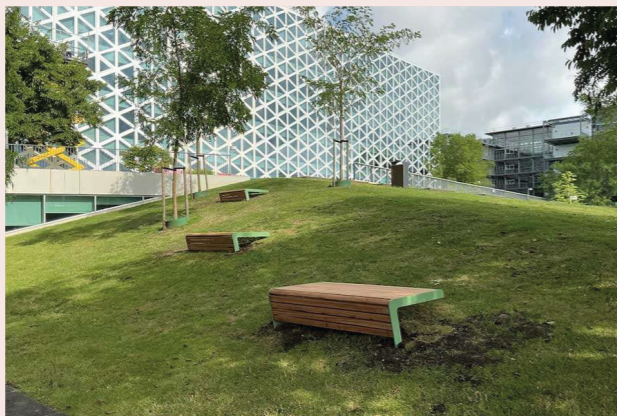
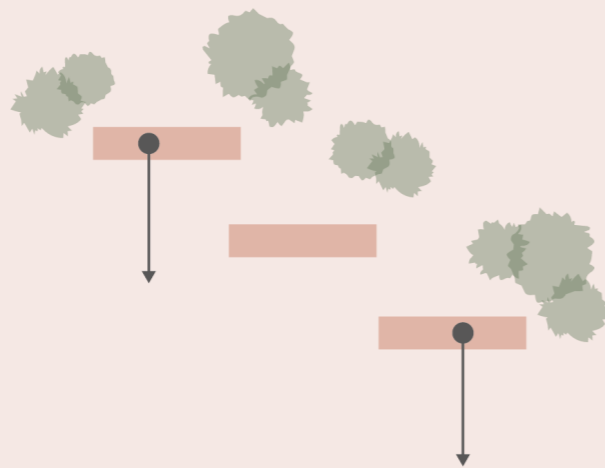
Theoretical back-up
Healing environments often use natural materials because they are perceived as more comforting, calming and familiar. Organic forms can calm down the mind of individuals, at lot more than linear shapes (Guidolin et al., 2024

