



SPECTRADE MARTERRADE

Group 1

Maria Chatzigeorgiou, Julia Kersbergen, Tommer Smits, Katya Stokoz, Suze Warmerdam

Kleinhans, Dr. R.J.

Newton, Dr. C.E.L.

AR0095 Social Inequality in the City, Diversity and Design
Assignment 1

00

Chapter 01 – Introduction

1.1 The Assignment	4
1.2 Research Questions	5
1.4 Evaluation of the Framework	5
1.2 The Context	6

Chapter 02 – Approach

2.1 Data & Insights	8
2.2 Engagement Strategies	9

Chapter 03 – Results of the Co-Creation Session

3.1 Initial Approach	10
3.2 Session 01	11
3.3 Session 02	16
3.4 Session 03	20
3.5 Final Takeaways	22

Chapter 04 – Design Proposal

4.1 Initial Approach	24
4.2 Theory of Change	26
4.3 Design References	30
4.4 The Design	31
4.5 Budget	32
4.6 Project Phasing	33

Chapter 05 – Reflection

5.1 Reflection on the Design Game and Course	34
----------------------------------------------	----

Chapter 06 – Other

6.1 Sources	36
6.2 Appendix	38

Colofon

Maria Chatzigeorgiou,
Julia Kersbergen
Tommer Smits
Katya Stokoz
Suze Warmerdam

Under supervision of:
Kleinhans, Dr. R.J.
Newton, Dr. C.E.L.

AR0095
Social Inequality in the City, Diversity and Design

Department of Urbanism
Faculty of Architecture and the Built Environment
MsC program Architecture, Urbanism and the Building sciences
Delft University of Technology

In association with:
MSc Metropolitan Analysis, Design and Engineering
AMS Institute

Department of Social and Behavioral Sciences
Erasmus University Rotterdam

02-04-2025

INTRODUCTION

1.1 The Assignment

This report has been prepared by a group of students following the TU Delft master course Social Inequality in the City, Diversity, and Design. Coming from diverse educational backgrounds—ranging from architecture to planning and social sciences—we collaborated over several weeks to explore and contribute to the revitalization of a small but vital part of The Hague Southwest: the Marterrade in the Raden neighbourhood.

Throughout the course, we engaged in a process of participatory design, co-creation, and placemaking with local residents and stakeholders, focusing on how design interventions can foster community building, social cohesion, and a renewed sense of belonging. The area, part of a broader National Programme targeting long-term regeneration in Den Haag Southwest, faces significant social and spatial challenges including outdated infrastructure, low financial capacity, and a growing sense of disconnection among residents.

Our interventions were grounded in a combination of on-site placemaking activities (including guerrilla gardening and wishfinding), co-creation sessions, and background research. We analysed spatial barriers, explored the potential of underutilized areas, and gathered insights from previous studies and ongoing regeneration efforts in Den Haag Southwest. This research not only informed our design decisions, but also gave us the tools to critically reflect on our own role as external actors entering an unfamiliar context.

Our assignment centered around the Kamerrade—an underutilized ground-floor meeting space at the heart of the neighbourhood. The objective: to develop small-scale, implementable interventions that not only enhance the use and visibility of this space, but also improve the public realm around it, namely the adjacent square and inner courtyards. In doing so, we aimed to encourage ownership, interaction, and connection across diverse community groups.

We approached this work through the lens of Asset-Based Community Development (ABCD), Theory of Change (ToC), and Design Justice, focusing on the strengths already present in the neighbourhood and looking for ways to support and amplify them through inclusive, bottom-up design strategies. Our goal was not only to propose spatial improvements, but to understand and support the social infrastructure needed to sustain them.

As external participants in this ongoing transformation, our role was not to prescribe final solutions, but to initiate processes that could seed long-term change—starting from small spatial actions and leading to more profound shifts in how people experience, shape, and care for their environment.

1.2 Research Questions

In order to guide our approach to the revitalization of the Marterrade and ensure our interventions were rooted in local needs and aspirations, we formulated the following research questions and considerations. These questions emerged through analysis of previous regeneration efforts, discussions with stakeholders, and engagement with the theoretical frameworks introduced during the course

- How can earlier ideas from the regeneration be developed so that they contribute to public space encounters, community building, design justice and ownership?
- How can existing assets be used cleverly and inclusively in the process?
- How to make connections between small-scale, local and practical interventions and the more abstract workings of space and place, especially the connection between the Marterrade and the surrounding area?
- What role can designers play in facilitating collective agency and co-ownership in contexts of regeneration without reinforcing existing power imbalances?

Together, these questions shaped not only our design proposals but also our understanding of our role within the process. They helped us reflect critically on how design can operate as both a tool and a conversation in the pursuit of spatial justice and more inclusive community development.

1.3 Evaluation of the Framework

The Theory of Change (ToC) framework serves as a crucial foundation for this study, guiding the evaluation and development of community-driven interventions. By articulating a clear pathway from inputs to long-term impact, ToC enables our team to connect small-scale placemaking actions—such as guerrilla gardening or temporary installations—with broader goals such as increased social cohesion, safety, inclusion, and public space revitalization in the Marterrade.

ToC's process of working backward from desired outcomes to define the necessary activities, stakeholders, and assumptions supports a more intentional and outcome-oriented approach to design (Connell & Kubisch, 1998). This framework proved especially helpful in a context like Den Haag Southwest, where regeneration efforts are already underway, but long-term success depends on community engagement, trust-building, and context-sensitive interventions.

A key strength of ToC lies in its responsiveness to local conditions. Rather than assuming a one-size-fits-all solution, it allows for the integration of resident knowledge, lived experience, and local history into the planning process (Weiss, 1995). As highlighted by Kania et al. (2014), collaborative initiatives are most successful when they are grounded in a shared understanding of change and supported by ongoing feedback and learning. In our case, ToC allowed us to evaluate the evolving outcomes of co-creation sessions, adapt our strategies in response to resident feedback, and remain accountable to the values of design justice and inclusivity.

Complementing our use of ToC, the Asset-Based Community Development (ABCD) approach helped us focus on the strengths already present within the Marterrade. Instead of framing the community in terms of needs or deficiencies, ABCD encouraged us to identify local assets—such as resident networks, informal gathering practices, and underused public spaces—as starting points for design (Mathie & Cunningham, 2003). This mindset shift was crucial in building trust and supporting bottom-up initiatives, especially in a neighbourhood where previous regeneration efforts have often felt top-down. By working with what already exists, rather than imposing external solutions, ABCD helped root our interventions in everyday life and community capacity (Russell, 2022).

Together, ToC and ABCD offered us complementary perspectives: ToC provided a structured, strategic lens through which to evaluate pathways to change, while ABCD rooted our interventions in the everyday capacities and aspirations of residents. This dual-framework approach allowed us to bridge the gap between theory and action—ensuring that our design proposals were not only evidence-based and reflective, but also grounded in the social realities of the Marterrade.

1.4 Context

The Marterrade is located in the Raden neighbourhood, part of Bouwlust and Vrederust in The Hague Southwest (Den Haag Zuidwest), an area originally developed during the post-war period to address rapid urban growth and housing shortages. Reflecting the functionalist ideals of light, air, and space that defined 1950s–60s Dutch planning, the area is structured around open blocks and generous public spaces. Like many neighbourhoods of this era, it now faces intersecting socio-economic and spatial challenges, including aging housing stock, fragmented public infrastructure, and growing socio-spatial segregation (Bolt & van Kempen, 2010).

In recent years, The Hague Southwest has been designated as a focus area for regeneration through the Nationaal Programma Den Haag Zuidwest (NPZW)—a 20-year initiative launched by the municipality in collaboration with housing associations and social partners. The programme aims to reduce disparities between the southwest and the rest of the city by improving education, employment, housing, safety, and health outcomes, while fostering stronger social cohesion and resident participation (Gemeente Den Haag, 2020).

The Marterrade serves as a central spine within the Raden neighbourhood and plays a strategic role in supporting these broader ambitions. Although physically well-positioned—with proximity to key social infrastructure including the primary school De Zuidwester, the community meeting space De Kamer Rade, and a senior housing complex—the street suffers from underutilized public space, weak social networks, and limited engagement with communal amenities. For example, while De Kamer Rade has recently been activated for small social gatherings, its potential as a community anchor remains largely untapped.

These local conditions reflect broader trends in Bouwlust and Vrederust, which together house over 29,000 residents as of January 2022. Approximately 60% of these residents have a non-Western migration background (Municipality of The Hague, 2024). The neighborhood experiences high unemployment and an above-average proportion of low-income households. In 2020, 38% of residents were receiving welfare benefits—significantly higher than the citywide average (Municipality of The Hague, 2024).

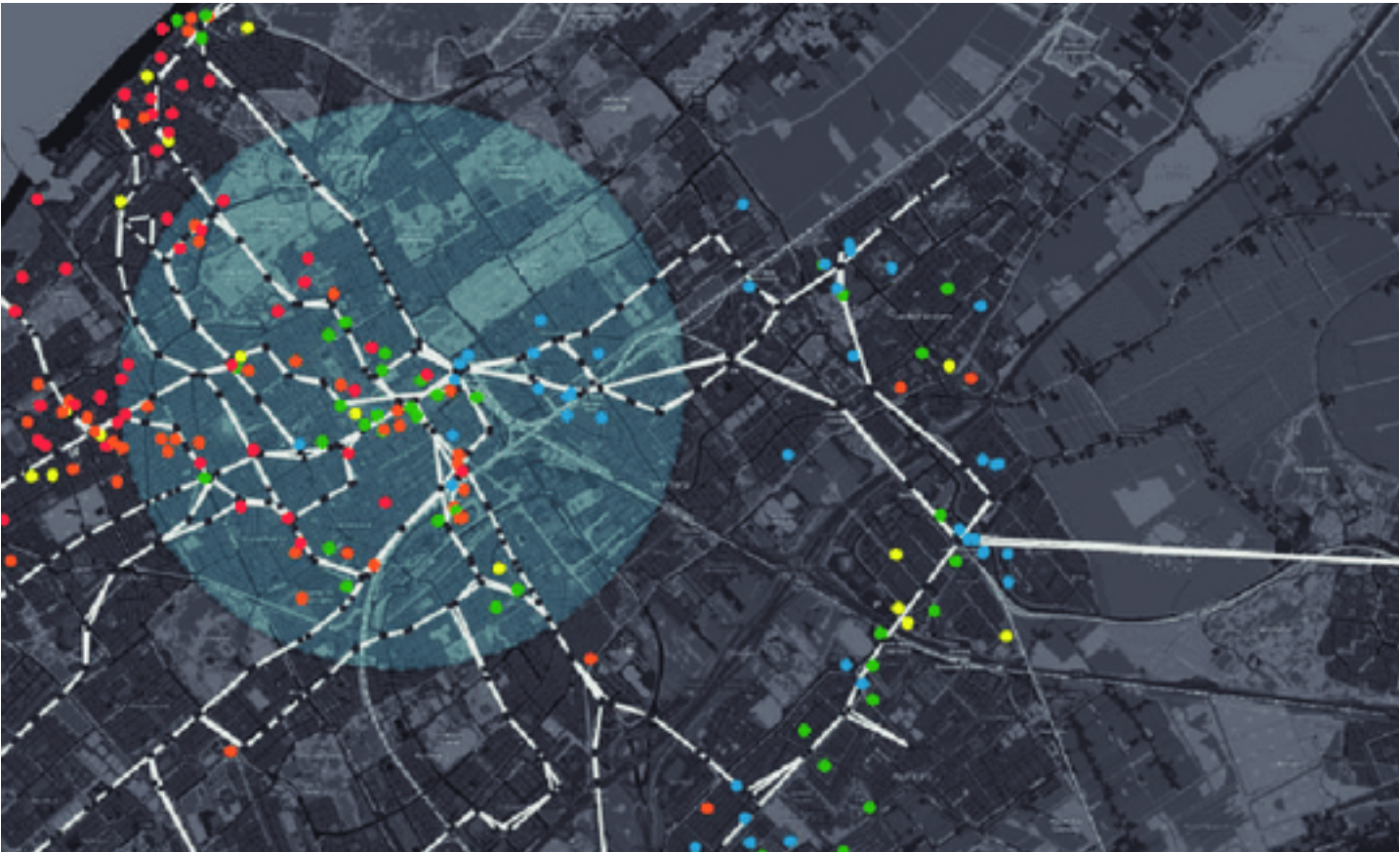
This neighborhood exemplifies the socio-spatial segregation increasingly prevalent in The Hague. According to the Segregation Monitor, structural divisions between high- and low-income areas are deepening, with disparities in work, income, and opportunity becoming more entrenched (Den Haag in Cijfers, 2024). In areas like Bouwlust and Vrederust, multiple forms of disadvantage accumulate—limiting educational attainment, labor market participation, and access to services. This condition reflects what the academic literature describes as spatial exclusion (Bolt, 2018), whereby certain

groups systematically experience reduced access to urban resources.

Further engagement through co-creation sessions has revealed valuable, often-overlooked social dynamics within the community. Many residents are elderly, and a significant number identify as artists or engage in creative practices. This dual demographic—aging individuals and artistically inclined residents—highlights the need for inclusive public spaces that support both aging in place and community-driven cultural expression. These social assets provide a strong foundation for participatory and culturally responsive area-based development.

Throughout the co-creation process and the development of interventions, we have remained mindful of the Marterrade’s role within the larger Raden neighbourhood—not just responding to the needs of immediate residents, but also considering how the site fits into the broader urban and social fabric. In response to stakeholder feedback, we plan to propose physical improvements that extend beyond the immediate building and grounds, integrating interventions into the adjacent streets and public realm. These include wayfinding strategies (e.g., engraved pavement markers, lighting) and pedestrian infrastructure upgrades (e.g., repair of uneven sidewalks). These interventions will be spatially mapped and conceptually embedded within the design proposals to ensure the Marterrade becomes a well-connected, visible, and accessible part of the neighborhood.

In this light, the Marterrade becomes more than a site of isolated intervention; it serves as a microcosm for testing integrated, community-rooted regeneration. By combining bottom-up approaches with spatially embedded strategies, the project contributes meaningfully to the long-term ambitions of the National Programme The Hague Southwest—supporting broader goals of equity, inclusion, and sustainable urban transformation across the district and city at large.



APPROACH

2.1 Data & Insights

To answer our research questions and develop interventions grounded in the local context, we used a combination of observations, co-creation sessions, literature, and prior reports. Each type of data contributed to validating, challenging, or refining our understanding of the neighbourhood and directly shaped our design responses. Below is a breakdown of how these data sources informed specific research themes:

1. Assumptions

Early in the process, we conducted Theory of Change exercises using a previous report by HHS students. This helped us frame our initial research questions, particularly around how earlier regeneration ideas could contribute to ownership, social cohesion, and encounters in public space. These exercises, supported by Google Maps analysis, led us to assume that small-scale interventions could help activate the area and strengthen connections between the Kamerrade and the surrounding public realm. However, these assumptions were challenged once we visited the site and engaged directly with residents.

2. Conversations

The co-creation sessions allowed us to explore how existing assets could be used inclusively and meaningfully. Residents provided insight into the use of space, what made them feel comfortable, and what hindered participation. These conversations clarified the types of interventions residents felt were welcome, such as low-maintenance greenery, movable seating, and social visibility without disrupting the quiet character of the area. Their feedback was crucial in refining our ideas about what ownership and social cohesion could realistically look like in this context.

3. Observations

Site observations helped us evaluate how public space was actually being used and how disconnected it was from indoor community functions. We identified spatial barriers, a lack of visual cues, and underutilized gathering areas, all of which helped answer our question about the gap between practical, small-scale interventions and broader ideas of space and place. The observed disconnection between the Kamerrade and the outdoor areas emphasized the need for subtle design strategies that make these spaces feel more continuous and socially legible.

4. Literature

Literature supported both the residents' suggestions and our own ideas about spatial and social interventions. It helped reinforce our understanding of how to connect long-term regeneration goals with small, community-led actions. In particular, it validated the role of comfort, belonging, and low-threshold participation in building social cohesion. This directly informed our final responses to questions about how to develop existing regeneration efforts and how to create synergy between interventions and local networks.

2.3 Engagement Strategies

To meaningfully involve residents in the design process, we developed a set of engagement strategies. These methods aimed to uncover not only spatial needs but also emotional, social, and psychological dimensions of how residents experience and envision the Marterrade. Given that all participants were elderly, we prioritized methods that were visually accessible, conversational, and adaptable to different levels of comfort and expression.

We divided our strategies across two co-creation sessions, iterating and refining our approach based on participant feedback. Each method is detailed below, along with its effectiveness and how it contributed to shaping our interventions.

