## Shapes and forms

The landscape in Eldhraun lava is rugged and uneven. Small rifts, canyons and hills create the expression of the lavafield. The lava is then covered with the soft green and spongy moss. The shape of the buildings is in contrast to these natural forms. Sharp edges and corners, smooth light grey or reflecting surfaces.

The form of the main building is sligthly curved to indicate the change of direction of the lava flow and the change of direction the guest travels on his way through the building. In the lounge area on the north end of the building it widens and opens up with a large window towards the grand view to the north and west, overlooking the lava towards Mýrdalsjökull glacier. It gets narrow towards the south, indicating that the guest slows down as he gets closer to his destination, the room.

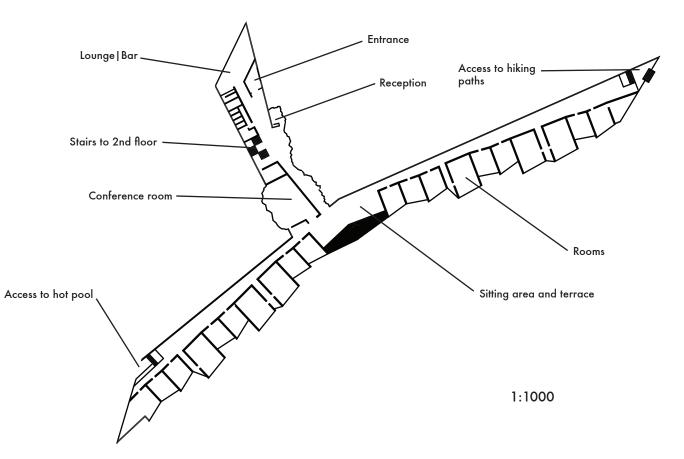
#### 1st floor:

The guest enters the building and has the option of turning right, towards the longe/bar area or left and head towards the reception area. The reception is located close to the middle of the building. It is placed in a vault that has been carved into the natural rock. From there he can take the stairs, leading to the 2nd floor or continue his journey towards the room via a corridor with partly natural/partly manmade walls.

The area where the main building connects to the room corridors, has a roomy sitting area with sofas and large windows to the SE with access to a large terrace. This sitting area is facing the same way as the rooms are. Due to the location in the middle of the building this is a good place for people to sit down and meet people from the other rooms.

The room corridors, leading in two seperate directions from the middle, open up towards the ends with large windows letting in light and opening towards the view. The north corridor gives access to walking trails through the lava while the south corridor leads to an outdoor hot pool in the natural lava. The smaller rooms are entered directly from the corridors while the larger rooms are entered from the side. This is done in order to be able to place the bathrooms at the back of the rooms. This creates small corridors leading from the larger room corridors, giving access to one or two rooms each. These small corridors have large windows that let light in and they create some privacy.

The staff offices, public toilets, luggage storage room and a conference room are all located on the 1st floor. The conference room is partly made with concrete walls and partly carved into the lava rock.





### 2nd floor:

The access to the 2nd floor is in the middle of the main building, opposite the reception desk. There are stairs and an elevator. When ascending the stairs the walls and ceiling open up. The wall to the E is open from the floor to the ceiling and the ceiling is made of glass. This opens a new view for the guest who until now has only had a low viewpoint from the 1st floor. The open ceiling lets in daylight and at night it opens the view to the sky, stars and northern lights when they are visible.

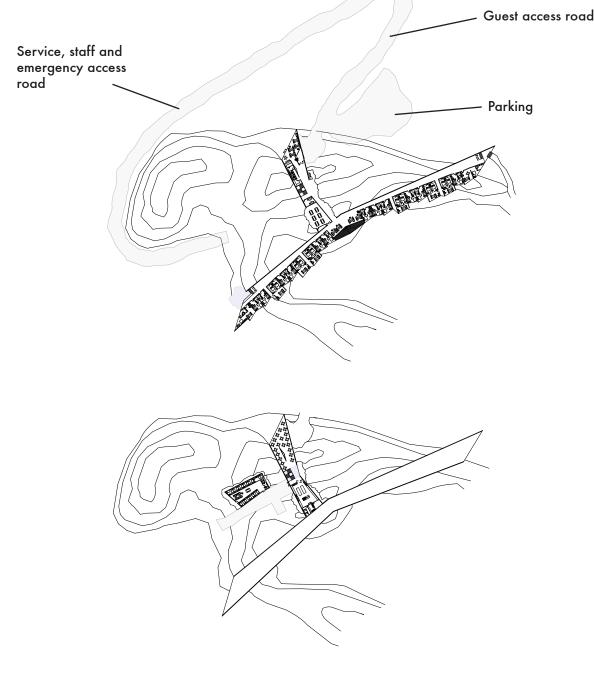
From the stairs the guest turns left towards the dining area. The wall at the NW end of the room is entirely made of glass and opens the view to N, NW and W. There is a concrete wall in the middle of the dining room and around this wall there are skylight openings allowing light to move and change colours on the walls.

