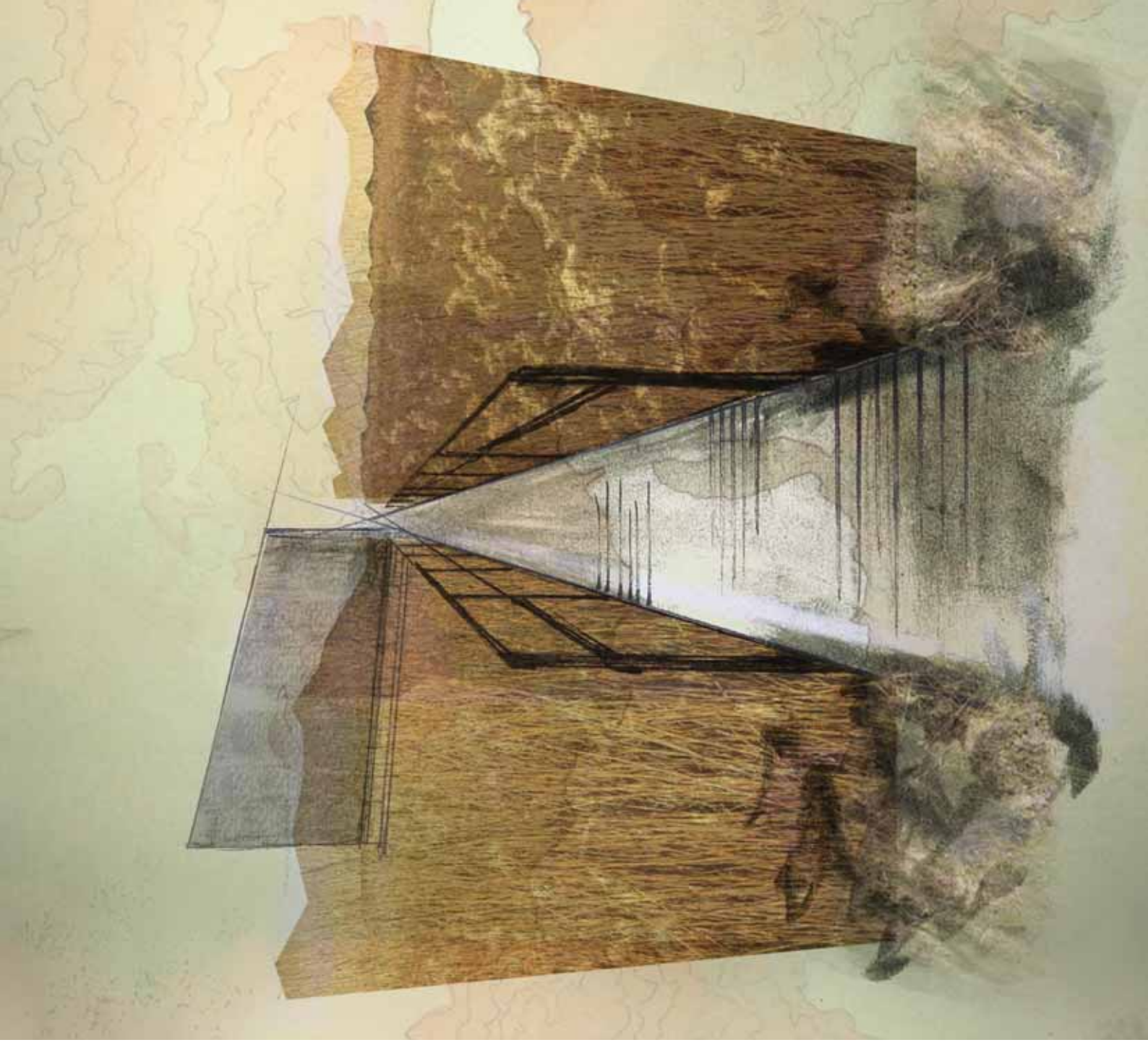


drift off

– a study on the design of
contemplative environments

Enida Kratović
Master's Thesis In Architecture
Mparc/ U+A/DL 2013
Chalmers University Of Technology
Göteborg, Sweden



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ABSTRACT

The point of departure for this master's thesis starts in the curiosity for the role of our built environments' contemplation-inducing dimension. This has led to an investigation of the design and architectural compositions of both eastern and western practice, suggesting how contemporary contemplative space is rendered; both in terms of portraying the architectural strategies, as well as using these strategies as tools for a propositional exploration.

The role of contemplation has through history defined the human experience. Some extraordinary environments have through time been created that go beyond addressing the physical levels and meeting utilitarian needs. These environments speak to the levels of higher human ambitions – the emotional, intellectual, poetic and spiritual levels. It can be argued that today in modern life, with its exposure to vast amount of information, the need for these contemplation-inducing environments becomes a necessity.

To place the exploration in a contemporary context, an opportunity arose to look into the plans for a new retirement home linked to the development of a new district called Ljungaviken, located in the town Sölvesborg in south of Sweden. The retirement home's closeness to nature, outdoor tourism and recreational spots as well as the chance to raise ideas to consider as a part of the development of a new area – and in extension all new planned areas – make the site an appropriate context for the proposal.

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INTRODUCTION

Point of departure

The need for common basic values and individual existential meaning has through history defined the human experience. Some extraordinary environments have through time been created that go beyond addressing the physical levels and meeting utilitarian needs. These environments speak to the levels of higher human ambitions – the emotional, intellectual, poetic and spiritual levels. This master's thesis starts in the curiosity for the role of this contemplative dimension of our built environments. It can be argued that today in modern life with it's exposure to vast amount of information, the need for contemplation-inducing environments that offer reflection and inner dialogue becomes a necessity.

The opening interest for these environments inspired to a number of questions; what is the role of contemplation in a postmodern world? How is a contemplative environment defined and what are the architectural ingredients? Are there cross-cultural and cross-religious aspects of design in contemporary life that can contribute to a contemplative realm?

Aim

My thesis is that spaces for contemplation are highly needed in our demanding and constantly moving modern life, and that these environments can be designed as free zones without religious or cultural demands, yet welcoming and responsive to their surroundings. There is a large potential for ideas about contemplation to widely impact our designed spaces beneficially. By studying existing examples of architecture that considers the contemplative realm of design, this thesis pursues to understand the role of contemplation today, and further raise ideas to consider as a part of the development of new spaces in general. The aim is to explore in what way a contemplative environment can be built, what values it can bring to its users and surroundings, and further propose an example of a contemplative environment in today's Sweden.

Scope

In my research I have focused on selective aspects of the design and architectural compositions of both eastern and western custom, to suggest how contemporary contemplative space is rendered. This is done both in terms of portraying the architectural strategies through exploration of definitions, theories and case studies, as well as in terms of using these strategies as tools for a propositional exploration.

To place the exploration in a contemporary context, an opportunity arose to look into the plans for a new retirement home linked to the development of a new district called Ljungaviken, located in the town Sölvesborg in south of Sweden. The retirement home's closeness to nature, outdoor tourism and recreational spots as well as the chance to raise ideas to consider as a part of the development of a new area – and in extension all new planned areas – make the site an appropriate context for the proposal.

Research methods

When it comes to research methods, I studied a series of books and articles regarding theories and ideas concerning contemplation, as well as examples of how it relates to architecture. I also had the opportunity to visit the chosen site in Ljungaviken and thereby deepen my understanding of the site by studying the site-specific natural and social conditions. I initiated an interview with park managing architect in Sölvesborg municipality, Kristina Höljer, as well as several interviews with the locals. All this led to a number of design approaches that consisted of developing experimental models, drawings, light studies and methods. This allowed me to test and further develop the strategies I have found to be interesting in their ability to approach the design of contemplative environments.

FINDINGS

What is contemplation?

The word contemplation may be defined by the synonyms “reflect” and “ponder” since these words signify a deep level of engagement with what is being viewed or considered.¹ This deliberate attention often implies a concentration on ideas, objects, or places that are somewhat outside our day-to-day thoughts. Another description aligns it with meditation and stress reduction, or mindfulness meditation – that is focused attention on the present moment.² These methods often apply a profound sense of body/mind relaxation, where one can lose track of time and let the focus on breathing become deeply relaxing and involving at the same time, a rapid transition from “doing” to “being”.³

Another interpretation of contemplation is “to transcend”, which means to go beyond ordinary ways of perceiving reality including all of one’s ways of feeling, thinking and the dimension of space, time and sense of oneself. It is the ability to “see” beyond the surface of a given reality.⁴ For example, the artist can be seen as being in a contemplative state, or in transcendence, to create art, or art is seen as able to induce a contemplative or transcending response.⁵ For many, this contemplative state can also be a spiritual or religious experience, but whether a spiritual/religious intention or not, it is about a human experience. The French poet Paul Claudel illustrates this by beautifully describing a liberation of the mind:

“Is it nothing, that Nothingness which delivers us from everything?”⁶

- 1 Krinke, R. (2005) *Contemporary Landscapes of Contemplation*, p. 2
- 2 Ibid.
- 3 Ibid. p. 8
- 4 Ibid. p. 64
- 5 Ibid. p. 2
- 6 Paul Claudel as quoted by Fallico, A. B. (1962) *Art & Existentialism*. p. 32

All descriptions ultimately refer to the methods of mind-discipline, either by letting go of all thoughts or by focusing on a specific thought, which suggests a philosophical contradiction; deep concentration on contemplation may seem contradictory to the philosophy of the process depending on letting go. Maybe it is merely the means to an end that admits this sort of contradiction.⁷

Why is contemplation important?

It can be argued that in the contemporary postmodern world, with the vast amount of exposure to information and often overload of sensory stimuli, most people only know inner silence in their sleep. Environments that decrease the damaging stimuli and offer outer silence tend to be beneficial for contemplation, and thereby offer an inner silence, or a chance to hear the inner dialogue. Ultimately, meditative practices and contemplation reduces stress and increases the equanimity and self-mastery – the ability to exercise choice in how we use our minds.⁸

Research on the “psychophysical immune system” suggests that there is a communication between emotions and the immune system via neuropeptides, and that each emotion has a different fingerprint. This indicates that the body registers and immediately responds to stimuli before the brain consciously grasps a situation, meaning that our psychological well being directly influences our physical health.⁹

Since the 1960s, research has been made on biological effects from meditation. Alpha waves are neural oscillations – electrical activities of the brain¹⁰ – and have the frequency range of 8–12 Hz. They are present during

7 Krinke, op. cit. p. 16

8 Ibid. p. 3

9 Ibid. p. 37

10 Hong L. E., Moran L. V. (2011) High vs Low Frequency Neural Oscillations in Schizophrenia. *Schizophr Bull.* pp. 659–663.

wakeful relaxation with closed eyes, and connected to the sense of well-being. During the practice of yoga and Zen meditation it has been shown that alpha brainwaves increase.¹¹

Contemplative environments

Nature's values

Research has shown that contact with nature, especially vegetation, has a restorative effect on human health both physical and psychological; for example, Roger S. Ulrich, a professor in architecture at Texas A&M University made a study proving nature's impact on health, demonstrating that patients recovered faster from surgery when they had a view of vegetation outside their hospital window rather than a view of a building. Additionally, Ulrich found that viewing nature is relaxing and helps to recover from stress. The people that were tested were presented slide presentations of nature with vegetation and urban scenes with no vegetation, and it showed that people viewing the nature slides had higher alpha wave activity. This suggests that nature is successful in creating a peaceful, yet attentive state.¹²

In his book *Places of the soul: Architecture and Environmental Design as a Healing Art*, architect Christopher Day stresses the importance of silence for human health, although pointing out that literal silence is harmful; sensory deprivation experiments show an acute crisis when all senses are denied stimulus. Instead it is the freedom from mechanical noise that is the healthy silence, where the sounds of nature and life are present and even soothing; waves on rocks, wind in trees, rain on glass, insects on a quiet summer's day and crackling fire.¹³

11

Hood Jr., R.W., Hill, P. C., Spilka, B. (2009) *The Psychology of Religion, an Empirical Approach.* p. 73

12 Krinke, op. cit. p. 135

13 Day, C. (2002) *Places of the Soul: Architecture and Environmental Design as a Healing Art.* p. 203

The restoration parallel

The writer and public speaker Ken Wilber compares restoration with contemplation, meaning that they share the same goals – to allow the mind to rest and regain focus, and to support calmness. He concludes that while restoration and restorative principles focus on the role of the environment, contemplation or meditation focuses on the role of the individual.¹⁴

Since restoration has similarities with contemplation, it might be interesting to assume that aspects of restorative settings can be applied onto contemplative ones. Rachel and Stephen Kaplan, professors at the University of Michigan, have done research on restorative environments and defined characteristics that a setting needs to have in order to be restorative. First, they point out that fascination is important for capturing our attention and intriguing us. Further, for the setting to be restorative, it must promote a sense of being away, a sense of physical separation from everyday activities.¹⁵ The restorative setting or activity should also reveal that there is more to explore than what is at first expected, a sort of balance between order and mystery. Also, it needs to be a bounded setting where the individual feels protected and safe, but not bored.¹⁶

Individual engagement

In ancient Greek culture the words *Topos* and *Chora* were both used to refer to a place. *Topos* implies the geographical location, found on a map or with a compass, but *Chora* is the place with personal meaning and history, carrying an affective capacity.¹⁷ As humans we put value to the environments around us, referring to some as home and some as strange, some as soothing and some as disturbing. When it comes to contemplative environments, how much does a contemplative response depend on the visitor and how much on the environment?

14 Krinke, op. cit. p. 109

15 Ibid. p. 133

16 Ibid. p. 134

17 Engfors, C., Arkitekturmuseet. (2005). *Rum för mening: om plats och ritual i det postmoderna samhället*. p. 70

Mary Frolich, professor of Spirituality at Catholic Theological Union in Chicago means that a contemplative experience is potentially available anytime, anywhere and to anyone.¹⁸

*“We can define contemplative experience as awareness – whether fleeting or habitual – of that most foundational, most original depth of being. . . . Because this is our most foundational reality, contemplative experience is potentially available to every human being, at all times and in every circumstance. It can and does “happen” to people without any preparation and while they are engaged in pursuits that are not concerned with seeking it.”*¹⁹

If contemplation can happen anywhere at anytime, it should mean that the environment doesn't matter to any large degree, yet for most people, it does.²⁰ Can some environments then help to direct a person into a contemplative state, even without the person having knowledge or an intention of finding a contemplative experience? Wilber means that if the design of an environment is seeking to attain the level of contemplation, in his opinion the highest level of development, the visitor can theoretically be positively affected by it, even if the visitor from the beginning didn't intend to experience a contemplative response.²¹ From another point of view, the Kaplans suggest that an environment that is not particularly attractive for a restorative state may still produce restorative effects to the visitor with skills and experience in meditation/contemplation. So the individual can enhance the role of the environment's restorative effects through meditation/contemplation.²²

As a reflection upon this, we might consider that the importance of the level of individual engagement and the impact of the environment really varies, and even if a contemplative experience can sometimes happen independently from the environment and the individual intention, it is still interesting when it doesn't, when the personal intention and the environment's characteristics play a supportive role for a contemplative outcome.

18 Krinke, op. cit. p. 4

19 Frolich, M. (2000) *The Lay Contemplative: Testimonies, Perspectives, Resources*. p. 45-46

20 Krinke, op. cit. p. 15

21 Ibid. p. 132

22 Ibid. p. 109

Case studies

Through my research I've come across some especially interesting projects that deal with contemplation in various ways. In order to optimize my research, I've chosen case studies widely distributed over time, type, and culture, among other properties. I've found the case studies to be attractive for a contemplative response and in this section follows an attempt to pinpoint the architectural tools used to create that response.



"Built forms have been instrumental in shaping thought and disseminating new ways of thinking."²³ – Andrzej Piotrowski, *Architecture of Thought*.

Pantheon

Rome, Italy

The Pantheon in Rome was built as a Roman temple and later sanctified as a Catholic Church. The harmonious, geometrical proportions of the monumental structure involve a cylinder shaped interior volume and a hemispherical dome above it. The dome has a diameter of 43.2 meters, which is the same length from the top of the dome to the floor of the cylinder. A whole sphere can be placed in the interior volume. An opening in the dome, the oculus with a diameter of 8.7 meters,²⁴ lets in the natural light from above and allows great acoustic and visual qualities inside the structure when rain pours down and hits the floor. In my opinion, this gentle, almost sacral light from the oculus together with the harmonious geometry create a sense of focus and protection from the outside world, while inducing a contemplative state.



Dome interior and oculus. Photo by author

23 Piotrowski, A. (2011) *Architecture of Thought*. p. 12

24 www.greatbuildings.com

Ryoan-ji

Kyoto, Japan

Ryoan-ji in Kyoto is a beautiful example of the traditional Japanese temples and dry stone gardens, Zen gardens, that are designed to promote a contemplative state. The clearing out in the nature and the lack of decorative design language suggest an adaptation of the concept of *Ma*, a Japanese term used to describe a void, a spatial gap. *Ma* implies a space awaiting occupation by various phenomenon – for example spirits or the visitors' presence – to become fulfilled and whole.²⁵ The damped influences from the surrounding also help to calm the mind, to pause and reflect. The garden lets one focus on the stones, and since it is impossible to see all the stones at the same time, it fosters a sense of infinity and puts the human in a bigger picture,²⁶ there are things we cannot know. There are mysteries in the simplest things.



