
A Nation Born
Þjóð Verður Til

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Acknowledgments / Þakkir

To complete a project of this scale by myself is near impossible, and I want to extend my gratitude to everyone who played a part and acknowledge the expertise and insight they brought to this completed work. To my incredible committee, your endless support and expertise across the disciplines of architecture, architectural theory, and engineering helped foster the growth of this project from its earliest inception to its completion. With your guidance and dedication to this project, I was able to deliver my best. To my chair, **Dr. Gregory Luhan**, your incredible knowledge of the discipline and practice field, the positive impact of design research, and its representation have been critical to this project's success and my academic career. To **Dr. Stephen Caffey,** the insight you brought to this project, beyond the architecture, to its purpose and further meaning, was critical. To Dr. Maria Koliou, your extensive knowledge and expertise were instrumental in creating a system that proved to be highly effective. To **Brian Gibbs**, my studio coordination, thank you for your valuable comments and additional insight into this project over the past two semesters.

Ég vil bera fram sérþakkir til nokkurra eru veittu mér ráðgjöf og miðluðu með sinni sérþekkingu yfir sviðum byggingarlistar, byggingarfræðum og verkfræðum. Þeirra þolinmæði og innsýn elfdu heildyfirlit þessa verkefnis, frá upphafi til enda. Án stuðnings þeirra hefði vinnslu þessa verkefnis verið erfitt að ljúka. **Dr. Gregory Luhan**, nefndarformaður, þekking þín á sviði byggingarlistar og túlkun þessa efnis hefur verið ómetanleg og þá ekki einungis við vinnslu þessa verkefnis – heldur hefur þú veitt mér sterka stoð fyrir mitt akademíska ferli til framtíðar. **Dr. Stephen Caffey**, þú veittir lykil innblástur þessa verkefnis, ekki aðeins varðandi byggingarlist heldur einnig varðandi hagkvæmni og ítarlegri greiningu. **Dr. Maria Koliou**, með þína víðtæku sérþekkingu á byggingarverkfræðum reyndist aðstoð þín gífurlega mikilvæg. Kærar þakkir **Brian Gibbs**, vinnustofuráðgjafi, fyrir þína ómetanlegu viðbótarinnsýn og fylgdina með mér og þessu verkefni síðastliðnar tvær annir.

Contents / Efnisyfirlit

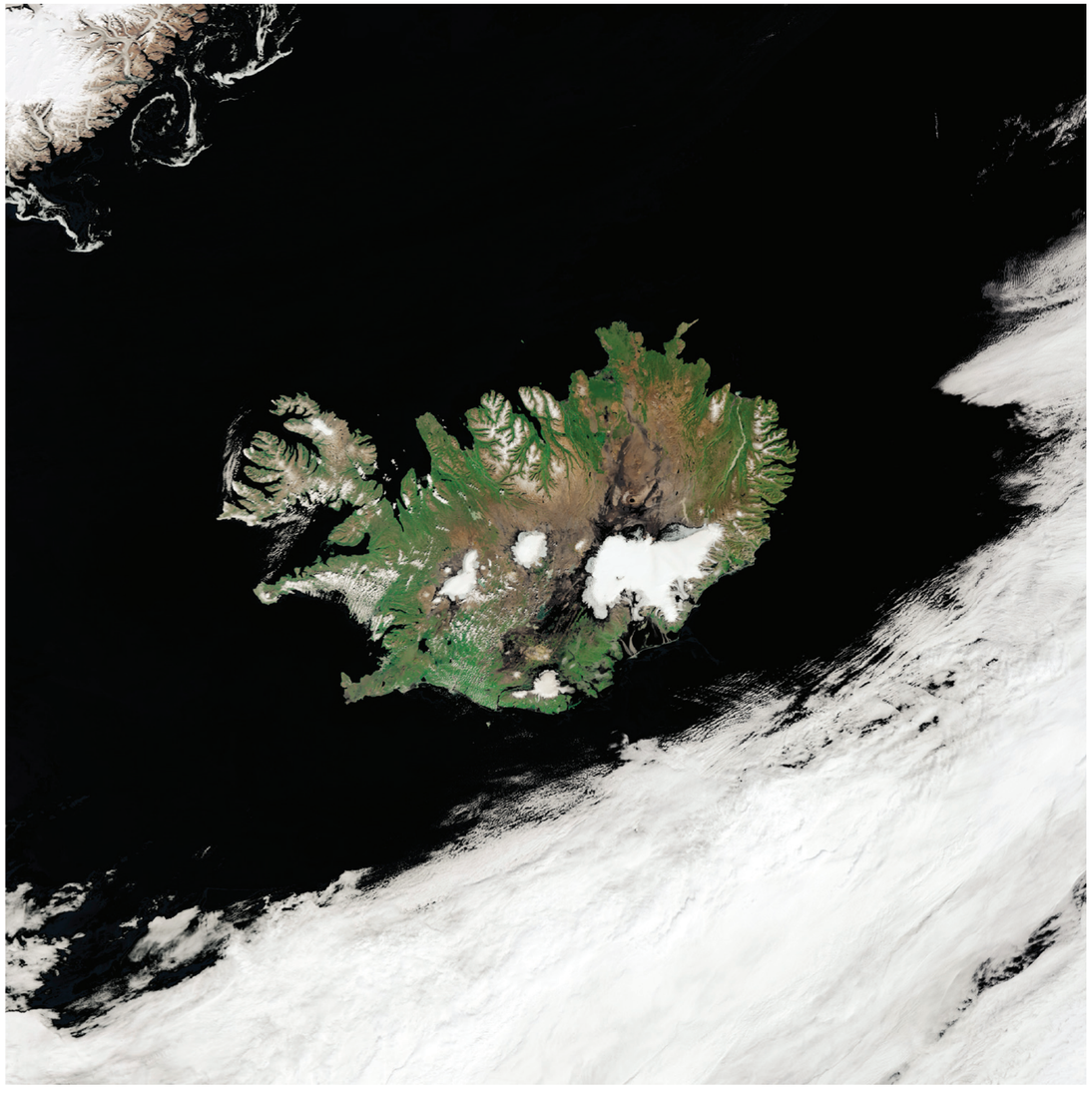
Dedicated to my parents.

Project Abstract / Samantekt

As it currently stands, the National Museum of Iceland, established in February of 1863, houses an impressive collection of thousands of artifacts showcasing Iceland's rich cultural heritage. However, the museum's current size is limited, and its exhibitions often feel cramped, and as a result, haphazardly organized. This lack of space and the museum's existing footprint detrimentally restrict its ability to display its extensive collection correctly. The current building dates back to the 1950's. It lacks modern amentines that would enhance the visitors experience as expected in a museum of this caliber. Despite these limitations, the National Museum of Iceland remains crucial in preserving and showcasing Iceland's history and culture. Iceland deserves a state-of-the-art, intentionally designed space capable of doing justice to the rich and growing sagas of Icelandic history and culture.

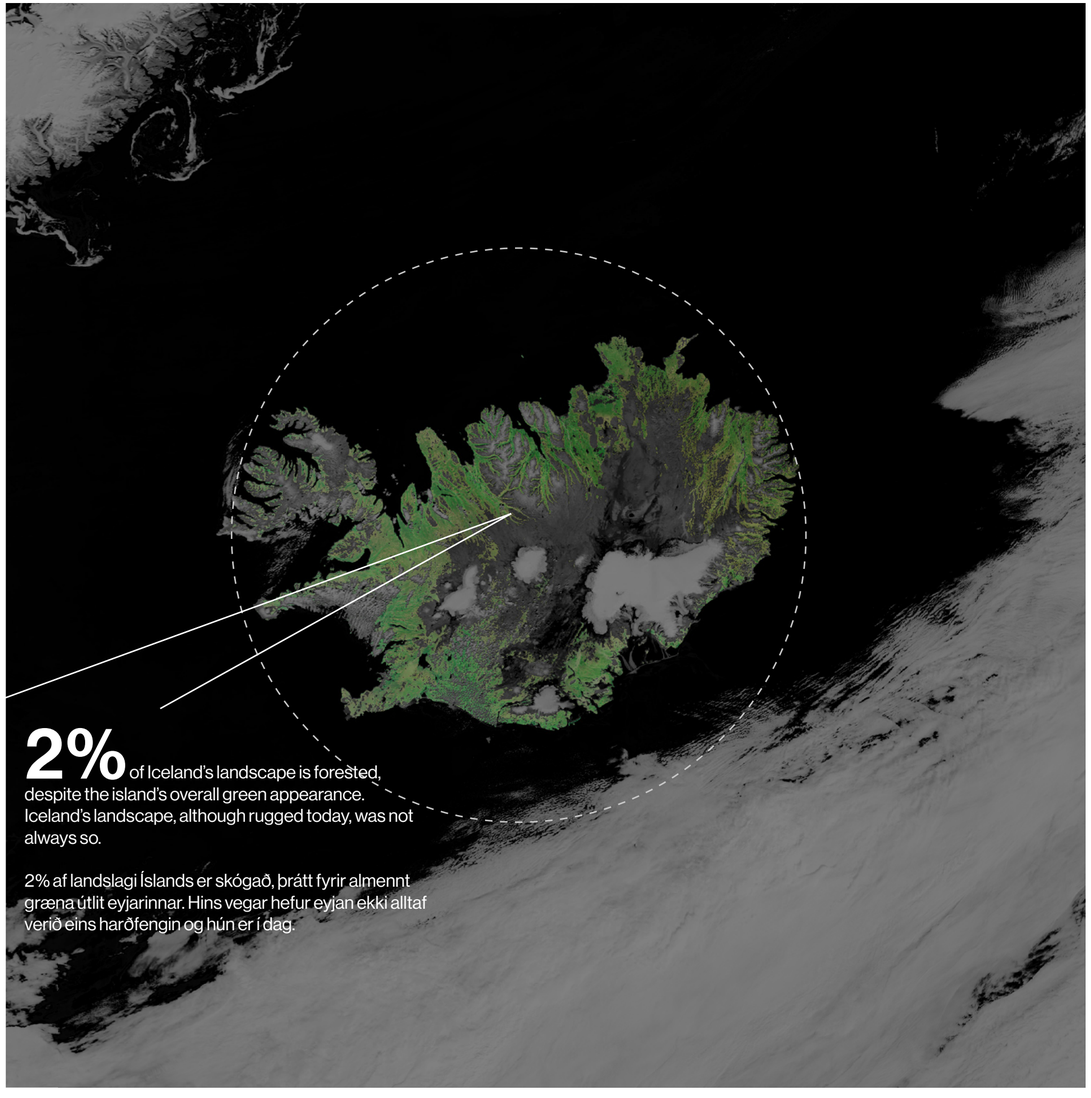
Eins og staðan er í dag varðveitir Þjóðminjasafn Íslands glæsilegt safn þúsunda muna er sýna ríkan menningararf Íslands. Núverandi húsnæði er takmarkað að stærð og því eru sýningarmöguleikar r nútímaleg þætti sem myndu auka upplifun gesta og myndu vera væntanlegir í safni af þessari stærð og gæðum. Þrátt fyrir þessi takmarkanir er Þjóðminjasafn Íslands enn mikilvæg stofnun í varðveislu og sýningu sögu og menningar Íslands, og er þess virði að hafa á miðjum öndum, með sérstökum hönnunum, sem eru hæfir til að láta ríkustu og stöðugt vaxandi sögur íslenskrar sögu og menningar dvelja þar á skemmtilegan og skýran máta.

Project Research / Verkefnarannsóknir



Timber was once a common material in the Icelandic landscape and influenced the country's earliest constructions. Today, sustainable construction practices in Iceland must consider the complicated relationship the nation has had with its forestry. By looking to the past for inspiration, Iceland can find answers for future construction projects and continue to evolve its materiality practices.

Við úrvinnslu byggingarhráefna á Íslandi í dag má ekki yfirlíta mikilvægan þátt íslenska landslagsins - trén. Þrátt fyrir flókin tengsl þjóðarinnar við íslenska skógrækt, þá getur sjálfbær byggingarhönnun á Íslandi fundið fyrirmynd í þeim byggingarstíl er var ríkjandi á upphafsárum þjóðarinnar. Með því að líta til sögunnar getur Ísland fundið innblástur fyrir framtíðarverkefnin.



When settlers arrived in Iceland in the early 870's, the vikings cleared the forests that once covered almost half of the island for the growing settlement. Combined with unregulated animal grazing and the island's exposure to the harsh winds of the North Atlantic, it led to rapid deforestation and the treeless landscape that is present today.