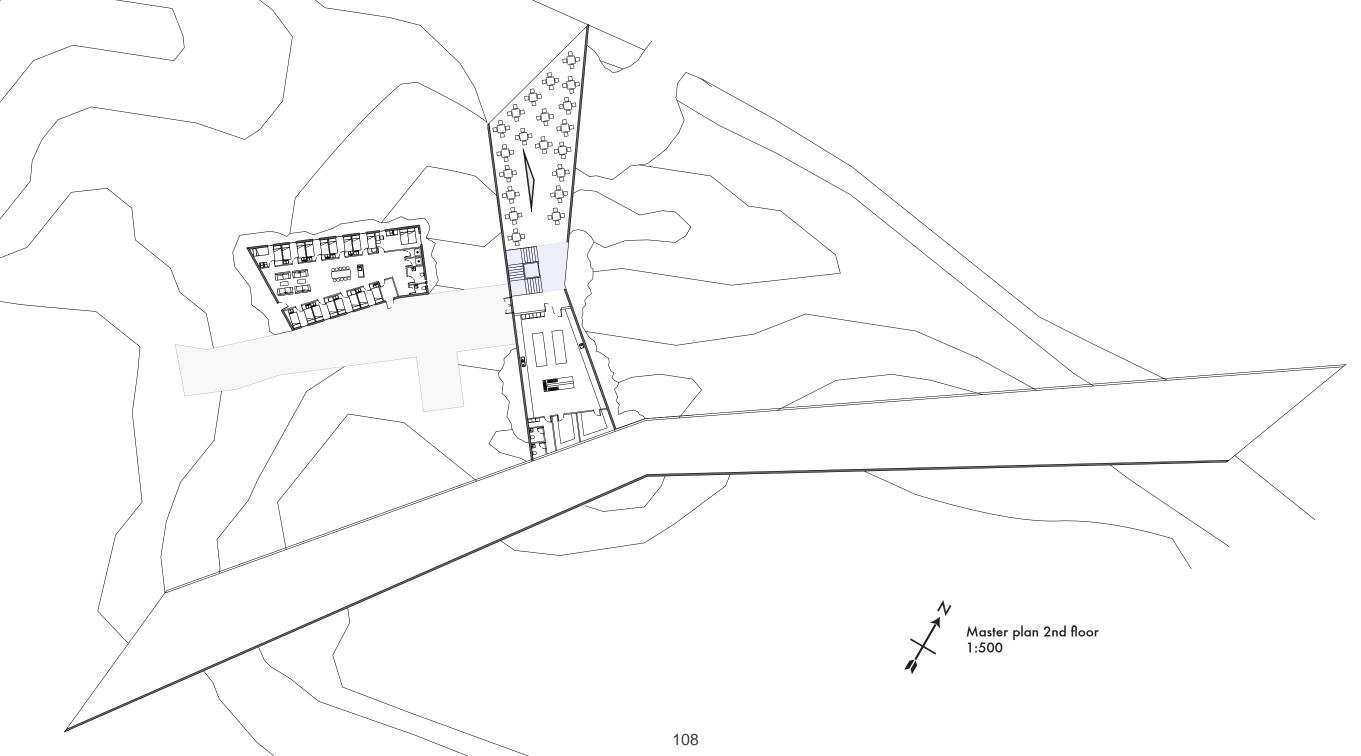
The kitchen is on this floor along with all the needed facilities and service access doors that also lead towards the staff accommodations that are placed in a seperate building to the W of the main building. The staff accommodation houses up to 20 people, has a sitting area, showers, small kitchen and a large dining table. The service and staff access to the buildings is via a small road that has been hidden from view by digging it into the lava on the W side of the hill.

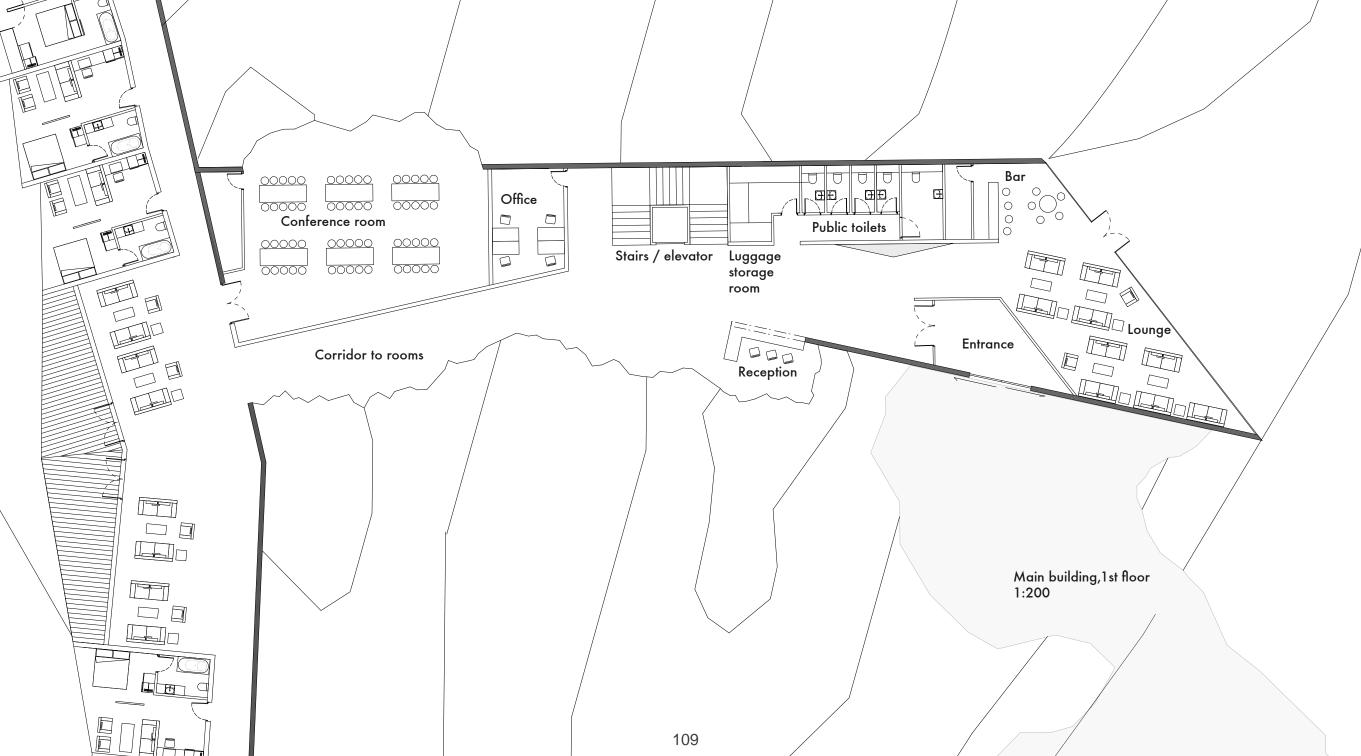
Having the staff accommodation in a seperate building allows for more privacy for the guests as well as the staff who at times want to distance themselves from the guests and their workplace.

