

ÅSTOL

250 YEARS AND BEYOND

Work by

Tess Ekman & John Hermansson





CHALMERS

Chalmers University of Technology
Department of Architecture and Civil Engineering
Architecture and Urban Design - Building Tectonics

Supervisor: Mikael Ekegren
Examiner: Björn Gross

All images courtesy of the author unless otherwise stated
2021

INTRODUCTION

ABSTRACT

Communities will be something that constantly changes with the larger affecting context around itself. Throughout the test of time, communities changes and the citizens within it finds new ways to go forward, develop and identify themselves among.

So is also the case for many Swedish coastal villages around the country, suffering from depopulation as globalization has entered the modern era. The rise and possible death of those small communities does also bring multiple significant elements with it, ending a period of sub-cultural identities that position regional cultures as a counterweight among international ones around the globe. This thesis aims to keep one of those remote identities active as a cornerstone in the wider network of cultural relationships.

The chosen site for this work is the island of Åstol that can be experienced as a remote place even with its close location to Gothenburg, some 30 kilometres from the regional centre. Emerging as harsh formations from the rough sea of Skagerrak, this island has been left to nature with its fishing dedicated community, forming its unique identity for more than 250 years. Through all these years, the fishing industry has been its epicentre, providing the citizens with trading goods - occupation - money - and purpose. However, due to the inevitable decline in profitability, this industry has vanished and society is left to write a new chapter of its history, to find a new purpose and life by and off the constantly surrounding sea. Åstol belongs to a part of the archipelago with strong bath culture, widely recognized by many visitors during the summer.

This project will try to build qualities upon the pre-existing culture to rediscover that previously thriving society, finding new goods - occupation - money and purpose to further establish its community the upcoming 250 years. The bath combined with sub-functions will presumably offer ways to awaken a year-round active community in a sustainable way, where values for both citizens and visitors are fulfilled - generating an everyday living room for the people of Åstol and their visitors to meet through.

// Archipelago - Landscape - Small-scale tourism - Revival - Contemporary adaptation - Bath - Accommodation - Remoteness

TABLE OF CONTENTS

Background	001
Motive	003
Academic Framework	005
Part I - Context	
Physical context	009
Past - Present - Future	011
Development forward	017
Part II - Baths through the centuries	
Gustafsberg Baths	019
Varberg hot Baths	025
Stiftet Åkersberg Andrum	031
PART III - Local characteristics	
Volumes	039
Building techniques	045
Details	049
PART IV - Site	
Regional integration	055
Åstol	057
Stormvallen	059
PART V - Proposal	
Program	061
Design	065
Details	089
Discussion	096
Bibliography	098
Appendix I	
Furniture design	102

TESS EKMAN

ekman.tess@gmail.com
+46734124120
born. 1993

Chalmers University of Technology 2019-2021
Master in Architecture and Urban Design

Sustainable development and design professions
Matter, Space, Structure
Nordic Architecture
Housing Inventions
Color and Light Theory
Preparation for Master Thesis I-II
Residents for Seniors

Okidoki Architects 2021-
Gothenburg, Sweden

Internship Okidoki Architects 2018-2019
Gothenburg, Sweden

Chalmers University of Technology 2016-2018
Bachelor graduation - Architecture program

Umeå School of Architecture 2014-2016
Architecture program

JOHN HERMANSSON

john.hermansson@live.se
+46730653258
born. 1993

Chalmers University of Technology 2019-2021
Master in Architecture and Urban Design

Sustainable development and design professions
Material and Detail
Architectural Competitions
Housing Inventions
Color and Light Theory
Preparation for Master Thesis I-II

White Architects 2021-
Gothenburg, Sweden

Internship MVRDV Architects 2020-2021
Rotterdam, The Netherlands

Internship Enter Architecture 2020
Gothenburg, Sweden

Internship Semrén & Månsson Architects 2018-2019
Gothenburg, Sweden

Chalmers University of Technology 2015-2018
Bachelor graduation - Architecture program

MOTIVE

This thesis takes a starting point in the discourse about architecture concerning globalization and the generalization with the subtle deconstruction of local identities it brings. Not much in contemporary architecture seems rooted in its context or culture. Local building traditions and architecture sensitive to its context, both environmental and cultural, have historically been a keystone to construct architecture but have mostly been replaced by general techniques, materials, and generic space. There are various theories related to this subject. Critical regionalism refers to the issue of places losing their identity in the built environment as "placelessness". As a counter-reaction to the widely spread generalization and degradation of cultural heritage that globalization brings, we want to explore how a building can be rooted in both its physical and immaterial context (culture) to strengthen a local identity and support it to sustain. Åstol is a site of interest since its cultural environment is regarded as a national interest and therefore must be protected. This strong local identity derives from a unique history. The society recently celebrated its 250th anniversary and the small island has gone from being uninhabited due to its harsh climate and inhospitable landscape, into becoming one of the most important fishing villages, eventually becoming so dense that the plots ran out. The dense environment on a remote island with total exposure to the climate has created a strong unity among the residents. Nowadays, when the fishing industry has been industrialized, Åstol is left in a position suffering from de-population and residents and businesses have a hard time keeping the island liveable all year round since a significant source of income from tourists only attracts enough people during the short summer season.

ADMITTANCE

"The phenomenon of universalization, while being an advancement of mankind, at the same time constitutes a sort of subtle destruction, not only of traditional cultures, which might not be an irreparable wrong, but also of what I shall call for the time being the creative nucleus of great civilizations and great culture, that nucleus on the basis of which we interpret life, what I shall call in advance the ethical and mythical nucleus of mankind. The conflict springs up from there. We have the feeling that this single world civilization at the same time exerts a sort of attrition or wearing away at the expense of the cultural resources which have made the great civilizations of the past. This treat is expressed, among either disturbing effects, by the spreading before our eyes of a mediocre civilization which is the absurd counterpart of what I was just calling elementary culture. /... /It seems as if mankind, by approaching en masse a basic consumer culture, were also stopped en masse at a sub-cultural level. /... /Whence the paradox: on the other hand, it has to root itself in the soil of its past, forge a national spirit, and unfurl the spiritual and cultural revendication before the colonialist's personality. But in order to take part in modern civilization, it is necessary at the same time to take part in scientific, technical, and political rationality, something which very often requires the pure and simple abandon of a whole cultural past. It is a fact: every culture cannot sustain and absorb the shock of modern civilization. There is the paradox: how to become modern and return to sources; how to revive an old, dormant civilization, and take part in universal civilization. /... / We are in a tunnel, at the twilight of dogmatism and the dawn of real dialogues."

Paul Ricoeur
Universal Civilization and National Cultures, 1961

ACADEMIC FRAMEWORK

Aim and purpose

The aim is to investigate how architecture can support and enable Ástol to develop without losing its unique identity. This would mean cultivating a resistant, identity-giving architecture rooted in its local context while at the same time having discreet recourse to universal contemporary techniques. Forming a strong relation to the context, considering surrounding nature, culture, history, climate, light, craftsmanship, materials, and tectonics are important aspects to generate meaningful architecture that can sustain over time.

Delimitations

This project will primarily deal with architectural aspects and do not intend to solve social-related problems such as de-population or rising prices on the housing market. Neither it intends to follow the official building regulations since it aims to focus on the visionary aspects of bringing the most out of the architectural potential and site. Economic aspects are included to some extent but are not the primary driver in the proposal. Instead, it strives to make a small contribution that will hopefully make the island a more attractive place to visit and live within.

Reading instructions

Chapter I introduces Ástol to deeper understand the issue and context both as it is today, historically and visions for the future. Analysis of references and guidelines for designing is presented in chapter II. Chapter III is about finding nuances of Ástol's characteristics in different scales and conclusions to bring forward in the design. The fourth chapter consists of a site analysis of the current conditions of the region, island and plot to understand how the project will integrate with its surroundings. In chapter IV the research is translated into an iterative design project spanning from volume placement to construction details, followed by a discussion, bibliography and appendix of furniture design.

THESIS QUESTION

How can architectural heritage and materiality be included as a departure point for a contemporary built addition to Ástol?

Sub-questions:

In what way could the context and place of Ástol be interpreted into contemporary architecture?

Which strategies and functions could be used to revive Ástol into a future lively community?

Methodology

To reach a trustworthy result, the method has been to understand the challenge of the site, society and history through extensive literature processing, and further in collaboration with local initiatives to create a program which can resolve the situation. From the theory of Critical regionalism, two research fields were investigated and created guidelines for the design. The first brought knowledge about the local characteristics in connection to the field of architecture and building traditions. Continuing, those were merged with studies of chosen, suitable reference projects touching on both culture on the west coast over the centuries. An iterative design process and research by design strategy have been key in developing the final proposal where the proposed design project is a medium, communicating the academic inquiry that its design emerges from, including an equal balance between scientific theoretical research as well as individual explorations from the site.

THEORETIC FRAMEWORK

The theories of Critical regionalism were first established by Alexander Tzonis and Liane Lefaivre and have in recent years, with a slightly different meaning, been developed by Kenneth Frampton. It strives to combat the lack of identity in architecture that globalization brings while at the same time reject the idea of reducing a culture into symbolism or falling into nostalgia. Crudeli (2018) states that *"Critical Regionalism is an approach to architecture that strives to counter the placelessness and lack of identity of the International Style, but also rejects the whimsical individualism and ornamentation of Postmodern architecture"*. The theories of Critical regionalism are not to be confused with vernacular architecture but is a progressive approach that seeks to identify regional characters and mediate between the global and the local languages of architecture (Frampton 2007). The aim is to create architecture rooted in modern tradition while being strongly tied to its geographical and cultural context. In *"Towards a critical regionalism: Six points for an architecture of resistance"* Frampton (2015) discusses the paradox it contains which makes the topic a complex question; that culture is both deriving from the past but needs to evolve and progress in order to sustain. He states: *"How to become modern and return to sources: how to revive an old, dormant civilization and take part in universal civilization?"*. Frampton continues to discuss how architects can cultivate a resistant, identity-giving architecture while at the same time having discreet recourse to universal technique. According to this theory, architecture should be something that goes beyond the mere visual dimension and celebrate the tactile dimension of tectonic components. In order to do so, a building should be rooted its context and derive from local parameters such as topography, culture, history, climate, light, craftsmanship, materials and tectonic form.



DERIVING FROM THE CONTEXT

Figure 001. The design will take inspiration from history and refer to the context and identity through analyses and tradition extraction in order to handle the risk of placelessness appearing otherwise.

PART I

CONTEXT

PHYSICAL CONTEXT

Exposed to the harsh climate of the shore, Åstol has to stand the rough challenges that nature brings. Located in between two communities Marstrand and Rönnäng, just a few miles northwest of Gothenburg, it was first habited by fishermen who found its physical framework suitable for their profession to proceed (Åstol ekonomisk förening 2003). Today, the main communications go between those nearby villages for transport further out in the region. Despite this, the island is considered a fairly isolated place which is also valued as one of its main qualities. Physical development emerged in proximity to the natural harbour where the main infrastructure and trading patterns were established. Trading is a central question at Åstol, where fish has been exported and inaccessible goods imported. Building materials, such as wood, is one of many examples that the inhabitants depended on making themselves a decent life. The limitations of the island offered scarce opportunities for extraction of building materials by themselves, but the population has always been known for being independent and solution-orientated, using what they got offered to build with (Sjöblom, 2002). Among other resources, stone has been used for foundation and residual materials from the sea to build paths and streets. Although, the most commonly used material is wood imported for the building's structure, often in symbiosis with a high level of detailing and care about the property as a whole, both interior and exterior. The high density of housing and buildings doesn't just bring social qualities but also ecological. Positioning the volumes against the west-southwest creating possibilities for protection against the wind and allowing conditions for outdoor microclimates where vegetation and greenery grow. The small gardens and their vegetation are elemental characteristics in this otherwise barren environment on the island.



ADAPTING TO THE RULES OF NATURE

Figure 002. Åstol is often referred to as *a rock in the ocean*. Exposed to the open sea, the next stop is Denmark. In such a location there's no need trying to resist nature, who always got the advantage.

PAST - PRESENT - FUTURE

1766 - 1900

Due to its barren landscape and weather-exposed location, Åstol remained uninhabited until the 18th century. It was the strategic position, natural weather-protected deep harbor as well as its fish-rich waters (herring) which attracted the first settlers despite the uninviting landscape. The rugged terrain and salty persistent wind made it impossible to grow crops on the island, which meant that the inhabitants fully relied on fishing (Sjöholm, 2002). Fish was eaten at every meal but also sold and traded for other goods, such as potatoes from the mainland. From 1766 to 1808 the community had grown from two to 28 families when the herring inexplicable disappeared. This caused great poverty and led to terrible living conditions. The people of Åstol endured the stringent times and were able to recover their fishing with new methods during the later part of the 19th century.

1900 - 1945

Life on Åstol was very tough and demanding, not only because of the forces of nature. Being a fisherman or sailor was a dangerous profession, and quotes from old interviews proofs that there was a constant concern about death among the residents. Not only did ships sink due to storms, but mines also became a threat during the First World War. The difficult living conditions and the constant presence of death made the role of religion incredibly important. Few community areas are characterized by the church as Åstol (Gustavsson, 1984). Before Åstol got their church, crowded boats were rowed with passengers to Rönnäng all year round to attend the Sunday service, even during the winter when a gutter in the ice was kept open for the boat. During the 20th century, fishing boats were motorized and made shipping to, for example, England possible.

The women were left with the kids and responsible for the household during long periods. Families had to rely on each other and the social cohesion became very strong. Åstol developed its own system of solidarity where wives received a widow's pension from the fishing team if the husband died during work. In 1923, a revival period began with influences from the ports of England. A Pentecostal church was founded on the island, which created such a great attraction that the meeting rooms were not enough and entire boat teams stayed home from work to attend revival meetings. This created a large division among the population since the conservative congregation on the island remained. The church became the largest social forum, not least during World War II, which generated a social control that governed life to a large extent on the island. Those who did not follow the rules risked being outcasts, which had major consequences in a society where lives to a large extent depend on collaboration (Gustavsson, 1984).

1945 - 1968

Since the fishing largely ceased during WW2, the stock of herring was able to recover. After the war, the catch and profit increased and led to huge investments on the island. In the middle of the 1960s, Åstol had its population peak and became one of Bohuslän's strongest and most modern fishing fleet with over 500 residents. Other marine industries emerged and became important sources of income, such as the ice industry (to keep the fish fresh during transportation), shipping and battling. Because of the blossoming business, Åstol's population was not enough to employ all activities, and people from the mainland were employed and had to commute to the island for work. Due to the profitable fishing water and large investments, the population grew until 1968 when the island had become so dense that the plots ran out (Sjöholm, 2002).

1968 - 1975

A great fishing crisis occurred in 1968 and put the resident's life at its edge. The water was depleted and the operations were no longer profitable. In just two years, the entire fishing fleet was sold. As fishing was by far the largest industry and families often relied and depended on each other's economies, many families economies collapsed that forced them to move from the island. The fishermen had to go ashore and start working in industries in nearby towns such as Skärhamn and Stenungssund. In 1975 there were only ten fishermen left. The former ice industry got converted into a smokery and the trawl bindery to a cannery that became the biggest employer on the island (Aili, 1978). An upgrade of sewage and roads also occurred during this period, and the piping required explosions in the solid rock. All leftover stone was put in the western bay, which created more land that got the name Stormvallen.

1975 - 2020

Åstols population has since the fishing crisis been increasingly replaced by summer residents which have affected the possibilities for year-round residents. In 2000, only 280 residents were remaining (Sjöholm, 2002). The school was closed in 2005 and the grocery shop has a hard time making a profit. During summertime, tourists come to enjoy the picturesque environment and take a bath in the crystal-clear water, but the island struggles to attract enough people rest of the year. Initiatives to make Åstol a lively year-round society have been launched, such as the restaurant. The unique environment of the island has now become a national interest in cultural preservation which means that the houses and the whole environment should be protected and must be preserved (Swedish National Heritage Board, 2018).



RECLAIM LAND

Figure 003. Before the entry of the modern era, Åstol's outline had a different look. This coastline changed when piping was installed and the residual rocks filled out the western bay that created Stormvallen.

2021

Åstol will not return to what it once was as the fishermen nowadays are replaced by commuters, and for some people, this has led to a sort of identity crisis (Sjöholm, 2002). The future development of Åstol is uncertain but holds great potential. In 2019 it was voted to be the fourth most attractive location to visit in Sweden during the vacation. According to the municipality, one of the biggest reasons why people move to Tjörn is because of its recreational qualities (Tjörn Municipality, 2020). The identity of being a fishing community will remain to be a big part of the legacy of the island, but the peculiar environment has qualities that go beyond this industry, in its extraordinary setting and character.

"What characterizes the whole island of Åstol is the light from the nearby sea and the whims of the weather that has dictated the lives of its residents through the history" - Tjörn Municipality

It stands clear that Åstol needs to be activated in order to sustain its culture, but the developments have to be done with its identity in mind. Society has always built its livelihood from its close connection to the sea in various ways. Nowadays the focus has shifted to more recreational purposes where the soothing and relaxing qualities in a unique and exotic remote setting attract people. Although, the short season is barely enough to sustain its societal main functions all year (Bohlin, 2020). Current initiatives strive to create a platform for the community service to endure where the post-office, ferry and supermarket are of certain interest. Tourism and part-time residents are important in these aspects and essential to include reaching positive synergies in-between and a financial basis for its service to sustain (L. Göthe, direct contact, Jan 22nd 2021).



ACTIVE FOR ONE SEASON

All plots, except Stormvallen, are occupied today and have been so for the last decades. Nevertheless, the densely built environment, Åstol is quiet and empty most of the year, coming alive every summer.

DEVELOPMENT FORWARD

Talking to Lena Göthe (direct contact, Jan 22nd 2021), responsible for some of the initiatives, she tells about the current strategies to approach this change. The question is rather about how to reach synergies and win-wins on a suitable scale to preserve the ambiance, cultural legacy and atmosphere without being over-commercialized as similar coastal communities have gone through over the last decades. The main points are though, to extend the active season and get a consistent flow of visitors who can stay for longer than daily visits (Göthe et al., 2020).

It is our belief that the setting and qualities of Åstol can be used to support the community to thrive in the future as well. Therefore, we propose a contemporary function connected to its spectacular setting by the sea; a recreational bath facility and accommodation to attract both visitors and residents all year. The facility would gain the residents, not only by the attraction of people supporting the economy to the businesses but also as an attractor for people to stay on a permanent basis. This would be a place where small-scale tourism, on the premises of Åstol, could intersect with residents' everyday life to experience the unique culture and nature with a strong connection to the identity of living by expanding the contact with its maritime elements and the sea. Its location makes it possible to create dramatic scenery that shows Åstols extremely exposed landscape that has dictated the life of residents throughout history.

The bath in connection with accommodation will support an economic basis for the restaurant, café, grocery store and ferry - finding those requested synergies. The contribution from a bath could create a program for a longer stay and further purpose for visits while at the same time giving values to citizens. Being open for locals makes Åstol more attractive to visit but also moving to permanently. The island is located in an area historically known for bathing which has vanished partly in recent years - waiting to be revived again.



STORMVALLEN TODAY

“In order to maintain the original character and soul of Åstol society, one must sustain and expand the contacts with maritime elements” - Åstols framtid; avveckling eller utveckling?

PART II

BATHS THROUGH THE CENTURIES

GUSTAFSBERG BATHS - 1890

Inspired by the early ideas of sea baths represented along the southern coastline in the UK and its believed medical advantages, Gustafsberg established its name as the first Swedish facility within this field in 1770 (Stackell, 1975). This concept was then spread along the western coastline in the country. As the industrial revolution went on, technologies developed that made it possible for Gustafsberg to offer bathtubs with comfortable heated saltwater.

The first hot bathhouse in Gustafsberg was presented as a proposal in 1814 by C. Chr. Gjørwell and introduced something new to the existing health resort with its absolute relation to the sea – in the sea. According to Stackell (1975), the design was inspired by the earlier baths in Doberan, Germany. Some opines that the building had a castle-like character with possible inspiration deriving from the tympanum.

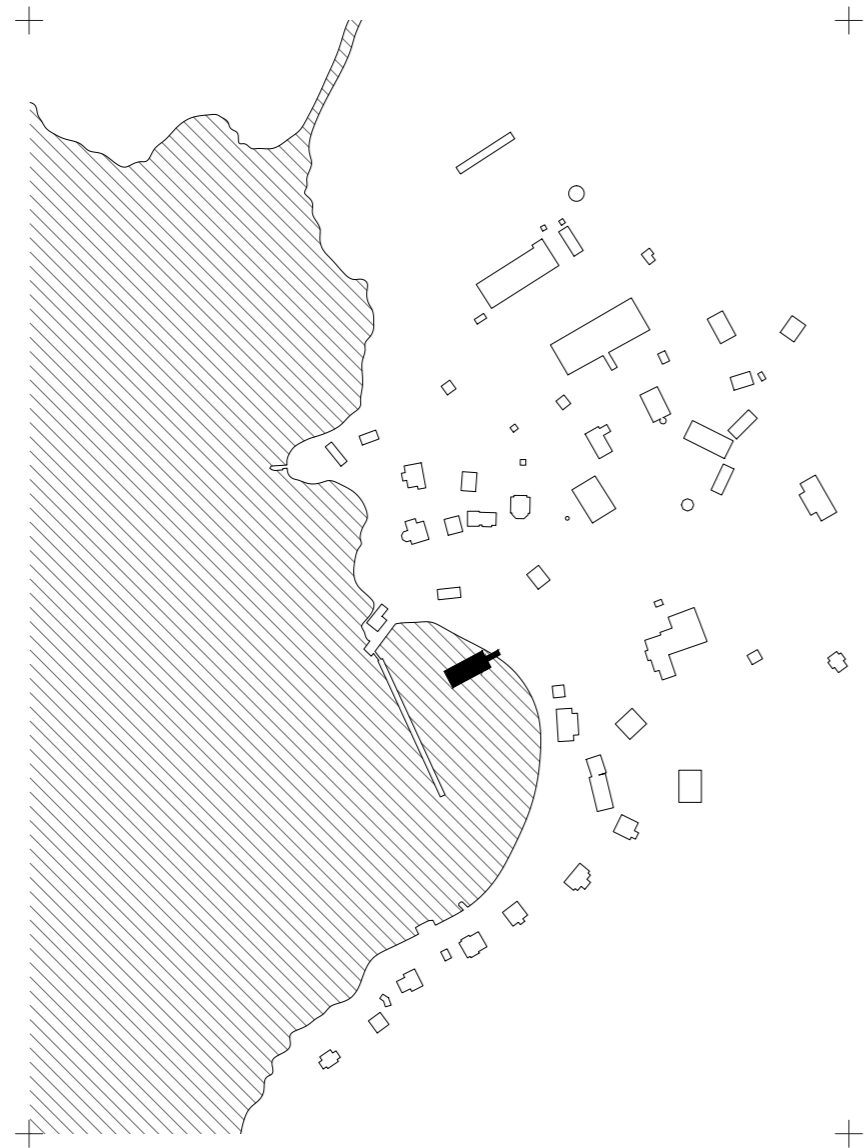
Six separated rooms with noticeable care for architectural quality, with the bathtub as the apparent focal point accompanied by a fireplace, were positioned along a central hallway and connected to a changing room. On account of its position in the water, the foundation elements were made out of stone with a timber construction above which was later concealed by panels to give the façade a richness in expression and aesthetics. Gables were especially important to signal representability as the entering faces (Stackell, 1975). The gable towards the sea had an exterior veranda added containing a stair into the sea as a continuation of the interior hallway.

At this time, baths played a significant role in improving health levels and provided medical treatments, with Gustafsberg as the pioneer center in Sweden within this field. Included in the stage of development for the hot bath was the specialized physician Fredrik Marin, whose report about the facility's medical positive opportunities were seen as important scientific studies (Stackell, 1975).



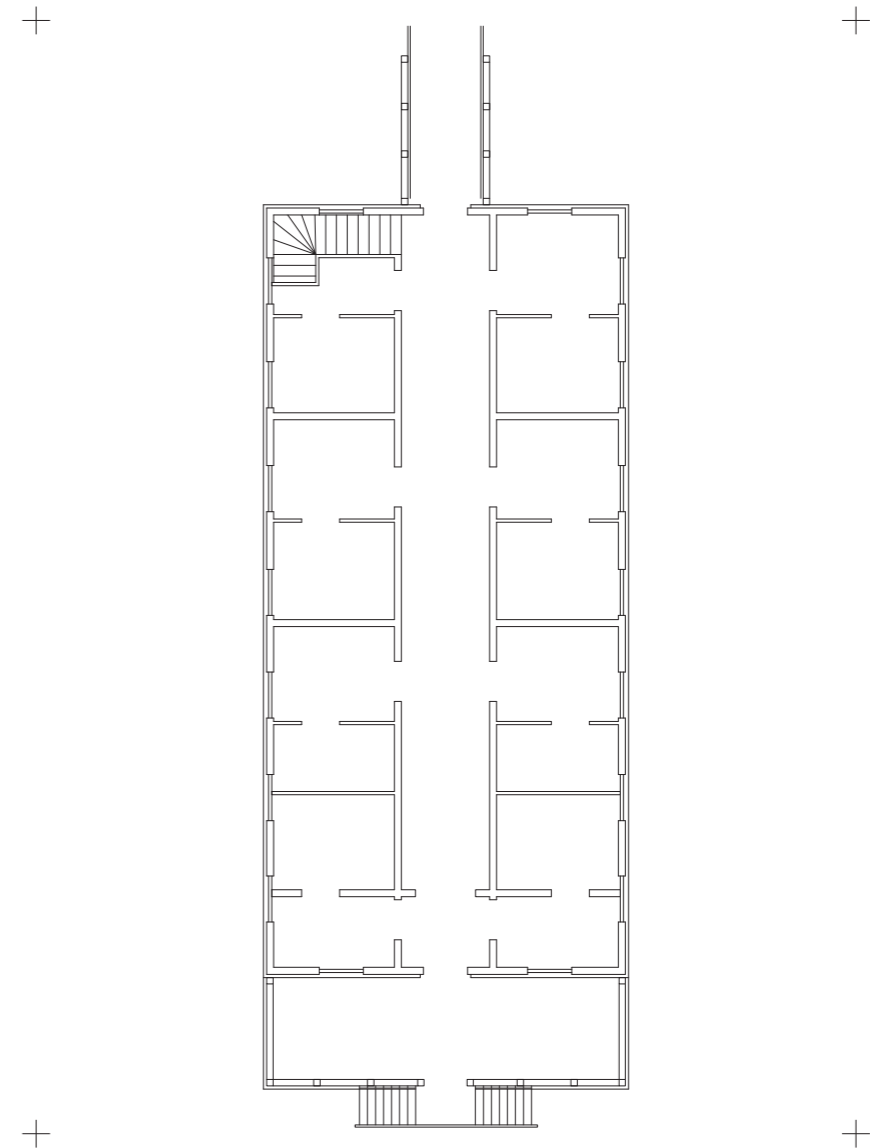
GUSTAFSBERGS HOT BATH HOUSE - APROX. 1890

Figure 004. Historical view from late 19th century when the original bath, as seen in the drawings, has expanded with new bathing facilities into an L-shape.



