

BRÁKAREY WELLNESS

MASTER THESIS 2021



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ADVANCED ARCHITECTURAL DESIGN
LTH - LUND UNIVERSITY



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BRÁKAREY WELLNESS

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abstract

Our decisions from the past affect the present time. The same is true of the decisions we make today. How do we want to see our local environment in the future? In the western part of Iceland there is an island called Brákarey. Brákarey is connected via bridge to the town of Borgarnes. Brákarey has played a variety of roles over the past years, but transport of people and goods was one of its biggest roles. Iceland is a sparsely populated country with about 368.000 inhabitants¹ on an island that covers 101.000 km² which is about 140% larger than Denmark with its 5.8 million inhabitants.³ Transport has therefore been an important part of Iceland's history and Brákarey played exactly one of these key roles by connecting the Capital, Reykjavík, to the western and northern parts of the country. At that time, ships docked at the harbor in Brákarey until a road was laid from Reykjavík which then took over the main role in terms of transport of people and goods.

Brákarey has in the recent years decayed due to lack of maintenance and its future has been a lot in the spotlight. The inhabitant's feelings towards the island are strong so the history, the materiality and the inhabitant's connection are the keys to a successful repurpose of the area.

The aim of this project is to introduce facilities for current and future activities and users of the island by maintaining the characteristics, historical buildings, the open access, the unobstructed views, the rich outdoor life and the rough materiality. This project and its facilities will focus on wellness for body and soul on a broad scale in spectacular surroundings. Leisure activities such as sea swimming, dock fishing, canoe sailing, jogging and hiking are already practiced on site and will be united in these new surroundings.

The harbor of Brákarey will be the main area to be discussed, but a strategic plan for the island as a whole will be presented.

1 Hagstofa Íslands, "Hagstofan: Landsmönnum fjölgaði um 1,3% á milli ára," Hagstofa Íslands, accessed May 30, 2021, <https://hagstofa.is/utgafur/frettasafn/mannfjoldi/mannfjoldinn-1-januar-2021/>.

2 Jónsdóttir, Hrefna, "Hvað er Ísland stórt (að flatarmáli)?" Visindavefurinn, accessed June 1, 2021, <http://www.visindavefur.is/svar.php?id=3198>.

3 Bastrup, Rasmus, "Indbyggere og areal," Folketingets EU-Oplysning, accessed June 1, 2021, <https://www.eu.dk/da/fakta-og-tal/statistik/indbyggere-og-areal>.

timeline

January	February	March
20 W Project brief	1 M Site visit	1 M First sketches
21 TH	2 T Preperation for opposition	2 T
22 F	3 W	3 W
25 M	4 TH	4 TH
26 T Analysis	5 F	5 F
27 W	8 M	8 M Building concept & program
28 TH	9 T Opposition - Valentina Glavica	9 T
29 F Move to Iceland	10 W	10 W
	11 TH Start detailed program writing	11 TH
	12 F	12 F Site visit
	15 M	15 M
	16 T Opposition hand in	16 T
	17 W	17 W Design phase 2D and 3D
	18 TH	18 TH
	19 F	19 F
	22 M Detailed program writing	22 M
	23 T	23 T
	24 W	24 W
	25 TH	25 TH
	26 F Process municipal drawings 2D/3D	26 F Preperation for mid-review
		29 M
		30 T Mid-crit
		31 W
April	May	June
1 TH Summary of mid-review	3 M	1 T
2 F	4 T	2 W
5 M	5 W Last line drawings	3 TH
6 T	6 TH	4 F
7 W Design phase	7 F	7 M
8 TH	10 M	8 T
9 F	11 T	9 W
	12 W	10 TH
	13 TH	11 F
	14 F	14 M
	17 M 90% crit	15 T
	18 T	16 W
	19 W	17 TH
	20 TH Finish drawings and renders	18 F
	21 F	
	24 M Site visit - drone shots	
	25 T	
	26 W Set up final presentation and booklet	
	27 TH	
	28 F	
	31 M Hand in booklet	
12 M		
13 T		
14 W Design phase		
15 TH		
16 F		
19 M		
20 T		
21 W Drawings		
22 TH		
23 F Site visit		
26 M		
27 T		
28 W		
29 TH		
30 F		

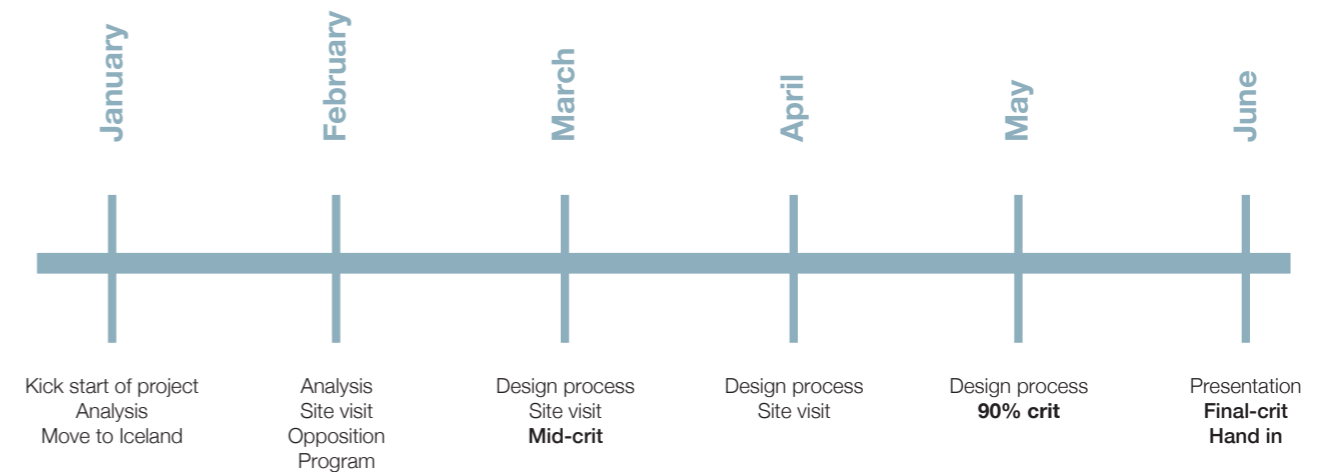


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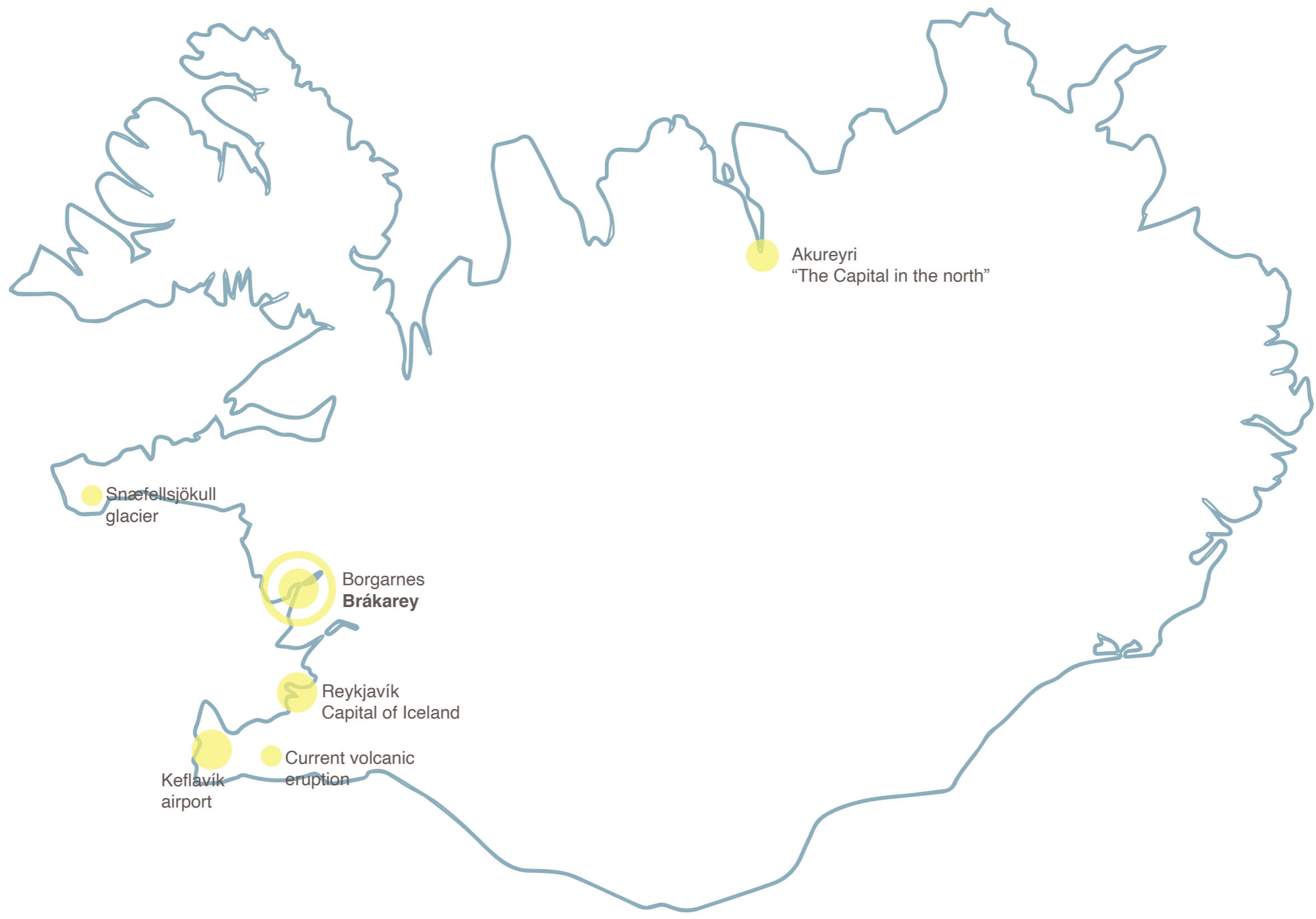
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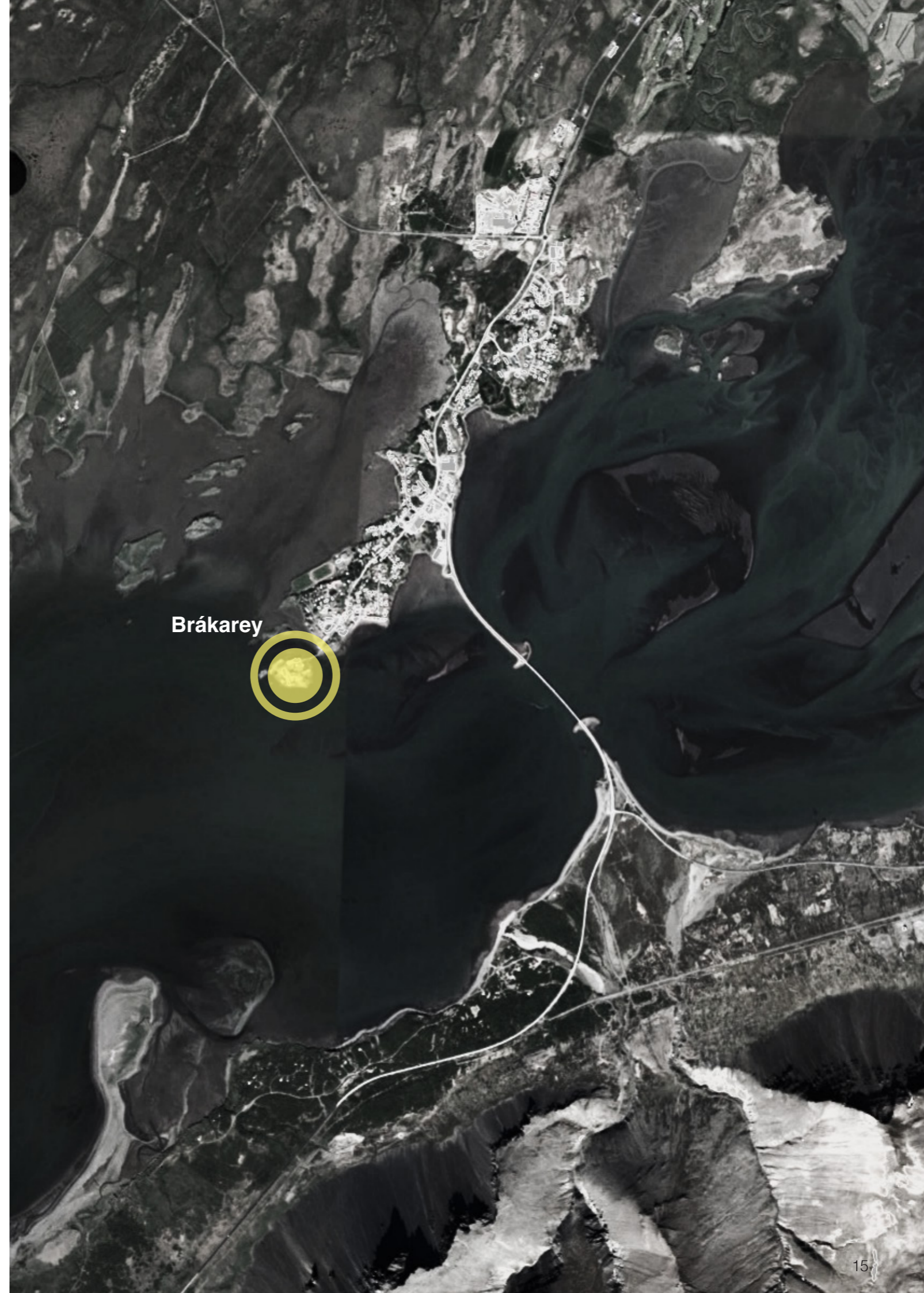
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01 introduction



project introduction

The project is inspired by the inhabitant's connection to the island of Brákarey, its history and its future.

My hope through this process is to show that there is a possibility of a sequel without destroying the history of the place and the deep connection that people from the town of Borgarnes and Borgarfjörður have to it.

The project is mainly divided into three parts. The research, a strategy suggestion for the bigger scale, and then the actual design.

For the phasing of the project I have proposed 3 phases.

Phase 01 - The Seabath

Phase 02 - The Brákarey Wellness and the Brákarey Park

Phase 03 - The residential area.

I touch upon all of these phases, but the main focus will be on Phase 01, The Seabath and the Brákarey Wellness from phase 02.



location and general information

My chosen location is an island in Iceland called Brákarey, connected via bridge to a town called Borgarnes. Borgarnes lies in the middle of West Iceland about 75 km from the capital, Reykjavík.⁴

Over the past decades Borgarnes has become more of a pit-stop on people's way to "the capital in the north" Akureyri, although it has several interesting things to discover.



Brákarey
Borgarnes
Iceland
64.533574, -21.927758

⁴ Markaðsstofa Vesturlands, "Velkomin í Borgarfjörð," Upplifðu Vesturland, accessed June 1, 2021, <https://www.west.is/is/stadur/ferdaleidir/velkomin-i-borgarfjord>.

aim

The aim of this project is to make Borgarnes back into a **destination** full of life and vibrant atmosphere all day round instead of the present pit-stop role it plays.

The island of Brákarey will play a key role in this intervention.



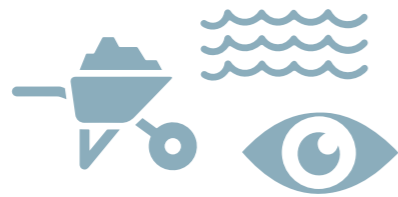
Brákarey as a destination in the past. Year unknown.



Brákarey as a destination in the past. Year unknown.

method

The focus of my proposal will be on the **existing** harbor pier. Working with the materiality and the roughness that is already existing in the area and combining it with the surrounding sea and the spectacular views to all directions.



why Brákarey?

Iceland is an island in the Atlantic Ocean and is around 103.000 km² in size. Iceland is the second largest island in Europe, following Great Britain, and the 18th largest island in the world. Iceland is one of the youngest landmasses on the planet, and consequently home to some of the world's most active volcanoes and the largest glaciers in Europe. Iceland is often referred to as "The land of Fire and Ice" and "The land of light and darkness" with long summer days with almost 24-hour sunlight but short winter days with only few hours of daylight.⁵

Around Iceland there are a dozen of smaller islands. Most of these islands are not populated.⁶ Brákarey has in the past been used for several different activities and is rich in history, but over the past years Brákarey has to some extent been forgotten and today the question that remains concerns its future. Do we reconstruct what can be restored or do we change the entire function of the island and its built area?

The reason I chose Brákarey as the destination instead of any other island around Iceland is because of the debate concerning its future, its former importance in transportation and because of how well connected it is to the town of Borgarnes. Borgarnes is one of the first towns that you have to drive through on your way to the west or north of Iceland. What's also interesting about the island of Brákarey is how much it is already used for all kinds of different activities even though it has seen better days.

By encouraging existing activities and improving the facilities, life will hopefully blossom in the island and attract even more different groups of people from all over the world.

⁵ Promote Iceland, "Geography," accessed June 1, 2021, <https://www.iceland.is/the-big-picture/nature-environment/geography>.
⁶ Hauksson, Birgir, "Hvað er búið á mörgum eyjum við Ísland?," *Vísindavefurinn*, accessed May 20, 2021, <http://www.visindavefur.is/svar.php?id=49644>.

02 history and background



Brákarey history introduction of the site

Brákarey is an island where in the past, fisheries, slaughterhouses, coal, oil transportation and transportation of other goods and people were operated⁷ but today almost all activities on the island have shut down and the buildings that remain are mostly unoccupied and dilapidated. Due to risk of fire-, and public safety, most of the buildings have been closed down until further notice,⁸ leaving the local inhabitants of Borgarnes and the workers within the area of Brákarey confused and insecure about what to expect in the future.



⁷ Gröndal, Gylfi, Kaupfélag Borgfirðinga 80 Ára: 1904-1984 (Borgarnes: Kaupfélag Borgfirðinga, 1984).
⁸ Skessuhorn, "Nánast Öllu Húsnæði Borgarbyggðar í Brákarey Verður Lokað Eftir Morgundaginn - Skessuhorn," February 11, 2021, <https://skessuhorn.is/2021/02/11/ollu-husnaedi-borgarbyggdar-i-brakarey-verdur-lokad-efir-morgundaginn/?fbclid=IwAR0zpwqJj0kH5u6cesz-ihIrmYcGsgiaoUhrxgyIUBZ-CkIS4uvKjlEM>.

Brákarey history history of Brákarey

Borgarnes is a town with a rich history that has a great connection to the Icelandic Sagas. Egill Skallagrímsson from Egils Saga grew up in Borgarnes where **Brákarey** gets its name from Egil's handmaid, Brák. When Egill played football with his father Skallagrímur and won, his father got angry and tried to kill him. Brák, Egil's handmaid, stopped Skallagrímur, who became very angry, and chased her down to the sea. Brák tried to swim away from him, but Skallagrímur threw a rock at her, which killed her.⁹



⁹ Ragnarsdóttir, Regína Hrönn, "The Saga of the Viking Egill Skallagrímsson & the 9 Cairns..." Guide to Iceland, accessed June 1, 2021, <https://guidetoiceland.is/connect-with-locals/regina/the-saga-of-the-viking-egill-skallagrímsson-the-settlement-centre-the-9-cairns-in-west-iceland>.