Pattern Language

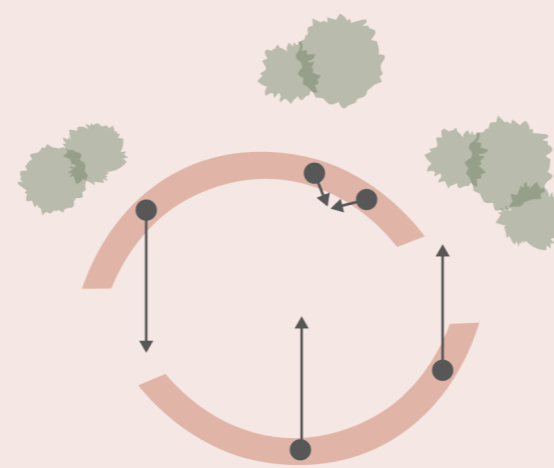


Pattern Language

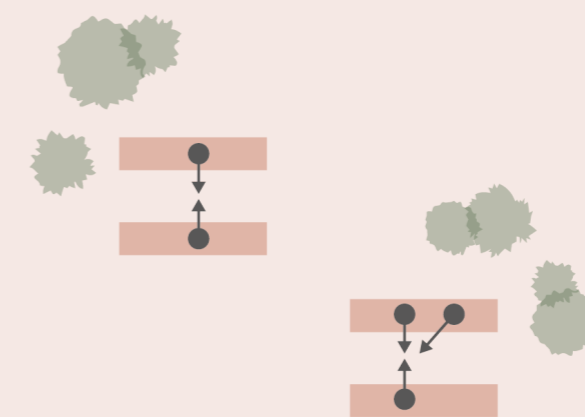
Quiet Zones



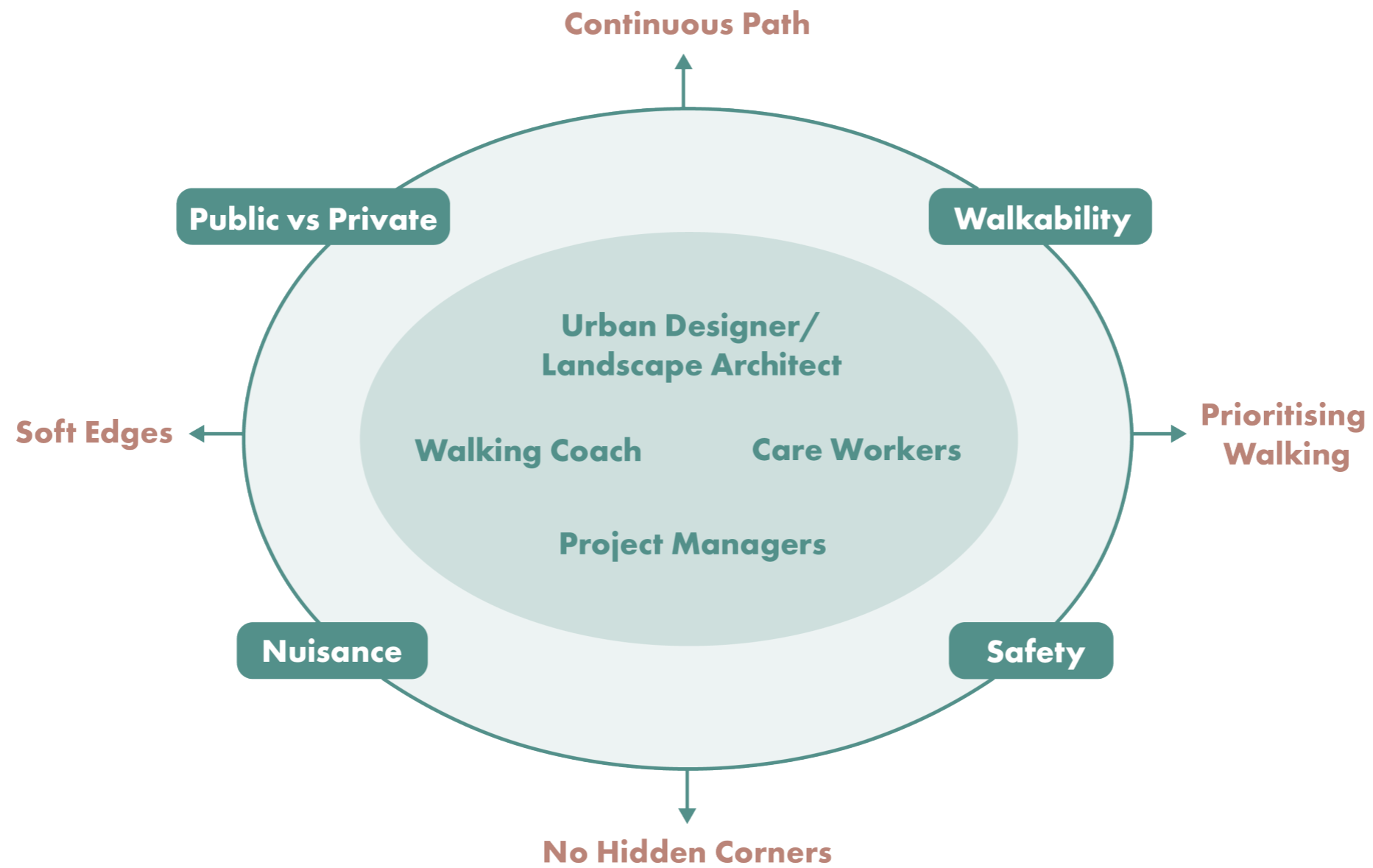