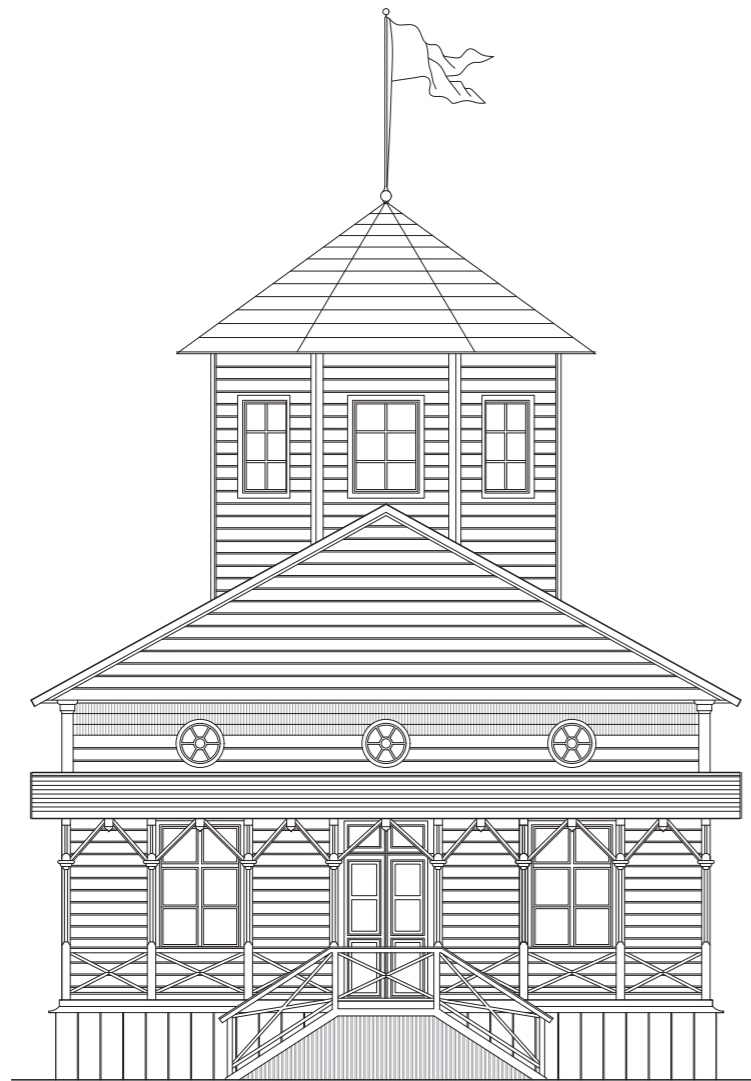
SITE PLAN - 1:5000

Original volume and position. The orthogonal plan of the bath is positioned in the sea with its gables alongside the shoreline and is reached by a footbridge.



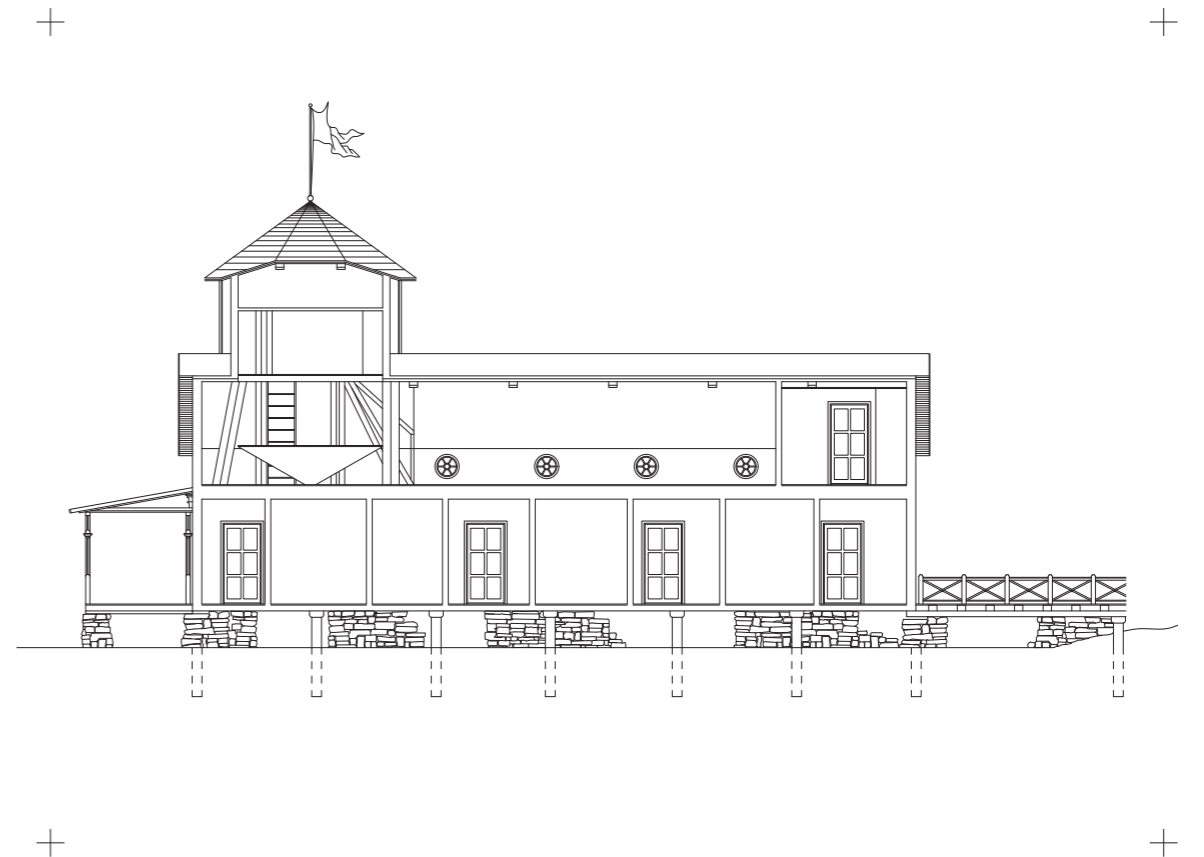
ENTRANCE PLAN - 1:200

A short footbridge led to the entrance on the gable and the central hallway to which the baths are connected along the facade. Technical installations were placed on the second floor.



ELEVATION - 1:100

Representational gable facade towards the ocean with a sundeck in the foreground and stairs leads into the sea. The symmetry from the plan is reflected in the facade.



SECTION - 1:200

Sectional drawing demonstrating the water tank positioned in the tower. Columns support the foundation together with the stone ground.

VARBERG BATHS - 1925

Varberg has been a recreational health resort since the 19th century. Designed by architect Allan Berglund, the hot bathhouse was completed and inaugurated by Governor Axel Mörner in 1925 and was highly modern for its time. Bath facilities were yet to a large extent about getting clean, but as bathtubs at home become a common feature, an interest in bathing as relaxation and recreation evolved (Lennartsson, 2017). Hence, the new public bathhouse contained both classic baths for washing and a recreational swimming pool.

Constructed in a clear national romantic style, the facility also contains many features of twenties classicism, which according to Lennartsson (2017) was a common building style for bathhouses in the 1920s.

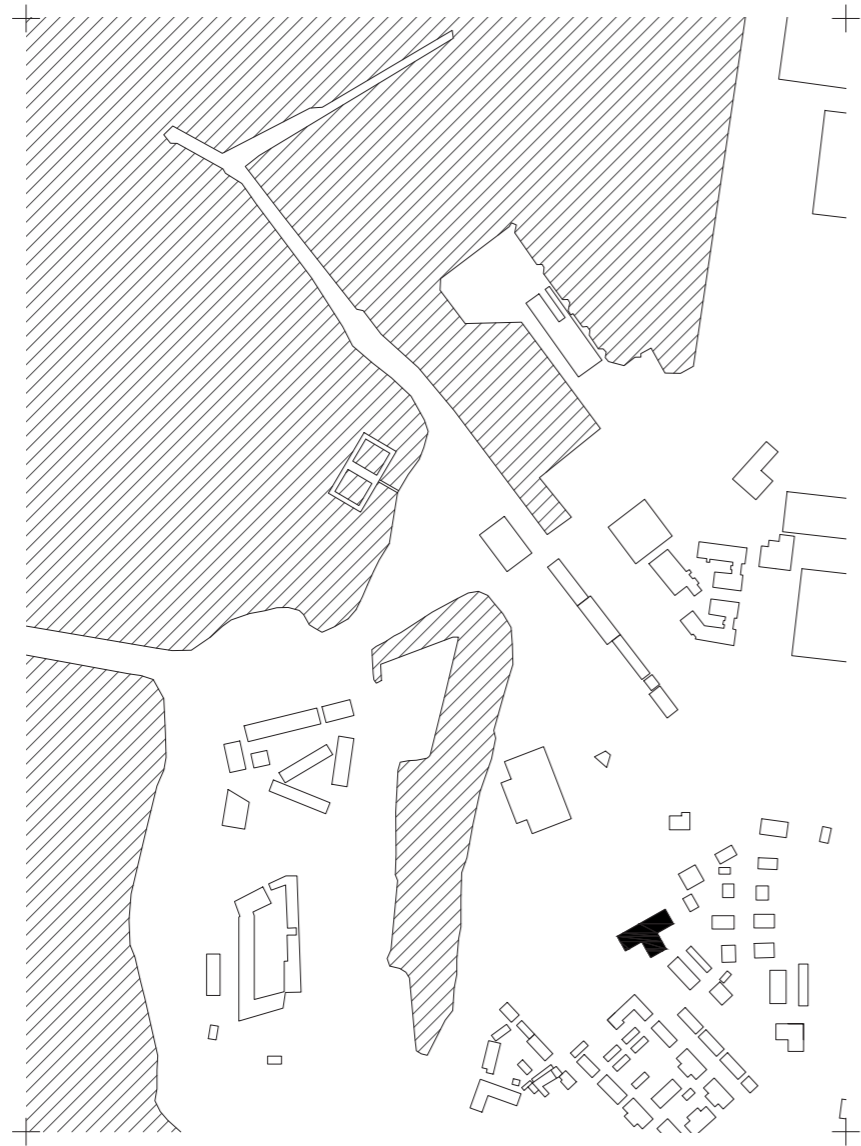
Since bathing still was largely about health benefits and wellbeing, the facility developed medical treatments and offered massages and seaweed baths. The swimming pool provided recreational bathing all year. With a length of 12.5 m, it had considerably large dimensions for its time and was the first of its kind with saltwater in Sweden. Another complete novelty was the position of changing cabins that traditionally had been placed around the pool edge, while in this case were placed as a separate function on the second floor.

By its proud posture and carefully crafted details, the architecture communicates a building of high status and dignity. Facades and plans are symmetrical with a clear accentuation on the middle axis. Emphasis is put on the main swimming pool with double ceiling height, daylight intake from three sides and generous skylights. The pool is surrounded by vaults and a pompous stair becomes the focal point when entering the main bath (Lennartsson, 2017).



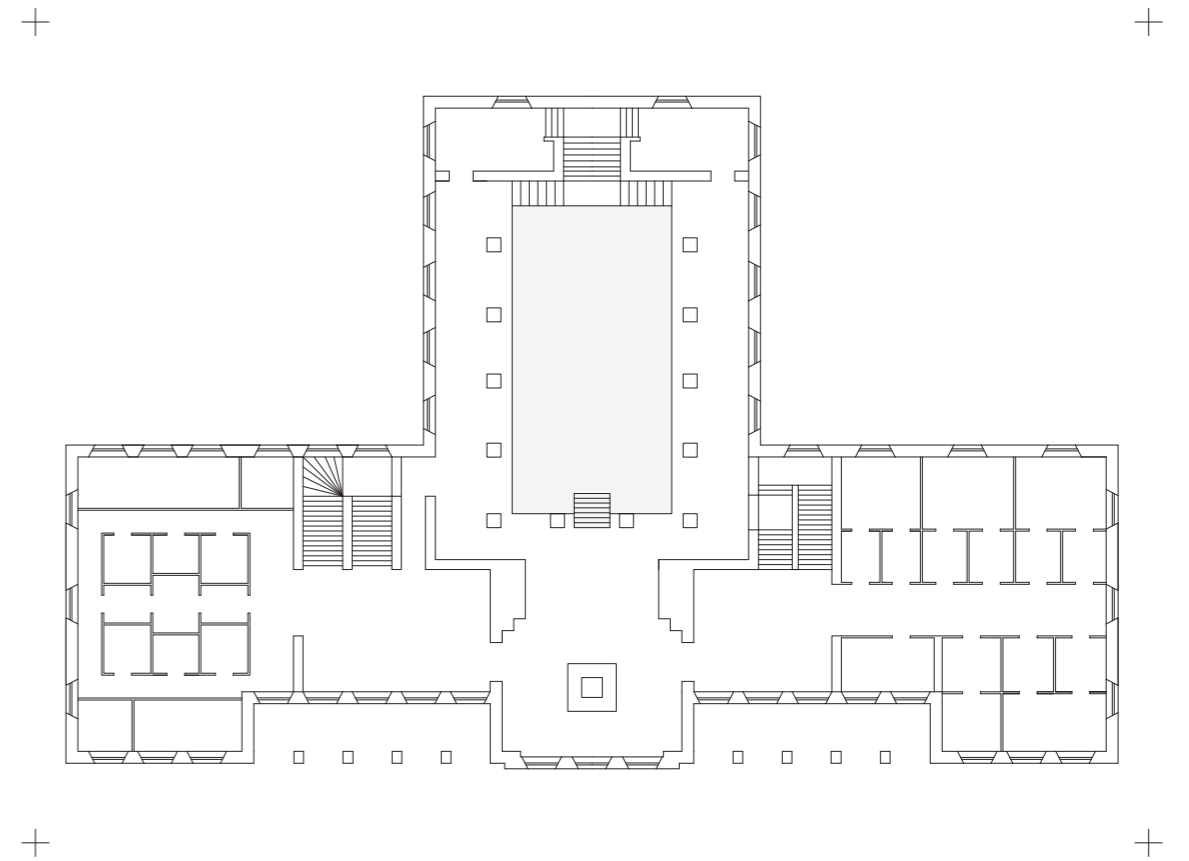
MAIN BATH INTERIOR - 1924

Figure 005. Double ceiling height with side-oriented columns was traditional for bathhouses these days. A clear symmetry is expressed both interior and exterior.



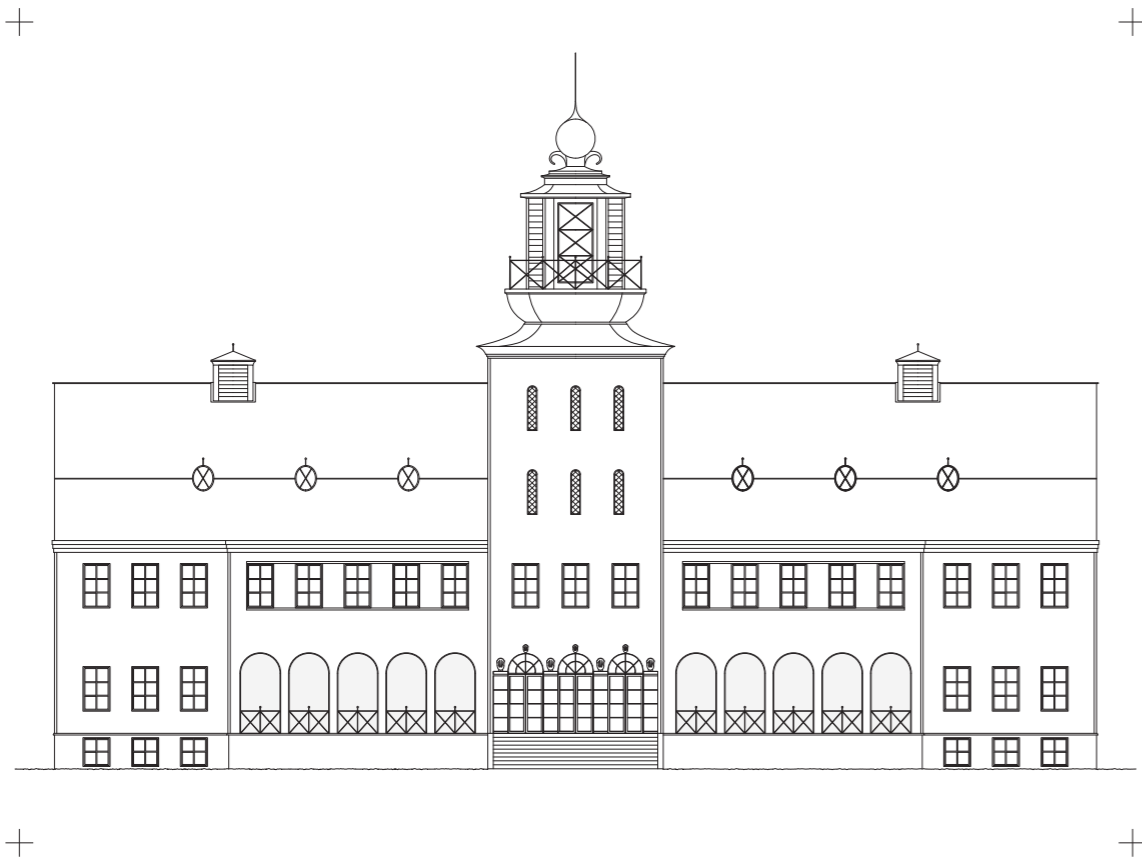
SITE PLAN - 1:5000

Varbergs hot bathhouse is positioned in an urban context withdrawn from the ocean. Its relation to the water can be studied in the site plan and compared to the cold bathhouse that is placed in the sea.



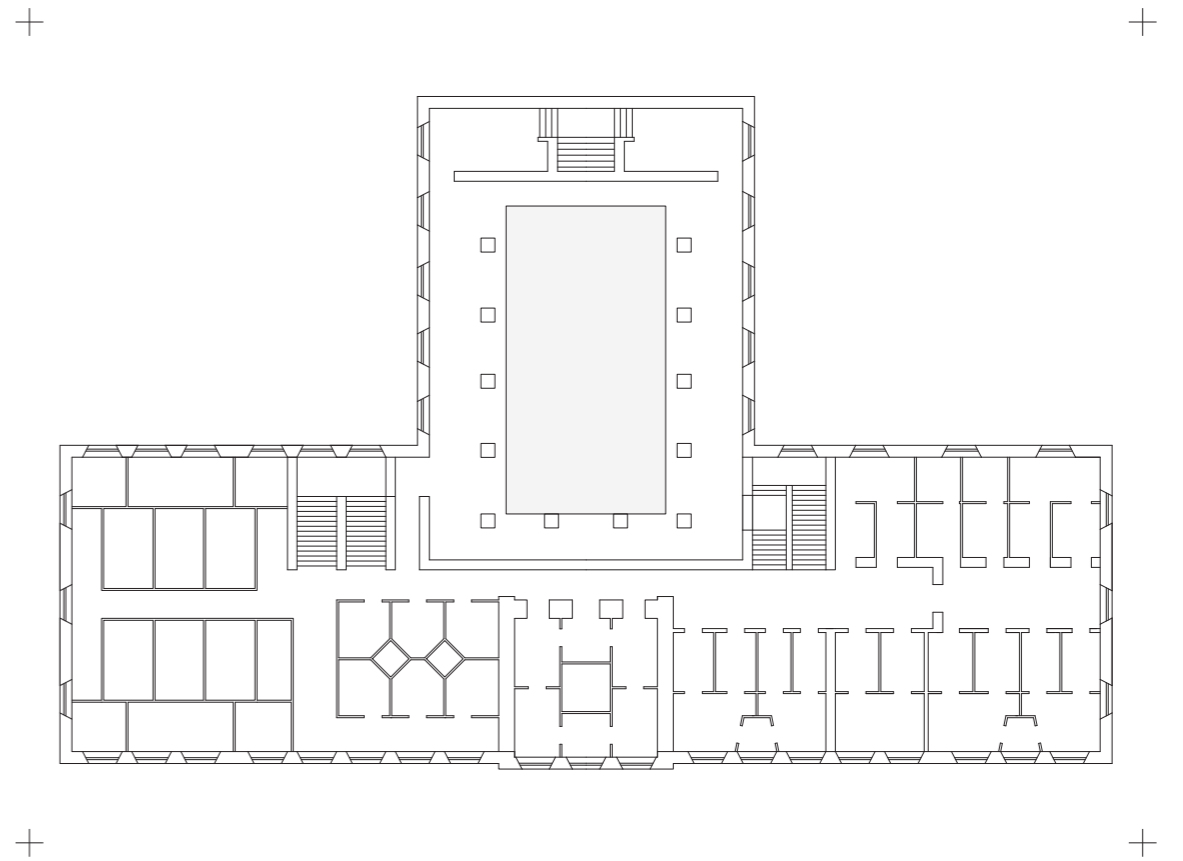
ENTRANCE PLAN - 1:200

A centrally placed entrance and foyer lead directly to the main bath. Dressing rooms are placed on the second floor and the spaces for massage, mud treatment and private bathtubs are located in the wings.



ELEVATION - 1:200

The bathhouse has a symmetrical facade with an accentuated middle axis that generates a readable hierarchy of the building where the centrally placed entrance is superior to the wings.



SECOND PLAN - 1:200

Spaces for cleaning and changing were positioned on the second floor in contrast to most of the contemporary baths. Private rooms for bathing in tubs are shown to the right.

STIFTET ÅKERSBERG ANDRUM - 2019

The bath culture and rituals have changed throughout the years. Our relationship to water is something in constant change, and the bath culture reflects upon the particular time by appearing in different shapes. In today's society with an increase in mental illness and deceptive beauty ideals, baths are alternative places for well-being (Rundgren, 2019).

Andrum is a contemporary bath built in 2019 by Lunds Domkyrka with the ambition to be an including function that welcomes a wider range of people. According to Rundgren (2019), the spatial concept derives from the journey between enriching spaces and experiences, in order to open people's minds and consciousness. Various antonyms such as open/closed, light/dark, wet/dry have been integrated into the sequence of spaces, creating a framework for a bath with a spiritual focus. Religious elements traditionally found in churches are subtly included in the structure, such as rows of columns or a representative main space with a skylight from a ceiling window (Rundgren, 2019).

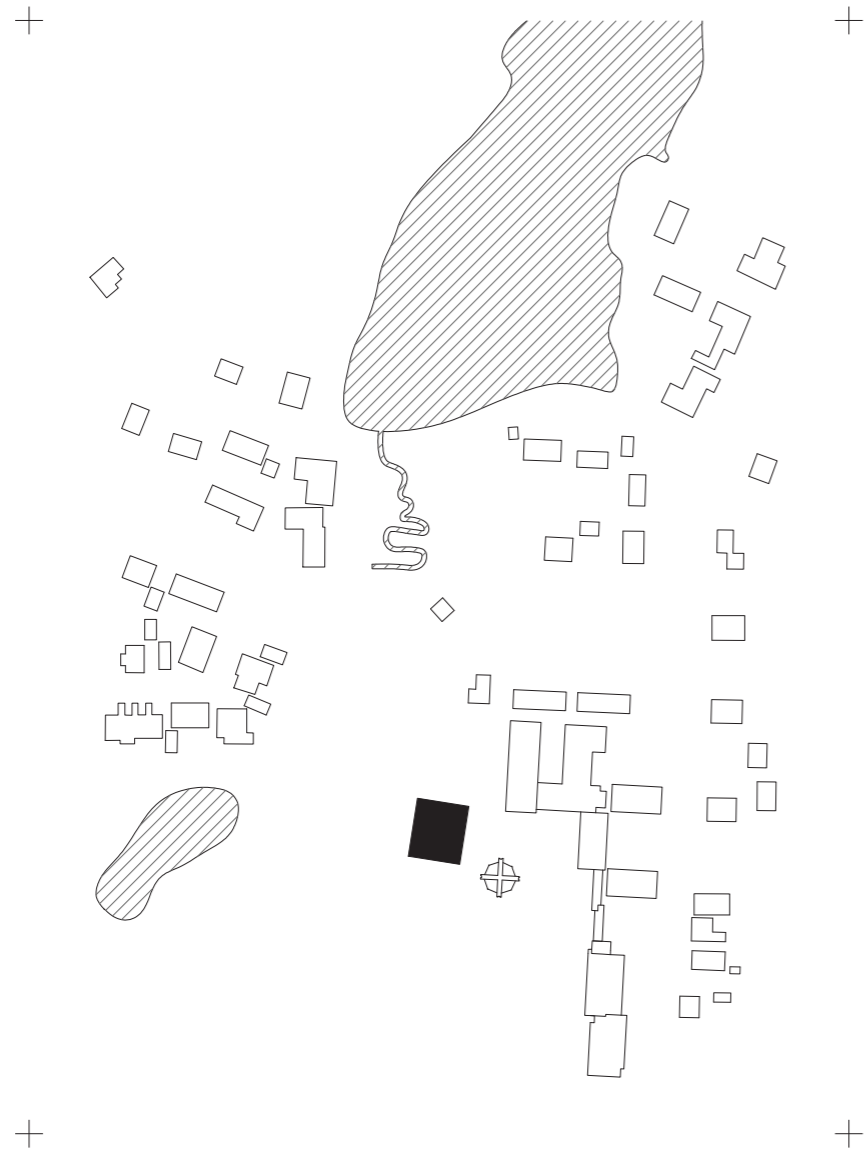
By varying open spaces and sightlines of greater distance, with smaller intimate spaces, contrasting elements are established to enhance the overall experience of the sequence. Positioned in a slope, the layout is divided into two sections where the building has a single level towards the neighbouring buildings holding the entrance and café, and a double height towards the surroundings where the bath is located. Generous windows in the baths connect the interior with the exterior nature that provides relaxing views from both baths and relaxing areas.