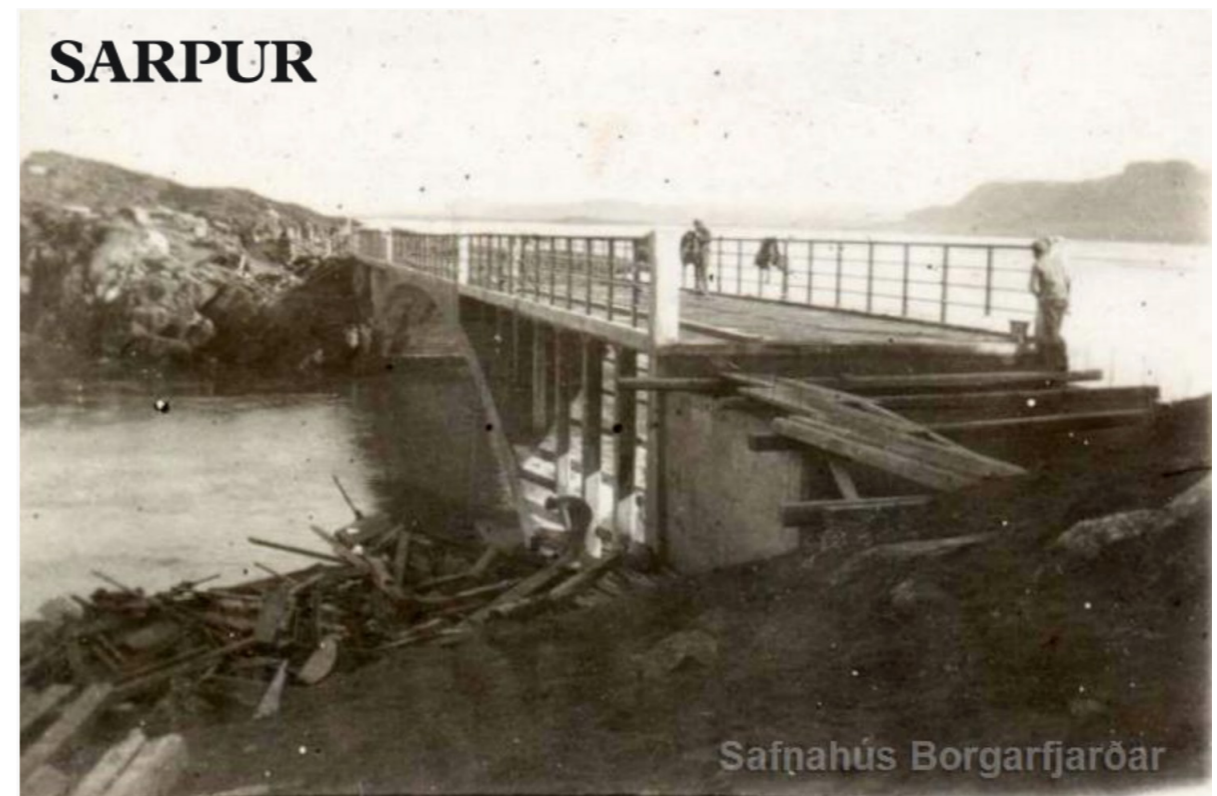
Egill Skallagrímsson (910-990)

Brákarey history Brákarey and the harbor

After settlements began to grow in Borgarnes in the second half of the 19th century, the place soon became a transport hub for the West and North of Iceland, despite the fact that harbor facilities were very poor.

In 1926, it was proposed that a harbor would be built in Brákarey and that Brákarsund (the sea between Brákarey and the town of Borgarnes) would be bridged so that transportation to the harbor area would be made as easy as possible. The construction of the harbor itself began in 1929 and was completed the following year, but in November 1930 a ship docked for the first time at the new pier.¹⁰

People and goods were mainly transported to and from Borgarnes, but there was very little fishing.¹¹ When the harbor was taken into use, a flow of tourists flowed through Brákarey, but after a road was laid from the capital in south and through Hvalfjörður around 1940, transportation of people and goods through Brákarey harbor decreased significantly. In March 1966 the last scheduled trip with transportation of people was completed.¹²



The bridge between Borgarnes and Brákarey under construction.

¹⁰ Friðriksson, Guðjón, *Hér Heilsast Skipin, Síðara Bindi* (Uppheimar, 2013), 240–45.
¹¹ Sigvaldason, Ari, *Víst Sóttu Þeir Sjóinn: Útgerðarsaga Borgfirðinga* (Borgarnes: Grímshús, 2011), 59. ¹² Friðriksson, Guðjón, *Hér Heilsast Skipin, Síðara Bindi*, 240–45.

Brákarey history Brákarey activity

Brákarey and its surrounding has been used for several different activities in the past.

It could be said that the actual history of Brákarey did not begin until the harbor was taken into use in 1930. When the transport of people and goods decreased around 1940, it was decided to build a small slaughterhouse in the island of Brákarey.¹³ March 26, 1966 was the last scheduled passenger trip,¹⁴ and the same year the slaughterhouse was enlarged and one of the most advanced slaughterhouses in the country was built with perfect technical equipment that took care of all the slaughter of Kaupfélag Borgfirðinga from 1968 - 2003.¹⁵ In 2003, the slaughterhouse in Brákarey was considered obsolete and it was considered a more cost-effective option to close it than to renovate it.¹⁶

Today most of these buildings and structures stand empty or inaccessible, only a monument of the past.



Ship docked at the harbor in Brákarey.

¹³ Gröndal, Gylfi, Kaupfélag Borgfirðinga 80 Ára: 1904-1984, 49-53.

¹⁴ Friðriksson, Guðjón, Hér Heilsast Skipin, Síðara Bindi, 245.

¹⁵ Gröndal, Gylfi, Kaupfélag Borgfirðinga 80 Ára: 1904-1984, 50.

¹⁶ Faxaflóahafnir, "Grimshúsfélagið," December 17, 2013, <https://www.faxaflaoahafnir.is/wp-content/uploads/Gr%C3%ADmsh%C3%BAst%C3%A9lagi%C3%B0.pdf>.

Brákarey today built environment

The buildings in Brákarey have seen better days. Some of them still house some kind of business, but in a recent news it was revealed that the majority of them had to be closed due to lack of fire protection and other safety reasons and can therefore pose a danger to those who use them and other parties around.¹⁷ While browsing through social media I came across a Facebook page for the local people of Borgarnes. On that page you could clearly see how important Brákarey and its future is for the local community. Some say it's crucial to keep most of the buildings that still can be fixed while others want to tear most of them down. The map to the right shows the buildings and structures that still stand today and, in the list below you can see what they host today and what they were originally built to host.

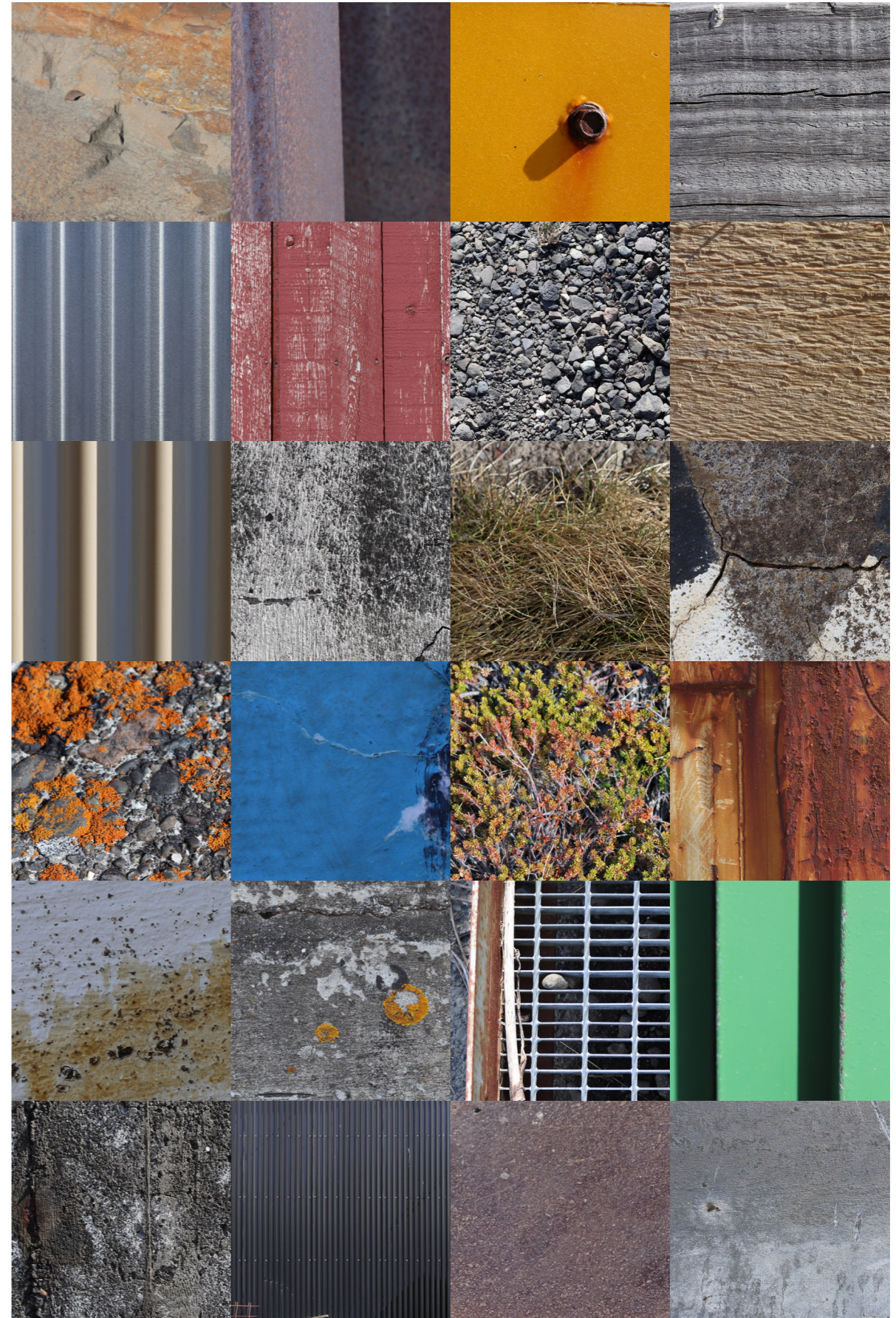
- A:** The bridge connected to Borgarnes, still in use.
- B:** Brákarbraut 18-20 - Light industry and apartment building, partly in use.
- C:** Brákarbraut 17 - The old gasoline station of Brákarey, not in use.
- D:** Brákarbraut 19 - Slaughterhouse for larger animals, in use.
- E:** Brákarbraut 21 - The old watertank, not in use.
- F:** Brákarbraut 25 - The large slaughterhouse. Used partly today as a small gallery, indoor golf track, recycling center and sometimes as a flea market. Partly closed.
- G:** Brákarbraut 27 - A pen for the slaughterhouse, not in use.
- H:** Brákarbraut 29 - Sewage treatment plant, in use.¹⁸
- I:** Brákarbraut 27C - A gin distillery, newly renovated, will open summer 2021.
- J:** The harbor, used today by the locals to fish, go kanooing, seabathe and by smaller private boat owners.

¹⁷ Skessuhorn, "Nánast Öllu Húsnæði Borgarbyggðar í Brákarey Verður Lokað Eftir Morgundaginn - Skessuhorn."
¹⁸ Ólafsdóttir, María Lisbet, "Brákarey í Borgarnesi - Tillaga að breyttu skipulagi" (Thesis, 2012), <https://skemman.is/handle/1946/13239>.



Brákarey today materiality on site

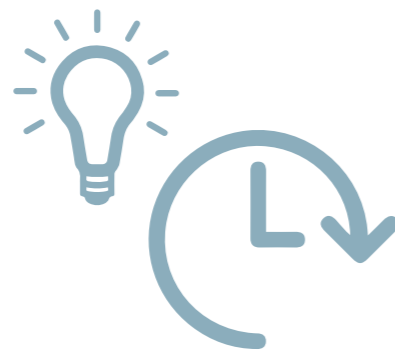
Materials are important to us as users. It can attract, guide and invite all depending on its location and feeling. Brákarey has a lot of different materials. Mainly rough materials such as steel, rusted and galvanized, concrete, stones and rocks, asphalt and bright colors such as yellow, green and orange. The materials alone give you a certain feeling and history of the place. A history you want to keep, a history with a meaning for a lot of people. On the page here to the right are some of the materials and colors I came across in some of my site visits this semester. They are both manmade and natural and instead of grouping them in that way I will let the pictures speak for them selves and the user to decide. Some of these materials and colors will play a key role in the design process later on.



Brákarey today current masterplan

According to Borgarbyggð's current master plan (2010-2022), it is suggested that a new residential area will be built in Brákarey with a maximum of 122 apartments, but there are also defined industrial areas and a marina. Trade and services are also planned on the island, so land use is planned to be mixed.¹⁹

The future of Brákarey has been in the spotlight for a long time where the latest detail planning for Brákarey is from 2007, when a competition concerning the future of Brákarey was held. The winning proposal suggested mixed land- use of the island.²⁰ Since then nothing has happened, except for the sewage treatment plant that has been built in the south-western part of the island.²¹ There is still a certain uncertainty regarding the future of Brákarey, so the future of it still remains as an unanswered question.



Brákarey - winning proposal, detailed plan. Kanon architects, 2007.

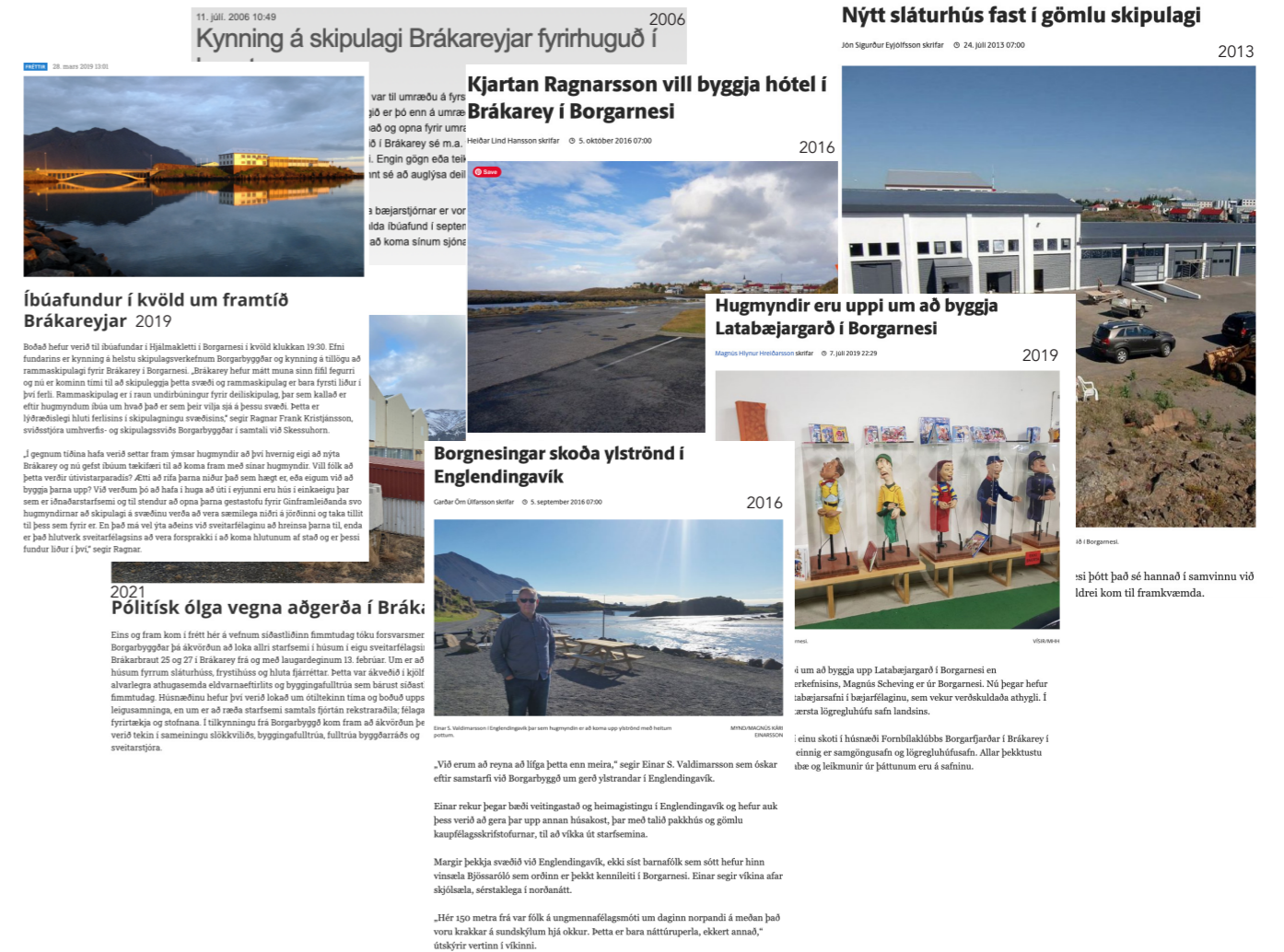


Brákarey - winning proposal, perspective view. Kanon architects, 2007.

¹⁹ "Aðalskipulag Borgarbyggðar 2010-2022" (Landlínur, March 2011).
²⁰ Kanon arkítæktar ehf, "Brákarey," accessed May 25, 2021, <http://www.kanon.is/portfolio/brakarey/>.
²¹ Veitur, "Ný hreinsistöð í Borgarnesi - tímamót í fráveiturstri Veitna," June 5, 2018, <https://www.veitur.is/frett/ny-hreinsistod-i-borgarnesi-timamot-i-fraveiturstri-veitna>.

Brákarey today the eternal plans

The future of Brákarey has been a lot in the spotlight. When searching the internet, multiple articles from the last two decades regarding the use of Brákarey pop up. Everything from detailed plans of the island to political debates regarding its future. Hotels, sand beach in Engendingavík, the Lazy town amusement park and so on. Inhabitants of Borgarnes argue on social media, and there are doubts as to whether the existing buildings are in fact dangerous or not.



Brákarey today the future?

Before following the suggested plan for the development of a mix-use residential area in Brákarey, something needs to be done that can kick-start a process that works as a **generator** for the rest of it and even entails a change of emphasis in the planning of the island.

On one of my many visits to Brákarey last summer, 2020, I noticed that the inhabitants of Borgarnes use the island for all kinds of different purposes, e.g., to fish from the harbor, sail kayaks and to take a swim in the ocean. I talked to an older woman living in Borgarnes, who comes regularly with a group of people to have a swim. She said that they really lack some sort of facilities to get dressed and warm up after the cold swim.

I think that this could be a great opportunity to combine activities and facilities for both locals as well as tourists by creating facilities that both groups benefit from. This could make Borgarnes become the destination and the beautiful island of Brákarey, the amazing location along with the spectacular mountain, volcano, sea and glacier views.



03 facts and process

water

Access to fresh water was a problem when Borgarnes was first inhabited (1878), just like in almost any other place in Iceland at that time. The first inhabitants had to dig wells to fetch fresh water, and carry it to their houses. In 1940, the number of inhabitants in Borgarnes doubled, from 640 to around 1240 as British soldiers moved to the town. Because of this, the town decided to build a fresh water supply. The British army provided all the supplies for the water supply in exchange for free drinking water for their soldiers living in Borgarnes.²²



Workers in Borgarnes



Svarfólsbrunnur wells.

