Strategic Urban Development Plan

Keldur Development Area

Competition brief



Mayor's Address



In Keldur, the City of Reykjavík sees a unique opportunity to develop a dense, mixed, diverse and carbon neutral new urban guarter. Excellent connections within the city and the capital area are provided by a development corridor that includes high quality public transport. We are emphasizing six key factors that are most effective in achieving the city's goals, namely; walkability, energy transition, healthy mobility, circular thinking, green buildings and infrastructure, and carbon sequestration. All these, along with carefully implemented social mixing and housing options for all income levels will guide the development of the new urban quarter. Integrating a vibrant urban environment with nature is also a challenge. This is what the competition is about and the City of Reykjavík aims for nothing less than setting new standards in urban development.



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1 Introduction

1.1 Overview

Reykjavík, Iceland, is a unique capital, characterised by its mix of pristine nature and vibrant urban life. In developing the capital area of 240.000 inhabitants, the focus is now on sustainability, quality of life and international competitiveness, with densification and installation of a high-quality bus rapid transit system, a new spine in the public transport system and the backbone of development in a growing city.

The City of Reykjavík has committed itself to achieving carbon neutrality by 2030 and to adapt to climate change in an ecological and humane way. The city participates in the Horizon Europe Cities Mission, determined to set an example to other cities in combating climate change. Setting new standards in urban development is imperative, for this to be achieved. Six key factors have been identified; walkability, energy transition, healthy mobility, circular thinking, green buildings and infrastructure, and carbon sequestration.

Development of the Keldur area is also a major step in creating a contiguous urban fabric and accommodating future housing and businesses. At 116 ha in size, it is large and rife with opportunities while also presenting interesting challenges. It is richly endowed by nature, with a delicate coastline and southward facing slopes, a cascading creek and river and magnificent views.

The development area is part of a corridor of dense, mixed use urban core that runs the length of the city, from the old city center to the eastern edge. The aim is to build an exciting, modern urban quarter for at least 10,000 residents and 5,000

workplaces, focused around eco-friendly transportation and land-use as part of a carbon-neutral urban environment.

The City of Reykjavík and Transport for the Capital Area PLC (TfCA, In Icelandic Betri samgöngur ohf) have signed a memorandum of understanding (MoU) to collaborate in the development of Keldur. With the MoU, a decision was made to hold an international contest for the development of the area. Keldur will be developed and constructed in collaboration with the City of Reykjavík and TfCA. This project is part of a transportation agreement from 2019 between the government of Iceland and the municipalities of the Capital Region. It aims to expedite the development of the Keldur area and construction of the Borgarlína, a bus rapid transit (BRT) system, which will run through the area.

The Borgarlína BRT service is a major prerequisite for transforming Keldur into a mixed urban area with apartments, services, and commercial properties. The transportation agreement tasks TfCA with overseeing the development and sale of land at Keldur. All profits from the development and sale of the land will go entirely to the transportation development project in the Capital Region.

The aim is to begin the BRT service at the same time as the first 100 apartments are delivered. Estimated travel time between Keldur and downtown Reykjavík will be approximately 20 minutes. The aim is to establish a secondary plan for the first development zones in the area in the autumn of 2023.



1.2 Contracting authority

The development of Keldur is a collaborative effort between the City of Reykjavík and Transport for the Capital Area (TfCA). Both parties are the contracting authority in this contest.

1.3 Contest organization and major dates

The procurement is being conducted as a design contest as described in article 44 of the Icelandic Act on Public Procurement No. 120/2016 which is based on Directive 2014/24/EU on public procurement of the European Parliament.

The contest is held in two stages. In the first stage, participants submit a draft strategy that meets the stated objectives. Submissions are electronic in A4 PDF format. No compensation or prizes are awarded for first stage entries.

In the first stage, no precise or detailed visualizations or renderings of buildings, streetscapes, or other elements are requested, only figures that explain core ideas and principles.

Up to 5 first stage entries will be invited to participate in the second stage, where all participating teams will receive EUR 50,000 to elaborate their strategies. A winning proposal will be selected to receive an additional EUR 50,000 award. Up to two proposals may be awarded a recognition with a EUR 15,000 award.

The contest begins in January of 2023 and submission for the first stage takes place in April. The second stage begins in May and final submission is in August.

The organization of the contest is described in Chapter 5.

1.4 Language

The language of the contest is English. This includes all documents provided for participants, queries and answers as well as entries submitted by participants. The metric system should be used for all dimensions.

1.5 Registration

Registration and access to documents is through the City of Reykjavík tenders portal at http://utbod.reykjavík.is/. Participants must register on the tenders portal to make sure that they receive all information regarding the contest. See chapter 5.1.