Halländsk gneiss stone and wood are the most conspicuous materials used, treated to different refinements giving a palette of textures, tactility, and colour tones to the interior. Placement of each material and its level of refining is used depending on its tactile qualities in connection to the function (Rundgren, 2019).



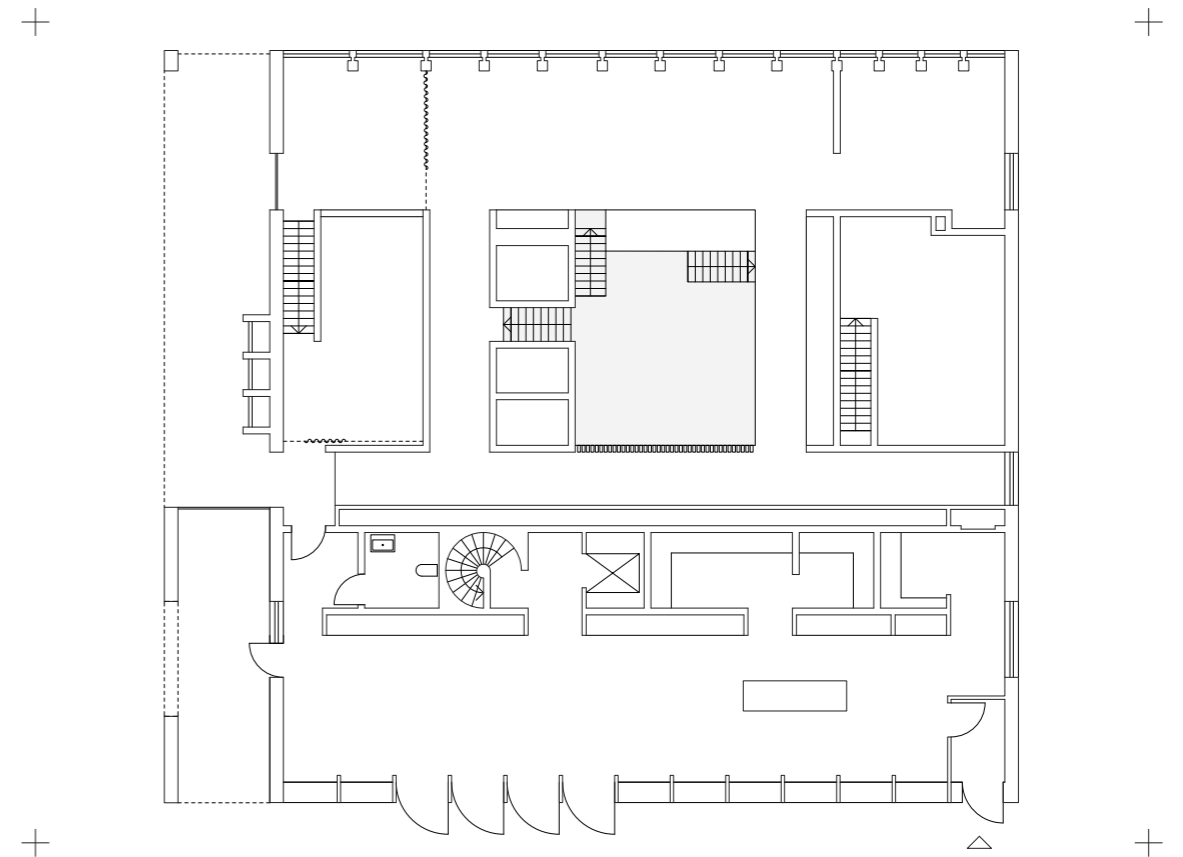
MAIN BATH INTERIOR - 2019

Figure 006. Halländsk gneiss is applied and interacted with during the visit through different parts of our body and senses, by using diverse levels of refinements and temperatures.



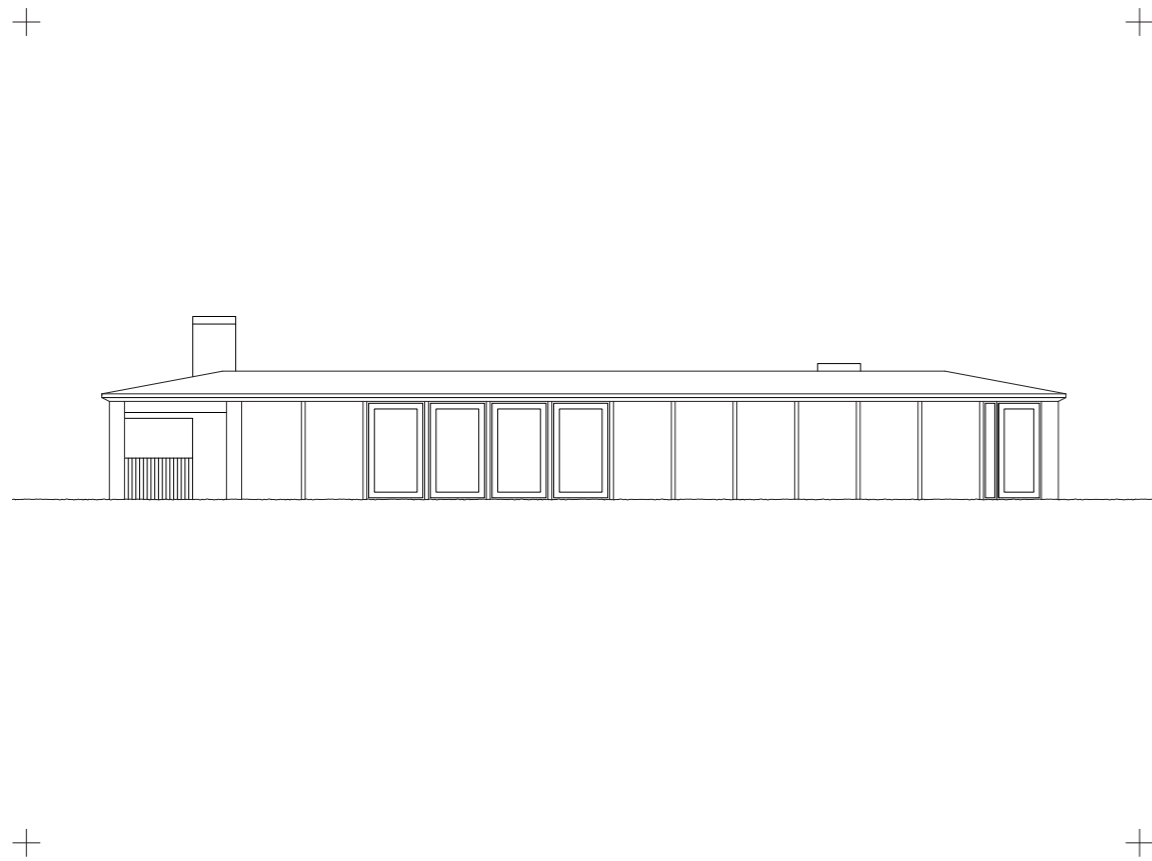
SITE PLAN - 1:4000

Andrum is a part of a larger complex called Stiftelsegården Åkersberg operated by the national church of Sweden.



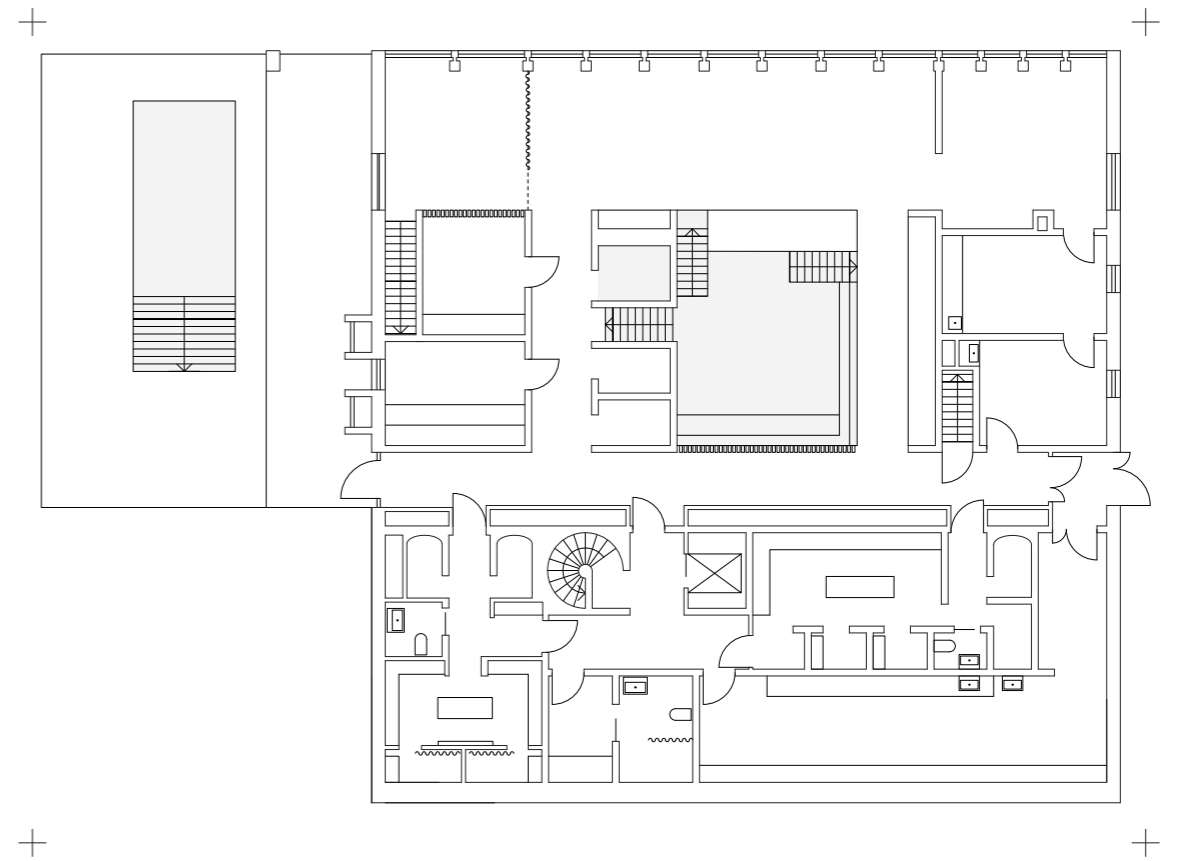
ENTRANCE PLAN - 1:200

The entrance is a bright and open space containing a simple and informal reception together with a café and lounge area. Storage, kitchen and communication are placed in a dark core.



ELEVATION - 1:200

With a facade partly structured to a grid, the building approaches the repetitive aesthetic style of many historical baths. Symmetrical aspects are less apparent.



BASEMENT PLAN - 1:200

The bath is located one level down from the entrance. Visitors go through a sequence of a light entrance, through a dark area with dressing rooms that further lead to the varying spaces of the main bath.

SUMMARY

GUSTAFSBERG

Constructed in 1815, Gustafsbergs bath was the first bathing facility of its kind on the Swedish west coast. At this time, bathing was principally used for hygienic and medical purposes, considered to have medical advantages and used as a cure. Bathing in hot water was carried out in private rooms with a close connection to a dip in the sea. Positioned in the water, the building has a foundation of stone with a timber construction above. The layout is a simple orthogonal rectangle with a double-sided corridor where bathrooms are placed on each side. Views to the sea are provided in both the corridor and in baths.

VARBERG

When Varberg bathhouse was built in 1925, bathing was less about merely getting clean and more about medical benefits, relaxation and leisure. Introducing a swimming pool with salt water as a complement to the many small and private bathrooms, bathing now became a social and recreational activity as well as a hygienic matter. The building is orthogonal and symmetrical in its volume. An accentuated middle axis is expressed both in plan and in facades with a double-sided corridor layout and a centrally placed entrance. Emphasis is put on a high level of detailing and powerful spatial experience when entering the foyer and main pool.

ANDRUM

Andrum was built in 2019 and is a contemporary bath with a focus on mental relaxation and recreation. It uses contrasts in material, light, temperatures and spatial volumes to enhance the experience and highlight the ritual of bathing. Its layout is divided into two sections, where the back is used for supportive functions and reception (divided into two floors), while the spa gets double ceiling height and is undisturbed in the front with generous views nature. Consisting of wood, concrete and stone, the placement and level of refinement of the material are intended to contribute to a tactile and multisensory experience.

DESIGN GUIDELINES

GUSTAFSBERG

Orthogonal volume
Sightlines through corridor
Double-sided corridor
Structure placed in the water out of non-organic material
Wooden structure as torso
Direct connection between inside and outside

VARBERG

Symmetrical plans
Repetitive and symmetrical facades
Views of nature or the sea are provided from some baths
Spatial focus on main bath and foyer
Corridors centered in plan
Bathing as both private and social activity
Care for details
Dignity in the building structure
Main pool with double ceiling height and skylight

ANDRUM

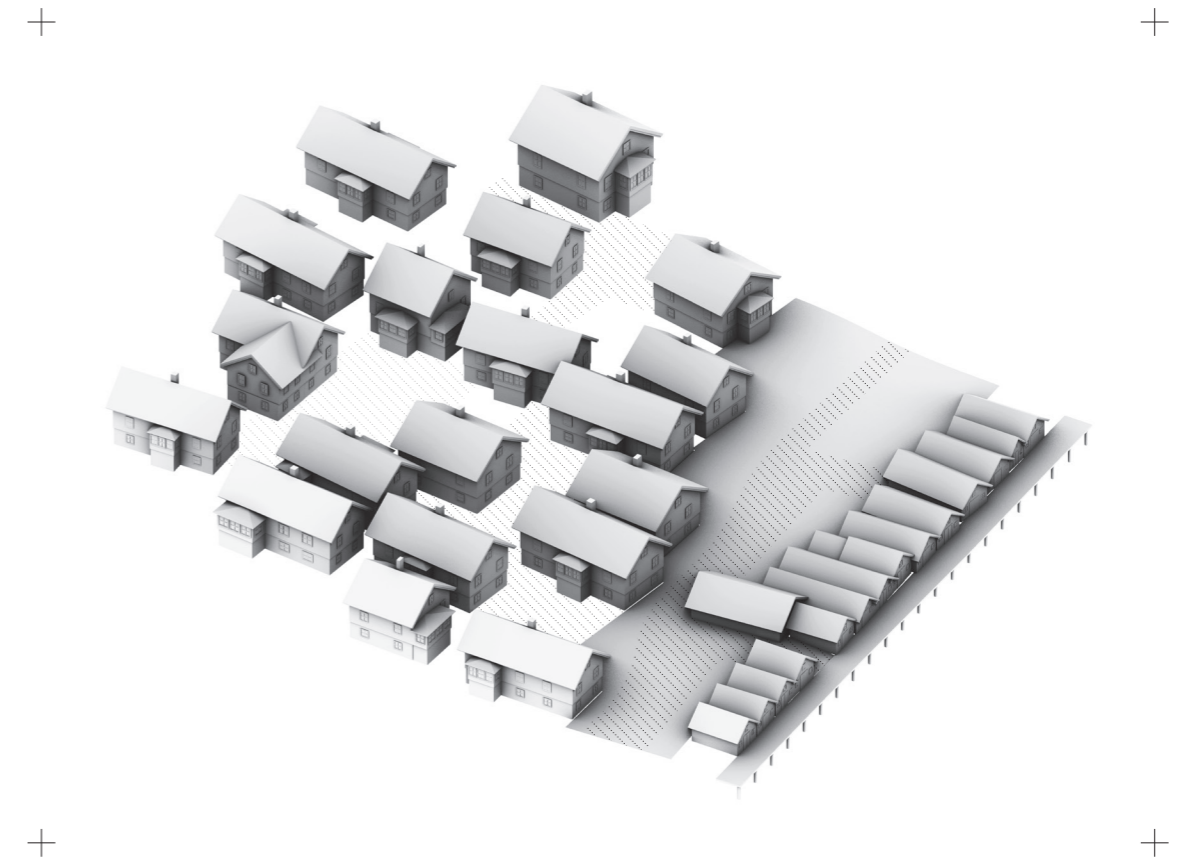
A varying sequence of spaces
The centrally placed corridor opens up to relax area
Details integrated into the structure
A close relation between inside and outside
Relax area is spacious, open and full of natural light
Structure of concrete, wood and stone

PART III

LOCAL CHARACTERISTICS

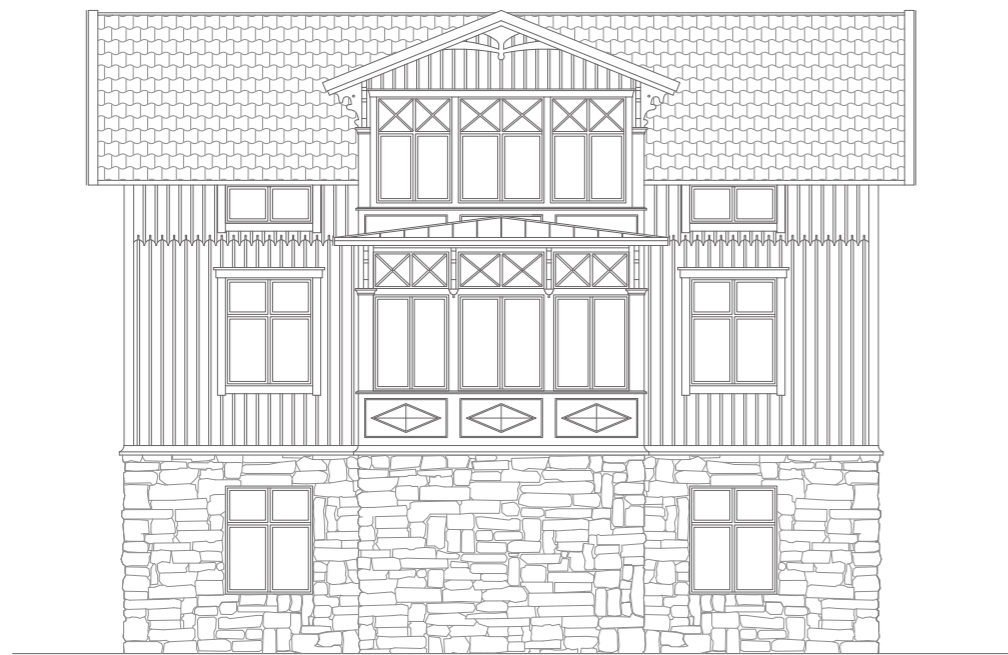
VOLUME

The fact that Åstol barely contains any large-scale buildings makes urban guidelines even more important to understand before introducing an essentially extensive volume. Despite that Åstol is home to just below 200 people all year today, the limited space of the island accommodates urban characteristics, similar to other early fishing communities along the west-coast landscape. Because of the building volumes position in relation to each other, where one house with a garden benefits from the shelter of the neighbour, a micro-climate is achieved. This makes it possible to spend time outside even on the stormiest days and birds chirp in trees despite its exposed location on a visit in mid-January. Most of the public spaces are protected from the climate, and the streets are made as compact as possible which increases the intimacy between houses. Extracting the typologies reveals that the building traditions mainly consists of two components; the dwelling and the boathouse. The boathouse is a downscaled version of the larger villa as a simple and robust shape that leaves room for independent exterior ornament and details. Boathouses are placed in a row along the seafront allowing two flows of movement around; in front or behind. A maximum two-level rule is valid for the villas and one level for boathouses. This creates a certain urban scale, ensuring that as many as possible have a glimpse of the sea from their dwelling. For constructional purposes, orthogonal plans are commonly used in which variety in between them is approached by the terrain, streets and small rotations. Traditional fences that mark plot boundaries are seldom and the scenery can therefore be experienced by an unrestricted movement. Instead, the relation is depending on a mutual agreement between the habitants respecting each other's privacy (Sjöholm, 2002). Nearly all buildings put their gable facades in an east-west direction. Roofs are consistently pitched with occasionally spotted dormers included. Steep angles of the roofs lower the perceived scale of the buildings and have a considerable impact on the urban character (Malm, 2017).



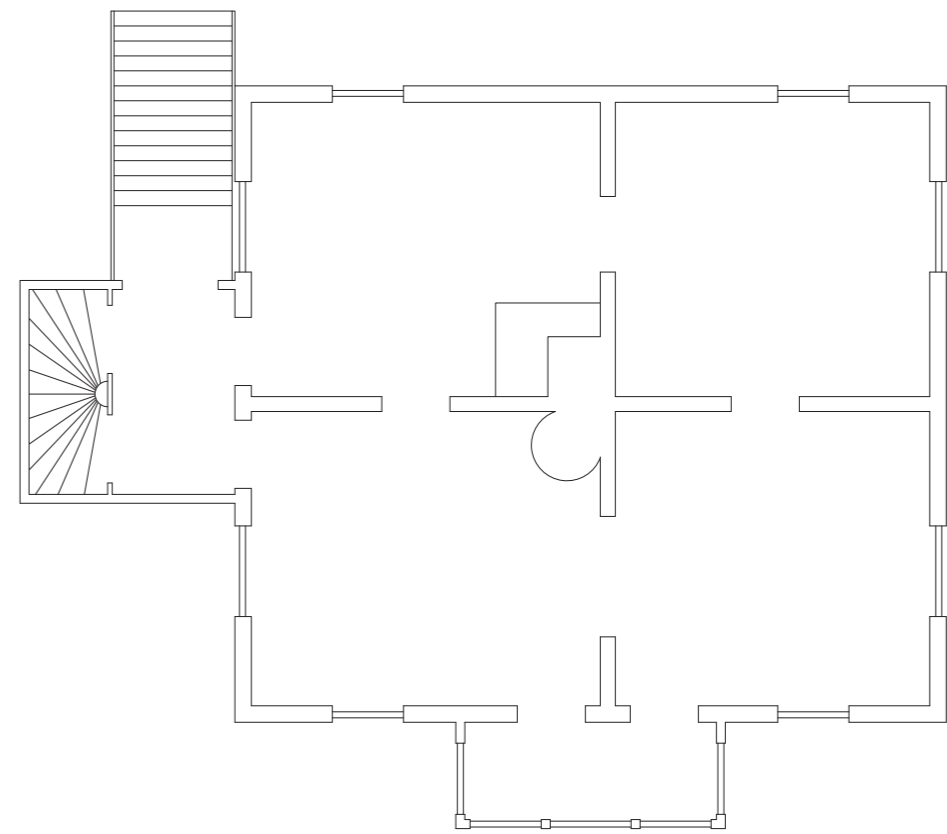
COMMON ELEMENTS

The urban environment at Åstol exists of a few typologies which constitute an overall uniqueness in how they are put together. Orthogonal plans, 7 times 9 meters with roof angles of 30 degrees appear frequently.



THE DOUBLE HOUSE ELEVATION - 1:100

Approximate representation of the residential typology *double house*. The illustration displays a proportional distribution of a traditional facade and its characteristic linear and repetitive arrangement.



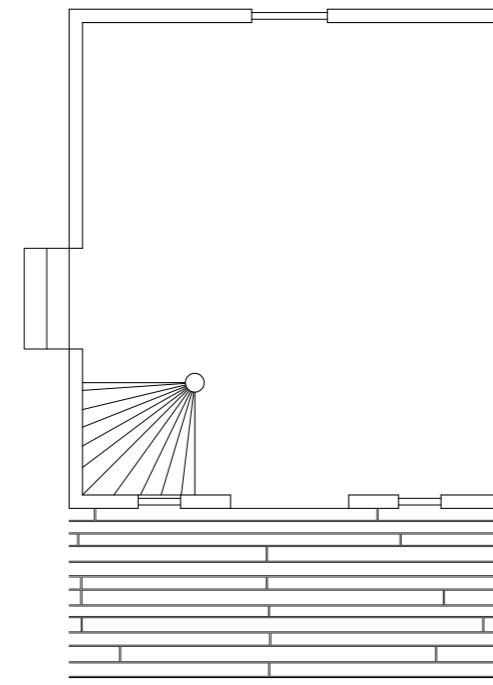
THE DOUBLE HOUSE PLAN - 1:100

The original plan forms a cross that contains four equally sized rooms. Verandas were later added as an element of luxury, and as the second floor expanded a staircase was often applied to the gable.



THE BOATHOUSE ELEVATION - 1:100

Deriving from basic shapes, the boathouse was required to be fast and cheap to construct to protect the gears used for fishing. Small windows connect the interior with the ocean.

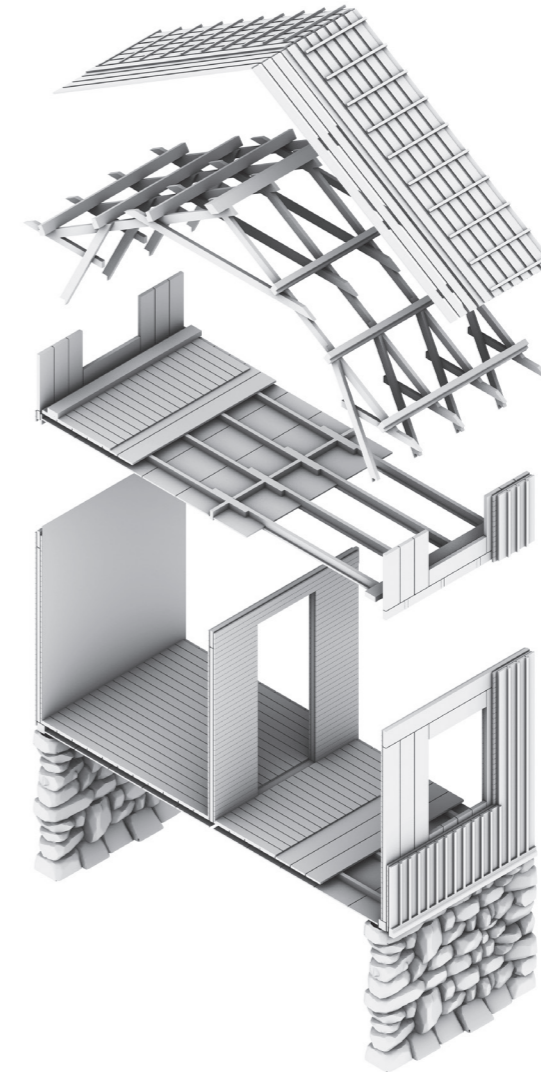


THE BOATHOUSE PLAN - 1:100

With an open plan, the hut principally operated as storage for fishing gears and workshop for minor renovations. Some units, depending on purpose, could also have a second floor with space for storage.