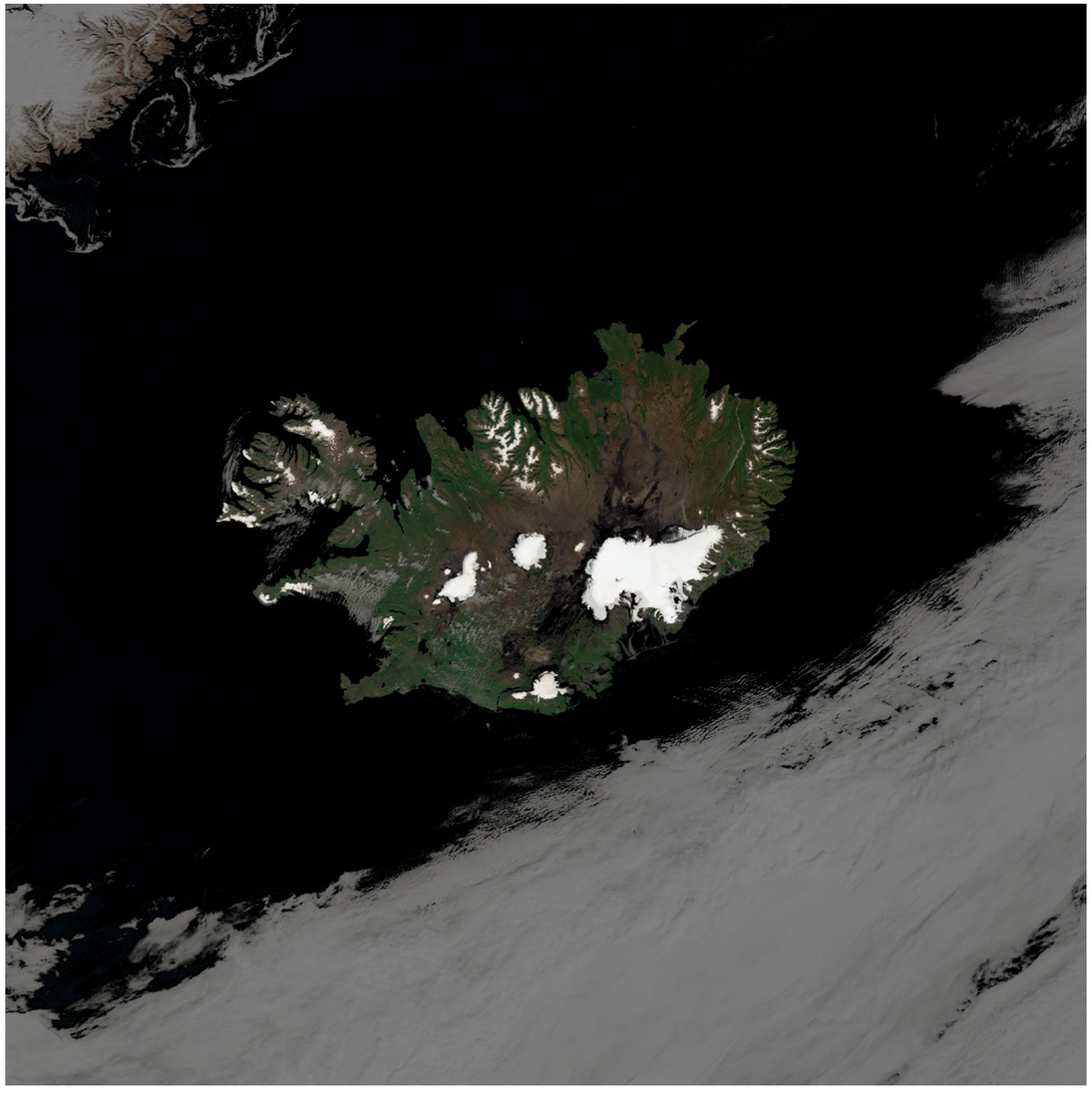
Þegar landnámsmenn komu til Íslands á 9. öld hjuggu víkingar niður skóga er áður höfðu hulið eyjuna, að mestu, til eldiviðs og til rýmis fyrir vaxandi landnám. Það ásamt ótakmörkuðum beitun húsdýra og hörðum norðan vindum leiddu hratt til skógareyðinga og takmörkun trjáa við núverandi landslag.

Although the modern landscape of Iceland has striking ruggedness and greenery as primary natural characteristics, the island is largely devoid of trees. Rampant desertification occurs in once-green areas due to weakened soil and the lack of woodlands, encroaching on grazing land, and the already limited arable land in Iceland.

Í dag er íslenskt landslag tilkomumikið, sviðmikið og þátt fyrir talsverða gróðursæld er eyjan þó enn að mestu laus við tré. Mikil auðn er á svæðum sem áður voru gróin, vegna veiks jarðvegs og ágengi sauðfjárs á ræktunarland Íslands.

In recent years, Iceland has taken steps to reforest its land and combat desertification while restoring the natural balance of its ecosystem. Reforestation has numerous benefits, including stabilizing soil erosion, protecting watersheds, providing habitats for wildlife, and sequestering carbon. Although reforestation efforts in Iceland are still in the early stages, the government and environmental groups remain committed to continuing these efforts to restore the natural balance of the island's ecosystem.

Undanfarin ár hefur verið lögð mikil áhersla á að endurnýja skógarsvæði til að berjast gegn landauðn og endurheimta þannig jafnvægi í vistkerfinu. Skóglendi hefur margvísleg vistvæn áhrif, þar á meðal stöðvun jarðvegsrofs, verndun vatnasvæða, umdæmi dýralífs, og kolefnisbindingu. Stjórnvöld og umhverfissamtök eru vongóð um endurheimta náttúrulegt jafnvægi á eyjunni.



Any new construction along a coastline today faces the challenge of understanding and responding to the inevitable change in sea level. Iceland is no different. With record levels of glacial melt, the island faces a unique challenge in coastal design considerations, which differs from most of the world.

Allar nýbyggingar við strandlengjur takast á við hönnunaráskorun um að skilja, og bregðast við óumflýjanlegum breytingum sjávarmáls. Íslensk hönnun, með metgildi í bráðnun jökla og harðri veðráttu má búast við erfiðum áskorunum í framtíðinni - frábrugðinni öðrum löndum.

Holarjokull Glacier 1989

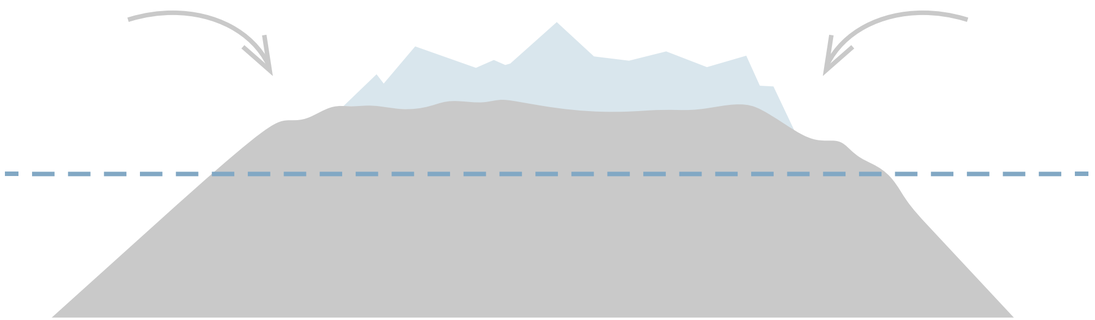
Holarjokull Glacier 2020

Glaciers cover ten percent of Iceland's land area. The Arctic region is encountering the most significant global temperature increase; if that continues, Iceland may lose all its glaciers by the year 2200.

Um það bil tíu prósent af landsvæðum Íslands eru þakin jöklum. Heimskautasvæðið mætir mestu hitahækkunum á heimsvísu og ef áfram heldur sem horfir gæti Ísland séð á eftir síðasta jöklinum fyrir árið 2200.

The massive amount of ice atop Iceland's glaciers, estimated to be around 3,400 cubic kilometers, has been pushing down on the land beneath it for millennia. This weight has caused the underlying ground to compress significantly, resulting in the land sinking.

Jöklar Íslands eru um 3.400 rúmkílómetrar sem hafa þrýst á landið í árþúsundir og þessi þungi hefur valdið því að landið sígur smám saman.

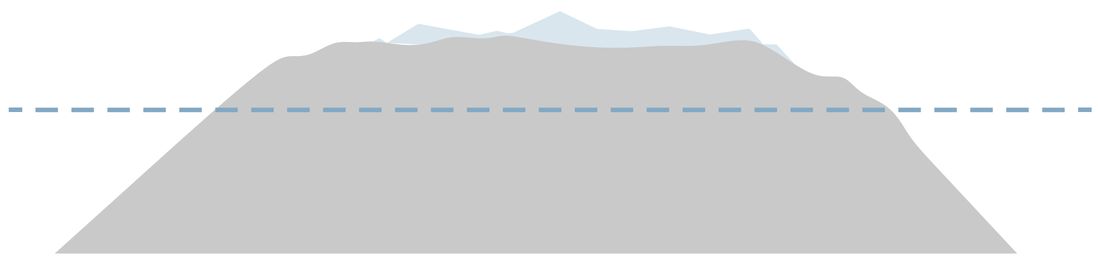


As glaciers melt, the water that once formed them runs off into rivers, lakes, and, eventually, the ocean. This process, known as glacial meltwater runoff, can significantly impact Earth's ecosystems and water resources.

Glacial meltwater runoff contributes to rising sea levels, which can severely affect coastal cities and populations. However, the unique circumstances of Iceland's geography, and the massive ice melting mean Iceland experiences something else.

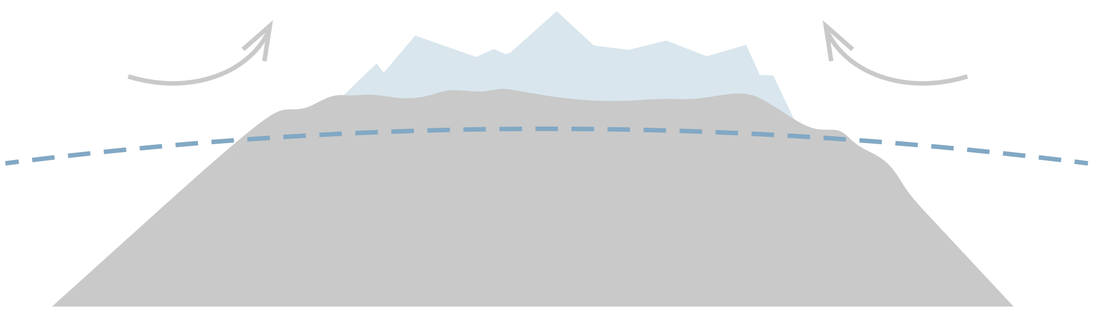
Þegar jöklar bráðna rennur vatnið í ár, stöðuvötn, og út í sjó. Jökulbræðsluvatnsrennslið í ferli sínu getur haft veruleg áhrif á vistkerfi jarðar og vatnsauðlinda, og með hækkun sjávarborðs getur það haft alvarlegar afleiðingar fyrir strandbúsetu.

Leysing vatns úr jökli stefnir til hækkunar sjávarstofns sem getur haft alvarlegar afleiðingar fyrir strandlönd og íbúa þeirra. Hins vegar eru einstök aðstæður landslagsins á Íslandi og fjölda stórra jökla sem bráðna merki um að Ísland upplifi eitthvað allt annað.



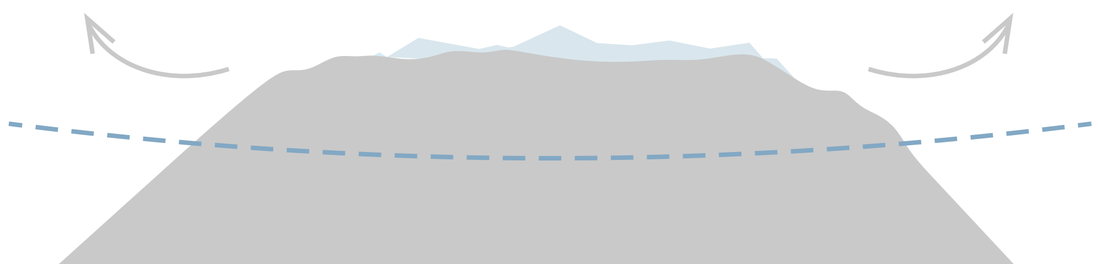
The scale and weight of Iceland's hundreds of glaciers have a gravitational pull on the North Atlantic waters around them. For thousands of years, the enormity of these glaciers has been pulling the surrounding ocean toward the island.

Umfang og þyngd jökla Íslands hafa þyngdarkraft á hafsvæðinu í norðanverðu Atlantshafi í kringum sig og til þúsunda ára hafa gríðarstærðir þessara jökla í raun verið að draga hafið í átt að eyjunni.



As the glaciers have been melting at record rates, the gravitational pull of the sea toward the island is weakening, resulting in a rare phenomenon : an island whose glaciers are shedding billions of tons of glacier meltwater into its ocean every year and is experiencing a sea level decrease.

Þar sem jöklarnir hafa bráðnað á methraða minnkar þyngdarkraftur hafsins í átt að Íslandi og uppgangur hafsins í kring streymir hinum megin á jörðina. Þetta leiðir af sér sjaldgæft fyrirbæri: eyja þar sem jöklar eru að varpa milljörðum tonna af jökulbræðsluvatni í hafið á hverju ári er að upplifa lækkun sjávarborðs.

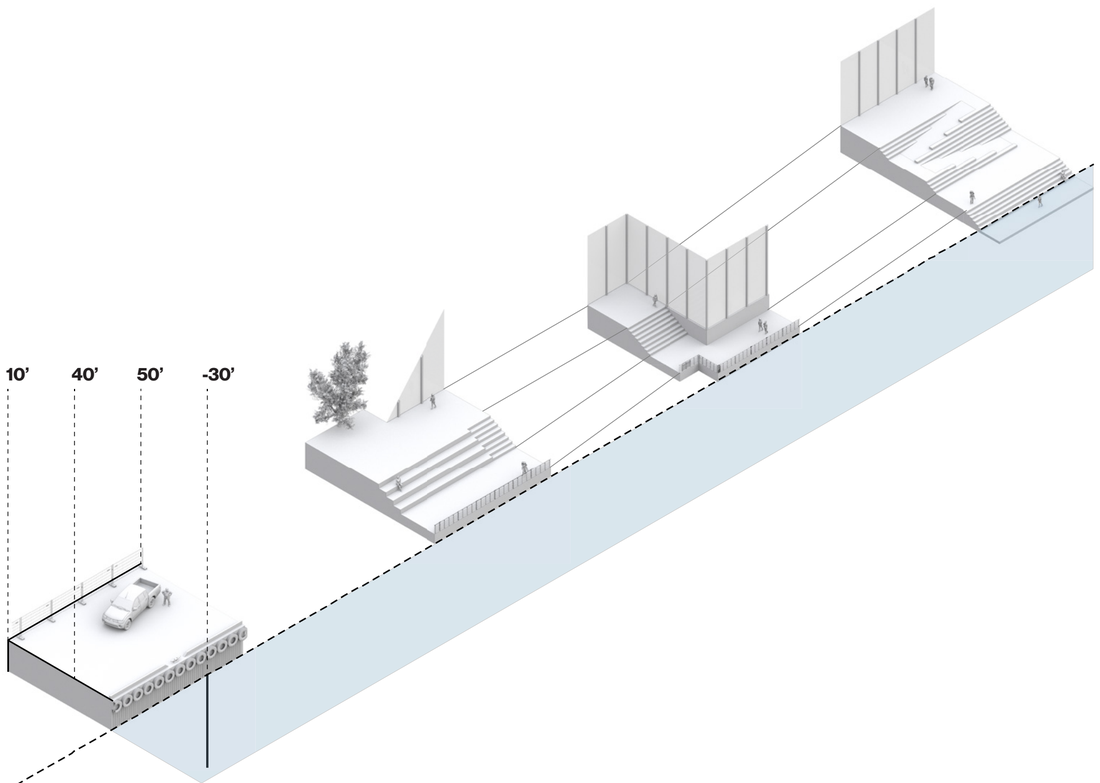


Designing for the inevitable reduction in sea level in Iceland is a challenging task, made more complex by the harsh conditions of the North Atlantic Ocean. It is crucial to locate a site protected by Reykjavik's historic harbor to ensure a controlled environment for responding to seal-level changes.