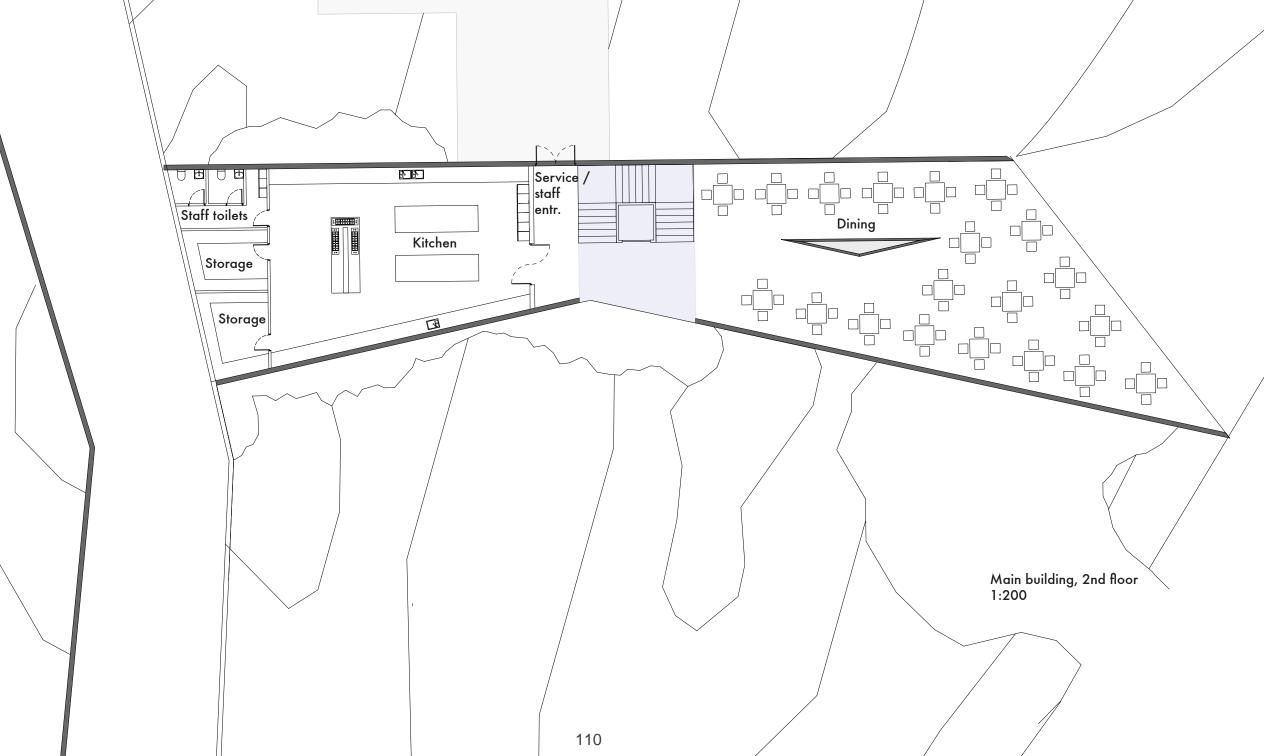
Following is a list of the rooms in the hotel and their sizes:

Entrance / reception	160 m2
Bar / lounge	98 m2
Dining room	235 m2
Kitchen and storage	170 m2
Sitting area	110 m2
Conference room	130 m2
Office and baggage storage	34 m2
North corridor	295 m2
South corridor	198 m2
Large room	64-73 m2
Small room	38-45 m2
Staff accommodations	200 m2
Total size of the hotel	2975 m2 br.











Floor plan south corridor 1:200



## The rooms

When designing the rooms for the hotel the focus is kept on five things:

- Functionality
- Views
- Comfort
- Connection to nature
- Peacefulness

During the design process a few different proposals are made and compaired to these focus points. The final proposal is the one that meets these focuspoints best.

#### Views / connection to nature: The wall facing the view is made of glass. The windowframes are placed

The wall facing the view is made of glass. The windowframes are placed on the outside of the walls, out of view from the inside (see photo to right). This gives the feeling of openness towards the nature outside, with the lavaflow extending directly from the building towards the mountains in the distance. This also limits the barrier between the inside and the outside. To further underline this connection nature could be brought into the rooms by the choice of colour on the walls and use of materials in the rooms.

There is a large skylight window directly over the bathtubs in the bathrooms allowing the guests to admire the stars and the northern lights from a warm bath when these things are visible

## Comfort:

The rooms are large. The user profile in this project is different from the target group in almost all of the other available accommodation in the area. This group of users has a strong financial status and is willing to pay more to get more. In this hotel the smaller rooms are around 35 m2 with beds for two. The larger rooms are up to 70m2 with beds for four in two bedrooms with seperate bathrooms. All rooms have comfortable sitting area with chairs and a sofa that can be used to sleep on, adding to the number of possible guests.

#### **Functionality:**

All the bathrooms are placed furthest back in the rooms, with the wc and bathtubs placed on the back wall. This simplifies the service channels, piping for water and ventilation, for the rooms. Most of the rooms are on one floor to make access for elderly and disabled easy. The rooms are large to make getting around within them easy and comfortable for everyone.

In the smaller rooms the wall seperating the bathroom from the sitting area is partly open with the top of the wall made of glass to allow light from the skylight window to flow into the sitting area, bringing light to the back of the room

#### Peacefulness:

The walls seperating the rooms are thick with good sound insulation. The only view out of the rooms is towards the dramatic nature. When the guests are in their rooms they are in their own private area.



A window in Jorn Utzon's house in Mallorca photo: http://www.pushpullbar. com



### Proposal 1.

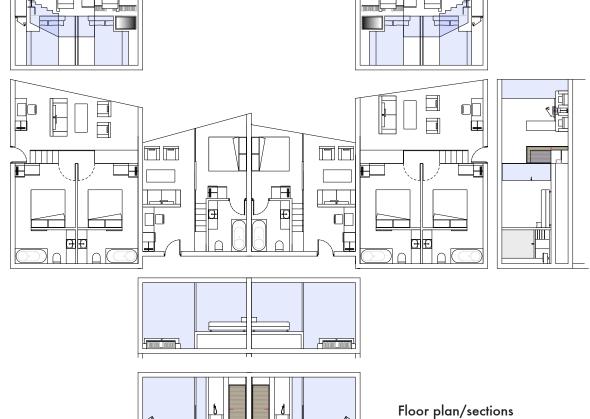
In this proposal the rooms are on two levels. The bedroom section in both small and large rooms are 90 cm higher than the sitting area. This is done to create more than one viewpoint for the guests while staying in the rooms. This however causes problems when it comes to access for the elderly and disabled.