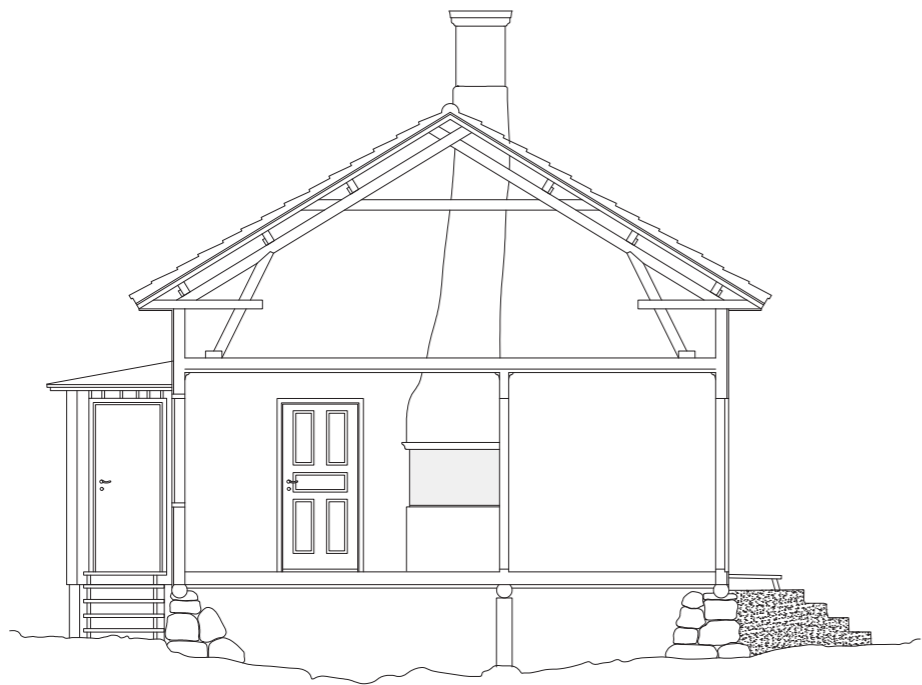
BUILDING TECHNIQUES

The process to raise a structure at Ástol was to a large extent carried out in identical ways, where the inorganic foundation was first prepared and then completed by a prefabricated wooden structure. Since wood was a scarce resource on the island, it was historically delivered by boat from a specific farmer on the mainland. Inspiration was retrieved from the neighbours rather than from global trends, whereas each community developed its typology over centuries, generating an identity and strengthening the sense of fellowship. Common values expressed themselves in buildings as a whole, with space for individual solutions in details and ornaments (Werne & Bjur, 1982). Foundations were built by inorganic material such as concrete or stone, raising a half to one level depending on prevailing terrain. Small windows in the inorganic base created a chilled temperature and the thermal qualities were used for several purposes. In the summer, it was well suited for summer residency while functioning as a workshop and storage space during the winter (Werne & Östnäs, 1983). The most common *double house* got a plan with four rooms with the same dimensions, one central load-bearing wall and exterior walls built out of different timber techniques. Building with wood had advantages in flexibility since it was easily expanded by adding some layers when going from one to two floors. This simple structure affected the expression of the volume with the pure, simple shapes with its repetitive window placement (Tjörns Kommun, 2017). The roof belongs to the most problematic parts of the construction, with difficulties to resist the local climate causing harm to the structure. It was built by trusses creating space to inhabit, covered with wooden panels with a different kind of exposed material where the most common was bricks or corrugated eternit boards. Later on, roofs of metal sheets were commonly used since it was considered as a resistant product. The climate demands the highest quality for the building materials to last and the traditional wood has been proved to sustain much longer spans than most of the modern, fast grown timber vulnerable and damaged by the climate (Werne & Östnäs, 1983).



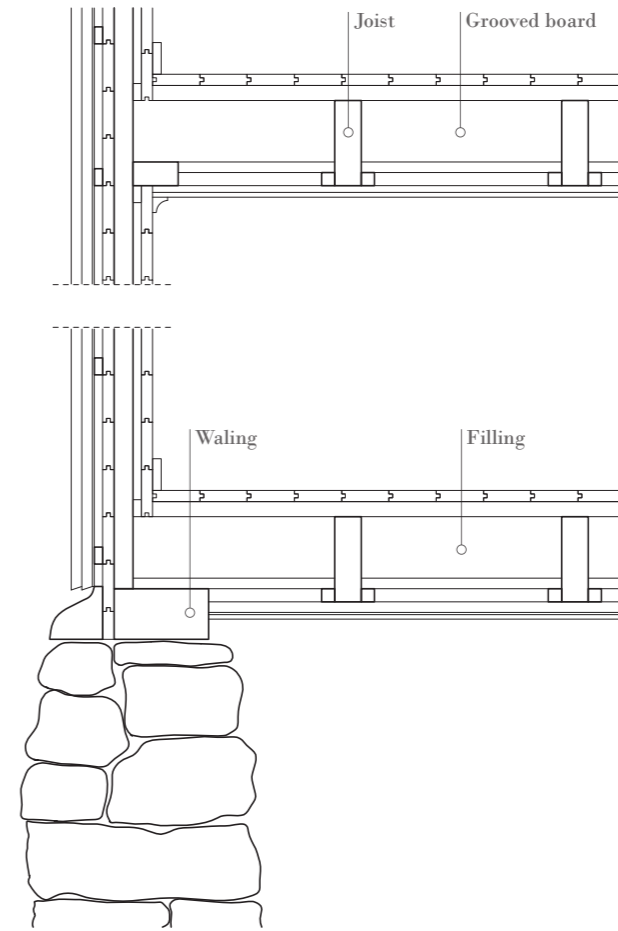
ROUGH TO REFINED

Exterior example of a typical construction, the roof could in some cases be lifted creating a full two-level *double house*. Notice the presence of the characteristic distribution of the structure.



STRUCTURE OF THE DOUBLE HOUSE - 1:100

Traditional building technique of the *double house*. Typically, the construction applies to both the *double house* and boathouse typology.

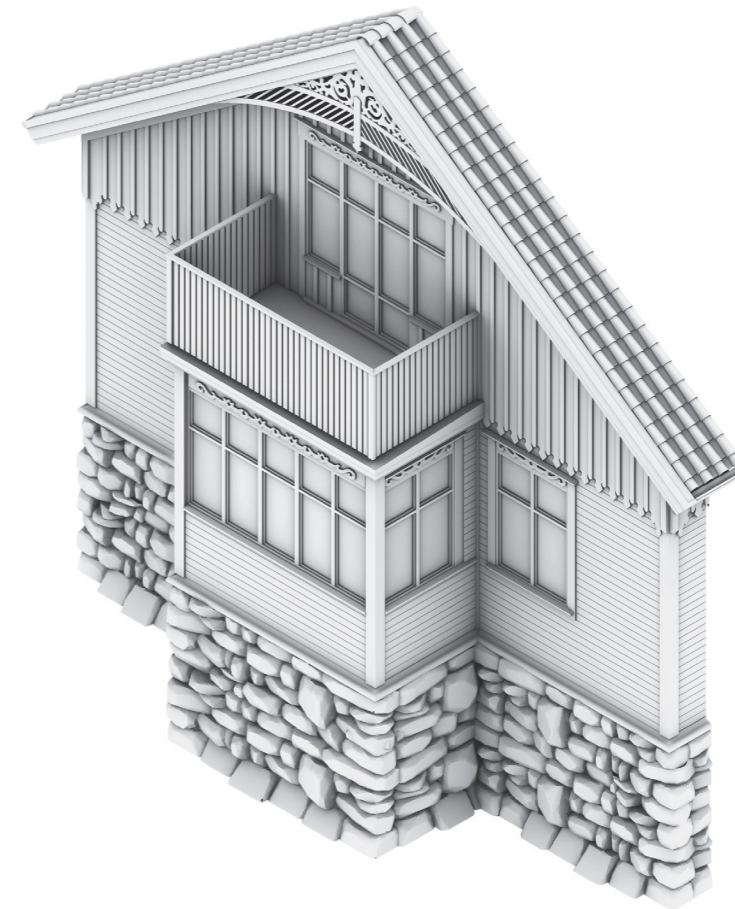


WOOD ON WOOD DETAIL - 1:20

An earlier version of the CLT structure was used historically where planks were added in layers in a cross-pattern to reach a firm structure to distance the ground. The flooring was built out of wooden joists.

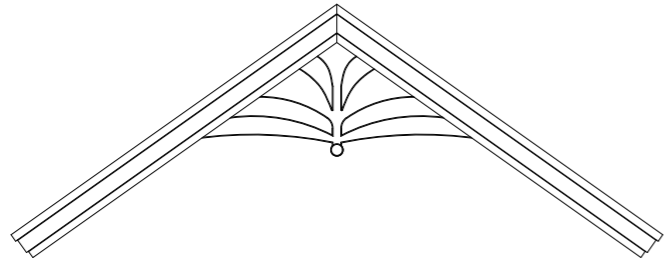
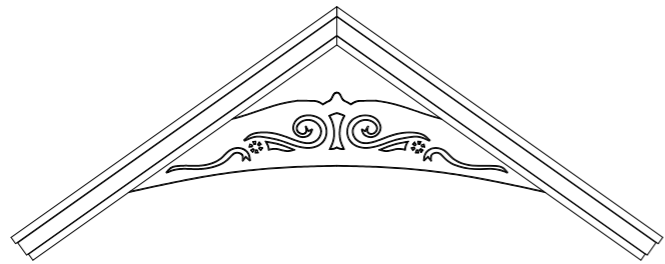
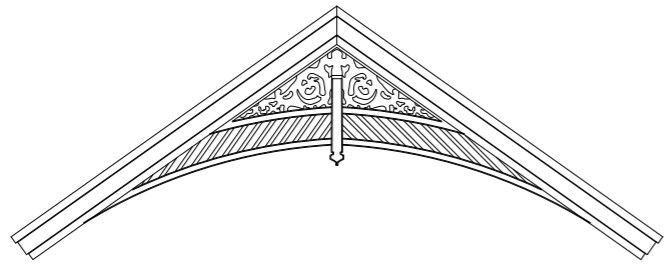
DETAILS

Åstol's residential buildings from the late 19th and early 20th centuries possess richness in decoration and details. In traditional fishing communities such as Åstol, the ornamentation was not assessed as beautiful or nice in itself, but would together with all building components create a composite whole that shows that the house was properly and neatly built (Werne & Östnäs, 1983). Around the turn of the century, it was customary for people to put an enormous amount of care, reflection and work into their houses. The architecture is characterized in its entirety by harmonious variations of similar basic forms. Buildings do not differ much in size, volume or window placement, but in their details such as decorations around windows, bars, porches or gables that differentiate the house. Details around windows and eaves, leaf-sawn details in panels and verandas and gable motifs characterize many of the residences. However, many houses were rebuilt in the '70s when the prevailing ideal of a maintenance-free house consequence that large amounts of the details were distorted. Asbestos cement tiles, metal roofs and windows without mullions were preferable and replaced the traditional houses with wood panelling and expressed carpentry joy. In the early 1970s, less than a tenth of the houses had the exterior wood panels left. Putting asbestos cement on the houses was not primarily linked to financial incentives on Åstol, but a change of ideas and values (Werne & Östnäs, 1983). The tiles became the symbol of development and success and a distancing from the old, decorated houses. Today many choose to restore the houses to their original condition. However, Werne and Östnäs (1983) point out that the decoration of the older wooden houses is often romanticized and seen from a purely aesthetic expression, while its deep cultural meaning is overlooked. It is easy to only refer to the romantic ornamented dwellings on Åstol, many houses are also reduced to minimal maintenance. Based on this, one can also argue that what is typical for Bohuslän societies is that there are remnants and deposits from different times that are interwoven and cemented into a whole.



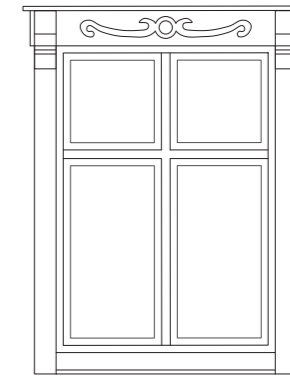
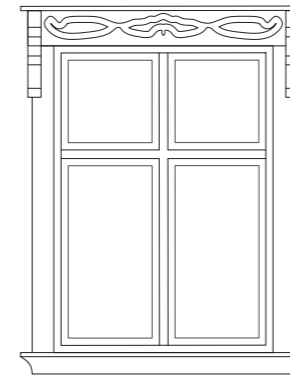
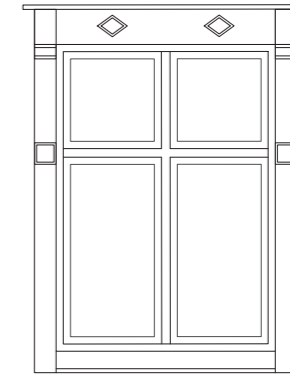
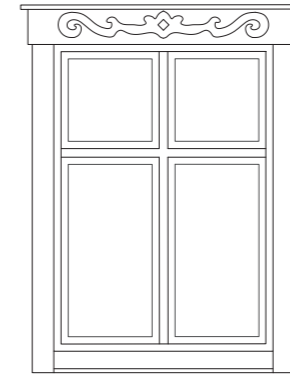
ORNAMENTED GABLE

A typical villa from the 19th century. The building stock on Åstol does not vary much in volume, window placement or colour but is differentiated by ornamentation on gables, windows, verandas and panels.



GABLES

Ornamented gables are a frequent feature at Åstol. They span from carefully cut nature-inspired details made with a jigsaw to more simple motives such as stripes or ribs in various patterns.



WINDOW FRAMES

Windows are often divided into four panes divided by mullions. The frames around are commonly decorated with jigsaw cut details to give the buildings a pleasant aesthetic and signal dignity.

SUMMARY

VOLUMES

The buildings are placed in a dense manner, slightly shifted from each other to create microclimates sheltered from the wind. Most buildings put their gable facades in an east-west direction. Streets are narrow and winds between the densely built houses, occasionally giving glimpses of the landscape and sea. The two dominating typologies are villas and boathouses, where the boathouses are placed in direct contact to the seafront at one level, and the villas behind in two levels climbing up on the cliffs. Buildings tend to be orthogonal structures with a base of stone and/or concrete, a light wooden structure above and a saddle roof. Sometimes a veranda is attached to the original building.

BUILDING TECHNIQUES

Resource scarcity led to the optimization of materials. Foundations are built out of rough stone or concrete, while the main volume is a structure made out of wood. The *double house* layout provided four rooms per storage in similar sizes. Resources could not be wasted and buildings required to be flexible in order to suddenly shrink or grow in size. Its simple structures are expressed with pure orthogonal shapes with repetitive window placements. Harsh climate demanded carefully thought through constructions and high quality of resources to sustain over time.

DETAILS

Since the architecture is characterized in its entirety by harmonious variations of the same basic forms, details and ornamentations are used to distinguish buildings from each other. Ornamentations are not merely an aesthetic matter that should be beautiful in itself but is culturally used to build a harmonious whole. Windows, gables, panels and verandas are often carefully decorated with leaf-sawn details out of wood.

DESIGN GUIDELINES

The studies of Åstol is important since it creates the foundation to understand the local traditions of the built environment. Analyzing and concluding about the current buildings and their character creates guidelines to propose a building that relates to the existing structure.

VOLUMES

Movement occurs close to facades
Buildings allow movement around them
A microclimate is created behind structures
One-leveled volumes stretch along the seafront
Views of nature and sea are provided in visual gaps between volumes
Physical barriers that divide the landscape is avoided
Orthogonal structures

BUILDING TECHNIQUES

Optimized use of materials
The robust and distinct base of concrete/stone
The main structure (torso) of wood
Pitched roof in east/west direction
Repetitive facade and window principle

DETAILS

Emphasis on carefully crafted details
Integrated into the expression to form a harmonic totality
Ornamentation is used to distinguish buildings (character)

PART IV

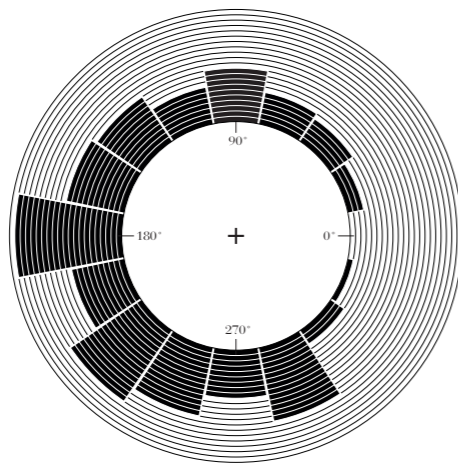
SITE

COMMUNITY

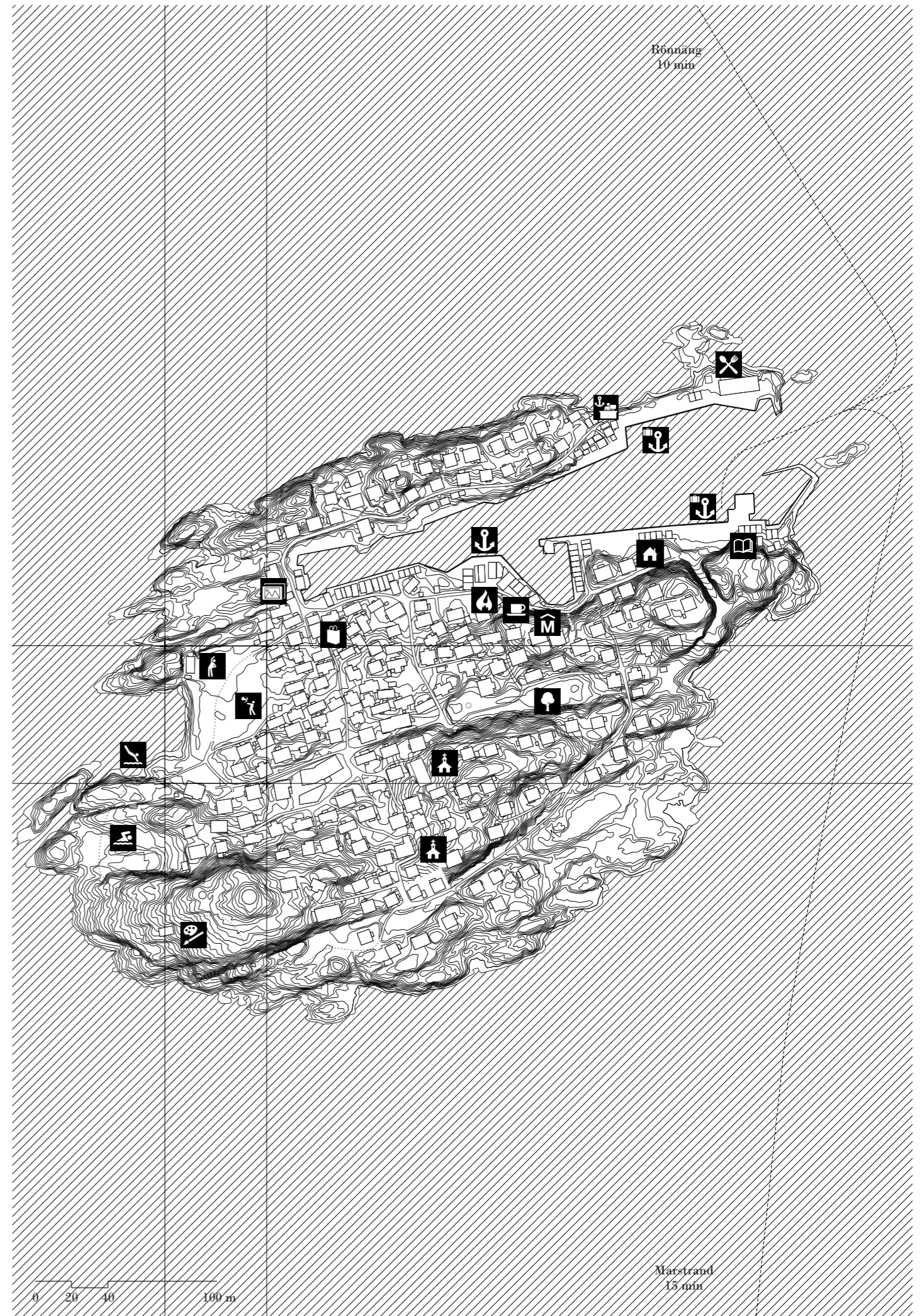
Åstol measures 600 x 350 meters which makes everything in close proximity. This makes it a car-free environment where walking is by far the easiest way to get around. Motorized vehicles are mostly used to transport heavier loads for construction or delivering goods. Bicycles are used in a limited way since the varying terrain and winding network of streets. Despite its small size, Åstol provides services and activities in a dense but small-scale manner. The island offers services such as a grocery shop, a fire station, a bed & breakfast with four rooms and two guest harbours. Outdoor activities range from bathing to volleyball, boule, gym and a park with a playground. Recreational walking tracks with viewpoints visually connected to iconic symbols for Bohuslän such as Carlsten's Fortress and Pater Noster lighthouse is popular. Besides the outdoor activities, the island accommodates a café, two churches, a smokery with a restaurant, two galleries, a museum of culture and a library that is open on selected seasons or very limited hours. During the low season, it is often necessary that you have to call a private number to make an appointment at some of these activities.

Åstol

Transport	  
Service	        
Activities	       



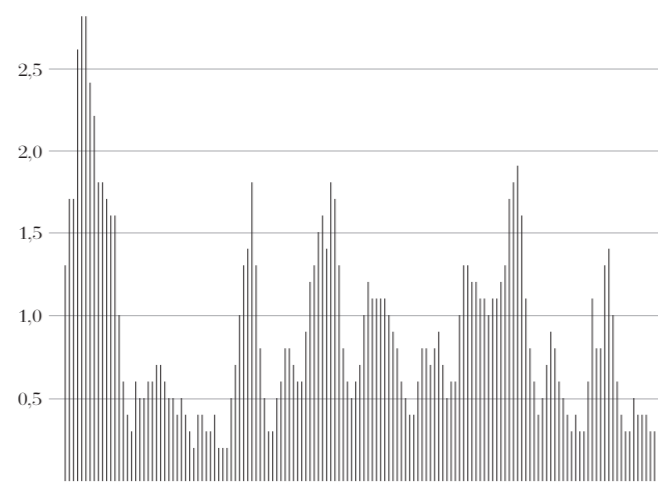
Wind direction, Vinga meteorological station [°]



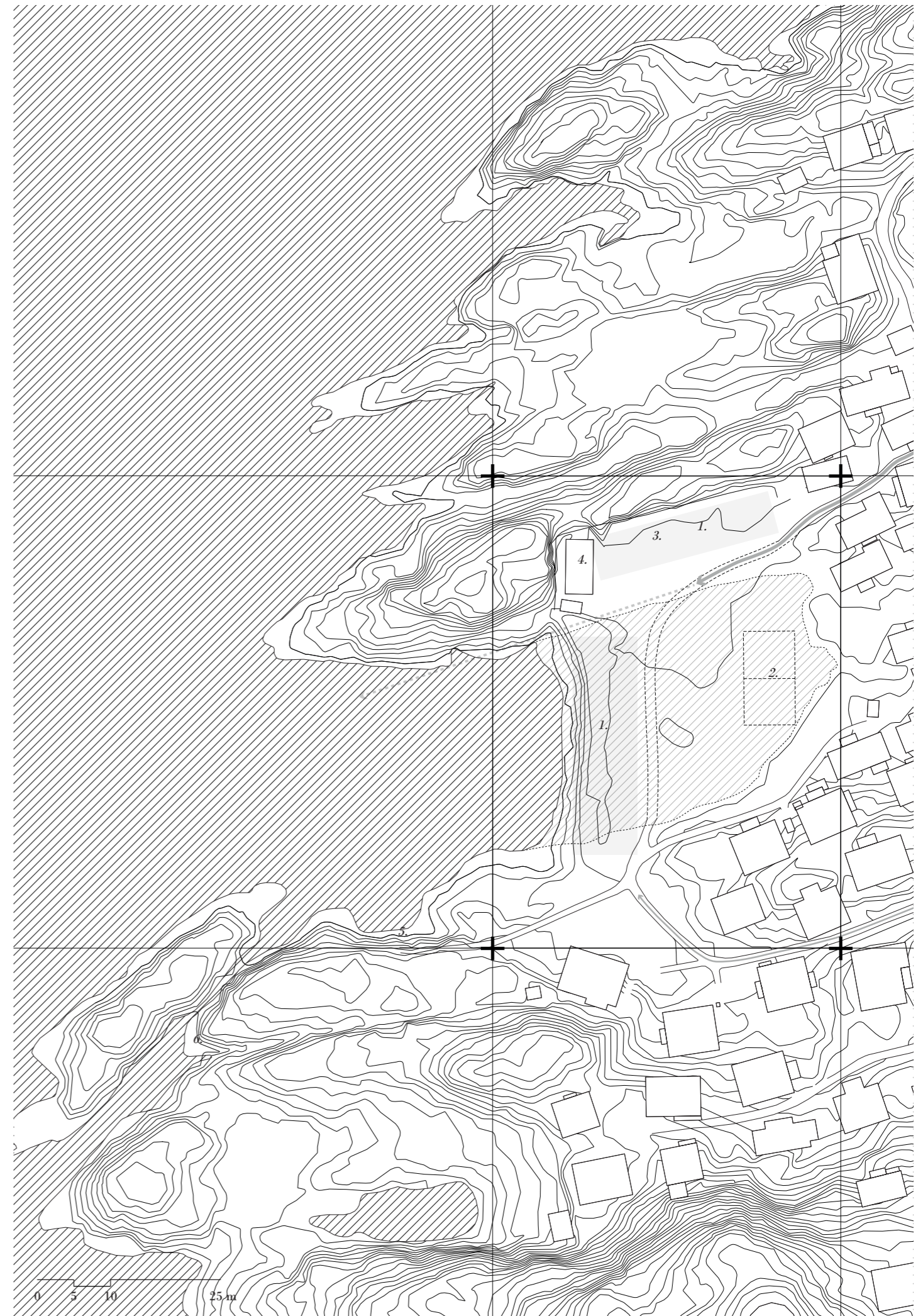
STORMVALLEN

The developments on the island leave little unbuilt land and the limited unharmed nature left is critical to preserve. In the west where the north and southern parts connect, close to the central part of Åstol, a piece of unexploited land seems to have been forgotten. According to historical maps, this land was under sea level until 1967 when the roads and water conduits were implemented and explosions in the solid rock were carried out. The leftover stone was discharged into the ocean as a landfill, creating a distance and buffer zone to the harsh winds and waves from the sea and got the name Stormvallen (eng. The storm mound). Except hosting a small administration building, an outdoor gym, a volleyball- and a boule court, the plot is left unused today. Recently, in 2019, initiatives at Åstol began to plan the area and developed a proposal together with architects containing various community functions, which later was appealed. With 50 meters to the grocery shop and 100 meters to the main sea bath, the plot offers astonishing views of the sea and iconic lighthouse Pater Noster. Interviews reveal that this land historically has been used for playing soccer and similar activities, but no traces of that remains today.