Ryoan-ji dry stone garden. Photo by Marcus Trimble

25 Krinke, op. cit. p. 182

26 Ibid. p. 14

Shokin-tei, Katsura Villa
Kyoto, Japan

Japanese traditional tea ceremonies employ strategies of ritual. The Shokin-tei Katsura Villa's stony pathways and movement through the house focus the mind on the instant task - step by step moving towards the world of tea. One of the most common ways of increasing the awareness of the connection between space and time has in Japanese landscape traditions been the stepping stone – they create intervals and thereby heighten the awareness of the person's movement. As does the palace's gated threshold, it marks the transition from one environment to another.²⁷ In his book *Spirit and Place* – *healing our environment: healing environment*, Christopher Day refers to this transition:

*"In daily life, we do a variety of things in a variety of places, hence pass through many states. Journeys between rooms can help us move from one state, appropriate to one activity – hence place – to another. These outer, physical, journeys function as inner, spirit-preparatory journeys."*²⁸



Shokin-tei tea pavillion. Photo by Raphael Azevedo Franca

27 Ibid. p. 182

28 Day, C. (2002) *Spirit & Place – healing our environment: healing environment*. p. 184

Woodland Cemetery,
Stockholm, Sweden

The Woodland cemetery in Stockholm uses architectural, geometric formations of nature and strong symbols and connotations that focus on life and death, mourning and nature.²⁹ The path starts out with a view of an endless expanse of space, an openness that fosters the sense of solitude with the Nordic vegetation around. On the path there are several points that offer reflection and even deeper involvement with the ritual of the visit. For example, the stairs that lead to the elevated meditation grove are unique in that the steps decrease in height and increase in depth to counterweigh the growing weariness of the climber.³⁰ Another symbol are the two arms of the cemetery's big cross respectively pointing towards the elevated meditation grove and an earthen columbarium, to sunrise and to sunset.³¹ In a similar way the Forest chapel and the morgue beside it take part in a symbolic dualism; the chapels pyramid shaped roof points towards the sky as opposed to the morgue embedded in the earth with its organic form.³²



Meditation grove and cross. Photo by Susanne Hallmann

29 Krinke, op. cit. p. 61

30 Ibid. p. 55

31 Ibid. p. 53

32 Caldenby, C., Hultin, O. (1985) *Asplund*. p.44

Salk Institute

La Jolla, California, USA

The Salk Institute is one of Louis Kahn's best examples of the formation of the "immeasurable"³³, which he often wanted his works to disclose. It refers to the capturing of another reality, which in the case of Salk Institute is designed as the special, if not sacred realm of the institute's courtyard. It serves as an oasis of silence promoting a silent dialog between the finiteness of itself and the infinity of the sky and ocean beyond. The walls frame a portion of the ocean and the sky, and enhance the silent oasis to serve as an auditorium where these atmospheric performances are staged.³⁴ The institute, as much of his other work, has an overall appearance of ages past; the design expression carries inherent memories of ancient Egypt and Rome, medieval Islamic architecture and the Enlightenment period, all which Kahn referred to as the "origins".³⁵



The courtyard. Photo by Liao Yusheng

33 Krinke, op. cit. p. 48

34 Ibid. p. 44

35 Ibid. p. 47

Reflection Garden, Bloedel Reserve

Bainbridge Island, Washington, USA

The Reflection garden in Bloedel Reserve in Bainbridge Island uses the simplicity of the peaceful water to mirror the sky thus creating another view, another feature to the place. The minimization of harmful stimuli offers this way an outer silence that can help to slow down the mind and match it to an inner silence that is beneficial to contemplation.³⁶ A narrow path that is designed as a one-way loop further induces a contemplative state. This way the visitors will not meet as they walk the path. There are restrictions on accessing the Reserve; a maximum of 20 people per hour are allowed entrance, charged admission, no eating, no pets, no rental of the grounds, no bus tours, and no large groups. These restrictions serve to further remove the visitor from the everyday world when visiting the Reserve.³⁷



Reflecting pool. Photo by Joe Mabel

36 Ibid. p. 70

37 Ibid. p. 112

The Church of Light

Osaka, Japan

The Church of Light in Osaka is described as architecture of duality – the dialogue between solid/void, light/dark, stark/serene – free from all ornamentation, and thus a pure, modest space. The humble simplicity of materials used and the intersection of light and solid create a meditative place of worship, raising the awareness of the intersection of the spiritual and the secular within the visitor. The structure is distinct from traditional Christian aesthetics; the only prominent religious symbol present in the church is the extruded cross from the east facing façade that lets in the daylight into the otherwise dark space composed of a concrete shell.³⁸ I find that the crossing between the dark and the light, the materiality of the concrete and the immateriality of the light, makes the light almost sacral, and the focus of it becomes a way to catch the visitors' fascination and move them towards it. It is a way of steering the visitors' movement and creating a sense of a sacred realm.



Extruded cross. Photo by Naoya Fujii

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38 www.archdaily.com

National Library of France

Paris, France

The National Library of France in Paris handles the relationship between the public and the private in an interesting way. The restrictions on entering the lower level of the library help to create a contemplative realm for the visitors. For every obstacle there's a strong sense of removal from the world. In the center of the building one reaches a planted forest. There are restrictions on when, how and who can approach the centralized parts of the building, making the forest a sacral part reached by this preparatory, almost ritualized walk through the building. It almost seems that ritual-like activities help to make a place special, distinguishing it from other places and thereby removing the visitor into another realm and away from the day-to day-experiences.³⁹



The forest. Photo by Yuri Palmin

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39 Krinke, op. cit. p. 116

Jewish Museum Berlin, Germany

The Jewish Museum in Berlin by Daniel Libeskind is shaped, surfaced and filled with symbols. For example, the angles of the surrounding walls, make the voids of the museum induce a sense of oppressiveness and nakedness, much as that of many Jewish victims.⁴⁰ The building contains an underground path system made up of three axes that symbolize three realities in the history of Jewish life in Germany. The first one is the Axis of Continuity; it connects the Old Building – the former Collegienhaus to the regal Court of Justice⁴¹ – with the exhibition levels of Libeskind's building, and symbolizes the continuation of Berlin's history. The Axis of Emigration leads symbolically outside to daylight in the Garden of Exile, and the Axis of Holocaust is a dead end. It becomes continually narrower and darker until it ends at the Holocaust Tower. The three axes intersect, which symbolizes the connection between the three realities.⁴² One way to look upon this is that these symbols promote a concentrated state of mind, and add a directly emotive level to the comprehension of the museum. With this sort of storytelling by symbols, the visitor engages in a reflective and contemplative mindset.



Axes intersection. Photo by Jens Ziehe

⁴⁰ Ibid. p. 153

⁴¹ Old building, www.jmberlin.de

⁴² Libeskind building, www.jmberlin.de

Sohlbergsplassen Viewing Platform Atnsjø, Norway

The viewing platform in Atnsjø by Carl-Viggo Hølmebakk frames the view of the almost luminescent winter landscape by leading the walk through densely growing pine trees to the view of the openness of the distant mountains. The dynamic quality in this relationship became the starting point for the design, that developed through several tests made by placing ladders up against the trees, looking for the most interesting spaces between the trees and the best views from them. The floor is slightly tilting outwards, creating a subtle sense of being pulled towards the view. The space underneath the platform is accessed by a staircase and leads further to the lake and down the hill. The space underneath is enclosed from above and carried by the pillar-like tree trunks, and only a few rectangular openings allow the rain and sunlight to get down to the terrain.⁴³ I believe this creates a sense of protection yet allows the visitor to enjoy the sound of the pouring rain, and the poetry of the daylight peeling through the platform above.



Platform and view. Photo by Ole H Krokstrand

⁴³ www.holmebakk.no

Chapel of Silence

Helsinki, Finland

The Chapel of Silence in Helsinki uses rounded geometry to induce the sense of enclosure and safety, but also to imply symbolism with infinity. The gently shaped interior space shields the visitors from the lively neighborhood outside and embraces them with the calm, sacral space inside. The materials are warm; the furniture is made out of solid wood and the windowless inner wall consists of thick oiled alder planks.⁴⁴ Along the high ceiling edge the skylight is gently let in, avoiding direct sunlight yet making the walls glow and thereby enriching the natural materials. The venue is a quiet place; the necessary conversations are saved for the concrete-made foyer. The space holds no formal services; it is simply a "multifaith" space for quiet contemplation on the simple benches.⁴⁵



The alder-lined interior. Photo by Tuomas Uusheimo

44 www.archdaily.com

45 www.architecturaldigest.com

Roden Crater Project

Painted Desert, Arizona, USA

The Roden Crater project by James Turrell is an ongoing land art project from 1979 that acquires a volcanic crater in the Painted Desert in Arizona, USA. The structure uses the light that is let in from the ceiling and displayed on the walls as a matter to observe as a physical phenomenon, as matter in itself and not that which it enlightens. The project focuses on the perception of the way light transforms the experience of space, being an intangible element that can fill a space with varying degrees of intensity and with varying thermal and colorific qualities.⁴⁶ The project is a chain of experiences, Turrell explains:

*"The sequence of spaces, leading up to the final large space at the top of the crater, magnifies events. The work I do intensifies the experience of light by isolating it and occluding light from events not looked at. I have selected different portions of the sky and a limited number of events for each of the spaces. This is a reason for the large number of spaces."*⁴⁷



Crater's eye. Photo by Florian Holzherr

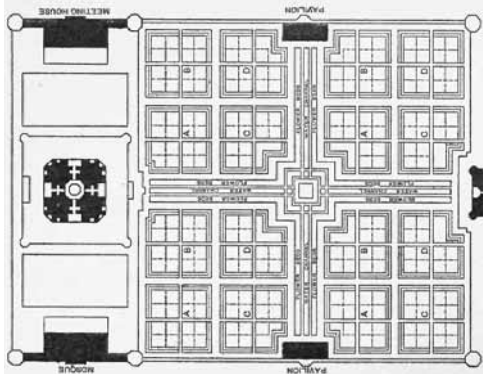
46 Krinke, op. cit. p. 187

47 www.rodencrater.com

The following two examples of contemplative environments are not specific case studies with a specific location, but rather widely spread examples of how in certain cultures and traditions contemplative environments are created.

Islamic gardens

Traditional Islamic gardens have not only the goal to foster tranquility and a contemplative state, but to also represent the life hereafter – the Gardens of Paradise. Through symmetrical proportions, nature's lushness, fruits, pouring water, the sound of chirping birds and shaded pavilions, the gardens manifest comfort and beauty of life, resonating in nature. Water is an important element of the gardens – four rivers of the Paradise are mentioned in the Qur'an, along with four gardens – and through out time Islamic gardens have been designed as enclosed and secure retreats divided into four by the streams of water. Symbolically the water in the gardens also represents the purification of the soul and the nurturing of the "garden within". Essential to the idea of a paradise garden on earth is that it is a private place, a place for prayer and contemplation and that it is detached from the world and from people.⁴⁸

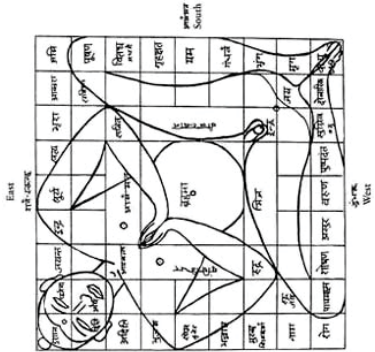


Example of Islamic garden; Taj Mahal Garden, Agra, India.
Image by CM Villiers Stuart

48 www.islamic-arts.org

Vastu Shastra and Feng Shui

An example of how it is believed that a building or an environment needs to follow certain principles in order to be harmonious and restorative can be found in Vastu Shastra and Feng Shui. These are traditional systems of geomancy where metaphysical and geomantic principles are considered when designing or siting buildings to improve and maintain well-being. Applied in Hindu architecture, Vastu Shastra is based on the five elements; earth, water, fire, air and space.⁴⁹ These are the main manifestations of *Prana*, the flow of universal energy. In Chinese Feng Shui this universal energy is called *Chi* and manifests through the five Feng Shui elements – earth, water, fire, metal and wood. According to both systems, human well-being can only be achieved when coherent with nature and the universal flow. Both Vastu Shastra and Feng Shui are widely spread and used in modern architecture.⁵⁰



Vastu Shastra grid.
Image from vastukarta.com



Feng Shui grid.
Image by FengShuiBedrooms, Flickr

49 www.vaastu-shastra.com
50 www.fengshui.about.com

DESIGN APPROACH

To reach my aim I have through my research of case studies and theories regarding contemplation extracted a set of key attributes an environment needs for inducing openness to contemplative beholding. These attributes are also used as architectural strategies and explored in form and materiality through models.

Strategies

These attributes are used as architectural strategies and can be summarized into five core attributes, that can be found in all of the case studies presented earlier. The five core attributes are:

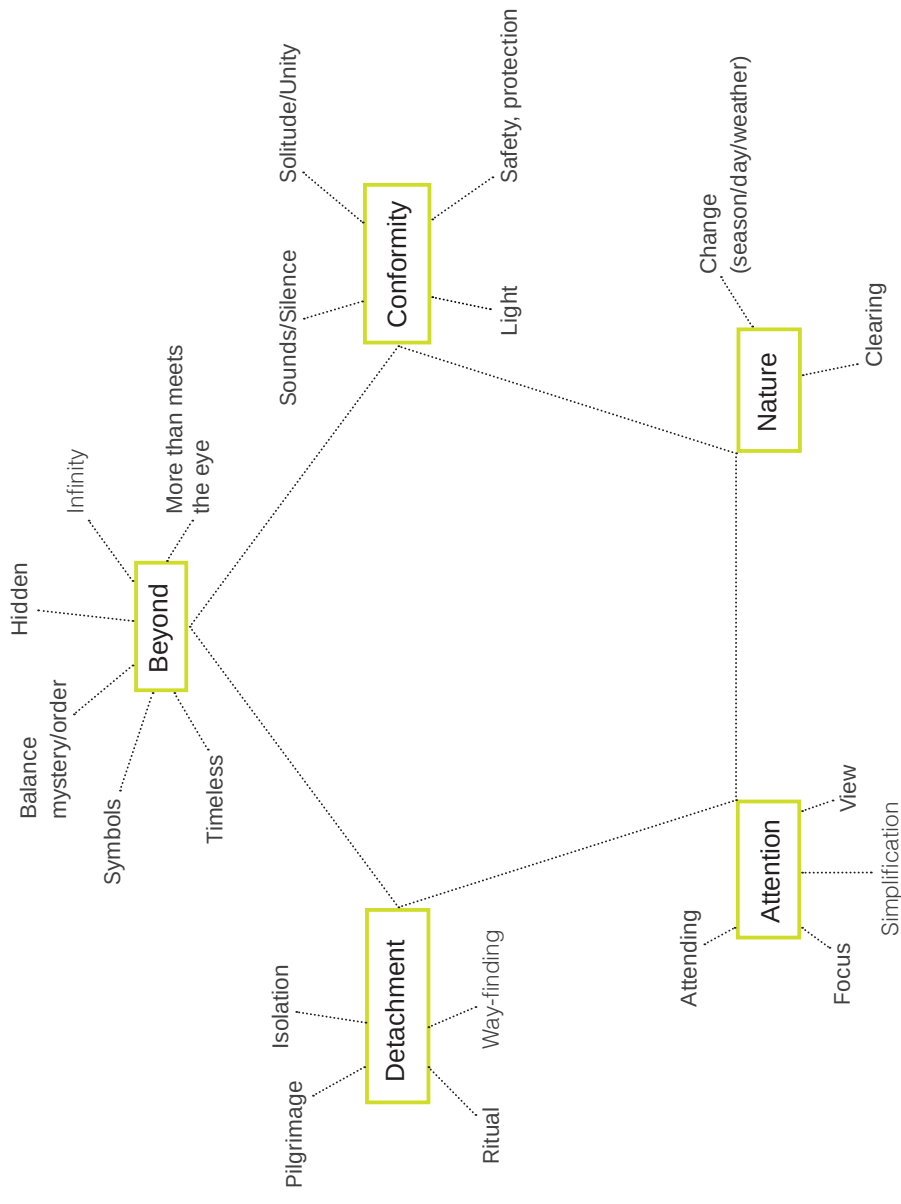
Detachment - the sense of removal from everyday life.

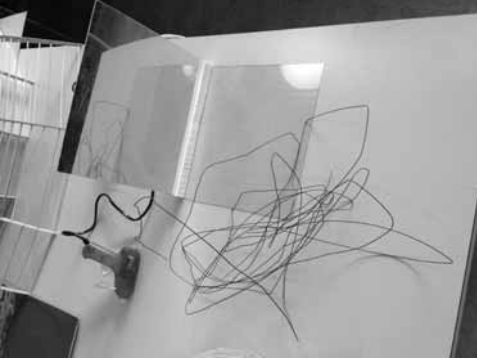
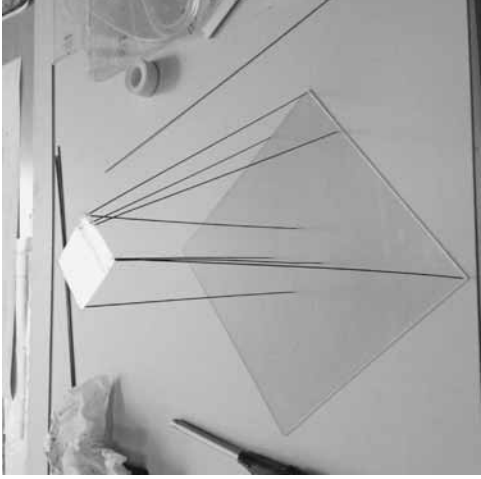
Attention - a focal point or view.

Nature - part of nature or natural phenomena. Ideas about change, infinity, timelessness.

Conformity - safety, protection and suitable for human needs.

Beyond - balance between mystery and order, more than meets the eye, hidden treasures.





Sketch modeling process. Photos by author

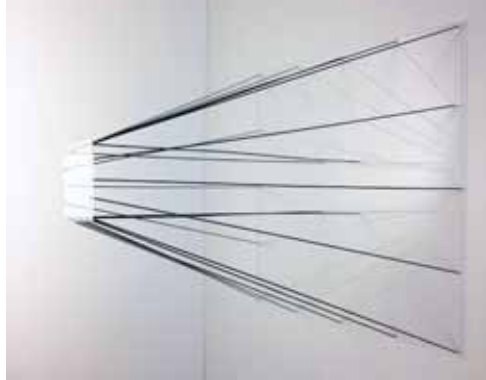
Sketch Models

As part of the research I explored the core attributes in form and materiality through models. The design process was a gradual journey from conceptualization to context, consisting of three stages which I named *abstraction*, *transition* and *context*.