Transitional Zones



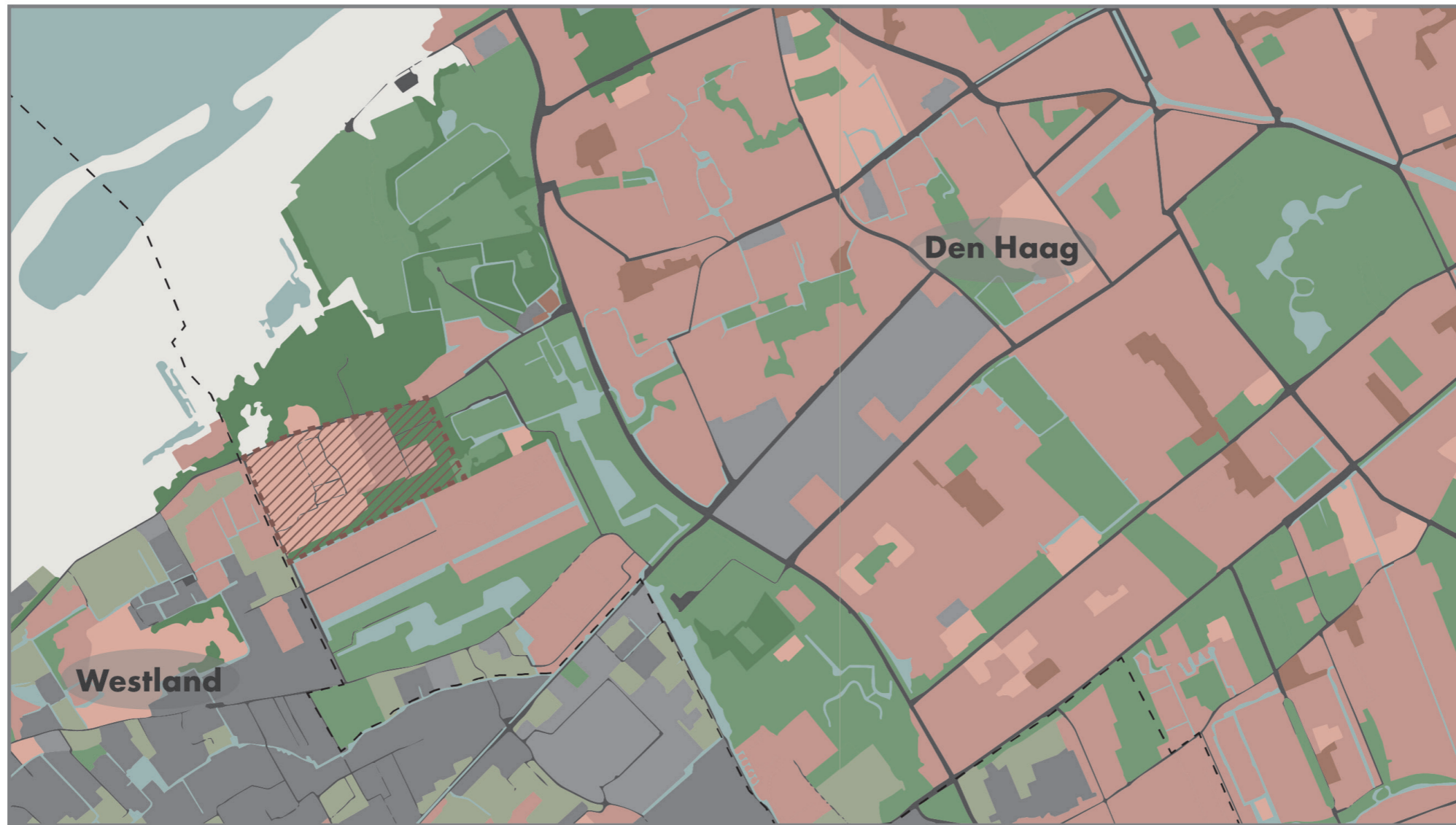
Active Zones



Brainstorming sessions



Vision Park Bloemendaal



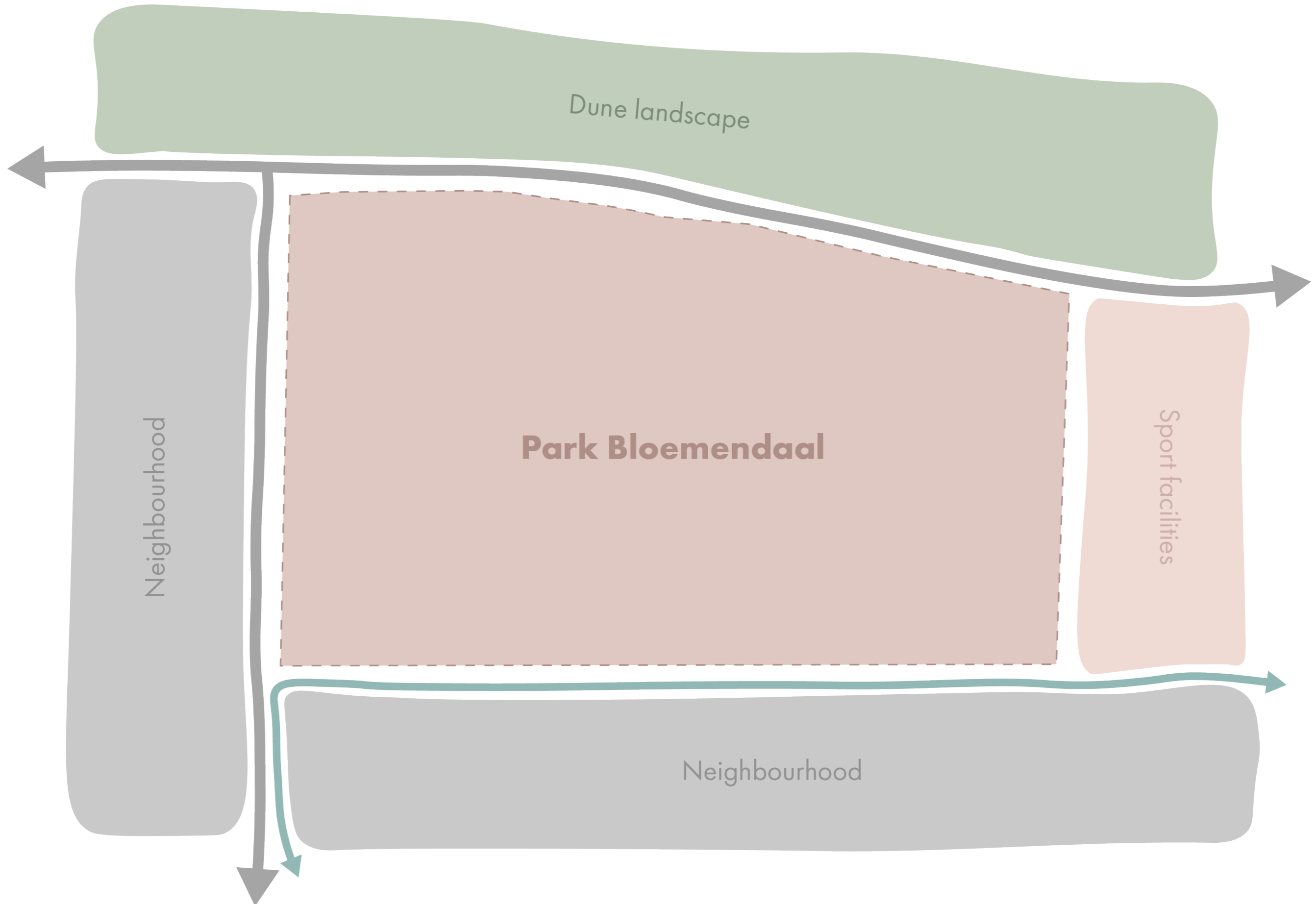
- Site
- Retail and hospitality
- Residential area
- Social facilities
- Natural terrain
- Business area
- Greenhouses
- Water
- Agriculture
- Park and public garden
- Forest
- Municipal boundary