²² Ólafsson, Egill and Hansson, Heiðar Lind, *Byggðin Við Brákarpoll - Saga Borgarnes I* (Borgarnes: Bókautgáfan Opna, 2017), 277–84.

heating

Around 1900 the most typical way of heating a house in Borgarnes was with peat. There were plenty of swamps in the vicinity of Borgarnes, but it was considered difficult work and time-consuming to dry the peat for use. However, those who were fairly wealthy used coal, and around 1930 almost all houses of Borgarnes were heated with coal. Because of this, coal ships regularly sailed into Borgarfjörður and docked at Brákarey. In the 1940s and 50s, many households introduced oil heating and reduced the use of coal. There were oil tanks at almost every house, which made it common to see oil trucks drive around town. An oil crisis hit the world in 1973, which caused oil prices in Iceland to double. The rise in prices led Icelanders to start using geothermal energy for energy production and heating.²³



Coals being docked at the pier. Picture: Þorsteinn Jónsson. Byggðin við Brákarpoll, saga Borgarness I - 2016. P. 297.



Oil transportation in the town of Borgarnes.

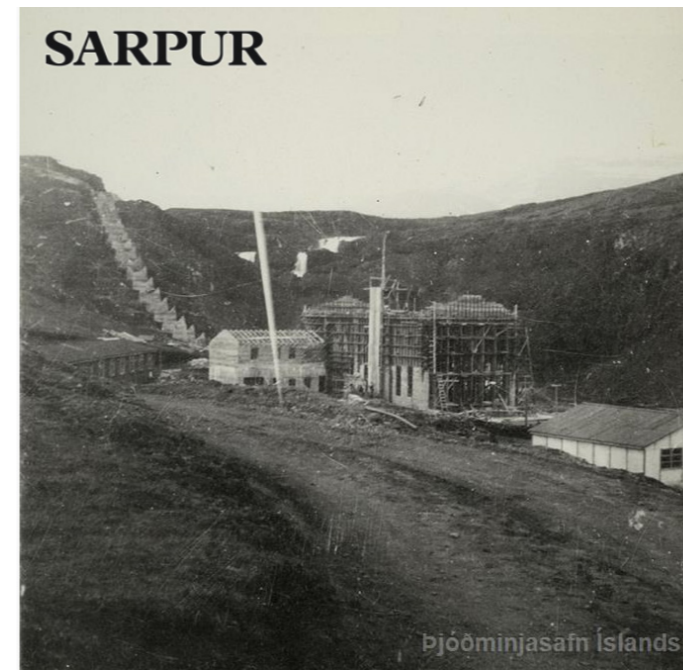
²³ Ólafsson, Egill and Hansson, Heiðar Lind, 295-301.

electricity

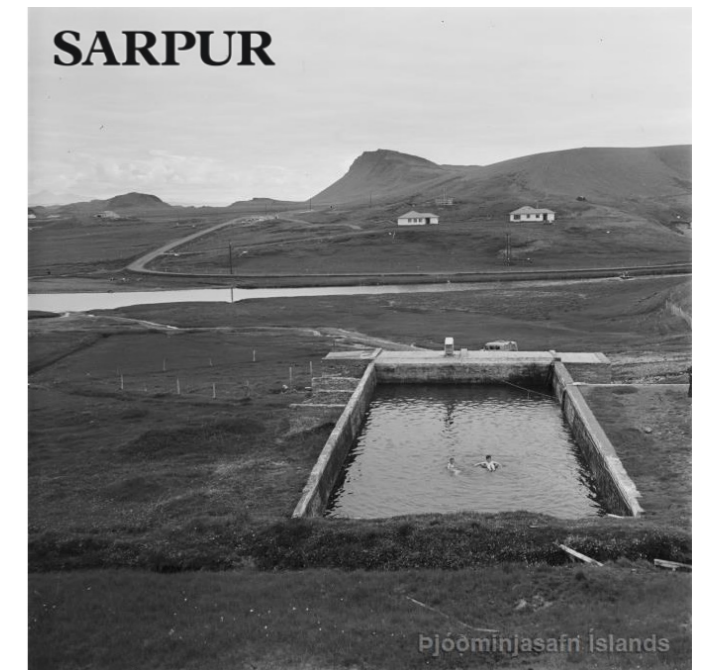
In 1918 electrification began in Borgarnes. At first it was only used for lighting, as electric stoves were not common and regarded as luxury at the time. Because of this, coal was a large part of household expenditure as it was used for both cooking and heating. As with the water, the demand for electricity also increased as the British soldiers moved to the town. At the end of the war, in 1945 the town decided to build water power generator in Andakílsárvirkjun, 17 km from Borgarnes.²⁴



Andakílsárvirkjun 1947 - Stamp.



Andakílsárvirkjun 1947.



Hreppslaug swimming pool, 17 km from Borgarnes somewhere between 1940-1965.

²⁴ Ólafsson, Egill and Hansson, Heiðar Lind, 285-95.

geothermal energy

Iceland has around 99.96% renewable energy supply, so in that sense Iceland is very sustainable. Today, the town of Borgarnes uses geothermal energy as their source for hot water. After several unsuccessful attempts to find hot water in Borgarnes in 1969, it was considered in 1973 to lay a district heating system from a nearby hot spring, **Deildartunguhver** in Reykjadalur to the town of Borgarnes and Hvanneyri. This took around 10 years, and in 1979, The district heating, Hitaveita Akraness og Borgarfjarðar was finally established and put into use in 1982.²⁵

Deildartunguhver is the largest hot spring in Iceland, giving 180L/s of 100°C hot water and pumped from the hot spring in 34 km long pipes to Borgarnes. This hot water is both used to heat the buildings and spaces as well as for bathing and showering. Access to hot water is therefore not a problem in the area.²⁶



Boiling hot water coming from Deildartunguhver.



Deildartunguhver close up, despite the heat, vegetation thrives.

²⁵ Ólafsson, Egill and Hansson, Heiðar Lind, 295–301.

²⁶ Verkis, "Hitaveita Akraness og Borgarfjarðar I Verkefni." www.verkis.is, accessed May 5, 2021, <https://www.verkis.is/verkefni/veitur/hitaveitur/hitaveita-akraness-og-borgarfjarðar>.

bathing culture

Iceland is crowded with geothermal hot springs which provides every 9 Icelander out of 10 hot water. Either the steam from the hot springs is used to heat up cold water or the water from the spring itself is used.²⁷

Because of all this hot water Iceland is also crowded with **outdoor** swimming pools and sea baths that are open all year round. The pools are so much more than just a bathing place, it's the place for people of all ages and groups to meet and mingle.

The water temperature is usually around 32-43°C, which varies depending on what people are looking for. Relaxation, activity or something in between.

Historically, geothermal pools have been a part of Iceland's identity since at least the 9th and 10th centuries, when they were used for domestic purposes, such as bathing and washing clothes.

The geothermal pools evolved through the years, and the first swimming pool was established in the 13th century.²⁸



Blue lagoon - Grindavík - Basalt architects.



Geosea - Sea bath Húsavík - Basalt architects.



Vök baths - Egilsstaðir - Basalt architects.



Jarðböð - Mývatn - Halldór Gíslason.

²⁷ Þórðarson, Sveinn and Jónasson, Þorgils, "Um Hitaveitur á Íslandi" (Samorka, n.d.), <https://samorka.is/wp-content/uploads/2016/06/Um-hitaveitur-%C3%A1-%C3%8DIslandi-1.pdf>.

²⁸ GJ travel, "Swimming Pool Culture in Iceland," accessed June 2, 2021, <https://www.gjtravel.is/swimming-pool-culture-in-iceland/>.

outdoor bathing

It may come as a surprise when thinking of the cold weather and the climate in Iceland that **outdoor bathing** is standard equipment in almost every town of the country, with few exceptions. Geothermally heated and open year-round, allowing Icelanders, tourists and guests to enjoy their daily swim no matter the weather.²⁹

“Instead of going to the pub or park, Icelanders like to gather in their local pool to get fresh air, exercise and discuss world matters in the hot tub.”³⁰

Jón Karl Helgason

People are more likely to drive their car and walk quickly between places, with almost no interest in meeting others and chatting in squares or on the streets, as is the case in many other parts of the world. Thus, the hot pools and hot tubs are the place to be.³¹

As has been mentioned Iceland is crowded with geothermal hot springs and it can be said that we almost take this resource for granted. When imagining the cold climate, one might wonder how expensive it would be to keep the pools warm and cozy. Back here? Nope, we have so much of this hot water that it could be said that we don't know what to do with it. Most of these geothermal pools therefore have continuous flow of hot water running, which also has the effect that less detergents such as chlorine needs to be used.

To put things even more in context, almost every Icelandic private villa has heated sidewalks and parking spots.

²⁹ “„Íslensk uppskrift að vellíðan“ – BBC um sundlaugarnar,” RÚV, August 17, 2020, <https://www.ruv.is/frett/2020/08/17/islensk-uppskrift-ad-vellidan-bbc-um-sundlaugarnar>.

³⁰ Gardiner, Karen, “An Icelandic Ritual for Wellbeing,” accessed June 16, 2021, <https://www.bbc.com/travel/story/20200817-an-icelandic-ritual-for-wellbeing>.

³¹ Gardiner, Karen.



Árbæjarlaug swimming pool - Úti og Inni architects.



Drangsnæs hot tubs.

Hofsós and Guðlaug

To get the feeling of bathing in Iceland I will introduce two already built outdoor bathing facilities, with different character, but both using geothermal water as their source of hot water.

Located in the Northwest of Iceland, the town of **Hofsós** is one of the oldest trading posts in Iceland, dating back to the 1500s. Hofsós used to be a fishing village but today the town is one of the main tourist attractions thanks to the fairly new outdoor geo thermal swimming pool it has to offer.³² The swimming pool at Hofsós is considered particularly beautiful and has received numerous awards and recognitions since it was taken into use. The pool was chosen a place down by the sea, south of the village, above the so-called Staðarbjargarvík. The pool is such that when swimming from south to north, the water surface of the pool flows together with the sea surface below it with a direct direction to the island of Drangey. The pool area is considered the main attractions due to its placement in the natural environment.³³



Hofsós swimming pool - Basalt and VA architects.



Hofsós swimming pool - Basalt and VA architects.

³² Guide to Iceland, "Hofsós Travel Guide," accessed June 12, 2021, <https://guidetoiceland.is/travel-iceland/drive/hofsos>

³³ Upplifðu Norðurland, "Sundlaugin á Hofsósi," accessed June 12, 2021, <https://www.northiceland.is/is/upplifun/badstadir/sundlaugar/sundlaugin-a-hofsosi>

In the west of Iceland, the town of Akranes is located with around 7500 inhabitants. Langisandur is a one kilometer long natural beach located by Akranes.³⁴ At Langisandur you can free of charge bathe in the sea and enjoy the view from the Geothermal pool, **Guðlaug** located in the stone and rock loading of the beach. Guðlaug is made out of concrete casted on site on two levels. From the higher hot tub the hot water flows to the lower one creating an exciting relationship between those two. During high tide the lower hot tub can be flooded creating a dynamic contrast between the natural elements and the baths.³⁵

Both at Hofsós and Guðlaug, geothermal water is used, with constant flow. The temperature of Hofsós pool is around 30°C while Guðlaug is around 40°.



Guðlaug geothermal pool - Basalt architects.



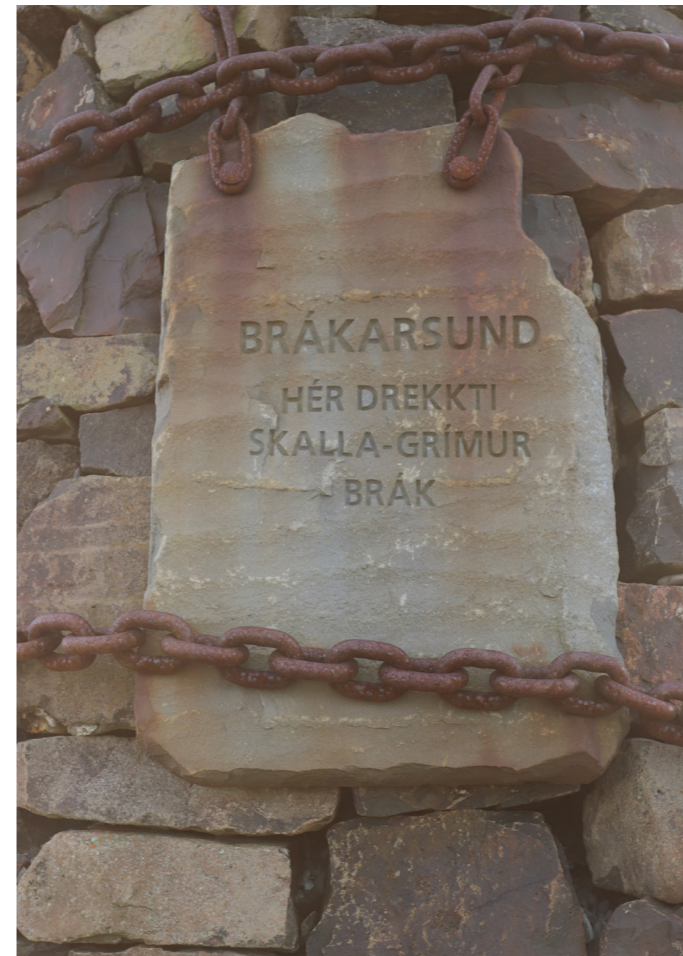
Guðlaug geothermal pool - Basalt architects.

³⁴ 300Akranes, "Akranes er framsækið sveitarfélag," accessed June 14, 2021, <http://300akranes.is/um-akranes>
³⁵ Architonic, "Guðlaug Baths," accessed June 14, 2021, <https://www.architonic.com/en/project/basalt-architects-gudlaug-baths/20193347>

site visits

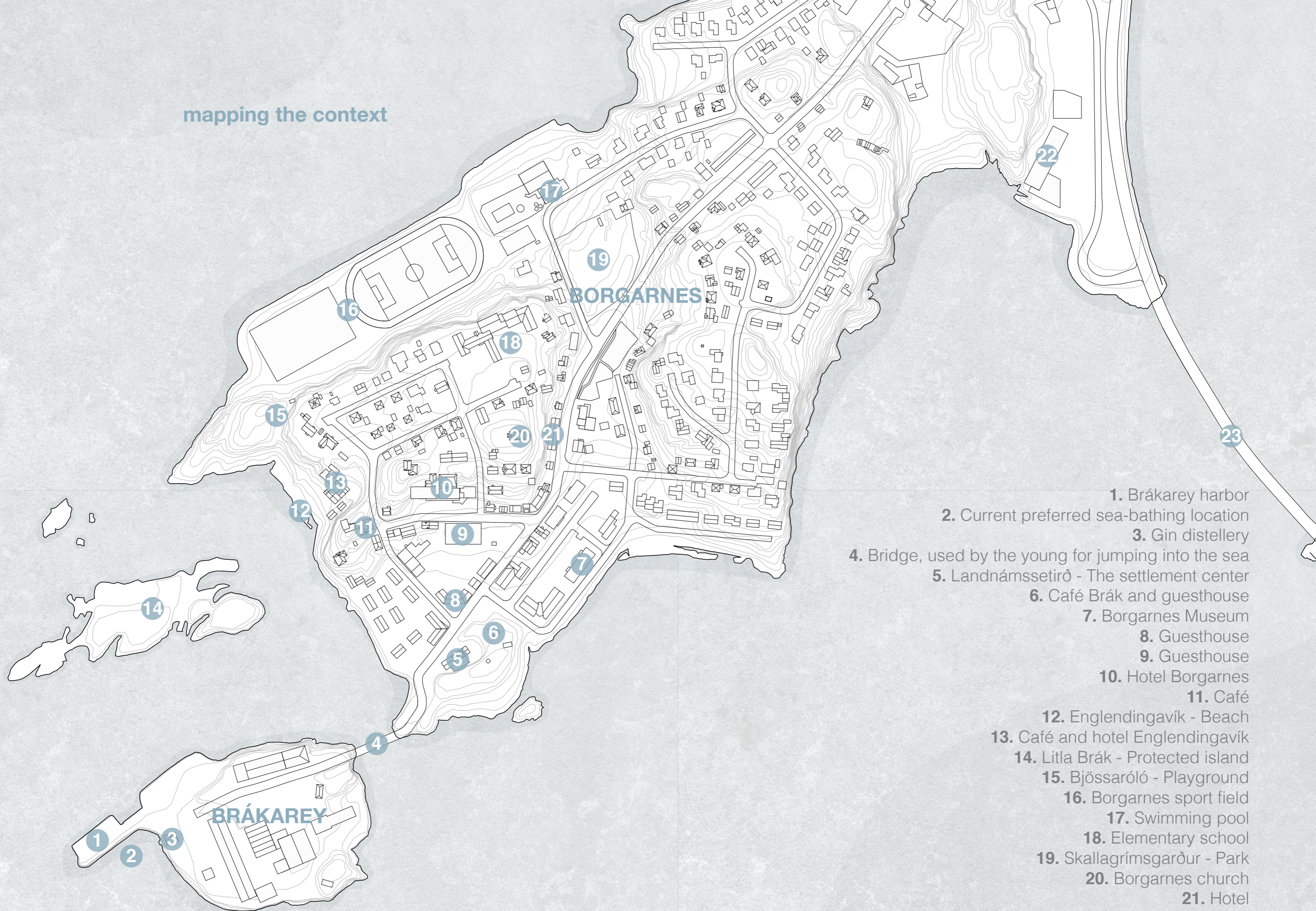
Over the past ten years I have visited Borgarnes regularly all year round. On some of these trips I went for a car-ride or a walk to Brákarey, mainly for the spectacular views and the calmness it offers. On the next three pages are some of the pictures I have photographed this semester in all kinds of weather.