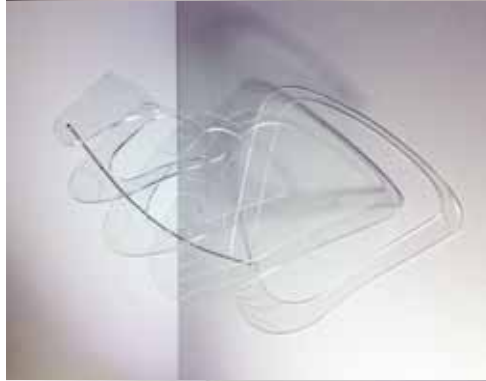
Stage 1: Abstraction

Exploring the terms *nature*, *detachment*, *attention*, *conformity*, *beyond* by conceptual models, an attempt to understand the core of the words' meaning translated into object/form.

Photos by author



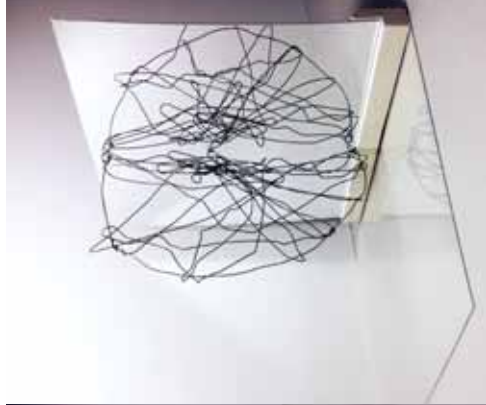
Attention



Detachment



Conformity



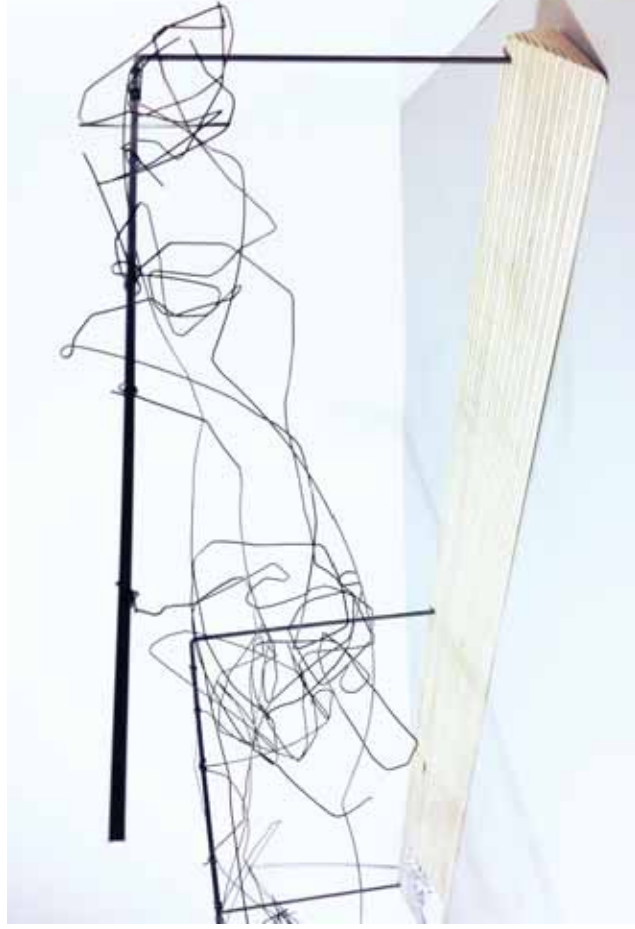
Beyond



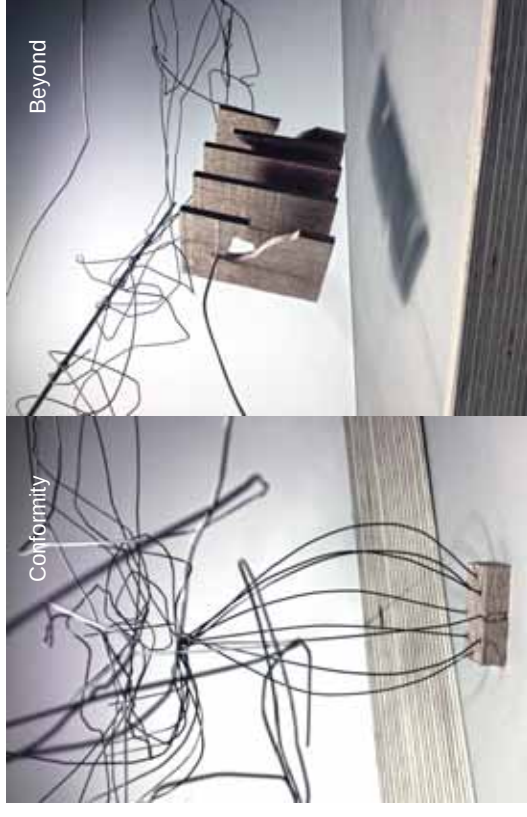
Nature

Stage 2: Transition

Exploring the terms in scale and conceptualized landscape of the site.
Translated terms into object/form on site.



This landscape model shows the relationship between the ground and the tree trunks of a specific area on the site in scale 1:100.

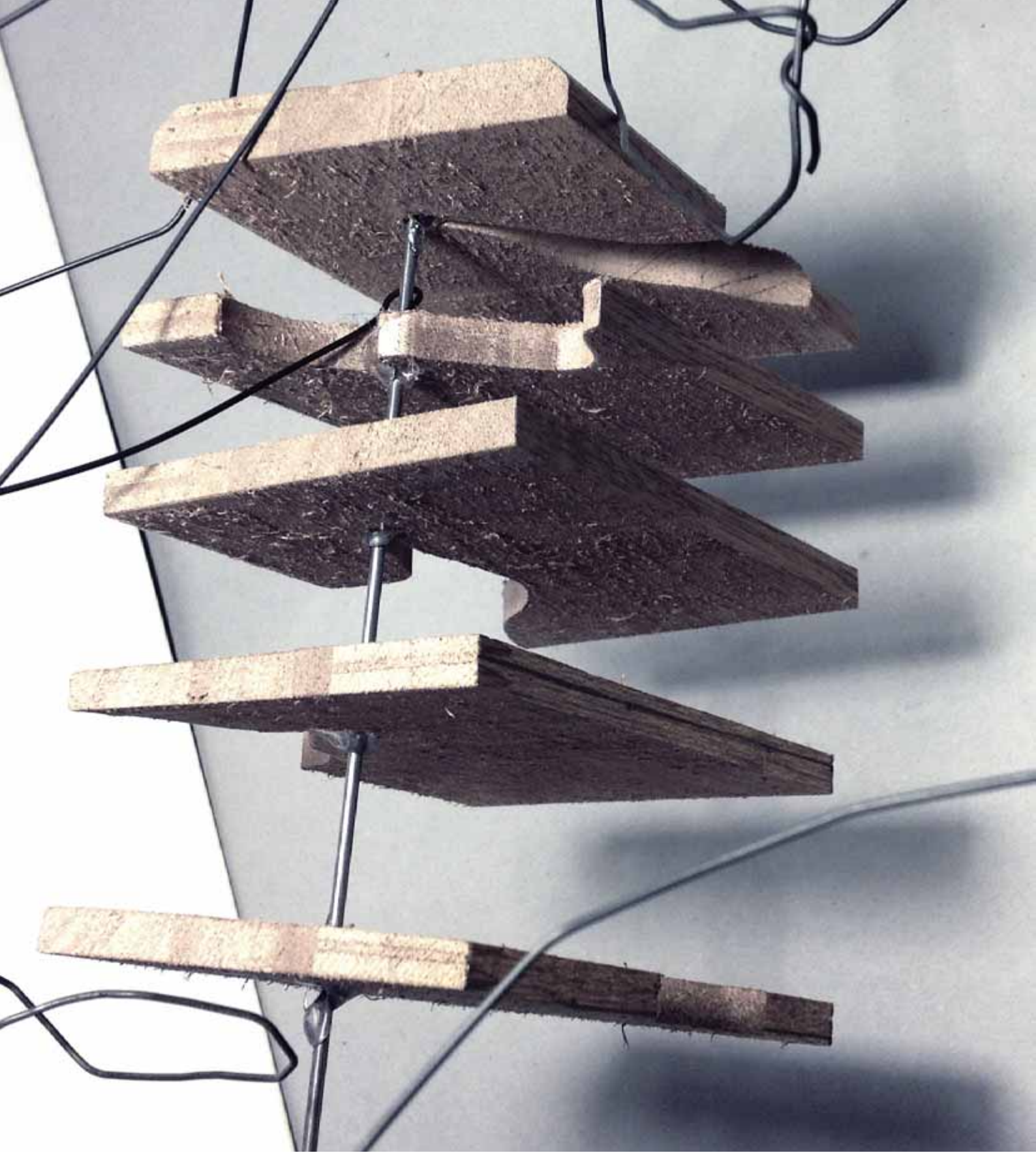


Conformity



Detachment

Beyond



Stage 2 model - Beyond.

Photo by author

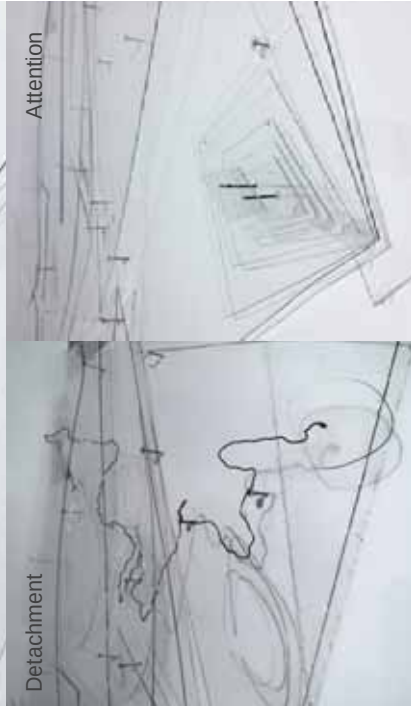
Here is an example of the ideas behind the models. The core attribute *Beyond* is in this model shown as a sequence of different elements representing obstacles, yet from one certain position it is possible to see through all of the elements, as shows the piercing metal wire. This presents a view *beyond* what is seemingly only chaos.



Beyond

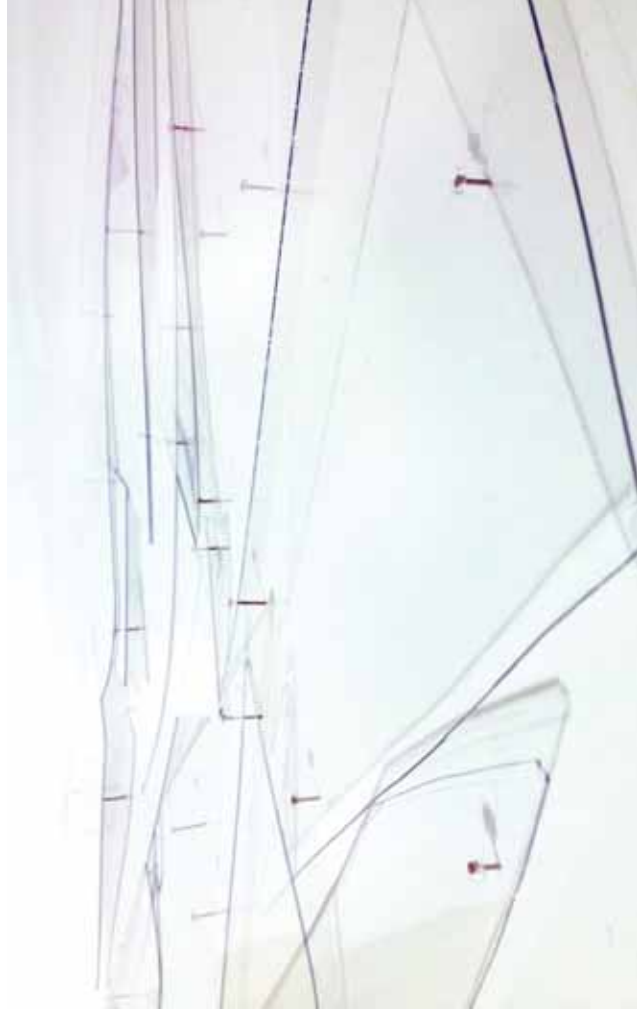


Conformity



Detachment

Attention



The model shows the major height differences and the slope to the reeds and water in scale 1:500.



The model shows the placement of the mapped out trees on the site in scale 1:500. Relationship between more dense and sparsely growing parts.



Attention



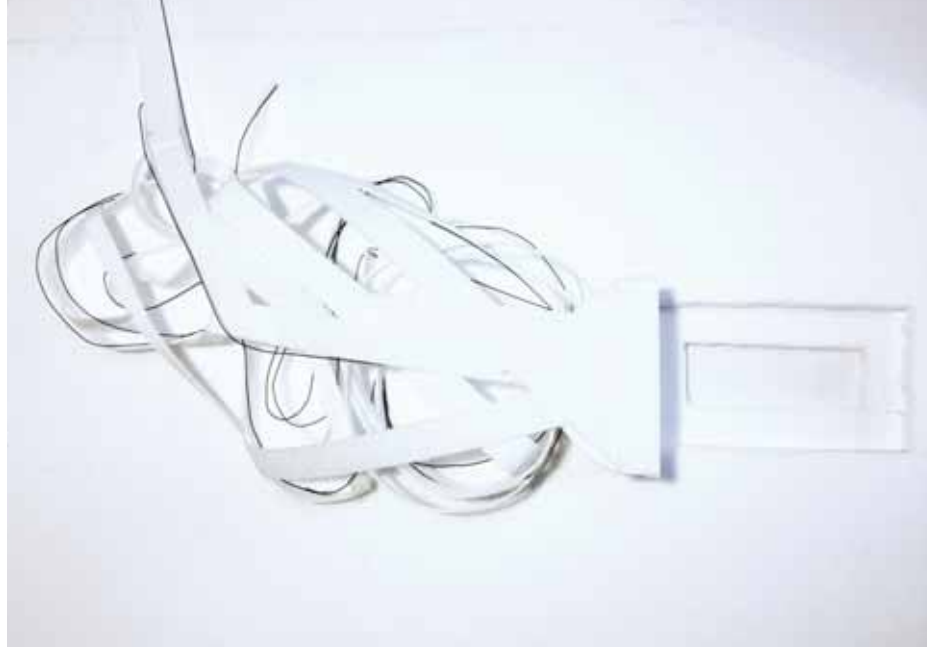
Conformity



Detachment

Stage 3 - Context

Exploring the spatiality and formal language of the core attributes in scale and on site. Architectural proposal draft.



Photos by author

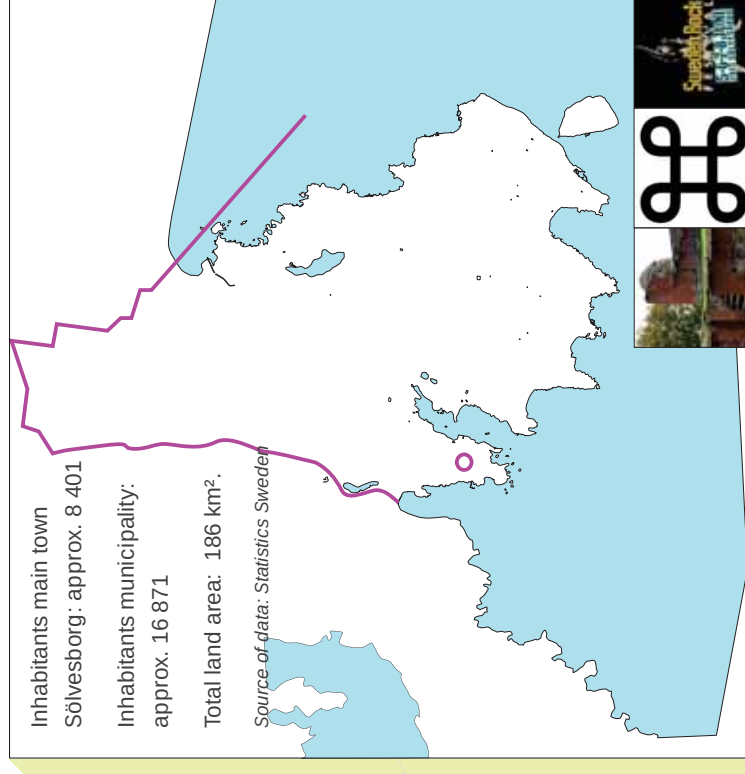
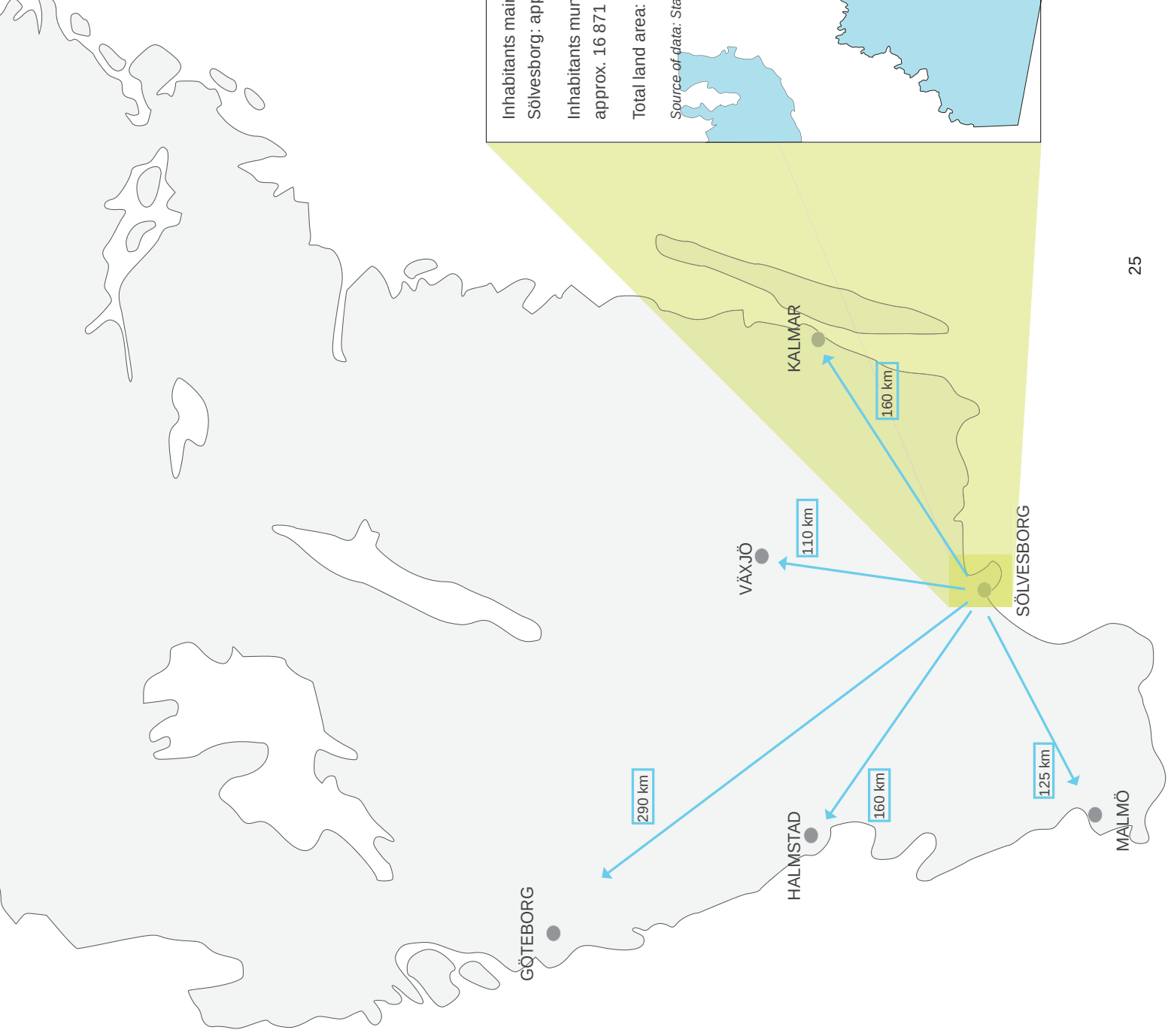
SITE