The straight lines and 90° corners also do not quite fit the overall expression of the buildings.

### Proposal 2.

Here the rooms are still arranged in the same manner. The window wall has been angled randomly to create a play in the reflecting windows seen from the outside immitating a rock wall in a canyon or a rift. The sharp angles also fit the overall design of the building.

The back wall is stepped to minimize the feeling of the corridors being long and boring to walk through.







#### Proposal 3.

All the rooms are now on one level to eliminate the problems regarding access for everyone. The window wall is still angled as in proposal no 2 but the back wall is also randomly angled to create an interaction between the window wall and the back wall. This is also done to make the corridors more appealing for the guests giving a feeling of walking down a canyon with rock walls towering above.

This proposal is the one that meets the focus points best.

# The outdoors

The lava hotel's location in the dramatic landscape is a perfect place to do long and short walks. The guest is given access to one of the most baeutiful yet dangerous lavafields in Iceland and all the stories and myths that come with it. Not to mention the flora and fauna surviving in this harsh enviroment so close to the Arctic Circle.

There will be marked hiking paths around the lavafield to try to keep people from walking anywhere they want but the Icelandic mentality does not like fences. And the lava is huge. The hiking paths will allow people to choose how far they want to walk and the shortest ones will have stairs or small bridges in the most difficult areas in order to make them passable for everyone. But this will only be so on the shortest paths closest to the hotel. For those wanting to go further there will be longer paths.

The paths will lead from the hotel in order not to compromise the privacy within the rooms. Here and there on these paths there will be places to sit down, small shelters or caves in the lava and places to have a picknic. Lavafields like Eldhraun have many hidden or open caves that adventurous hikers can explore. Open fires are dangerous in these parts since the moss can become very dry and can burn.

The most important factor is to make it possible for the guests to gain access to the unspoiled nature surrounding the hotel and do so in a way that does not damage the fragile environment.

The access from the building to these paths will either be from the end of the N room corridor or via the terrace in front of the sitting area where the three building elements meet.



A group of explorers in a lavatube. (photo: VHS)



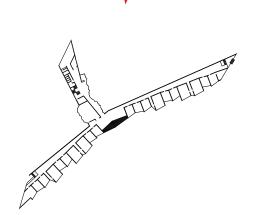
Hikers in a lavafield (photo: VHS)

# 5 presentation



This project has involved the design of a hotel. But that has not been the only objective. In recent years, not to mention during the time of economical crises on a historical scale, the Icelandic tourist industry has suffered from lack of initiative and goverment support when it comes to inventing new ways to attract a bigger number of tourists to Iceland. Iceland is one of the last countries in the world where unspoiled, untouched and wild nature is easily accessible. In Iceland one can find a great variety of nature and landscape in a small area, perhaps even more than in any other country in the world. But not many things are being done to make use of this unique situation in a positive way for nature and people.

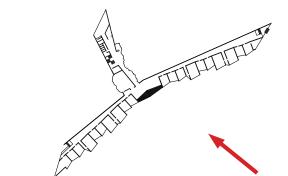
The hotel in this project is designed not only as an accommodation for tired tourists. It is also a proposal on how one type of the Icelandic landscape, lava, can be used to create something that attracts travellers and allows them to get into close contact with. Lava is for many people an alien material, a form of rock that a large part of the worlds population has never seen, touched or smelled.





During their stay in the hotel the guests get a unique opportunity to experience lava in close contact. Being partly buried in a lavafield that is so rich of history and myth, the hotel is completely surrounded by this strange and uninviting, yet stunningly baeutiful material along with the vegetation and animals that can survive in these harsh conditions. Its appearance changes with the ever changing light, changing of the weather and the changing seasons, constantly creating new feelings and moods. The lava is pulled into the building literally by using natural rock in many of the interior and exterior walls but also by opening some of the walls completely to the open nature right outside the windows. Short or long walks in the lava are a great way to relax, breathe in the fresh air and enjoy life. Afterwards the guests can relax in a hot tub in the lava while enjoying the phenominal dance of the northern lights in the sky during the winter or the endless hours of sunlight during the summer.

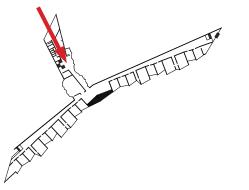




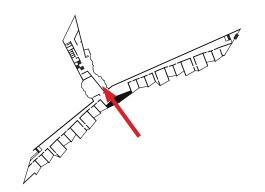


To further allow the guest to understand lava, a material that once was in a liquid form and flowed like a river from the highlands, the guest is taken on a journey that starts when he turns of the Ringroad and heads for the hotel. He travels through a canyon until he reaches the building. When he enters the building the direction he is travelling in changes due to the curving main building. The entrance area is rather dark, almost as if he has entered one of the lavatubes or tunnels the liquid lava sometimes flowes through underground.

But there is light at the end of the tunnel and there, in the middle of the building he finds the reception.



Once the guest has signed in to the hotel he continues his journey down a corridor, partly made of concrete and partly with natural rock walls. The ceiling is partly open to let in light and bring the outside feeling into the building. It can be sunny and bright, foggy and mystical, dark with a starry sky or any other mood that nature can bring in this harsh enviroment.

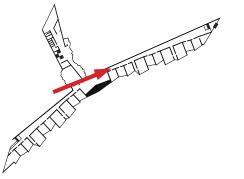






The room corridors are rather dark, creating a canyon like feeling. The walls on one side are uneven to further enhance the feeling of being in a natural canyon or rift with rock walls surrounding you. The walls are high, towering above the guest, 4 m high closest to the main building, reaching 6,5m at the end.