In most of my recent site visits, there was always some human activity in the island. People walking, running, swimming, photographing, working, kayaking, biking or simply on a car-ride around the island. The people I talked to mentioned that the island had a special attraction because of its location and calmness it offers away from the semi urban situation in the town of Borgarnes.





mapping the context



- 1. Brákarey harbor
- 2. Current preferred sea-bathing location
- 3. Gin distillery
- 4. Bridge, used by the young for jumping into the sea
- 5. Landnámssetirð - The settlement center
- 6. Café Brák and guesthouse
- 7. Borgarnes Museum
- 8. Guesthouse
- 9. Guesthouse
- 10. Hotel Borgarnes
- 11. Café
- 12. Engendingavík - Beach
- 13. Café and hotel Engendingavík
- 14. Litla Brák - Protected island
- 15. Bjössaróló - Playground
- 16. Borgarnes sport field
- 17. Swimming pool
- 18. Elementary school
- 19. Skallagrímgarður - Park
- 20. Borgarnes church
- 21. Hotel
- 22. Supermarkets
- 23. Bridged entrance to Borgarnes

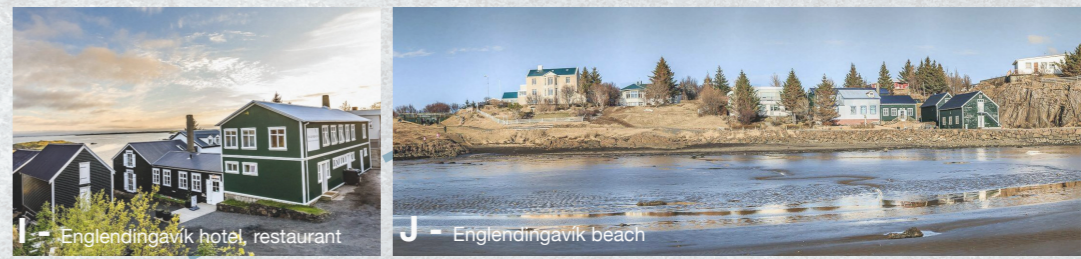
10 minute mapping



BORGARNES

BRÁKAREY

10 minute walking radius

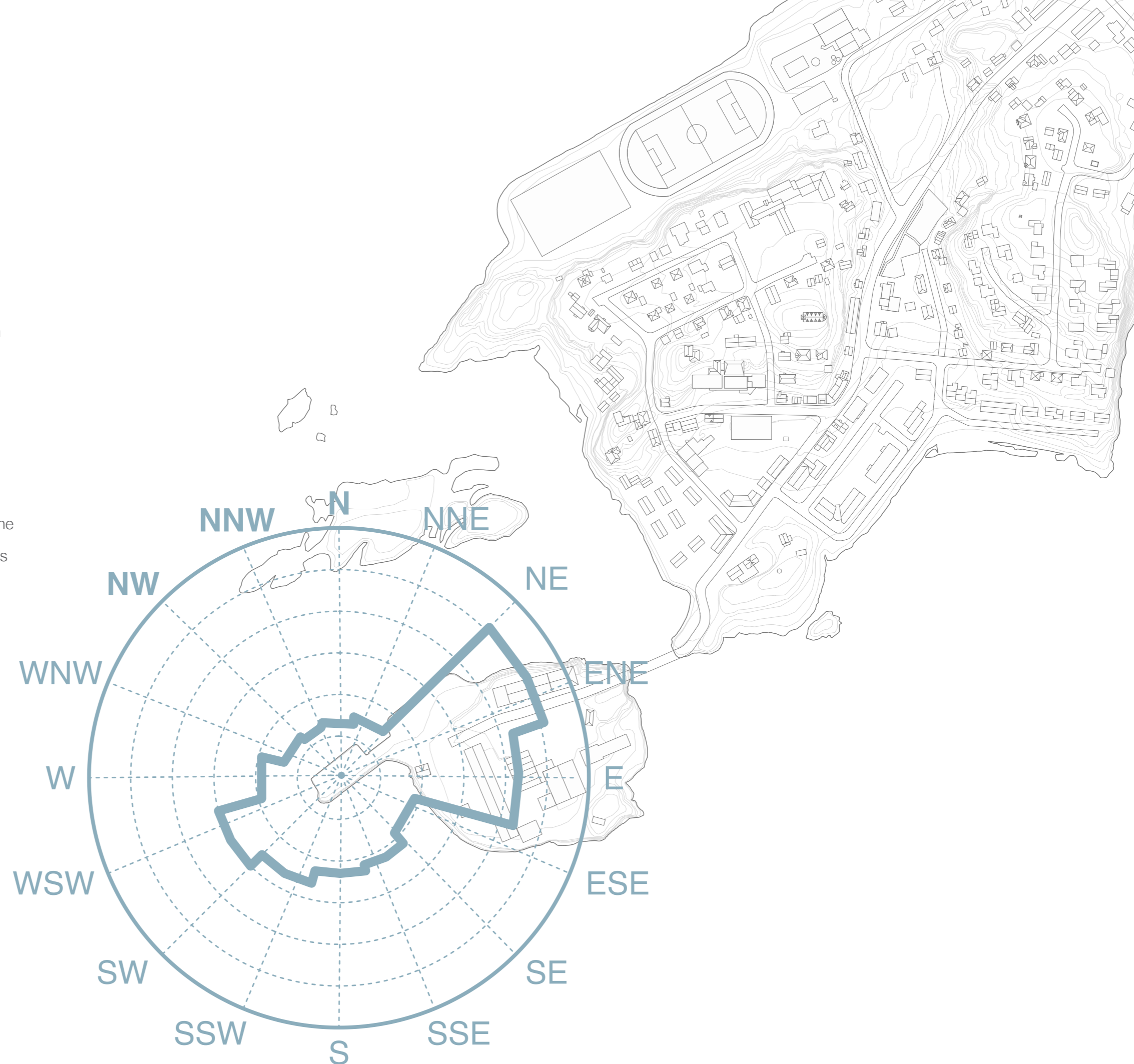


wind effects

This is the closest wind rose to Brákarey which clearly shows that it blows most from the **north-east**.³⁶

This needs to be taken into account when designing the area, especially in regard to the location of outdoor areas and bathing facilities.

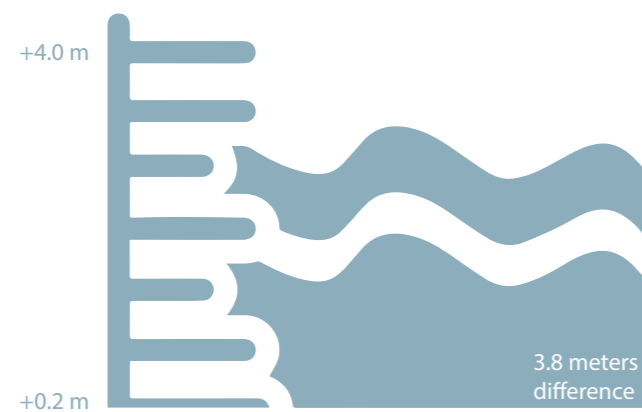
The proposed building volumes can serve the purpose of windbreakers and create shelters for various functions in the area.



³⁶ Veðurstofa Íslands, "Vindatlas," accessed June 2, 2021, <https://vindatlas.vedur.is/>.

sea level and accesibility

The Sea-level around Brákarey varies greatly and the difference of it can range from 0.2m to 4m depending on the time of the day.³⁷ This variation needs to be taken into account when designing, programming and implementing the project. Accessibility to the sea from the harbor is through an existing old concrete ramp, which is used by the sea bathers and kaykers already today.



³⁷ Sigurður Sigurðarson, "Lágsvæði – Viðmiðunarreglur Fyrir Landhæð" (Vegagerðin, 2018).



The existing concrete ramp used to access the sea



Sea bathing in Englingavík in 1945. Brákarey in the background,

views

From the harbor in Brákarey there are spectacular views in all directions. South to mountain Hafnarfjall, West to the ongoing volcanic eruption in Geldingadalir, North-West to the horizon, North to Snæfellsjökull Glacier and North- East to the island of Litla Brákarey.

This will affect the design of the proposed volumes and different areas of the project.



Horizon

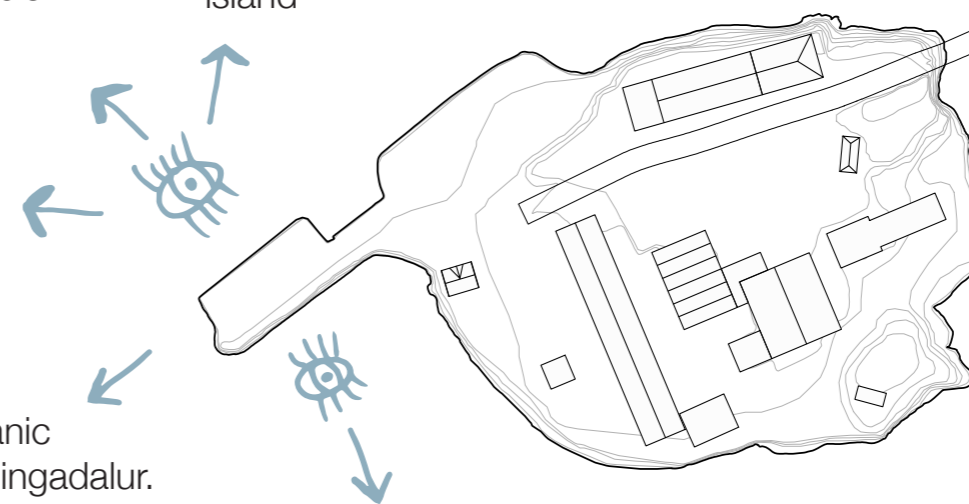
Ongoing volcanic eruption, Geldingadalur.



Snæfellsjökull Glacier



Litla Brákarey island



Mountain Hafnarfjall

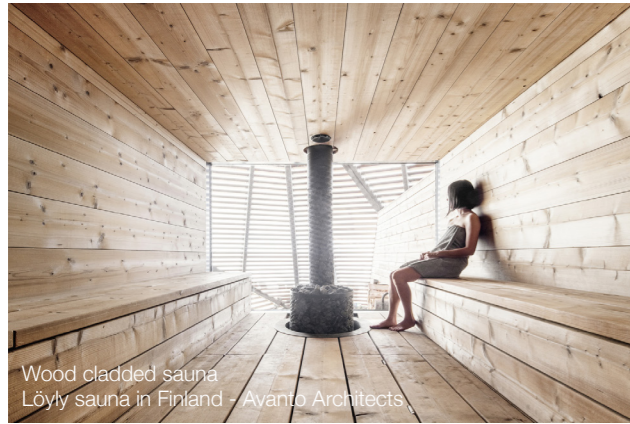


social media

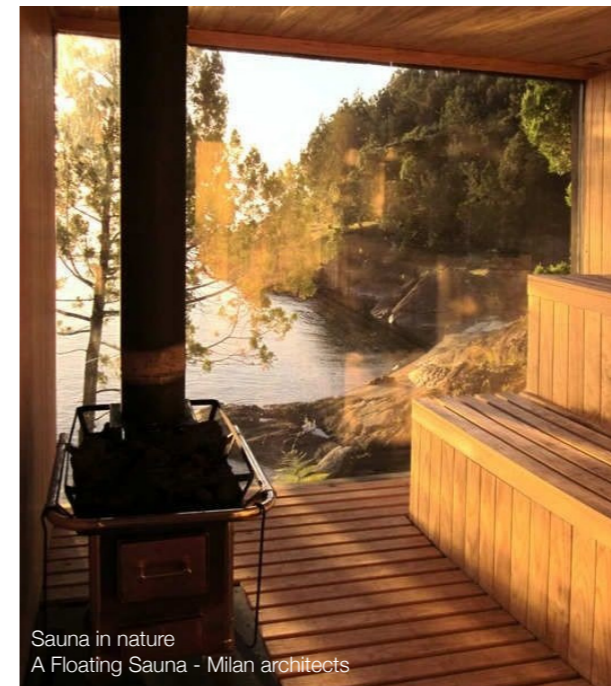
Scrolling through social media, such as Instagram you get the sense of the life already on the island of Brákarey. By scrolling through the Facebook group, “Borgarnes” you can come across interesting dialogues between the inhabitants around the future of Brákarey. People in the group are divided into several groups where some want to keep everything as it is, others rebuild the area while some want to tear everything down and start at the beginning. How about meeting somewhere in between? Give the place extra life to begin with and see what happens? Maybe old joys come to life and new and exciting ideas get born. We need to water the flowers for them to grow, the same can be true of our environment, man-made or not.



material references

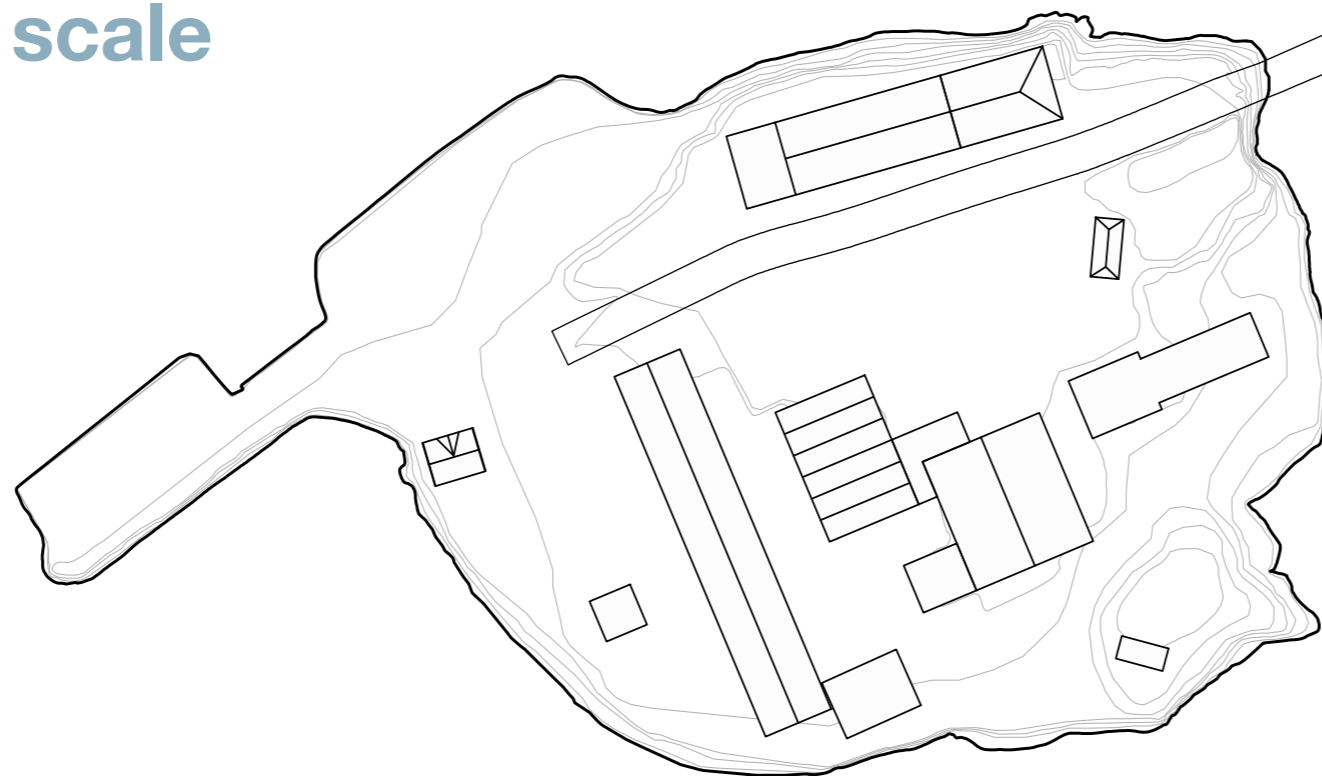


atmospheric references





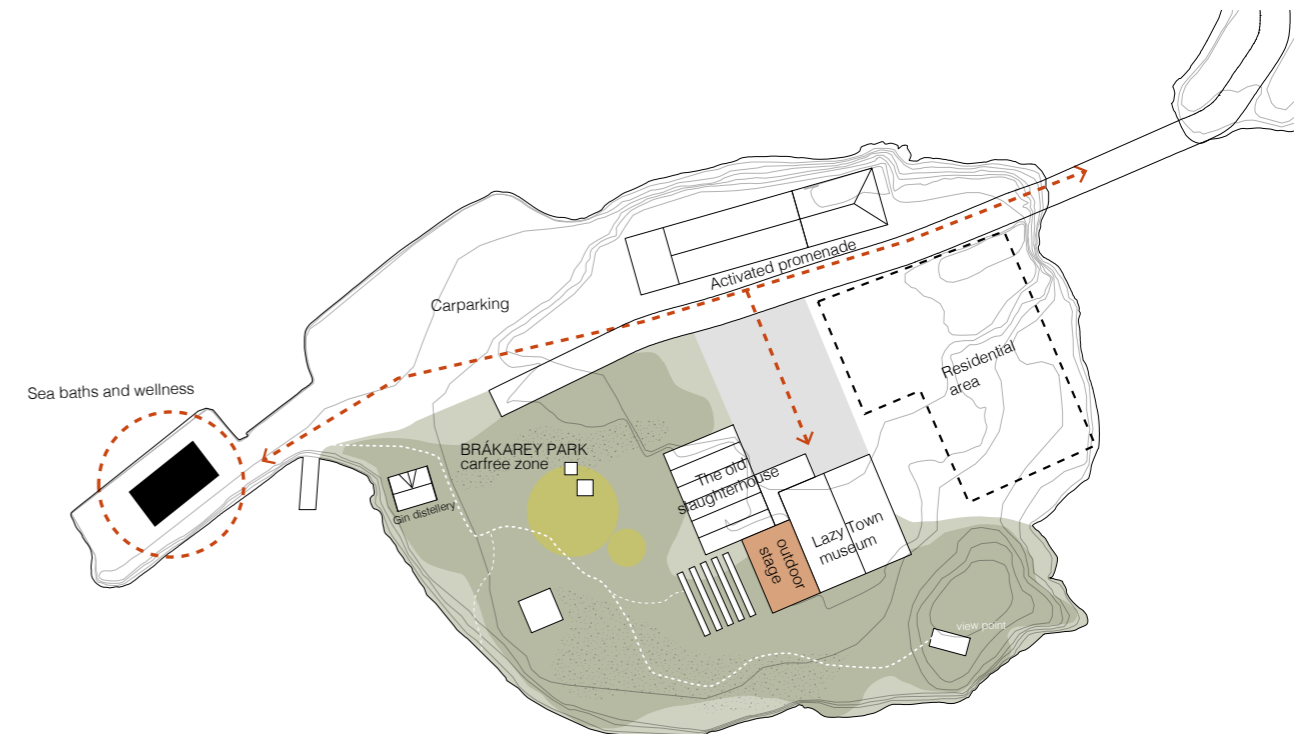
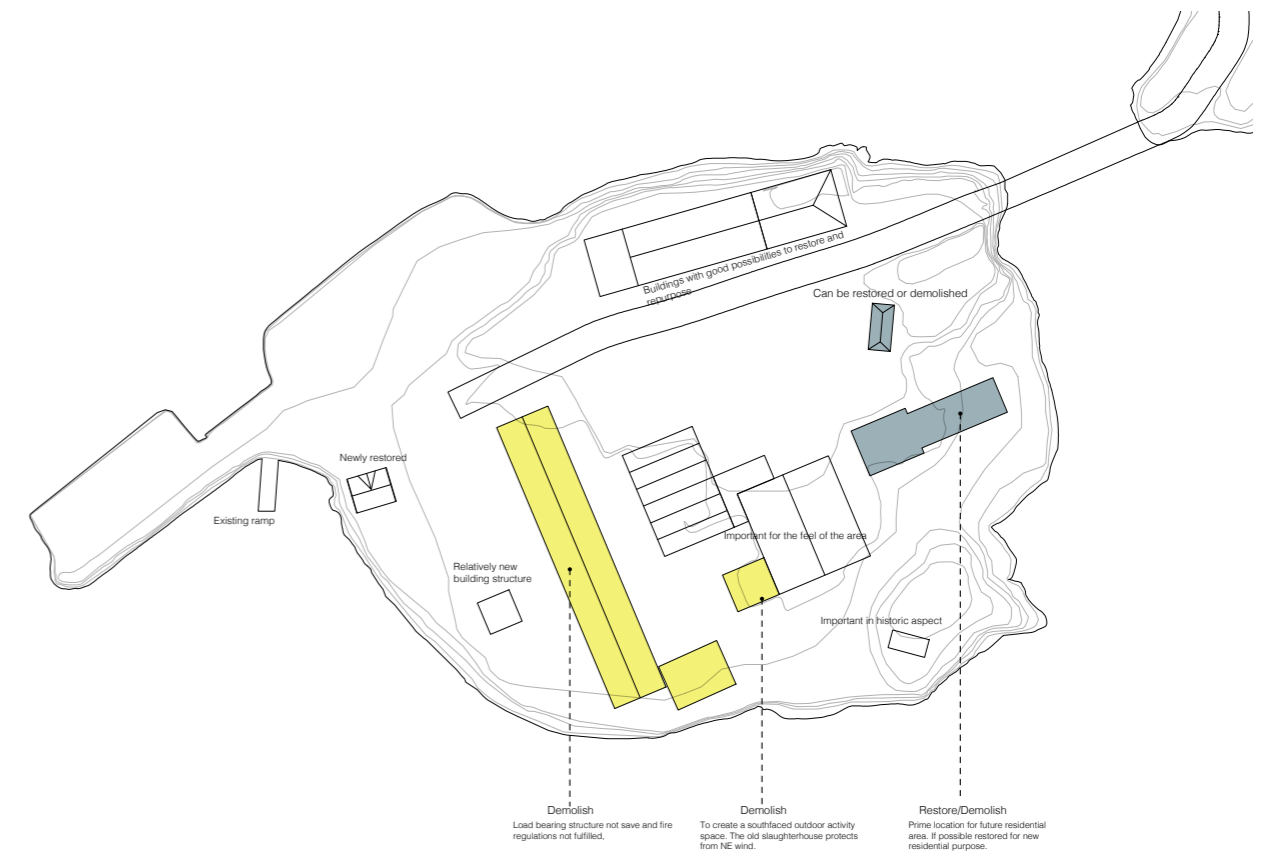
04 strategic plans at the bigger scale