The chosen site for the proposal is in connection to a planned retirement home that is a part of the expansion of the coastal district Ljungaviken, in the town Sölvesborg in southern Sweden. Ljungaviken has good connections to outdoor tourism, nature and recreational sites and makes a good spot for designed contemplation-inducing environments. The area is in development which also gives an opportunity to raise ideas to consider as part of the development of a new area, and in extension, all new planned areas.

Sölvesborg - context

Short info

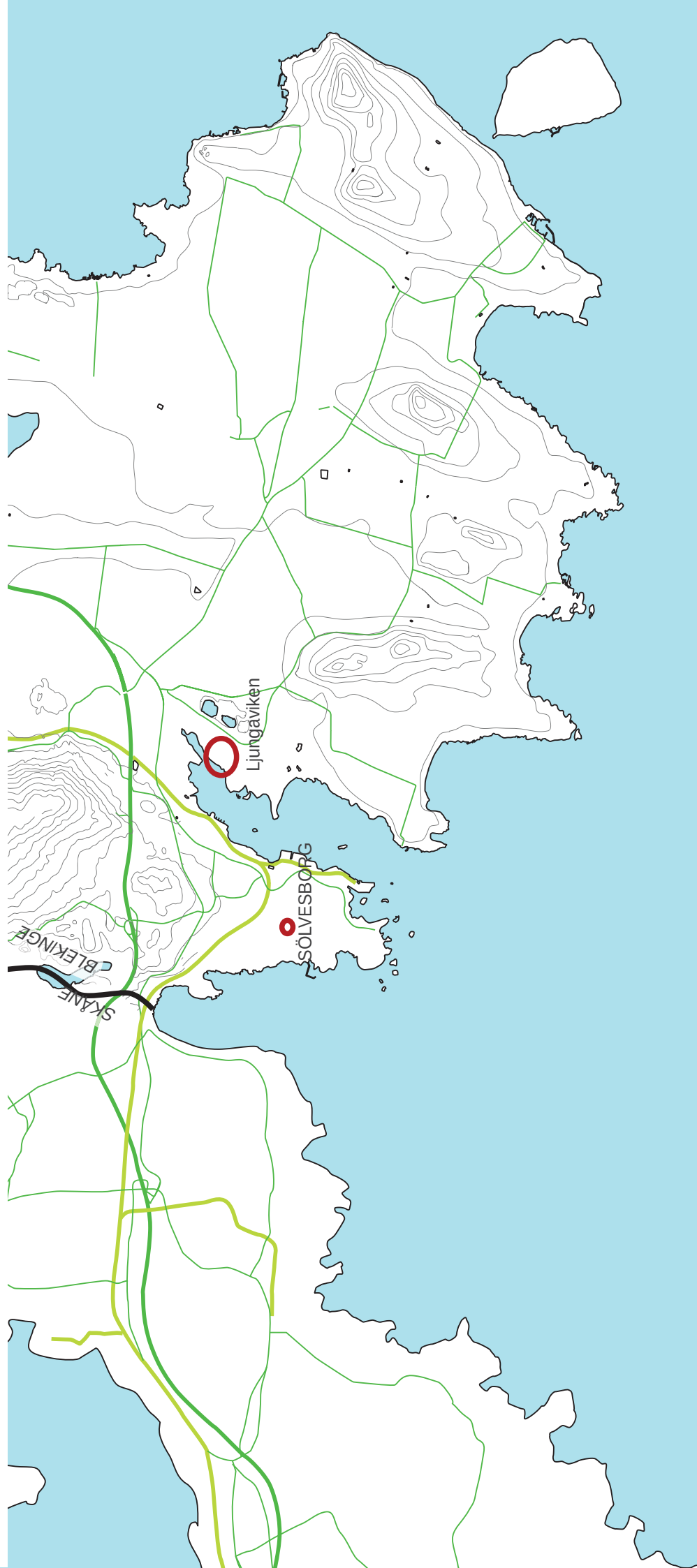
There are approximately 8 400 inhabitants in the town Sölvesborg. The town is usually associated with its castle ruins, antiquaries, and the Sweden Rock festival, among others.

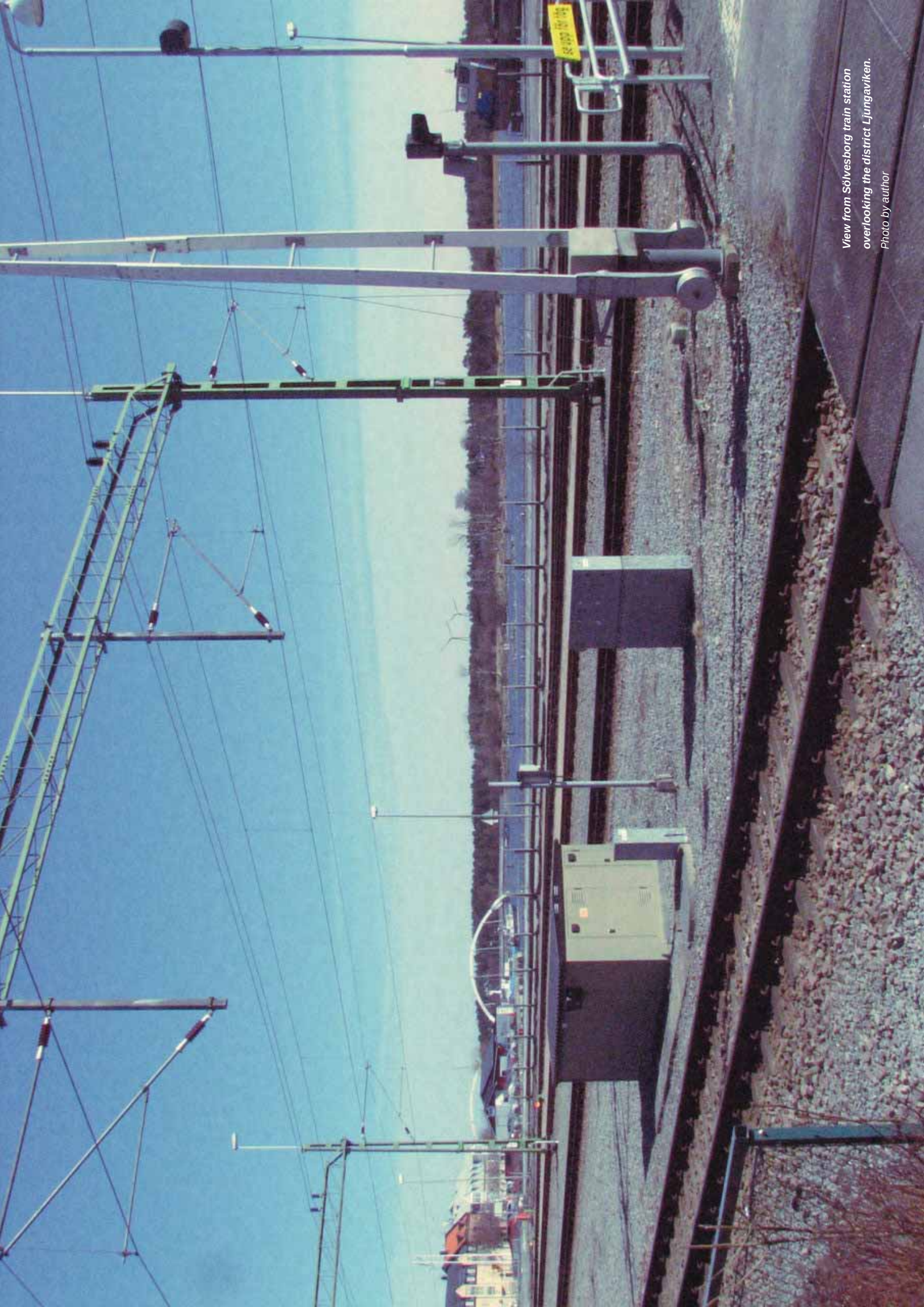


Connections

The connections to Sölvesborg and its district Ljungaviken consist mainly of the highway E22 and the railroad.

- County border
- E22
- Train
- Country road



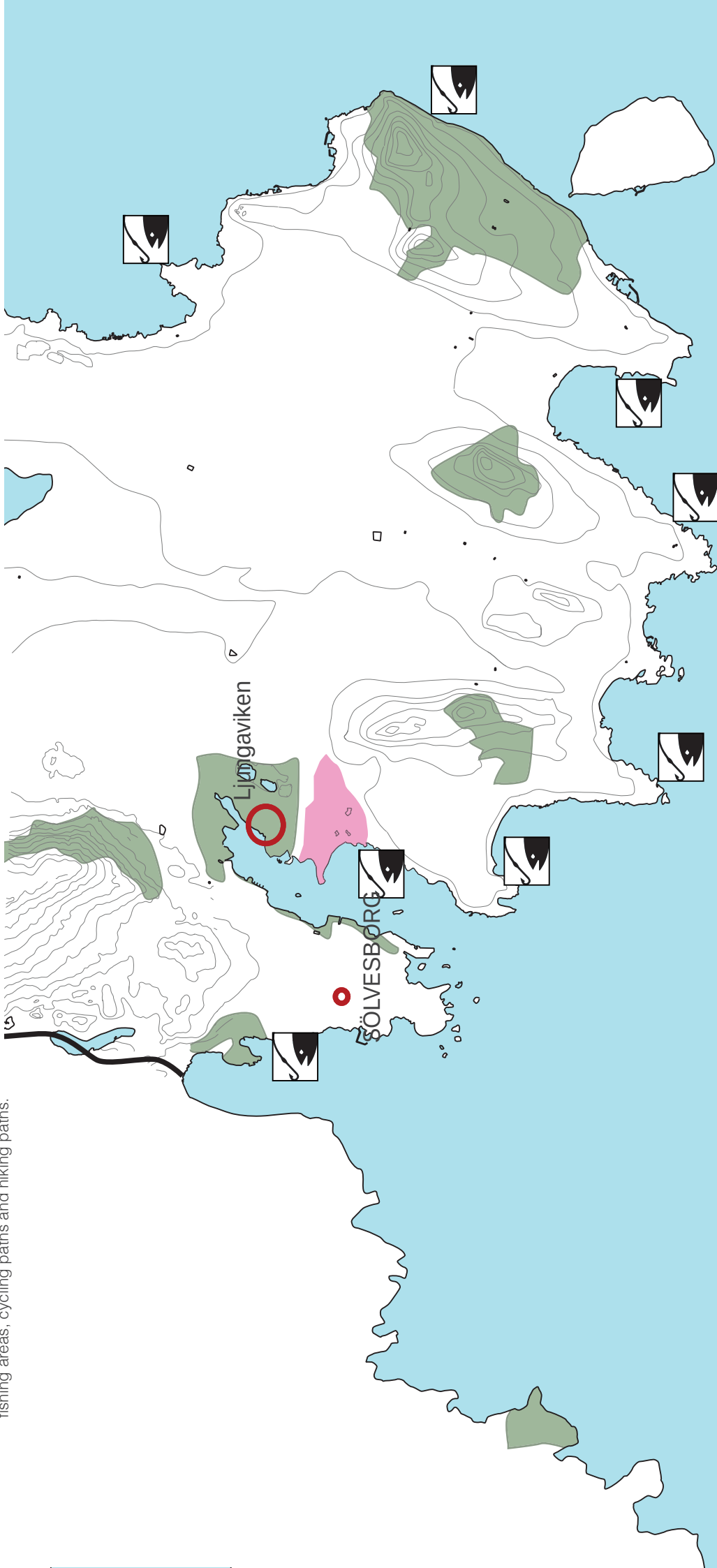


View from Sölvborg train station
overlooking the district Ljungaviken.
Photo by author

Outdoor life

Sölvesborg municipality has a rich outdoor life and offers reserve parks, sport areas, fishing areas, cycling paths and hiking paths.