1.6 Document structure

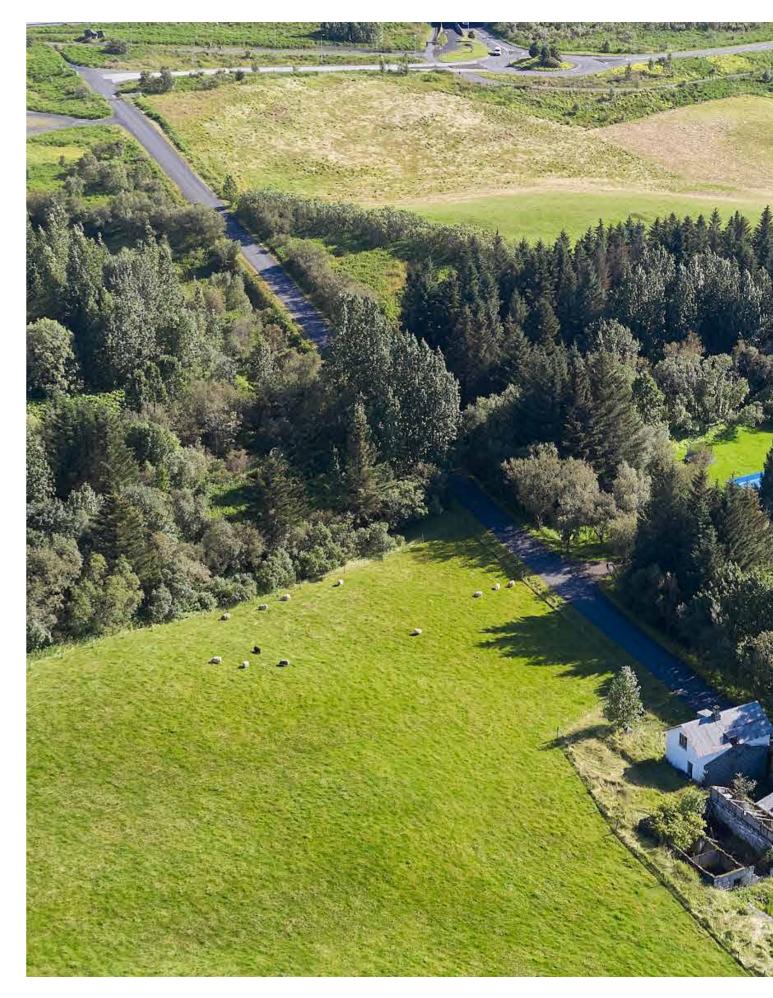
There are four chapters following this introduction.

Chapter 2 contains information about current conditions in the development area and its geographical context. This information may or may not have direct relevance to proposals developed by participants, depending on their content and approach.

Chapter 3 contains information about current policy. Participants are free to deviate from current policy in their proposals if justified with reasonable expectations of results that are better aligned with the objectives stated in chapter 4.

In chapter 4, the objectives of the contracting authority are described at length and the jury will score proposals based on how well the stated objectives are achieved.

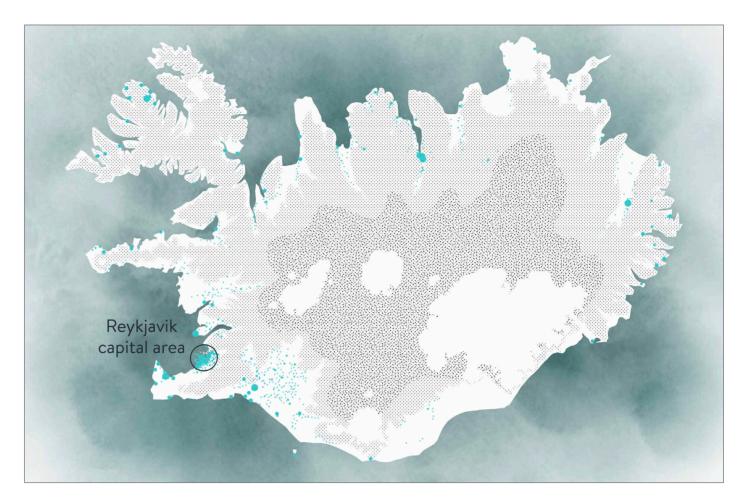
Chapter 5 contains all information about the procedures of the contest, including registration, inquiries, submissions, jury, scoring, prizes and dates.



2 The development area

The purpose of this chapter is to describe current conditions in the development area and its geographical context but objectives, to be achieved through future development, are stated in chapter 4.

The information provided in this chapter may or may not have direct relevance to proposals developed by participants, depending on their content and approach.



2.1 General context

2.1.1 Iceland's unique situation

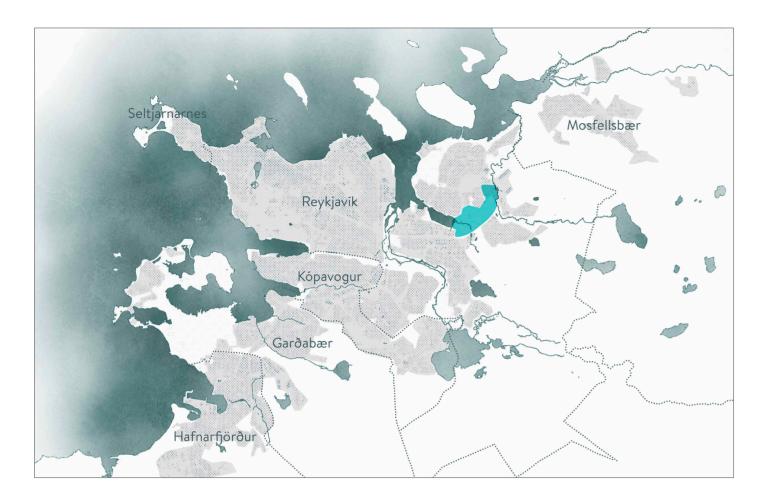
Iceland is an island at the 65th parallel in the North Atlantic. It has an area of 103,000 km² and a population of just under 380,000. It is thus very sparsely populated and most of the population lives near the coast, as the central highlands are nearly uninhabitable.