1. Participatory Mapping

The first method, Participatory Mapping, aimed to capture spatial and emotional perceptions by asking participants to mark favorite places, areas of concern, and routes of movement on large printed maps using color-coded stickers and markers. Questions such as “Where do you like to gather?” or “What feels unsafe?” were intended to generate targeted spatial insights. While this method is widely used in participatory planning and is praised for visualizing collective knowledge (Cochrane & Corbett, 2020), we found it less effective for elderly participants, who were more comfortable discussing ideas conversationally than translating them onto paper. Some participants had difficulty interpreting the maps, and the exercise felt too abstract. As such, we concluded that this tool may be more suitable for younger or more visually oriented groups unless significantly adapted.

2. Fundamental Needs Detector

Adapted from Desmet's (2020) 13 fundamental human needs framework, the Fundamental Needs Detector asked participants to place stickers on cloud-shaped icons representing needs like safety, stimulation, and belonging. This tool linked emotional well-being with spatial experience, revealing not just what participants felt about the Marterrade but why. Most participants required some facilitation, as certain need categories were too abstract or unfamiliar. However, once guided, they were able to articulate valuable emotional responses that would not have emerged from spatial discussion alone. This method proved particularly useful in highlighting underlying values and concerns—such as the importance of visibility, comfort, and personal agency in public space.

3. Ideal Day Scenario

The Ideal Day Scenario was designed as a storytelling-based tool to surface intangible and affective experiences. Participants were invited to imagine their perfect day in the Marterrade, responding to prompts such as “Where would you rest?” or “What would you see, hear, and feel?” Although insightful, this strategy worked best in casual conversation rather than as a structured activity. Participants struggled to complete this alongside mapping or categorization tasks, especially with a

small group and a high facilitator-to-participant ratio. The tool did, however, help us identify key qualities that participants valued—quiet, greenery, safety, and familiarity—and pointed us toward more subtle and layered interventions.

4. Photographic Preference Exercise

Introduced in the second session, the Photographic Preference Exercise replaced drawing or abstract mapping with visual comparison. Participants were shown images of different intervention types (e.g., benches, planters, shaded seating) and asked which they preferred and why. This strategy was highly successful. It encouraged detailed discussion and made abstract ideas more tangible and relatable. Participants could clearly articulate values like back support, social orientation, and safety without the need for technical language or design experience. As Cochrane & Corbett (2020) suggest, such image-based methods are especially effective in inclusive engagement because they reduce barriers related to literacy, memory, or visual-spatial skills.

5. Walkshop

The Walkshop—a resident-led walk through the neighbourhood—allowed us to gather real-time, site-based feedback. Participants directed the route and shared spontaneous observations, including concerns about accessibility, cleanliness, and comfort. By walking together, we were able to witness how residents navigate their environment, which spaces they avoid or gravitate toward, and how they interpret the space socially. As Babbie (2016) notes, such naturalistic and context-driven methods help uncover everyday practices that are often invisible in seated discussions. The walkshop also created a more equal dynamic between facilitators and participants, fostering openness and agency.

NOTE: Full documentation of the Fundamental Needs Detector, Participatory Mapping, and Photographic Preference Exercise, including activity sheets is included in the Appendix.

The diverse tools helped us answer our research questions by revealing:

- How regeneration efforts can succeed only when connected to emotional and social needs (RQ1),
- How underused yet valued assets like benches or green buffers can be enhanced through resident-led design (RQ2),
- And how small-scale actions—like signage, planting, or seating layout—can ripple outward to shift how spaces are felt, navigated, and cared for (RQ3).

While each strategy had strengths and limitations, together they painted a layered picture of the Marterrade. Importantly, the most meaningful outcomes often emerged not from the tools themselves, but from the relationships they enabled, the conversations they opened up, and the dignity they afforded to residents as co-designers of their own spaces.

RESULTS OF THE
CO-CREATION SESSIONS

3.1 Initial Approach

Entering the co-creation sessions, we remained intentionally open-minded and flexible, knowing that we had limited control over who would attend, how many participants would be present, or how they might respond to our engagement tools. This uncertainty required us to prioritize creating a warm, welcoming atmosphere where participants felt comfortable speaking freely, regardless of their communication style or level of familiarity with the project.

Our primary focus was to build trust—through informal conversation, patience, and active listening—while gently guiding the sessions to ensure we could still gather meaningful insights. We were not only interested in collecting data, but also in establishing a safe space where participants could express themselves and feel heard, seen, and respected. This reflects wider participatory research principles that emphasize co-creation, emotional safety, and non-hierarchical dialogue (Drew, 2018; Babbie, 2016).

At the same time, we had to stay attuned to the flow of conversation—stepping in with prompts or structured tools when energy dipped, and holding space when conversations took unexpected but valuable turns. Balancing openness with structure became essential in helping us understand how people experience the Marterrade today, and where our next steps as designers could begin to take shape.

3.2 Co-Creation Session 01

On March 13, a co-creation session was conducted at the Buurtvrouwenhuis with five elderly residents, all aged 65 and older. The session was facilitated by Maria and Suze from our group alongside several other students. Four of the five participants had lived in the Raden neighborhood for most of their lives, offering deep insight into long-term local experiences.

Initially, participants were hesitant and somewhat unsure about the engagement process. However, as the discussion progressed in a familiar and informal setting, participants became more engaged—particularly when addressed in a conversational manner. This dynamic affirmed the importance of creating a warm and trusting environment when working with older adults (see Babbie, 2016). As with many community-based participatory approaches (Bisani, 2016), flexibility, active listening, and informal rapport proved key to accessing rich, experience-based insights.

Our engagement plan involved three tools: Participatory Mapping, the Fundamental Needs Detector, and the Ideal Day Scenario. However, the session revealed limitations in these structured methods for this demographic, prompting adaptations in real-time and informing the redesign of future sessions.

Evaluation of Engagement Strategies

While these strategies were discussed in detail in Chapter 2.6, we offer a brief summary of their application here:

- Participatory Mapping: Proved ineffective due to low comfort with visual drawing and map interpretation. Elderly participants preferred verbal sharing over graphical input.
- Fundamental Needs Detector: Generated valuable emotional insights when clarified through one-on-one conversations, but required clearer language and examples to be fully accessible.
- Ideal Day Scenario: Was integrated informally through guided conversation, rather than as a standalone activity. Its effectiveness was limited due to participant fatigue and simultaneous tasking.

Based on this experience, we proposed Photographic Preference Exercises as a better alternative for future sessions, using visual prompts to support more accessible and intuitive engagement.

Key Themes and Resident Feedback

1. Greenery and Landscape Use
Residents described the existing greenery as largely decorative and unengaging. They advocated for walkable, immersive nature that could serve both aesthetic and social functions. A butterfly garden was proposed to bring life, color, and intergenerational interaction to the space.

2. Seating and Social Interaction
Seating was seen as inadequate for elderly users. Benches were described as uncomfortable, poorly placed, and not conducive to face-to-face interaction. The suggestion of picnic tables emerged repeatedly, offering a solution that encourages informal gathering and active socializing.

Safety and Movement
Pavement space was perceived as too open, encouraging unsafe cycling and scooter traffic. Residents suggested using planters in a zigzag formation as a low-cost method of traffic calming while adding greenery.

Public Art and Belonging
While some participants appreciated the existing statues, they felt disconnected from them. The origins were unclear, and there was no emotional or cultural attachment. Participants proposed including community-led artistic contributions to enhance recognition and place-based identity.

Play and Programming
Although most residents had no strong need for child-oriented spaces, one participant suggested a small, secure play area for younger children. Most participants preferred quiet, passive social spaces like the inner courtyards of the Buurtvrouwenhuis.

General Use and Meaning
Many residents admitted they rarely use the public square themselves, instead spending time in the inner gardens of the Buurtvrouwenhuis for coffee, games, and conversation. These indoor/outdoor communal spaces were deeply valued and felt more private, safe, and familiar

NOTE: Full documentation of the Fundamental Needs Detector, Participatory Mapping, and Photographic Preference Exercise, including activity sheets is included in the Appendix.

3.2 Co-Creation Session 01

On March 13, a co-creation session was conducted at the Buurtvrouwenhuis with five elderly residents, all aged 65 and older. The session was facilitated by Maria and Suze from our group alongside several other students. Four of the five participants had lived in the Raden neighborhood for most of their lives, offering deep insight into long-term local experiences.

Initially, participants were hesitant and somewhat unsure about the engagement process. However, as the discussion progressed in a familiar and informal setting, participants became more engaged—particularly when addressed in a conversational manner. This dynamic affirmed the importance of creating a warm and trusting environment when working with older adults (see Babbie, 2016). As with many community-based participatory approaches (Bisani, 2016), flexibility, active listening, and informal rapport proved key to accessing rich, experience-based insights.

Our engagement plan involved three tools: Participatory Mapping, the Fundamental Needs Detector, and the Ideal Day Scenario. However, the session revealed limitations in these structured methods for this demographic, prompting adaptations in real-time and informing the redesign of future sessions.

Evaluation of Engagement Strategies

While these strategies were discussed in detail in Chapter 2.6, we offer a brief summary of their application here:

- Participatory Mapping: Proved ineffective due to low comfort with visual drawing and map interpretation. Elderly participants preferred verbal sharing over graphical input.
- Fundamental Needs Detector: Generated valuable emotional insights when clarified through one-on-one conversations, but required clearer language and examples to be fully accessible.
- Ideal Day Scenario: Was integrated informally through r guided conversation, rather than as a standalone activity. Its effectiveness was limited due to participant fatigue and simultaneous tasking.

Based on this experience, we proposed Photographic Preference Exercises as a better alternative for future sessions, using visual prompts to support more accessible and intuitive engagement.

Key Themes and Resident Feedback

1. Greenery and Landscape Use
Residents described the existing greenery as largely decorative and unengaging. They advocated for walkable, immersive nature that could serve both aesthetic and social functions. A butterfly garden was proposed to bring life, color, and intergenerational interaction to the space.

2. Seating and Social Interaction
Seating was seen as inadequate for elderly users. Benches were described as uncomfortable, poorly placed, and not conducive to face-to-face interaction. The suggestion of picnic tables emerged repeatedly, offering a solution that encourages informal gathering and active socializing.

3. Safety and Movement
Pavement space was perceived as too open, encouraging unsafe cycling and scooter traffic. Residents suggested using planters in a zigzag formation as a low-cost method of traffic calming while adding greenery.

4. Public Art and Belonging
While some participants appreciated the existing statues, they felt disconnected from them. The origins were unclear, and there was no emotional or cultural attachment. Participants proposed including community-led artistic contributions to enhance recognition and place-based identity.

5. Play and Programming
Although most residents had no strong need for child-oriented spaces, one participant suggested a small, secure play area for younger children. Most participants preferred quiet, passive social spaces like the inner courtyards of the Buurtvrouwenhuis.

Reflection

The feedback suggests that the public square should be a space for quiet social interactions rather than a hub of activity. Residents value face-to-face seating arrangements, but they also recognize the risks of excessive seating attracting loitering youth. While most feel the current play areas are sufficient, some believe a small playground for younger children could enhance the space. In terms of public art, residents are generally content with the existing statues, though some noted they feel no personal connection to them due to uncertainty about their origins.

Greenery emerged as a key concern, with many finding the existing vegetation aesthetic but impractical. A butterfly garden was suggested as a way to create a more engaging, walkable green space, rather than having planted areas that serve no functional purpose. Additionally, greenery was seen as a possible tool for managing scooter and bike traffic, which has become a safety issue due to the wide-open pavement. Some residents proposed arranging planters in a zigzag pattern, which would encourage safer, slower movement without making the square feel overly restricted.

Long-time residents also reflected on past changes to the neighborhood, noting that shops once stood across from the community center, but their removal has brought a sense of peace and quiet that they now appreciate. While they do not oppose improvements, they do not wish for the public square to become overly active. Instead, they would prefer thoughtful additions that enhance comfort, such as more greenery and better seating arrangements. Many found the current benches uncomfortable and poorly positioned, making them unlikely to use them. One resident suggested that picnic tables would be a more practical alternative, as they encourage natural group interaction and could serve as informal gathering spots.

Despite discussions about the public square, many elderly residents acknowledged that they rarely use it themselves. They do not require many outdoor activities, as they are content with the community center’s offerings, where they gather for coffee, social events, and games. Instead of open public spaces, they gravitate toward quieter, more private areas, particularly the inner gardens, which provide a safe, peaceful retreat away from traffic and noise. These communal spaces hold deep personal meaning, as they are where residents regularly socialize, drink coffee, and play games like bingo or card nights. The activities held there are highly valued, reinforcing the sense of community and belonging among elderly residents.

Design Implementation

Since residents emphasized the value of the community center as a vital social hub, we developed a Theory of Change (ToC) to enhance the building and integrate greening initiatives. As a third space—distinct from home and work—the community center provides an essential gathering place where residents can engage in meaningful interactions, discuss local initiatives, and collectively shape their environment. Research highlights that multipurpose community centers, particularly for older adults, serve as critical spaces for social support, reducing loneliness, and promoting active lifestyles, ultimately improving overall well-being (Skarupski & Pelkowski, 2003).

Currently, the community center is a welcoming but informal space, where residents meet and socialize. However, its potential is far greater—it can become a structured and dynamic third space, where people gather not just for casual interactions, but to collaborate on creative events, discuss neighborhood development, and actively participate in shaping their shared environment.

To realize this transformation, the ToC framework requires both financial and human resources. Funding is essential for materials such as plants, lighting, seating, and creative supplies, but the most crucial investment is in active community engagement. As a third space, the center must be flexible and responsive, shaped by the ideas and needs of its users. Activities such as art exhibitions, coffee and tea gatherings, painting sessions, cooking events, and collaborative workshops will create opportunities for meaningful social interaction, intergenerational collaboration, and grassroots neighborhood initiatives.

In the short term, this transformation will strengthen the feeling of community and social connection, as residents experience more frequent and meaningful interactions. Increased participation will foster a sense of trust and belonging, while also improving perceptions of safety, as active engagement in shared spaces leads to a greater sense of collective responsibility. In the long term, we anticipate significant benefits to mental health and overall well-being, as social stimulation and access to creative outlets contribute to emotional resilience and life satisfaction. Evidence suggests that seniors who engage in community center activities report lower levels of depression, improved cognitive function, and increased independence compared to those without such access (Skarupski & Pelkowski, 2003).

Moreover, this Theory of Change will foster an inclusive and participatory culture, encouraging the active involvement of local artists, educators, and stakeholders, who will co-create projects that enhance the center’s vibrancy and cultural significance. By strengthening these connections, the center will evolve into a self-sustaining, community-driven third space that actively supports social cohesion, cultural engagement, and neighborhood revitalization.

NOTE: The Theory of Change for the ‘Community Centre’ is included in the Appendix.

Placemaking Strategies

Following the first co-creation session, we identified three key placemaking strategies aimed at creating a meaningful and inviting space where residents feel engaged and at home. These strategies focus on enhancing the neighborhood in ways that align with the preferences and daily habits of the community.

Reflecting on our previously considered interventions, we recognized that a vegetable garden is neither feasible nor beneficial for implementation. Residents expressed concerns about lack of engagement and long-term maintenance, which could lead to neglect and deterioration of the space.

However, the other two interventions—seating improvements and landscaping enhancements—were well-received and align with the residents’ needs. These strategies have the potential to create a more inviting and functional environment, encouraging social interaction and enhancing the overall aesthetics of the neighborhood while remaining practical and manageable.

The goal of this placemaking strategy is to enhance the livability, comfort, and sense of community in Marterrade through targeted interventions that reflect resident priorities. While residents appreciate the peaceful nature of the neighborhood, they also identified several key concerns, including:

- A lack of meaningful greenery that can be walked through and enjoyed rather than just serving as decoration.
- Safety issues due to speeding bicycles and electric scooters, particularly on wide-open pavement areas.
- Insufficient comfortable seating that encourages conversation and social interaction.
- A desire for small-scale, thoughtful improvements rather than large, disruptive changes.

The following three interventions were developed in response to resident feedback and will be implemented with direct participation from the community:

- Plant and Flower Boxes – To introduce year-round greenery while also serving as a natural barrier to slow down fast-moving bicycles and scooters.
- Flower/Butterfly Garden – To create a tranquil, biodiverse space that provides both aesthetic and ecological benefits, while also discouraging bike traffic.
- Seating Improvements – To install well-placed benches that promote face-to-face interaction while maintaining accessibility for elderly residents.

These interventions aim to strengthen social connections, improve environmental quality, and enhance the overall user experience of public spaces in Marterrade. Each improvement is designed to be practical, resident-driven, and easy to maintain, ensuring that changes are sustainable and align with the community’s long-term needs.