- Nature reserve
- Golf
- Fishing

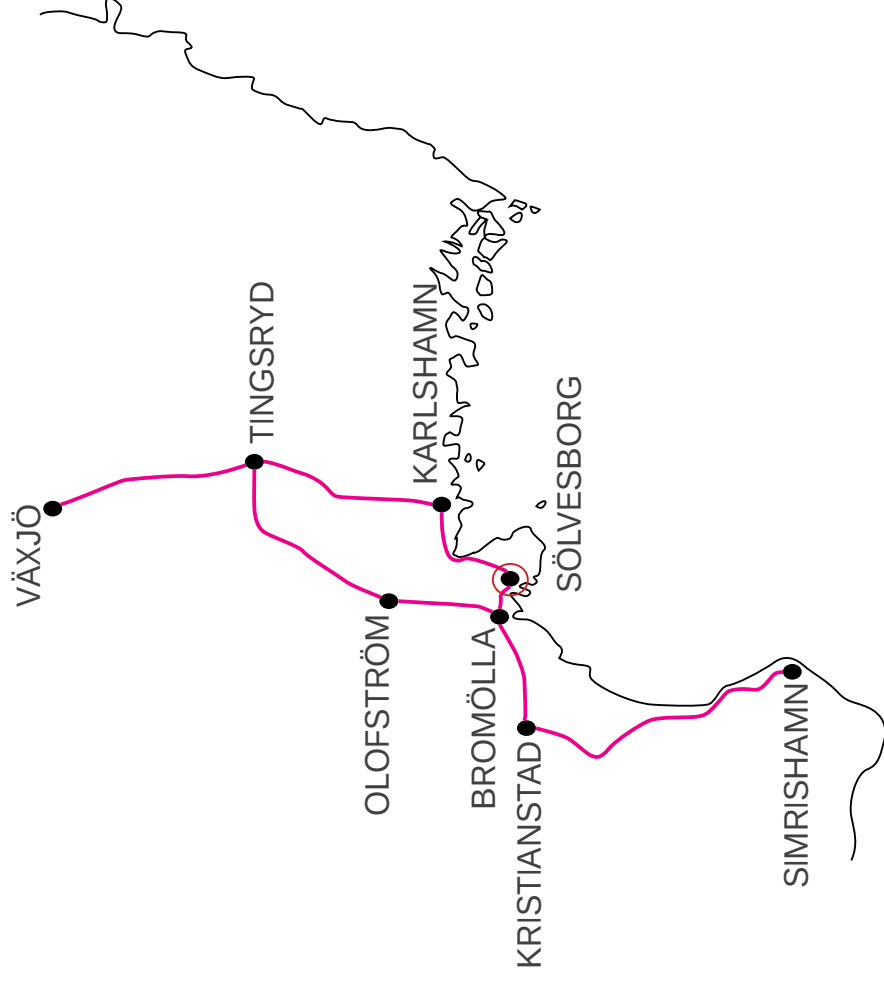


Cycling paths

Cykelled Listerlandet

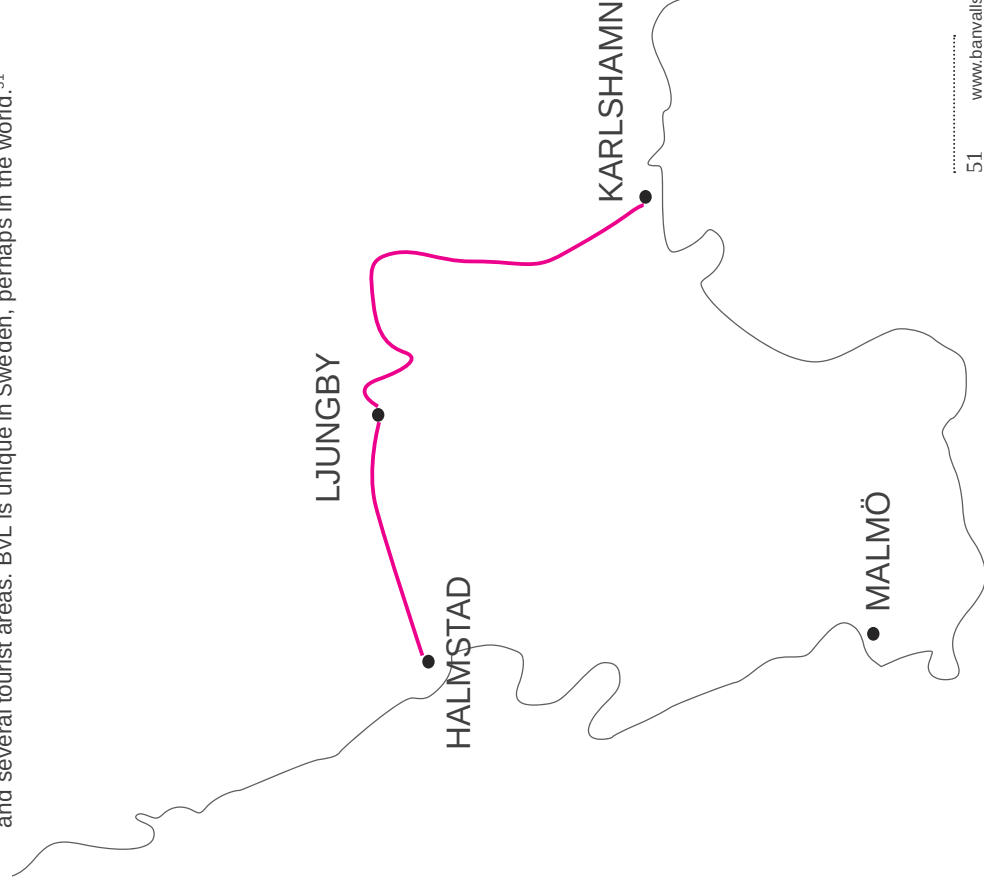


Sydostleden



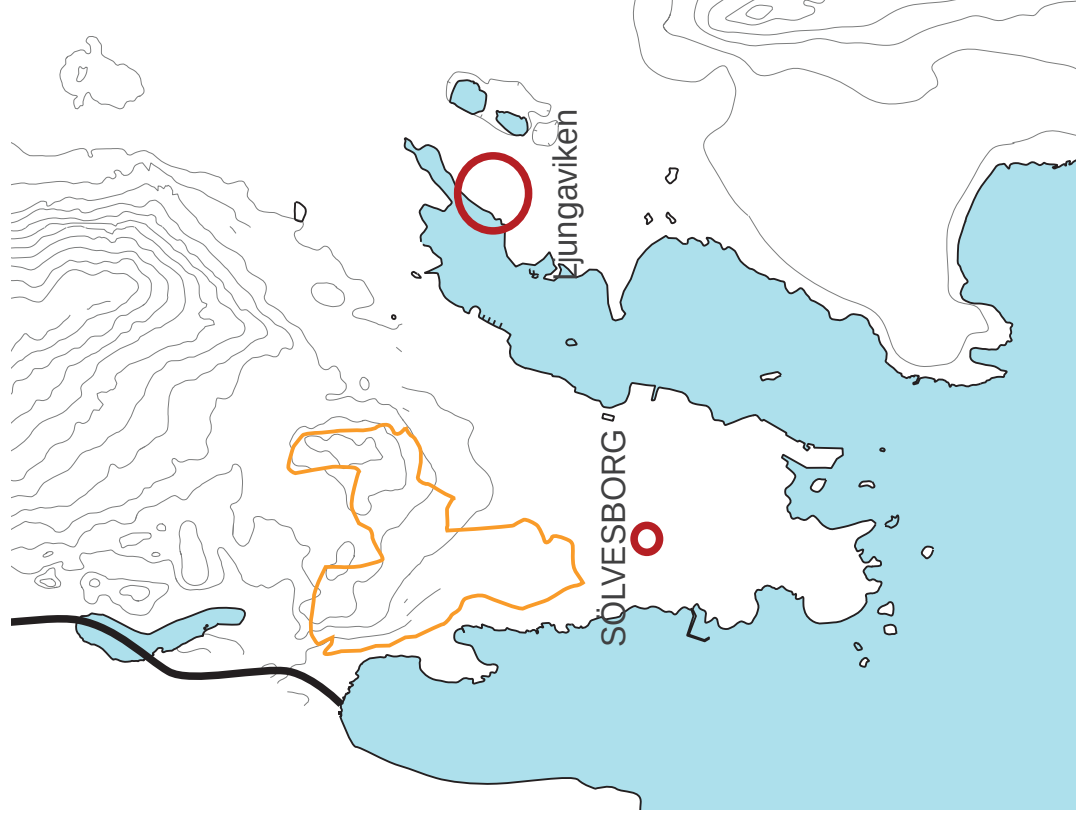
Banvallsleden

Banvallsleden uses two disused narrow train routes, Halmstad - Bolmen and Karlshamn - Vislanda - Bolmen railways, both constructed in the late 1800s and in use until 1970. Old railway tracks through varied landscapes can be advantageously used for recreational purposes. Banvallsleden links two oceans and several tourist areas. BVL is unique in Sweden, perhaps in the world.⁵¹



Hiking paths

Sölvesborgsleden



Skåne/Blekingeleden 1



District Ljungaviken

Conditions

The new district is located across the town Sölvesborg in the nature by the sea.

- Pedestrian/bicycle bridge
- Arable land
- Forest
- Settlement
- Wetland
- Other open countryside



Old & New



In the spring of 2010 an archaeological investigations was made in parts of Ljungaviken. Two settlements from the Stone Age show that people were living there 6000 years ago.⁵²



Old stone walls from the 19th century, that were used to separate the lots can be found in parts of Ljungaviken.⁵³



The bridge that connects the town to Ljungaviken is very long, 756 m long to be exact. It was finished in the spring 2012.⁵⁴



Sölvesborgs municipality is planning for about 550 homes in Ljungaviken, including villas, rental apartments, condominiums and land rentals.⁵⁵

Photos by author

52 www.ljungaviken.se

53 Interview with Kristina Höljer, park managing architect. 2013-04-04

54 www.ljungaviken.se

55 Ibid.

Flora & Fauna



Top left: Flying Whooper Swans. Photo by Aleksander Playsic

Top right: Sea Eagle. Photo by Martin Alexandersson

Down left: Common Kingfisher. Photo by Hans Falklind

Down right: Wood Sandpiper. Photo by Kent-Ove Hvass

The Natura 2000-area that passes trough Ljungaviken serves as protection of the environment for resting and wintering bird species. These birds are some of which can be seen in the area. Reed and coastal vegetation can also be found in Ljungaviken, along with scots pines, oakes and alder.⁵⁶

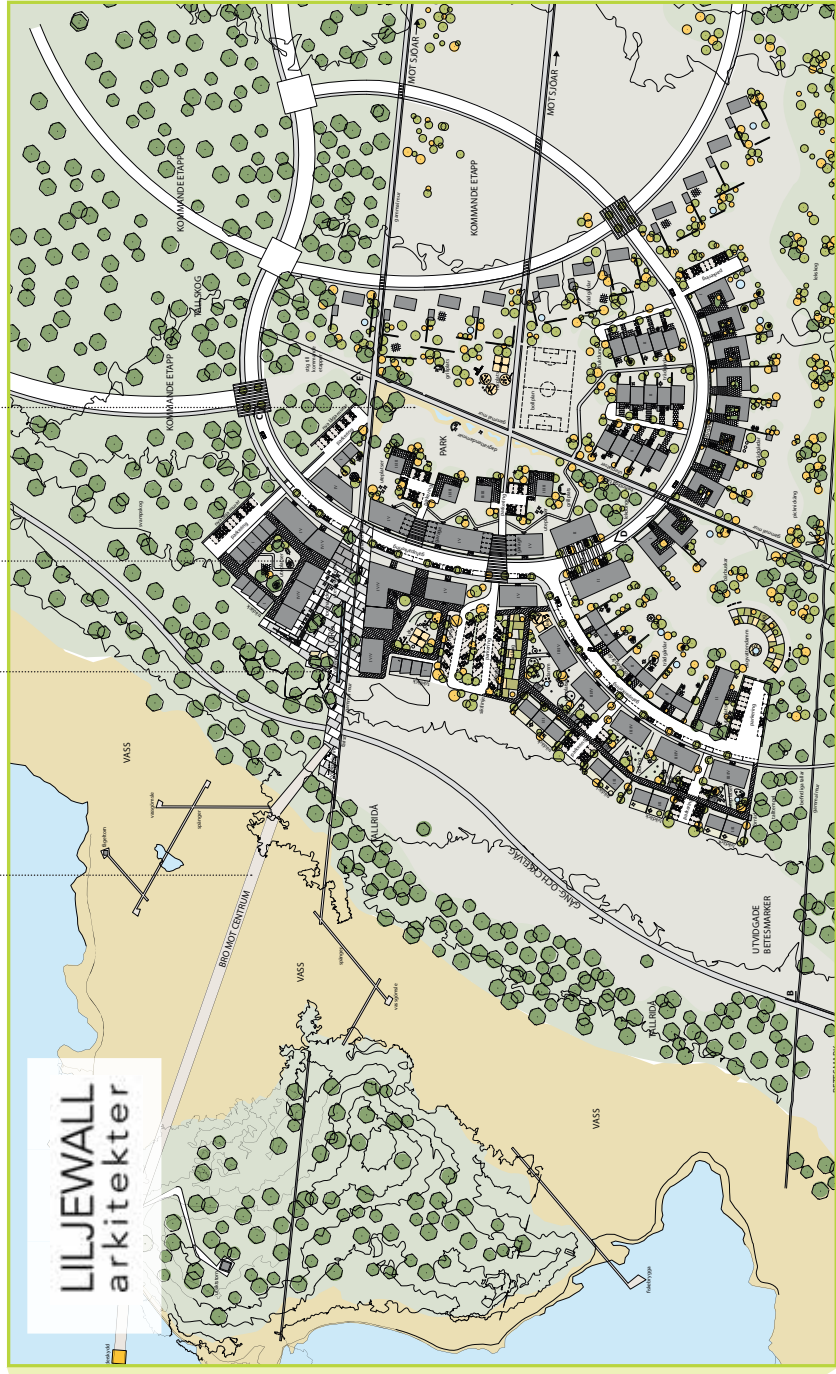
56 Ibid.

Current situation

This is the site plan over Ljungaviken as Liljewall Arkitekter proposed it. From the bridge one can pass the square and move further to the residential areas. In the middle is a park who will partially be designed by the influential Dutch garden designer Piet Oudolf.⁵⁷



Plans for Ljungaviken.
Image by Liljewall Arkitekter



⁵⁷ Interview with Kristina Höjler, park managing architect. 2013-04-04

The retirement home

The planned retirement home by Lijewall Arkitekter incorporates ideas about calm, recreation and closeness to nature. The retirement home is in 4 plans and hosts a total of 54 apartments. It's currently in the projection phase.⁵⁸



*Left: The planned Ljungaviken square and retirement home.
Right: Entrance of retirement home.
Images by Lijewall Arkitekter*

.....

58 www.ljwall-arkitekter.se

What is a contemplative place for you?

– the residents of the area speak out

While visiting Sölvesborg and the construction area of Ljungaviken, I took the opportunity to speak to the residents of the town. What do they think is a contemplative environment? Many answers referred to the nature, the forest and sea, but also activities in nature, hunting, sailing, walking, jogging ect. Also, many mentioned that a contemplation-inducing place is one that is not so easy to get to, and one that offers protection, some sort of enclosure from behind.



"A place in nature, designed for letting go of everyday thoughts. It is preferably a place with very bad mobile network..."



"Somewhere peaceful and restoring."



"Sitting somewhere, near the sea, the forest. Or when one is with animals."



"A place with a view, and some sort of enclosure behind one's back."



"Silence, where it is nice to walk and exercise. Peace and calm, the nature, the sea".



"In nature, or by the sea. Sailing is a contemplative experience for me."



"The nature and where there is silence. Somewhere that's a not too easy to come to, where you can be alone or together with someone for a peaceful moment."

"For me it is a place where you can hear water, or the forest. Also, horse stables or the lecture halls in Lund University.." – Anonymous local

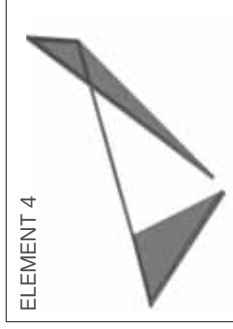
"The hunting tower, the beach and the mushroom forest. Where it is still."
– Anonymous local

PROPOSAL

View over the reeds, Ljungaviken.
Photo by author



The building is located in the middle of the reeds. From the square there are two paths leading to the building, one a bit longer through the trees and one a bit shorter starting from the pedestrian path. The latter is more accessible.



Along the way there are several elements representing deconstructed parts of the main structure, gradually materializing themselves into the building. These can be used for sitting, observing but mainly they are for leading the way to the building. There are two ways, one is longer and follows a current path through the trees, and the other is shorter, more accessible.





SITE PLAN

Retirement home

ELEMENT 7

ELEMENT 6

ELEMENT 5

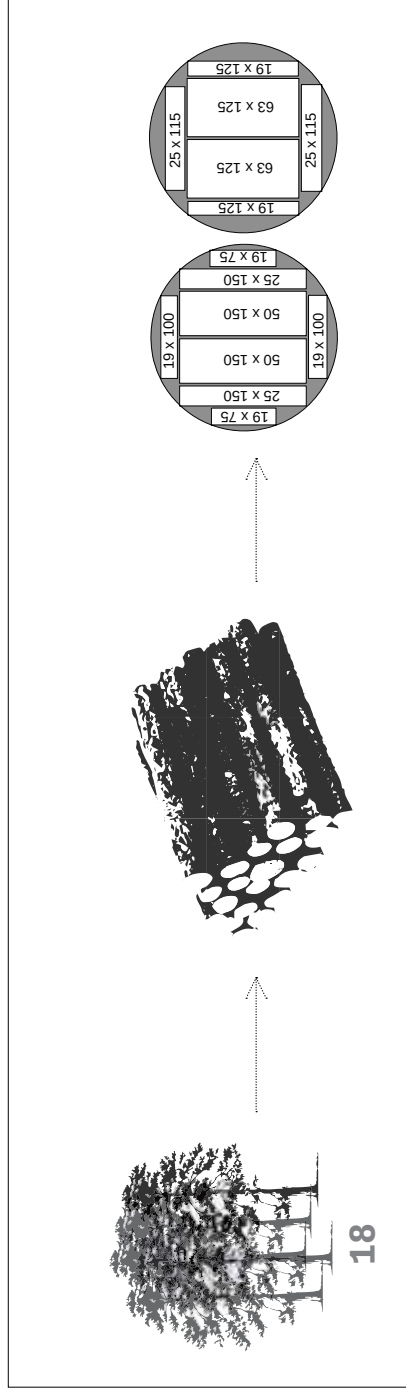
ELEMENT 4

ELEMENT 3

ELEMENT 2

ELEMENT 1

The elements placed out in nature will use the timber from the scots pines that are cut down to make place for the retirement home. There are 18 pine trees planned to be cut down.



SITE PLAN



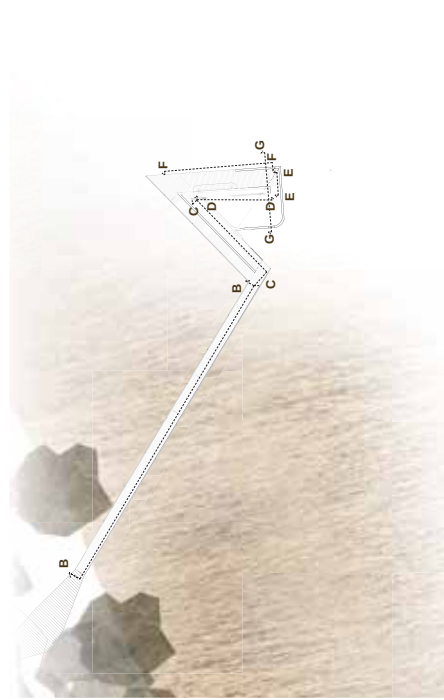
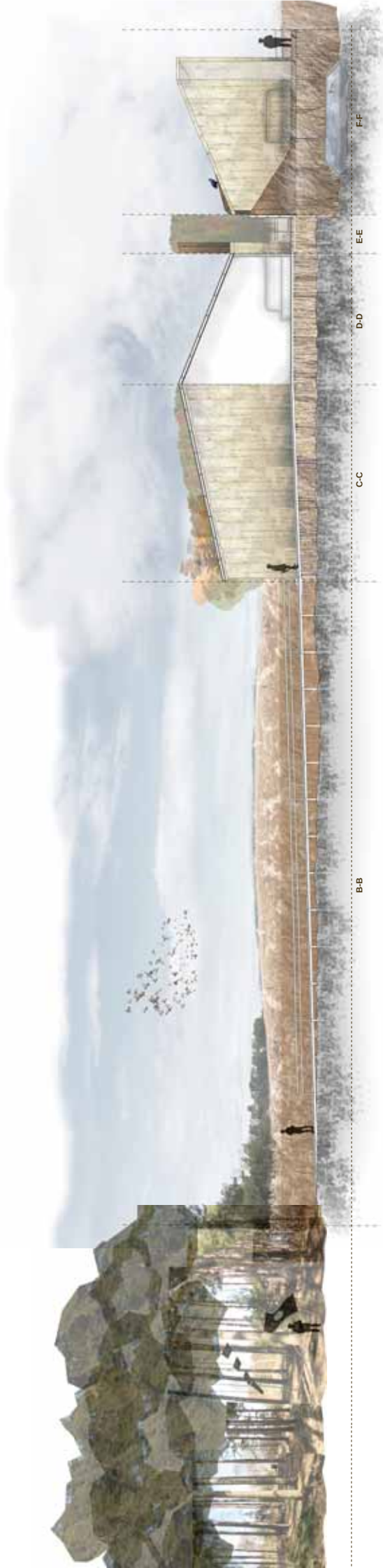