the big scale - strategy

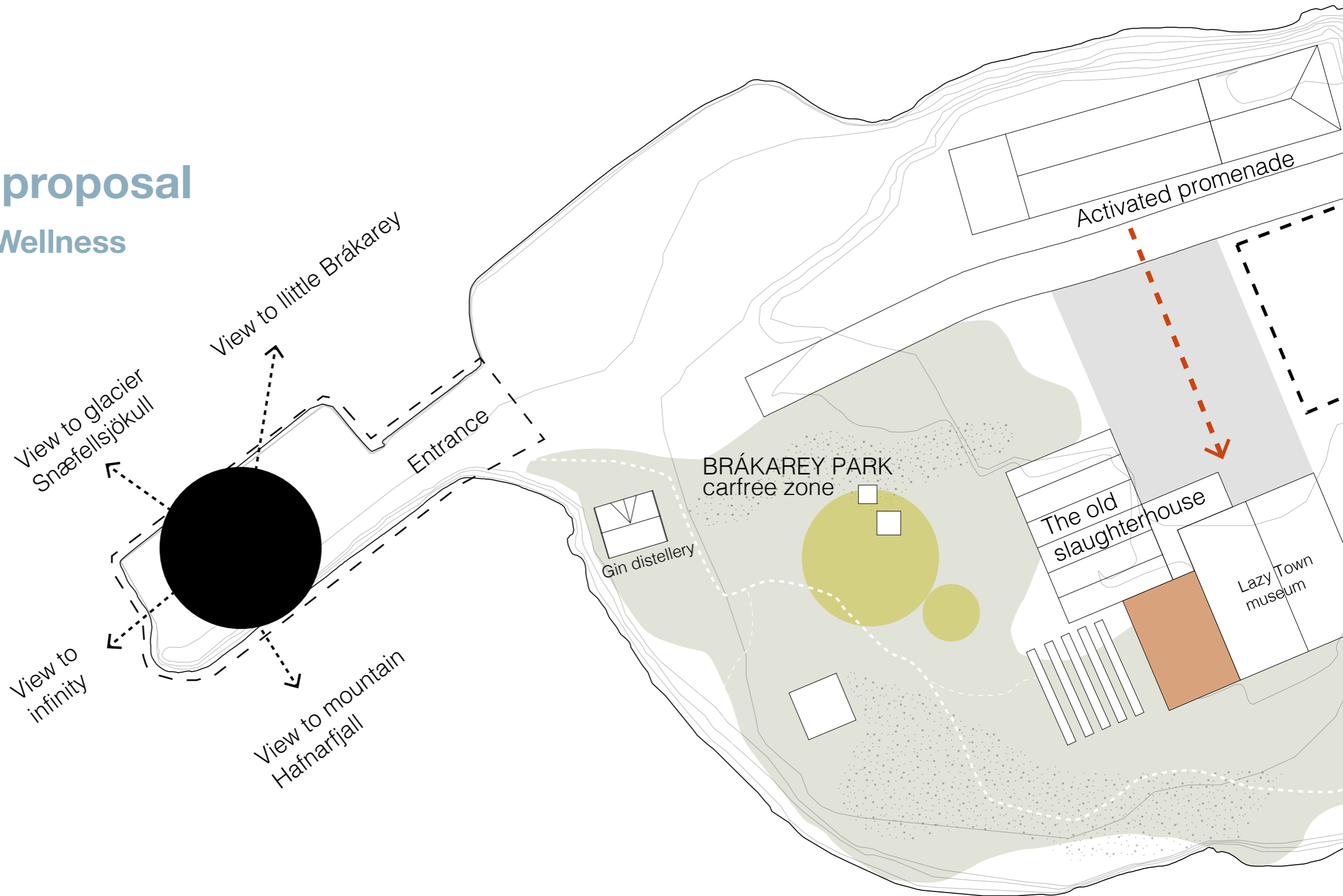
As has been mentioned, there are different ideas about the future of the area, although nothing has happened for quite a few years. The uncertainty about what is the right solution for the island is great and therefore I hope that a few smaller interventions or facelifts can bring Brákarey the beauty and care that it needs to grow and become the destination it deserves.

In a larger context, it would be preferable in my opinion to consider the flow of transport within the island, mainly with pedestrians and cyclists in mind. From Borgarnes and over the one lane bridge until you reach the harbor, I suggest an active promenade where the ground floors of the already existing buildings at Brákargata 18-20 would offer smaller rental spaces that could be used for all kinds of pop-up markets, smaller shops or galleries. In the southern part of the island, I suggest that the buildings considered not safe because of general safety and fire safety will be demolished and the **Brákarey park**, a car free zone would be introduced. The old slaughterhouse would continue to host a “Lazy town cartoon” museum and the antique car museum would get its place as well. An outdoor south faced area with a stage would be added with possibilities to host all kinds of different activities. The old slaughterhouse protects it from the NE wind. In the south-eastern part of the island I suggest a possible residential area to be built. The harbor in the west will host the **Brákarey Wellness and Seabath**, with focus on wellness for body and soul on a broad scale in it's spectacular surroundings. Leisure activities such as sea bathing, dock fishing (angling), kayak sailing, jogging and hiking are already practiced on site and will be united in these new surroundings.



05 design proposal

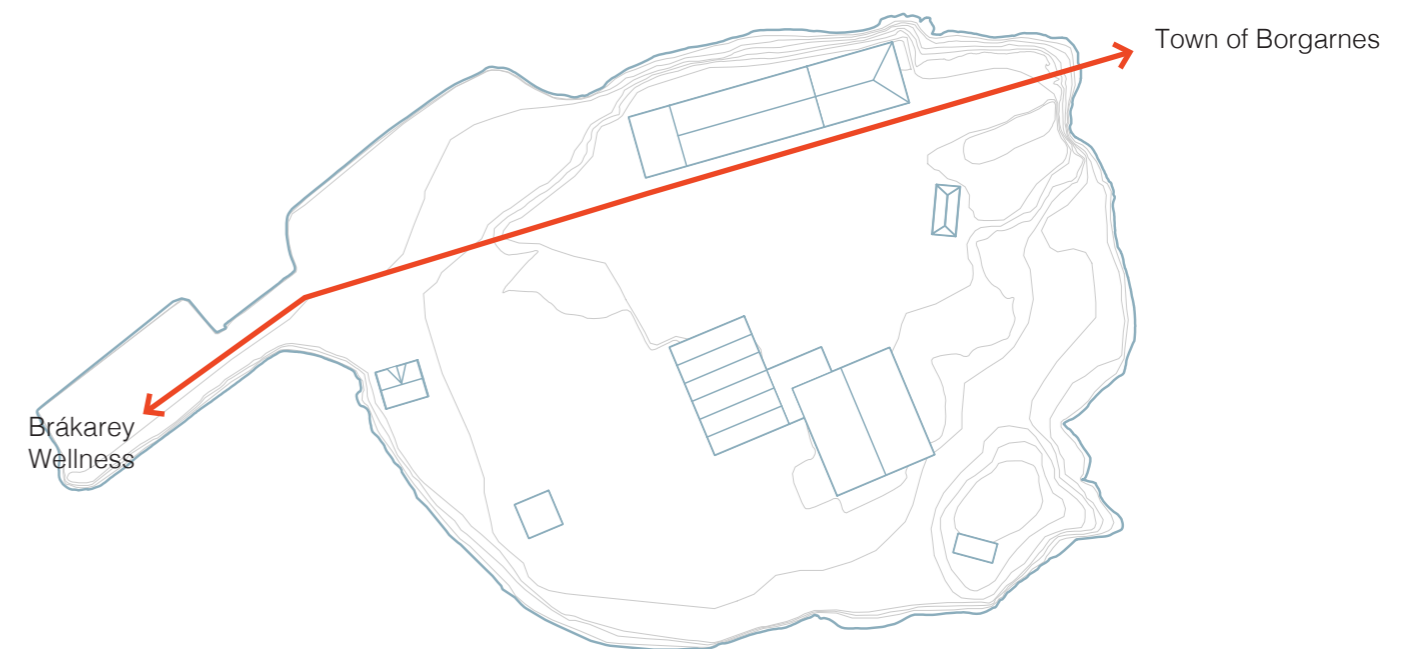
Brákarey Wellness



focus

The focus of my proposal will be the existing harbor pier, the surrounding sea and the spectacular views which together will serve as the previous mentioned **generator** for the entire area of Brákarey. During the research phase and in the beginning of the process for my thesis I decided that I needed to choose the big scale or the smaller scale to focus on. I decided to choose the smaller scale, with the hope that smaller interventions will lead to bigger ones, that later on will complement each other and unite Brákarey.

The red line from the bigger strategy plan will be the link that binds the proposal together. It has no fixed beginning but Brákarey Wellness is at the end of it.



current activity

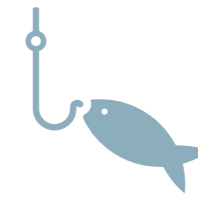
Today the inhabitants of Borgarnes use the island for all kinds of different purposes, although most of the current activity would benefit from facilities and extra activity to be able to use it in any weather at almost any time of the day and year.



Light industry workers and other employees



Sea bathing



Angling from the harbour



Kayaking



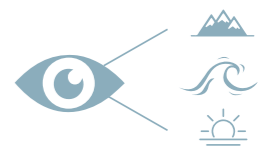
Leisure sailing



Walking/Running



Biking



Enjoy

current and future users

The island has in the past and today mostly been used by local residents and employees working within the area of Brákarey.

The proposal will aim to support both the local residents and employees in the area, guests from other parts of Iceland and tourists from all over the world of all groups and ages.

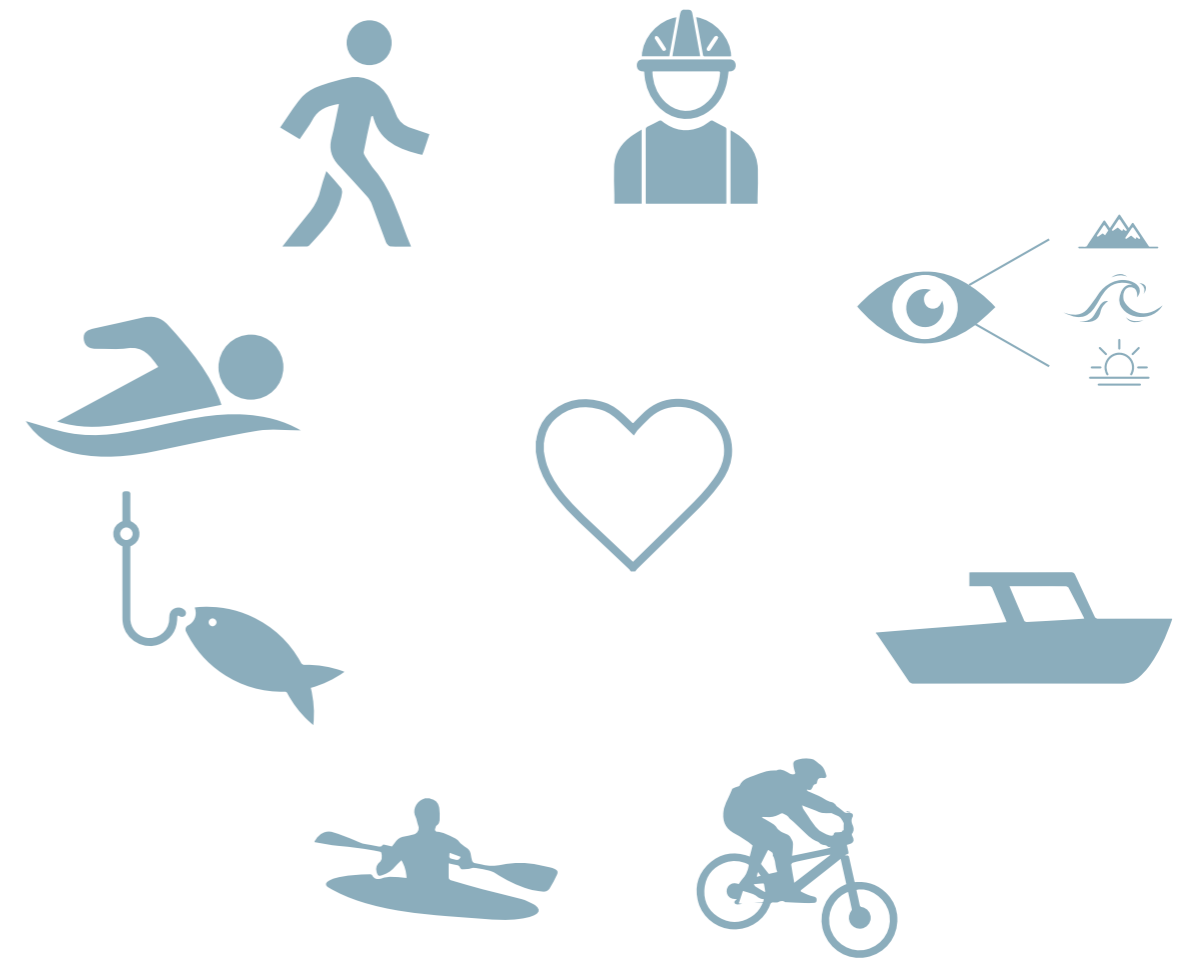


design proposal aim

For the design proposal the aim will be to create a place where all of the current and future suggested users find a place to continue or start to engage in their preferred activity.

Local sea bathers, fishers, employees, sailors, bikers, kayakers, walkers, runners and enjoyers from the town of Borgarnes, guests and tourists should all find something in the island of Brákarey.

The aim is to create a **wellness** where all suggested activities and future users can enjoy and relax, either before, after or during their activity.

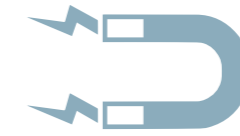


purpose and goals

The proposed programs should act as a magnet for the entire area and attract users from all over and create a space for all current and future users.

It should respect the historical value of the area and the connection of the inhabitants and work with reused materials when possible or use materials connected to the site and its former use.

Lastly it's important to select programs that also return profit that will be useful in future developments of the area.



Magnet

Proposed programs should act as a magnet for the entire area and attract users from all over.



Users

Create a space for current and future users.



History and connection

Respect the historical value of the area and the connection of the inhabitants.



Reuse and continuity

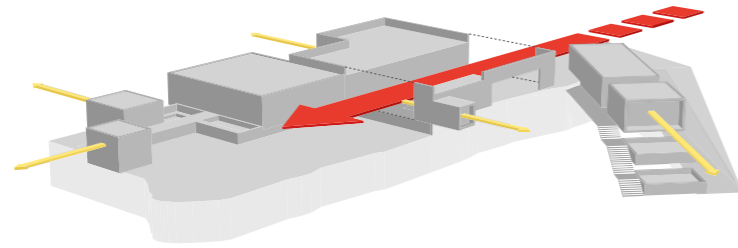
Reuse materials when possible and use materials connected to the site and its former use.



Profit

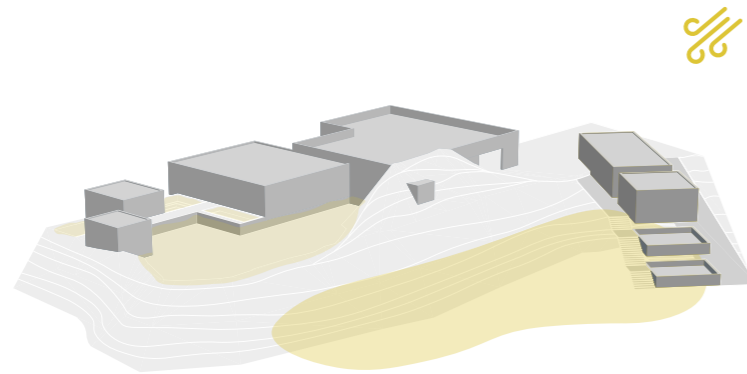
Select programs that return profit and are useful in future developments of the area.

strategies



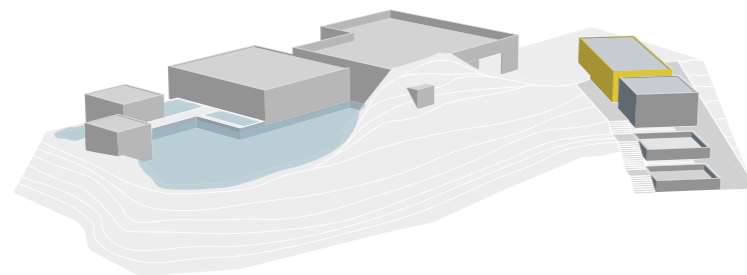
Extrovert volumes

The red line from the bigger strategy plan goes through the proposed volume and ends at the Brákarey lagoon in the Brákarey Wellness. From this axis, the yellow axis grow frame the main viewpoints in the area, making it extrovert. The focus is on the surrounding area both from inside the buildings and outside.



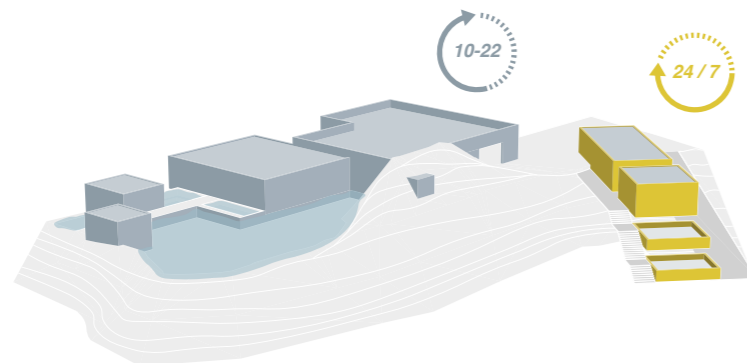
Wind/Shelter

The direction of the volumes create sheltered areas from the prevailing wind direction for the activity at the Wellness and the Seabath.



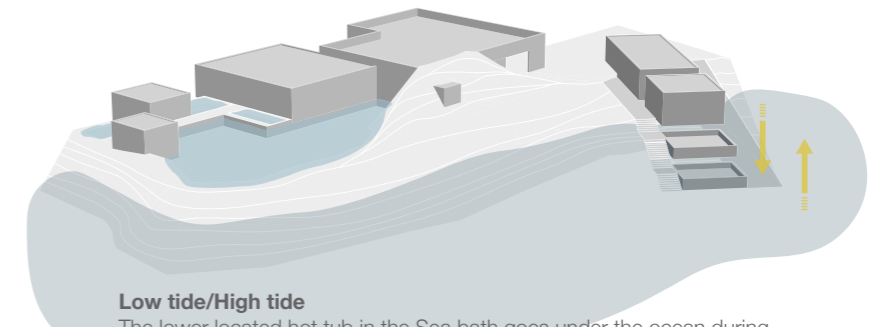
Open structure

The Seabath consists of outdoor dressing rooms, cloak rooms, sauna and hot tubs. The structure is partly considered "light", only a shelter for the rain and wind making it easy and affordable to construct in phase 01. The saunas and the Wellness are considered insulated and warm.