Iceland is located at the tectonic plate boundary between Europe and North America, resulting in a high level of seismic activity and giving the country a unique landscape. Large numbers of tourists are drawn to Iceland each year for its natural beauty, and tourism is the country's largest industry. The fishing industry is the second largest. Iceland also has an abundance of fresh water and renewable energy, and nearly all the country's energy production utilizes hydropower and geothermal heat.

Iceland's nature is young and its biome is delicate. Because of the country's northerly position on the globe, the sun is generally low in the sky. Shadows are long, winter days are dark, and summer nights are bright. The weather is often cold and windy due to the fact that it's an island in the north.

Iceland has been inhabited since around the year 900 CE and was primarily an agrarian society up until the turn of the 20th century, when villages began to form by the seaside with the rise of the fishing industry. Today, about 63% of the population (around 240,000 people) live in the Capital Area.





2.1.2 A rapidly developing city

The Keldur development area is an important part of the main urban development corridor in the eastern part of Reykjavík, the capital of Iceland. Reykjavík is the largest of six municipalities in the Capital Area, with just under 140,000 residents. The other municipalities are, from south to north: Hafnarfjörður, Garðabær, Kópavogur, Seltjarnarnes and Mosfellsbær. The area is a single commercial and residential market with a common infrastructure, outdoor recreation areas, resources and nature.

Urban development in the Capital Area is a recent phenomenon that picked up speed during the 20th century due to migration to the city. Beginning in the 1980s, the urban area began to spread considerably due to increased car ownership, impacting the environment and resulting in traffic jams during rush hour. From 1985 to 2012 the population grew by 50%, population density decreased by 35% and the number

of private cars almost doubled. The municipalities of the Capital Region have therefore agreed to install a Bus Rapid Transit (BRT) system known as Borgarlína, a state-of-the-art public transit system, and the development of densely populated, transport-oriented areas along the Borgarlína route. The BRT system will run through Keldur, and the area plays a key role in the transit system's development.

Profits from the sale of building rights in the area will be used to partially finance the development of transportation infrastructure, with particular emphasis on active transportation and robust public transit. Development in the area should reflect the focus on sustainability that Reykjavík prioritizes in all aspects of the city's future development. This is an ambitious strategy for sustainable development, a dense and mixed urban population area, and eco-friendly travel habits.

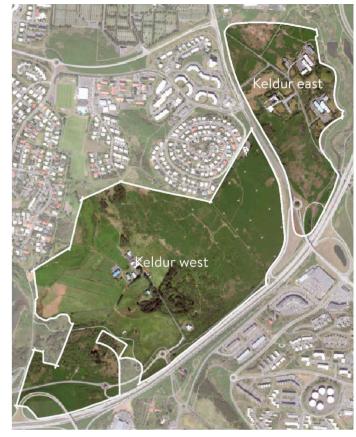
2.2 Development of Keldur

2.2.1 Context and immediate surroundings

The Keldur development area belongs to the district of Grafar-vogur in the eastern part of Reykjavík, and is mostly undeveloped at present. Most of the area is owned by TfCA. It is 116.9 hectares and divided into a west and east part, 86.3 ha and 30.6 ha, respectively.

Keldur will be served by one of the Borgarlína BRT routes, which will extend from the city center through Keldur, passing through the new neighbourhoods at Ártúnshöfði and Vogabyggð. With a frequency of 7–10 minutes, estimated travel time with Borgarlina between Keldur and the old city center is 20 minutes. The route continues east from Keldur to Mosfellsbær. Keldur is delineated to the southeast by Vesturlandsvegur, the main artery into Reykjavík from the northern and western parts of the country. Vesturlandsvegur and Suðurlandsvegur, the main artery into Reykjavík from the southern part of the country, intersect in the southwest corner of Keldur. The area is therefore a sort of a gateway into Reykjavík from other regions of the country.

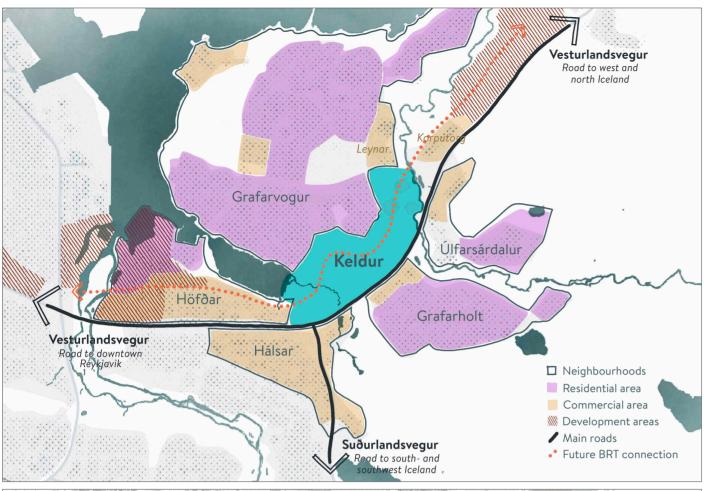
To the north of Keldur are Grafavogur's established residential neighbourhoods, characterized by low density and generally low building heights. To the south of Vesturlandsvegur is the residential housing development in Grafarholt, with a commercial area next to the road. The main commercial districts around the planning area are Hálsar in Árbær and Höfðar to the west of Höfðabakki, most of which is scheduled to be converted into mixed residential housing. Businesses are also located north of Keldur, at Leynir, and at Korputorg.