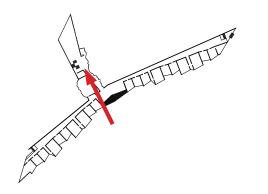
Daylight is entering from the end of the corridor as well as from the sides in two places. The ceiling is like a cloudy sky. There is a skylight window above a thin textile fabric. When the sun moves in the sky the light moves around the ceiling, constantly changing. The colours, amount and strength of the daylight outside is brought into the corridor through this ceiling.



The dining area is on the 2nd floor of the main building. When acsending the stairs to the 2nd floor the guest experiences the sky opening up. The ceiling is open above the stairs and across the middle of the building.

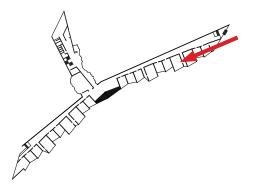
The E wall is also open from the floor to the ceiling opening a new view for the guest from a higher viewpoint than he has had from the 1st floor. The wall on the N side of the dining room is made from glass, directed at a spectacular view over the lava, Mýrdalsjökull glacier and the biggest active volcano in Iceland, Katla.





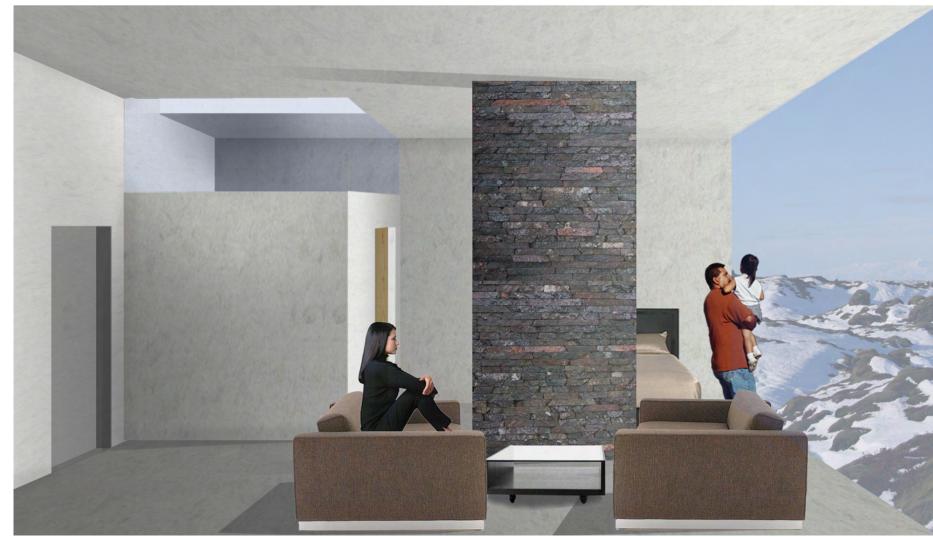
When inside the rooms the guests are in their own private place. The larger rooms are up to 72m2 with a ceiling hight of 3,5 m. They have two bedrooms for two persons each, two bathrooms and a spacious sitting area with only the glass window seperating them from the lavafield and open nature outside.

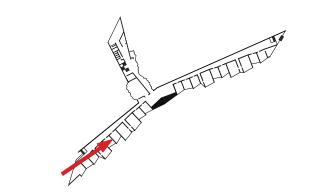


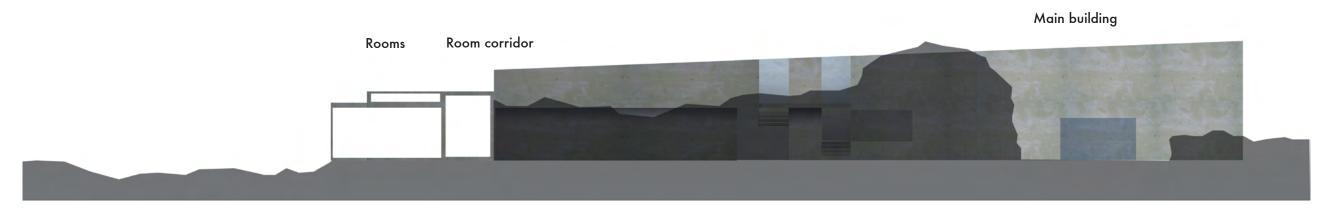


The smaller rooms are from 35 m2 with a ceiling height of 3,5 m. They sleep two people with the option of using the sofa as an extra bed if a small family is travelling together.

There is a spacious sitting area with the same unobstructed view as in the larger rooms. Skylight windows above the bathtubs in all the rooms add to the experience of staying in the rooms, both during the day as well as during the night when the stars and northern lights are visible in the sky. The skylight window allows daylight to flow into the back of the room.

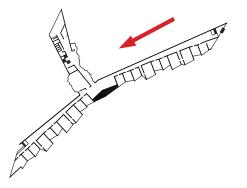


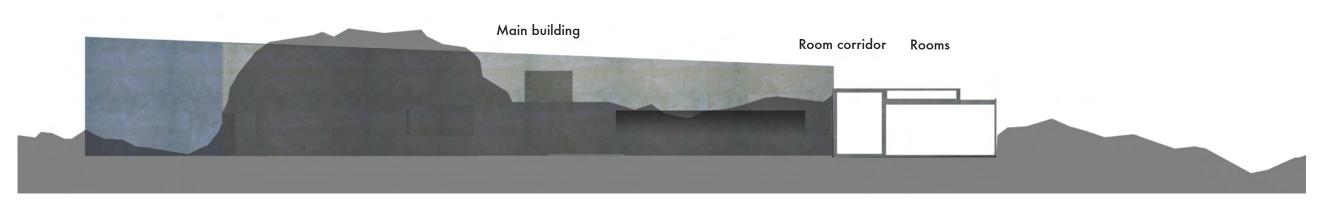




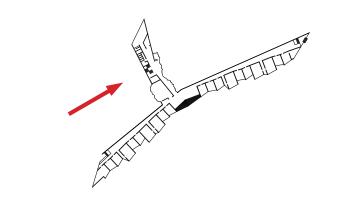


A cross section through the lava hill on the east side of the hotel showing how the building is buried inside the hill. Because of the hill, the level of lava on the N and NW side of the hotel is higher than on the S and SE side.