Hönnun, vegna óumflýjanlegrar lækkunar á sjávarborði við Íslandsstrendur er krefjandi vegna erfiðra aðstæðna. Til að tryggja stýrt umhverfi bregðist við breytingum á sjávarmáli er mikilvægt að vinna með staðsetningu sem og sögulegu Reykjavíkurhöfn.

By exploring waterfront typologies that connect people with the water, it is possible to promote leisurely engagement of the harbor, and address the unique design challenges presented by a coastline that will recede of time.

Með því að kanna tengsl fólks við strandlengjuna, við útivist , er mögulegt að örugglega nýta höfnina ásamt því að leysa einstaka hönnunarvandamál sem byðst í tengslum við strandlengju sem mun dragast saman á meðan tíminn líður.



The Reykjavik Municipal Plan for 2010-2030 clearly states the desire to increase the development of educational and research facilities in the Vatnsmýri district of Reykjavik, where the current National Museum of Iceland is located. Relocating the museum to a new site allows the University of Iceland to engage in the adaptive reuse of the existing building to align more with the municipal goals of increasing educational facilities.

Í aðalskipulagi Reykjavíkur 2010-2030 kemur fram vilji til að auka uppbyggingu fræðslu og rannsóknaaðstöðu við Vatnsmýri í Reykjavík, þar sem núverandi Þjóðminjasafn Íslands er til húsa. Með því að flytja safnið mun það gera Háskóla Íslands kleift að endurnýta húsnæðið, og það mun samræmast betur markmiðum sveitarfélagsins um að auka við fræðsluaðstöður.

Exisiting Site **University of Iceland**

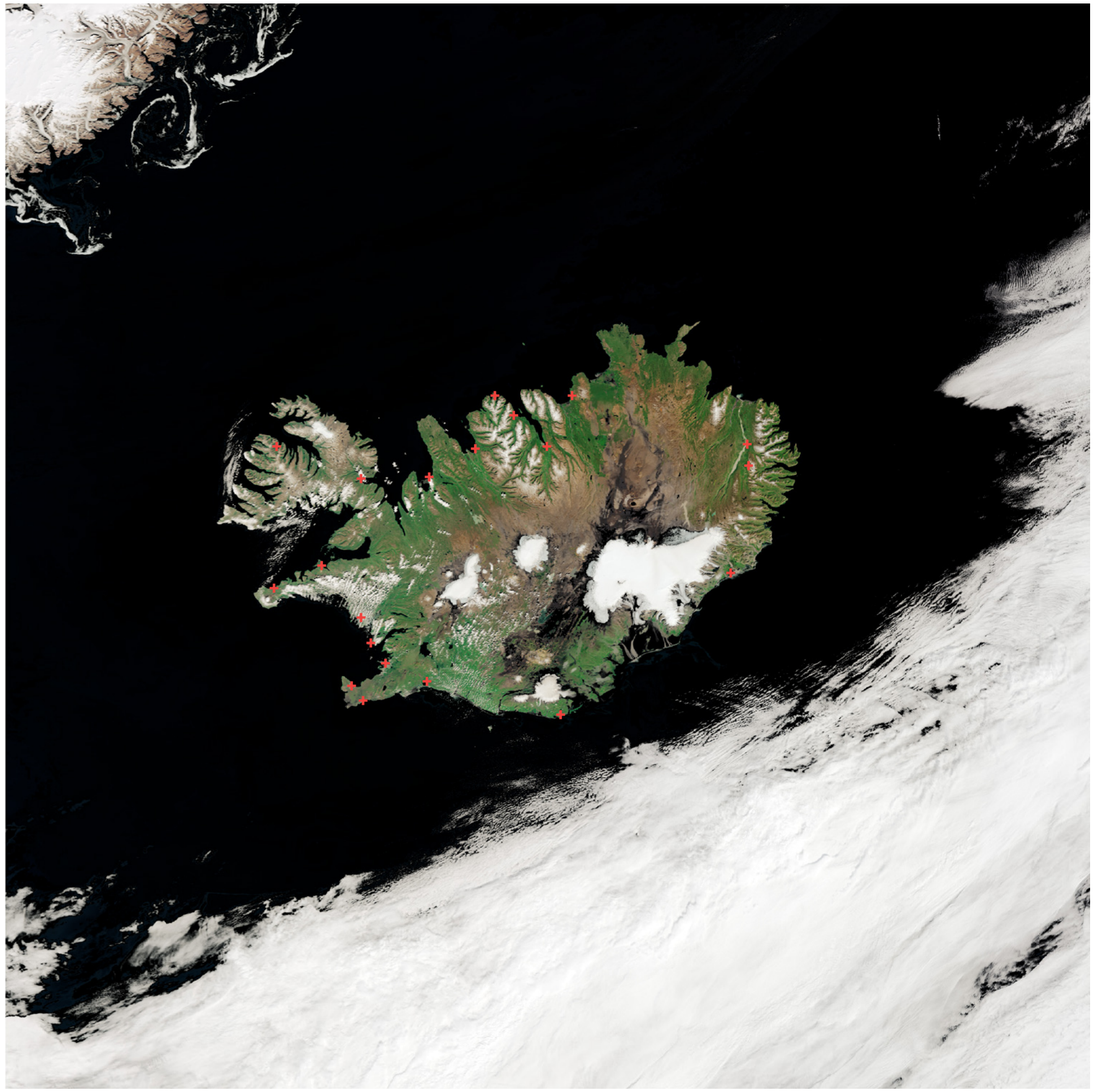
The site is adjacent to the University of Iceland, in the Hagatorg-Suðurgata zone. Plans for this region include the development of offices, institutions, and research institutions primarily associated with the University of Iceland. Planning notes the importance of internal connectivity between the areas in the three growth poles in research and innovation, achieved in part by synchronizing building typologies.

Núverandi lóðarstaðsetning er nálægt Háskóla Íslands og Hagatorgs-Suðurgötu svæðinu. Áætlanir fyrir þetta svæði eru að þróa skrifstofur, stofnanir og rannsóknarstofur tengdar Háskóla Íslands. Í áætlunum er tekið fram mikilvægi innri samstöðu milli svæðanna í þremur skrefum með sérhæfðu markmiði innan rannsókna og nýsköpunar sem náð er að hluta með samræmingum við byggingarhögun.

Site Relinquished to the **University of Iceland**

Relinquishing the site aims to guide the city's development over 20 years and includes provisions for creating sustainable and livable communities, promoting economic growth, and enhancing the city's cultural and environmental assets. One of the critical components of the municipal planning strategy is the development of the academic triangle and Reykjavik airport area, which envisions a cluster of educational, research, science, and high-end health services. This area will serve as a hub for innovation and knowledge sharing, and focus on promoting scientific and technological advancements in various fields.

Að gefa upp staðsetninguna miðar að því að leiðbeina þróun borgarinnar yfir 20 ára tímabil og inniheldur ákvæði um að búa til sjálfbær samfélög sem eru hæfileg í búsetu, stuðla að efnahagslegri þróun og auka menningarlega og umhverfislega auðlindir borgarinnar. Eitt helsta þátturinn í sveitarstjórnarplönuninni er þróun akademíuskammsins / flugvallar svæðisins sem er hugmyndað sem klasinn af menntandi, rannsóknum, vísindum og háendaglum heilbrigðisþjónustu. Þetta svæði er ætlað að vera miðstöð nýsköpunar og þekkingardeilingar, með áherslu á að stuðla að vísindalegum og tæknilegum framförum í fjölbreyttum sviðum.



Throughout history, Icelandic settlement has primarily occurred along the island's coastal regions since Iceland is volcanic, with rugged terrain and limited arable land. On the other hand, the coastal areas offer more favorable conditions for settlement, such as access to fishing, fertile soil, and natural harbors for trade and transportation. The earliest Icelandic settlers arrived in the 9th century and established settlements along the coast, the foundation for the country's eventual growth and development. Today, most of Iceland's population still lives in coastal regions, emphasizing the continued importance of the coast to Icelandic culture and society.

Í gegnum söguna hefur íslenskur landnám fyrst og fremst átt sér stað á kystuslóðum eyjarinnar. Þetta er í hluta lagi vegna þess að Ísland er eldrið eyja með ójöfnu landslagi og takmarkaðri uppskeruflöt. Kystuslóðirnar bjóða hins vegar upp á betri skilyrði fyrir byggðir, svo sem aðgang að fiskveiðum, frjósum jarðvegi og náttúruhamlum fyrir verslun og samgöngur. Fyrstu landnámsmennirnir komu á 9. öld og stofnuðu byggðir á kystunum sem þjónuðu sem grunnur fyrir vöxt og þróun landsins. Á í dag býr meirihluti íslenska þjóðarinnar enn á kystuslóðum, sem leggur áherslu á þátt sem ströndin hefur ennþá í íslenskri menningu og samfélagi.

NATIONAL MUSEUM OF ICELAND

SITE RELOCATION

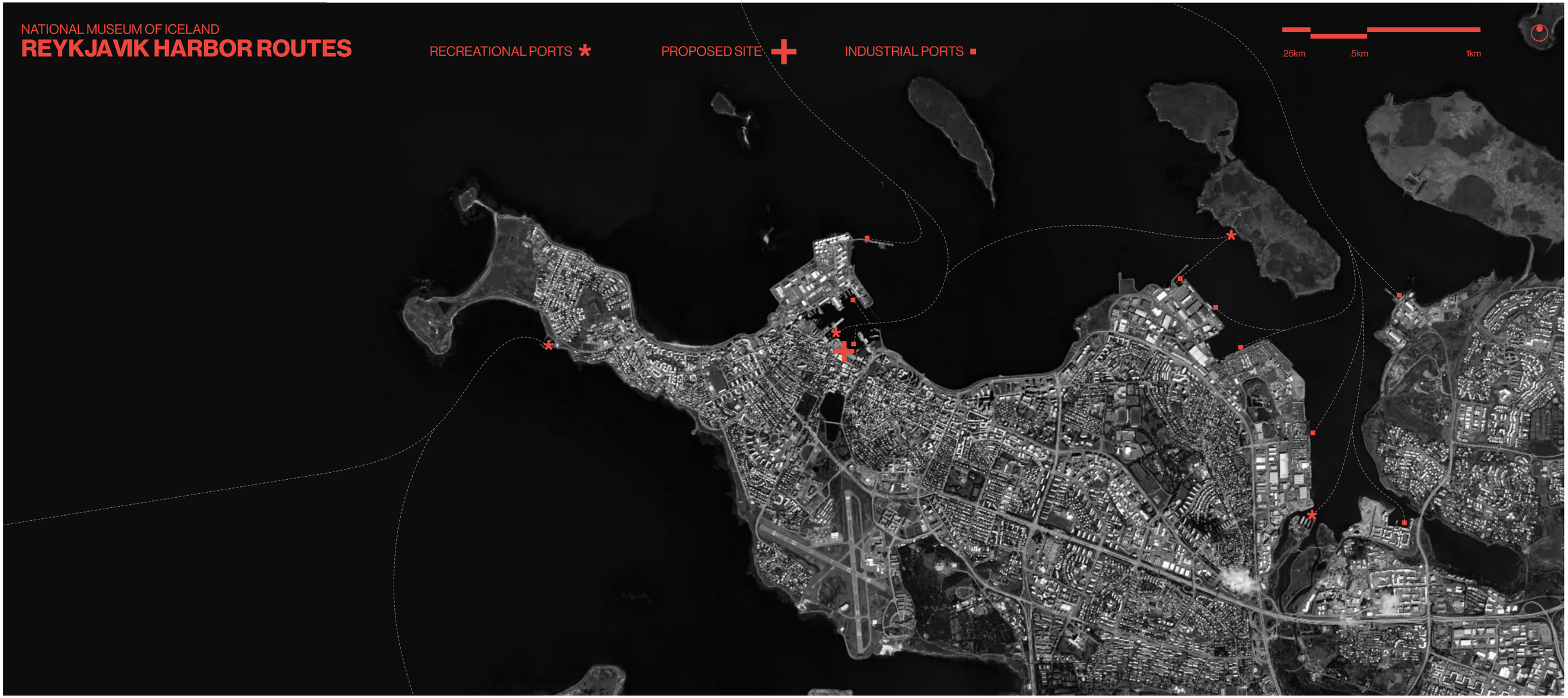
EXISTING SITE *

PROPOSED SITE +

.25km .5km 1km

NATIONAL MUSEUM OF ICELAND

REYKJAVIK HARBOR ROUTES



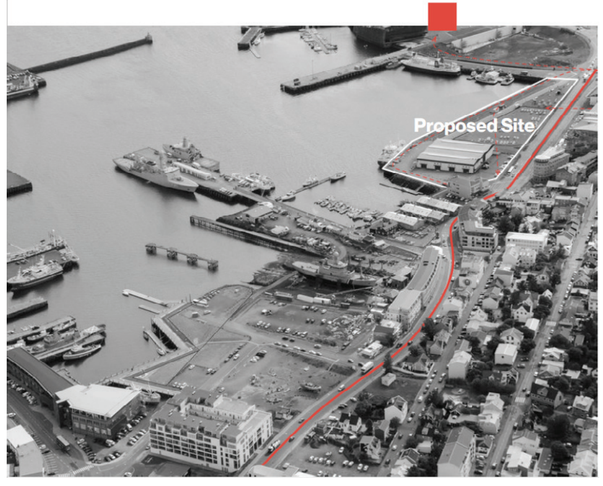
NATIONAL MUSEUM OF ICELAND

REYKJAVIK CIRCULATION

1 NORÐURSTRÖND
2 SUÐURSTRÖND
3 EIÐSGRANDI
4 GEIRSGATA
5 LÆKJAGATA
6 SNORRABRAUT
7 LAUGAVEGUR
8 SUÐURLANDSBRAUT
9 BUSTAÐARVEGUR
10 HÖFÐABAKKI
11 HALLSVEGUR
12 STRANDVEGUR

PROPOSED SITE

.25km .5km 1km



Upper Image Facing North from Downtown Reykjavik - Procession of pedestrian and vehicular traffic towards the Harpa Concert Hall.