↑ The cadastral boundaries of the land owned by TfCA PLC. The contest is not limited by these cadastral boundaries.

A new public transit network.
Source: Preliminary draft of the first phase of the Borgarlina BRT system.

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2.3 Landscape and surroundings

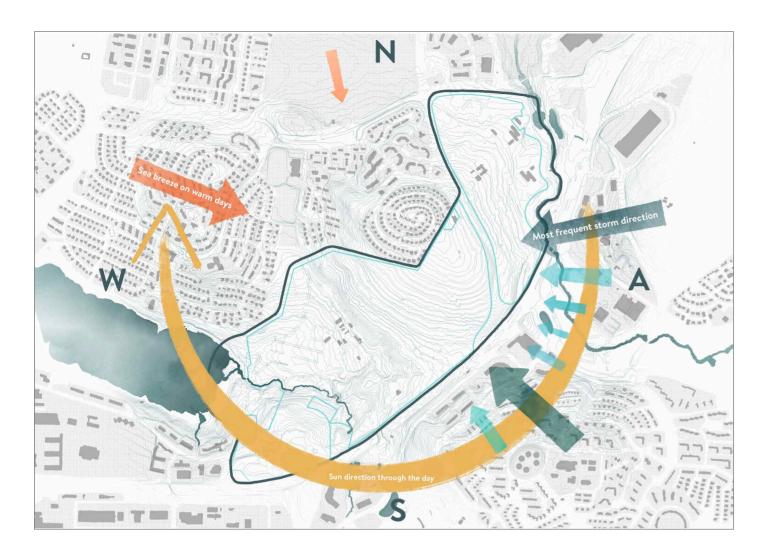
2.3.1 Landscape of hills and hollows

Keldur west is characterized by significant slopes, which create an attractive setting for development while at the same time presenting the challenge of inclined urban development. The highest elevation is about 80 m a.s.l. and the slope is generally between 6–12%. Southwest of Keldur is Nónholt, an ancient glacial moraine. Keldur east slopes gently downwards to the north-east. The lower parts of the area in Keldur west are for the most part drained wetlands used as agricultural fields.

The area is adjacent to the Grafarvogur inlet, with mud flats and a small stream, Grafarlækur. The river Korpa demarcates the region to the east, leading down from Úlfarsárdalur and flowing northwards alongside the area.

The top of the hill affords a good view of the Capital Area to the south and southwest, and the mountains are visible in the distance. To the east is Mt. Úlfarsfell and to the north is Mt. Esja, one of Reykjavík's most distinctive landmarks. The mountain view is not as clear from the valley by the inlet, but the view to the west is impressive. There the landscape is more contained and creates a kind of shelter from the surrounding city.





2.3.2 Climate

Due to its northerly location, the sun in Iceland is lower in the sky and shadows are longer than in more southerly countries. It is therefore key that the development faces the sun and is sheltered from major wind directions.

Keldur west is sheltered by the surrounding hills, sloping towards southwest for residents to enjoy afternoon sun. The eastern part is more exposed to the wind.

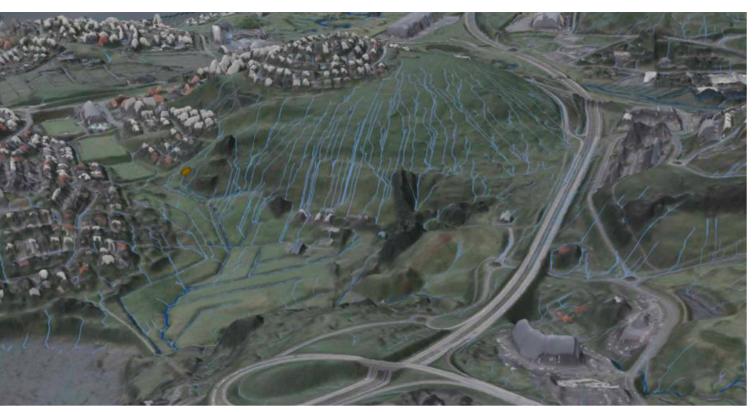
The best urban spaces have direct sun exposure, but are also sheltered from the northwesterly sea breeze that tends to pick up on summer days, bringing down the temperature. The sun is at its highest when it reaches 49° on the summer solstice.

2.3.3 Geology

The bedrock of Keldur is so-called Reykjavík basalt, which is common in the Capital Area and is believed to be approx. 200,000 years old. Surface deposits at the top of the hill are classified as moraine, while peatland is found at the end of the Grafarvogur inlet.