Strategy 01: Plant and Flower Boxes

- Objective:
- Introduce year-round greenery with plants that bloom in different seasons.
 - Create a barrier to slow down fast-moving bicycles and electric scooters, particularly e-bikes that cause disturbance and make the area feel unsafe.

- Materials Needed:
- Plant boxes
 - Soil
 - Frost-resistant plants
 - Gardening tools, and gloves.

- Execution:
1. Research seasonal, frost-resistant, perennial plants (photos to visualize options).
 2. Choose plants that bloom throughout the year, ensuring they are frost-resistant and low-maintenance.
 3. Engage residents in selecting plants to foster ownership and connection to the space.
 4. Decide on plant box locations that also serve to slow down bike traffic, without obstructing mobility for elderly residents.
 5. Create a map with possible placement of plant boxes and determine the necessary measurements.
 6. Contact the municipality of The Hague to discuss placing plant boxes on public ground.
 7. Order materials and schedule installation with resident involvement to ensure the boxes are well-maintained and appreciated.
 8. Install and plant the chosen plants.

By involving residents in the selection of plants and flowers, we ensure they are an integral part of the placemaking process, fostering a stronger sense of ownership and connection to the space. Providing a curated list of plant and flower options allows for year-round greenery, ensuring the space remains vibrant throughout the seasons. The inclusion of visual aids (such as pictures) helps residents visualize the plants, especially if they are unfamiliar with certain species, ensuring the choices are both accessible and engaging.

The co-creation of plant placements adds to the sense of place, allowing residents to see the area as something they have contributed to, making it more meaningful and personal. One of the key reasons residents will take part in planting the flowers themselves is that it directly ties them to the transformation of the space, creating a shared experience that strengthens community bonds. Furthermore, working together in the garden will help build connections among neighbors, promoting a stronger, more engaged community.

Strategy 02: Seating

- Objective:
- As many residents are elderly, they need seating areas to comfortably enjoy the garden and plant boxes. Benches will be placed in a way that fosters social interaction, with seating arrangements facing each other. Secure bins will be installed nearby to prevent littering, ensuring they are accessible without requiring extra walking.

- Materials Needed:
- Benches
 - Picnic Tables
 - Bins (with protective covers to prevent litter), and accessories.

- Execution:
1. Contact the municipality of The Hague about placing benches and bins.
 2. Engage residents in deciding the placement of benches and bins to ensure inclusivity and accessibility.
 3. Create a map with possible placements of benches and bins, ensuring they are practical and convenient.
 4. Order benches after finalizing locations.
 5. Order bins after confirming placement.
 6. Install benches facing each other to promote connection among residents.
 7. Install bins close to benches, ensuring easy access and secure design to prevent littering.

Strategy 03: Butterfly Garden

- Objective:
- Create a tranquil and biodiverse garden that invites residents to engage with nature, encourages social interaction, and prevents bike traffic from cutting through the area. The entrance gate will serve as a barrier to cyclists while maintaining an open and inviting atmosphere.

- Materials Needed:
- Wooden fence
 - Paint + Brushes
 - Wood stain
 - Butterfly bushes
 - Small flowering plants
 - Soil
 - Gardening tools, and gloves.

- Execution:
1. Research seasonal, frost-resistant, perennial plants (photos to visualize options).
 2. Choose plants that bloom throughout the year, ensuring they are frost-resistant and low-maintenance.
 3. Engage residents in selecting plants to foster ownership and connection to the space.
 4. Decide on plant box locations that also serve to slow down bike traffic, without obstructing mobility for elderly residents.
 5. Create a map with possible placement of plant boxes and determine the necessary measurements.
 6. Design the decoration of the fence entrance.
 7. Contact the municipality of The Hague to discuss placing plant boxes on public ground.
 8. Order materials and schedule installation with resident involvement to ensure the butterfly garden are well-maintained and appreciated.
 9. Create a plan on how to remove the tiles and how to dispose of them.
 10. Remove and dispose of tiles
 11. Install and plant the chosen plants.
 12. Place fence

3.3 Co-Creation Session 02

On March 20, a second co-creation session was conducted with eight elderly residents, all aged 65 and older. Julia from our group, along with other students, facilitated the discussions.

The session took place in the same familiar setting and focused on two main engagement strategies: the use of photographs and a walkshop. Both methods proved effective in encouraging discussion, as residents responded well to tangible visuals and real-time observations in their environment. These informal, experience-based strategies reinforced the value of accessible, conversational engagement with older adults.

Evaluation of Engagement Strategies

While these strategies were discussed in detail in Chapter 2.6, we offer a brief summary of their application here:

- Photographic Preference Exercise: This strategy proved highly effective in encouraging participation and eliciting detailed feedback. By presenting residents with image variations of potential interventions (e.g., different bench designs), participants were able to express preferences clearly and confidently. The visual nature of the activity made it accessible and intuitive, prompting lively discussion and additional design suggestions. Its success confirmed the value of image-based tools when working with elderly participants and those less comfortable with abstract spatial thinking.
- Walkshop: Walking through the neighborhood alongside participants enabled spontaneous, in-situ reflections on the built environment. Residents highlighted overlooked challenges—such as uneven paving or bird droppings on benches—and shared insights about preferred routes, perceived safety, and accessibility. The informal, embodied nature of this strategy helped surface real-time feedback grounded in experience, offering critical contextual data that would not have emerged in static discussions.

Key Themes and Resident Feedback

Butterfly Garden & Green Interventions

Participants generally supported the idea of greening but were cautious about interventions that might be difficult to maintain. Vertical wall gardens were met with skepticism due to concerns about upkeep, suggesting that perceived feasibility is a determining factor in resident support. In contrast, the insect hotel was well received, particularly when framed as a collaborative project involving local schools, which residents viewed as an opportunity for intergenerational connection.

A strong preference emerged for specific plant species, such as the Vlinderstruik (Buddleia), reinforcing the importance of low-maintenance, pollinator-friendly greenery. Residents responded positively to the proposal for a colorful pathway through the butterfly garden, viewing it as a means of enlivening the otherwise grey surroundings. However, textured ground treatments like grass-infused pavement were rejected due to accessibility concerns, emphasizing that any intervention must accommodate residents with mobility limitations.

Seating & Social Interaction

Residents placed greater importance on bench placement than on the specific type of bench. There was strong consensus that benches must be stable, secured, and accessible to individuals with mobility challenges. While some participants appreciated the idea of benches with integrated tables to support informal gatherings like outdoor coffee, others raised concerns about durability and misuse. Concrete benches with mosaic designs were proposed as a creative intervention, though their feasibility was questioned due to cost. The discussion revealed that seating is understood not just as a physical amenity but as a tool for shaping social behaviour—residents are looking for configurations that invite casual interaction without encouraging loitering.

Plant Boxes & Visual Quality

Participants were highly critical of anything perceived as visually neglected or “armoedig.” The material and condition of plant boxes mattered: grey or aged wood was viewed negatively, while brighter, well-maintained options were preferred. Lower boxes were seen as more accessible and appropriate for the space, especially during the winter when plants are not in bloom. Here, color and maintenance were linked—residents saw vibrant plant boxes as a way to maintain visual appeal year-round, regardless of vegetation growth.

Design Preferences & Accessibility

Among the three layout proposals shown, the second design—featuring more greenery, open space, and benches facing one another—was the clear favorite. It struck a balance between aesthetics, social use, and accessibility. The first design was positively received but lacked sufficient wheelchair access, while the final design was rejected due to clear accessibility issues. Concerns were also raised about the slipperiness of wooden surfaces, and lighting was emphasized as critical to safety and to discouraging youth loitering in the evenings.

Findings Based on the Walkshop

Street Conditions & Accessibility

As participants walked through the neighborhood, they identified challenges that had not been previously discussed. Streets were widely described as grey, uneven, and difficult to navigate, particularly for those with mobility or visual impairments. This suggests that visual appeal alone is not enough—surface conditions and ease of movement are critical to making the space truly accessible.

Lighting & Perception of Safety

The open space near the round part of the Marterrade and the second inner garden were both described as poorly lit. Participants emphasized that improving lighting in these areas could increase their usability, especially in the evening. While concerns about youth loitering persisted, the emphasis was placed more on environmental design interventions (such as lighting) than on surveillance-based solutions, which were seen as less feasible.

Waste Management

Residents noted that the existing underground trash bin is often full and proposed adding a second one. This feedback reflects a broader concern with cleanliness and maintenance, aligning with earlier findings on the negative perception of neglected infrastructure.

Play Areas

While the idea of a small children’s playground was suggested, opinions were mixed. Some participants welcomed it as a way to support intergenerational use of the space, while others were concerned about potential noise. If implemented, participants stressed that it must be accessible for children with physical disabilities and safely enclosed with fencing. This highlights the need for inclusive and context-sensitive design, particularly when introducing new programmatic elements.

Community Center Visibility

There was shared concern about the lack of visibility and approachability of the community center. Participants suggested adding color or design features—such as a painted pathway leading to the entrance—to make the space feel more welcoming and intuitive to navigate. This feedback reinforces the role of design in signaling access and encouraging use, especially for residents who rely on visual cues to navigate public space.

General Safety Concerns

One resident raised concerns about feeling unsafe due to the presence of youth congregating at night. While cameras were briefly mentioned, most participants focused on passive design strategies, such as lighting and visual transparency, as more appropriate responses.

Reflection

Findings from the March 20 session have directly informed the refinement of proposed interventions, ensuring they are responsive to user needs and grounded in lived experience. Seating, for instance, emerged as a central concern—not in terms of form, but function and placement. Residents emphasized the need for sturdy, theft-resistant benches that support social interaction and are accessible to individuals with mobility challenges. As a result, final interventions will prioritize benches with arm and back support, anchored placements, and configurations that facilitate face-to-face engagement without obstructing circulation routes.

Similarly, the rejection of grass-infused pavement due to mobility concerns highlighted the importance of universal accessibility. This feedback led to the exclusion of textured or uneven surface treatments in favor of smooth, slip-resistant materials suitable for assistive devices. The request for colorful plant boxes and pathways underscored the importance of maintaining visual vibrancy throughout the year, especially during winter months when greenery is limited. These preferences will inform material selection, seasonal planting strategies, and color application across the site.

Lighting was another recurring theme, particularly in areas perceived as unsafe or underused. Residents’ suggestions to increase illumination near seating and pathways will guide the placement of lighting fixtures to enhance safety, visibility, and nighttime usability. Collectively, these insights have helped shape a design response that balances functional accessibility, safety, and aesthetic quality—ensuring that proposed interventions align with both the practical and emotional needs of the community.

However, several spatial and infrastructural constraints must be considered in the implementation of these interventions. The broad pavement adjacent to the Marterrade is designated as a fire route, which prohibits the placement of plant boxes, benches, or other fixed elements in that area. In addition, the presence of sewer infrastructure beneath the pavement limits the feasibility of tree planting along certain edges. Despite these limitations, the municipal climate budget presents a viable funding opportunity, provided that the proposed interventions demonstrably contribute to increased greenery and climate resilience.

Design Implementation

Based on recent co-creation sessions, it became clear that the inner garden is highly valued by residents as a semi-private, peaceful space for socializing. Unlike the public square, which received more mixed feedback, the inner garden was repeatedly referenced as a comfortable and familiar environment. In response, we developed a Theory of Change aimed at enhancing the garden’s physical and social infrastructure to strengthen its role as a space for connection, ecological richness, and everyday well-being.

Currently, the inner garden provides limited seating and minimal greening. The proposed transformation aims to cultivate a visually vibrant and ecologically active environment—one that supports informal social interaction, passive recreation, and sensory engagement. Central to this approach is the introduction of flowering plants, butterfly-attracting vegetation, colored paving for visual warmth, and improved lighting for both safety and ambiance.

From an urban design perspective, well-connected, well-lit, and easily navigable public spaces are strongly correlated with perceived safety and increased usage (Maas et al., 2009). In tandem, continuous, obstacle-free pedestrian infrastructure enhances mobility for older adults and children alike, reducing physical barriers to participation in community life (Gul et al., 2020). The redesign of the garden will incorporate these principles by ensuring level, non-slip surfaces and strategic lighting, making the space inclusive for users with varied mobility levels.

While the emphasis of this intervention is on a semi-private space, it must be understood within a broader neighbourhood ecology. Though many residents expressed a preference for private or quiet areas, there remains an opportunity to reconnect this internal space with wider public initiatives by enhancing walkability and symbolic links between the garden and surrounding amenities. This balance—between privacy and permeability—is central to fostering community resilience and inclusivity.

To implement this transformation, multiple forms of input are required:

- Material inputs, including native flowering plants, lighting, inclusive seating, planters, and a central insect hotel that serves both ecological and educational purposes.
- Human resources, such as students, volunteers, professionals, and local stakeholders to design, build, and maintain the interventions.
- Institutional and local knowledge inputs, including support from Haag Wonen and the participation of residents in co-design processes to ensure relevance and cultural alignment.

Planned activities in the enhanced space will include watching

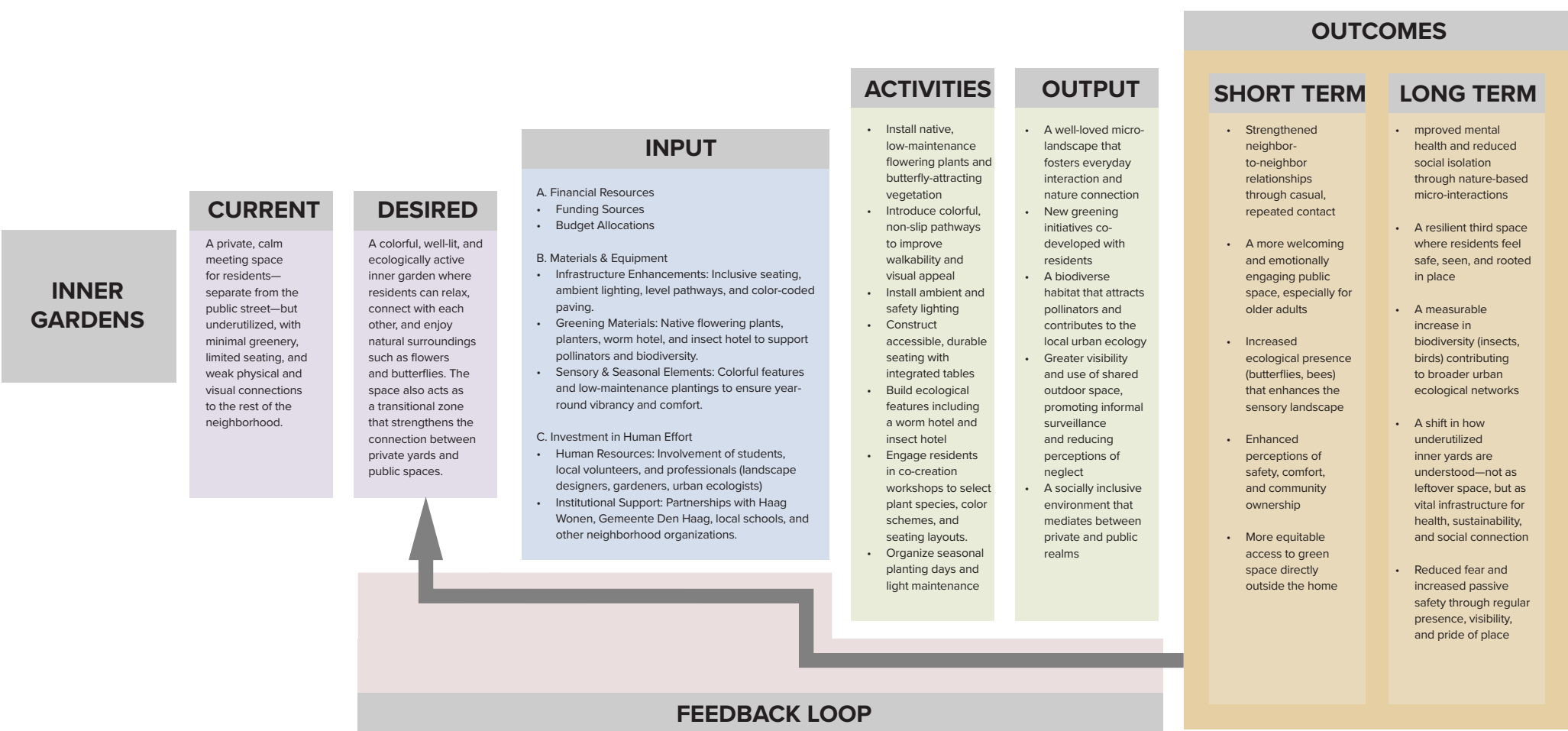
butterflies, interacting with planted elements, contributing to composting (e.g., through a worm hotel), and participating in informal gatherings. These interventions support both passive and active uses, accommodating a range of energy levels, interests, and routines.