Lower Image Facing East along the existing Reykjavik Old Harbor and Geirsgata urban axis, as well as the relationship to the harbor and Harpa Concert Hall.

Efri mynd Að horfa norður frá miðbænum í Reykjavík - Faraðar fótgönguliðir og ökutækjaflutningur í átt að tónlistarhúsinu Harpa.

Neðri mynd Að horfa austur meðfram tilverandi Reykjavíkur hamnaborgar og borgarásar Geirsgötu, ásamt tengslum við höfnina og tónlistarhúsið Harpa.

Major Roadways

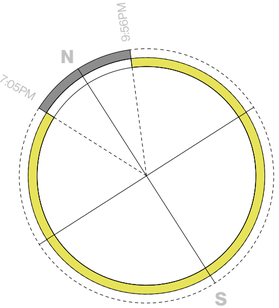
Pedestrian Flow

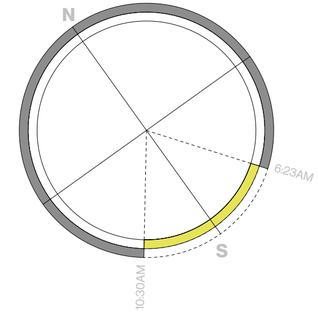
Harpa Concert Hall

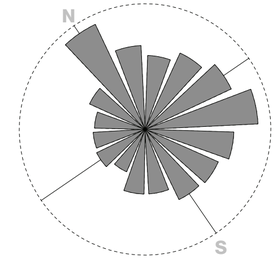
Proposed Site

Downtown Reykjavik

125’ 250’ 500’







Project Program / Forritunarfræði

In its current state, the National Museum of Iceland has an exhibition space that spans approximately 17,500 square feet. This limited exhibition area results in cramped and congested atmosphere with less than 9 square feet per item, making it difficult for visitors to appreciate the items on display fully.

Þjóðminjasafn Íslands, í núverandi húsnæði býður upp á takmarkað sýningarrými sem skapar getur þrengsli meðal gesta og gert það að verkum að erfitt er að sjá og njóta muna safnsins.

1 Square Represents 10 Artifacts

With the initial reconfiguration of the exhibited artifacts, the museum will reduce the number of displayed items from 50% to 20% of the total collection. This reduction has enabled a more deliberate curation, giving the museum curators greater control over the exhibitions narratives. By exhibiting fewer artifacts, the museum can create a more intentional and systematic display, ensuring the preservation of centuries-old artifacts.

Við enduruppstilling á gripum mun safnið fækka sýndum munum úr 50% í 20% af heildarsafni. Þessi fækkun mun leiða til markvissara sýningarhalds sem gefur safnstýrendum aukna stjórn á frásögnum sýninganna. Með því að sýna færri gripi getur safnið skapað kerfisbundnari sýningar og tryggt varðveislu aldagömlu gripanna.

1 Square Represents 10 Artifacts

800 - 1000 AD

1000 - 1200 AD

1200 - 1400 AD

1400 - 1600 AD

1600 - 1800 AD

1800 - Present Day

The ongoing exhibition, 'Making of a Nation', divides the museum into six sections that cover 200-year increments, encompassing over 1200 years of Icelandic history. However, the artifacts in the collection are not evenly distributed, with almost 70% originating from 1700 to the present day. This results in an exhibition focusing mainly on the last two to three centuries, rather than proportionally representing Iceland's lengthy and fascinating history through a more strategic allocation of artifacts

„Making of a Nation" sýningin skiptir safninu í sex hluta sem ná yfir 200 ára skeið og rúmum 1200 árum Íslandssögunnar. Munirnir í safninu dreifast þó ekki jafnt yfir árin, en tæplega 70% þeirra eru upprunnin frá árinu 1700 til dagsins í dag. Þetta leiðir til þess að aðallega er fjallað um síðustu tvær til þrjár aldir, heldur en að túlka langa og heillandi sögu Íslands með markvissari úthlutun sýndra gripa.

1 Square Represents 10 Artifacts

To achieve a more balanced distribution of artifacts, nearly 400 items have been relocated from exhibits spanning the period between 1600 to the present day. The purpose of this relocation is to create a more organized and structured exhibition, and control the density of artifacts within their respective historical eras. The relocated artifacts will be periodically rotated through a new temporary exhibition space, enabling a more intimate curation of cultural heritage, historical narratives, and significant events throughout Icelandic history.

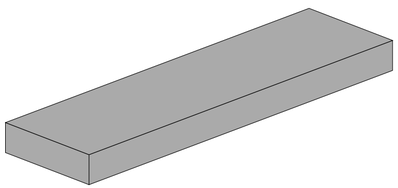
Til að jafna dreifingu á safnmunum voru tæplega 400 munir tímabundið fjarlægðir frá sýningum er fjölluðu um árin 1600 til dagsins í dag. Tilgangur þessara breytinga var að stjórna þéttleika gripa á sögulegum tímum þeirra. Hinum fluttu gripum verður reglulega endurstokkað um nýtt og tímabundið sýningarrými sem gerir kleift að safna menningararfi, sögulegum frásögnum og merkum atburðum í gegnum Íslandssöguna nánar.

1 Square Represents 10 Artifacts

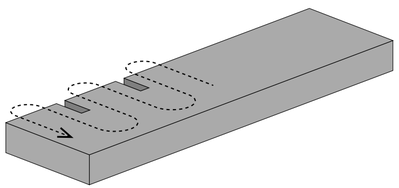
The artifacts from the “Making of a Nation” exhibition will redistribute across exhibition spaces, and showcase each 200-year segment of Icelandic history in a balanced and celebratory manner. As a result, the new National Museum of Iceland’s exhibition now has an exhibition archive percentage of 13% and 87%, respectively. This new organization allows for a more calculated approach to circulation and programmatic layout, and a more systematic conservation effort for all the artifacts under the guardianship of the museum’s archive. The new process also eliminates the need to exhibit the entire collection, while freeing up space for future acquisitions and exhibitions.

Mununum frá sýningunni „Þjóð verður til“ hefur verið dreift jafnt yfir sýningarrýmin og sýna hvert 200 ára tímabil Íslandssögunnar á yfirvegaðan og hátíðlegan hátt. Sýningarhlutfall hins nýja Þjóðminjasafns Íslands er því 13% og 87% í sömu röð. Þessi nýja hönnun gerir ráð fyrir útreiknanlegri nálgun á dreifingu og forritunarlegu skipulagi, auk þess að stuðla að varðveisluátaki fyrir alla gripi undir verndarvæng safnsins. Nýja nálgunin útilokar einnig þörfina á að vera ætíð með alla muni á staðfastri sýningu og eykur rými fyrir nýja gripi og fjölbreyttari sýningar.

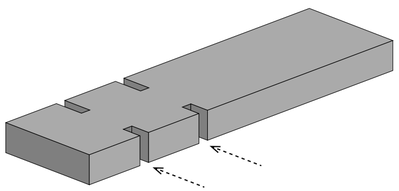
1 Square Represents 10 Artifacts



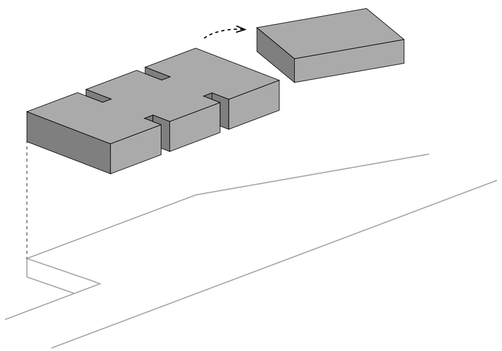
Massing is introduced to the selected site, and placed linearlyto conform to the site orientation.



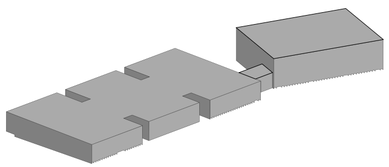
Introduce exhibition circulation to massing, carving out the form to enforce the curitorial circulation.



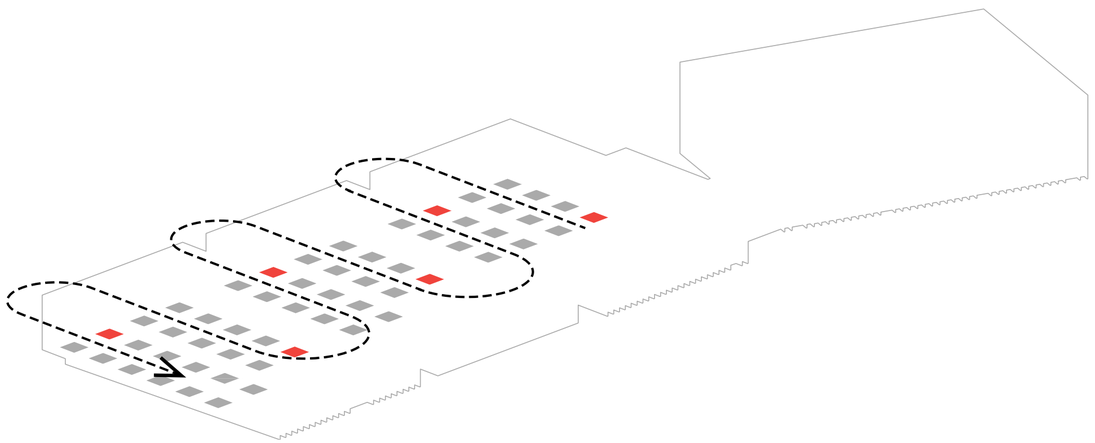
Symmetry is established by pushing the massing inwards to match the opposite side.



Responding to the site, part of the massing is tilted along the harborfront, creating the wedged courtyard.



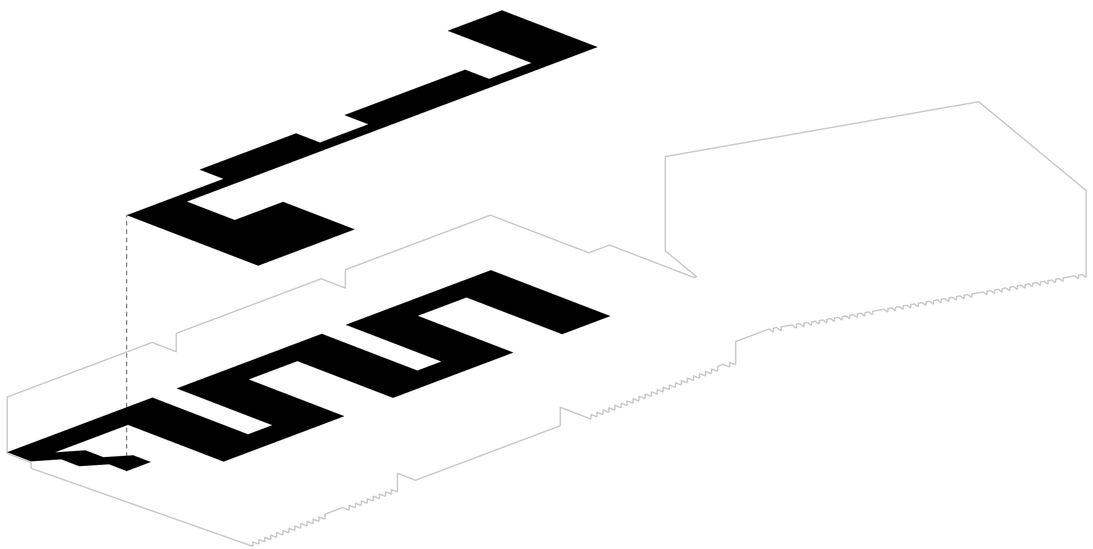
Exhibition Circulation / Sýningarumferð



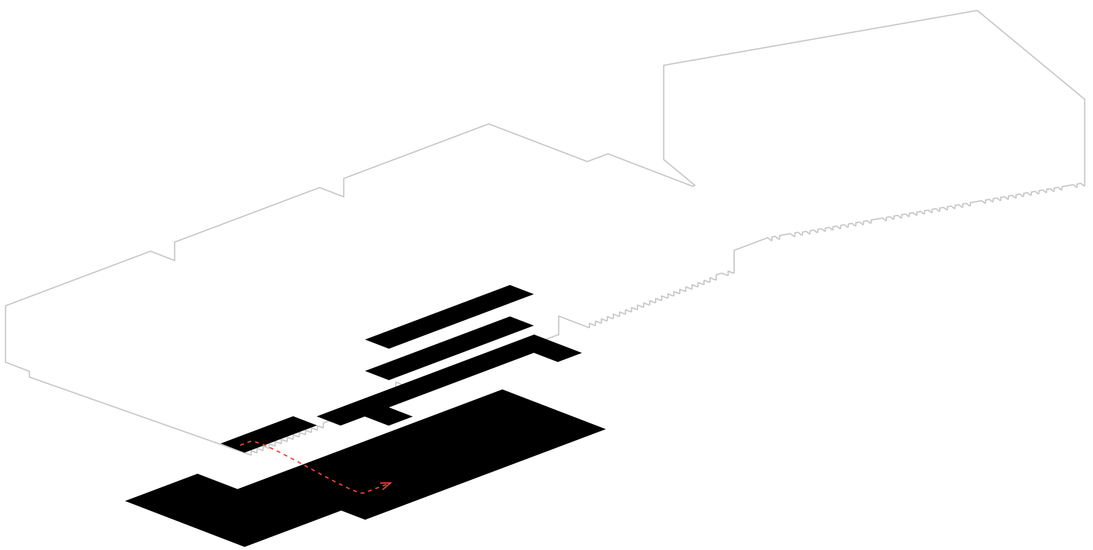
The flow of museum guests through the building is manipulated to provide a compelling kinetic narrative. The gallery design provides respect for individual cultural happenings and movements. The first gallery space showcases 800 to 1000 AD, and features a lowered ceiling and dimmer lighting to give a safer exhibition space for delicate artifacts. This space moves visitors north, towards the harbor, and the interstitial space between galleries provides expansive views of the bay and mountains beyond. The following galleries follow this flow, moving north to south and south to north, complementing the themes of the two-hundred-year periods.