Vision Park Bloemendaal



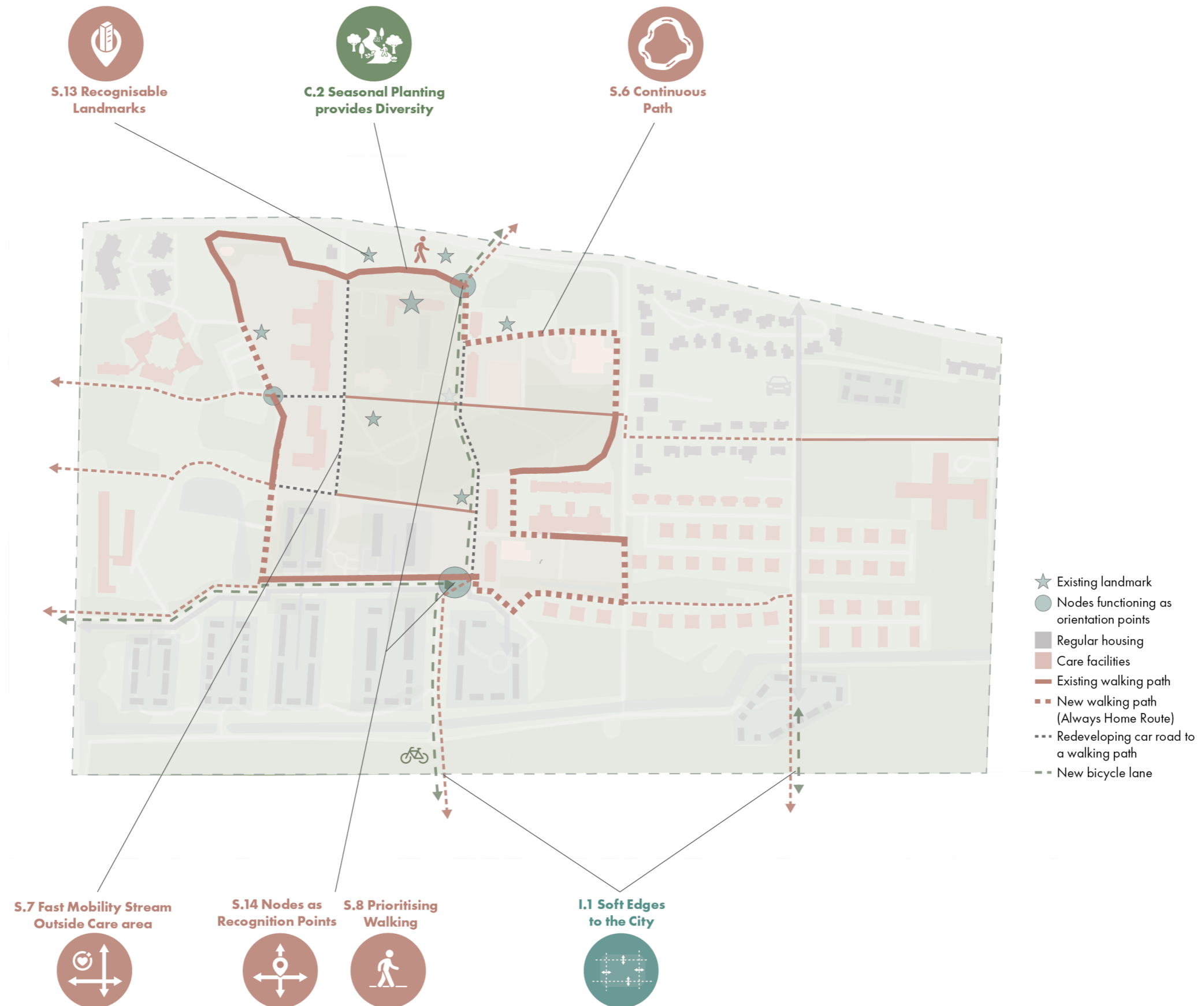
- Site
- Main green structure
- Ecological corridors
- Natura 2000