In the short term, this intervention is expected to improve residents’ perceptions of health, safety, and neighborhood identity. Drawing from Maas et al. (2009), the presence of greenery not only enhances a sense of safety through natural surveillance but is also linked to improved self-reported health and reduced mortality risks. The addition of color, light, and low-maintenance vegetation will contribute to a calming, inviting atmosphere that encourages spontaneous interaction and presence.

In the medium term, these changes are anticipated to foster greater community engagement and identification, particularly among older residents. As Burrage (2011) notes, community gardens can bridge social divides and foster collective capacity by encouraging repeated, casual interaction among diverse users. By anchoring social life in a shared green space, residents may build trust, familiarity, and mutual care.

In the long term, the project aims to contribute to urban biodiversity and environmental resilience. Research by Thompson et al. (2003) and Di Pietro et al. (2018) emphasizes the importance of green micro-environments—such as domestic gardens and small community plots—as key ecological nodes within urban systems. By attracting pollinators, birds, and beneficial insects, the garden will serve not only as a space for humans, but also as habitat for non-human species, reinforcing broader ecological health and urban sustainability.

Ultimately, the inner garden has the potential to evolve into a multifunctional third space: socially nurturing, environmentally conscious, and deeply rooted in local values. Through this Theory of Change, we align spatial intervention with community voice, ecological thinking, and inclusive design principles—ensuring that even small-scale transformations can generate meaningful, long-lasting impact.



For the final phase of our project, we will translate the insights gathered from the co-creation sessions into a refined set of design criteria by breaking down the attributes of the inner gardens—much like we initially deconstructed the HHS student interventions. This step will enable us to critically assess what the space currently offers, what residents envision, and how specific design elements can bridge that gap. The breakdown will guide the development of our final proposal and ensure that interventions are not only desirable but feasible, context-sensitive, and responsive to local realities.

By aligning physical improvements—such as lighting, vegetation, and seating—with the emotional and social needs voiced by residents, we aim to create a resilient spatial framework that enhances everyday life. This process also reinforces the importance of iterative feedback, community ownership, and low-threshold design strategies. Ultimately, the proposed transformation will be grounded in lived experiences while projecting a future vision where the Marterrade is not only green, safe, connected, and inclusive, but also adaptable and co-owned by the people who use it daily.

3.4 Co-Creation Session 03

The third and final co-creation session was held on March 27 at the Marterrade, marking a shift from idea gathering to active collaboration. This session focused on materializing some of the previous discussions and allowed for hands-on involvement from residents and students alike. Tommer and Katya from our group participated, along with several other students who were divided into smaller working groups with distinct roles.

One group focused on greening the pavement by flipping standard tiles into biodiverse ones, creating a vertical green façade along the Kamerraad. This was both a symbolic and practical gesture, showing how small-scale interventions can visibly transform a space. A second group built a large neighborhood model designed to be interactive—residents were invited to draw on it, place miniature elements, and explore ideas spatially. A third group constructed a display table for the model, supporting the overall setup and presentation.

Throughout the session, informal conversations unfolded naturally. The tactile nature of the projects encouraged residents to physically engage with the work, moving beyond verbal feedback and into shared action. At the end of the session, all participants—residents, students, and staff—came together for a communal painting activity accompanied by music. This closing moment created a celebratory atmosphere and reinforced the strong sense of community that had been nurtured over the previous sessions.

Evaluation of Engagement Strategies

Unlike previous sessions, no formal engagement strategies were actively deployed during Session 03. Instead, the event functioned as an open and participatory environment where residents could engage on their own terms. This more fluid format allowed conversations to arise organically—without structured prompts or exercises—which led to authentic, casual exchanges between students and residents.

While traditional tools such as Participatory Mapping or Photographic Preference Exercises were not used, the hands-on nature of the activities themselves became a form of engagement. Residents were encouraged to participate by flipping tiles, decorating the façade, or interacting with the neighborhood model, which naturally sparked dialogue and collaboration. These tactile moments supported a more intuitive form of participation, where ideas were shared through action as much as conversation.

This approach highlights the value of unstructured engagement when trust has already been established. In a familiar, low-pressure environment, residents felt free to express themselves without the constraints of a formal method. While it lacked the data-gathering rigor of previous sessions, it succeeded in deepening social bonds and reinforcing the sense of community ownership—key outcomes for any co-creation process.

Key Themes and Resident Feedback

While there was not uch conversation with residents, a walk with a resident using a scootermobile offered an in-depth understanding of accessibility, safety, and infrastructure-related challenges within the inner garden pathways surrounding the Marterrade.

1. Inaccessible Pathways for Mobility Devices

The resident highlighted that her friend, who also uses a scootermobile and lives on the ground floor, struggles to access her back garden. The pathway leading to the entrance is too narrow and includes a sharp turn, making it impossible for scootermobiles to navigate without veering off into the grass. The hedge, which is positioned too closely to the fence, further restricts maneuverability.

Resident’s suggestion:

Widen the pathway by moving or trimming the hedge to create a navigable route for scootermobiles and other mobility devices.

2. Maintenance Issues

The same pathway is poorly maintained, with plants and weeds growing through the pavement, further limiting accessibility. The neglected state of the path contributes to its underuse and deteriorates the walking experience for all users, especially those with mobility challenges.

Resident’s suggestion:

Clear and regularly maintain the pathway to ensure safe and accessible movement through the area.

3. Lack of Visibility and Social Safety

Due to its enclosed nature and minimal lighting, the pathway lacks visibility and social control. This has led to problematic behaviors such as public urination and defecation in the hedges, particularly during warm evenings when the adjacent park is used for barbecuing and gatherings. The absence of public toilets in the park exacerbates this issue. Additionally, the resident noted that the path is sometimes used as a shelter by homeless individuals, given its seclusion and lack of surveillance.

Resident’s suggestion:

Install lighting to improve visibility and increase perceived safety, making the space feel more cared for and less vulnerable to misuse.

Reflection

During this final session, we also took time to walk around the neighborhood independently, revisiting spaces previously discussed in earlier sessions. Our aim was to spatially map and verify resident concerns, identifying exactly where interventions might be most effective. This exercise allowed us to correlate verbal feedback with on-the-ground observations.

Interestingly, we found that the inner gardens possess a unique quality—they felt like quiet, protected oases nestled within the dense urban fabric. With only minor adjustments related to maintenance, accessibility, and lighting, these spaces could become even more welcoming and functional for daily use. Similarly, the surrounding streetscape and plaza appeared visually cohesive and functionally adequate, suggesting that large-scale infrastructural upgrades may not be necessary.

This led us to reflect on a key insight: while much of the resident feedback throughout the sessions was critical, the physical environment of Marterrade is generally in good condition. This suggests that the core issues may be less about material deficiencies and more about social dynamics and the emotional atmosphere surrounding public spaces—particularly the perception of neglect, safety, or belonging.

As students and external observers, we noted that the neighborhood had many appealing qualities—we even concluded that we would enjoy living there ourselves. This gap between resident perception and physical condition highlights the need for interventions that don’t just “fix” spaces, but reinvigorate the social energy and sense of community connection around them.

A particularly telling moment came while building the table for the neighborhood model. Several residents paused to ask questions, offer feedback, and engage with us. These spontaneous interactions, prompted not by formal activities but by the simple act of building in public, revealed an existing layer of social connection at Marterrade—one that may be quiet, but is alive and ready to grow when nurtured through collective activity and shared ownership of space.

Design implementation

We identified very specific barriers to access, comfort, and visibility that are not always visible from maps or plans. Issues like narrow turns, overgrown paths, and the absence of lighting were not only practical concerns, but also contributed to feelings of insecurity, neglect, and isolation in certain areas.

As a result, the final design will incorporate these observations and resident suggestions in tangible, actionable ways. For example, the recommendation to move the hedge and widen the path for scootermobile access will inform our rethinking of circulation and turning radii within shared spaces. Instead of standard lampposts, which residents noted could be intrusive, we propose integrating low-level LED lighting along fences to softly illuminate walking paths without disturbing nearby homes—supporting both safety and ambiance.

Additionally, our experience in the inner gardens reaffirmed their potential as intimate, restorative spaces within the neighborhood. These spaces already support strong social bonds and community rituals, and with only minimal improvements—such as better path maintenance, visibility, and programmatic flexibility—they can become even more welcoming and multifunctional.

Together, these inputs have grounded our final design in a balance between material adjustments and atmospheric improvements. The vision of Safety, Accessibility, Connectivity, and Greenery continues to guide our work, but now with a sharper understanding of how those principles manifest on the ground. This means our final proposal will not only reflect feedback gathered through structured engagement but also the embodied knowledge gained from simply being in the space—walking, observing, listening, and building relationships.

3.5 Final Takeaways

While each co-creation session yielded distinct insights, some proved more influential than others in shaping our final design proposal. The first session offered valuable perspectives from elderly residents who had lived in the neighborhood for decades. Their reflections illuminated long-standing patterns of use and attachment to place; however, the feedback presented a limited view of the area’s broader, evolving needs. The second session introduced greater diversity, including participants from various generations and life stages. This emphasized the importance of iterative engagement to ensure the design responds meaningfully to a wider spectrum of lived experiences. The third session cultivated a more collaborative atmosphere, fostering new forms of interaction and a shared sense of agency. Activities such as the co-construction of the Tafelbak encouraged inclusion and reinforced the responsibility of designers and researchers not merely to collect data, but to remain actively involved in the ongoing life of the neighborhood.

In terms of methodology, we found that elderly residents engaged more readily when guided by visual materials—such as photographs, diagrams, and rendered views. These tools helped make abstract spatial ideas tangible and opened up conversation. Walkshops and site-based conversations were particularly effective in surfacing grounded observations and site-specific concerns that may not have emerged in static settings. While the third session’s hands-on components were less generative in terms of design data, they played a critical role in building trust, social connection, and informal dialogue between residents and the design team. These forms of engagement are not incidental—they are foundational to our vision of participatory design as a relational and iterative process.

Across all three sessions, however, a deeper layer of social issues became increasingly visible. Tensions between neighbors, a lack of institutional trust, and a prevailing sense of disconnection pointed to long-standing emotional and relational fractures. While physical interventions—such as improved lighting, seating, and planting—can help create conditions for change, they cannot in themselves rebuild broken social ties. As Frediani and Boano (2012) remind us, spatial design must be understood not as a fixed product but as part of a longer, more complex social process of empowerment and mutual trust. Similarly, Manzini (2015) underscores the importance of fostering “social infrastructures”—the everyday systems of support and interaction that allow communities to thrive. Seen through this lens, the work ahead at the Marterrade is not only architectural but deeply relational. It will require long-term engagement and continuity to repair social cohesion and enable residents to feel ownership and pride in shared public space.

A compelling precedent for this kind of transformation is the Granby Four Streets project in Liverpool, UK. After decades of neglect, residents began reclaiming their neighborhood through small but consistent acts of care—planting flowers in vacant lots, organizing street markets, and painting facades.

These informal actions laid the foundation for a more formal resident-led regeneration effort through the creation of the Granby Four Streets Community Land Trust. Partnering with the architectural collective Assemble, the community restored derelict homes using salvaged materials, created a Winter Garden in two abandoned houses, and launched the Granby Workshop, a social enterprise that produces handmade ceramics and tiles. These interventions went beyond physical repair—they nurtured collective identity, local enterprise, and healing (Chatterton, 2016). Granby’s success demonstrates how even modest, incremental design efforts—when grounded in care, ownership, and time—can catalyze enduring, community-led regeneration. It offers both a practical and emotional precedent for the Marterrade, where spatial interventions may serve as the first step in a longer process of social reconnection.

Taken together, these final takeaways shape the foundation of our proposal and ensure that our interventions are not only spatially coherent but socially grounded. By aligning physical improvements—such as seating, lighting, and vegetation—with the emotional and relational needs voiced by residents, we aim to establish a resilient spatial framework that enhances everyday life. This process reinforces the value of slow, iterative feedback, community ownership, and low-barrier design strategies that evolve through shared experience. Ultimately, our vision for the Marterrade is a public realm that is green, safe, connected, and inclusive—but also flexible, adaptive, and co-owned by the community that gives it life.



Interior of the Granby Workshop in Liverpool, a social enterprise launched by Assemble in collaboration with local residents. The workshop produces handcrafted tiles, homewares, and architectural elements using recycled materials—supporting local employment and community-led regeneration.

Image credit: Assemble / ArchDaily



The Granby Winter Garden, created by Assemble and the Granby Four Streets Community Land Trust, transforms two formerly derelict homes into a lush, light-filled indoor garden and community space. It provides a year-round venue for social gatherings, workshops, and quiet reflection—strengthening local ties through nature, care, and shared use.

Image credit: Granby Four Streets CLT



A street market organized by residents of Granby Four Streets as part of their grassroots regeneration efforts. These events reactivated public space, fostered social connection, and built local momentum long before formal architectural interventions began—demonstrating how community-led action can lay the groundwork for lasting transformation.

Image credit: thisistomorrow.info

DESIGN PROPOSAL

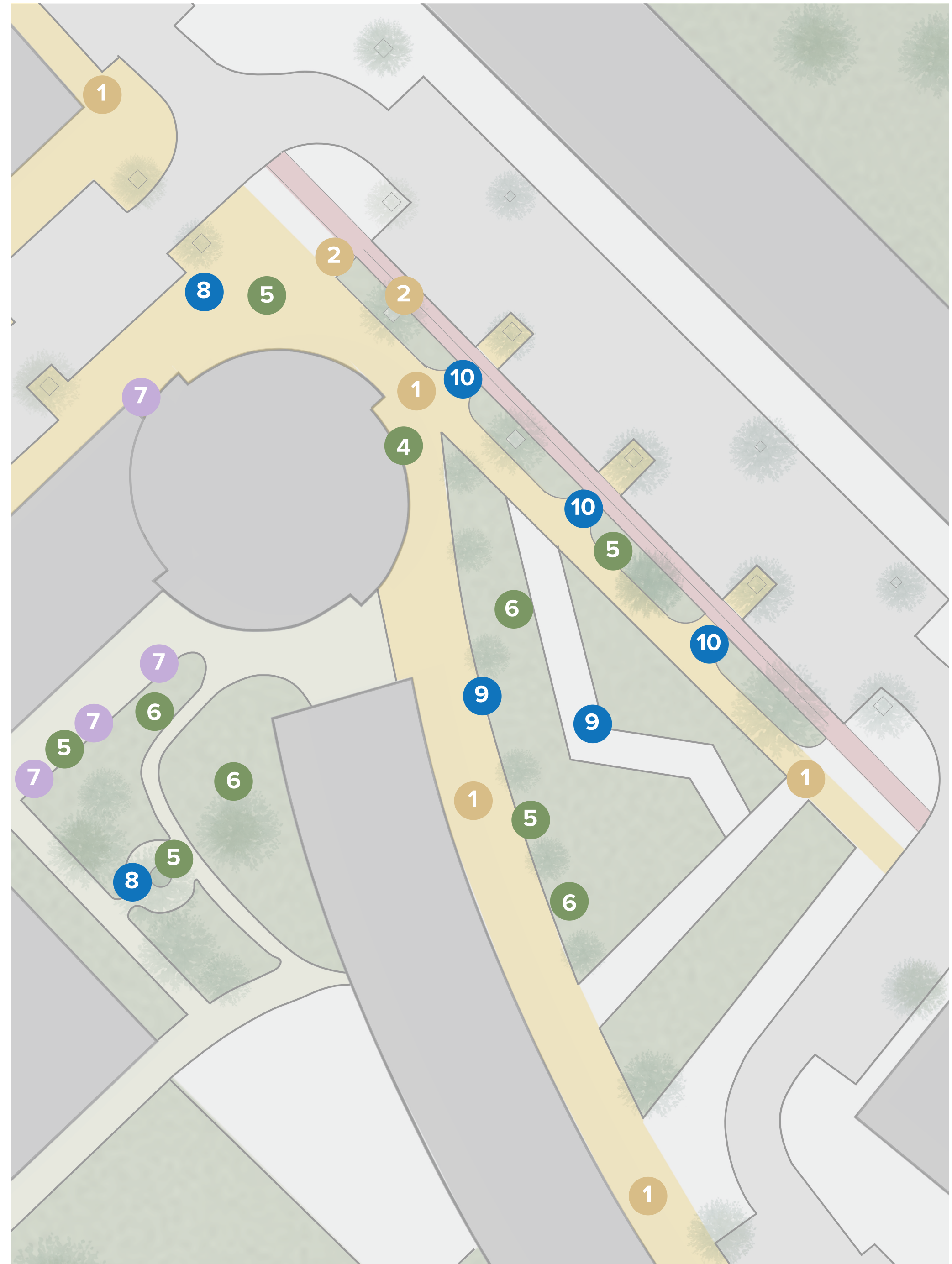
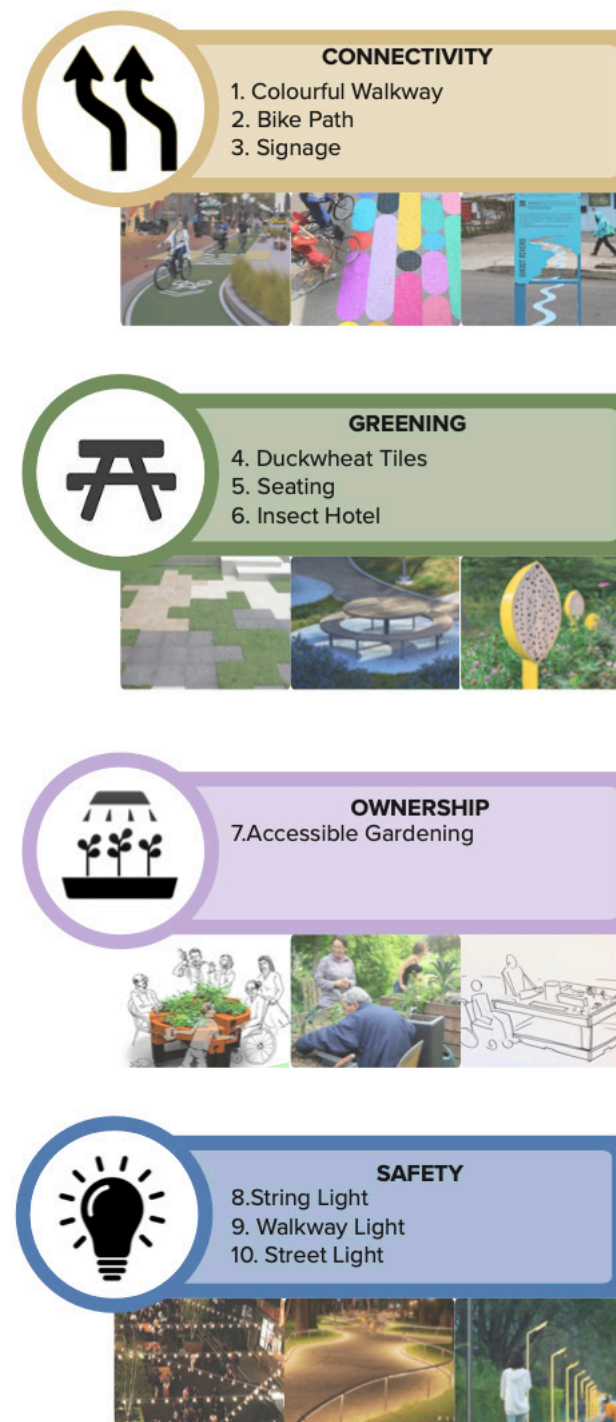
4.1 Initial Approach