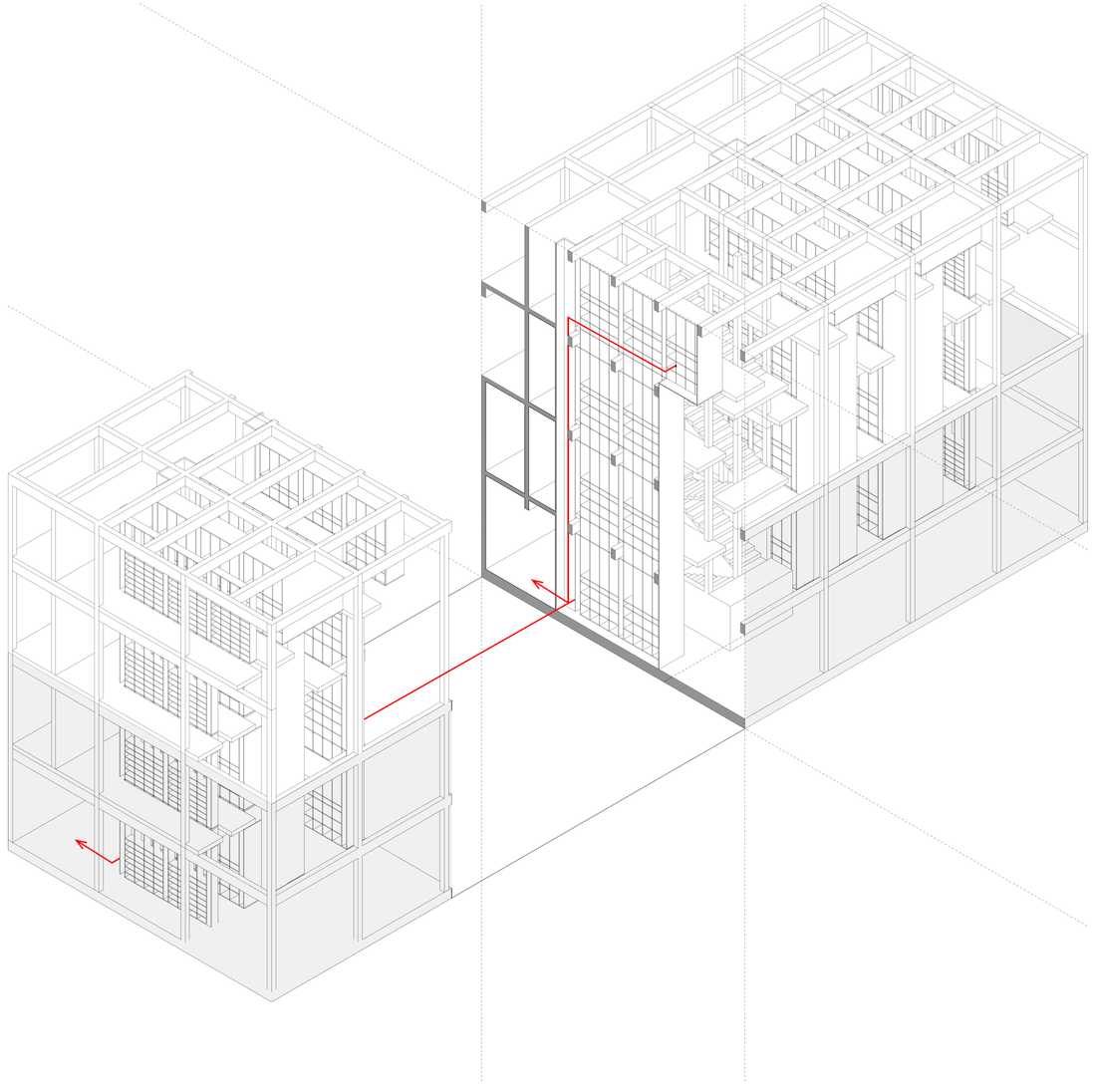
Með því að innleiða vandaða röðun á listaverkum sem sýnd eru yfir sex tímabilum, er hreyfing gesta í gegnum bygginguna stýrt til að búa til áhrifamikla kvikmyndagerð. Galeríurnar voru hönnuð til að sýna virðingu fyrir einkennum hverrar menningarhátternis og stefna. Fyrsta galleríið sýnir árin 800 til 1000 og hefur lækkandi loftstein og myrkra birtu til að tryggja öryggi fyrir fínnfílaða listaverka. Þetta rými færir gesti norður á leið til höfninnar, og milligöngur milli galleríanna bjóða upp á víðáttu yfir víkina og fjöllin burt á fjarða. Eftirfylgjandi galleríurnar fylgja þessari hreyfingu, ferðast norður til suðurs og suður til norðurs, sem fyllir út þemasamsetninguna á tvö hundruð ára tímabilunum.

Exhibition Spaces / Sýningarými



Archive / Skjalasafn



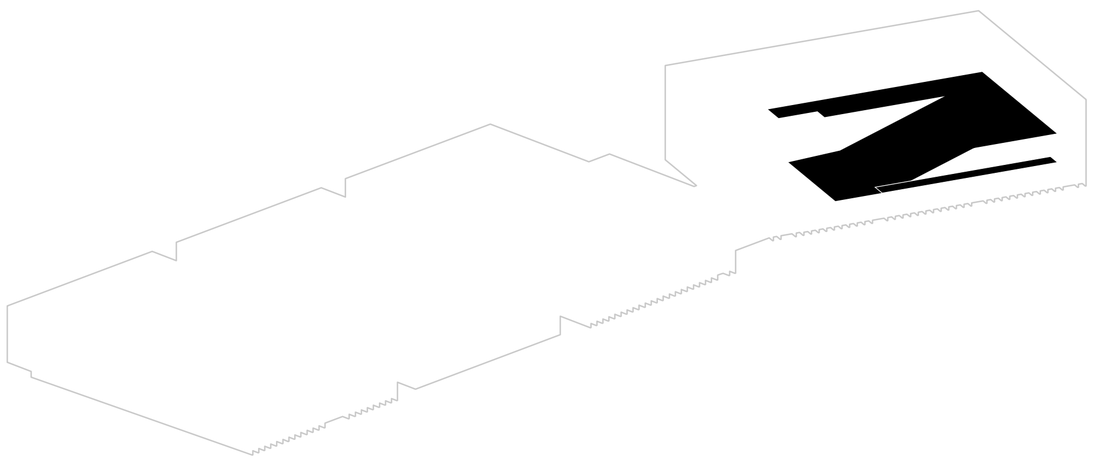


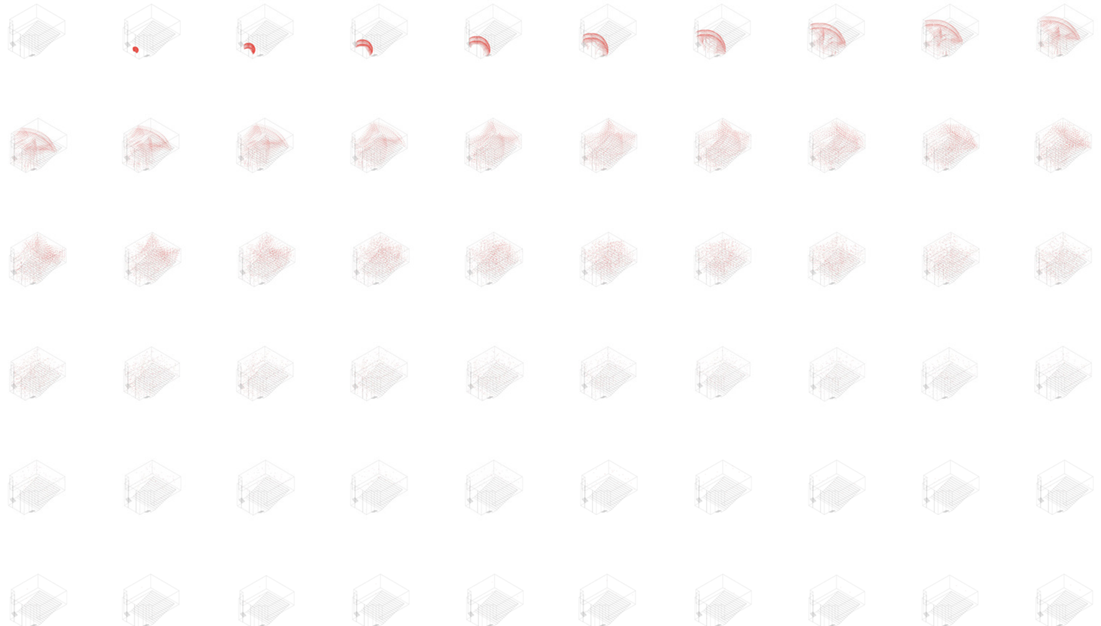
Artifact Retrieval System / Listhlutafinnkerfi

The retrieval system, located between the shelving units of the archives, brings artifacts down to the lowest level of the archive. From here, researchers can ensure the safe transportation of priceless artifacts to and from the study rooms.

Staðsett milli hilla skjalasafnsins er hlutafinnkerfið notast við til að finna hluti og koma þeim niður á lægsta stig skjalasafnsins. Frá þessum punkti geta rannsóknarmenn tryggjað öruggan flutning gildra hluta til og frá rannsóknarherbergjunum.

Theater / Leikhús

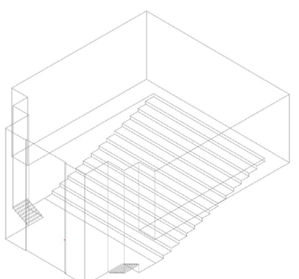


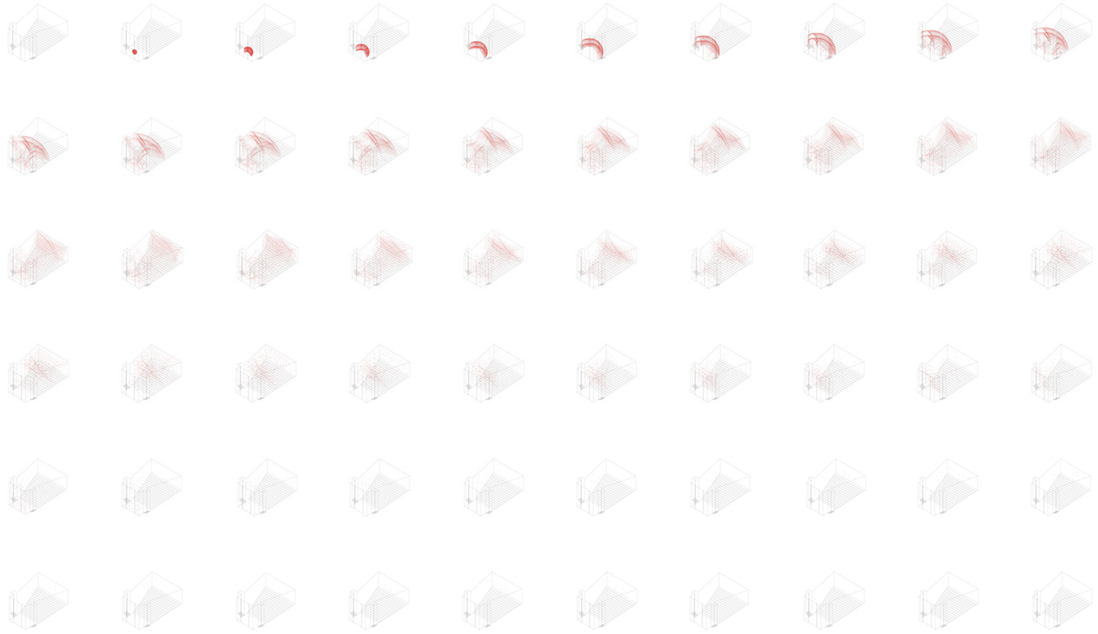


Acoustic Performance Sequence / Tónlistarframkoma Röðunar

The data in the diagram above shows the initial massing of the theater space and its acoustic performance - through simulated echo and reverberation tests. With no intentional acoustic design, sound lingers in the theater and creates an unpleasant experience for the visitors.

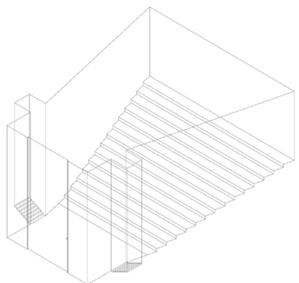
Með hjálp hljóðtöku- og endurtónunarpóta, sýna gögnin sem koma fram á myndinni hér að ofan upphaflega uppbyggingu þjóðleikhússins og hljóðþol þess. Án ætlunarlegri hljóðhönnun heldur hljóðið áfram í rýminu og skapar óþægilega upplifun fyrir gesti.