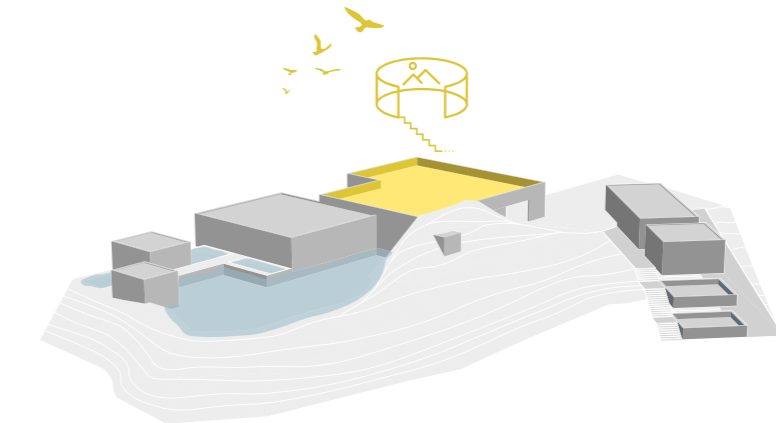
Access

The Wellness is suggested to have fixed opening hours while the Sea bath can be accessed at all times free of charge.



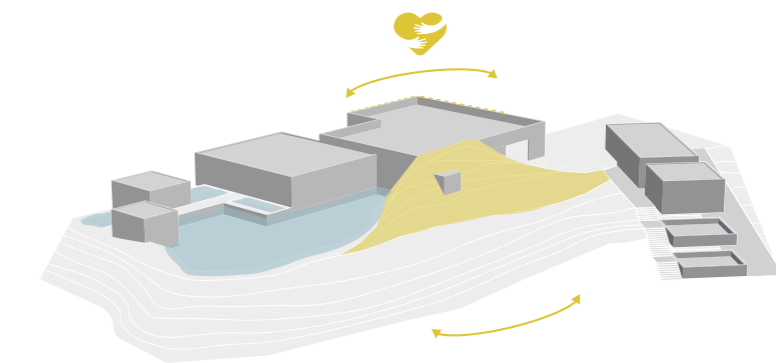
Low tide/High tide

The lower located hot tub in the Sea bath goes under the ocean during high tide but reappears during low tide. This creates a dynamic relation between the built and the natural environment.



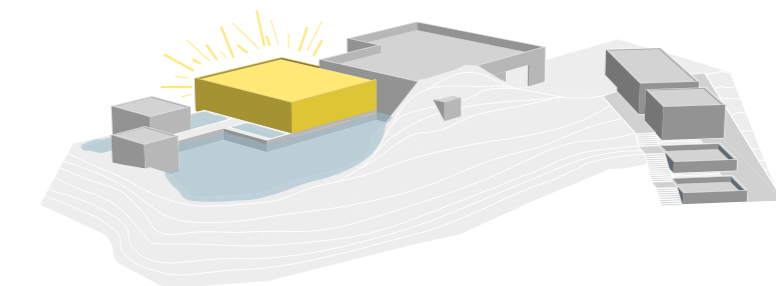
Rooftop

The rooftop of the Wellness is partly accessible for guests and other visitors in the area. A panorama view to all directions can be enjoyed from the rooftop as well as the wild birdlife on the island of Litla Brákarey.



Material envelope

The existing trapezoid steel and the stone and rock loading grows from the site and wraps around the Wellness volume.



Navigation

The dressing rooms cladding will light up during the night, referring to a lighthouse and a sailing navigation light.

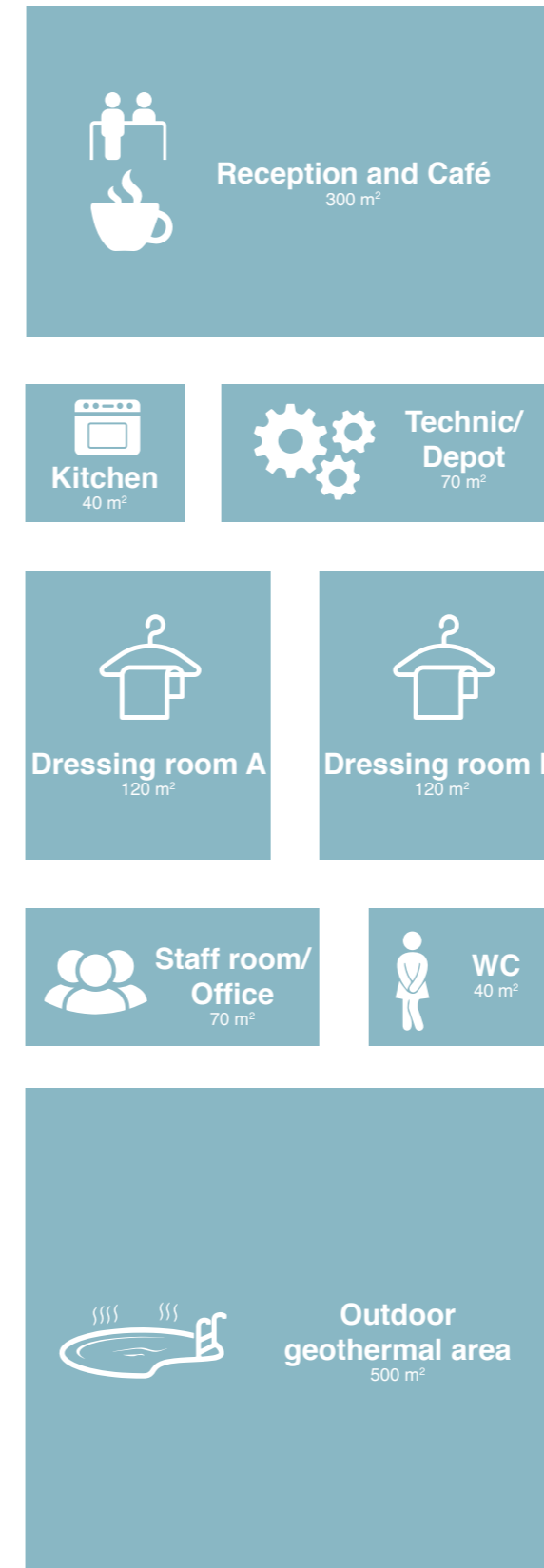
program of proposed buildings

By looking at several different reference projects with similar activities I made a program with guiding sizes of proposed areas and activities in m². This was one of the tools and guidance throughout the design.

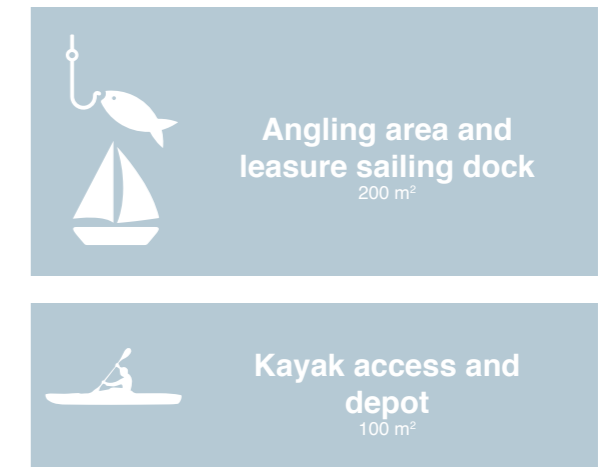
Sea baths Open access



Geothermal Wellness Controlled access



Angling and sailing Mixed access





BRÁKAREY WELLNESS

ANGLING

GEOHERMAL POOL

ANGLING/
SAIL BOATS

KAYAK
DEPOT

CAR PARKING

BRÁKAREY PROMENADE

EXISTING
RAMP

GIN DISTELLERY

BRÁKAREY SEA BATHS

BRÁKAREY PARK

SITEPLAN
1:600

materials and sustainability

It is inevitable to discuss sustainability without mentioning Iceland's unique position in terms of the energy resources we have, compared to other nations, but almost 82% of all energy used is domestic and comes from renewable natural resources.³⁸ Although the concept of sustainable buildings is rather new in Iceland, Iceland has a rich ecological architectural heritage that kept the nation alive from the time of the settlement until the turn of the 18th century. For centuries, Icelanders lived in turf houses, but it could be said that the turfhouses is Iceland's contribution to architectural history. The materials used were sourced from the surrounding area. The stone from the hillside was used to build a wall and the turf was excavated from the fields and used as insulation around the stonewall.³⁹ As we evolved, our buildings did as well and from the late 18th century wooden buildings and later on concrete buildings became the materiality of choice.⁴⁰ We don't have a lot of natural building materials in Iceland that can be used, so most of the building materials that are used today are imported from Europe.⁴¹



Icelandic turfhouse around 1925-1930



Icelandic turfhouse in Skógar, still standing today.

³⁸ Landsvirkjun, "Kolefnisspor Landsvirkjunar," 2008, <https://www.mbl.is/media/20/1720.pdf>.

³⁹ Ágústsson, Hörður, "Íslenski torfbaerinn," Ferlir, accessed June 2, 2021, <https://ferlir.is/islenski-torfbaerinn-hordur-agustsson/>.

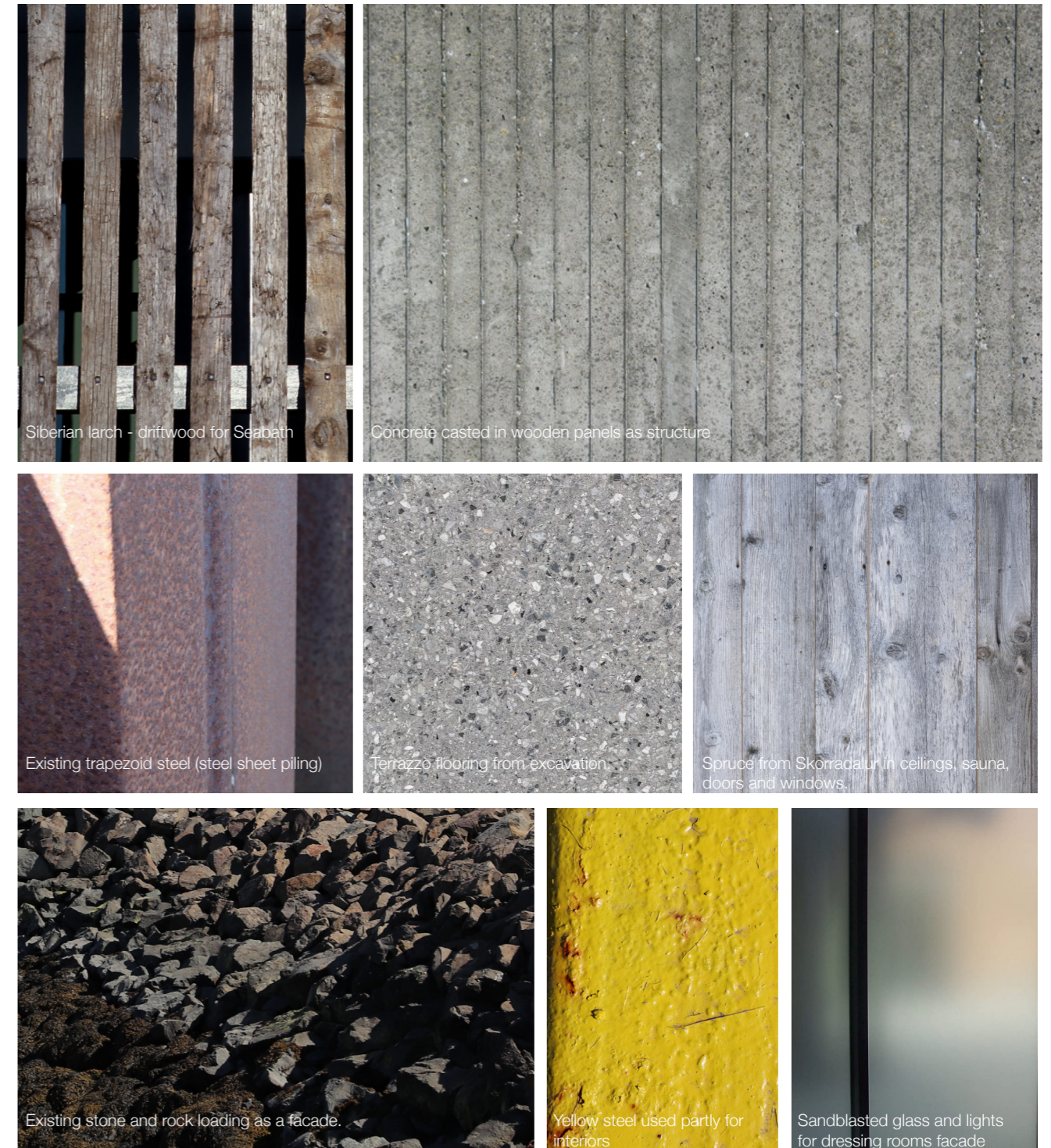
⁴⁰ Karlsson, Gunnar, "Hvenær fluttu Íslendingar úr torfbæjum?" Vísindavefurinn, February 3, 2012, <http://www.visindavefur.is/svar.php?id=60608>.

⁴¹ Tryggvason, Snorri Þór, "Umhverfisáhrif Efnis- Og Orkunotkunar í Íslenskum Byggingariðnaði," January 2010, 7, <http://hdl.handle.net/1946/5613>.

materials of choice

For the structure of Brákarey Wellness I suggest concrete, casted in timber on site, will be used. In Skorradalur, a valley 28 km away from Borgarnes a small production of Spruce wooden panels is operated.⁴² This panel will be used in the ceilings of the Brákarey Wellness for warmness and acoustic purposes. The spruce wooden panels will also be used inside of the sauna and relax room. For the flooring of Brákarey Wellness, Terrazzo concrete will be made with crushed stone from the excavation and the surrounding area. On the northern and western side of the Wellness, the trapezoid steel structure that is already existing in the harbor, will be extruded to the facades and uses as cladding. On the south side, the stone and rock loading will be extended to the facade. The dressing room will be cladded with double sandblasted glass and lights. The interiors will partly be made out of yellow steel sheets.

The Seabath structure is considered a light structure, non isolated, only with the purpose of creating a shelter to get dressed and to take a shower. The materials used will be mainly Siberian larch originated and processed from drift wood which has washed up on the shores of Iceland from Siberia.⁴³ Although there is not as much driftwood washing up as before, there is still driftwood on the shores of Iceland that can be used.⁴⁴ Wood from the area could also be reused from buildings that will be demolished. The sauna in the Seabath will also be made out of drift wood, but isolated and the spruce panels from Skorradalur will be used as cladding on the inside.

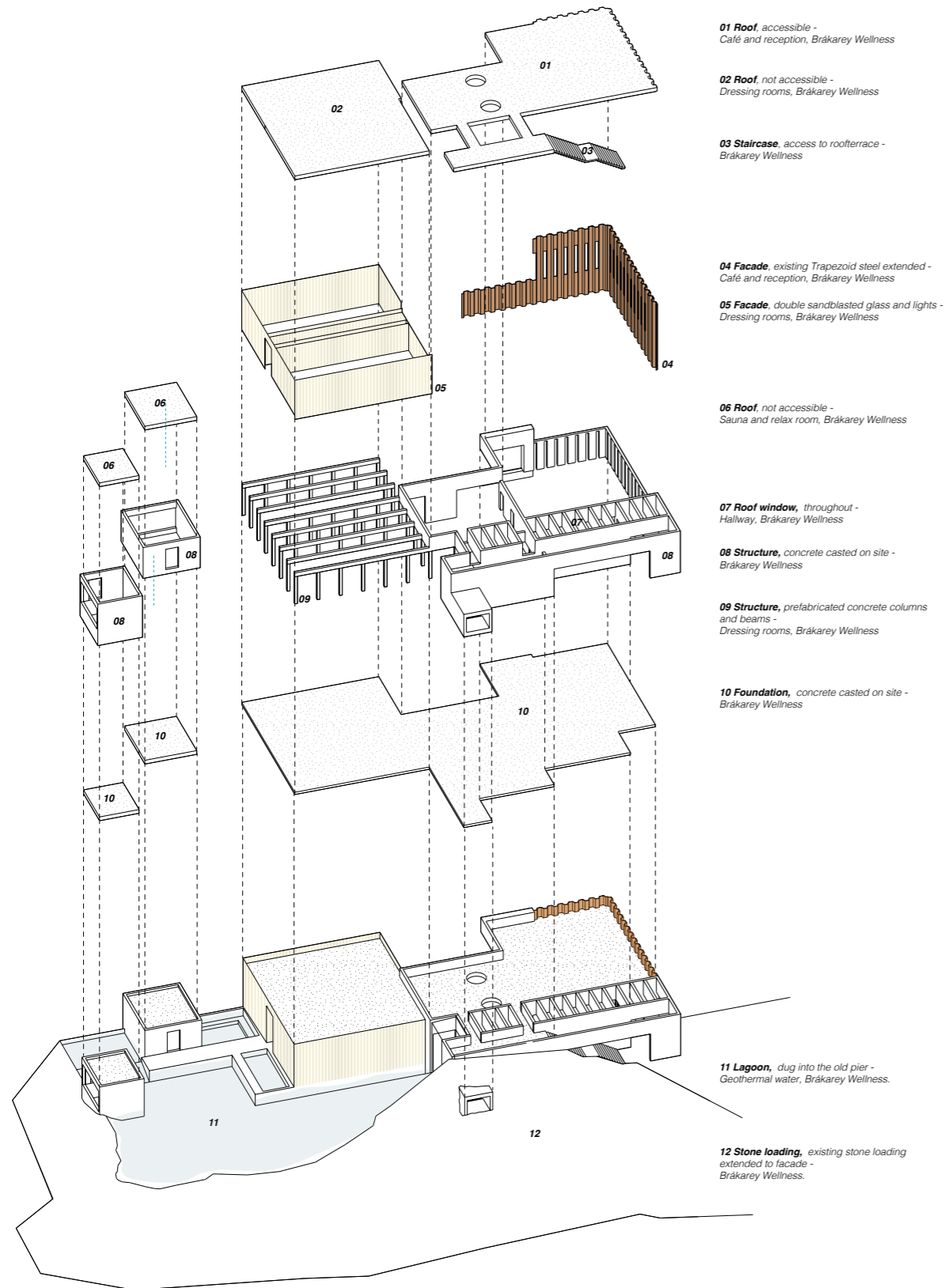


⁴² Ragnarsson, Ónundur Páll, "Veggirnir klæddir furuskífum," June 29, 2010, <https://www.mbl.is/greinasafn/grein/1339194/>.