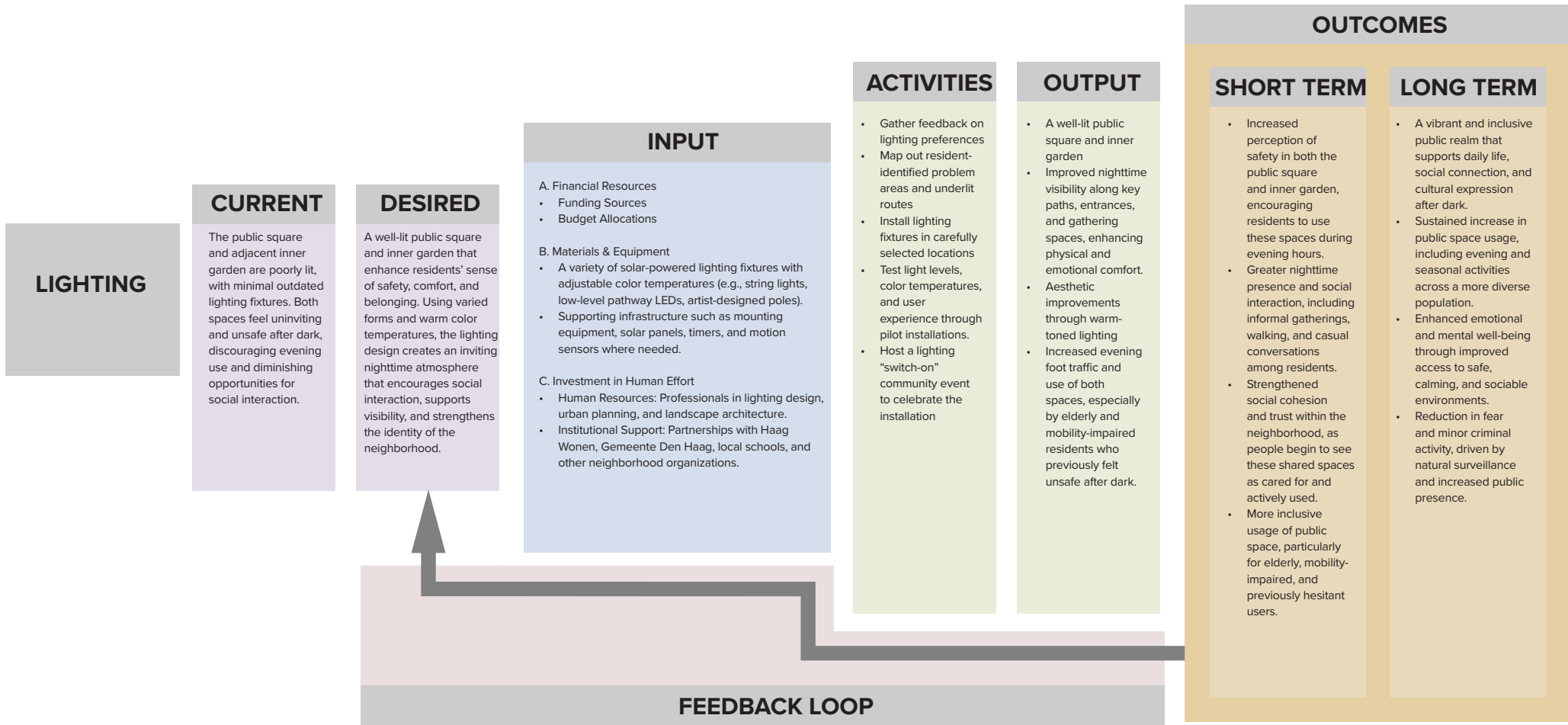
. Our project began with a spatial lens: mapping movement, identifying gaps in infrastructure, and observing how the Marterrade was used—or not used—on a daily basis. Initially, we focused on what could be improved physically: Where were benches missing? Which routes were unclear? Where did the space feel unsafe or underused? From this, we developed early ideas for interventions such as additional seating, clearer pathways, soft lighting, and small green elements. These were low-cost, low-maintenance improvements aimed at increasing comfort, legibility, and accessibility—particularly for elderly residents and families.

But as the process unfolded, especially through co-creation sessions and in-person engagement, our perspective began to shift. The more we designed, the more we found ourselves asking: What does this intervention actually do for someone who lives here? How might it change their routine, their sense of safety, or their connection to others? It became clear that the physical form of the intervention was only one layer—what mattered more was how it would be used, interpreted, or even ignored. Residents weren't simply pointing out spatial flaws—they were sharing feelings of disconnection, neglect, and mistrust. We realized that benches or paths alone wouldn't change that. What was needed were gestures that made people feel seen, considered, and included.

This realization shifted our priorities. Rather than focusing solely on what we were designing, we became more interested in why—and for whom. Our discussions moved from objects to outcomes: Could this table create a reason to gather? Could this painted path express something unique about the neighborhood? Could soft lighting help someone feel more at ease walking home? Suddenly, each intervention became less about the space itself and more about the relationships it could support. This approach didn't replace our initial spatial analysis—it built on it, with deeper attention to the social, emotional, and symbolic dimensions of place.

Ultimately, our initial focus on physical space laid the groundwork for a richer, more people-centered design process. We learned that the real value of small interventions lies not only in how they look or function, but in how they can reshape everyday experiences and relationships within a community.





Final Design: Safety

The conceptual foundation of our lighting intervention was shaped by our direct observations during the opening day of Kamerrade, where string lights were hung across the front square. This simple gesture—visually warm and non-intrusive—transformed the spatial atmosphere, subtly inviting residents to participate while reinforcing a sense of safety. It was neither overly institutional nor sterile; instead, it conveyed care, attention, and the presence of community. This inspired us to think more deeply about the relationship between lighting, perception, and urban belonging.

Across the co-creation sessions, safety consistently emerged as a concern, yet it was often rooted in perception rather than physical danger. Residents shared that they avoid using certain spaces after dark—not due to explicit threats—but because of poor visibility, lack of social control, and an overall sense of neglect. These insights echo existing literature which suggests that well-lit, legible, and visually open public spaces not only enable easier navigation but also increase feelings of comfort and encourage greater social presence (Maas et al., 2009). In this way, safety becomes a spatial and emotional condition, co-produced by design, maintenance, and community use.

Currently, the Marterrade square is lit by sparse, dim streetlights that do little to signal care or encourage presence. Residents described the space as “unwelcoming” after dark, and some noted that the existing lighting fails to differentiate the square from surrounding roadways—visually and atmospherically. There is no sense of “arrival” into a neighborhood or communal zone. This absence of identity and visual warmth diminishes the usability of the space, particularly in the evening when it could otherwise support informal gatherings, passive recreation, and intergenerational exchange.

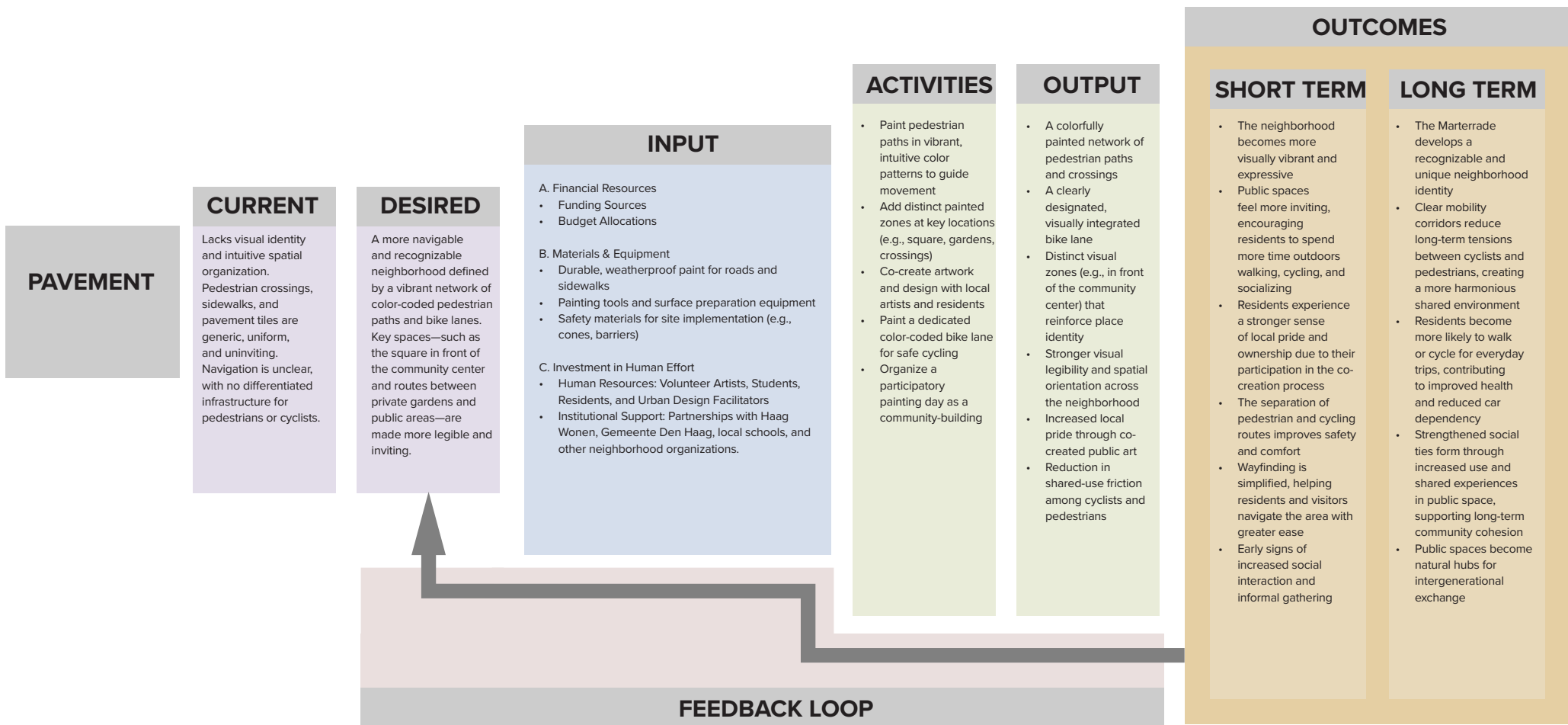
In response, we propose an alternative approach: a diverse, layered lighting strategy that aligns with the square’s social, ecological, and spatial potential. Our ToC reframes lighting not simply as infrastructure, but as a tool for social choreography and emotional resonance. Drawing on Davidovic et al. (2018), we emphasize the importance of warm-white tones, which are perceived as safer and more pleasant compared to neutral white lighting. Additionally, Kostic and Djokic (2009) highlight how white-light sources with high color rendering enhance

spatial legibility and architectural enjoyment—vital in a square where visual character and identity are currently lacking.

The proposed lighting types range from solar-powered pathway LEDs and artistic light poles to festive string bulbs that signal celebration and care. Each fixture plays a different role: lighting pathways for safety, illuminating gathering points to enable social interaction, and aesthetically framing the square as a place that matters. Just as importantly, we advocate for a participatory design process, including door-to-door engagement to identify areas perceived as most unsafe. This ensures that resident expertise and lived experience guide the intervention’s form and placement.

In the short term, we expect lighting to enhance perceptions of safety, improve nighttime use, and foster trust among residents. Public presence tends to reinforce itself—when people feel safe enough to gather, it generates natural surveillance, which in turn discourages antisocial behavior. Warm, diverse lighting also invites residents to see the square as a space for community, not just circulation.

In the long term, we anticipate deeper outcomes. Lighting can support the transformation of Marterrade into a self-sustaining third space—a neighborhood commons that is inclusive, resilient, and identity-rich. As Peña-García et al. (2015) assert, well-lit public spaces encourage increased social interaction, reduced crime, and improved overall well-being. The shift from isolated, underused zones to shared, cared-for places reflects our broader goal: to foster social cohesion through spatial equity and design care.



Final Design: Connectivity

This intervention focuses on strengthening pedestrian connectivity, enhancing wayfinding, and separating modes of movement to improve both spatial legibility and user experience in the Marterrade. While many residents emphasized their preference for private and semi-private areas—such as the inner gardens—our design approach aims to complement these more intimate zones by creating a public realm that is equally comfortable, navigable, and engaging. In doing so, the intervention seeks to unify fragmented spaces into a coherent system that serves both movement and identity.

As noted by Gul et al. (2020), well-structured pedestrian environments—including wider sidewalks, physical buffers from roads, and traffic-calming measures—are essential for fostering accessible, safe, and inclusive urban areas. These elements are particularly beneficial for children, older adults, and individuals with mobility impairments. Currently, the Marterrade lacks such spatial hierarchy: pedestrians, cyclists, and motorized vehicles often share undifferentiated paved areas, especially in the square. This not only creates friction among users but also contributes to spatial ambiguity, undermining the potential of the public space to serve as a cohesive, legible, and welcoming environment.

In response, our proposal introduces dedicated bicycle lanes, which are physically and visually distinguished from pedestrian pathways. These bike lanes are intended to improve circulation efficiency while reducing conflicts between users. More than a functional upgrade, the introduction of cycling infrastructure reflects a broader principle: that mobility networks shape behavioral norms. Designated bike corridors reinforce expected movement patterns and allow pedestrians to walk without the stress of navigating around scooters or bicycles

This spatial separation is consistent with the principles of “complete streets”, a planning model that prioritizes equal access and safe passage for all users, regardless of age or mode of transport. In the Marterrade, this principle is implemented through clarity in ground treatment, visual differentiation via color, and the physical delineation of mobility paths—all of which support the creation of a functional and intuitive public realm.