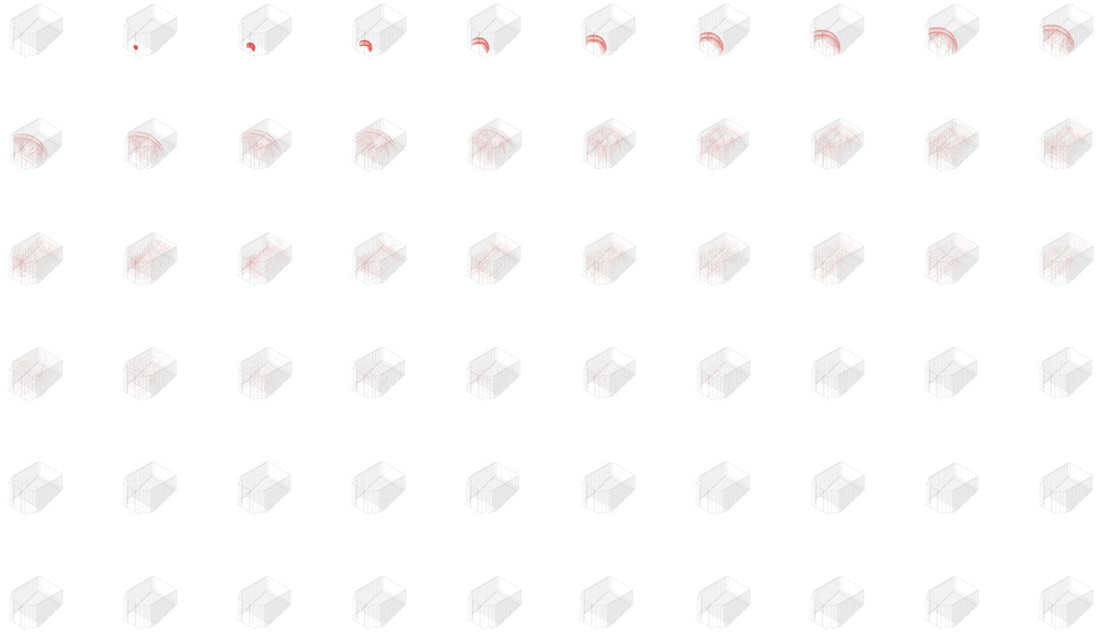




Implementing acoustic design language to the theater relieves the space of lingering sound. The angle of the space now reduces parallel surfaces, and quiets the noise of the space faster. This allows for a more enjoyable experience for the visitor, but more can be done to further improve the performance of the space.

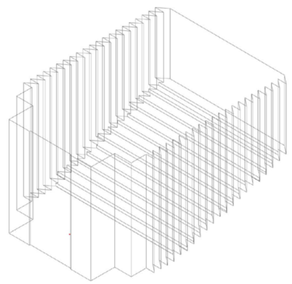
Með því að beita hljóðhönnun, dregst hljóðið frá rýminu og skapar þannig betri hljóðþol. Hornið á rýminu minnkar nú samhliða yfirborðum og dregur hljóðið í rýminu hratt til hljóðlítils. Þetta skapar betri upplifun fyrir gesti, en enn er hægt að bæta frammistöðu rýmisins.

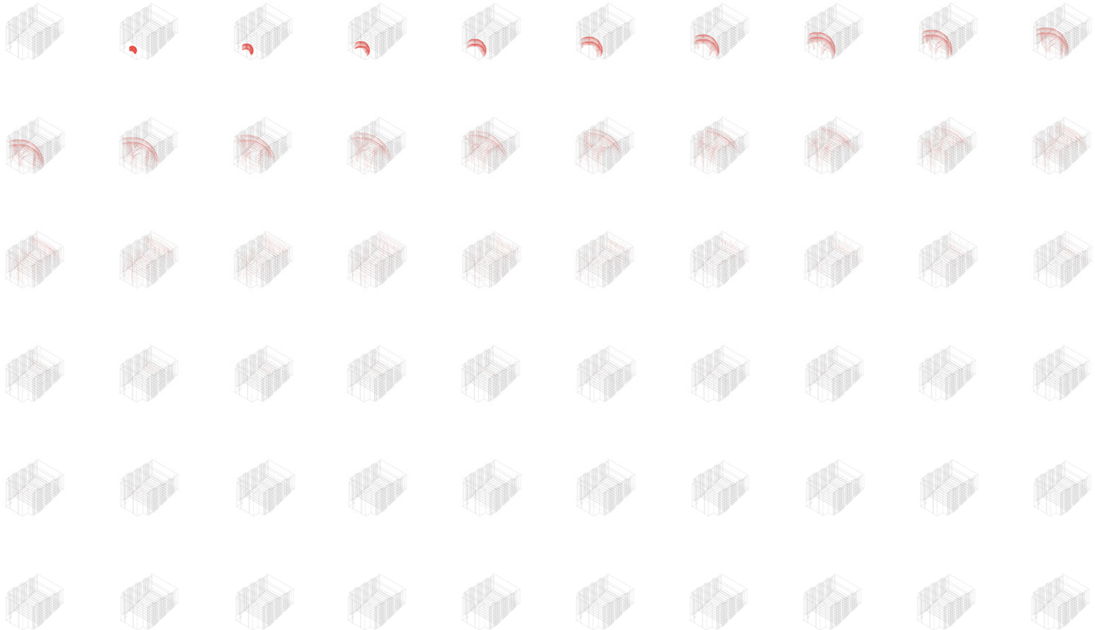




In addition to the previous acoustic treatments to the space, further reducing parallel surfaces along the walls of the space deadens the sound at an even faster pace.

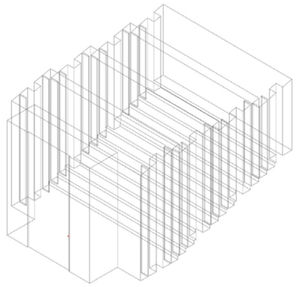
Auk fyrri hljóðmeðferða í rýminu, minnkar það hljóð sem er til staðar enn frekar með því að minnka samhliða yfirborð á veggjum rýmisins. Þetta lækkar hljóð í rýminu enn hraðar.

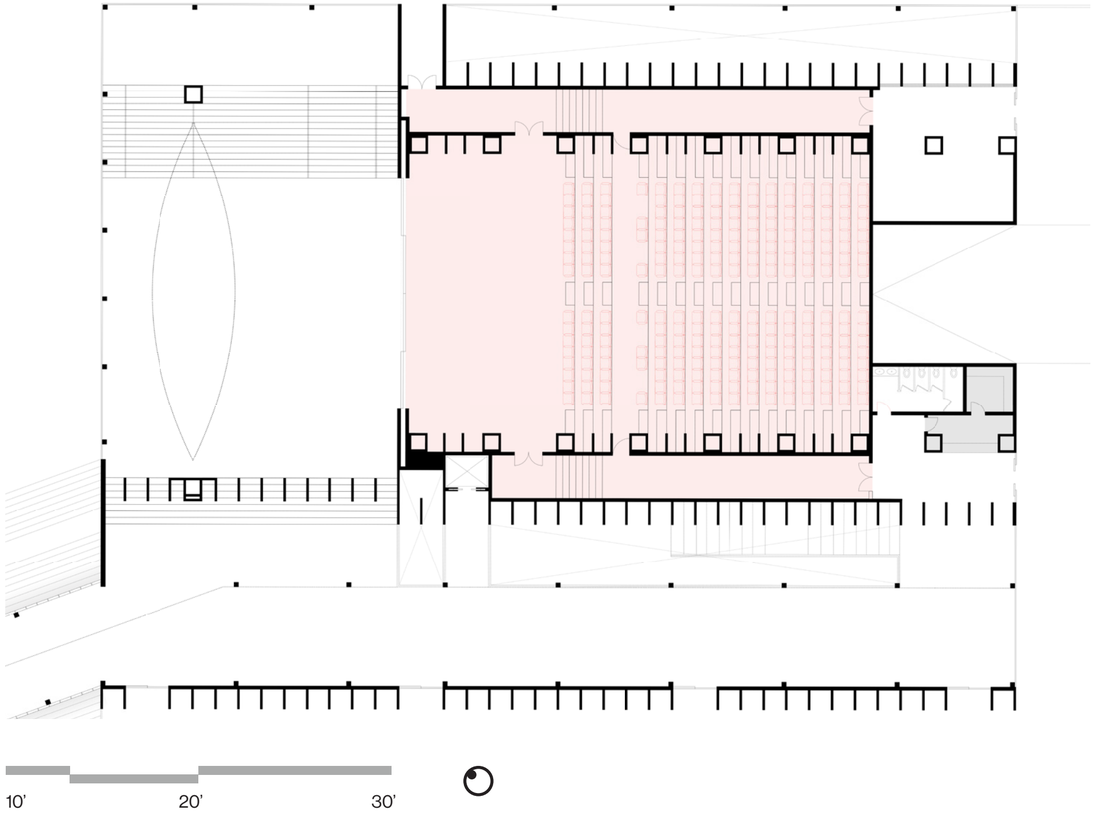




Combining the individually tested elements allows the final form of the theater to best deaden the noise of the space, by integrating the wall treatments, reducing the parallel surfaces, and even along the ceiling, creating an area that is not audibly harsh or reverberant.

Með því að sameina þætti sem hafa áður verið prófaðir í einu heildrænum hljóðhönnunargrundvelli, er hægt að skapa endanlega útgáfu af þjóðleikhúsinu sem best lækkar hljóð í rýminu. Það er gert með því að sameina veggbehandlinguna, draga úr samhliða yfirborðum, jafnvel á loftinu. Þetta skapar rými sem er ekki heyrnharðt né endurhljómandi.

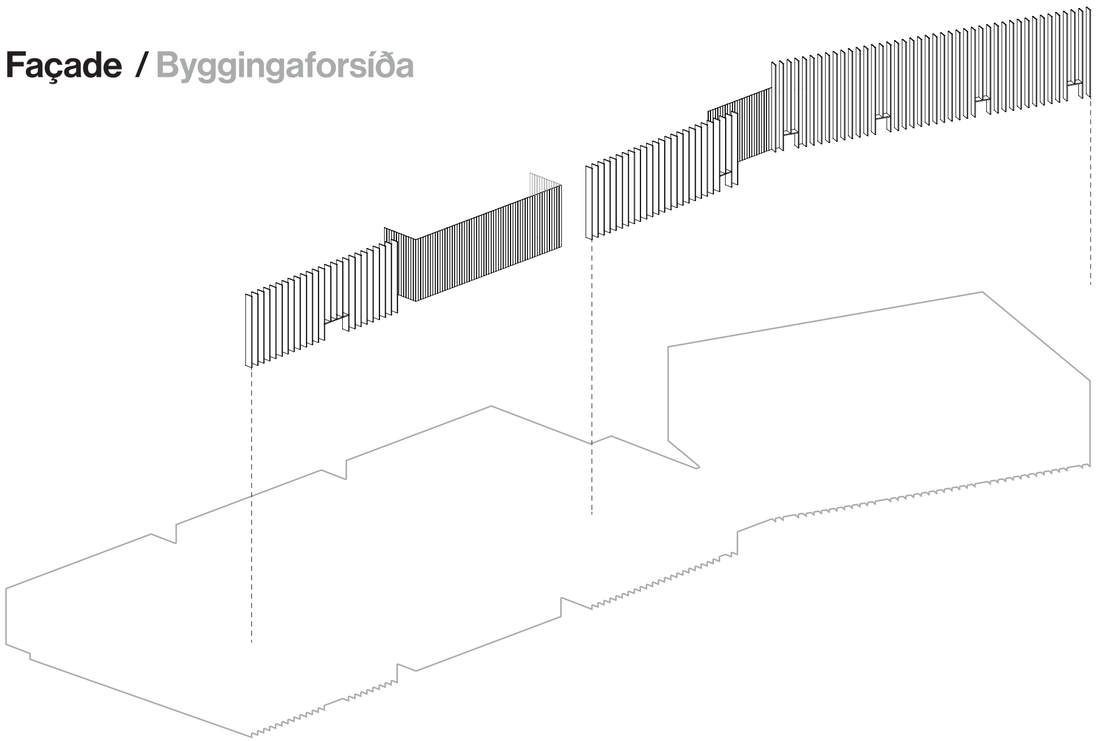




Theater Section / Leikhús Hluta

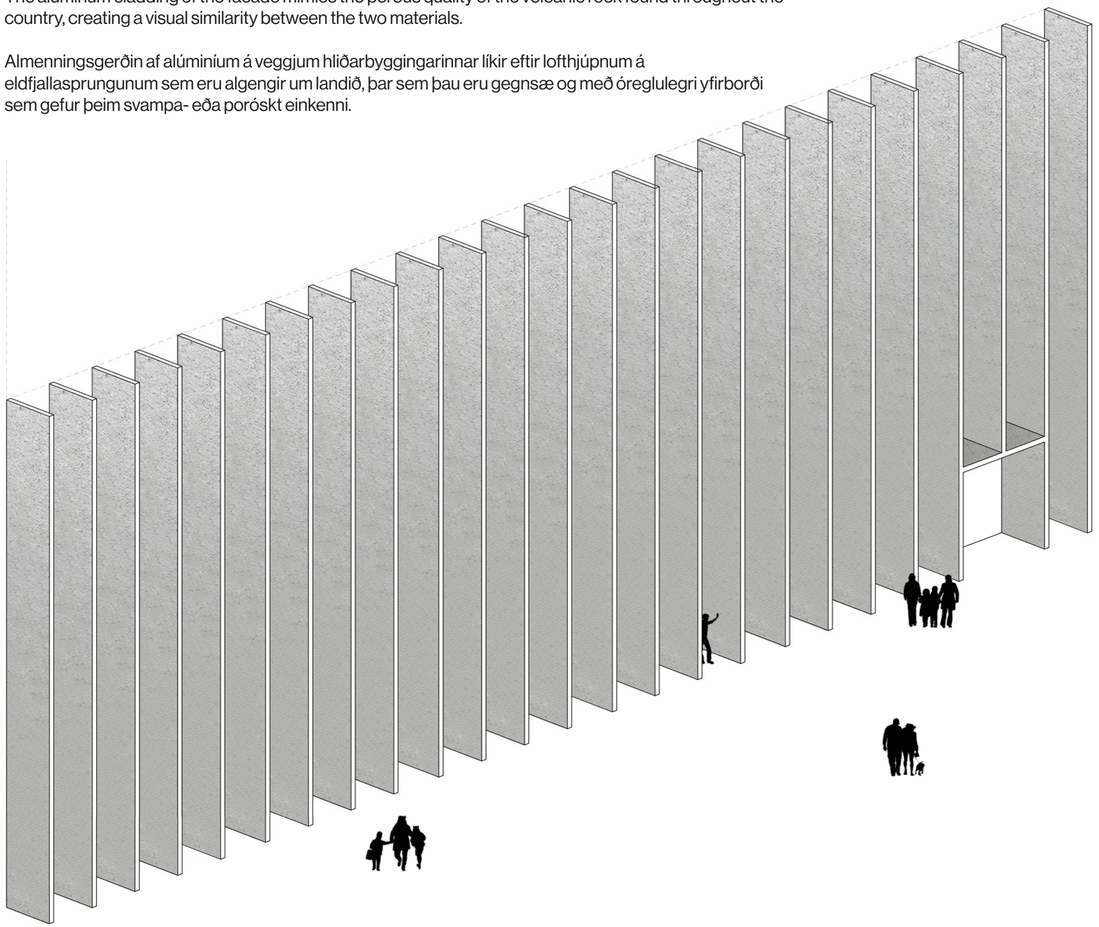
10’ 20’ 30’