1. Proposed site
2. Volleyball- and adjacent boule court (built 2020)
3. Outdoor gym (built 2020)
4. Åstol IS, sports administration building
5. Diving board, deep sea bath
6. Main bath



Wave height measured over 21 days, Vinga meteorological station [m]

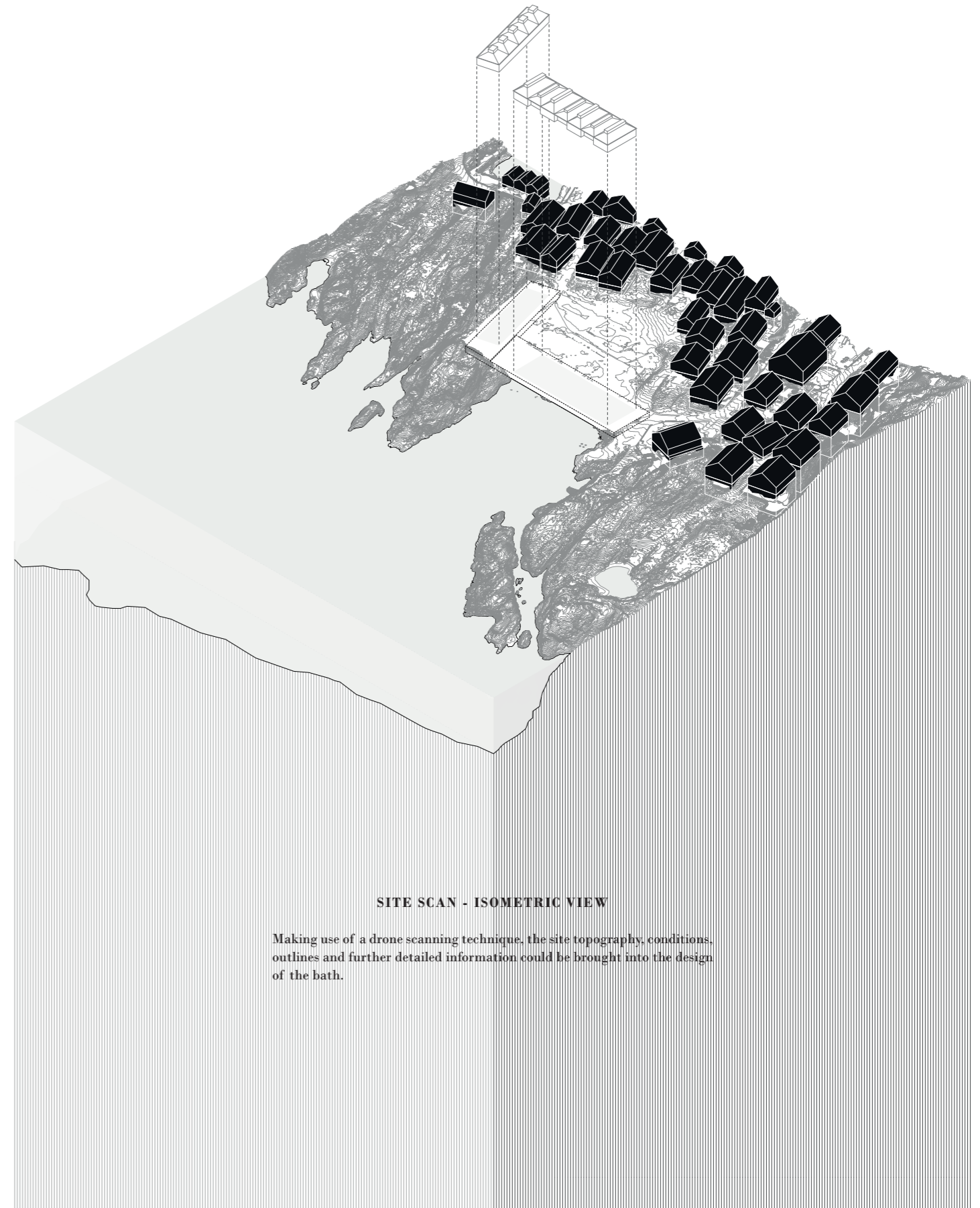


PART V

PROPOSAL

ÅSTOL BATHS

The proposal consists of two volumes framing the landscape and adapts to the scale and building traditions at Åstol. One holds a bath and the annex includes guest rooms and a multipurpose room which can be used by both residents and visitors for parties, conferences, meetings or workshops. With inspiration deriving from boathouses, the bathhouse stretches along the seafront in one level and can be experienced by walking behind; in shelter from the wind, or in front; to experience the spectacular view of the open sea. A glimpse of the sea is provided when entering the site that dramatizes the view of the ocean. Simultaneously, the volume generates a microclimate and wind-protected area behind the bath providing new possibilities for the plot which until now have been too windy for most activities. A small terrace platform is positioned between the volumes which open up views towards the ocean and defines an apparent place for an entrance. The existing flood wall is essential because of the exposed position and is therefore kept and transformed in a way that also makes the sea accessible for bathing. The building is placed on this wall, 2.3 m above sea level to endure the harsh weather and high waves. A construction with a rough base out of concrete, a wooden torso covered with panels and pitched roofs are all characteristics from Åstol's traditions that are emphasized in the design in a contemporary manner. Its repetitive and symmetrical shape with small variations is reflected in the plan where the focus is put on varying, carefully designed spaces that together provide an intensified experience of the architectural spaces. When entering the bath, the lobby opens up to the spectacular view of the open sea and the important middle axis immediately appears through its symmetry. This axis leads visitors through the building with its spatial sequence, where closed parts such as the drinking stone space or the changing rooms contrast the open relax and main bath area which enhances the experience. Intimate functions, such as traditional private rooms for bathing are reached from the relax space, giving the visitor a range of different experiences and atmospheres as well as a glimpse of how the bath has developed over time. A contemporary interpretation of local characteristics combined with the typology of baths permeates all scales, from the volume, building techniques, materials, daylight, and details to create a project highly specific for its context.

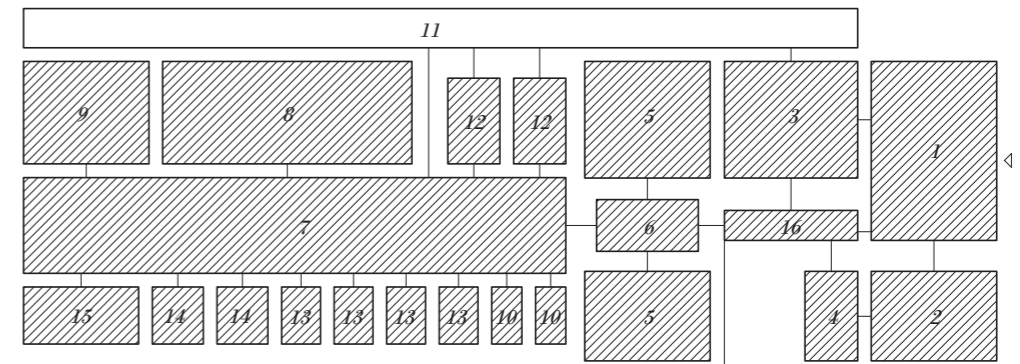


SITE SCAN - ISOMETRIC VIEW

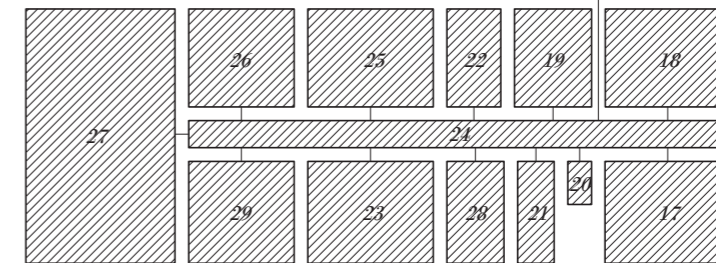
Making use of a drone scanning technique, the site topography, conditions, outlines and further detailed information could be brought into the design of the bath.

ÅSTOL BATHS

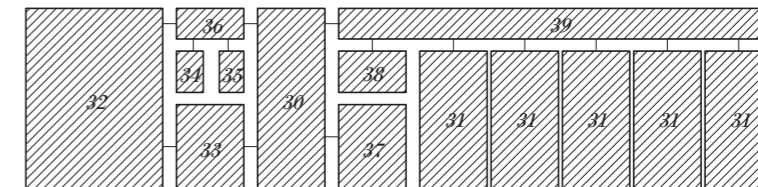
No.	Space	Quantity	Sqm (m ²)	Total
<i>Bath facilities</i>				
1	Foyer	1	48	48
2	Reception	1	38	38
3	Reading room	1	43	43
4	Staircase, cloakroom and WC	1	37	37
5	Changing and showers	2	35	70
6	Drinking stone	1	14	14
7	Relax area	3	103/34	136
8	Main bath	1	58	58
9	Hot pool	1	33	33
10	Cold pool	2	6	12
11	(Sun deck)	3	(35)	(105)
12	Saunas	2	11	22
13	Traditional single tubs	4	6	24
14	Seaweed baths	2	8	16
15	Thematic weather showers	1	22	22
16	Communication	3	11/7/7	25
				598
<i>Supportive and technical facilities</i>				
17	Staff changing room	1	38	38
18	Seasonal furniture storage	1	38	38
19	Deliveries	1	17	17
20	Cleaning	1	4	4
21	Laundry	1	15	15
22	Recycling	1	12	12
23	General storage	1	38	38
24	Communication	3	47/16/10	73
25	HVAC	1	38	38
26	Surge tank	1	23	23
27	Inspector passages	4	56/33/48	137
28	Chemical storage	1	22	22
29	Water treatment	1	24	24
				480
<i>Community and accomodation</i>				
30	Foyer	1	30	30
31	Guest rooms	5	24 (+11)	175
32	Community space	1	62	62
33	Kitchen	1	15	15
34	Storage	1	5	5
35	WC	1	5	5
36	Cloakroom	1	5	5
37	Dining	1	15	15
38	Cleaning	1	9	9
39	Communication	1	35	35
				356
Grand total:				1434



Bath - entrance level



Bath - basement level



Annex

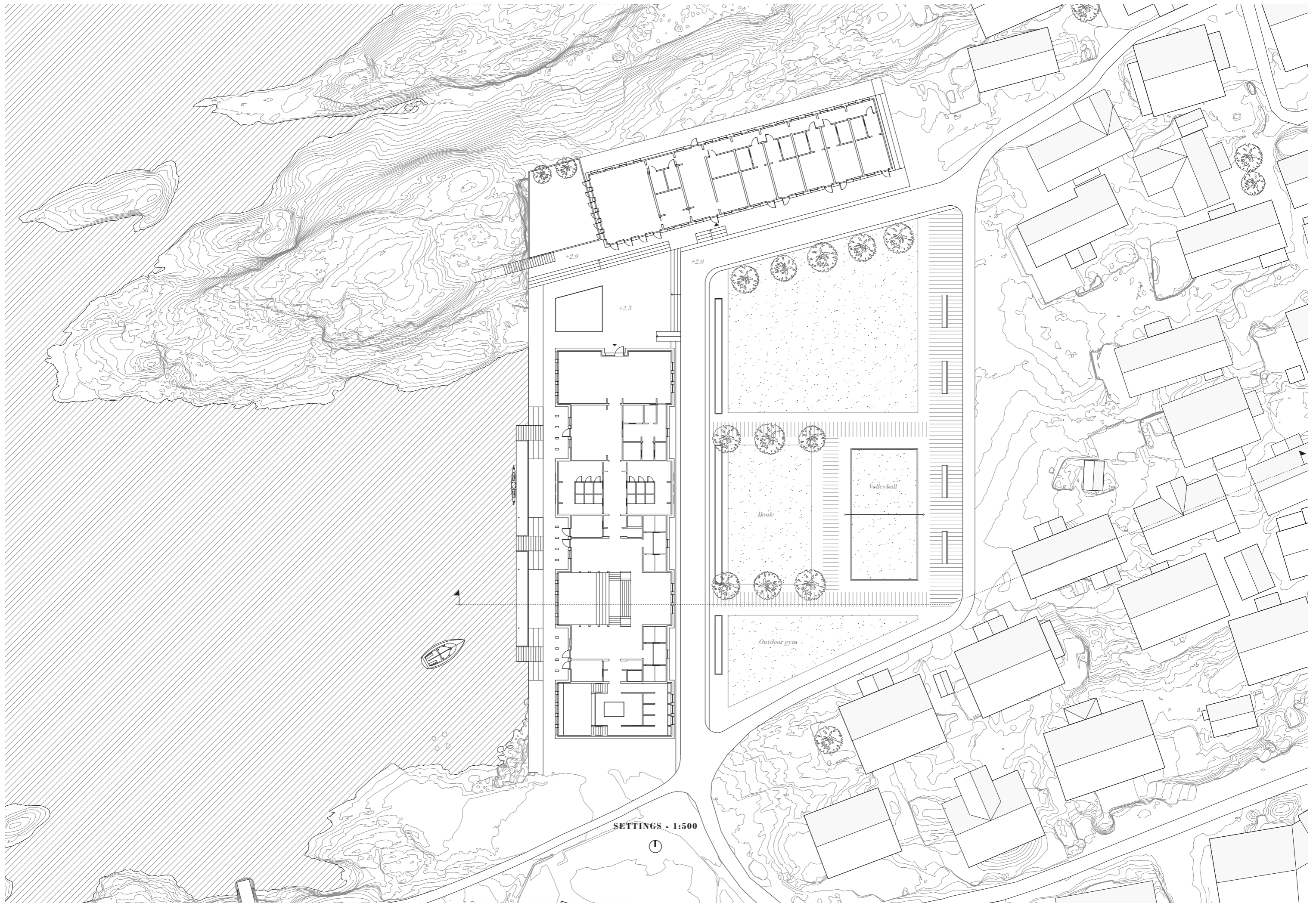


PROPOSAL'S POSITION - 1:4000



BATH FROM SEA

The existing flood wall has an important protecting role. Due to high waves and strong winds, the bath is elevated 2,3 meters standing on a robust base to stop waves from proceeding inland.



SETTINGS - 1:500





LANDSCAPE SECTION - 1:500

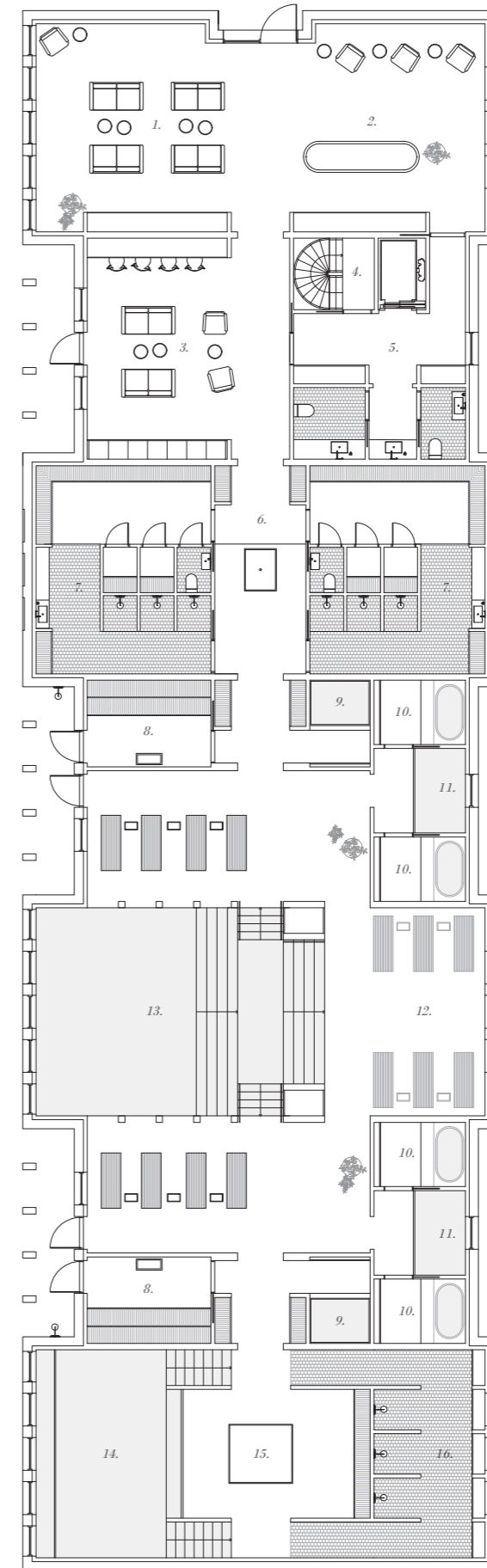
The bath is positioned on one level with its long side along the shoreline. This prevents blocking views for the residents behind and builds upon the urban design principles of Astol.



ENTRANCE PLAN BATH - 1:200

Walking through narrow streets from the ferry wharf eventually leads to this view, where the two volumes frame the ocean and give a sense of the exposed environment and location.

- | | |
|------------------------|------------------------------|
| 1. Foyer | 9. Cold pool |
| 2. Reception | 10. Seaweed baths |
| 3. Reading room | 11. Traditional single tubs |
| 4. Communication | 12. Relax area |
| 5. Cloakroom and WC | 13. Main bath |
| 6. Drinking stone | 14. Hot pool |
| 7. Changing and shower | 15. Hot stone relax |
| 8. Sauna | 16. Thematic weather showers |

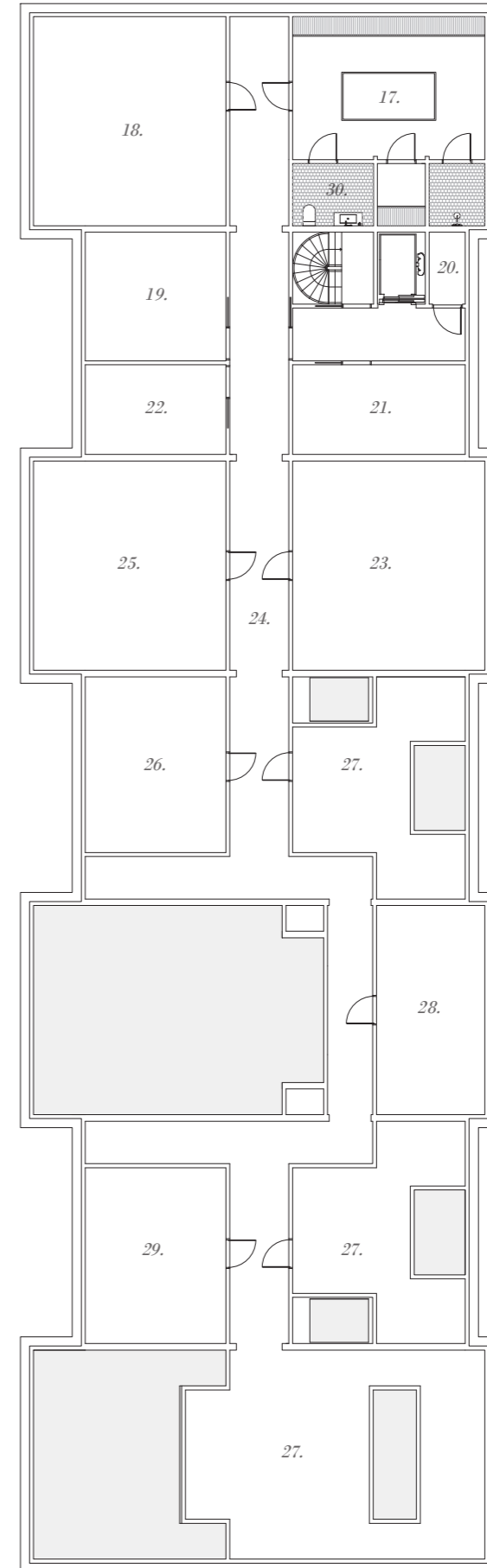


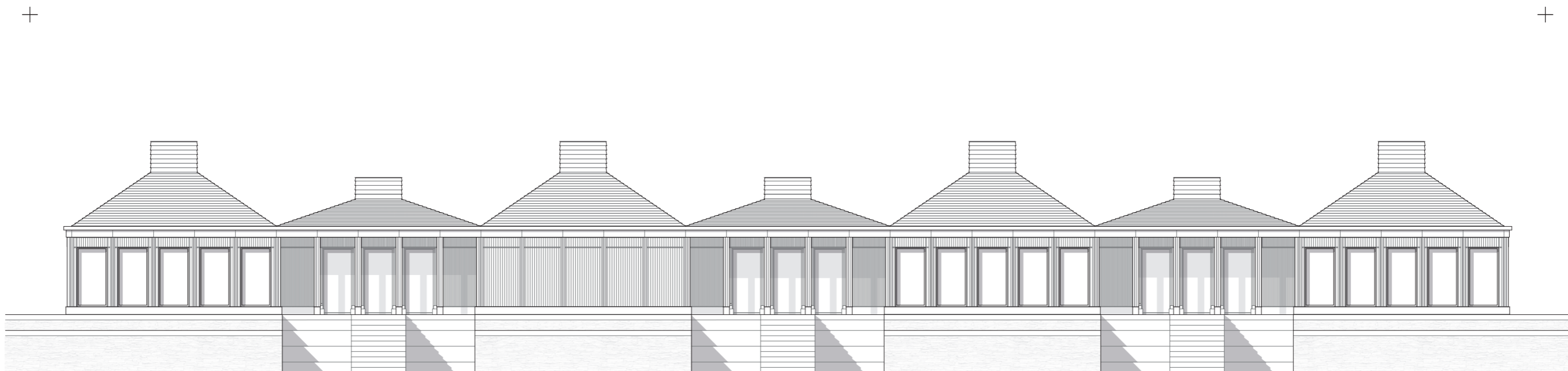


BASEMENT PLAN BATH - 1:200

The main bath can be entered from three sides and is surrounded by spaces for relaxation that frames the view of the ocean. Skylights create a sacral atmosphere that refers to the religious history of Åstol.

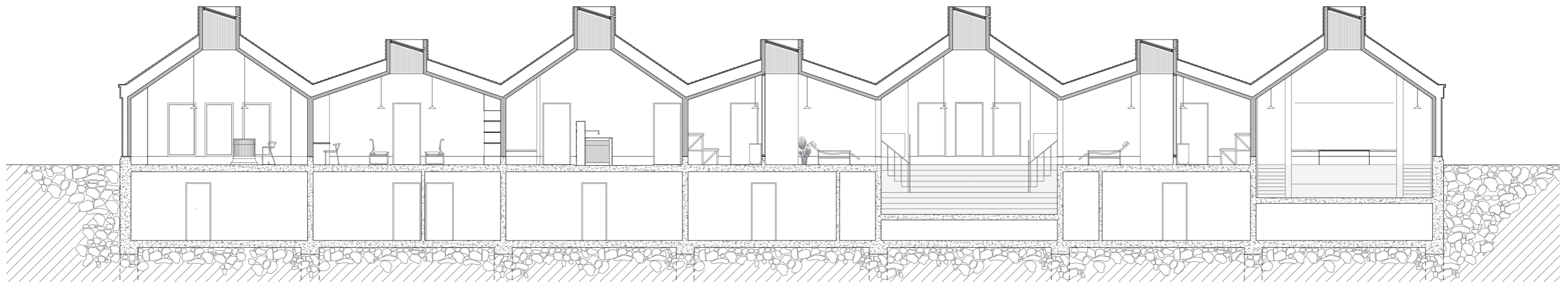
- | | |
|-------------------------|------------------------|
| 17. Staff changing room | 24. Communication |
| 18. Season storage | 25. HVAC |
| 19. Deliveries | 26. Surge tank |
| 20. Cleaning | 27. Inspector passages |
| 21. Laundry | 28. Chemical storage |
| 22. Recycling | 29. Water treatment |
| 23. General storage | 30. Staff WC |





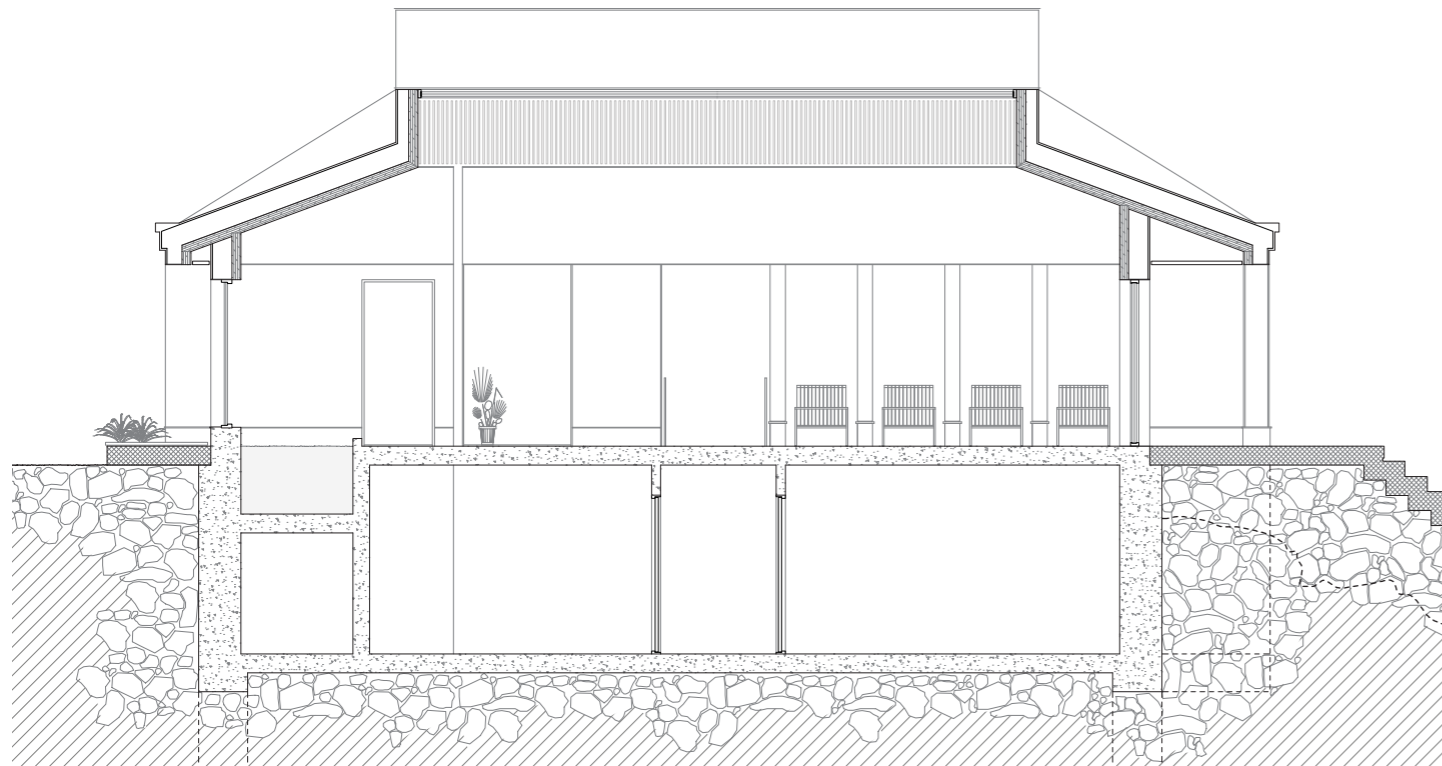
WEST ELEVATION BATH - 1:150

The bath opens up more generously towards the west with panoramic views of the sea. Inspiration derives from the strict, repetitive architecture of the historical bath references.