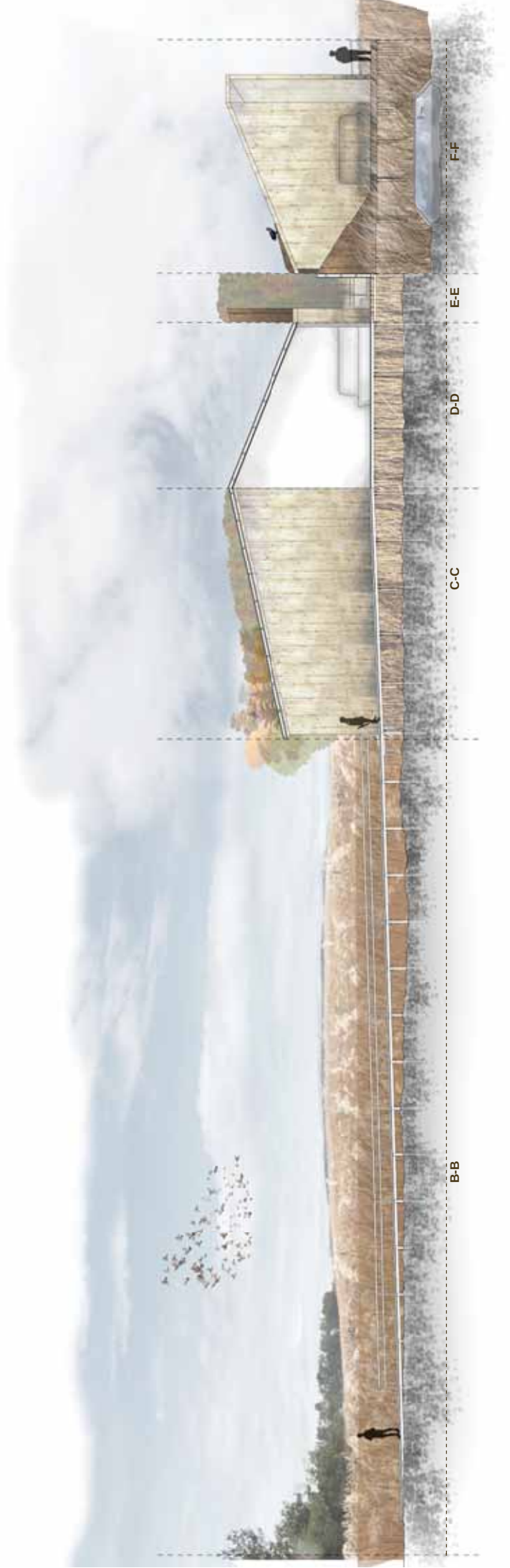
Pines in Ljungaviken.
Photo by author



A-A

ALIGNED SECTION
SCALE 1:200





Detachment – Height

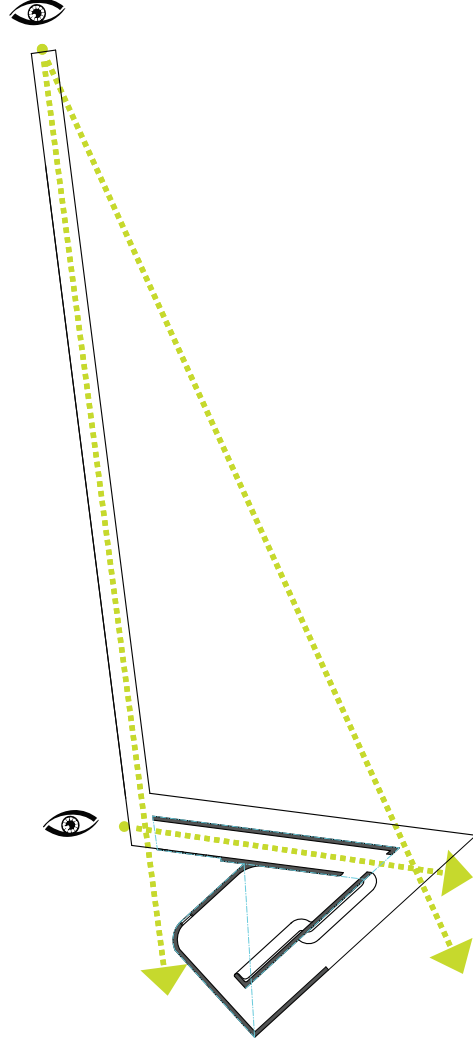
The building rises approximately 1,5 meters. Starting off with the reeds in eye level, as you approach the final part of the building you feel the top of the reeds under your hands. This is to enhance the feeling of removal from the world.

1,5 m



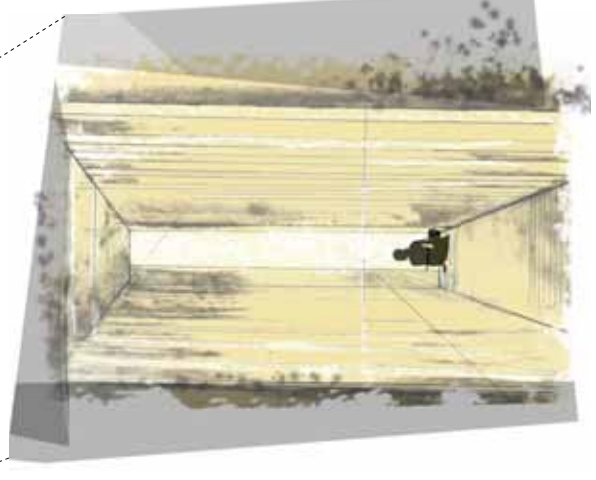
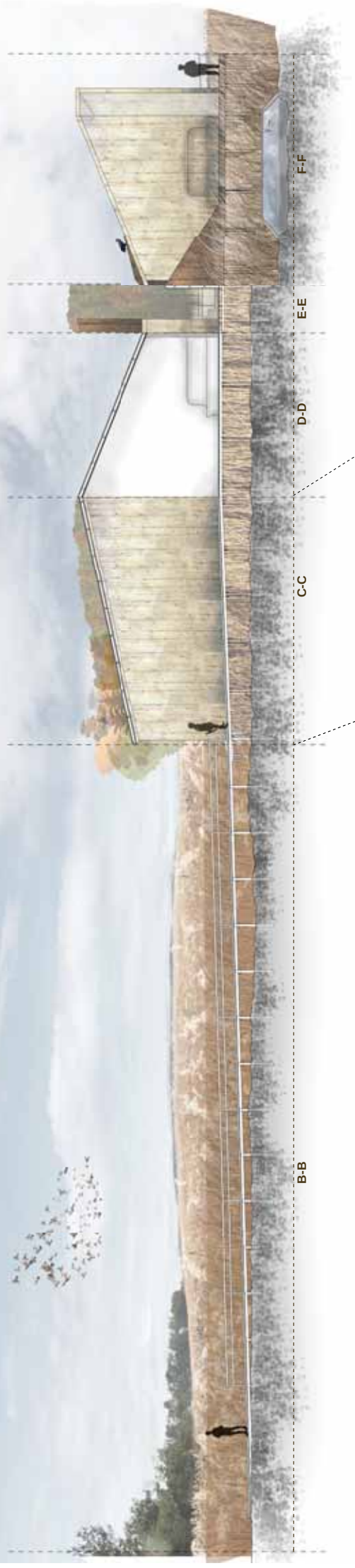
Detachment – Angles controlling visibility

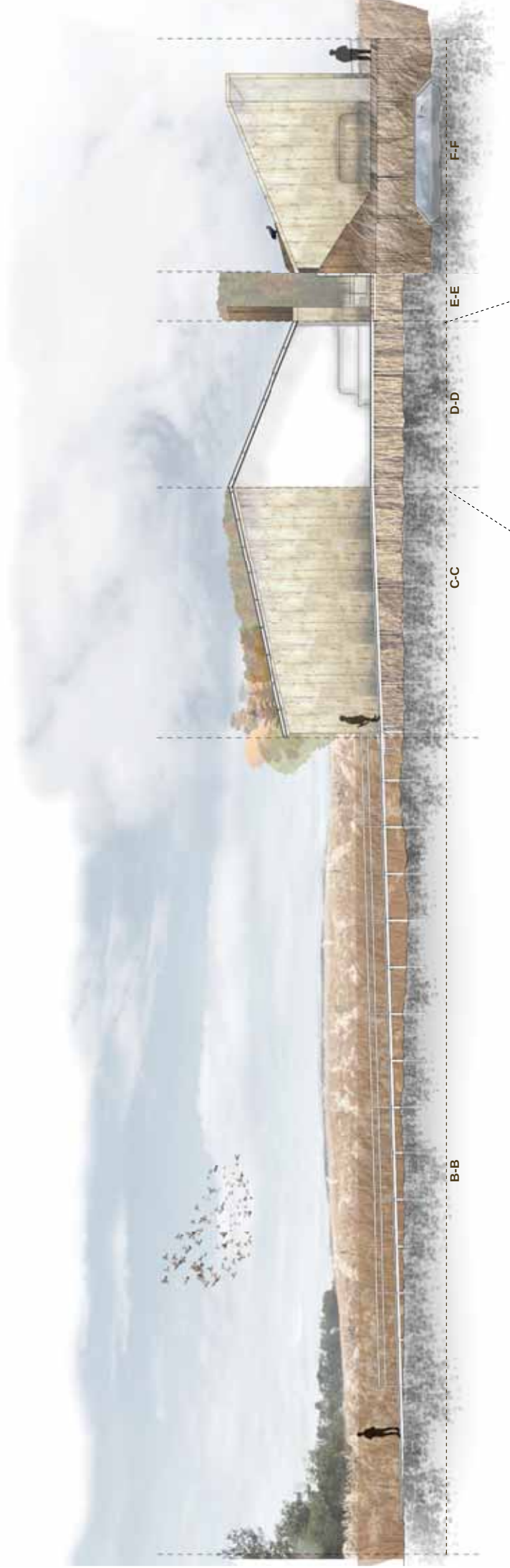
The angles control the visibility. Depending on where one is standing, some things are hidden, some are shown. From the “start” of the path one can not see the whole building, only a wall. Also, when approached, one can only look forward. The path to the sitting places follow a zick-zack pattern, to even more enhance a ritualized walk and make the visitors sense a detachment from day-to-day concerns.



Attention – Walking towards the light

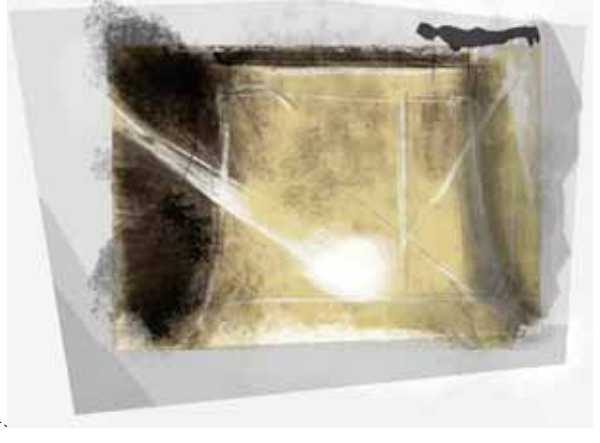
The attention is captured by the light at the end, a notion of moving yourself toward a point of focus, the intangible light, perhaps with a sense of sacrality.

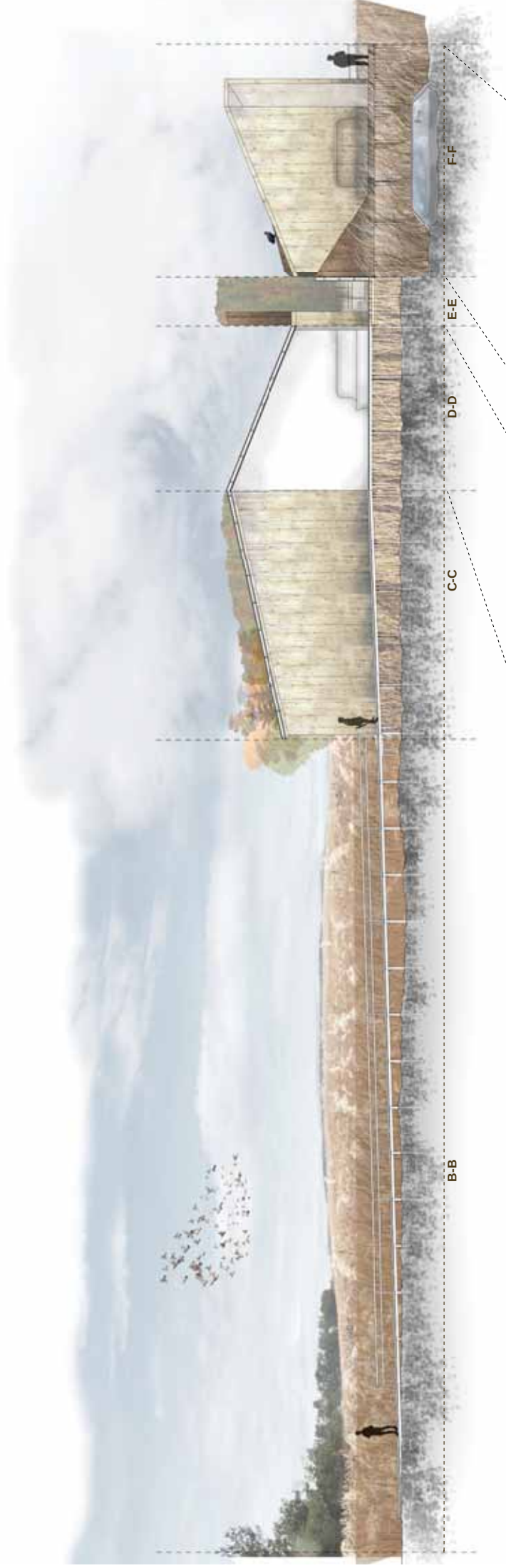




Nature – Moving light

The roof is constructed to let in an ellipse of light and display it on the wall. As the day passes one can see the change in time, observe the light itself. Light as a physical phenomenon, as matter in itself and not that which it enlightens.





Nature – View of the reeds

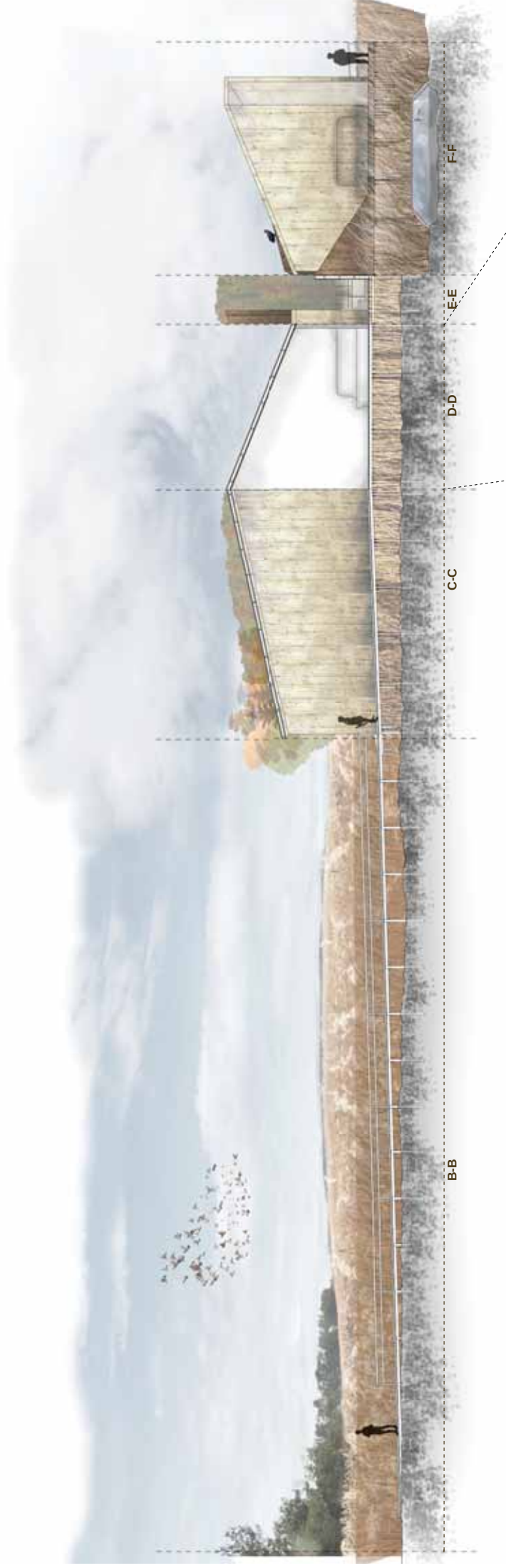
The reeds are all around, though two main view points. These are focused on both south and north. The north part is enclosed and weather protected, and the south part is outside and open to the sun.