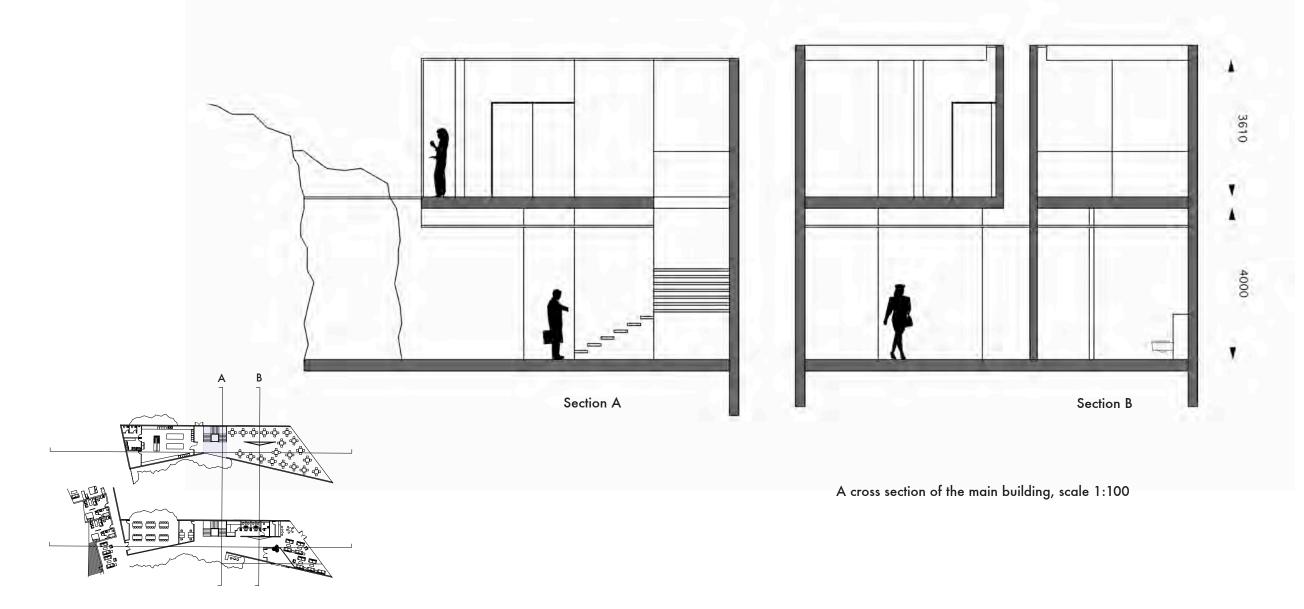


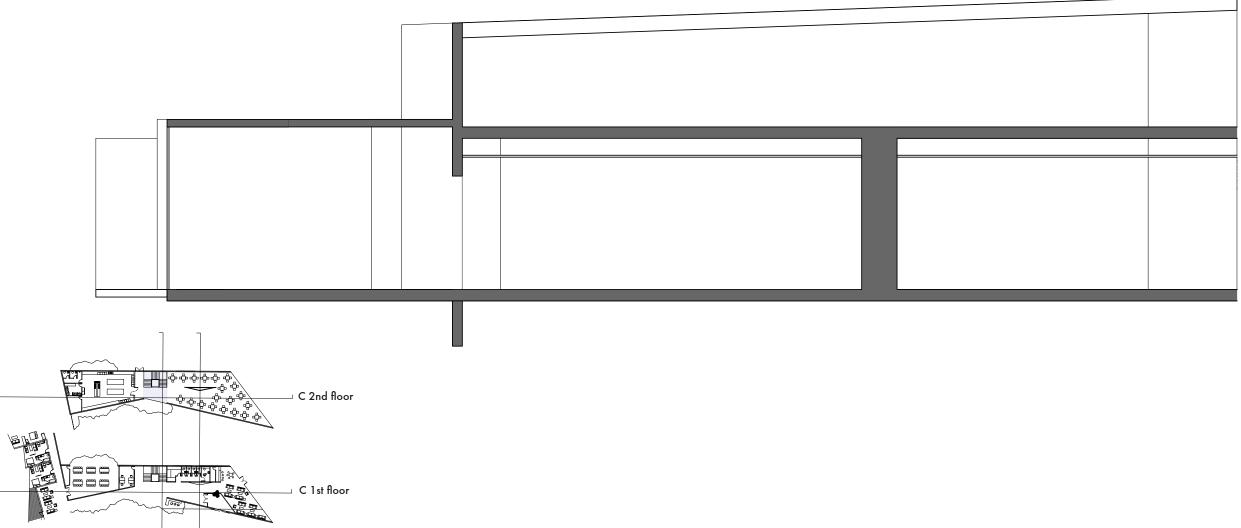


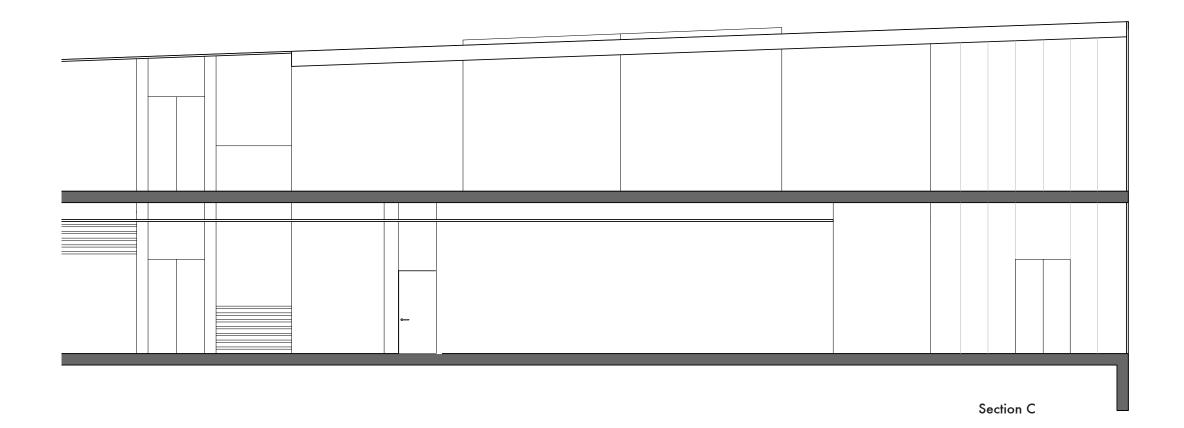
Scale 1:250



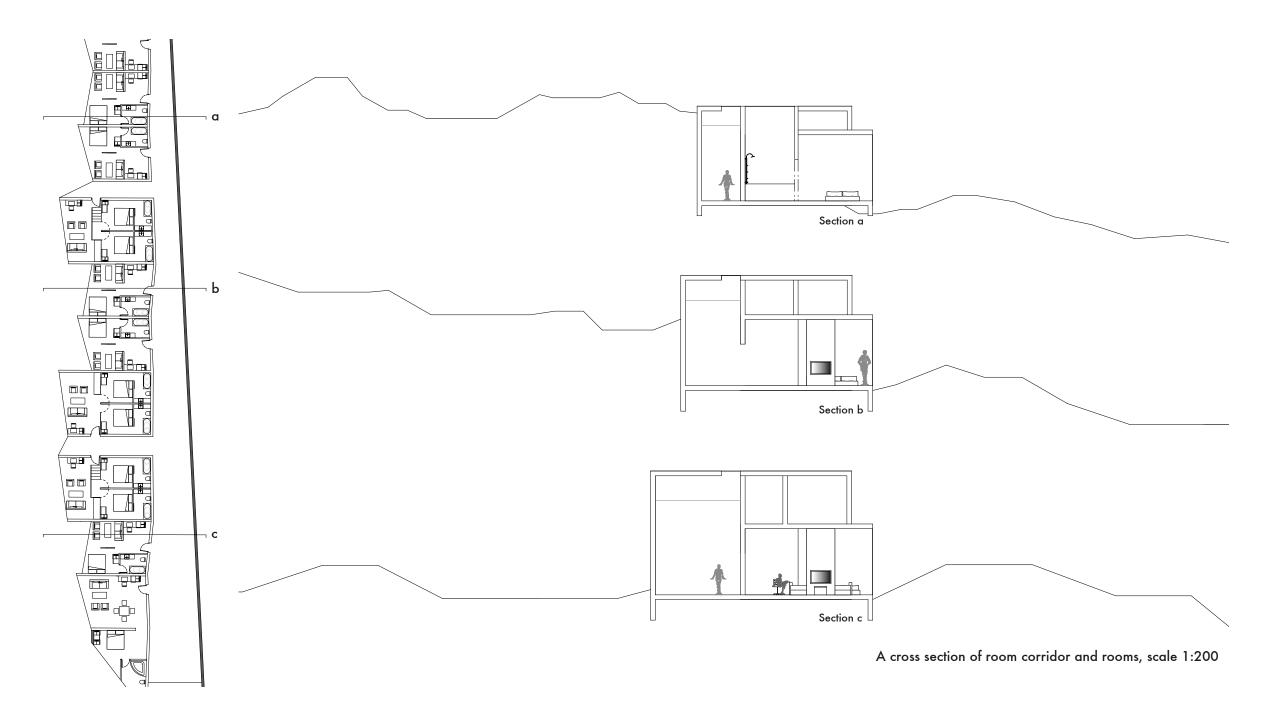
A cross section through the lava hill on the west side of the hotel showing