LONG SIDE SECTION BATH - 1:150

Section displaying the modular units and the sequence moving between them. Some units hosting main functions and by so have a higher ceiling than the supporting ones.

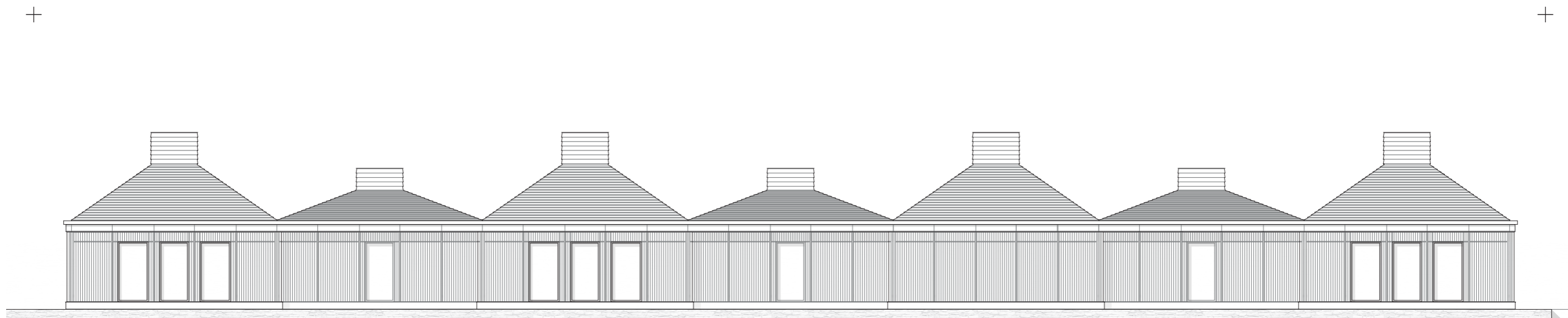


SHORT SIDE SECTION - 1:100



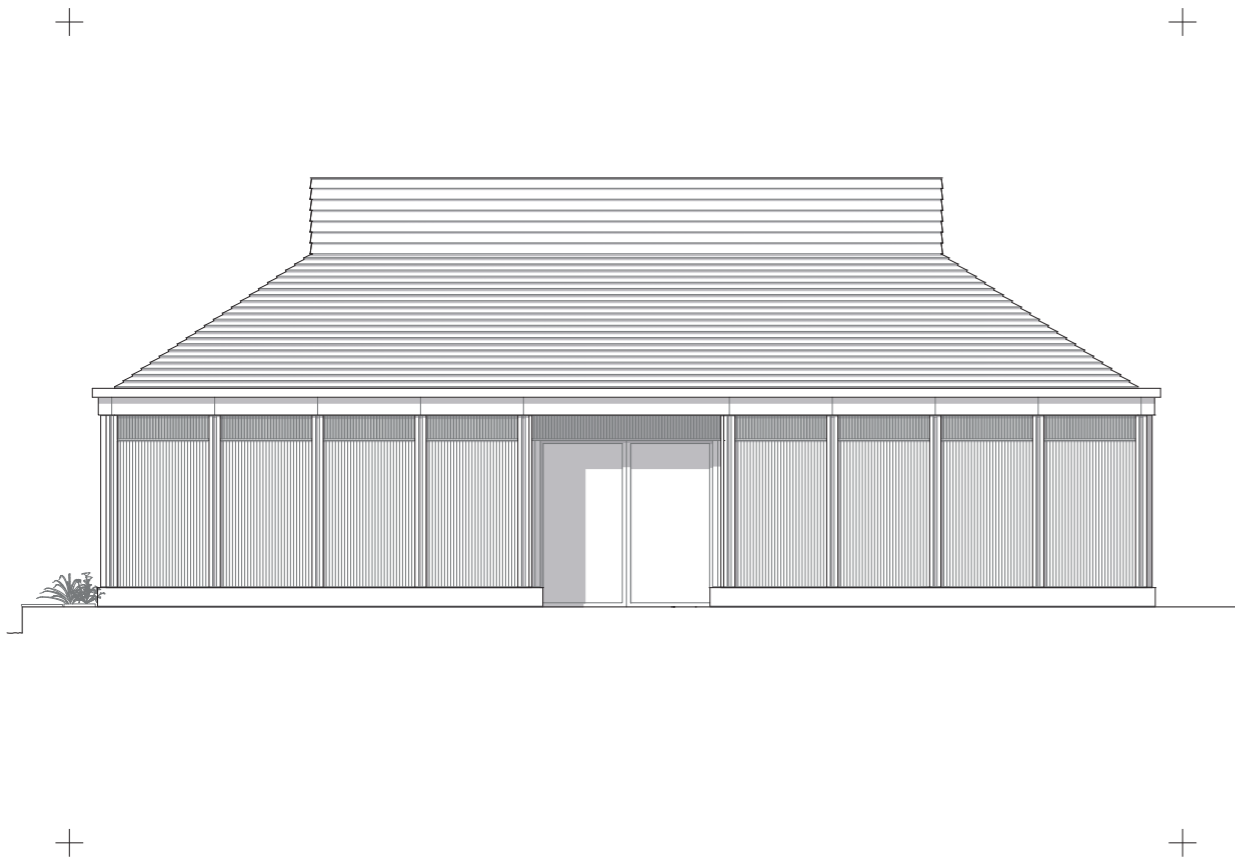
MICRO-CLIMATE NICHES

The niches facing west are pushed 1600 mm into the volume causing a microclimate partly protected from wind but with sea view and sun.



EAST ELEVATION BATH - 1:150

Towards the wind-protected area, the facade facing east is designed to be inviting but a little bit more reserved in its expression. Still, it distinguishes itself as something public and is carefully detailed.



NORTHERN ELEVATION BATH - 1:100

Inspired by traditional gables, the main entrance is symmetrically placed and clearly distinguished by ornamentation. The closed parts enhance the entrance and create an interesting tension.



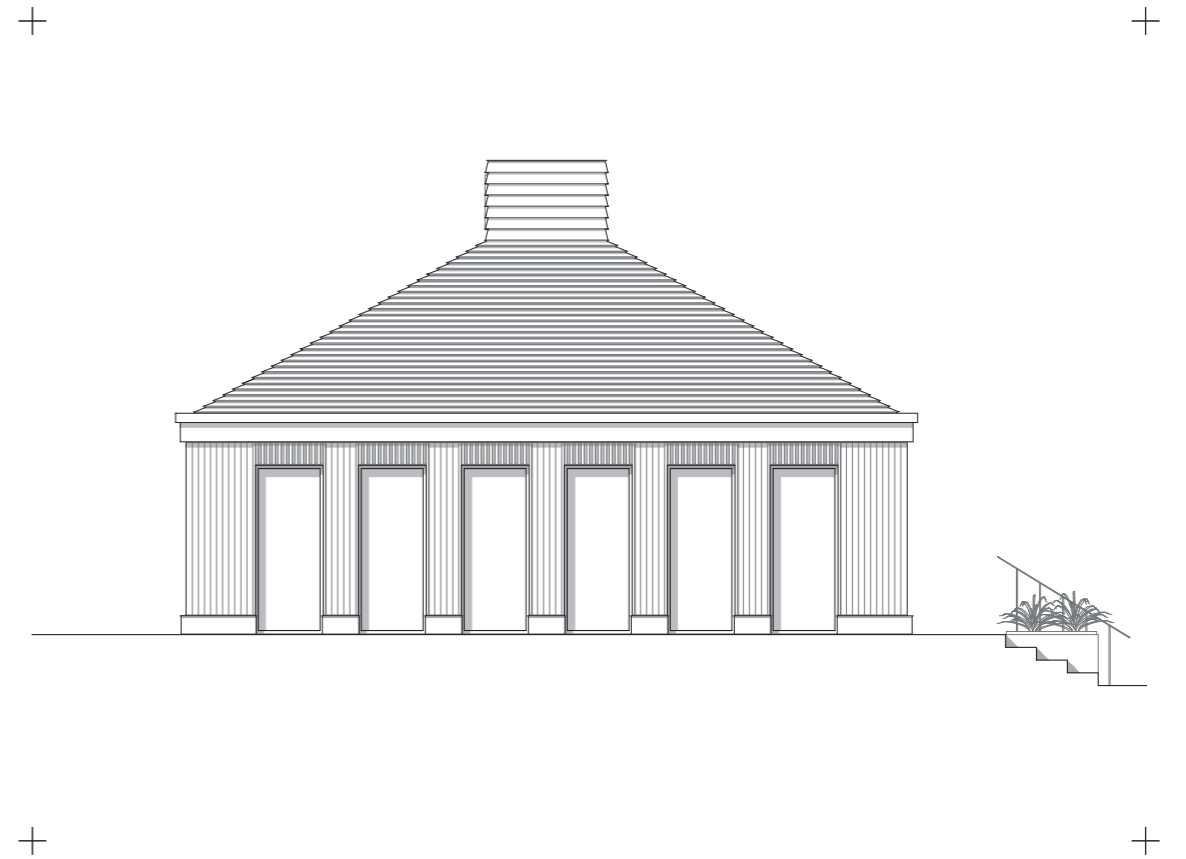
ENTRANCE PLATEAU AND RELATION TO THE SEA

Inspired by the building traditions of Åstol, a small walkway between the building and sea is kept public and accessible, making it possible to enjoy a swim from the stairs in front.



INTERACTING WITH HEAT

The last room of the sequence of spaces is dedicated to interacting with heat in various ways. A hot bath is placed in front of the windows and a heated stone marks the end of the journey.



ANNEX COMMUNITY SPACE ELEVATION - 1:100

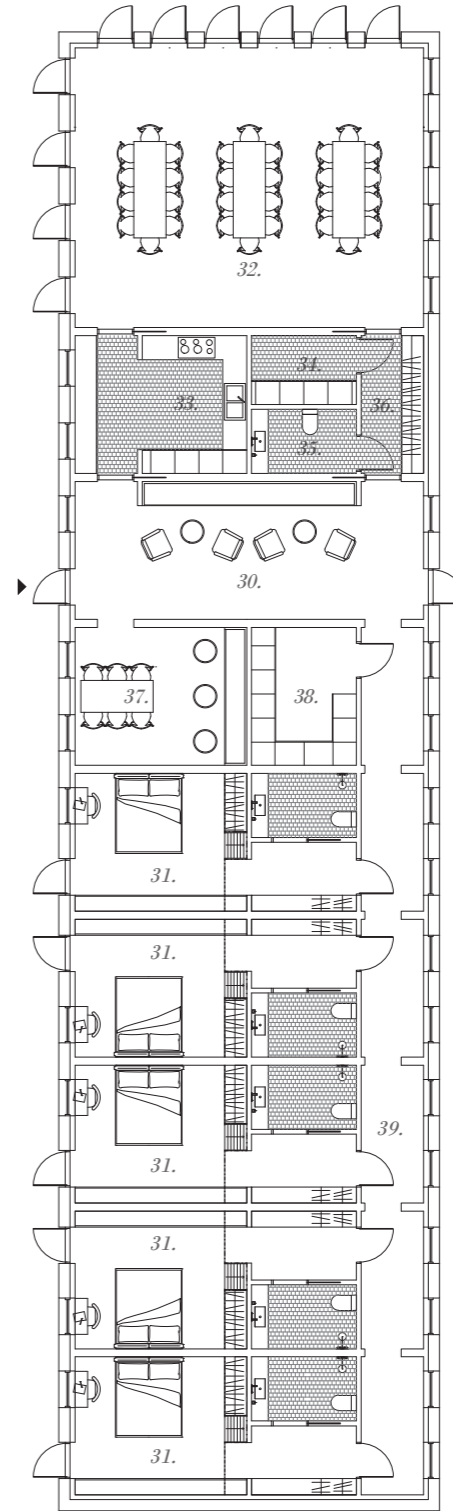
Facade of community space that opens up towards the sea. Ornamentation is traditionally focused around doors and windows and highlighted on gables.

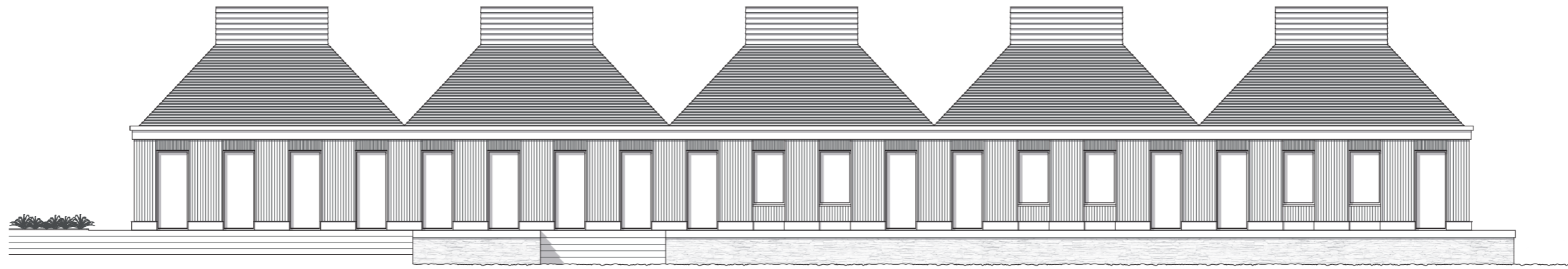


ANNEX PLAN - 1:200

Multipurpose room seen from the entrance plateau. The facade opens up towards the outside giving views of the sea and surrounding nature. As seen to the left, a patio sheltered from wind is created in direct contact.

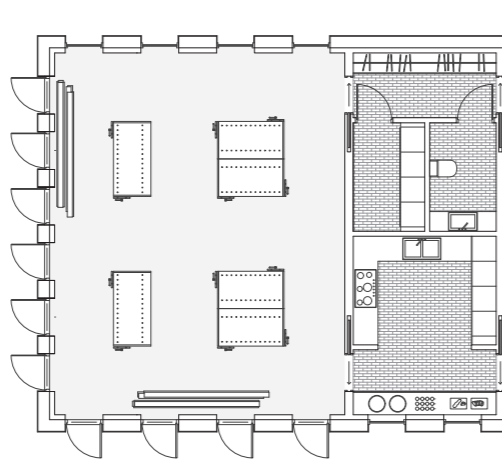
- | | |
|---------------------|-------------------|
| 30. Foyer | 35. WC |
| 31. Guest rooms | 36. Cloakroom |
| 32. Community space | 37. Dining |
| 33. Kitchen | 38. Cleaning |
| 34. Storage | 39. Communication |



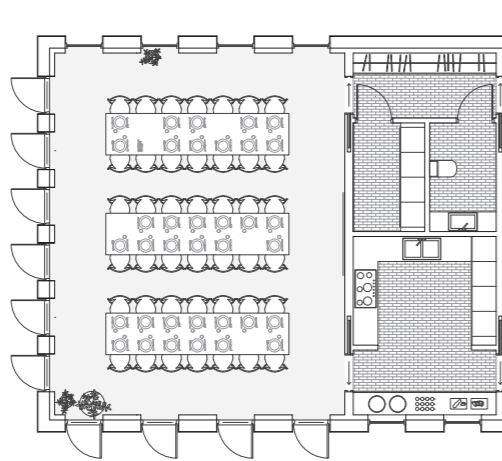


SOUTH ELEVATION ANNEX - 1:150

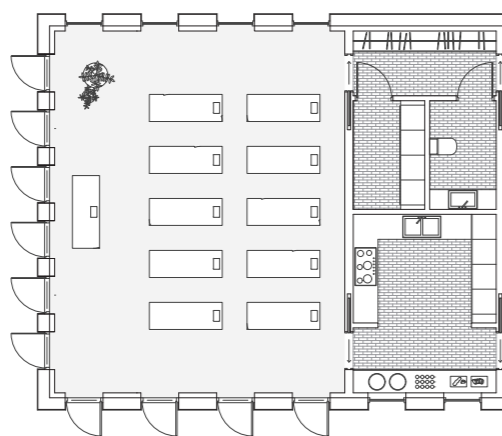
Facade of the annex facing the public outdoor space created behind the bath. Common functions such as the multipurpose room and foyer (left) open up more than the guest rooms (right).



The multipurpose room as a workshop...



...as a celebration hall...

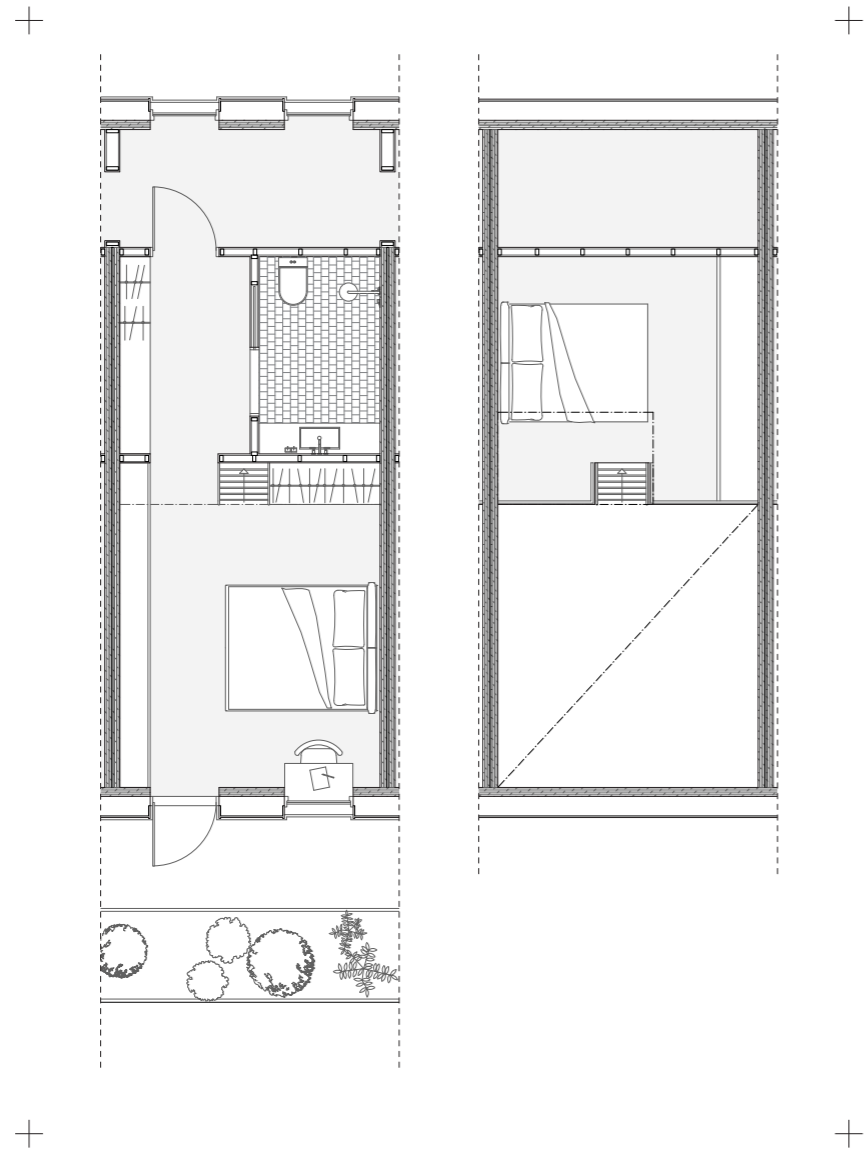


...as a yoga class



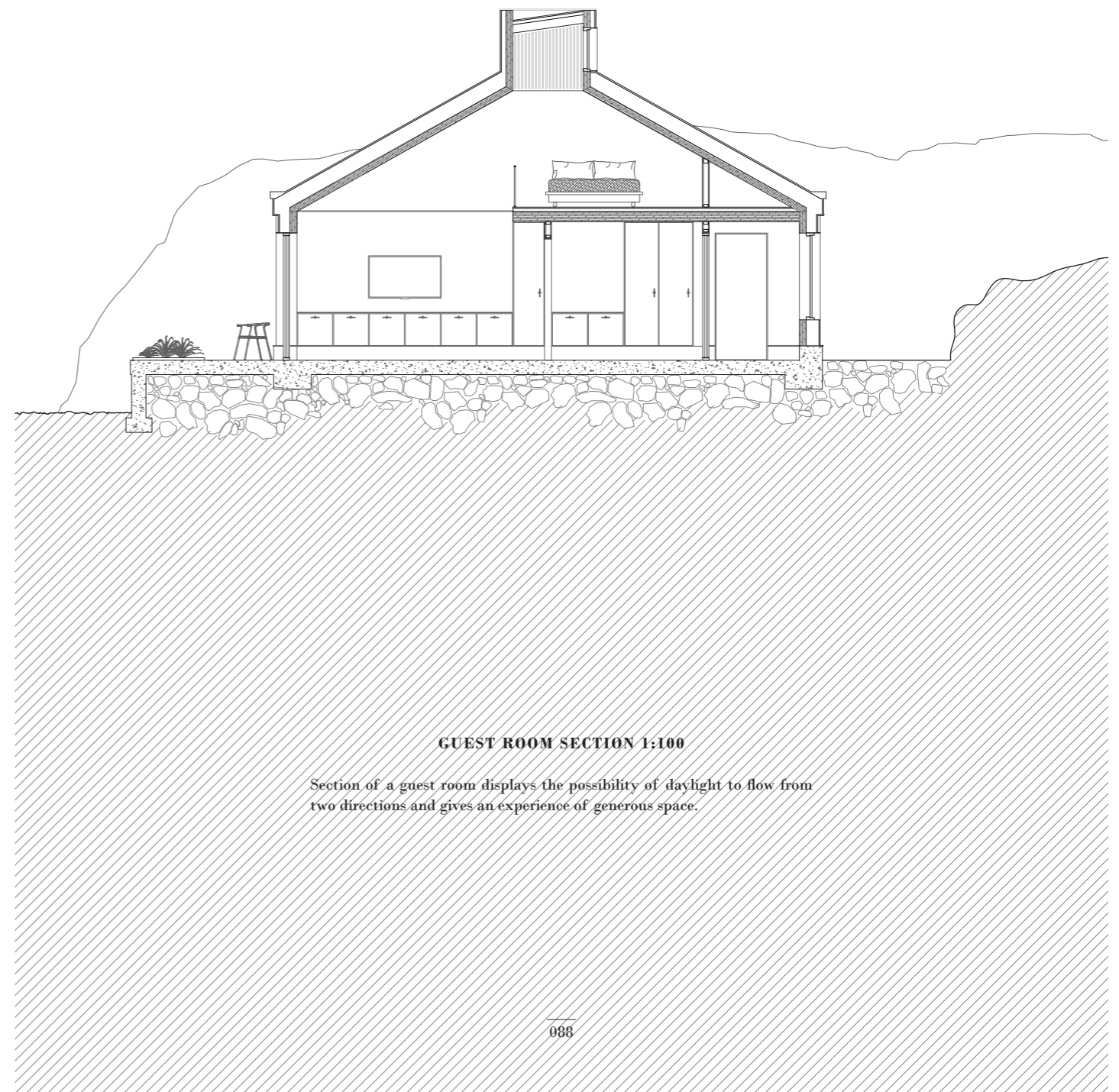
COMMUNITY SPACE VARIATIONS - 1:200

A generous community space is dedicated to the citizens as a meeting spot and is envisioned to host various activities. The open space is connected to a kitchen, bathroom and storage.



GUEST ROOM - 1:100

Accommodation hosts a simple but robust type of dwelling for visitors. By integrating a loft, two to four people can stay in one unit.