The soil on the hill is thin and below it are 1–2 meters of moraine before reaching the bedrock. The strata beneath the peatland are much thicker, up to 11 meters, followed by sedimentary rock, the lowest part of which is very dense.





↑ Flow paths at Keldur overlaid on a model of the hill. Source: ÍSOR.

2.3.4 Hydrography

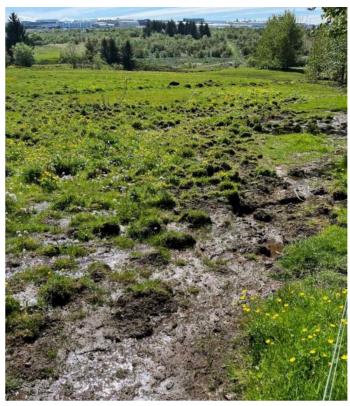
Natural waterways can be found at the streams Grafarlækur, Klofningslækur, and Álalækur, and water also collects in the ditches of the drained peatland. Grafarlækur is the largest of these waterways and flows through the region out to sea at Grafarvogur. The volume of water in the streams varies, and can quickly increase and even double during periods of significant thaw. Several warm springs of different temperatures can be found by Grafarlækur (between 5–25 °C).

The name Keldur (e. 'bog', 'marsh') indicates the presence of surface water. Keldur is located at the bottom of Grafarlækur's catchment basin, whose source is at Bullaugu, which was previously used as a water supply for Reykjavík. The largest amount of surface water flows into the area from there, but surface water also flows into the planning area from the north, where groundwater accumulates in the ditches of the drained swamps. Examples of saturated moorland soil that have not been absorbed by ditches can be seen at the Institute for Experimental Pathology at Keldur.

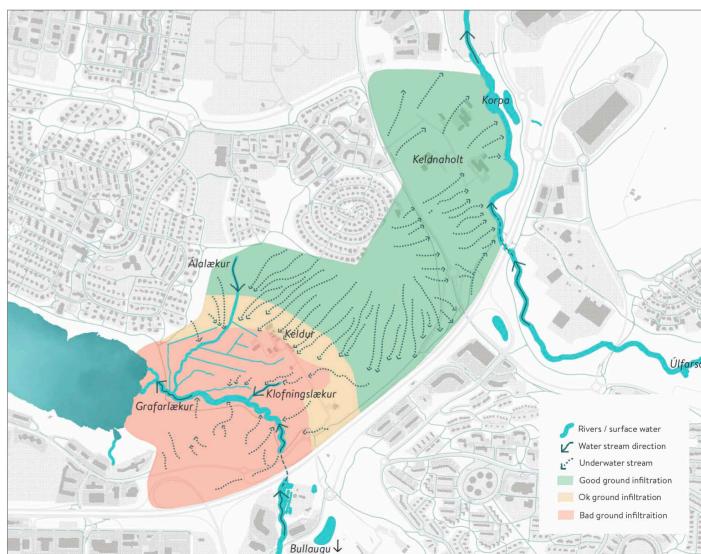
2.3.5 Receptors for surface water

Ground water research of the Capital Area has shown that the water table mostly follows the local surface elevation. Good receptors for surface water are generally found where groundwater is at a depth of more than 5 meters and strata are sufficiently permeable. If the groundwater is less than 3 meters below the surface or the strata are very dense, the receptors are not as good.

Accordingly, the upper part of the region is considered a good receptor, as the soil is thin and the bedrock is permeable. This location is well suited for blue-green drainage solutions and for channeling surface water down into the bedrock, close to the source. The lowest part of Keldur, on the other hand, is considered a poor receptor due to the dense layers of sediment on top of the bedrock. It is to be expected that water levels in the marshland at Keldur could rise during development, and the permeability of the materials used for filling the ditches must be carefully considered. It is possible that the ditches may be used in some capacity as part of blue-green drainage solutions in the area.



← A bog in a field at the Institute at Keldur.





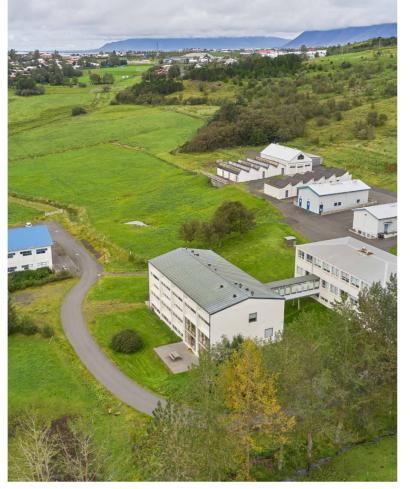
↑ View of Grafarvogur

2.3.7 Biom

Grafarvogur inlet and the river Korpa are on the Nature Conservation Register and are listed as local nature conservation areas in the Reykjavík Municipal Plan. The Grafarvogur mud flats are one of the most important stopover sites for migrating birds, in particular shorebirds, in the Capital Region. The area is currently in the process of being declared a conservation area, with the aim to protect the natural state of Grafarvogur and its biodiversity, including important riparian ecosystems, bird habitats, and pristine mudflats. The flats are rich in birdlife year-round, especially shorebirds, gulls, and ducks.