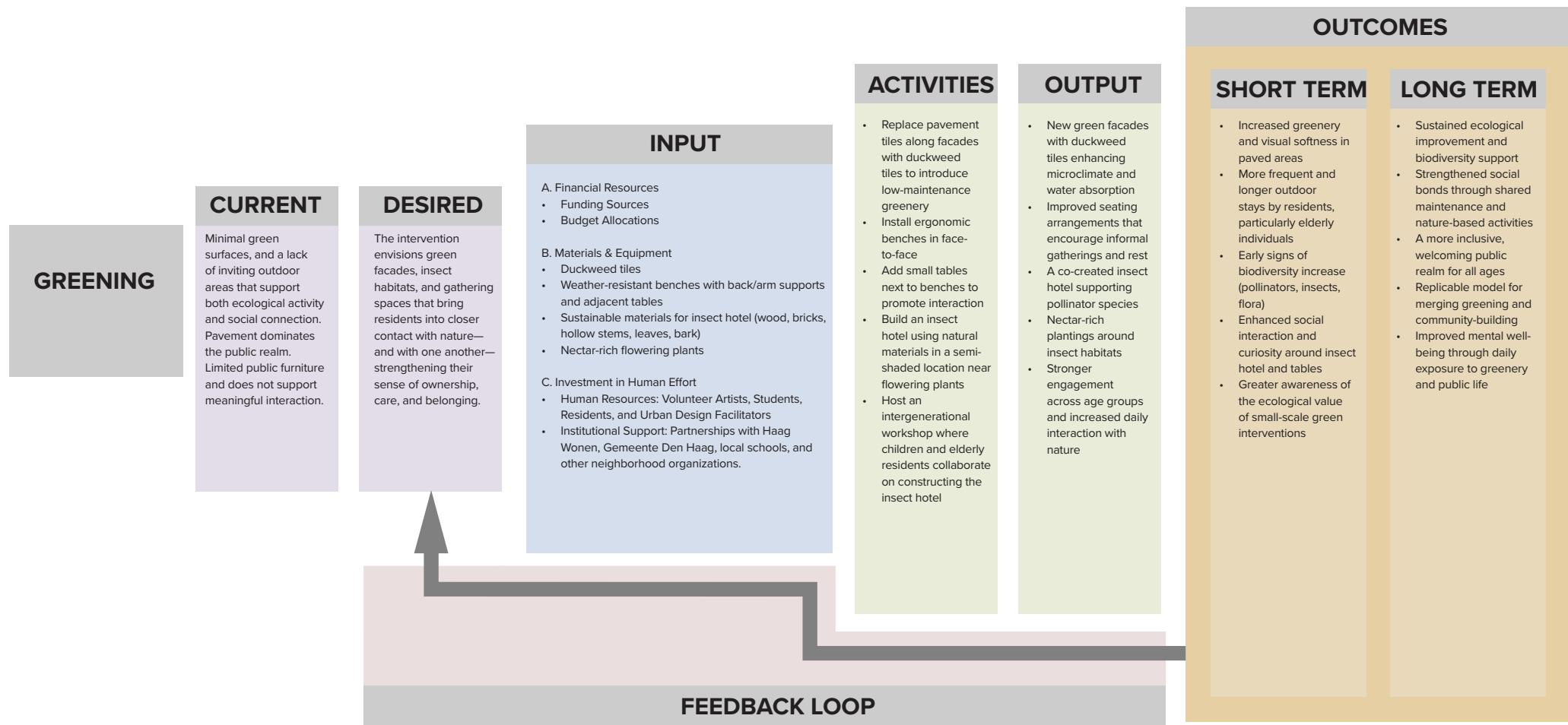
Simultaneously, the proposal introduces color-coded pedestrian

paths, co-developed with residents and artists. These paths are not merely directional tools but also narrative devices that tell a visual story of the neighborhood. Inspired by Gehl’s (1987) work on street complexity, we recognize that variation in material, signage, and texture increases spatial intimacy and pedestrian comfort. In contrast to the existing grey, homogeneous pavement, the proposed interventions foster visual richness and playfulness, transforming movement through the space into an engaging experience.

These changes also reinforce wayfinding, an often-overlooked but essential element of public space design. In neighborhoods like the Marterrade, where entrances, pathways, and gathering areas blend into one another, a clear visual language is needed to guide residents and visitors alike. Painted paths, combined with lighting and signage, contribute to a layered system of orientation, helping users understand where they are and how to navigate the neighborhood with ease.

Moreover, the intervention embraces the principles of Asset-Based Community Development (ABCD) by drawing on local creativity. Artists who already live in the neighborhood are envisioned as collaborators in shaping the visual identity of the mobility paths. This approach not only builds on existing human capital but also deepens the community’s emotional connection to the public realm.

Though connectivity is often viewed as a technical concern, it also has a significant impact on safety and social well-being. Maas et al. (2009) argue that well-connected and well-lit public spaces with clear sightlines foster natural surveillance, reducing crime and increasing the sense of security. When people feel confident navigating a space, they are more likely to occupy it, which in turn reinforces collective presence and accountability. Connectivity, in this sense, becomes a tool for activating underused spaces and transforming them into environments that invite participation and stewardship. Timmer (2005) further reinforces this perspective by describing common spaces as central to social life, and calling for a “continuous network” of pedestrian and cycle routes to connect high-quality social spaces. Connectivity, in this sense, is not just about movement—it is about cultivating social interaction, neighborhood pride, and a shared sense of place.



Final Design: Greening

A comprehensive Theory of Change (ToC) for greening in Marterrade positions everyday ecological interventions as essential tools for enhancing not only environmental sustainability but also social cohesion and public well-being. In response to repeated concerns from residents about the inner garden’s lack of vegetation, biodiversity, and usability, this intervention integrates three key elements: the replacement of paved surfaces with duckweed tile green facades, the installation of ergonomically designed benches with adjacent social tables, and the construction of a communal insect hotel. This multi-scalar strategy addresses the urgent need to restore fragmented urban ecosystems while simultaneously creating inclusive and socially generative public spaces.

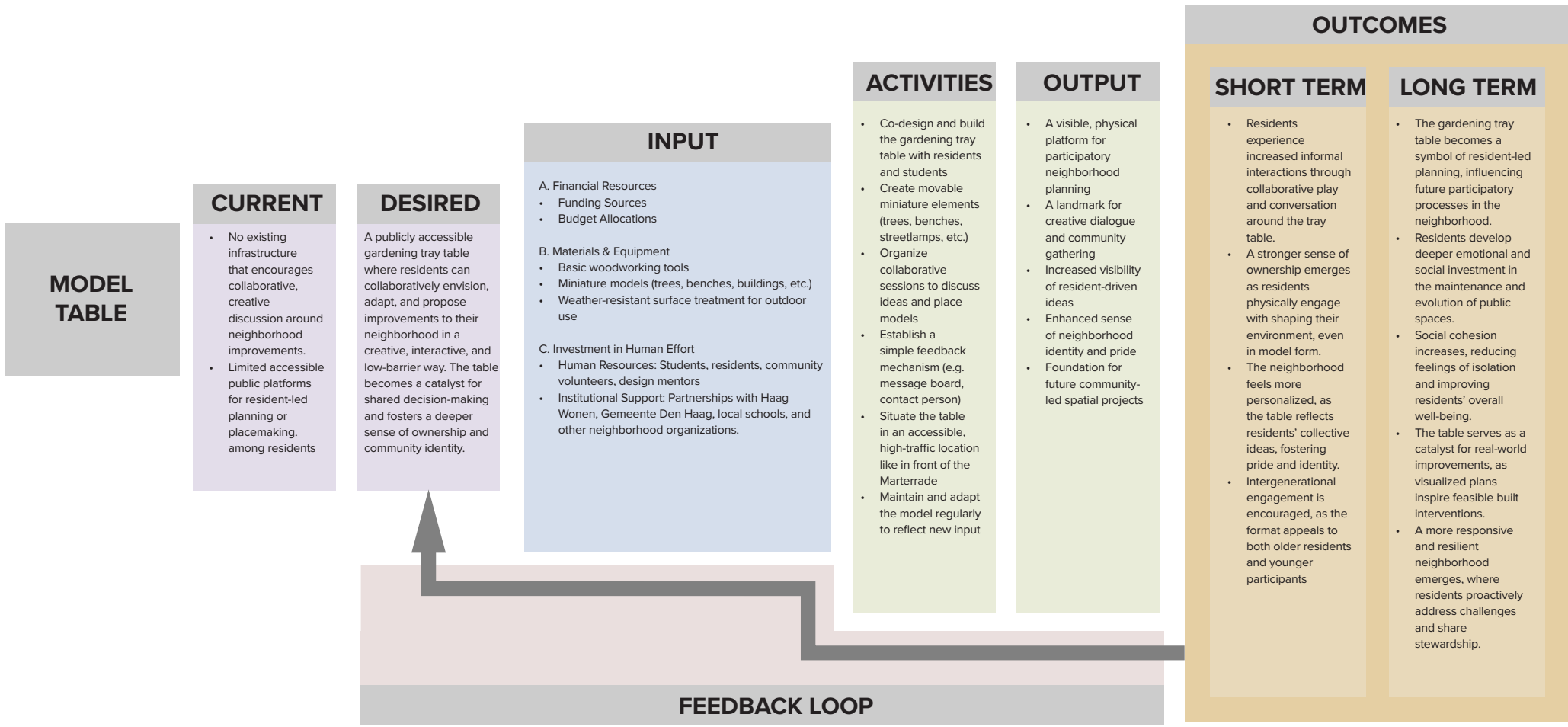
Urban greenery has long been linked to improved mental health, reduced stress, and increased social trust (Maas et al., 2009; Jennings et al., 2016). Yet greening must extend beyond aesthetic gestures to meaningfully engage with local ecological systems and social realities. The use of duckweed tiles—a sustainable and low-maintenance alternative to conventional paving—creates permeable surfaces that improve stormwater absorption, reduce urban heat island effects, and foster habitat conditions for beneficial insects and microflora (Flip the City, 2024). Beyond environmental function, such green facades visibly communicate care and investment in the public realm, enhancing resident attachment to place (Placemaking Europe, 2021). This aligns with theories of environmental stewardship, which posit that when residents participate in transforming their environments, they develop stronger emotional and social bonds to those spaces (Krasny et al., 2015).

Alongside greening the surface, the intervention reactivates social life in the garden by introducing accessible and comfortable seating arrangements. Drawing from Mexi and Tudora’s (2012) findings, benches are designed with ergonomic features and arranged in L-shaped and face-to-face configurations to foster conversation. Their placement in both sunny and shaded areas, with tables for shared activities, accommodates elderly users and supports passive engagement in outdoor life—factors directly linked to improved physical and emotional well-being (Datta et al., 2015). Importantly, these furnishings signal that the space is meant to be used, lingered in, and cared for, shifting the garden from a zone of transit to one of encounter.

At the micro-scale, the installation of an insect hotel addresses ecological decline by offering pollinators safe habitats and food sources through nearby nectar-rich plantings. But perhaps more critically, the insect hotel acts as a platform for intergenerational collaboration. Children and elderly residents are invited to co-create the structure, sparking shared learning experiences and relational repair—something that Schiefer and Van Der Noll (2017) argue is key to rebuilding trust and cohesion in increasingly fragmented urban societies. The playful, tactile process of building with natural materials also democratizes ecological knowledge, making it accessible across age, language, and education divides (Wildlife Trusts, n.d.).

Taken together, these greening interventions function as catalysts for layered change. In the short term, they increase visual greenery, support pollinator biodiversity, and invite more residents—especially older adults—into public life. In the long term, they establish ecological infrastructure, promote routine maintenance practices, and support the emergence of more socially embedded and environmentally conscious behaviors. However, the success of these outcomes depends on continuous engagement and clearly defined responsibilities. Without sustained use and stewardship, even the most carefully designed green infrastructure risks becoming neglected or symbolic rather than functional. Benches may become damaged, tiles overgrown, and insect hotels ignored if maintenance and activation are not collectively managed.

Still, this intervention insists that small-scale greening—when thoughtfully designed and socially embedded—can repair the everyday. It bridges the divide between ecological and human systems, reinforcing that sustainability is not only about carbon, but about connection: to place, to others, and to the more-than-human world. This ToC reframes urban greenery not as a backdrop, but as active civic infrastructure that supports resilience, inclusion, and dignity in daily life.



Final Design: Ownership

The Gardening Tray/Model Table (tafelbak) functions as a tactile and participatory planning tool, offering residents the opportunity to reimagine and reshape their neighborhood through hands-on interaction. Designed as a scaled model of the Marterrade, the tray table enables individuals to add elements such as trees, benches, plants, lighting, or playgrounds using small wooden pieces. This intervention fosters a collective visioning process and encourages residents to actively contribute to shaping their environment—physically, socially, and symbolically.

Rooted in the Asset-Based Community Development (ABCD) framework, this approach empowers residents by inviting them to become co-creators of their own space. Rather than relying on external authorities to dictate improvements, the model provides a platform for local knowledge, experience, and imagination to take form. The tangible, interactive format lowers barriers to participation, making planning more intuitive and accessible, especially for individuals who may be less comfortable engaging through maps or formal drawings.

The tray table itself consists of a wooden surface and modular building blocks representing key neighborhood structures. To further enhance its potential, future iterations may include interchangeable or 3D-printed miniatures—trees, furniture, planters, and signage—to allow residents to physically compose and test spatial interventions. This process transforms abstract ideas into a shared and visible vision, strengthening both spatial literacy and community ownership.

Spatially, the tray table is designed for collaborative use. Its dimensions allow at least two residents to engage simultaneously while seated, facilitating conversation and idea exchange. The success of this interaction was confirmed during the March 27 co-creation session, where the table effectively supported both social interaction and spatial dialogue among participants.

In terms of placement, the public square in front of the Marterrade is considered the most appropriate location. Unlike semi-private inner gardens, which have limited accessibility, this area is open and visible to all. As such, the table becomes more than a planning tool—it becomes a public landmark. Residents and visitors can gather around it, use it as a meeting point, or simply engage with the evolving miniature landscape as a reflective

mirror of their community’s values and ideas.

While the Gardening Tray Table presents a promising tool for participatory planning and creative engagement, its long-term success depends on sustained community use and proper maintenance—both of which are uncertain. One major concern is whether residents will continue to interact with the table after the novelty of its installation fades. Without structured programming or facilitation, the table risks becoming underutilized, neglected, or even misused. Additionally, questions of durability and upkeep arise: who will be responsible for ensuring that the wooden components remain intact, weather-resistant, and organized? Over time, pieces could go missing, become damaged, or be repurposed in unintended ways. To avoid the intervention devolving into visual clutter or waste, a clear stewardship plan must be developed—possibly involving the community center, a resident working group, or local artists.

4.3 Design References

Our design references were carefully selected to reflect both the spatial insights gained through the co-creation sessions and the practical constraints of the project—particularly the need for low-cost, low-maintenance interventions with lasting impact. We looked to precedents that successfully transform underused urban spaces through modest, thoughtful design gestures that prioritize atmosphere, identity, and everyday usability.

We were especially drawn to projects that demonstrate how simple, ground-level interventions can activate public space without relying on expensive infrastructure. The curved seating design by Assemble (Figure 4), for instance, influenced our thinking around social edges and informal gathering spaces. Its organic layout softens the boundaries between movement and rest, while integrated planting and material warmth create a more intimate, human-scale environment. These qualities resonated with resident feedback around openness, vulnerability, and the desire for safer, more comfortable public areas.



Figure 4

Figures 5 and 6 played a pivotal role in shaping our connectivity strategy and approach to ownership. These projects show how bold surface treatments—through vibrant colors, graphic patterns, and visual rhythm—not only improve the legibility of urban space, but also allow residents to take part in shaping their environment. These colourful pathways contribute to a sense of authorship and visibility, turning ordinary circulation routes into expressions of local identity. In our proposal, these painted walkways—co-designed with residents and artists—extend all the way to the tram line, becoming both a directional guide and a canvas for community storytelling. In this way, connectivity is not just functional, but expressive, embedding a sense of place into everyday movement.



Figure 5, Figure 6

Lighting also emerged as a major theme during our co-creation sessions, particularly regarding safety and evening use. Figures 7, 8, and 9 illustrate how soft, ambient lighting can reinforce a feeling of care and presence while supporting nighttime activity. These precedents informed our proposal to layer lighting across key pedestrian paths and gathering points—creating not just visibility, but atmosphere. In doing so, lighting becomes more than a technical fix; it becomes a spatial gesture that counters the sense of neglect and reinforces social comfort.