how the building is buried inside the hill.

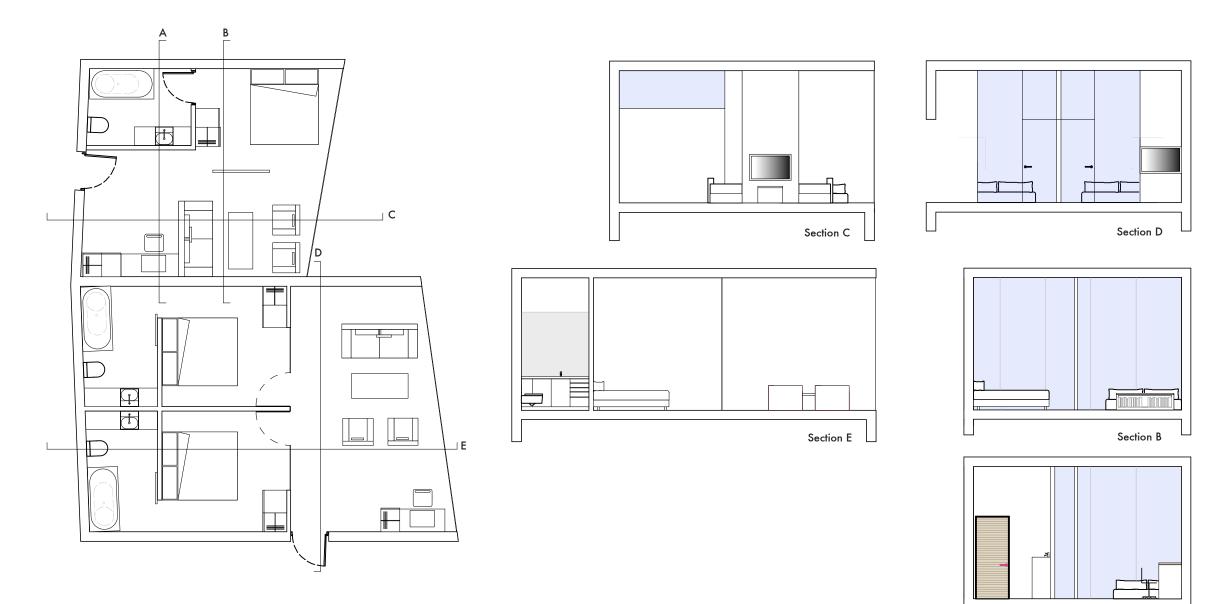






A cross section of the main building, scale 1:100







A plan and cross section rooms, scale 1:100

# 6 outro



#### Conclusion

The vision for this project is to...