Korpa River (also known as Úlfarsá), from its source in Hafravatn Lake to the estuary along with an approx. 200 m wide buffer zone on either side of the river, is also listed on the Nature Conservation Register (see map on page 24). It is considered both scenic and good for salmon fishing with vegetated banks. The area around Korpa is fertile, with scenic paths on either side of the river. A salmon ladder has been installed. Korpa is a comparatively small stream, and during dry periods the water level can become quite low. For this reason, the ecosystem is vulnerable to disturbance.

There are also fish in Grafarlækur and its banks are covered by lush vegetation, but less is known about its habitats.



↑ View towards the Institute for Experimental Pathology at Keldur.

2.3.8 Vegetation

During the first part of the 20th century, marshlands were drained and many fields were cultivated to the north of Grafarlækur. Traditional farming was practiced on these fields beyond the middle of the century, including sheep grazing, but since farming stopped, the fields have occasionally been used for horse grazing. Trees have been planted widely across the area over the years, especially around the summer cottages that previously stood in the area. Trees and other garden plants common in the middle of the last century are still found there today.

From the 1950s to the 1970s, unusually diverse vegetation was planted on the piece of land surrounding the summer cottage that stood at Brekka (e. Hill), located in the northwesternmost part of the Nónholt elevation. Today, the lot belongs to the City of Reykjavík and is a sort of nature park with footpaths and benches. A fairly large tree nursery called Kálfamói is located south-west of the research facility. Cultivation at Kálfamói began around the middle of the 20th century. There is a significant number of trees between the building clusters in the east part, which could be integrated into green spaces in future planning.

Arboreal vegetation grows quite slowly in Iceland, and planning must take the current vegetation into consideration. Significant vegetation should be maintained to as great an extent as possible and utilized as green areas and as part of blue-green infrastructure.

2.3.9 Archaeology and cultural heritage

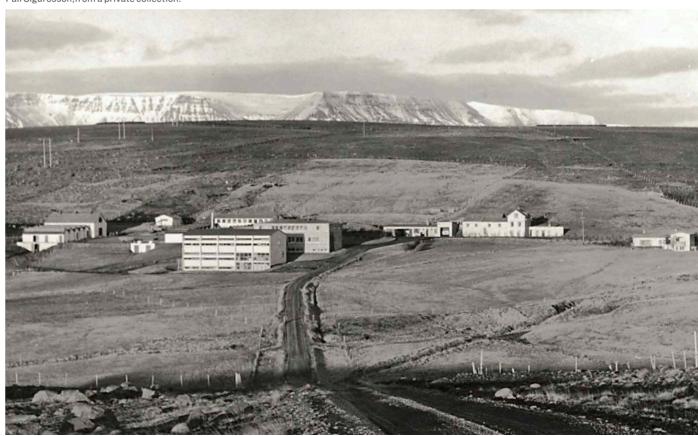
Archaeological finds have previously been discovered in the area, and 32 known artefacts have been recorded within it, along with artefacts from more recent eras, including WWII. There are no declared protected archaeological artefacts in the area. The area in question belonged to the old farms Keldur, Gröf, and Lambhagi, as these farms were described around the year 1700.

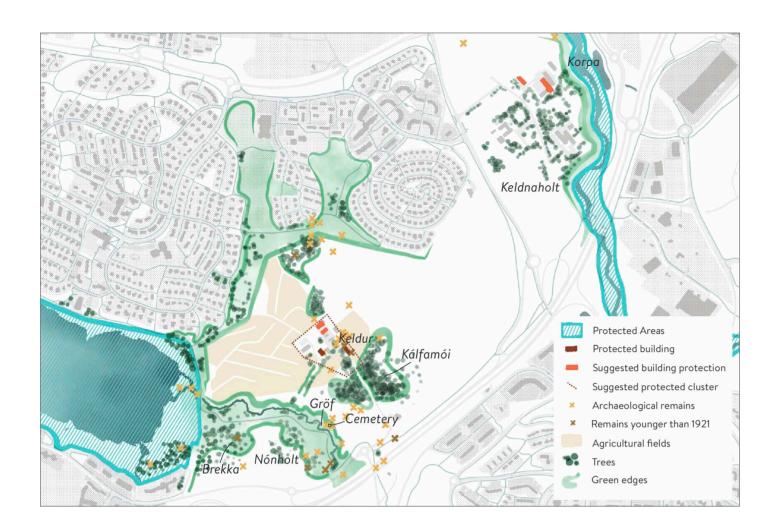
There are two farm mounds in the area, Keldur and Gröf. Ancient artefacts dating as far back as the settlement era can most likely be found in these mounds. There is a home burial ground on the farm mound at Gröf. The area includes buildings governed by the Cultural Heritage Act No. 80/2012 as well as houses with certain historical and aesthetic value. There are 36 buildings within the planning area registered in the building survey. This survey was carried out by the Reykjavík City Museum (Report no. 222).

The survey result suggests that four buildings should be protected by means of planning stipulations. It is also recommended that the cluster of houses at Keldur be protected as an entity (see map on the next page). One building, Rannsóknarhús II (Research Building II) at Keldnavegur 5, built 1960, has already been declared protected since 1999. The exterior of the building is protected along with the fixed furnishings in the library. Two buildings are conserved under the category of "houses built 1925 or earlier".