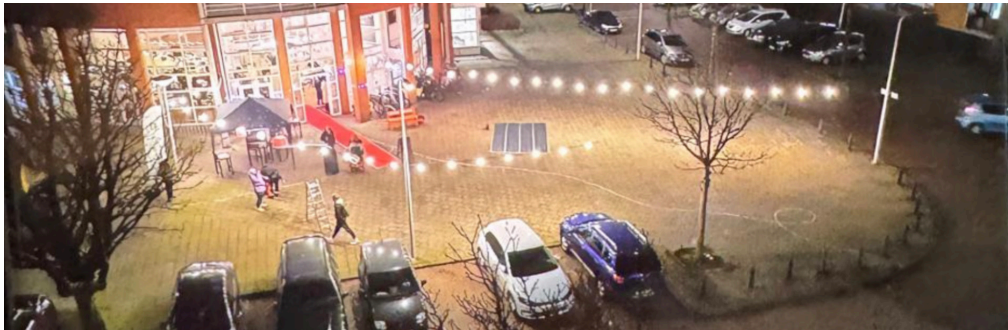


Figure 7, Figure 8, Figure 9, Figure 10

Collectively, these references shaped our design approach as one rooted in spatial enhancement and social reactivation. Rather than proposing large-scale, high-maintenance interventions, we chose to work with and amplify what is already present—reinforcing local narratives through modest but intentional design. From painted ground patterns to integrated seating and lighting, our proposals aim to create a more legible, inclusive, and emotionally resonant public realm. By aligning aesthetics with resident priorities, we hope to contribute to stronger social infrastructure, clearer navigation, and a greater sense of belonging in the Marterrade.

4.4 Design

The design for the Marterrade courtyard and surrounding streets reimagines the neighborhood’s public realm as a vibrant, inclusive, and ecologically responsive urban commons. Drawing from co-creation sessions and resident interviews, the intervention addresses core concerns around safety, identity, comfort, and biodiversity through a layered set of spatial upgrades. Nestled within this living infrastructure are ergonomic benches and circular tables, placed in sunny and shaded areas to accommodate a range of users. Their arrangement encourages informal gathering, quiet reflection, and multigenerational interaction, especially among elderly residents, for whom accessibility and comfort are essential.

Ecological greening continues at a micro scale with the installation of a community-built insect hotel, surrounded by nectar-rich flowering plants. Created collaboratively by schoolchildren and older residents, the insect hotel not only supports pollinator populations, but fosters intergenerational learning and a sense of collective ownership over the space. These soft, ground-level interventions are complemented by an atmospheric lighting strategy that enhances nighttime safety and ambiance. Warm-toned string lights are suspended between trees and poles throughout the inner courtyard, signaling care and visibility without feeling institutional. Lighting extends into public routes as well, using low-level solar-powered path lights and artistic fixtures to define key thresholds and gathering spots—transforming the garden into a usable, welcoming space even after sunset.

Beyond the garden, the design addresses mobility and neighborhood legibility through a set of colorful, co-created pathways. Inspired by principles of “complete streets”, the intervention introduces clearly painted pedestrian and cycling lanes, which separate movement types and reduce friction between users. These paths are not only functional—they are narrative devices, incorporating color, rhythm, and local storytelling to build neighborhood identity and pride. Murals, stencils, and painted crossings help orient pedestrians while inviting playful interactions, particularly from children and caregivers. The introduction of greenery along these routes—including wild grass verges and planted tree beds—further softens the hardscape and supports pollinator corridors across the site.

Together, these design elements articulate a coherent spatial strategy grounded in care, community, and co-creation. In the short term, the interventions offer immediate improvements in usability, visibility, and comfort. Benches get used, insects return, colors guide movement, and string lights make lingering feel safe. In the long term, they cultivate a spatial identity that is memorable, inclusive, and ecologically engaged—one that reflects the rhythms, relationships, and stories of the residents themselves. While the success of the project depends on continued maintenance and programming, its foundation lies in its capacity to invite participation, build pride, and shift how the public realm is understood: not as leftover space, but as shared ground for everyday life.



4.5 Budget

Budget was one of the most defining and limiting factors in shaping our design proposal. From the outset, we were aware that meaningful change would need to come through small, strategic interventions—ones that could be implemented affordably, maintained easily, and scaled over time. This meant shifting our focus from large, transformative gestures to low-cost, low-maintenance actions with high social value. Interventions like painted pathways, planters, signage, and greening initiatives were selected not only for their visual impact, but also for their feasibility: they can be realized through community workshops, municipal support, or in-kind contributions such as volunteer labor and donated materials.

Feasibility was approached holistically, not only in terms of money, but also time, effort, permissions, and long-term

responsibility. Some elements, like solar lighting or permanent seating, require more coordination—with the municipality or housing associations—and may be implemented in future phases depending on available funding. We also considered who would care for and use these interventions: what could realistically be maintained by residents, and what would require institutional support? This thinking helped us prioritize actions that build capacity and ownership rather than long-term dependency.

By organizing interventions into tiers based on complexity, cost, and stakeholder involvement, we developed a flexible, scalable proposal that balances ambition with pragmatism. Budget limitations challenged us to be more creative, collaborative, and focused—ultimately strengthening our commitment to accessible, community-led design that can evolve over time with the neighborhood itself.

Intervention	Feasibility Notes	Estimated Cost (€)	Key Considerations
Painted Paths & Square	Requires municipal approval; dependent on weather and volunteers	€150–400 (Medium)	Eco-friendly paint preferred; relies on community-led painting efforts
Bike Lane Marking	Coordination with authorities; must meet safety standards	€300–600 (Medium)	Signage and surface paint only; no repaving assumed
Tafelbak (Shared Table)	Built through co-creation with residents; needs tools and materials	€100–250 (Low)	Volunteer tools assumed; emphasizes ownership and collaboration
Creative Greening (Art, Paint)	Requires facilitation by artists/designers and basic materials	€200–600 (Medium)	Designed to engage residents in low-cost beautification
Lighting Preference Survey	Simple outreach method (paper/online); volunteer-led	€0–50 (Low)	Translation may be required; low threshold for implementation
Solar Lighting Installation	Requires sourcing materials, permissions, and basic technical skills	€500–1,000 (Med-High)	3–5 units assumed; can be installed in phases with support from professionals/volunteers
Duckweed Tile Installation	Coordination with city; seed planting and material work	€200–600 (Medium)	Community planting possible; potential for seasonal variation
Greening Events & Education	Sessions led by team or volunteers; materials for planting and outreach	€100–200 (Low)	Covers snacks, print materials, small giveaways
Bench & Table Installation	Durable materials required; consultation for placement	€800–1,500 (High)	Must be accessible (back and arm support); higher material and labor costs
Insect Hotel Workshop	Materials and facilitation for intergenerational building	€250–500 (Medium)	Includes flower planting; promotes ecology and community bonding
Nectar-Rich Planting	Volunteer planting days; low maintenance species selection	€100–300 (Low–Med)	Cost varies by species and planting area

4.6 Project Phasing

The proposed interventions have been structured into four phases, each aligned with varying levels of complexity, stakeholder involvement, and material cost. This phasing strategy not only responds to budget constraints but also reflects the need for gradual, trust-based implementation in a socially complex context like the Marterrade. The first phase focuses on low-cost, high-engagement actions such as painted paths, signage, the Tafelbak, and community workshops around greening and insect hotels. These interventions are deliberately designed to be quick to implement, visible, and participatory—building early momentum and signalling care.

Phase two involves soft landscaping, planters, and nectar-rich planting, extending the impact of initial greening efforts. These actions serve both aesthetic and ecological functions, while deepening community involvement through shared maintenance and use. Phase three introduces medium-complexity infrastructure such as duckweed tiles and select lighting elements. These require more coordination, permissions,

and potentially technical support. The final phase introduces higher-cost, higher-durability components such as solar-powered lighting and public seating—elements that improve long-term usability but are contingent on external funding and stakeholder negotiation.

While the physical timeline of implementation may span months, the social timeline is far longer. Gaining the trust of residents could take years, especially in a neighborhood where past experiences have shaped skepticism toward outside initiatives. The phased design process acknowledges this reality: it is intentionally slow, iterative, and flexible—allowing for interventions to grow in step with community readiness. Though modest in scale, these proposals act as important first steps toward building stronger relationships, greater visibility, and long-term transformation from within.



REFLECTION

Tommer

At first glance and on paper, this assignment seemed very enjoyable. I was genuinely looking forward to it and started the project with enthusiasm. I was excited about engaging with residents and developing a design together with my group. However, the process didn't fully meet my expectations. To be honest, I found working with the Theory of Change somewhat simplistic. While I understand the importance of thinking holistically, it became a bit repetitive over time. Filling in for four weeks that you need materials as "tools" and people as "resources" lacked depth and nuance. Moreover, attendance from residents was often limited — which is understandable given the circumstances. As a result, not all planned research methods could be applied, and there were often more students than respondents. This led to similar findings across the different groups, making it less interesting to listen to one another's presentations. On the other hand, it was both enjoyable and insightful to speak with respondents and gain a better understanding of what is going on in the neighborhood. As a group, we learned to improvise and adapt to the actual situation. This course also provided a great opportunity to learn and experiment with new research methods. We were introduced to techniques such as participatory mapping, the fundamental needs detector, the ideal day scenario, walkshops, and collages of landscapes. These tools have expanded my methodological skill set and offered a refreshing perspective on participatory and area-based research.

Suze

Working on this project was unlike any assignment I had previously encountered during my studies. Initially, I felt somewhat unsure about the direction and execution, but I gradually came to appreciate the different approach. It challenged me to think outside the box, while still allowing me to draw on my background in public administration in a meaningful way, complementing the expertise of other group members.

Attending the first co-creation session was a turning point. Engaging directly with the residents and the community we aimed to support gave the project a clear sense of purpose and direction. Collaborating with an organization like Haag Wonen added further value, as it simulated a real-world working environment and deepened my interest in such practical project work. The hands-on approach was moreover a nice change of pace from static textbook reading. It allowed me to gain real-life understanding of what it takes to transform a neighbourhood, yet I felt supported by the few theoretical lectures we followed at the beginning of the course.

That being said, I found the development of the Theory

of Change increasingly repetitive over time. Despite collecting more input from residents, the consistently low turnout limited our ability to make the ToC more specific or representative. In the end, it felt as though we were working with only a handful of individuals whose needs and perspectives sometimes conflicted, making it difficult to create a more comprehensive and balanced version. But perhaps this is simply due to the short time frame we were dealing with.

Maria

I chose this course because I already had some knowledge in the theory of placemaking through my background in urban planning and the MADE program. I wanted to deepen my understanding through real-world experience. While the theoretical side felt familiar, applying it on-site brought new insight. Especially regarding the complexity of turning a space into a place. Working with tools like the Theory of Change (ToC) helped structure our reflections and improve our approach, but I would have appreciated learning more tools to reflect on and adapt our findings. Co-creation in Marteraade was insightful, though often challenging. Community members didn't always attend sessions, reminding us that participation takes time, consistency and trust.

This experience made me realize that placemaking isn't just about design—it's about relationships, presence, and everyday interactions. Even being involved for just 3 weeks showed me how long-term commitment is essential for real impact. I've also come to appreciate how small-scale interventions can create meaningful change by fostering dialogue and local ownership. As someone interested in spatial justice, these sessions helped deepen my thinking about inclusion, access, and the role of communities in shaping their environments. If I were to repeat the course, I'd suggest splitting teams between different neighborhoods to gain more diverse perspective, as in these sessions almost everyone had similar findings.

Julia

The initial course description sparked great enthusiasm, particularly due to its divergence from the traditional structure of my other academic courses within the field of Public Administration. Unlike the heavily theory-driven nature of most curricula, this course offered the opportunity to engage directly with real-world challenges through fieldwork. The prospect of moving beyond abstract academic writing to engage with the lived experiences of residents was especially appealing.

The structure of the course — beginning with theoretical lectures followed by group collaboration and fieldwork — was, in my view, well-conceived. However, one of

the key challenges encountered during the field phase was the limited participation of local residents. Although this posed a constraint in terms of data collection and community input, it simultaneously reflected a realistic aspect of participatory urban planning: achieving high levels of community engagement is often difficult in practice.

In terms of the final assignment, I believe the reports produced could have greater practical relevance if supplemented with detailed information regarding municipal regulations, planning frameworks, and budgetary constraints. Such contextual data would allow for a more integrative approach, bridging academic insights with implementation realities. As it stands, the reports—though theoretically grounded and well-constructed—risk being perceived as detached from practical feasibility, particularly where proposed interventions may conflict with regulatory limitations or exceed financial capacities.

Furthermore, an unintended consequence of our presence in the neighborhood was the creation of expectations among some residents regarding the implementation of their ideas. Despite our efforts to clarify that we were not in a position to guarantee implementation, some individuals interpreted the initiative as a promise of action. This disconnect may contribute to feelings of disillusionment and could potentially undermine trust in local governance structures or community-based participatory processes. This outcome contradicts the broader objective of fostering citizen engagement and highlights the ethical considerations inherent in community-based fieldwork.

Katya

As an exchange student, I began this course anticipating a structured, academically driven format—something more aligned with the theoretical and lecture-based approach I was accustomed to at my home university. I wasn't entirely sure what to expect from the on-site co-creation sessions, and I was initially surprised—though pleasantly—by how open-ended and participatory the methodology turned out to be. It was refreshing to encounter a pedagogical model that prioritized resident input and foregrounded real, lived experience. Yet as the course progressed, I also began to recognize the limitations of this approach—both in terms of what was realistically achievable within the scope of a short-term academic project, and in terms of the degree to which students could genuinely influence the deeper social dynamics at play in the neighborhood.

I'm deeply interested in questions of social and spatial justice, and while I remain committed to participatory processes, I became increasingly aware of the gap between intent and impact. The format of the course, while participatory in theory, seemed to guide us—whether consciously or not—toward proposing small, tangible spatial interventions. Many of these felt more like "band-aid" solutions than pathways toward systemic change. The concerns raised by residents—around mistrust, neglect, and disconnection—were not problems that could be addressed through better seating, new planters, or improved lighting alone. In some cases, the feedback we received during sessions simply confirmed things we had already assumed,

such as the lack of maintenance or safety concerns in public spaces. While this didn't invalidate the co-creation process, it did lead me to reflect more critically on what constitutes "valuable" data, and how the framing of participatory tools may limit or predetermine the kind of knowledge we actually gather.

This also brought into question the very structure of co-creation. Though framed as a bottom-up process, our sessions were still part of a top-down, university-supported initiative. Residents were effectively asked to share personal insights within the context of a student research project, the outcomes of which would be analyzed, published, and shared with institutions like Haag Wonen. This raises important ethical questions about authorship, representation, and responsibility. If we invite people to be part of a participatory design process, what do we owe them in return? Is participation meaningful if it does not include continued involvement, transparency, or a clear sense of how contributions are used beyond the classroom?

A particularly formative moment for me was attending one of the co-creation sessions in the actual space. From a design standpoint, I was struck by how much potential already existed. The scale, the quality of light, and the openness of the space suggested that only minor spatial adjustments might be needed to increase comfort and accessibility. But what couldn't be ignored was the underlying social atmosphere—the sense of fatigue, mistrust, and disconnection that many residents subtly expressed. These were not things a bench or a butterfly garden could resolve. The real design challenge seemed to lie not in the spatial layout, but in how to rebuild a sense of belonging and care within the community.

Another reflection that emerged throughout the process was the tension between collaborative input and disciplinary expertise. I appreciated working with a group composed of students from different academic backgrounds, and it was valuable to see how each of us interpreted the same data through different lenses. However, in practice, the final design visuals and spatial proposals largely fell on me—as the only architecture student in our group. This created a time crunch in the final week, which felt at odds with the slow, thoughtful process the course otherwise encouraged. It also revealed a misalignment between the ambitions of co-creation and the pressures of academic deadlines, especially when it came to deliverables that were heavily visual and spatial in nature.

Looking back, my most important takeaway is that co-creation should not be treated as a means to an end, but as an evolving relationship. If I were to do this again, I would advocate for more time with the residents before proposing interventions—time to simply listen, build trust, and understand what matters to them beyond our frameworks and agendas. I would also suggest that future versions of this course allow for more flexibility in outcomes. Not every participatory design process needs to result in a physical intervention. Ultimately, this course reminded me that design—especially socially engaged design—is not about quick fixes.

SOURCES

Afacan, Yasemin. (2021). Impacts of biophilic design on the development of gerotranscendence and the Profile of Mood States during the COVID-19 pandemic. *Ageing and Society*, 43, 1-25. 10.1017/S0144686X21001860.

Bolt, G. (2018). *Housing Segregation in European Cities*. Routledge.

Burrage, H. (2011, September). Green hubs, social inclusion and community engagement. In *Proceedings of the Institution of Civil Engineers-Municipal Engineer* (Vol. 164, No. 3, pp. 167-174). Thomas Telford Ltd.

Chatterton, P. (2016). Building transitions to post-capitalist urban commons. *Transactions of the Institute of British Geographers*, 41(4), 403–415.