Façade / Byggingaforsíða



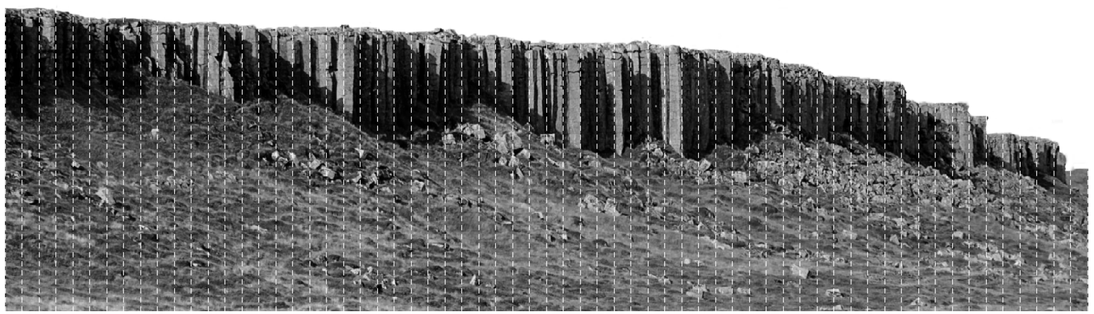
The aluminum cladding of the facade mimics the porous quality of the volcanic rock found throughout the country, creating a visual similarity between the two materials.

Almenningsgerðin af alúmíníum á veggjum hliðarbyggingarinnar líkir eftir lofthjúpnum á eldfjallasprungunum sem eru algengir um landið, þar sem þau eru gegnsæ og með óreglulegri yfirborði sem gefur þeim svampa- eða póroskt einkenni.



Iceland's basalt columns form naturally in a symmetrical and balanced manner. They offer a unique opportunity to blend nature with man-made structures by bringing the stunning coastal formations of Iceland to the harbor. The National Museum of Iceland's facade system, facing north towards Reykjavik, features an array of fins that cover the entire surface except for the channel glass facade. The 'fins' added depth creates striking shadows that highlight the uniformity of the pattern while also relating it to the angular and jagged relief of the natural basalt columns.

Basaltsúlurnar á Íslandi standa eðlilega í jafnvægi og rökréttum hlutföllum. Basaltsúlurnar gefa tækifæri til að tengja saman náttúruna og manngerða hluti, með því að flytja náttúrulegu mynsturinu á ströndum Íslands inn í höfnina. Í sjónum á Reykjavík stendur fagurfallegur veggur í Þjóðminjasafninu sem samanstendur af stóru fjölda veggskola sem eru settir upp án þess að hafa áhrif á gluggavegginn sem er gerður úr gegnumláts-glasi. Þessi aukna djúptstaða skapar dásamleg skuggamyndir sem tengja jafnvægi mynstursins við brattan og óreglulegan yfirborð basaltsúlanna í náttúrunni.



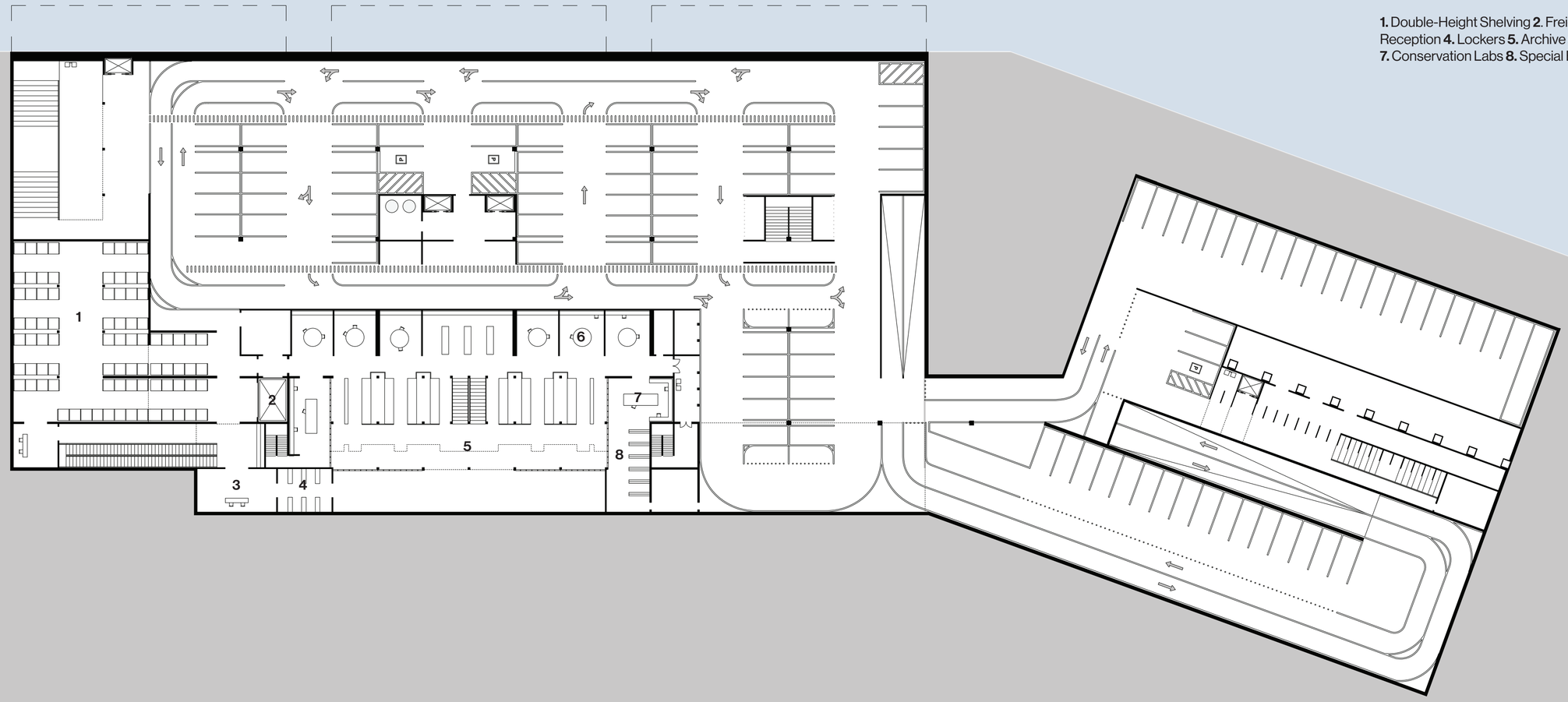
Project Documentation / Verkefnis Skjaldarsetning

Level -2 Plan

The lowest level of the museum primarily houses the archive, along with ample parking. Specifically, double height shelving units, the study rooms of the archive, two research and conservation labs, as well as the primary entrance to the archive.

10’ 20’ 30’

1. Double-Height Shelving **2.** Freight Elevator **3.** Archive Reception **4.** Lockers **5.** Archive **6.** Study Spaces **7.** Conservation Labs **8.** Special Books Library



Exhibition to Archive Section / Sýning yfir í Skjalasafnsafn Hluta

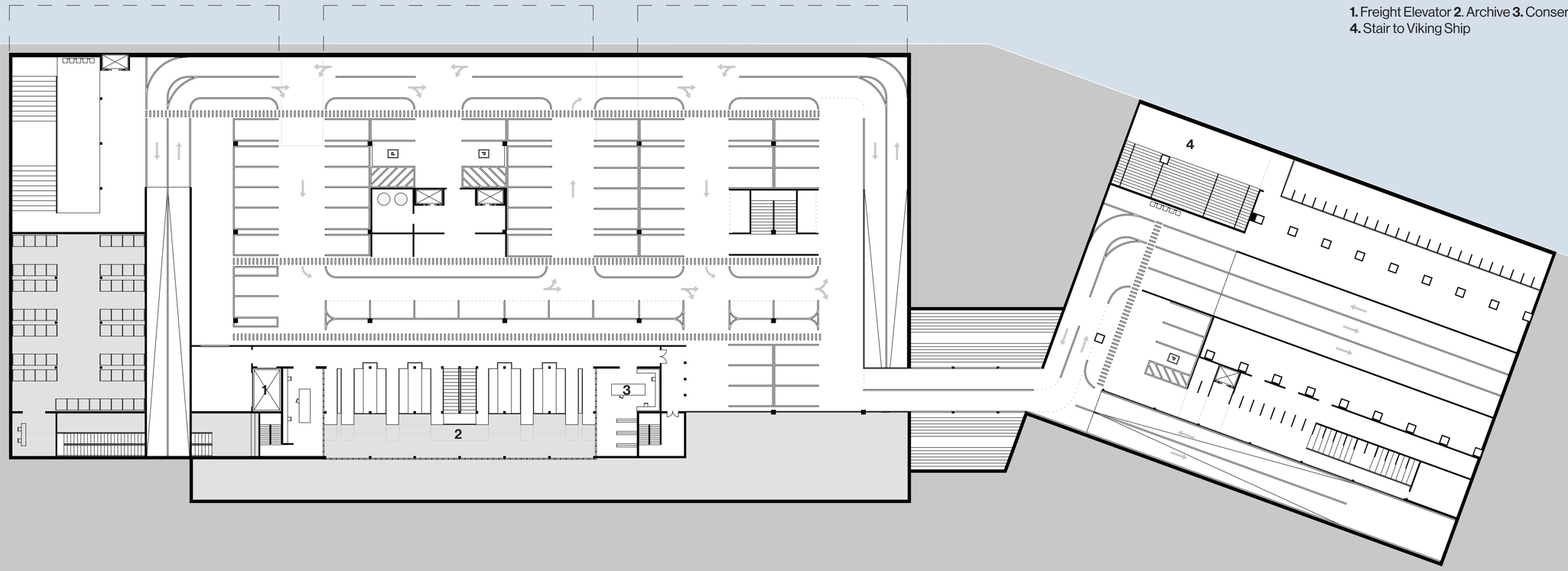
10’ 20’ 30’

Level -1 Plan

The second lowest level of the museum contains mostly parking. On this level, the archive has two research and conservation labs that flank the atrium of the archive on it's left and right. A large portion of the archive is open-to-below from this level of the museum.

10’ 20’ 30’

1. Freight Elevator **2**. Archive **3.** Conservation Labs
4. Stair to Viking Ship

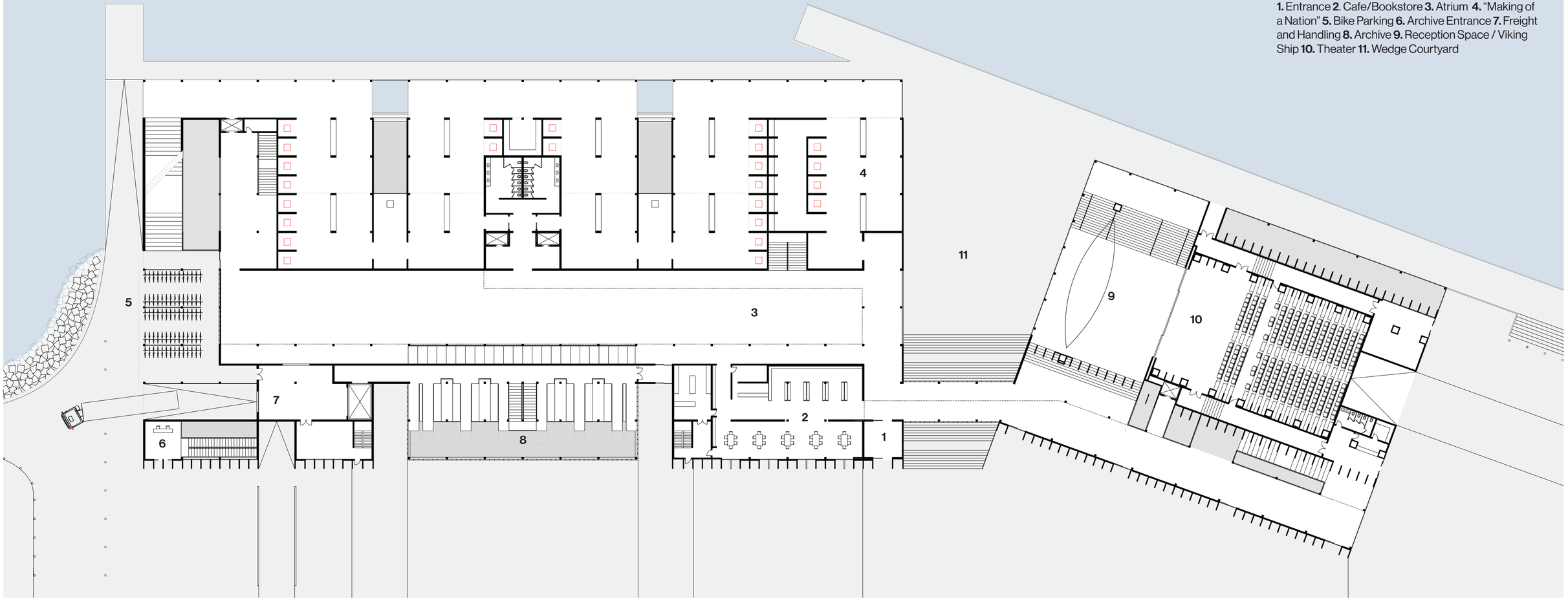


Ground Level Plan

The ground level of the museum houses five of the six galleries within the “Making of a Nation” exhibition, a level of the archives, freight delivery and handling, bike parking, an atrium, and reception space adjacent to the theater, where the Islendingur viking ship hangs above. Near the primary entrance is a small cafe and bookstore.