View north

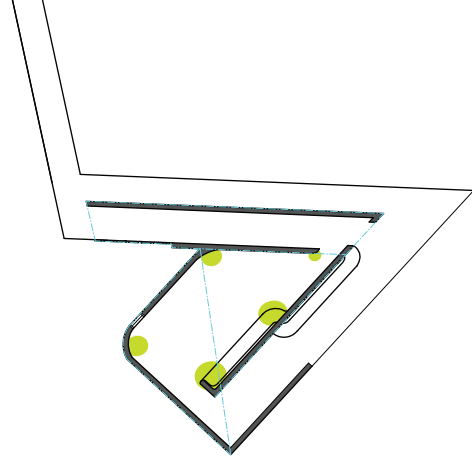


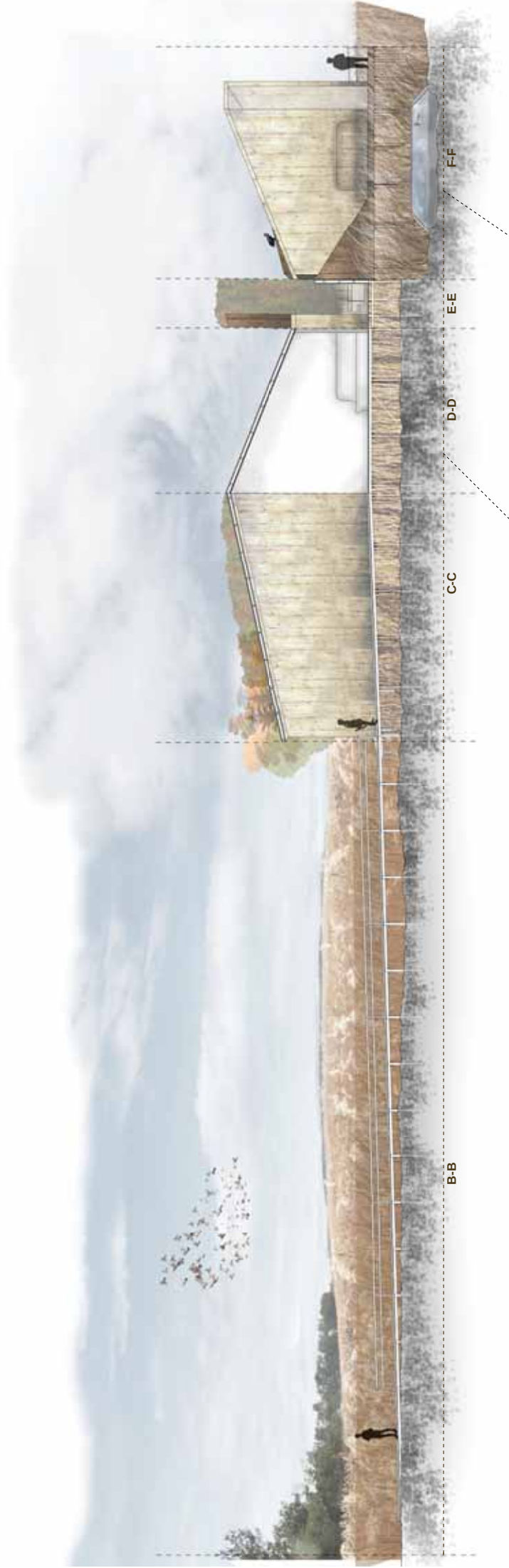
View south



Conformity – Rounded edges

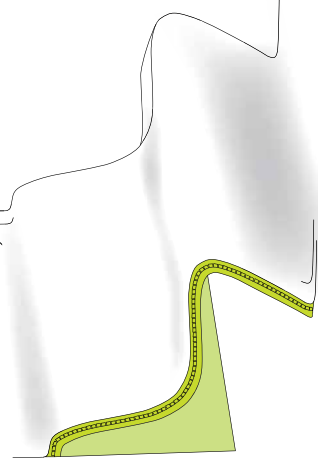
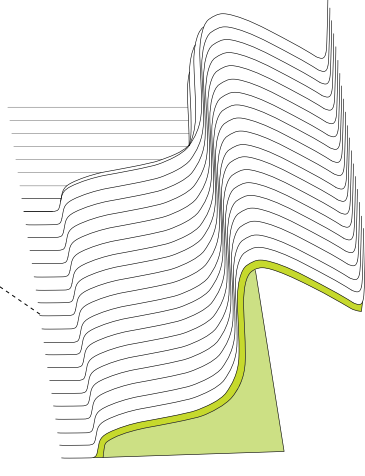
In the weather protected part the corners are rounded for enducing the sence of enclosure and safety, but also implying symbolism with infinity, where start and finish is blurred.

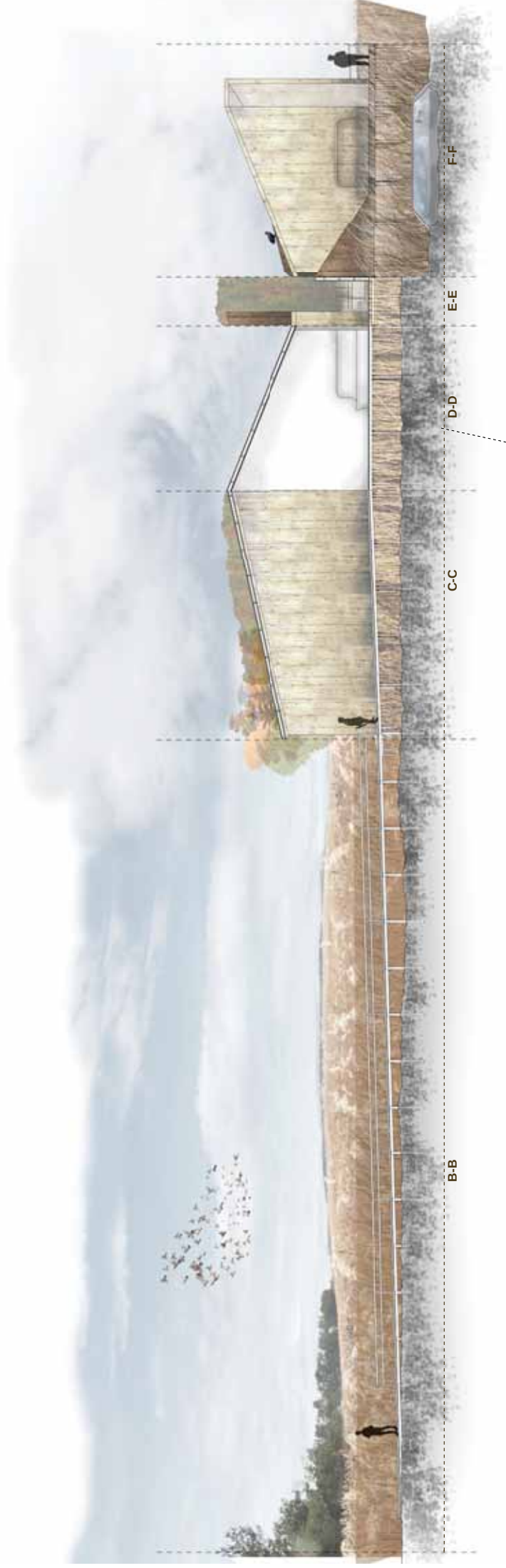




Conformity – Sitting spots

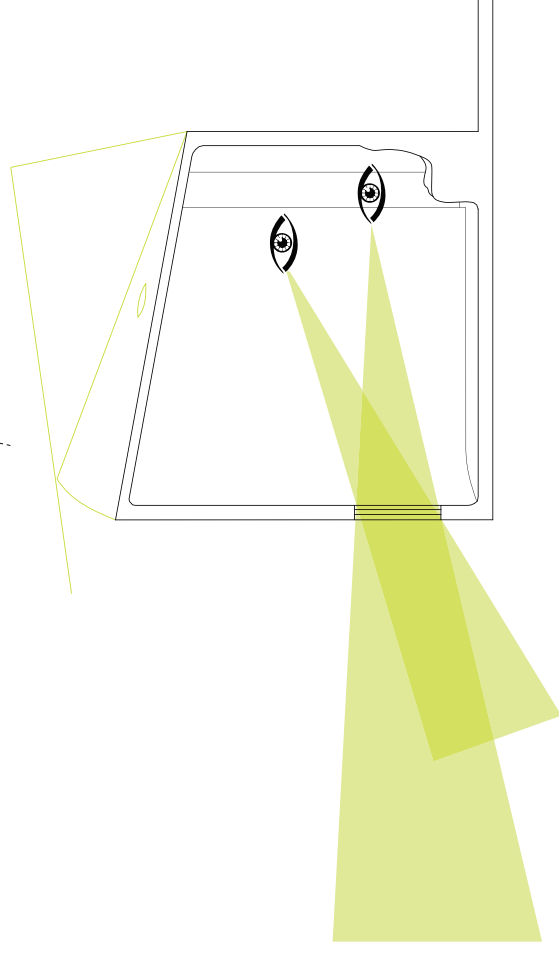
The sitting spots on both the north and the south part of the building are rounded and a part of the walls.

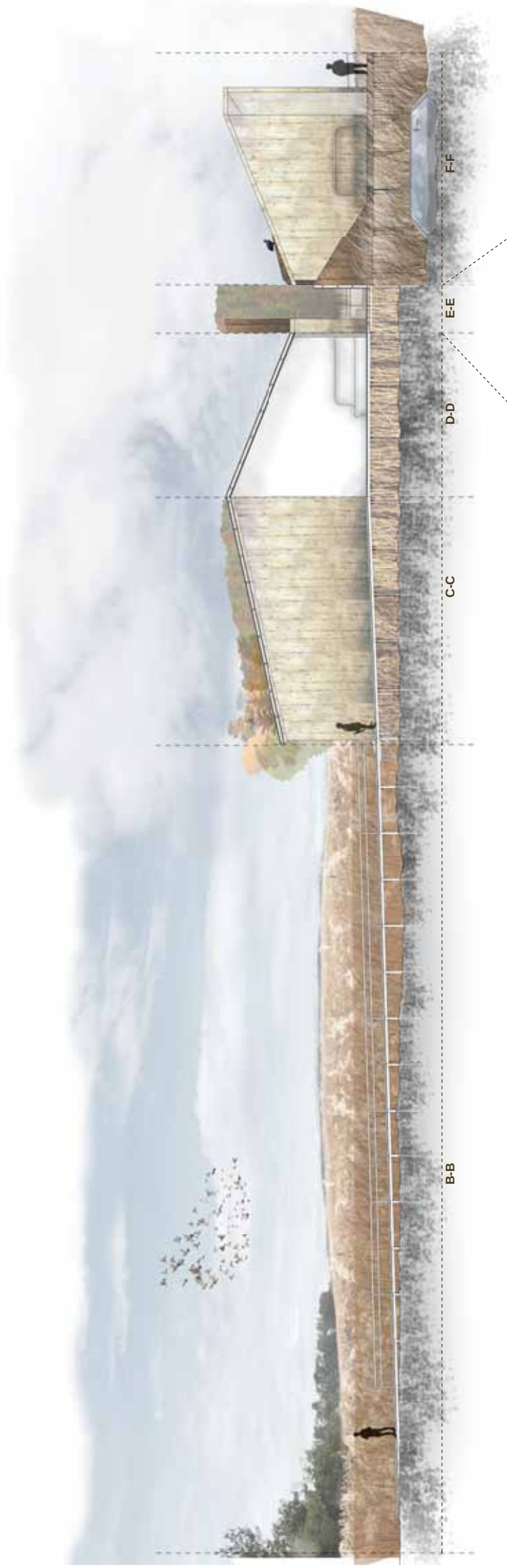




Beyond – Low window

An opening is positioned in the way that the view to the north can only fully be enjoyed when sitting on the seats across, not while standing or moving around. Like a hidden feature, for only the ones that stay to contemplate.





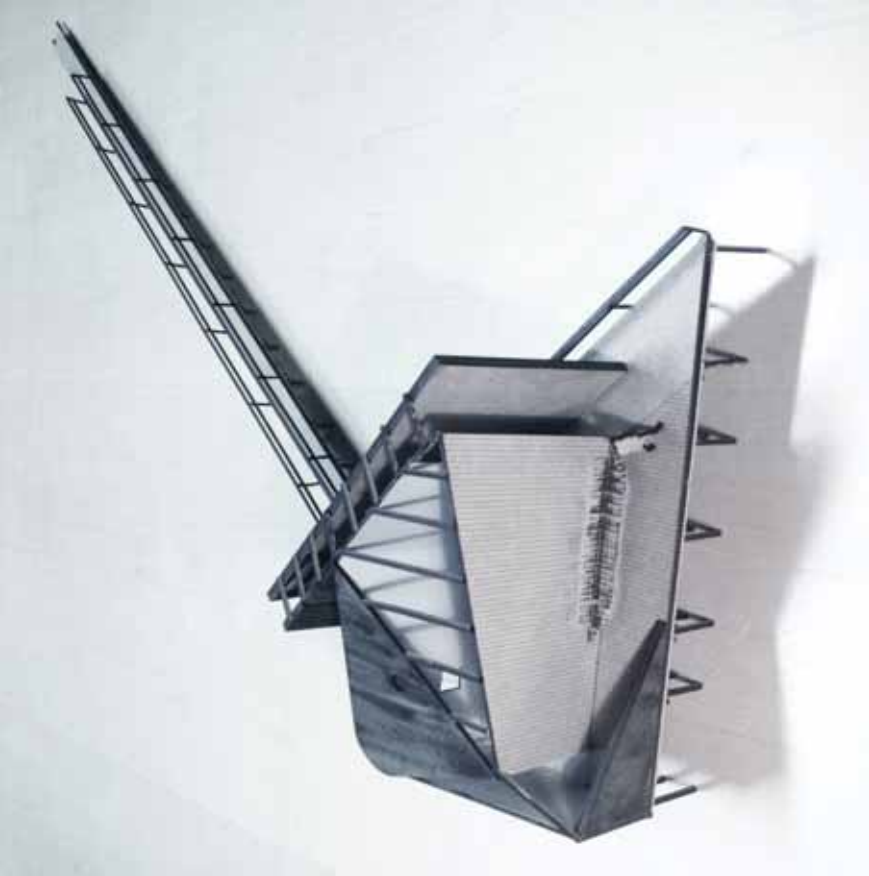
Beyond – Water mirror

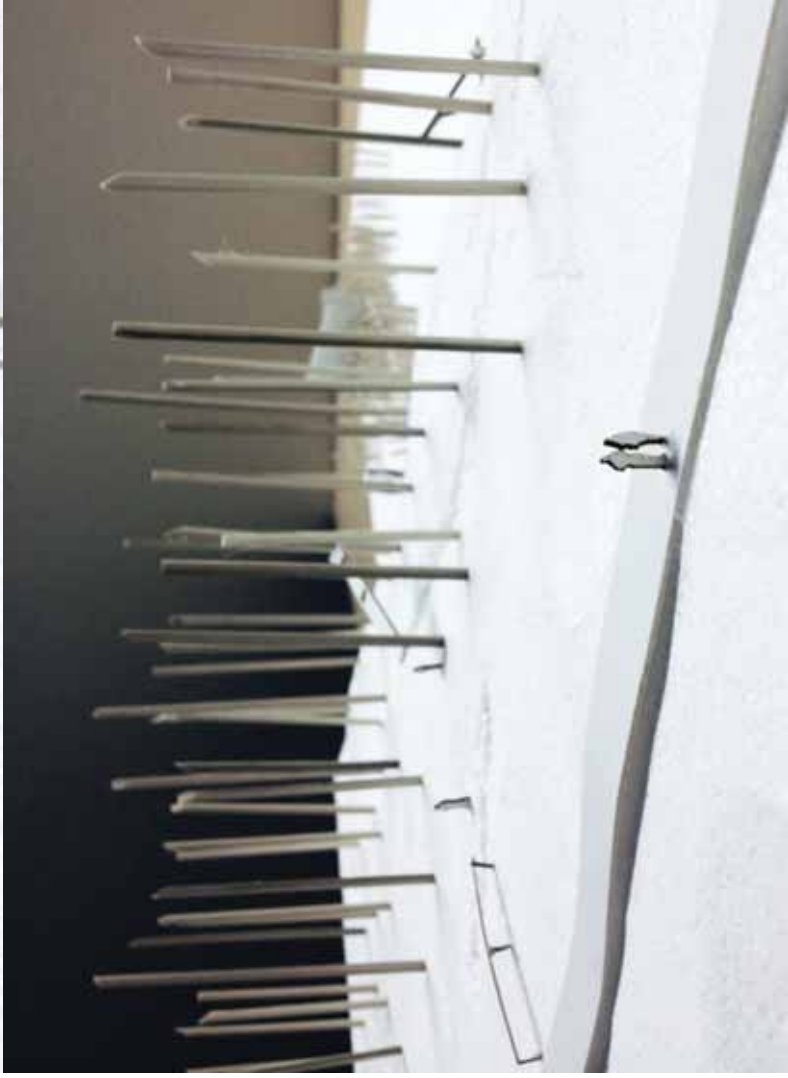
The water mirror in front of the southern part of the building reflects the sky and brings the water closer. There is a symbolism to infinity - the finiteness of the structure itself and the infinity of the sky above and reeds beyond.