Archaeological remains should not be regarded as constraints for development but protected buildings must be preserved and integrated into the new urban area. The small cemetery near Grafarlækur creek must be preserved.

↓ Keldur ca. 1960. Photographer: Páll Sigurðsson, from a private collection.





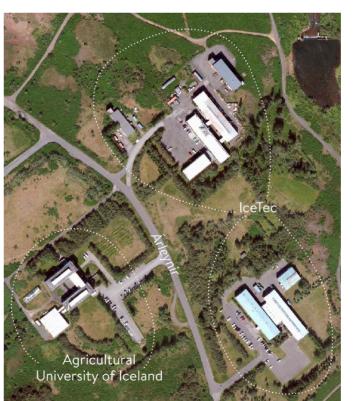
2.3.10 Activities and operations

Keldur west

The University of Iceland Institute for Experimental Pathology began operations at Keldur in the autumn of 1948. The Institute is an independent academic establishment affiliated with the University of Iceland Faculty of Medicine and conducts research and offers services, consultation, and supervision in the field of animal diseases. The institute has a staff of about 50 people and keeps numerous laboratory animals.

The Institute operates on approx. 85 ha of agricultural land, of which 11–15 ha are cultivated fields used for sheep and horse grazing. Facilities at the institute measure around 5,000 m² and include offices, laboratories, and stalls for laboratory animals, some of which are highly specialized. It should be assumed that the Institute's operations will continue in current facilities with some leeway for development, but without the surrounding fields, the fish farm and sheep pen south of the facility cluster.





Keldur east

There is one road through the east part, Árleynir, which leads to three building clusters. The Technology Center (IceTec) is housed in two of these clusters near Korpa River. The Technology Center is a non-profit organization that is not in competition with private companies and institutes, and is entirely state-owned. IceTec is intended as a bridge between academia and the tech industry, and is a part of the development of a knowledge community at the University of Iceland Campus in Vatnsmýri (near Reykjavík airport).

The Agricultural University of Iceland has facilities near Víkurvegur. The university's main research center is located there, and all instruction for the Masters of Sciences program in Planning takes place there as well. The United Nations University Land Restoration Training Program also has facilities at this location. There are no plans to relocate the operations, though this should be considered a possibility. The established presence of these institutions may present an opportunity for future development.

To the north of the area is a commercial district at Fossaleynir, and to the north of that is Egilshöll sports center and the golf course at Korpúlfsstaðir to the east. Korputorg, a big-box shopping center and a warehouse, lies on the other side of the river Korpa, and the home improvement and hardware store Bauhaus is located on the other side of Vesturlandsvegur.

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2.4 Surrounding areas and nearby services

2.4.1 Urban form

The surrounding urban areas are representative of the planning, architectural and construction history of previous decades:

- Grafarvogur, built between 1985 and 2000
- Grafarholt, built between 2000 and 2010
- Úlfarsársdalur, built between 2010 and 2020

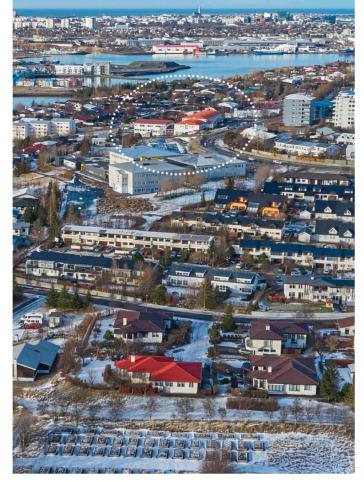
Focus in planning has obviously changed considerably over the course of these years, and emphasis has gradually been shifted towards denser, more mixed, and eco-friendlier development.

The buildings in Grafarvogur generally have rather low height and density, as was common in the 80s and 90s when they were built. This is particularly the case for the neighbourhoods on the south side of the district closest to Keldur. Single-family homes are most prevalent in Foldahverfi and Húsahverfi, therefore the density is very low. Another characteristic of the area is an irregular street pattern with many cul-de-sacs.

The streets at the top of the hill form a kind of maze, from which the main road takes its name. The houses are mainly built by the owners themselves, so the architecture is diverse in keeping with the spirit of its time - colourful and with gabled roofs. Gardens are generally well kept and green borders provide a frame for the neighbourhoods.







↑ View of Foldahverfi to the west with a glimpse of retail properties at Hverafold. Vegetable gardens can also be seen in the foreground

2.4.2 Shops and services

Scattered, low-density residential areas like Grafarvogur are not ideal for local services, and residents frequently mention a lack of shops and services within walking distances. The main service center in Grafarvogur is Spöng, over 2 km as the crow flies from Keldur, and thus not at all within reasonable walking distance. A small center providing local services is located at the top of Hverafold road by Fjallkonuvegur, within one kilometer from Keldur in a straight line. Previously there was a supermarket, bakery, pharmacy, bank, a bookstore, convenience store and more, but most of these shops have since closed.

Many residents of the south side of Grafaryogur most likely shop in supermarkets elsewhere in the city on the way home from work rather than going to Spöng. A denser, more lively development at Keldur with shops and services and good access to active transportation is an opportunity to increase the quality of life in the current community.