GUEST ROOM SECTION 1:100

Section of a guest room displays the possibility of daylight to flow from two directions and gives an experience of generous space.

DETAILS

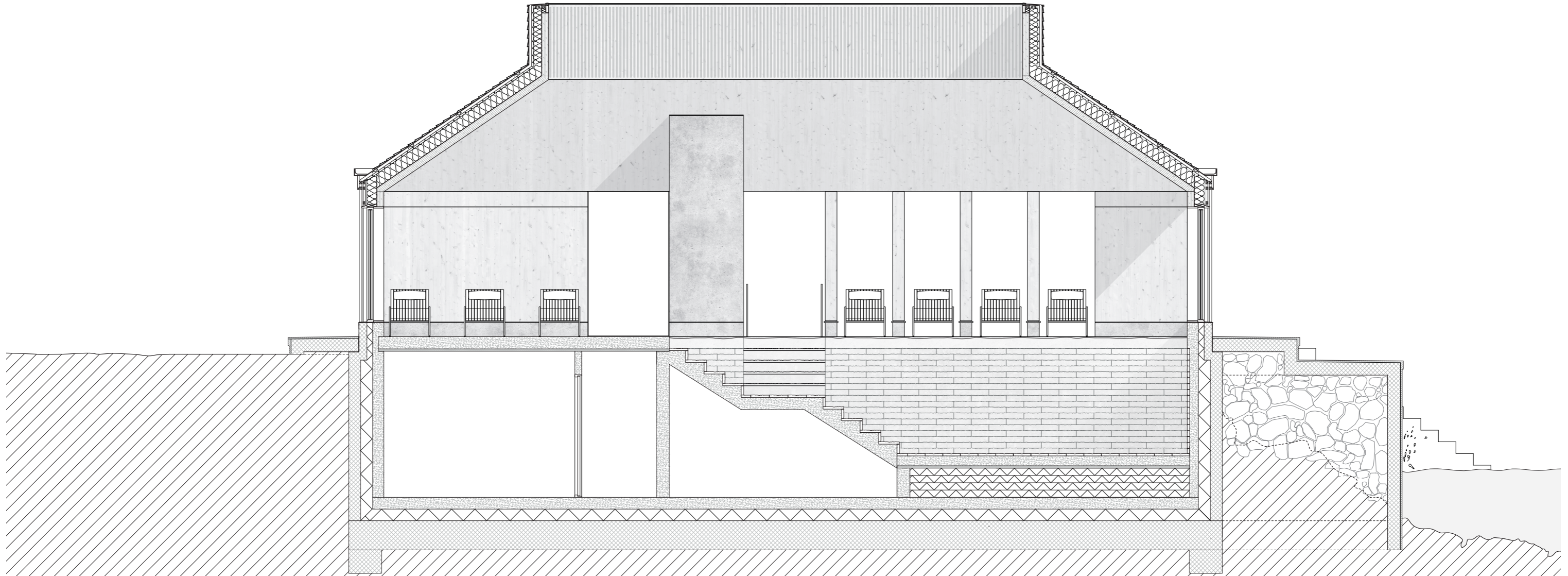
The current program requires qualities and solutions which is not present on Astol today, since it lacks a comparable function or building of a similar size. Although, present solutions can be implemented with similar thinking as they were used to when constructing buildings in and with connection to water. A consistent theme to handle the prevailing requirements the program puts on the structure has been the usage of non-organic materials like stone or concrete in connection to water with organic high-quality wood standing above with a gap preventing moisture to penetrate the wood. Metal sheets have been used in sensitive areas concerning the wood along the facade as well as on the roof. The details are designed to create a long-time sustainable entirety in balance with the importance of aesthetics.

An example of this can be found in the horizontal detail - on the exterior facing parts where glulam profiles give a repetitive rhythm which is a common characteristic both in the studied references and partly on the site. Combining these profiles with technical qualities, conductor pipes has been integrated and hidden into these elements at some points to find a combination where beauty and construction co-exist.



DIRECT OVERVIEW

A central middle axis gives a direct impression from the entrance door and runs through the entire building, ending with a rough carved amphibolite hot stone.



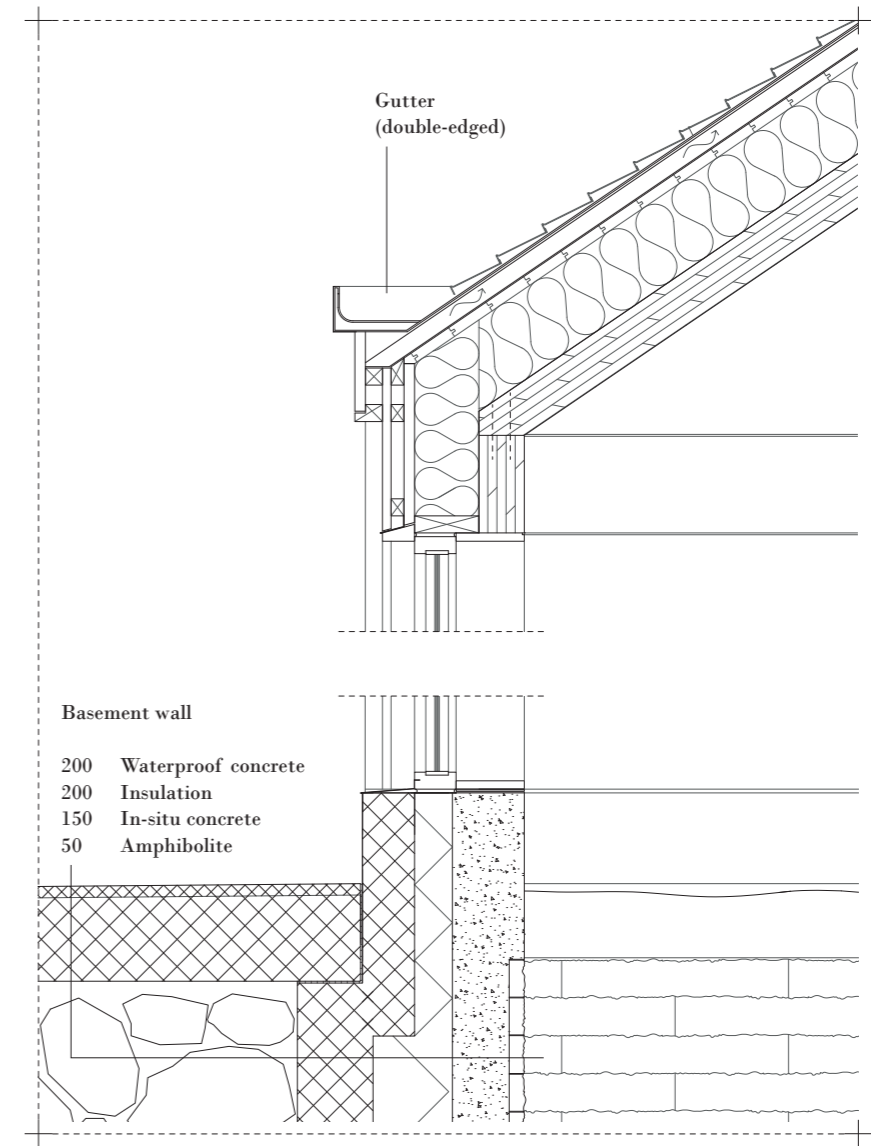
SHORT SIDE SECTION - 1:75

A technical section demonstrates the correlation of the CLT construction on the interior in combination with other materials.



ELEVATION BATH - 1:40

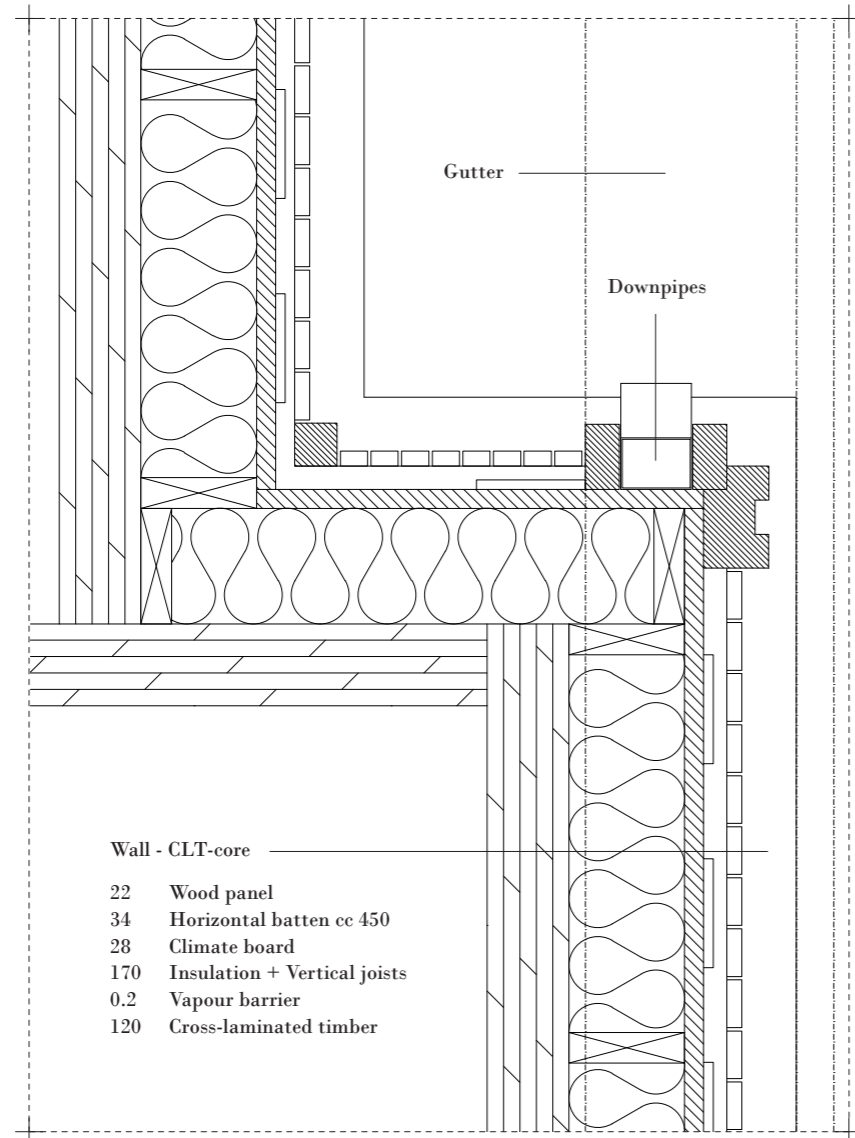
Referring to the structural principles of Åstol and the fishing village communities, the proposal shifts tone according to the landscape, with a darker base close to the sea and a lighter top that meets the sky.



- 200 Waterproof concrete
- 200 Insulation
- 150 In-situ concrete
- 50 Amphibolite

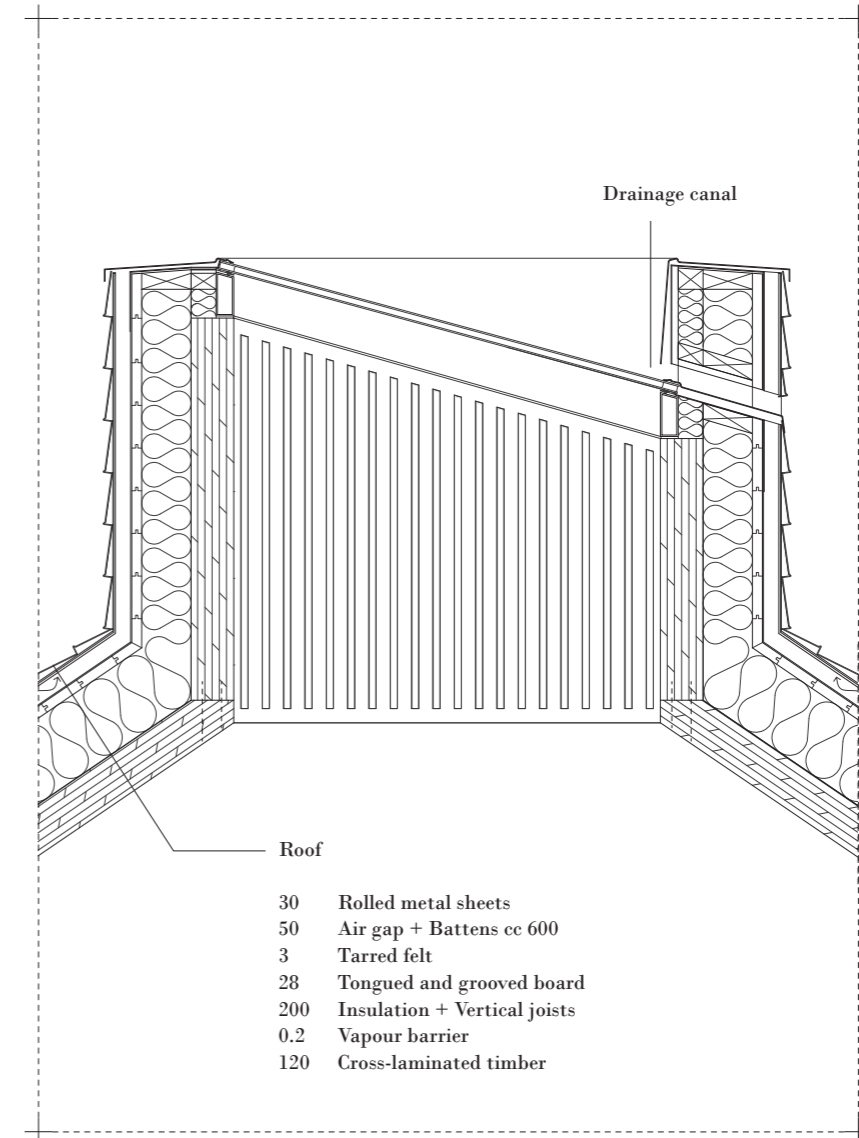
SECTION - 1:20

Both inside and outside, the foundation out of concrete is elevated 240 mm off the ground. This forms a base that naturally protects the construction from the weather-exposed setting and wet interior environment.



HORIZONTAL DETAIL 1:10

Using CLT-boards enable a quick assemble on the weather-exposed site and is a contemporary technique inspired by traditional solid plank walls. Gutters are located in niches and built into the structure of details.



SKYLIGHT 1:20

Skylights enable a bright interior while also referring to the religious period, creating a sacral spatial atmosphere to the main rooms.

DISCUSSION

By investigating how architectural heritage and materiality can be included as a departure point for a contemporary built addition to a place, the proposal strives to be a contemporary addition for Åstol to progress and develop without losing its unique identity. This multifaceted question and investigation required an approach to design that was previously unexplored to us, where the project derives from a place with a complex issue instead of deciding a function or plot as a starting point. Thorough research consisting of site visits, interviews and literature created a solid foundation for the thesis to evolve from and create a proposal that, on a credible basis, has a positive impact on the community that can create synergy effects and attraction without overexploiting or change its unique character.

Forming design guidelines by analysing both local baths as a typology and characteristics of Åstol has strongly influenced the design where it strives to find nuances in the local traditions; to articulate regionalism without being nostalgic and romantic. Theories of critical regionalism have encouraged us to incorporate traditional design with modern building techniques and global tendencies. It has allowed us to investigate and explore historic architecture and use them as a strong influence of inspiration without replicating or use them in their traditional manner. Introducing a non-existing typology (bath) to investigate the design and method through has been both a challenge and liberation, since the proposal springs from identified guidelines and characteristics of the existing villas and boathouses - while still being something else. Inspiration for designing flows, functions, sequence of spaces and atmospheres are most found in references of baths while building techniques, volume placement, material and details to a higher extent derives from analyses of Åstol in different scales and layers, trying to understand both its functional aspects but also deeper cultural meaning and value.

The approach also required a different procedure to use built references where the constant flow of images with global (and often ephemeral) trends are abandoned and replaced with historical buildings that have sustained the test of time. Avoiding getting stuck in nostalgia or a superficial postmodern approach, where cultural attributes risk being reduced into a mere symbolic object, but investigating contemporary interpretations of traditional ways of constructing architecture has been crucial during the process. It has been a challenge to handle both the aesthetics of a beautiful building that should have strong connections to its sensitive cultural environment while still have a contemporary expression and modern building techniques.

It is inevitable to consider the impact our prejudgements have had on the analysis of the island and it is easy to simply refer to the idyllic parts of the setting and discard other parts, even with awareness and critical mindsets. Capturing the full essence of a place is hard, if not impossible, to break down into objective data and the attributes of what characterizes Åstol will somewhat remain a subjective selection.

This thesis aims to contribute to continuous work within the field of architecture more with an attitude of finding inspiration in existing environments rather than the immediate translations of the design outcome itself. It seeks to form a sensible relation to its surroundings that finds traces and nuances in the local context while still contribute to the ongoing history with a contemporary addition. A proposal that has strong ties to history and culture while also have a modern and progressive approach. The question we state and the issue the island is facing is complex and has many answers, but we believe that this thesis proposal by understanding the present situation and forming a strong relationship to its 250-year history, is a possible way for Åstol to blossom in the future.

BIBLIOGRAPHY

Aili, B. (1978). Åstols framtid: Avveckling eller utveckling? Chalmers University of Technology

Bohlin, N. (2020). Åstols framtid - människorna, lugnet och naturen [unpublished licentiate thesis]. University of Gothenburg

Crudeli, A. (2018) Beyond Critical Regionalism. A conversation with Kenneth Frampton. Retrieved from: <https://www.centoventigrammi.it/kenneth-frampton-interview/>

Deplazes, A (Ed.). (2013). Constructing Architecture: Materials, Processes, Structures. A Handbook. Basel: Birkhäuser Verlag

Frampton, K. (2007). Modern architecture: A critical history (4th ed). London: Thames & Hudson Ltd

Frampton, K. (2015). Towards a critical regionalism: Six points for an architecture of resistance. Retrieved from <https://www.modernindenver.com/wp-content/uploads/2015/08/Frampton.pdf>

Frampton, K. (1983) Prospects for a Critical Regionalism. The Yale Architectural journal, Volume 20.

Frampton, K. (1995) Studies in Tectonic Culture, MIT Press

Gustavsson, A. (1984). Pingströrelsen på Åstol: processen från minoritet till dominerande lokal kultur. Department of Ethnology, Uppsala University

Göthe, L. Bohlin, M. Magnusson, A (2020). Handlingsplan för Åstol året runt. University of Gothenburg

Hedberg, K. et al.(2003) Åstol 100 år i bilder. Åstol Economic Association

Kindblom, I. (1995). Badhus: Bad och badande före 1950. Stockholm: Swedish National Heritage Board

Lefavre, L., & Tzonis, A. (2003) Critical Regionalism: Architecture and Identity in a Globalized World. New York: Prestel

Lennartsson, B. (2017). Varmbadhuset i Varberg: Antikvarisk utredning av interiör. Varberg Municipality

Ricoeur, P. (1961). Universal civilization and National Cultures. Evanston, IL: Northwestern University Press

Rundgren, K. (2019). Andlig renhet för vår tid. Tidskriften Arkitektur, volume 8, p. 60-69

Rutgersson, D. et al. (2016). Kulturmiljöprogram för Tjörns kommun: Vårda, bevara och utveckla - program för Tjörns Kulturmiljöer. Tjörn Municipality

Sjöholm, C. (2002) Moderna skärgårdsbor i gammal kultur. Bohusläns museum förlag

Stackell, L. (1975) Västkusten förr: badortsmiljöns liv och bebyggelse under 1800-talet. Stockholm : Natur & Kultur

Stackell, L. (1974) Den svenska västkustens havsbadort: en miljöstudie. Doctoral Theses from University of Gothenburg

Swedish National Heritage Board (2018). Riksintressen för kulturmiljövården: Västra Götalands län (O). Stockholm: Riksantikvarieämbetet. Retrieved from: https://www.raa.se/app/uploads/2018/12/O_riksintressen.pdf

Tjörn municipality (2020). Öar runt Tjörn. Tjörns Kommun. Retrieved 2020 from : <https://www.tjorn.se/kultur-fritid-och-turism/turism-och-sevardheter/oar-runt-tjorn>

Werne, F. (1982). Ombyggnad och byggnadskultur i de bohuslänska kustsamhällena. Stockholm: State Council for Building Research - Svensk Byggtjänst

Werne, F. Östnäs, S. (1983). Bygge i Bohuslän. Stockholm : Wahlström & Widstrand

IMAGES

Front cover: Åstol harbour in 60s [Picture]. (n.d.). Retrieved 12 mars 2021, derived from *gamla bilder och minnen från tjörn* (facebook group), published by Jan-ever Johansson. Photographer unknown.

Figure 001: Åstol harbour [Picture]. (n.d.). Retrieved 12 mars 2021, derived from *gamla bilder och minnen från tjörn* (facebook group), published by Jan-ever Johansson. Photographer unknown.

Figure 002: Åstol from above [Picture]. (n.d.). Retrieved 12 mars 2021, derived from <https://www.mynewsdesk.com/se/astols-is/pressreleases/aastol-runt-foerorsakar-6-grundstoeningar-1016859>

Figure 003: Åstol from above [Picture]. (n.d.). Retrieved 15 january 2021, derived from Åstols hembyggsdmsmuseum.

Figure 004: Gustavsberg bath [Picture]. (n.d.). Retrieved 12 mars 2021, derived from Bohusläns Museum. Photographer Hansson, A.

Figure 05: Varberg bath [Picture]. (n.d.). Retrieved 18 january 2021, derived from Hallands Kulturhistoriska museum. Photographer Gustaf Björkström.

Figure 006: Andrum bath [Picture]. (2020). Retrieved 18 january 2021, derived from <https://www.johansundberg.com/project/andrum>. Used with permission. Photographer Peo Olsson.

Back cover: Åstol harbour from above [Picture]. (n.d.). Retrieved 12 mars 2021, derived from Bohusläns Museum. Photographer Hansson, A.

ACKNOWLEDGEMENTS

To the following individuals, thank you for your supportive spirit and guidance as well as helpful actions through this thesis process. Your presence assisted us to achieve this satisfying result in the end.

Mikael Ekegren

Björn Gross

Robert Jockwer

Tabita Nilsson

Peter Christensson

Åsa Jönsson

Lena Göthe

Anders Alander

Åstol citizens

Annie Guo

Alfred Johansson

Friends and family

ÅSTOL

250 YEARS AND BEYOND



CHALMERS

Chalmers University of Technology
Department of Architecture and Civil Engineering
Architecture and Urban Design - Building Tectonics

Thesis work by -
Tess Ekman & John Hermansson

2021

APPENDIX

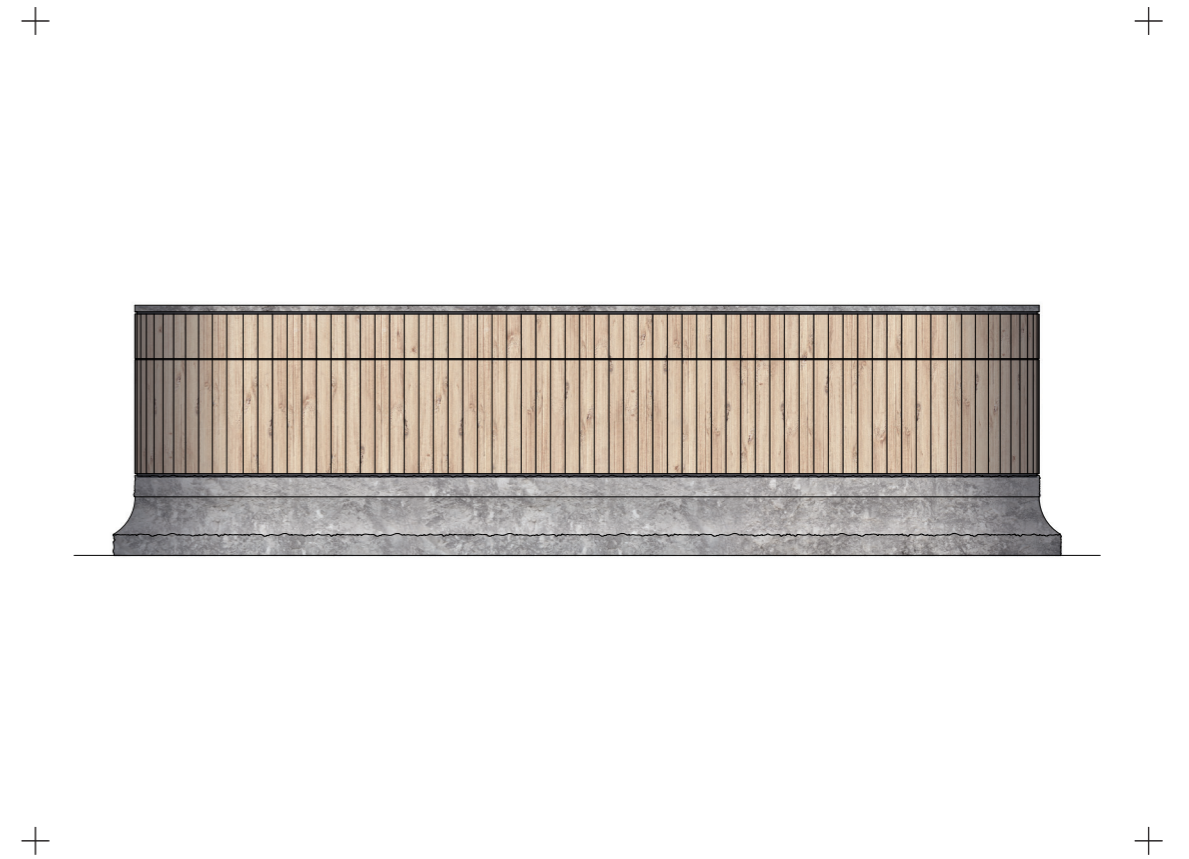
I

FURNITURES

A building is essentially about the walls, roof, facades and position, but the detailed interior and loose furniture also have an important role. This project aims to go additionally into the detail scale with furniture design, making sure that the building follows the desired theme all the way through. Various furniture and fixtures are presented in this appendix, offering an enhanced understanding of what the proposal is turning into. The theme of interpreting traditional characteristics of Åstol developed over the years has been included and brought in contemporary designs and materials, making the bath and annex a symbol of our present time. To constitute a balanced whole, each element does not intend to stand out on its own but designed to harmonize as a unified expression. Therefore, an object can be simple and discreet or the opposite, depending on its specific role and relation to other design elements.