Clarke, M., Cadaval, S., Wallace, C., Anderson, E., Egerer, M., Dinkins, L., & Platero, R. (2023). Factors that enhance or hinder social cohesion in urban greenspaces: A literature review. *Urban Forestry & Urban Greening*, 84, 127936.

Cochrane, L., & Corbett, J. (2020). Participatory mapping. *Handbook of communication for development and social change*, 705-713.

Datta, D., Datta, P. P., & Majumdar, K. K. (2015). Role of social interaction on quality of life. *Journal of Medical Research*, 5(4), 290–292.

Den Haag in Cijfers. (2024). Segregation Monitor – Work and Income. Retrieved from <https://denhaag.incijfers.nl/mosaic/en-us/segregatiemonitor/5--werk-en-inkomen>

Desmet, P. M. A. & Delft University of Technology. (2020). Thirteen fundamental psychological needs. https://pure.tudelft.nl/ws/portalfiles/portal/85830175/Desmet_2020_13_fundamental_needs.pdf

Diaz, J. M., Webb, S. T., Warner, L. A., & Monaghan, P. (2018). Barriers to community garden success: Demonstrating framework for expert consensus to inform policy and practice. *Urban Forestry & Urban Greening*, 31, 197–203. <https://doi.org/10.1016/j.ufug.2018.02.014>

Di Pietro, F., Mehdi, L., Brun, M., & Tanguay, C. (2018). Community gardens and their potential for urban biodiversity. *The urban garden city: Shaping the city with gardens through history*, 131-151.

Davidovic, M., Djokic, L., Cabarkapa, A., & Kostic, M. (2019). Warm white versus neutral white LED street lighting: Pedestrians' impressions. *Lighting Research & Technology*, 51(8), 1237-1248.

Elands, B., Peters, K., & de Vries, S. (2018). Promoting social cohesion—increasing well-being. *Oxford textbook of nature and public health: the role of nature in improving the health of a population*. Oxford University Press, Oxford, 116-122.

Flip the City. (2024). Van Kroostegel naar Kroostuintje. <https://letsflipthecity.nl>

Frediani, A. A., & Boano, C. (2012). Processes for just products: The capability space of participatory design.

Gehl, J. (1987). *Life between buildings: using public space*. New York: Van Nostrand Reinhold.

Gul, Y., Jokhio, G. A., & Bibi, T. (2020). Walk towards sustainability: Improved neighbourhood street connectivity helps. *E3S Web of Conferences*, 211, 01004. <https://doi.org/10.1051/e3sconf/202021101004>

Hahlweg, D. (1997). “The City as a Family” in Lennard, S, H, S von UngernSternberg, H. L. Lennard, making cities livable [c]. In *International Making Cities Livable Conferences*. California, USA: Gondolier Press

Ilieva, R.T.; Cohen, N.; Israel, M.; Specht, K.; Fox-K’amper, R.; Fargue-Lelièvre, A.; Ponizy, L.; Schoen, V.; Caputo, S.; Kirby, C.K.; et al. (2022). The SocioCultural Benefits of Urban Agriculture: A Review of the Literature. *Land*, 11, 622. <https://doi.org/10.3390/land11050622>

Jennings, V., Larson, L., & Yun, J. (2016). Advancing sustainability through urban green space: Cultural ecosystem services, equity, and social determinants of health. *International Journal of Environmental Research and Public Health*, 13(2), 196.

Kleinhans, R. (2025, March). Theory of Change – A Tool for Design and Impact Analysis, AR0095 L6B. Faculty of Architecture and the Built Environment, TU Delft.

Kostic, M., & Djokic, L. (2009). Recommendations for energy efficient and visually acceptable street lighting. *Energy*, 34(10), 1565-1572.

Krasny, M. E., Russ, A., Tidball, K. G., & Elmqvist, T. (2015). Civic ecology practices: Participatory approaches to generating and measuring ecosystem services in cities. *Ecosystem Services*, 12, 177–186.

Labrecque, Carole, and Lucie Tremblay. “The Evolutive Prosthetic Garden: A New Concept for Elderly Living in Nursing Facilities.” *Journal of Therapeutic Horticulture*, vol. 8, 1996, pp. 56–60. JSTOR, <http://www.jstor.org/stable/44025355>. Accessed 12 Mar. 2025.

Maas, J., Spreeuwenberg, P., Van Winsum-Westra, M., Verheij, R. A., Vries, S., & Groenewegen, P. P. (2009). Is green space in the living environment associated with people's feelings of social safety?. *Environment and Planning A*, 41(7), 1763-1777.

Maas, J., Verheij, R. A., Groenewegen, P. P., de Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology & Community Health*, 60(7), 587–592.

Manzini, E. (2015). *Design, When Everybody Designs: An Introduction to Design for Social Innovation*. MIT Press.

Mexi, A., & Tudora, I. (2012). Livable urban spaces: Public benches and the quality of daily life. *Scientific Papers Series B, Horticulture*, 56, 367–375.

Municipality of The Hague. (2024). Neighborhood Profile Bouwlust and Vrederust. Retrieved from <https://www.denhaag.nl/en/city-districts/escamp/neighborhoods/bouwlust-and-vrederust/>

Paydar, M., & Kamani Fard, A. (2021). The impact of legibility and seating areas on social interaction in the neighbourhood park and plaza. *Archnet-IJAR: International Journal of Architectural Research*, 15(3), 571-588.

Peña-García, A., Hurtado, A., & Aguilar-Luzón, M. C. (2015). Impact of public lighting on pedestrians' perception of safety and well-being. *Safety science*, 78, 142-148.

Peters, K., Elands, B., & Buijs, A. (2010). Social interactions in urban parks: Stimulating social cohesion?. *Urban forestry & urban greening*, 9(2), 93-100.

Placemaking Europe. (2021). *Facade Gardens: How to Improve Your Hybrid Space*.

Russell, C. (2022). Getting to authentic co-production: An asset-based community development perspective on co-production. In E. Loeffler & T. Bovaird (Eds.), *The Palgrave handbook of co-production of public services and outcomes* (pp. 173–184). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-53705-0_9

Sakici, Ç. (2020). Seating Area Preferences: A Case of Kastamonu City Park in Kastamonu. *Journal of International Social Research*, 13(73).

Schiefer, D., & Van Der Noll, Y. (2017). The essentials of social cohesion: A literature review. *Social Indicators Research*, 132(2), 579–603.

Skarupski, Kimberly A., and Jennifer J. Pelkowski. “Multipurpose Senior Centers: Opportunities for Community Health Nursing.” *Journal of Community Health Nursing*, vol. 20, no. 2, 2003, pp. 119–32. JSTOR, <http://www.jstor.org/stable/3427937>. Accessed 19 Mar. 2025.

Soga, M., Cox, D., Yamaura, Y., Gaston, K., Kurisu, K., & Hanaki, K. (2017). Health benefits of urban Allotment gardening: Improved Physical and Psychological Well-Being and Social Integration. *International Journal of Environmental Research and Public Health*, 14 (1), 71. <https://doi.org/10.3390/ijerph14010071>

Timmer, V., & Seymoar, N. K. (2005). *The Livable City*. Vancouver Working Group Discussion Paper for World Urban Forum 2006

The Wildlife Trusts. (n.d.). How to Build a Bug Mansion. <https://www.wildlifetrusts.org/actions/how-build-bug-mansion>

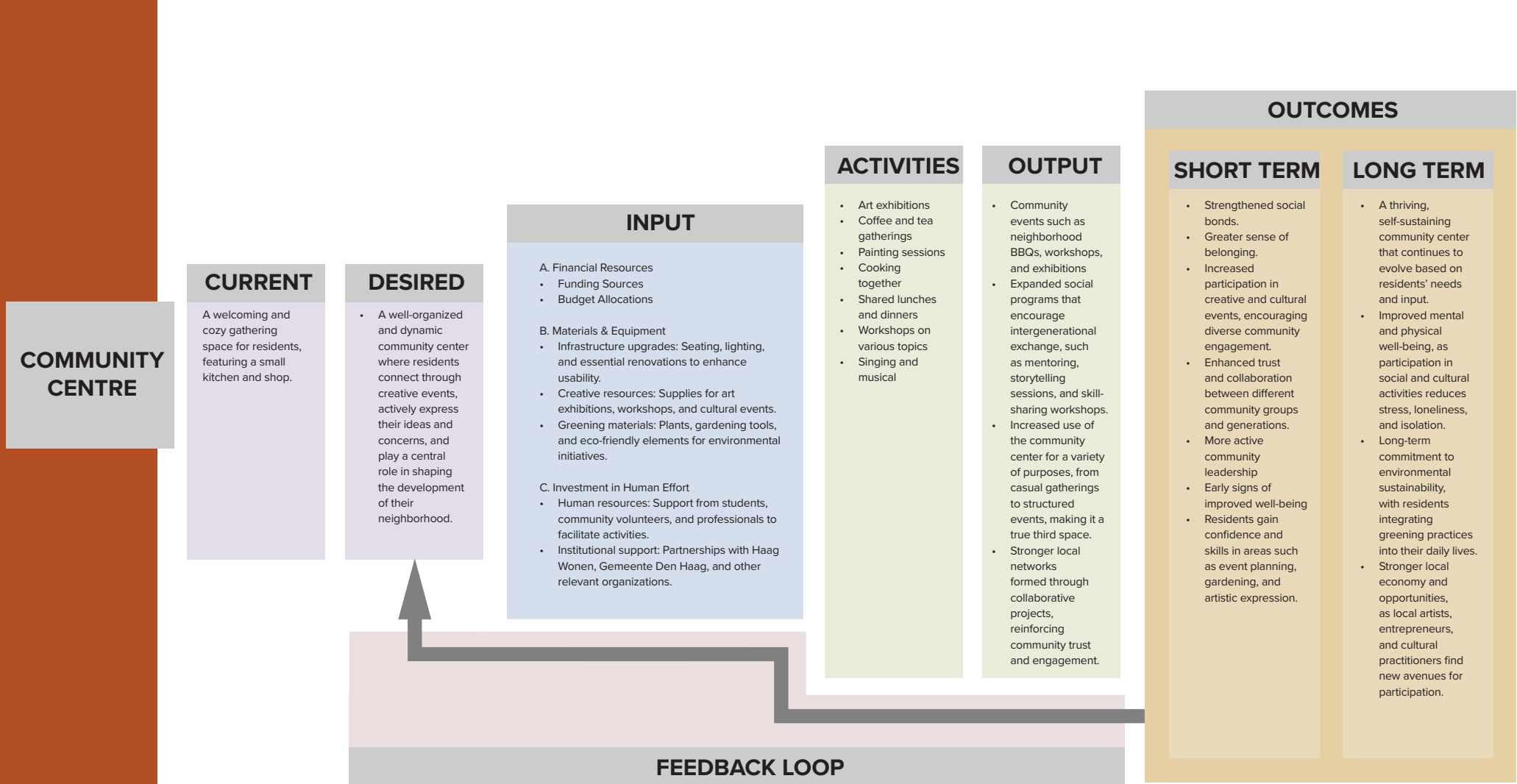
Thompson, K., Austin, K. C., Smith, R. M., Warren, P. H., Angold, P. G., & Gaston, K. J. (2003). Urban domestic gardens (I): Putting small scale plant diversity in context. *Journal of Vegetation Science*, 14(1), 71-78.

Verovšek, Š., Zupančič, T., Juvančič, M., Petrovčič, S., Svetina, M., Janež, M., Pušnik, Ž., Bajec, I. L., & Moškon, M. (2021). The aspect of mobility and connectivity while assessing the neighbourhood sustainability. *Academic Journal of Interdisciplinary Studies*, 10(3). <https://doi.org/10.36941/ajis-2021-0062>

Wainwright, O. (2015). Assemble and the people's architecture: Turner prize winners who rebuilt their community. *The Guardian*

Whyte, W.H. (1980). *The Social Life of Small Urban Spaces*. New York: Project for Public Places.

APPENDIX



SPECTRADE MARTERRADE

SAMEN GEVEN WE DE MARTERRADE EEN NIEUWE INVULLING

VOEL JE VERBONDEN

- 1. Kleurrijk Wandelpad
- 2. Fietspad
- 3. Bewegwijzering



BRENG DE NATUUR DICHTERBIJ

- 4. Eendenkroost Tegels
- 5. Zitplekken
- 6. Insectenhotel



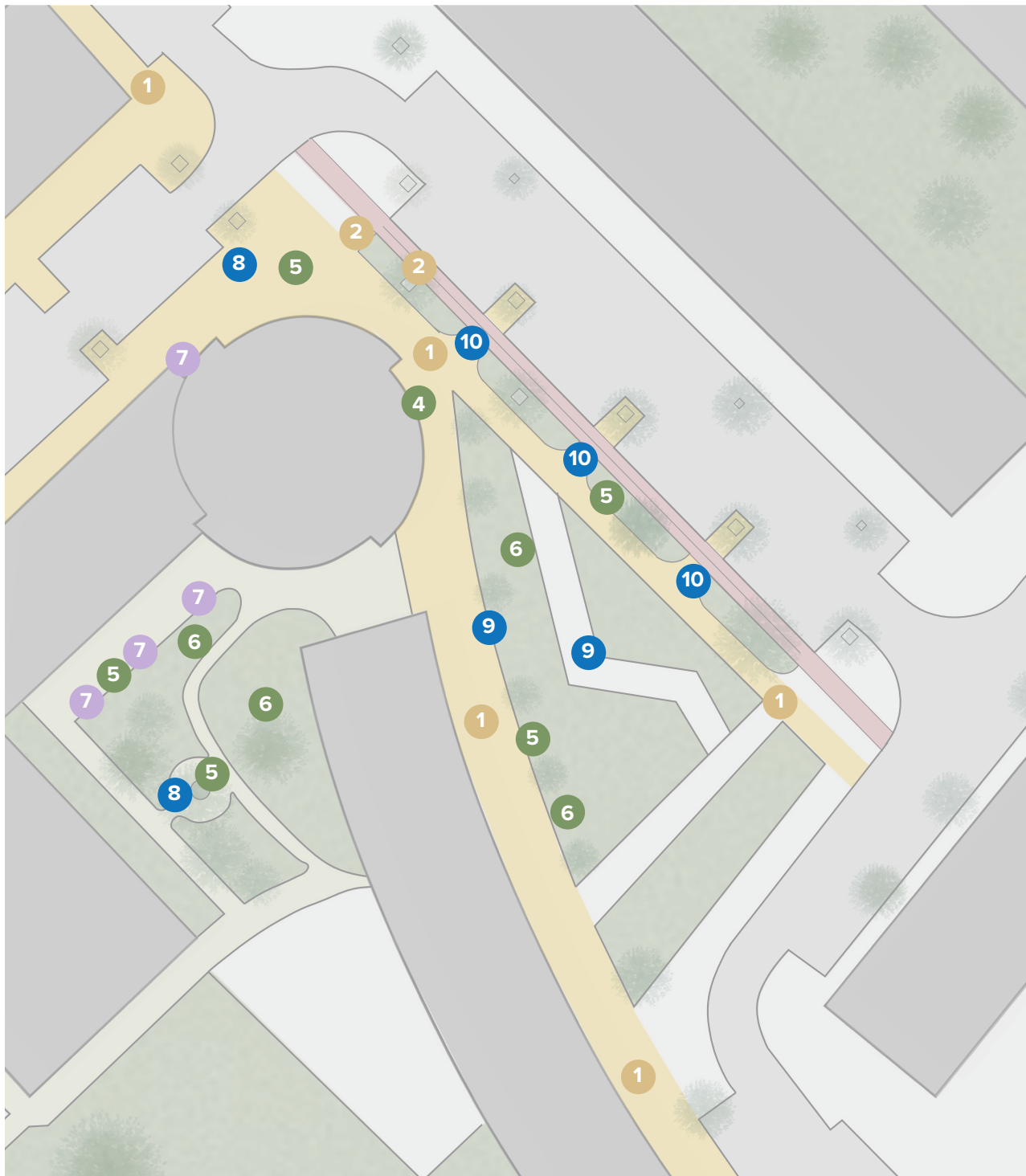
MAAK HET VAN JOU

- 7. Tafelbak



VOEL JE VEILIG EN GEZIEN

- 8. Slingerlichtjes
- 9. Padverlichting
- 10. Straatverlichting



BUURTPLEIN

Een kleurrijk pad, samen met jullie ontworpen, leidt naar de tramhalte en bevat een aparte fatbikestrook met geïntegreerde verlichting.



BINNENTUINEN

Een rustige, gezellige tuin om te zitten, ontspannen en elkaar te ontmoeten—nu met sfeerverlichting, plantenbakken en ruimte voor bloemen en insecten.