Vision Park Bloemendaal



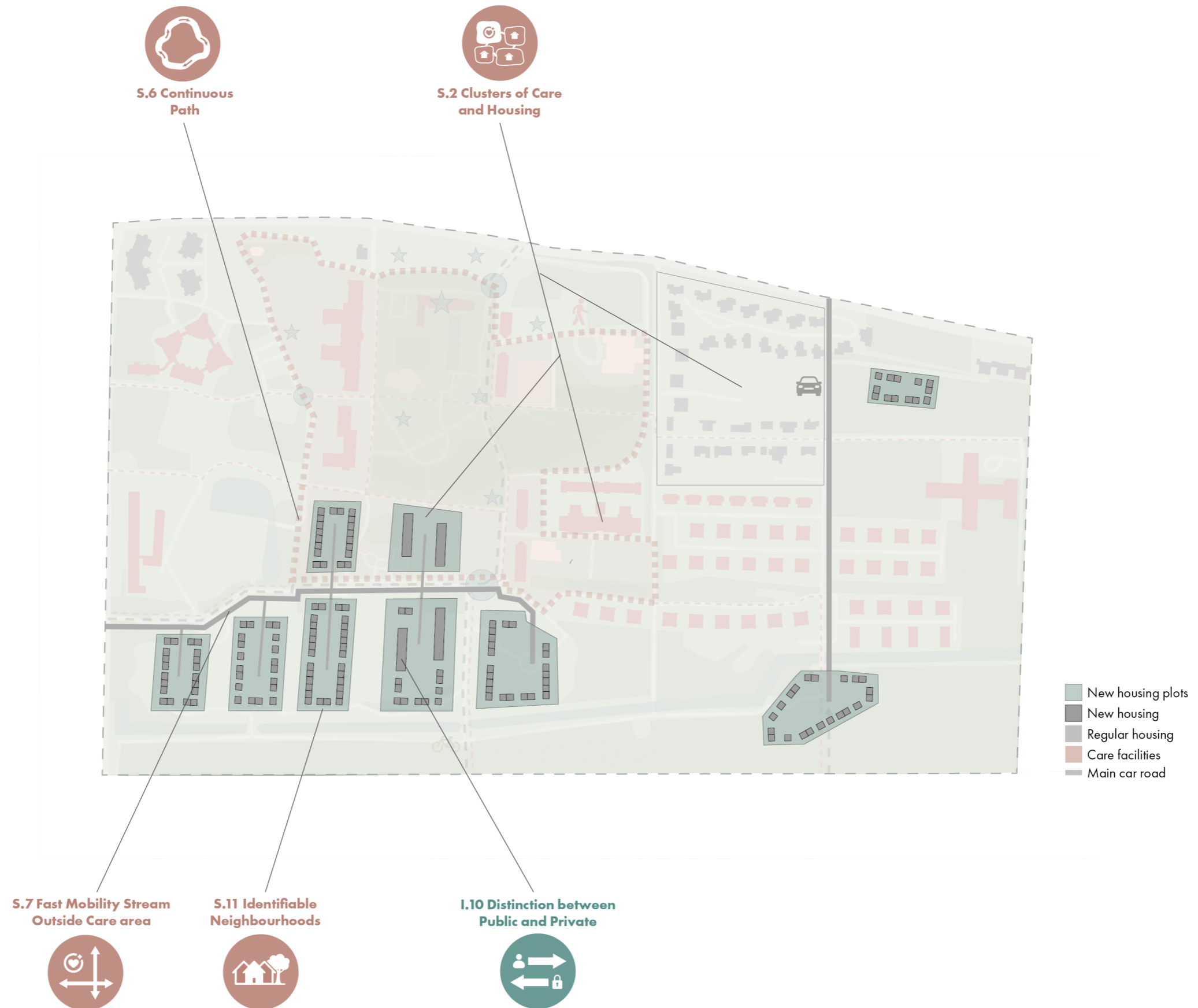
Vision Park Bloemendaal

Clear Spatial Framework



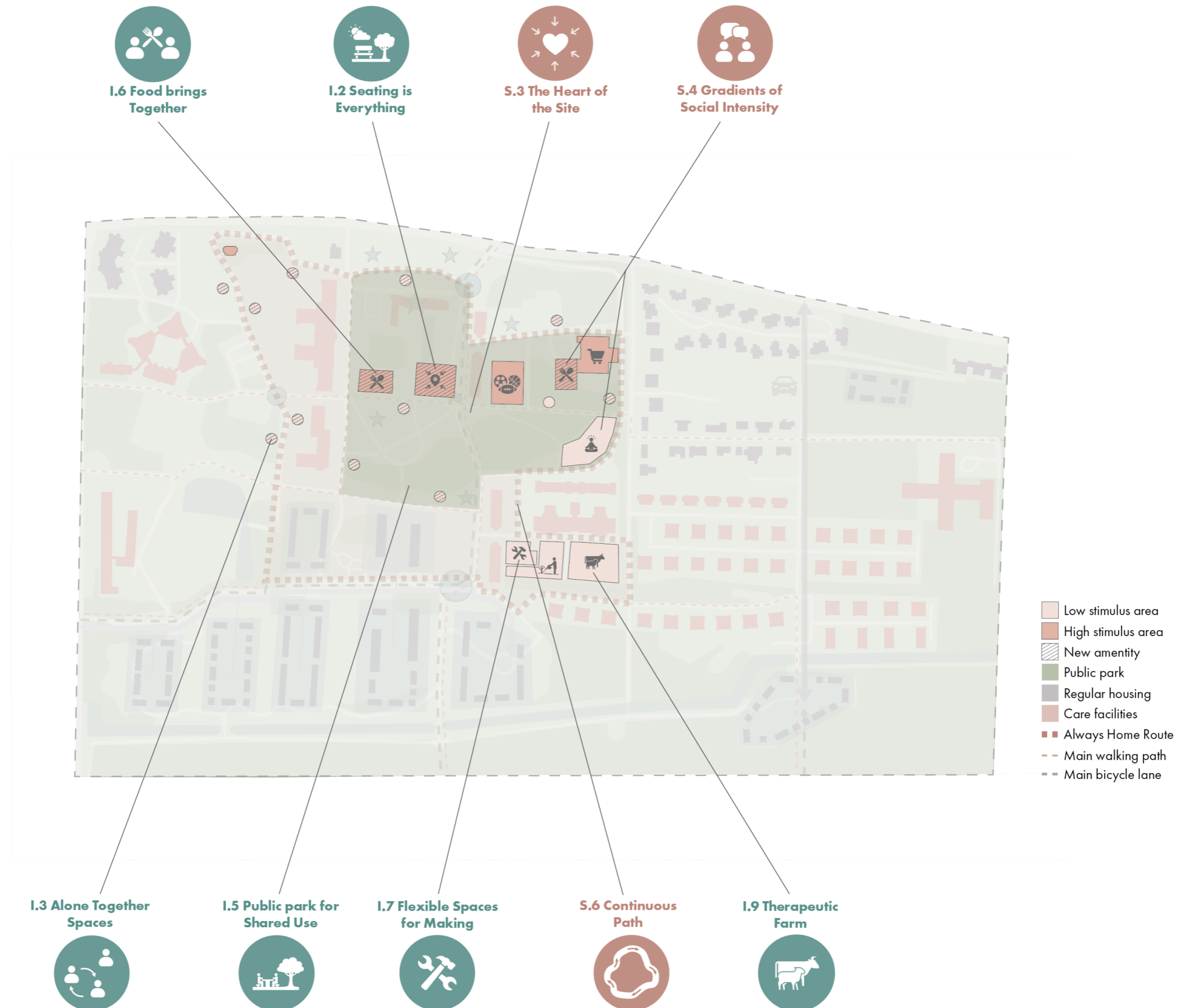
Vision Park Bloemendaal

Activate the Site



Vision Park Bloemendaal

Activate the Site



Vision Park Bloemendaal

Long-Term Comfort



Impact for different Users



Care Residents

- **Autonomy**
- **Flexibility**
- **Predictability**
- **Safe movement**
- **Recovery support**



Visitors

- **Inviting environment**
- **Predictability**
- **Clear routes**
- **Mental wellbeing**



Neighbours & New Residents

- **Accessible green space**
- **Walking routes**
- **Shared facilities**
- **Mental wellbeing**

Conclusion



Acknowledgements

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Delft Faculty of Architecture and the Built Environment
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