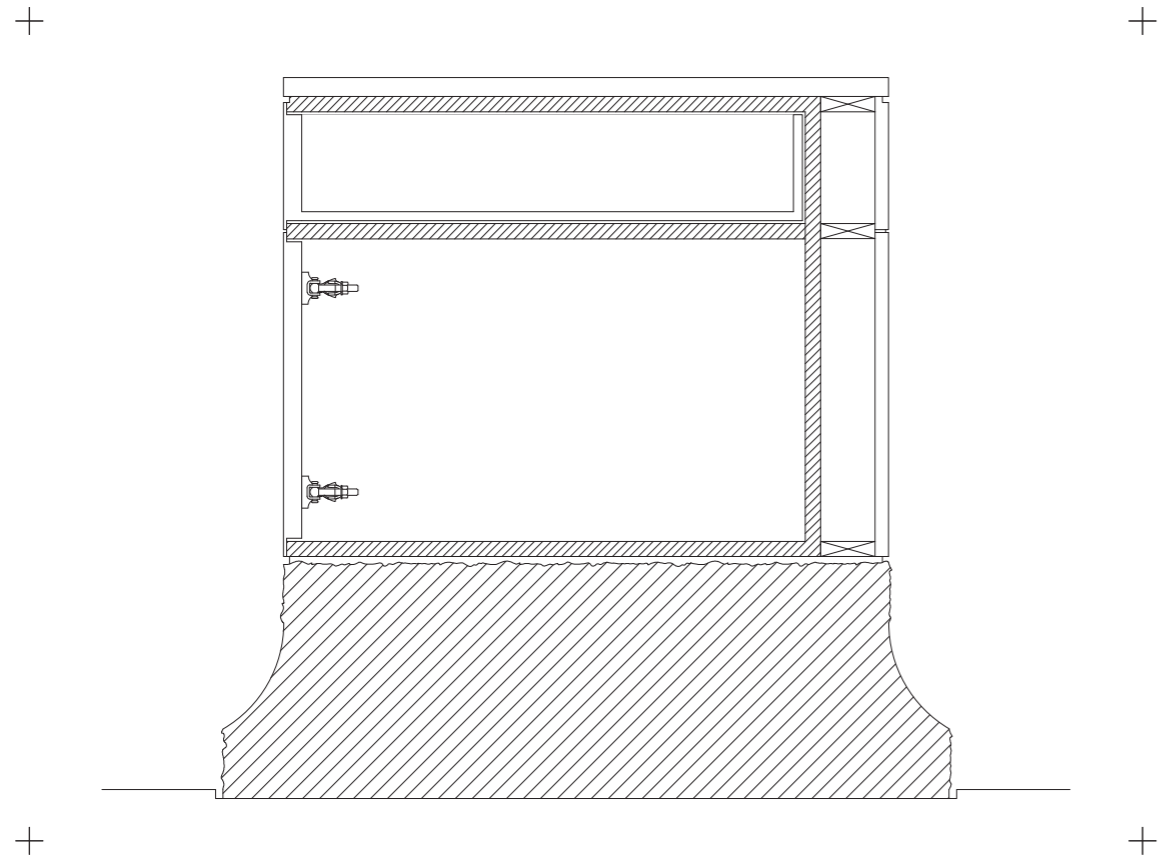
ENTRANCE/RECEPTION DESK

The reception desk got a welcoming purpose for visitors in need of assistance. It is sought to provide an informal atmosphere standing more like an accessible island than a traditional desk, having the potential to move around and interacting more equally if needed. Similar to other types of furniture, this aims to imitate the setting and environment of Astol, like a solid island on a rock with lightweight structures on top. On the backside, space for storing has been included through drawers and boxes to store the most essential things. Through a clean and generous space on the tabletop, this piece can also be used for serving small snacks such as coffee, cookies and fruits to the visitors.



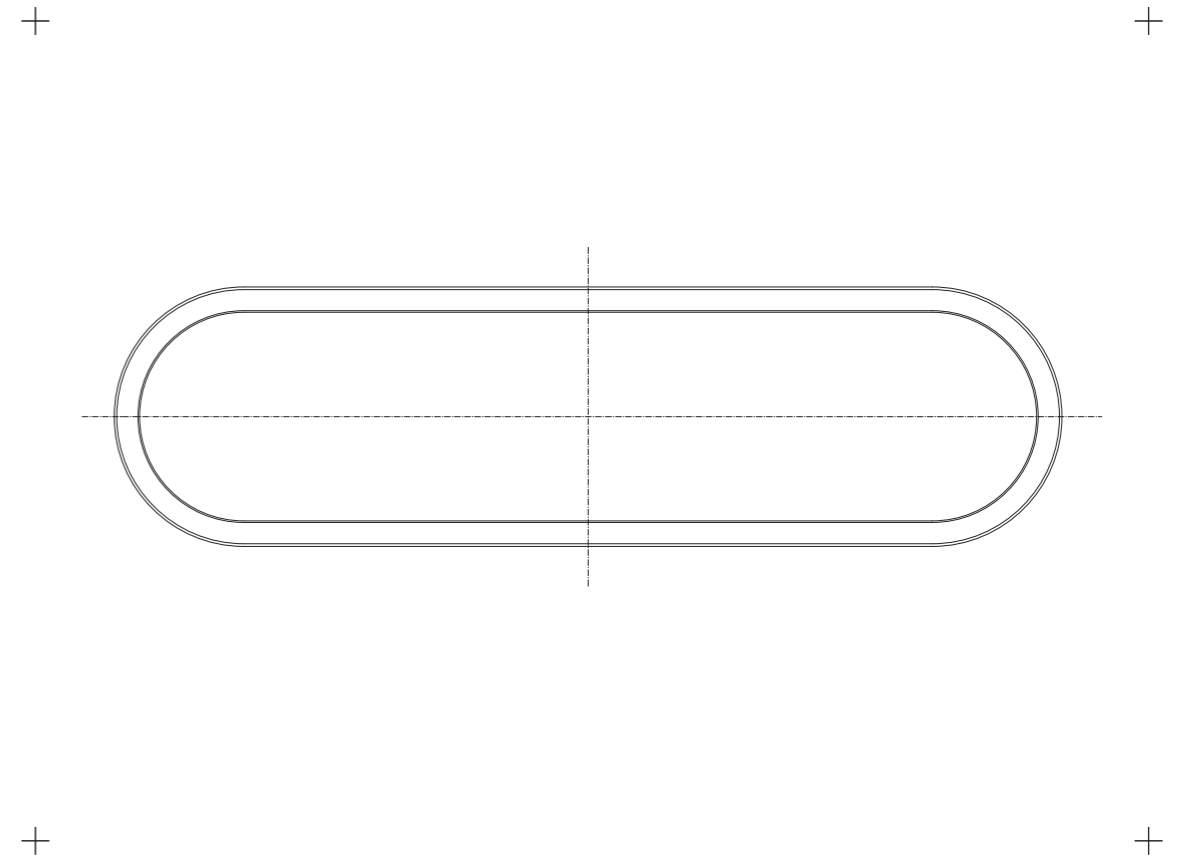
ELEVATION - 1:40

Interpreting the contextual structure with its solid stone base merging with the slab - organic material as wood with inner storage spaces and a topper of amphibolite stone.



SECTION - 1:20

Front surfaces towards the receptionist for storage units in wood with the edge covering gaps to enable a solid expression as the island in the middle of the entrance space.



PLAN - 1:40

Generous spaces are sought here to ensure usage for various purposes and events, acting foremost as a reception desk with a welcoming character.

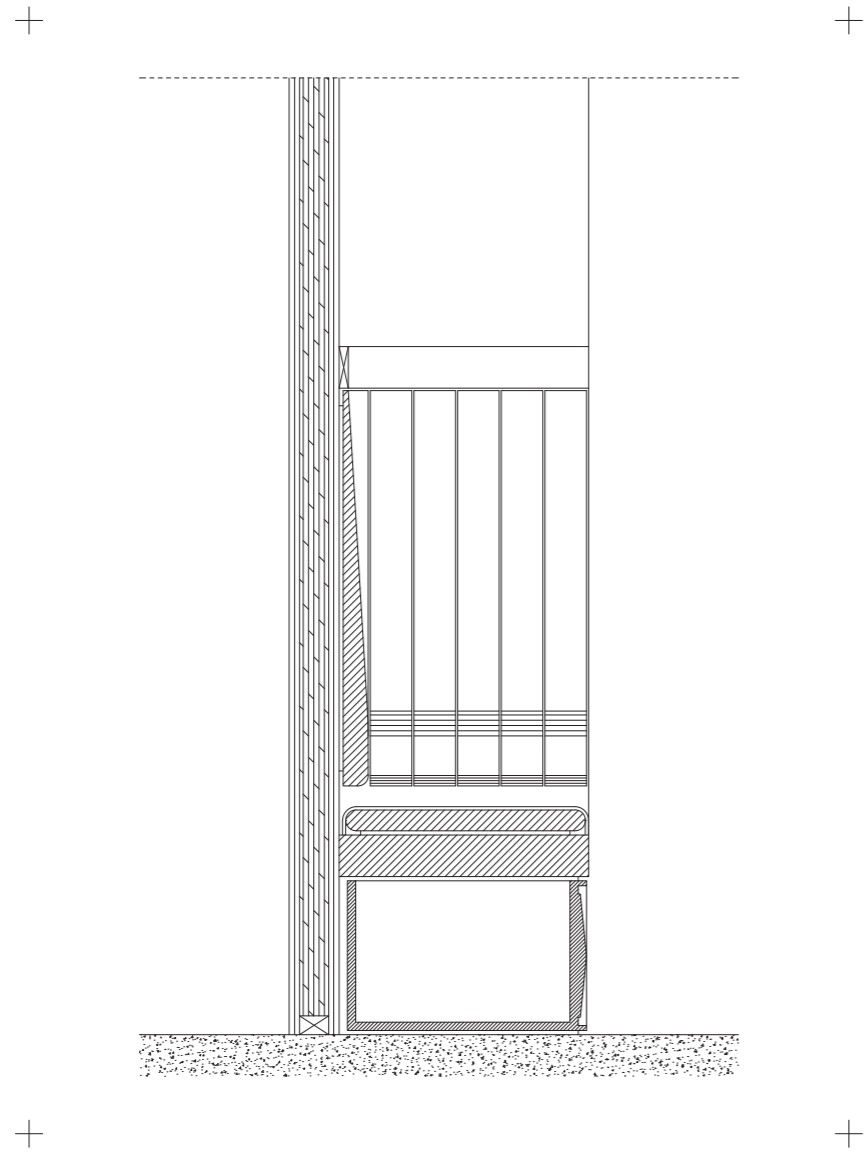
WALL-INTEGRATED BENCH

The bench is an object that appears in different locations through the bath, offering a place for temporary seating and storing opportunities for brought accessories such as towels and coats. Instead of the constructional pine wood, the pieces of furniture are made out of ash with a similar colour tone as the walls. The characteristic shape of the rhombus has been properly implemented in the design as panels that are otherwise found below windows on the residential verandas' facades. The seatings consist of leather for gentle and warm contact against the body.



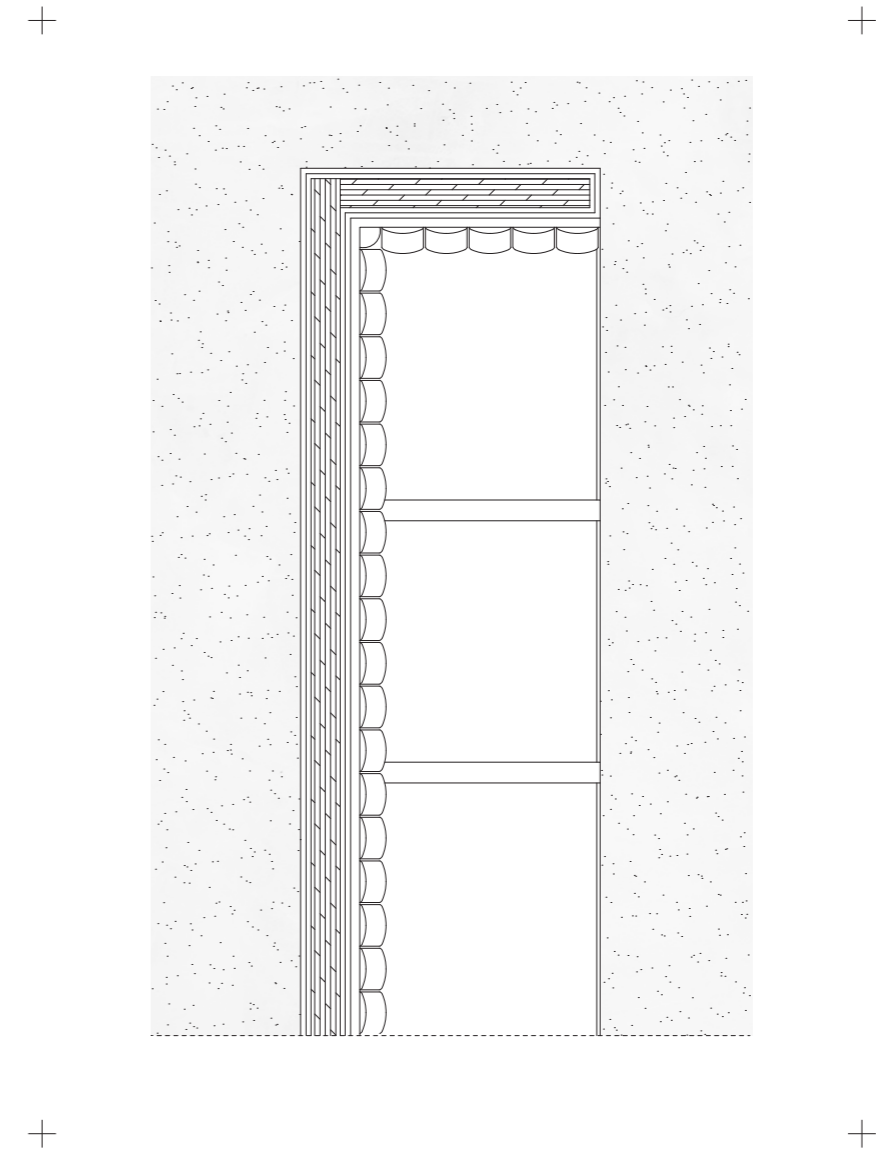
ELEVATION - 1:20

Implementing detail characteristics on new faces and positions, keeping the rhythms and repetitive aesthetics by sectioning the seats from each other.



SECTION - 1:20

Behind the front panel boards in the elevation view hides a storage space, where one could either store the personal stuff or supplements to the bath facility.



PLAN - 1:20

Niches are utilized for various purposes - seating is one of them. The backboard has a light tilt and is covered in brown leather to make it comfortable and likely to spend time in.

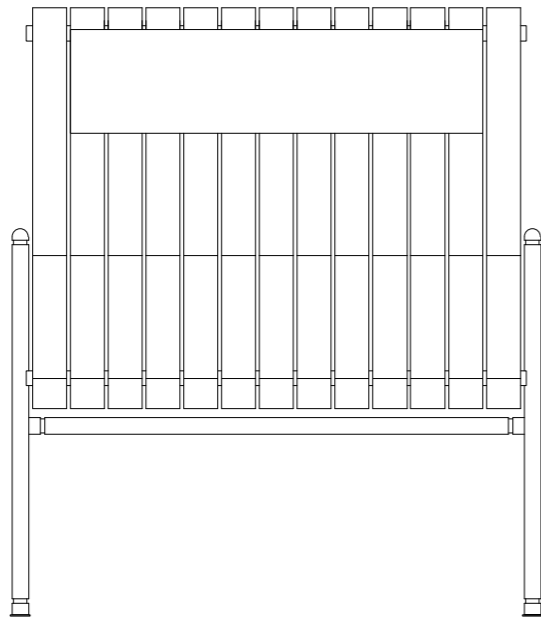
RELAX CHAIR

The relaxation chair intends to highlight its wave-shaped profile inspired by the sea and modified to a design adapted for the measurements of the body. These curvy wooden arches are built up by a series of glulam sections that is possible to replace for a sustainable life-cycle. The seating section connects to a metal frame below with minimal material use, achieving a light expression to the overall design. Horizontal beams are also imagined hanging towels on, or other accessories brought by the visitors.



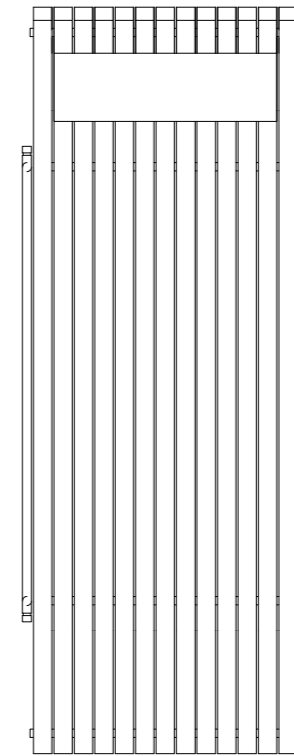
ELEVATION - 1:20

The lounge chair is made out of steel and natural wood to match the general building materials. Its soft silhouette invites for a relaxed position to rest.



SECTION - 1:10

Wooden ribs are assembled by rods of steel that discreetly hold the seating in place. The ribs are bent into their specific wave shape with heat.

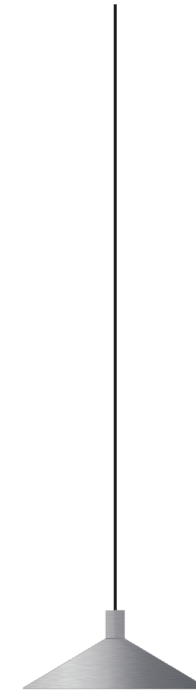


PLAN - 1:20

A gap between the wooden ribs supports the construction to dry faster and therefore sustain longer. The construction also allows easy replacement of single components.

LIGHTING FIXTURES

This project uses various types of lightning. These lamps are used for hanging while others are positioned directly onto walls. The idea behind the simple design has been to implement a traditionally used shape in a minimalistic manner, to harmonize with the overall appearance of the skylight and the materiality of the ceiling. Hence, this shape seeks a balance between those elements as a subtle addition.

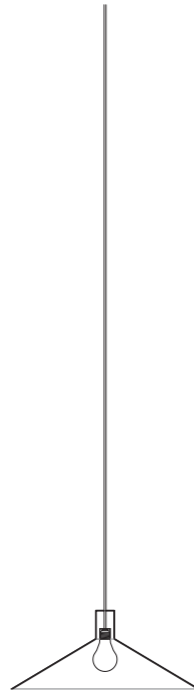


ELEVATION - 1:20

The fixture takes inspiration and angles from the commonly used rhomb as a decorative motive on Astol. The shape spreads the light at a wide range and exposes the lightbulb as the light source.

+

+



+

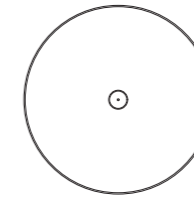
+

SECTION - 1:20

Section of the minimalistic appearance, keeping the number of components to the absolute minimum.

+

+



+

+

PLAN - 1:20

Simplicity in its design is envisioned to complement the more decorative pieces of furniture and form a greater whole.

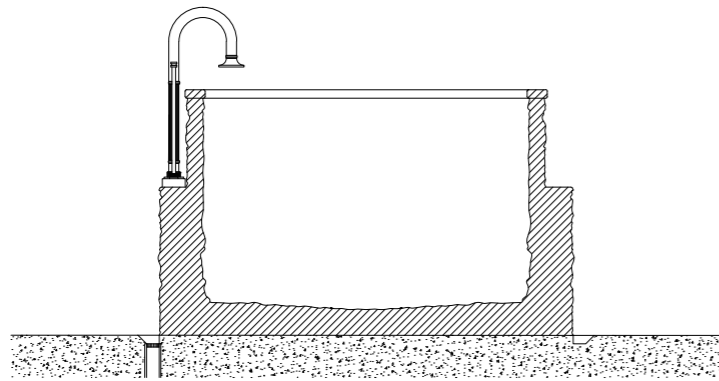
SINGLE BATH TUB

Natural bathtubs are a phenomenon naturally existing on the shores and in the borderland between the land and sea. Concave rock formations are filled with seawater brought by the waves, protected from the open ocean and its climate. When designing the tub, these aspects were taken into consideration and used as an inspiration. The tub is constituted by a stone block roughly carved out inside that aims to give a tactile experience between the body and surface similar to the natural event and bring the thoughts to the surrounding cliffs.



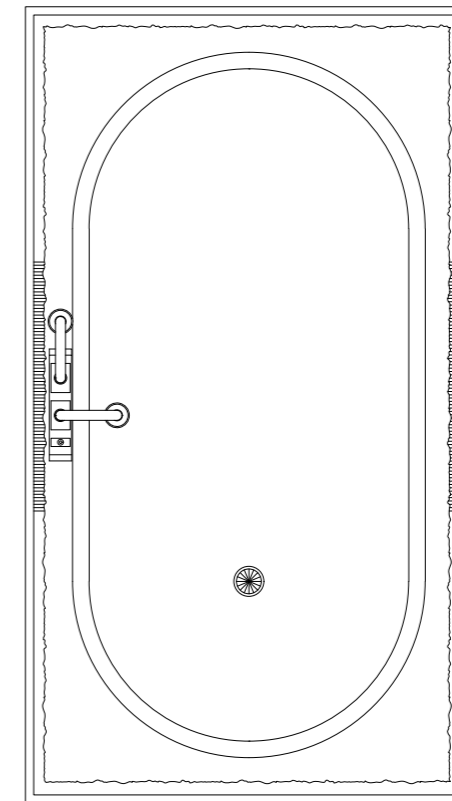
ELEVATION - 1:20

Bathing inside a carved out stone block convey a robust and protected feeling. With a solid base, the principal rule in the project is applied.



SECTION - 1:20

Water supplements are positioned outside of the bathtub to keep the expression homogeneous. Different levels of refinements of the stone are applied depending on how the part interacts with the body.



PLAN - 1:20

A rounded corner landing on a rectangular base is used to familiarize with the organic aesthetics of the human body.

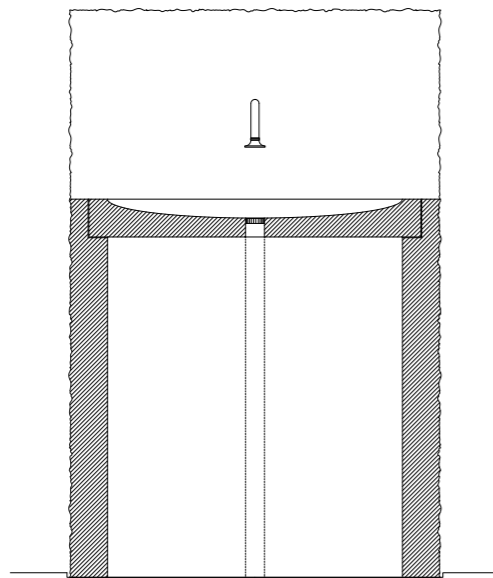
DRINKING STONE

The drinking stone acts as much as a water tap as a divider in the plan, where it distinguishes the dry area from the wet. Its back facing the entrance is elevated 1600 mm and by so breaks the sightline in the central corridor where the areas of "undressed" and "dressed" meets. Sight and the sound from the running water along its back mark the end of the dry area and indicate that shoes should be taken off before proceeding. Its heavy expression of carved stone refers to the rocks of Åstol and expresses a balance in the combination between the rough and refined.



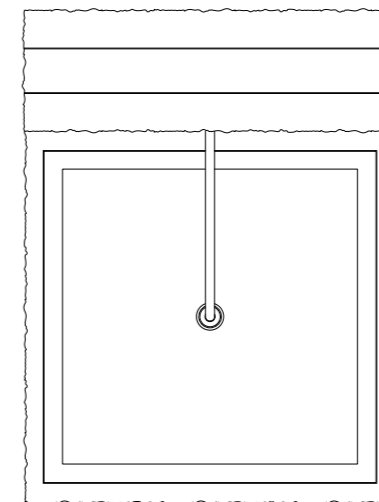
ELEVATION FRONT - 1:20

The heavy expression refers to the cliffs of Åstol. The raised back visually divides the wet and dry areas, providing privacy to the bath department.



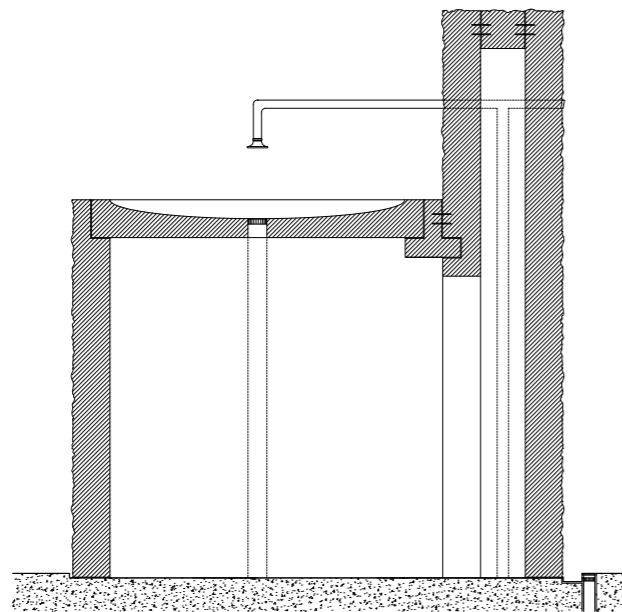
SECTION - 1:20

A course treatment of the stone is used along the sides while the sink with the drinking function is polished and have a refined finish.



PLAN - 1:20

The sink of polished stone is positioned inside the rough stone slabs. To provide a solid expression, no joints appear on the sides that are facing the main sightlines.



SECTION - 1:20

Water supplements are positioned in the back panel while the drainage is directly under the tap. A small hole for dripping water is positioned towards the back and drainage is built into the floor.



ELEVATION BACK - 1:20

Before entering the changing rooms, visitors meet the back of the drinking stone that directs the flow. A pipe with dripping water adds both sound and visible qualities of water and marks the transition between the dry and wet zone.