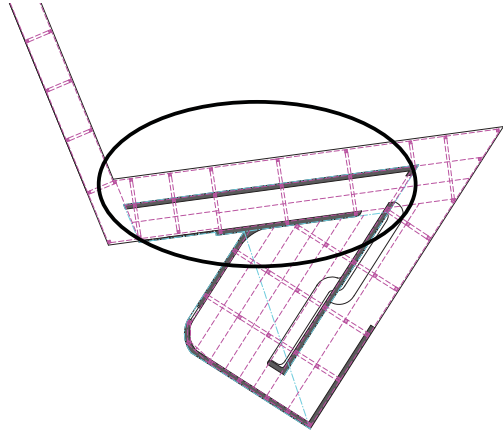
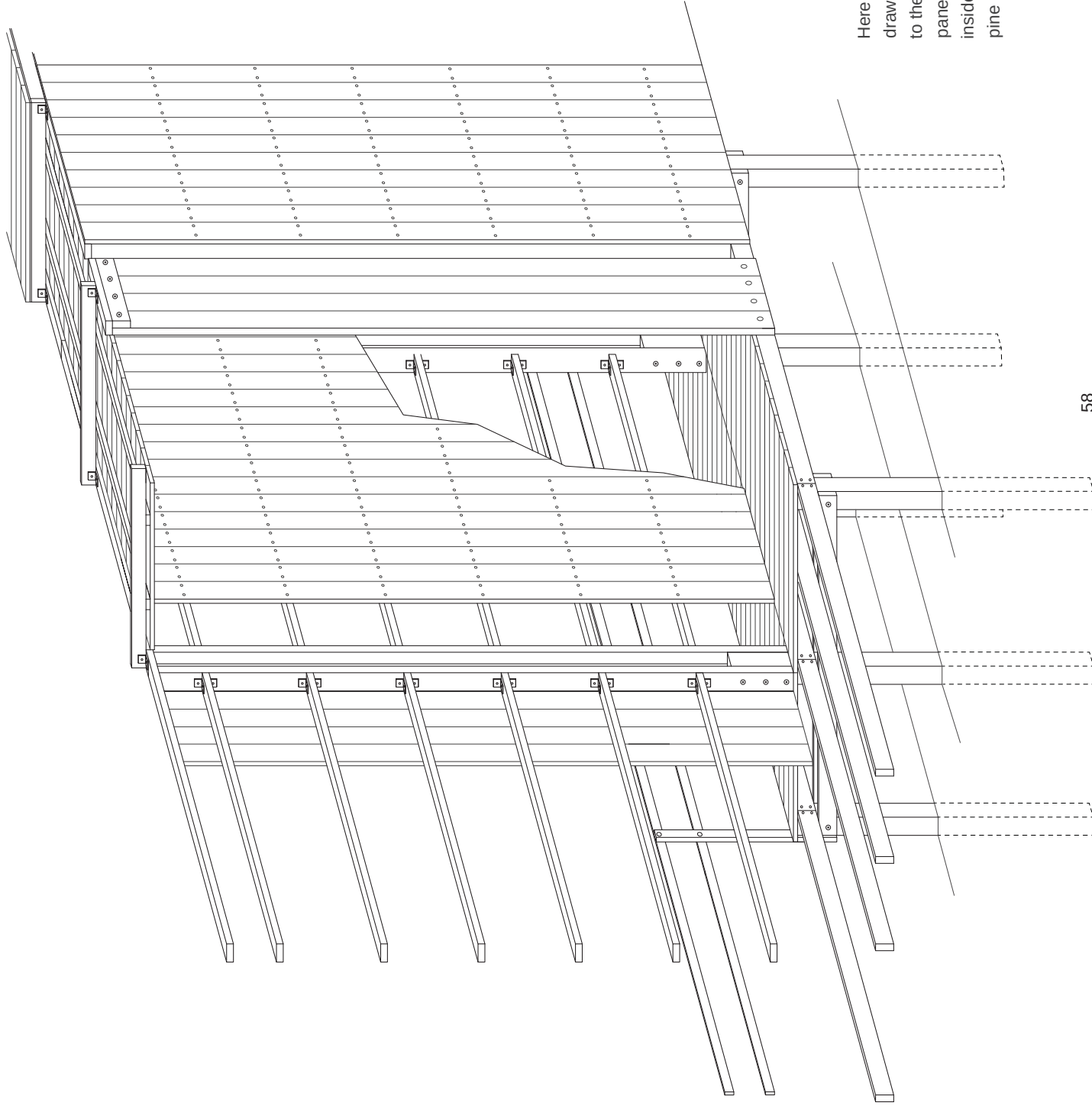




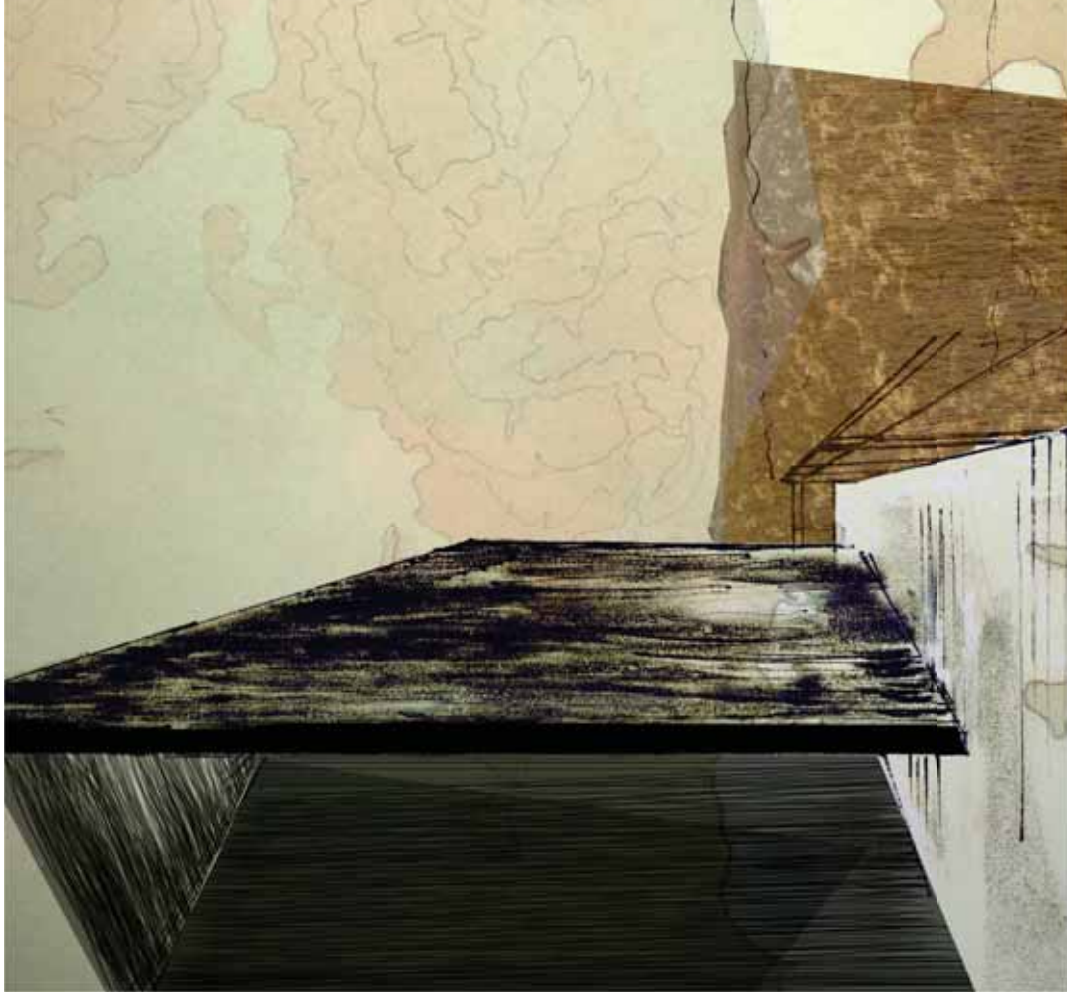
Model and photo by author







Here is a construction principle drawing showing a part of the walk to the sitting spots. The outsides are panels of charred pine timber and the insides are panels of non-processed pine timber.



Non-processed pine timber

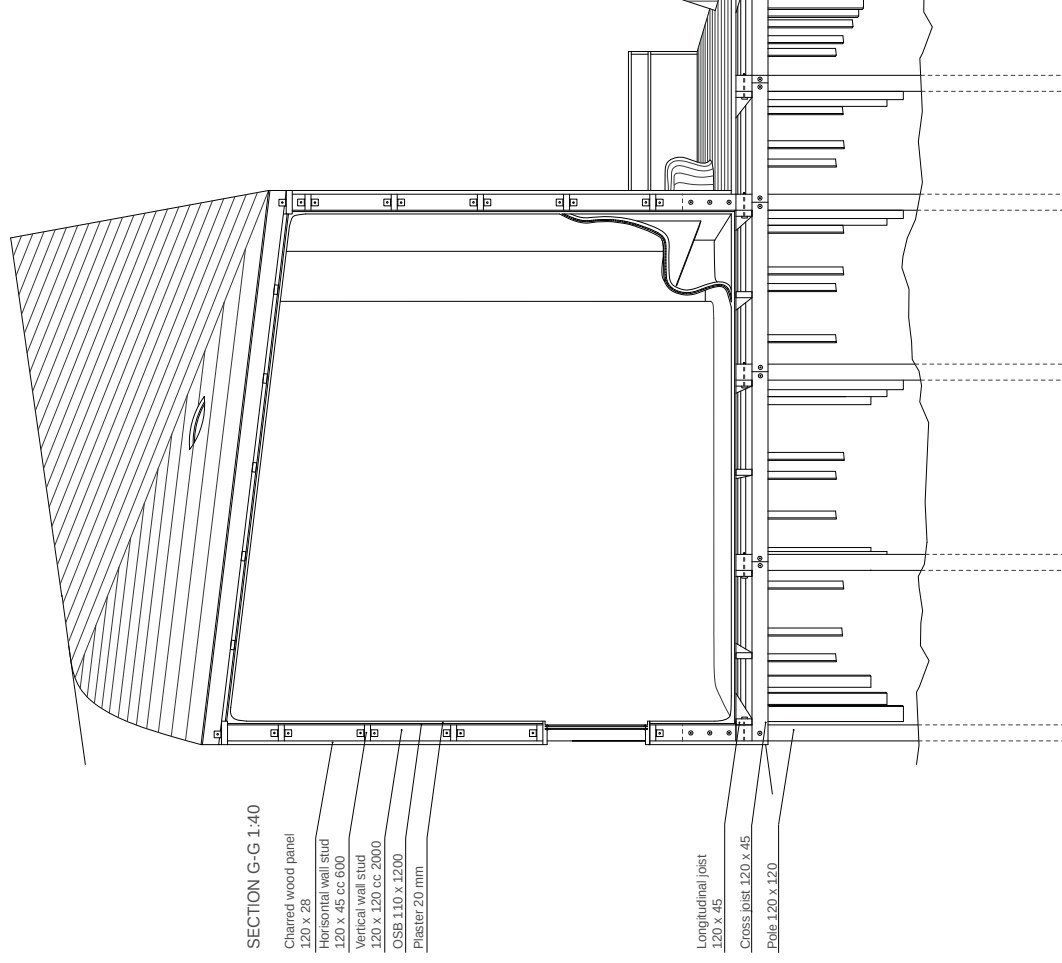


Charred pine timber

The structure's facade consists of panels of charred pine timber and non-processed pine timber, and the latter is easily effected by the surrounding environment and transformed thereafter.

Charred wood on the other hand, is resistant and durable, and serves good as protection. Precaution is taken to use non pressure-treated wood, since it might damage the natural balance of the soil.

The picture shows one of the ways one can take when walking back to the forest. The building's charred wood can stain a bit, so when walking back, one can swiftly brush the hand along the panels and take a little piece of the contemplative experience home.



SECTION G-G 1:40

Charred wood panel
120 x 28

Horizontal wall stud
120 x 45 cc 600

Vertical wall stud
120 x 120 cc 2000

OSB 110 x 1200

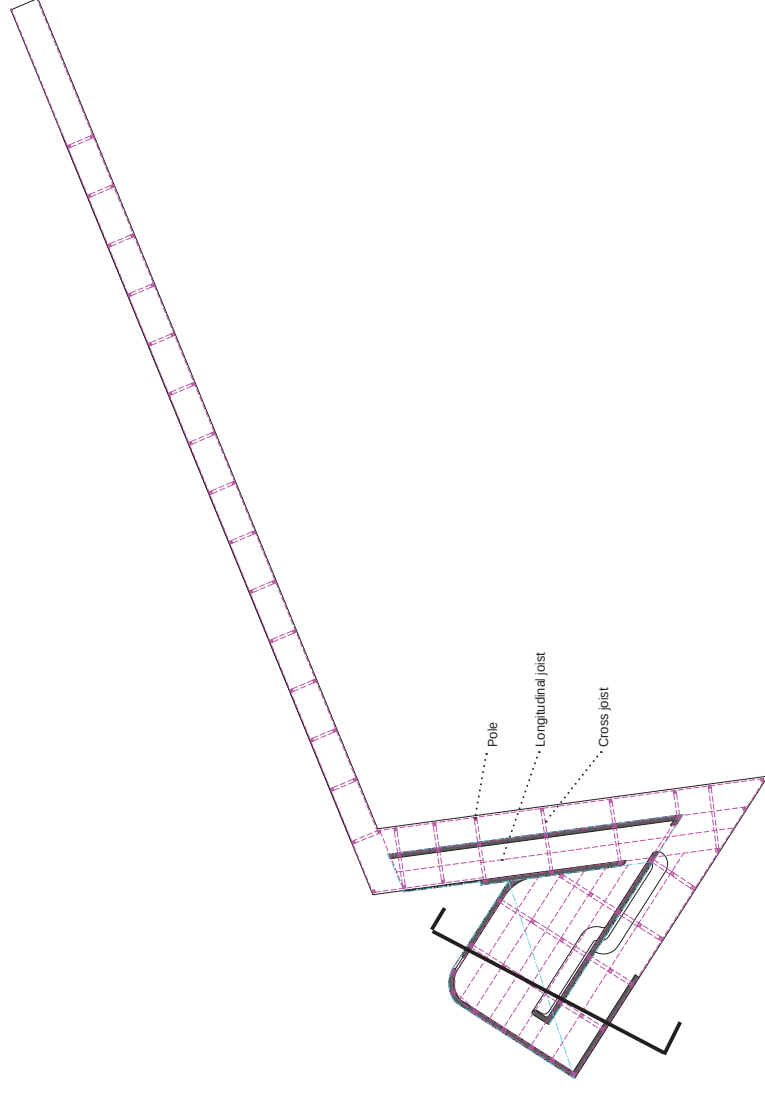
Plaster 20 mm

Longitudinal joist
120 x 45

Cross joist 120 x 45

Pole 120 x 120

Scale 1:40

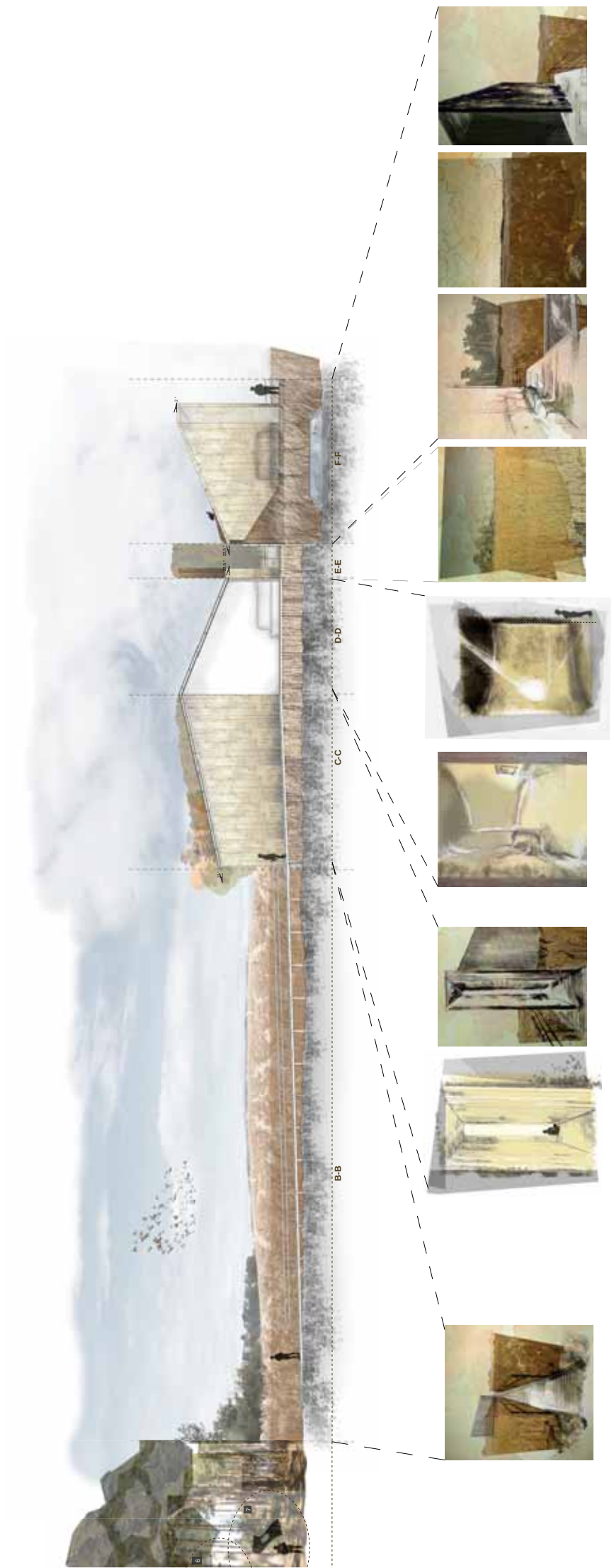


Here is a more detailed section showing the weather protected part of the structure, the rounded room. The inside consists of OSB covered with light grey plaster, which enables the rounded edges.



The rounded room. The inside is covered with light grey plaster, which enables the rounded edges, and gives a matte and soft impression of the space.





CONCLUSION

This thesis shows that contemplation plays an important part for human health and well-being; not only can the mind practice self-mastery and recover from overloaded sensory stimuli, it is also directly influential to our physiological health. Further, there is a link between our inner contemplative states and the environments around us, even if the degree of individual engagement is connected to the outcome. To illustrate in what way a contemplative environment can be built, the case studies in this thesis show the various ways in which they effect our associations, thoughts, moods and actions, all ultimately leading to the same goal – a contemplative experience. It is clear that these environments are not about filling the space with objects, it's about something more sensual and emotional than that.

The proposal in Ljungaviken illustrates an example of a contemporary stage for the ancient need for contemplative experiences, by implementation of strategies enabled and inspired by the case studies. The design shows the influence of the surrounding through the carefully considered placement, expanse, materiality, and the varying degrees of spatial intensity. The structure is aesthetically stripped down to the elemental core of its purpose, making the clear, tactile architecture hold a dialogue between simplicity and awe, between nature and the used materials, between visitor and experience.

There is a large potential for ideas about contemplative environments to widely be incorporated as a positive contribution to our designed spaces. It seems clear that the strategies for planning a contemplation-inducing environment, as developed in this thesis, do not solely need to be applied as such, but also used as a part of other settings; offices, schools, housing, health care centers, and commercial settings, among others. There is potential for these strategies to stretch into an urban scale, branch out and create landscapes of contemplation that contribute positively to contemporary life, not only through aesthetic and intellectual heightening, but also through an improvement of our physiological and psychological health.

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