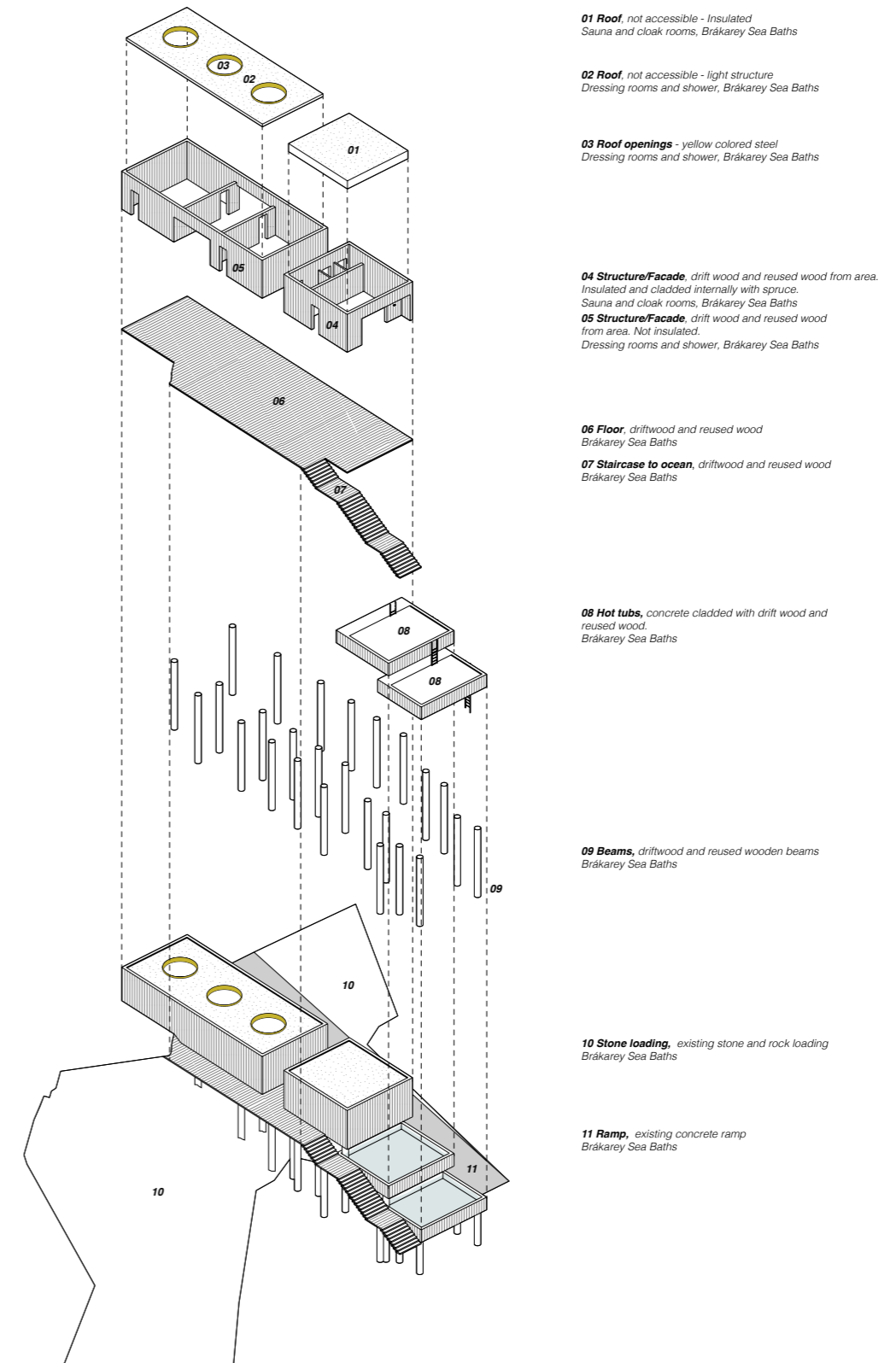
⁴³ Halldórsson, Jón Már, "Hvaðan kemur rekaviðurinn sem finnst við strendur Íslands?," Visindavefurinn, March 29, 2004, <http://www.visindavefur.is/svar.php?id=4102>.

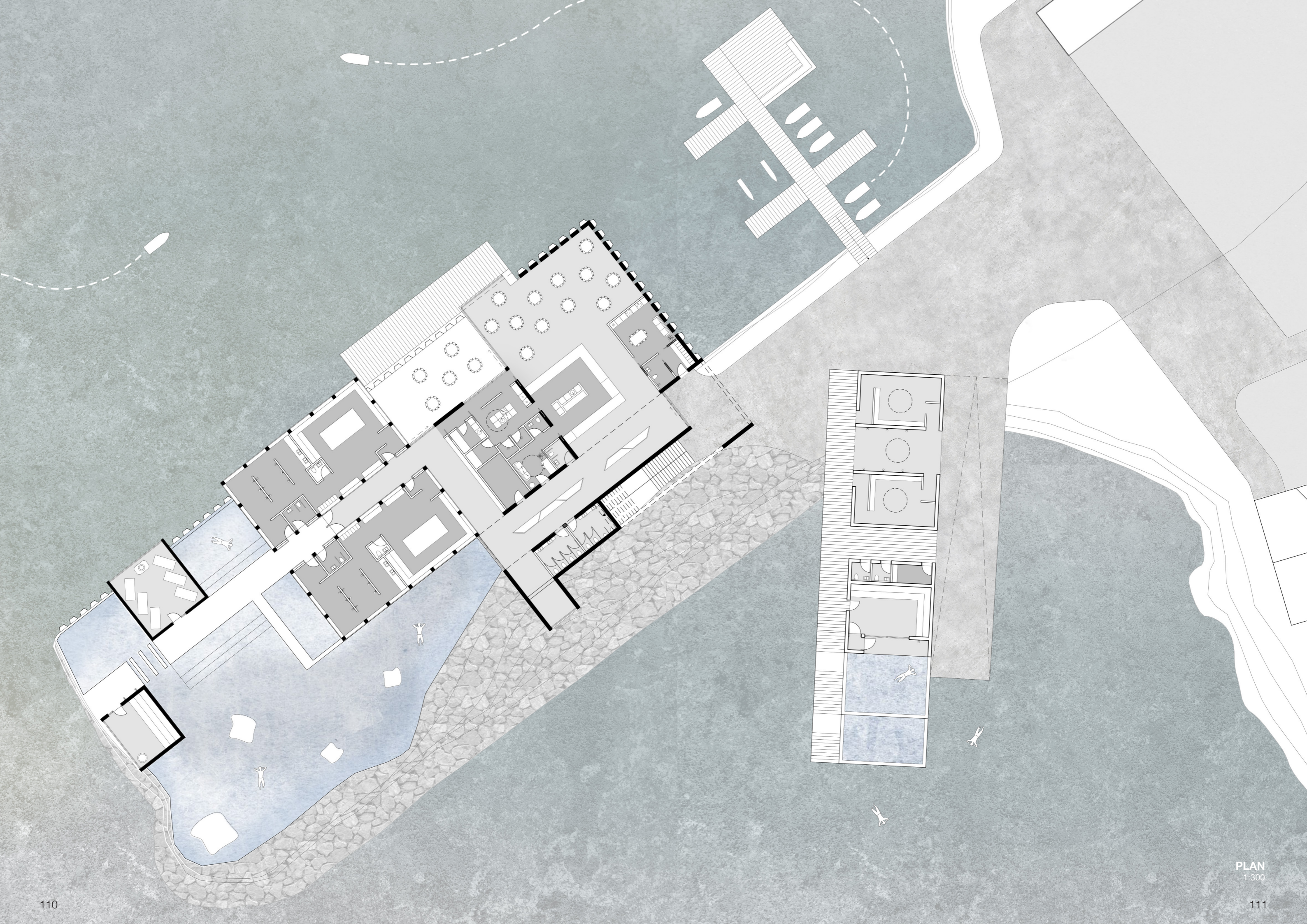
⁴⁴ Unnarsson, Kristján Már, "Hafa Enn Hlunnindi Af Rekavið Þótt Varla Komi Spýta Að Landi," Visir, September 17, 2020, <https://www.visir.is/g/20202013626d>.

Brákarey Wellness - Exploded AXO



Brákarey Sea baths - Exploded AXO

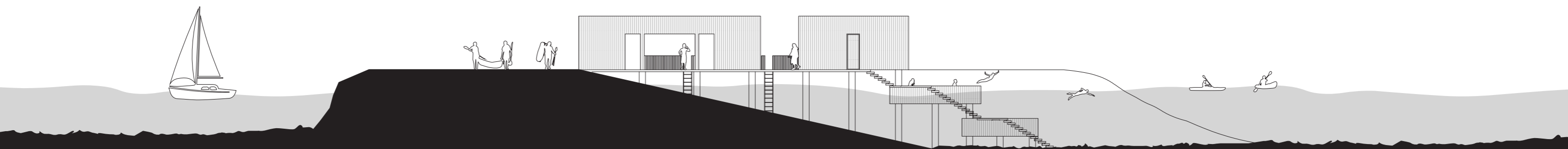


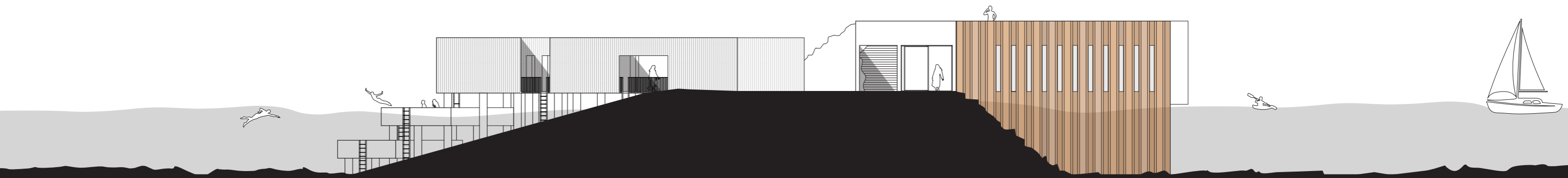


- 01. Outdoor dressing room
- 02. Outdoor shower
- 03. WC
- 04. Depot
- 05. Sauna
- 06. Hot tub
- 07. Entrance
- 08. Stair to rooftop
- 09. Staff entrance/lockers
- 10. Staff WC
- 11. Staff room
- 12. Reception/Bar
- 13. Café
- 14. Outdoor seating area
- 15. Angling area
- 16. Dock
- 17. Kitchen
- 18. Office
- 19. Handicap WC
- 20. Technic room
- 21. Depot
- 22. Laundry
- 23. Relax-view to sea baths
- 24. Egilsklefi (mens dressing room)
- 25. Brákarklefi (womens dressing room)
- 26. Egils lagoon
- 27. Brákar puddle
- 28. Relax
- 29. Snæfell lagoon
- 30. Infinity sauna
- 31. Brákarlagoon
- 32. Existing ramp
- 33. Car parking
- 34. Kayak depot
- 35. Existing gin distillery

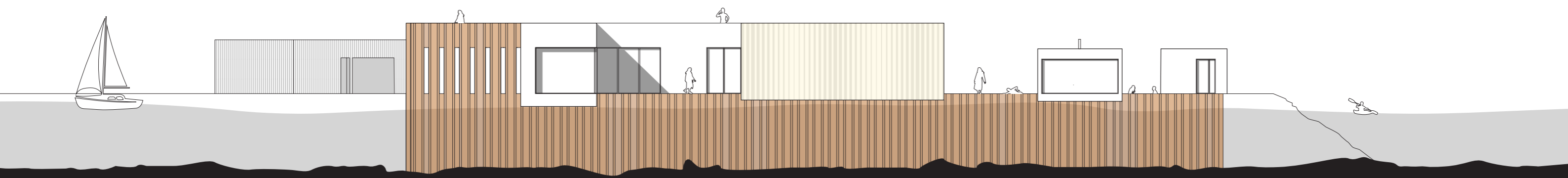
Sizes:
 Brákarey Wellness: 867 m²
 Brákarey Sea Baths: 184 m²

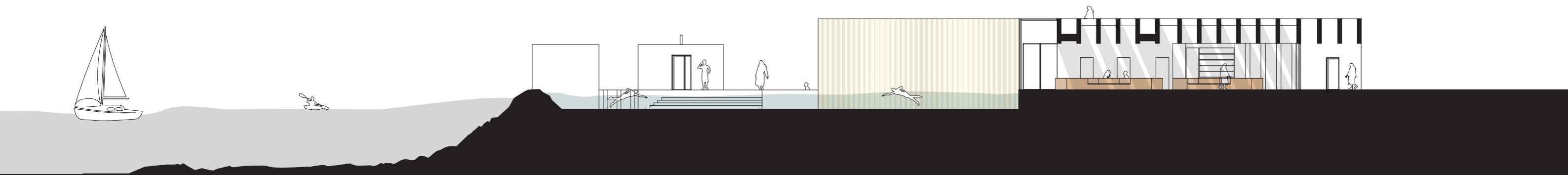


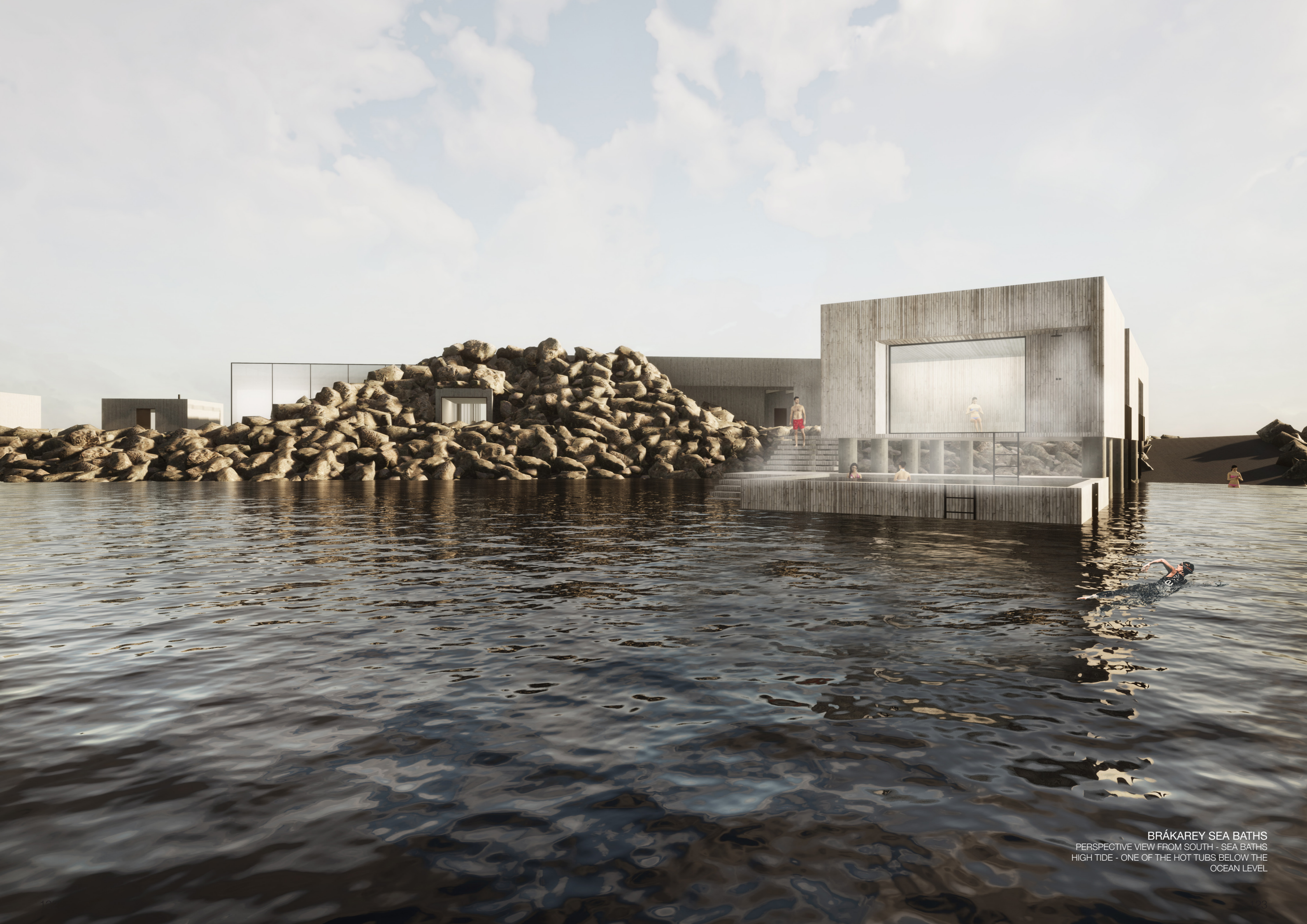




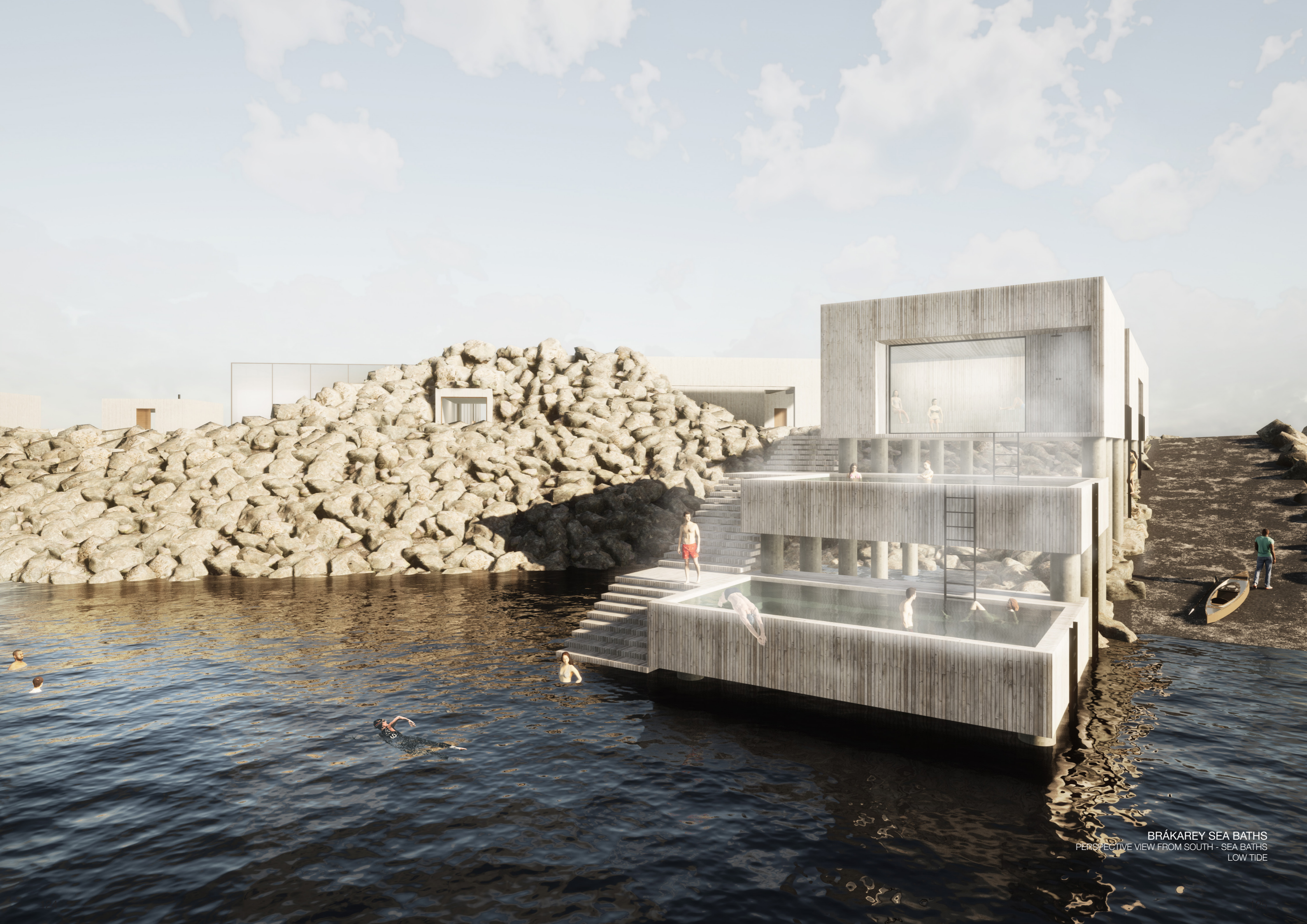
BRÁKAREY WELLNESS AND SEABATH
ELEVATION EAST
1:300