10’ 20’ 30’

1. Entrance **2**. Cafe/Bookstore **3.** Atrium **4.** “Making of a Nation” **5.** Bike Parking **6.** Archive Entrance **7.** Freight and Handling **8.** Archive **9.** Reception Space / Viking Ship **10.** Theater **11.** Wedge Courtyard

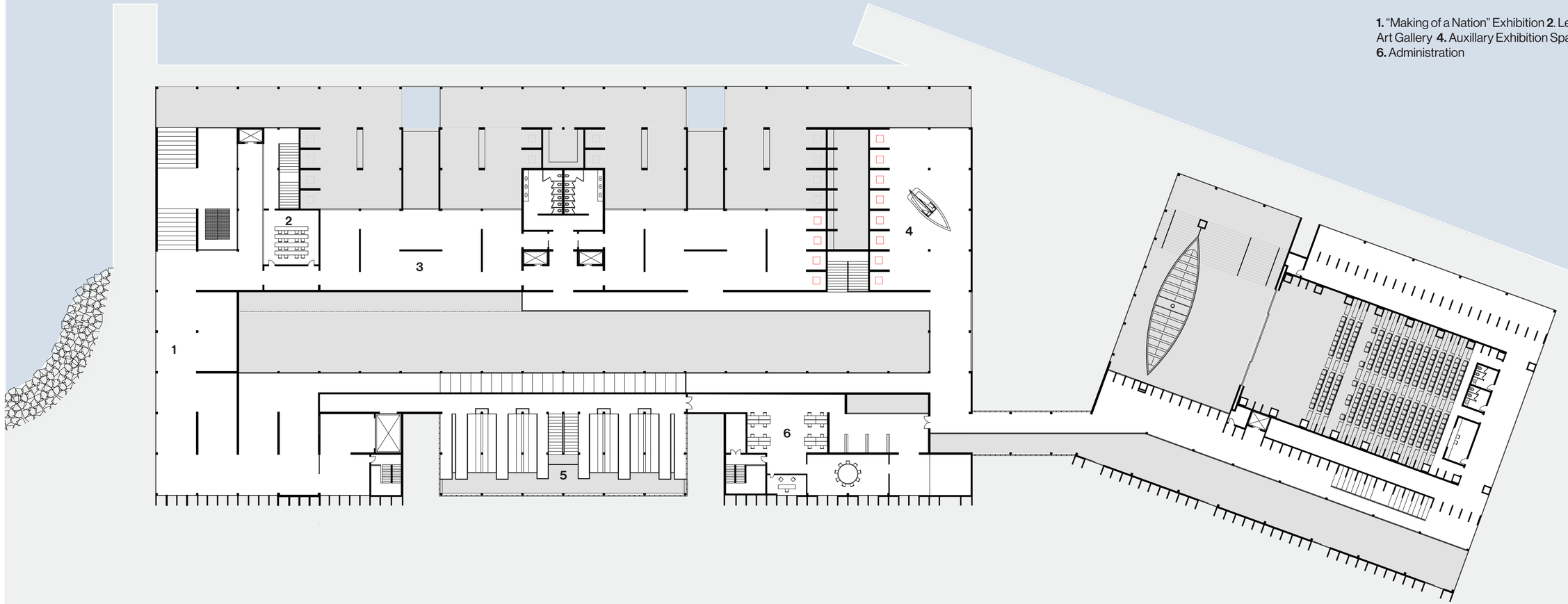


Level 2 Plan

The second floor of the museum features the sixth gallery of the primary exhibition, “Making of a Nation”, the theater, a smaller auxiliary exhibition space, as well as an art gallery. You will also find administrative spaces on the second floor, next to the top floor of the archive - completing it’s four story rise from the lowest level of the museum below.

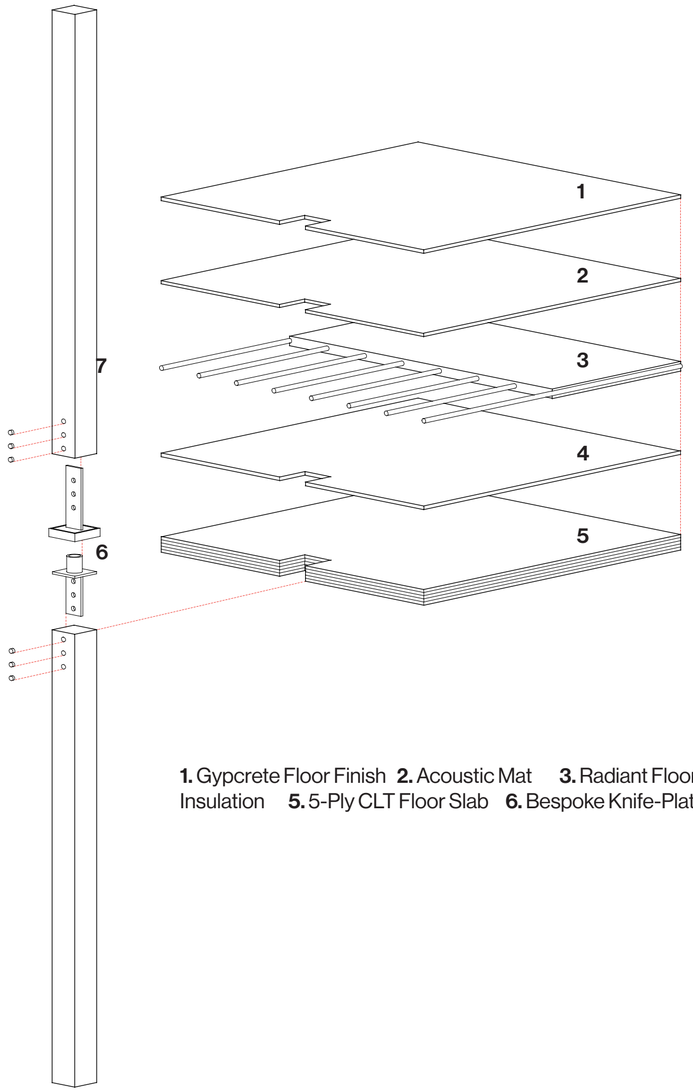
10’ 20’ 30’

1. “Making of a Nation” Exhibition **2.** Learning Center **3.** Art Gallery **4.** Auxillary Exhibition Space **5.** Archive **6.** Administration

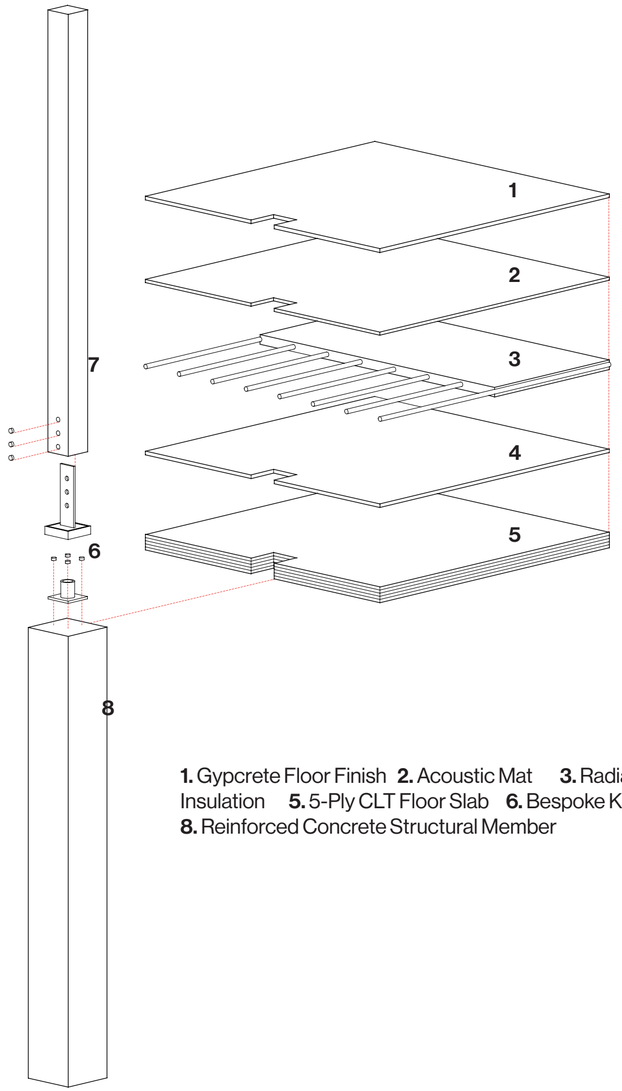



WELCOME TO
THE NATIONAL
MUSEUM
OF ICELAND
NATIONAL MUSEUM
OF ICELAND

Structural Resolution / Byggingarupplausn

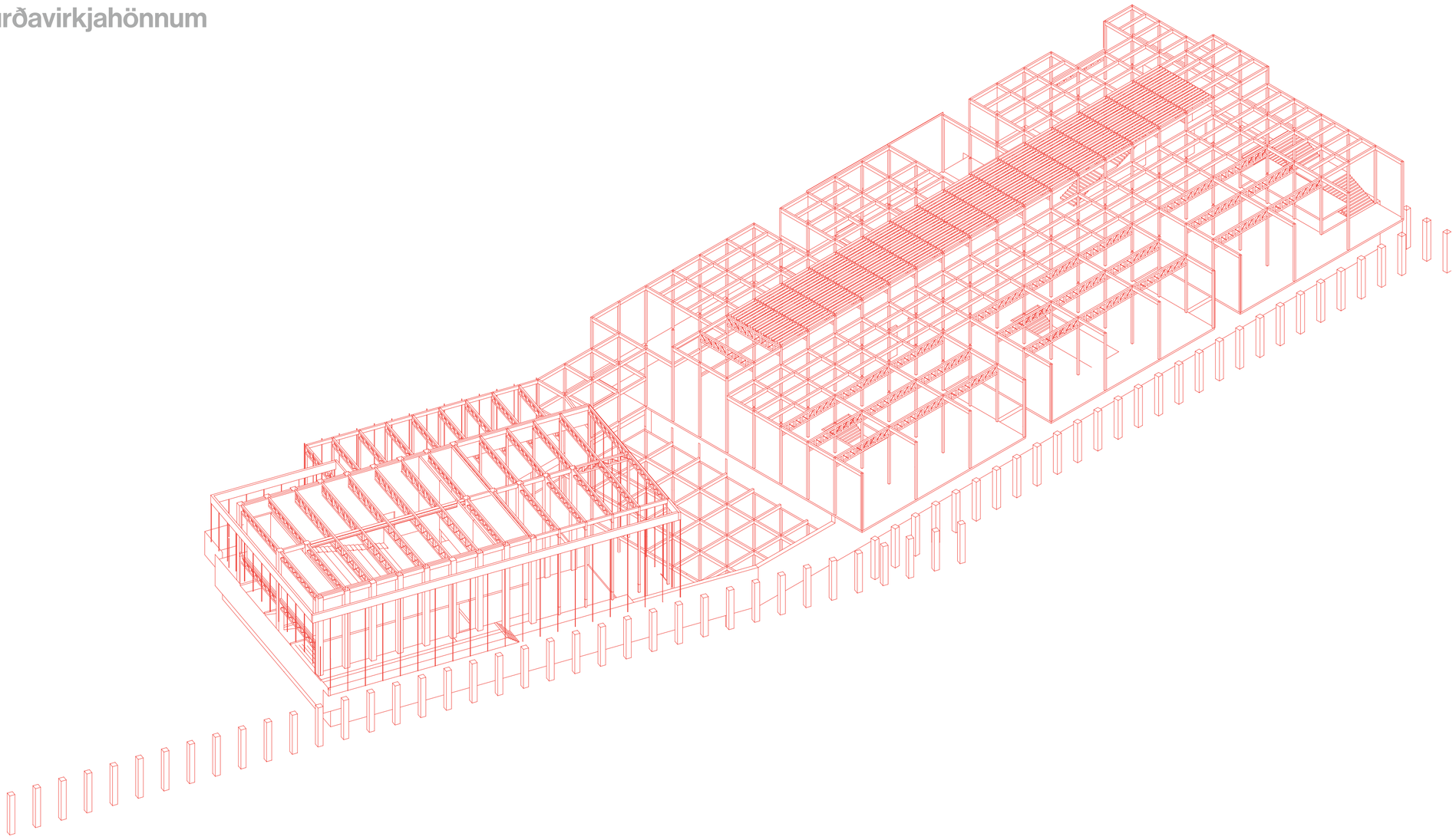


1. Gypcrete Floor Finish **2.** Acoustic Mat **3.** Radiant Floor Heating System **4.** Icelandic Rockwool Insulation **5.** 5-Ply CLT Floor Slab **6.** Bespoke Knife-Plate Steel Connection **7.** CLT Columns



1. Gypcrete Floor Finish **2.** Acoustic Mat **3.** Radiant Floor Heating System **4.** Icelandic Rockwool Insulation **5.** 5-Ply CLT Floor Slab **6.** Bespoke Knife-Plate Steel Connection **7.** CLT Columns **8.** Reinforced Concrete Structural Member

Structural Model / Eftirlíkan að Burðavirkjahönnum



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