...create an accommodation of architectural quality that allows its guests to experience a close contact with the Icelandic nature ...work <u>with</u> nature, not against it

...create a way to use nature in a positive way in order to support the economy in a contrast to large scale industrialized construction.

Placing a manmade structure in the middle of the unspoiled, dramatic and unique Icelandic landscape demands special care. In order not to destroy the very thing that is supposed to be the attraction, the building has to show special consideration to its surroundings.

In this project the aim is to design a building that can coexist with nature and gain from the expression, feeling and precence of the stunning landscape. By keeping the building low and wide and in a way merging it with the nature surrounding it four things are gained:

- The building is mostly hidden from view and does not affect the view over the lavafield in a bad way.

- By having the building partly buried in the lava it is possible to use the lava in itself as a part of the building, substituting for some of the exterior walls. This also keeps the guests in the hotel closer to the lava and the nature around physically, limiting the barrier between the manmade and the natural.

- The guest's experience of this strange and alien material, lava, becomes stronger and this brings the guest closer to it, enhancing the experience.

- The main concept idea, The Flow, becomes strong. The Flow takes the guest on a journey that imitates the journey that the lava undertook on its way from the eruption in the highlands down to the flatlands below. The guest is first taken into a canyon (the road leading to the hotel), then the lava tubes under ground (the building) and finally the open flat lands (the rooms overlooking the solid lavafield). The total size of the building is 2.975 m2. It has 20 rooms and can house up to 60 guests. Being partly buried inside the small hill the only view of the building from the north is two grey concrete walls standing out from the hill. They appear not to have any volume and act as land art within the lavafield. They are visible and attract some attention to them without it being obvious that they are a part of a building.

Most of the other visible parts of the building that are not buried are made from glass. The wall facing NW is 9 m high and 18,5 m wide. The angle of the wall makes it almost invisible from the approach road towards the building. The glass covering the wall reflects the surrounding nature and makes the wall almost disappear into the hill.

The walls facing SE are the windows of the rooms. They are also mostly glass facades and the window for each room is slightly angled so the reflection in the whole facade is broken up into about 25 different reflections of the lavafield. They immitate a canyon wall, broken into small sections. The roofs of the building are at a slight angle and they are covered with lava rock.

Since the building is almost invisible from the outside the architecture on the inside is very important as is the connection from the inside to the outside. This is where the concept and the experience for the guest is created. The interior walls are still mostly the same grey concrete as visible from outside. In addition some of the walls are the natural solid lava while others have been covered with lava bricks.

Staying in the hotel the is meant to be a unique experience for the guest. But how and what is the guest experiencing? Man uses five senses to experience things; vision, hearing, touch, smell and taste. The building design allows for all these senses to be used in order to get in close contact with the lavafield and the nature within it:

Vision: The lava around the building is clearly visible from within the building and in many parts taken into the building. When moving through the building the guest goes from darkness to light, natural to manmade, open and wide to narrow and tight. Different areas creating different moods and feelings. The daylight outside is brought into the building through large windows and skylight windows creating many different feelings inside the hotel.

Hearing: It is difficult to describe the sounds that a place like Eldhraun lava creates. Not only the sounds from the singing birds or the wind blowing in the low vegetation and through rifts and canyons. It is the sound of the quietness of this huge and dramatic area that is very present and something one has to experience on his own.

Touch: Having lava in such close contact both outside and inside the hotel gives the guest a unique opportunity to touch this material that somtimes is rugged and edgy but other times smooth and almost soft. The soft and spongy moss covering the lava is also an alien material for many people. Simply walking in the lava and the moss is an experience in its own.

Smell: Despite the fact that lava is basically rock, it has a very special smell. Due to the fact that it is very porus and brittle the smell is much stronger than the smell of other types of rock. The tough vegetation, specially the moss, also gives a unique smell. The strength of the smell depends greatly upon the weather conditions. It becomes stronger after the rain and during wet and misty days with low wind.

Taste: This is the most difficult one. Some of the vegetation around the hotel are edible, the reindeer moss and the crowberry, and the chefs preparing the dinner for the guests will without any doubt use them in their cooking. That is one way for the guests to use taste for the experience. But there is a very thin line between smell and taste. The strength of the smell often feels like one can actually taste the area without putting anything into the mouth. The smell becomes the taste. The lava and the unspoiled nature are always present. If it is not used within whatever room the guest is standing in, it is clearly visible outside the building.

But the experience is not only of a physical nature. The ever changing expression of this huge area loaded with stories of mysterious creatures and adventures is constantly surrounding the guest. The play with different amount and expression of the light in different areas within the building, depending on the feeling and expression in the light outside bring the presence of these creatures, adventures, stories and myth to life and into the hotel. No one should be surprised to meet an elf or a long forgotten outlaw lurking in a dark corner.

All these things combined will make the stay in the hotel an experience not to be forgotten.

There is no doubt that the lava hotel would attract visitors from all over the world. Hopefully this report has stated why. But this is just lava, one of so many things that Iceland has to offer and are strange, alien and unique for many people. This could be the first hotel in a line of theme based hotels or accomodations here and there in Iceland. Black sands hotel, Glacier hotel, Mountain hotel, River hotel and so on. This is just one simple way for the tourist industry and the authorities to think outside the box, or at least to make the box a little bigger.

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Sigurjón Þórðarson, former hotel manager at Hótel Flókalundur. Björn S. Harðarson, Phd Geology. Haraldur Einarsson, Guesthouse Höfðabrekka Óskar H. Guðjónsson, Ultima thule Expeditions Sigrún Nikulásdóttir, Moments team building agency Jón G. Egilsson, Icelandic Meteorological Office Guðrún Ægisdóttir, Project Manager, Mountain Hostel Thorsmörk