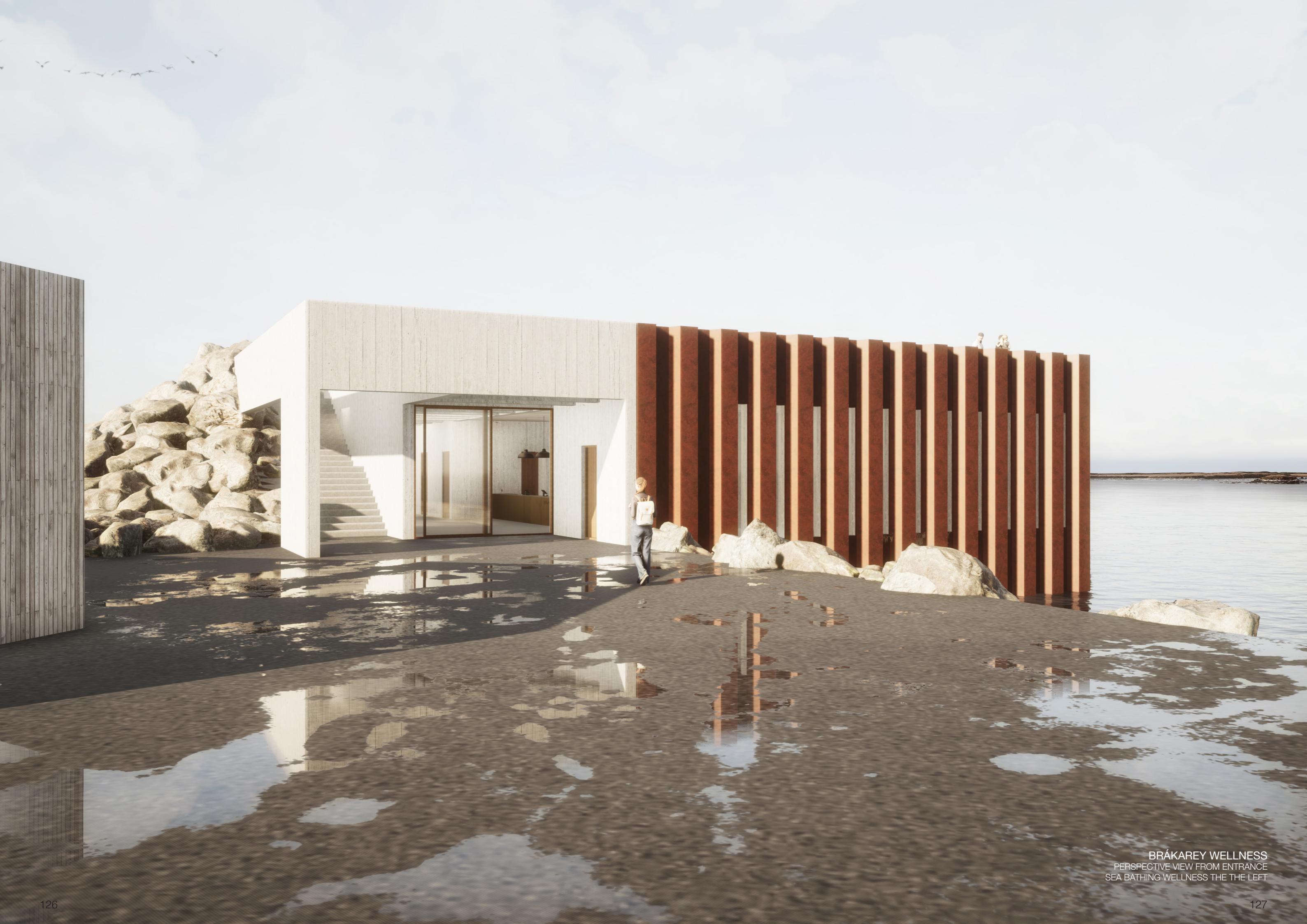




BRÁKAREY SEA BATHS
PERSPECTIVE VIEW FROM SOUTH - SEA BATHS
HIGH TIDE - ONE OF THE HOT TUBS BELOW THE
OCEAN LEVEL



BRÁKAREY SEA BATHS
PERSPECTIVE VIEW FROM SOUTH - SEA BATHS
LOW TIDE



BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM ENTRANCE
SEA BATHING WELLNESS THE THE LEFT



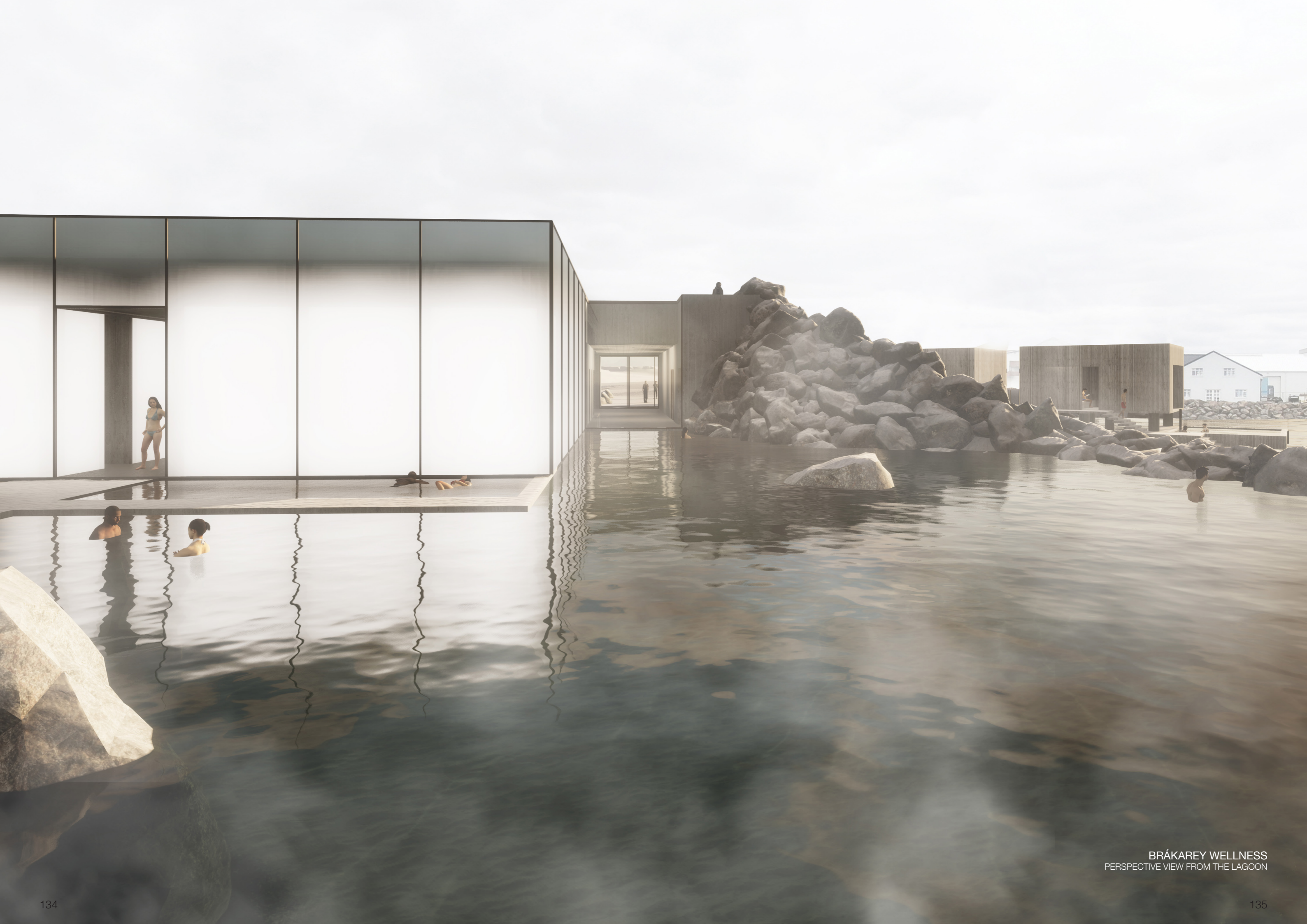
BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM NORTH-EAST



BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM NORTH-WEST



BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM SOUTH-WEST



BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM THE LAGOON



BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM THE LAGOON
TOWARDS MOUNT HAFNARFJALL



brákarey wellness

staff

BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM THE ENTRANCE
LOOKING TO THE RECEPTION AND CAFE



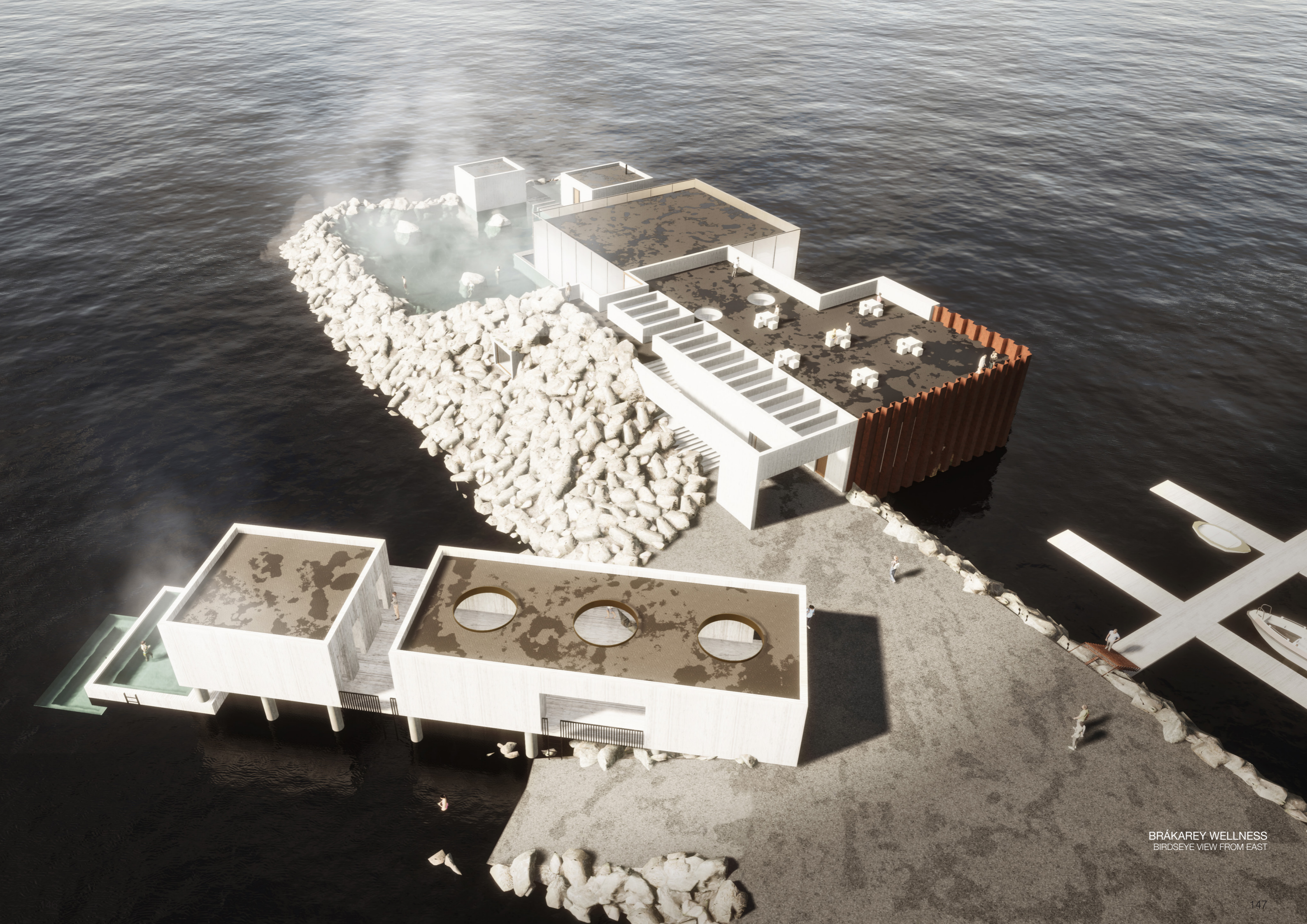
BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM THE CAFÉ
WINDOWS BETWEEN THE TRAPEZOID STEEL AND
LARGE CORNER WINDOW TO PATIO AND OCEAN.



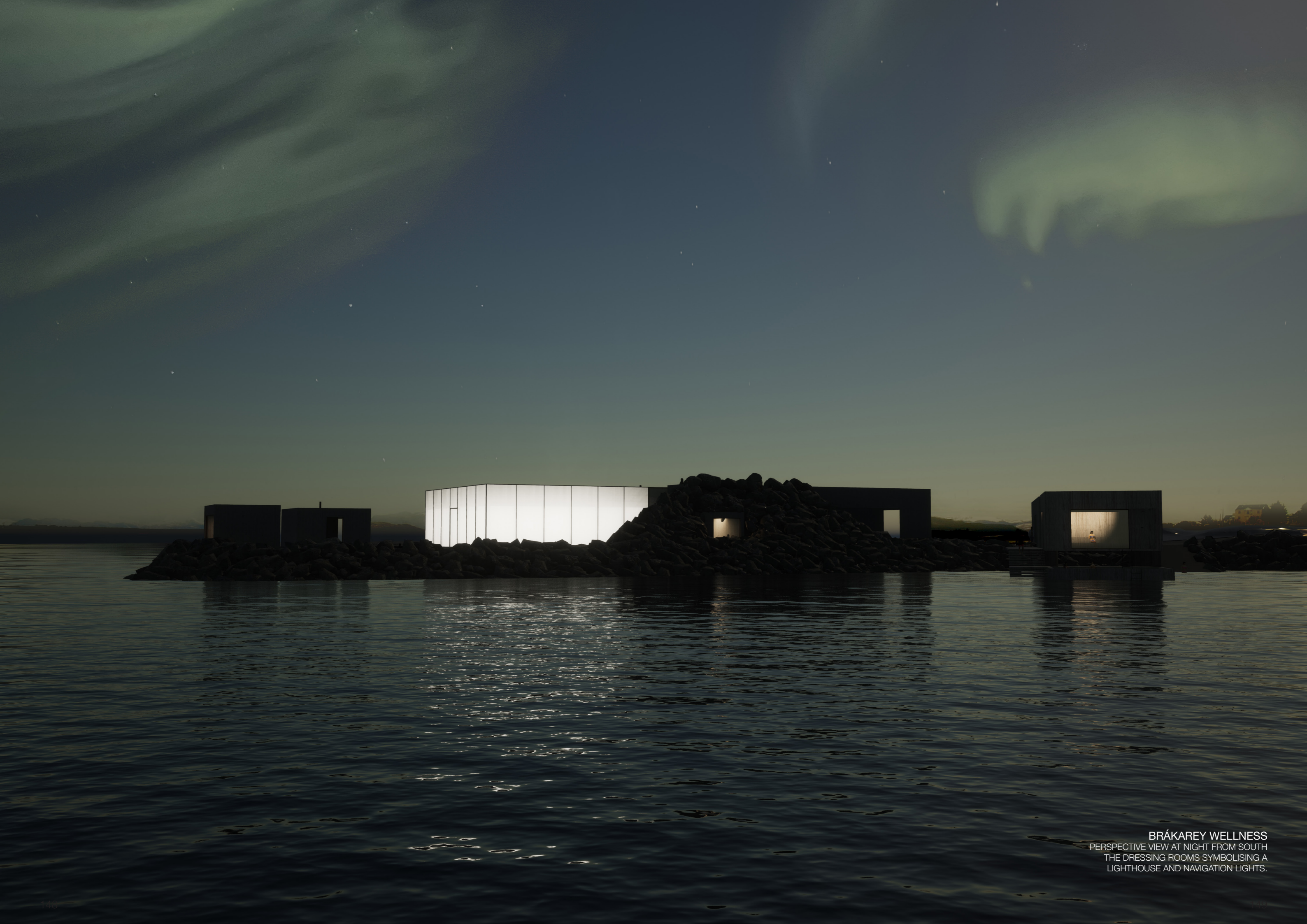
BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM THE CAFÉ
LOOKING AT THE CAFÉ AND RECEPTION



BRÁKAREY WELLNESS
PERSPECTIVE VIEW FROM HALLWAY FACING THE
WINDOW TO THE LAGOON.



BRÁKAREY WELLNESS
BIRDSEYE VIEW FROM EAST



BRÁKAREY WELLNESS
PERSPECTIVE VIEW AT NIGHT FROM SOUTH
THE DRESSING ROOMS SYMBOLISING A
LIGHTHOUSE AND NAVIGATION LIGHTS.

06 findings and reflections

findings

As stated in the introduction the aim of this project was to introduce facilities for current and future activities and users of the island of Brákarey by maintaining the characteristics, historical buildings, the open access, the unobstructed views, the rich outdoor life and the rough materiality. The idea for this project was born because of my relation to the area of Borgarnes, as I spend a lot of time in the nearby valley, Skorradalur, all year round. I've always been fascinated by the island of Brákarey, especially regarding the uncertainty of its future. The roughness, the spectacular views and calmness are also some of the main factors. During my research I found out that the local inhabitants really do care about this area and what the future of it holds. My hope is that through my proposed strategies and design this care and hope for a better future will remain and get even stronger.

This process was really challenging, especially in regard to the design of the proposed buildings and how they would fit in its spectacular surroundings. For everything to function as a whole it was crucial to embrace the natural beauty of the area, to keep the history and traces of what was there before and to work with the existing materials and users. Because of these findings I decided to create an extrovert building, with focus on the surrounding views and the activities it hosts.

By bringing in all of these different kinds of groups to the area, hopefully life will blossom and the future of Brákarey will never be uncertain again.



reflections

For the past years I have truly been interested in the island of Brákarey, so choosing a topic for my thesis was quite straight forward. At first, I didn't know what to tackle in terms of the future of the area. When searching the internet I found aforementioned ideas, thoughts and articles about Brákarey and its future which has been in the spotlight for the past decade or so. What also caught my interest was to read about all of those ideas that had been put forward without inaction which led me into thinking what could really bring some more life to the area and hopefully make Brákarey into a destination full of all kinds of activities and facilities. Rather than doing a designed masterplan for the entire island of Brákarey I suggest a strategy for it and my primary focus is on the Brákarey Wellness and the Sea baths where I go more in depth of the building design. As stated in the current masterplan and the winning proposal for the detailed plan from 2007 the area is mainly supposed to become a residential area with mixed land-use. With my proposal I hope that the area will mainly be open for public, embracing the nature, the views and the culture of the island and that only a small stamp of it would be marked for residential use.

During the design process I tried various approaches to the proposed volumes and facades. In the end I decided to focus on the already existing rough materials and building style, where the idea is to keep the feeling of the harbor and its former activities.

All in all, I think the project has developed in the right direction over the past few months. This process was really learnful and I can say for sure that I've developed a lot as an architecture student on this journey, especially in terms of time management, independence and focus. I look forward to the following years and upcoming projects.

07 end notes

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BRÁKAREY WELLNESS

AAHM10: Degree Project in Architecture
2021

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ADVANCED ARCHITECTURAL DESIGN
LTH - LUND UNIVERSITY