2.4.3 Schools, kindergartens, and sports

There are two schools, Foldaskóli and Húsaskóli, in the Foldahverfi and Húsahverfi neighbourhoods located next to Keldur west, as well as three kindergartens, the athletic facility Fjölnir, and the Grafavogur swimming pool in Dalhús. At present, the schools can accommodate 200-300 more students. Egilshöll, the country's largest athletic and recreation center, is 1 km just to the north of the center of Keldur east, and the secondary school Borgarholtsskóli is located at Spöng. Grafarvogur Health Clinic is also located at Spöng. The development area is expected to include new school districts, with each district serving about 1,200 - 1,500 apartments.

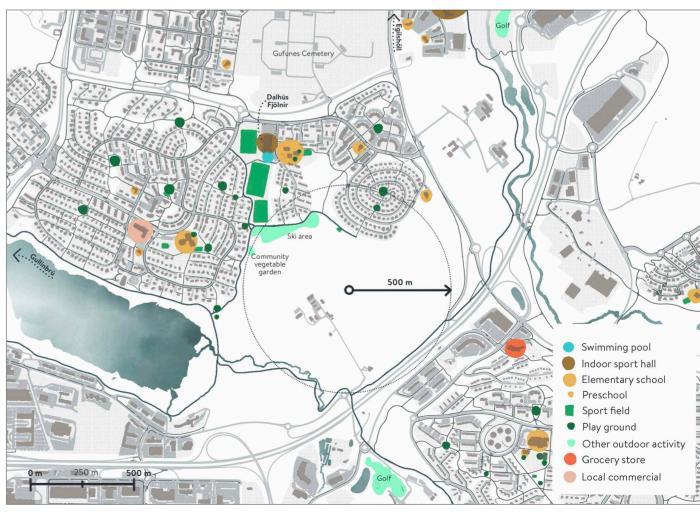


2.4.4 Outdoor recreation

A popular footpath winds around Grafarvogur along the shoreline under the Gullinbrú bridge, into Bryggjuhverfi towards Gufunes. From the path along the inlet, another footpath leads up the hill towards the Fiölnir athletic center. Groves of trees dot Kálfamói and the former summer cottage lot at Brekka, though there is little opportunity for outdoor recreation in the drained and fenced-off fields surrounding the Keldur institute. Paths run along the scenic area of river Korpa and Grafarlækur

Fjölnir, Egilshöll, and the golf courses at Korpúlfsstaðir and in Grafarholt all offer excellent sports and leisure facilities. There is a small ski lift on the slope next to Húsahverfi, which is very popular among youngsters during the snowy season. Further down the slope are vegetable gardens where residents can rent a plot. Gufunes Cemetery on the other side of Hallsvegur is a scenic, green, and grassy area perfect for a stroll.

← View of Fjölnir athletic center and Grafarvogur swimming pool by Dalhús road. Part of the ski slone can also be seen in the foreground



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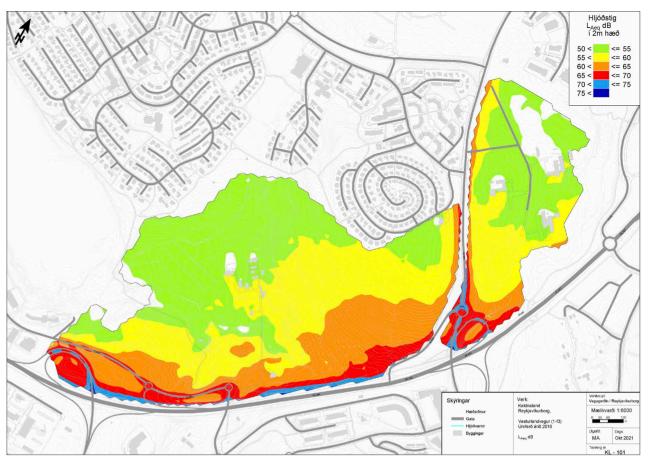
2.5 Current infrastructure

2.5.1 Road links

The traffic arteries Vesturlandsvegur and Suðurlandsvegur meet in the southwest corner of Keldur, where they connect with the Ring Road. These are two of the largest arteries into the city. At their point of intersection, the annual average daily traffic (AADT, a measurement of the total volume of vehicle traffic per day over a year) for Vesturlandsvegur is 50,000 cars and just under 20,000 for Suðurlandsvegur.

Road links into Grafarvogur are via Gullinbrú bridge to the west of Keldur and via Víkurvegur road between Keldur west and east. Gullinbrú and Víkurvegur connect via Hallsvegur. Road links in Foldahverfi and Húsahverfi to the south are limited, as this region is primarily characterized by cul-de-sacs. There are good pedestrian connections, however, and it is important that they link up with the new development.

Keldur is currently accessible by car via Stórhöfði road, entered via the Vesturlandsvegur exit from the east and a connection under Vesturlandsvegur at Vínlandsleið and Krókháls. Stórhöfði connects with Víðarhöfði/Hálsabraut to the west under Vesturlandsvegur and Höfðabakki. At present, vehicle traffic to/from Keldur east passes through the intersection of Víkurvegur and Árleynir.



↑ Traffic noise at a height of 2 m. Map prepared by EFLA Consulting Engineers.

2.5.2 Noise

A noise map of Vesturlandsvegur reveals that noise in a large part of Keldur next to Vesturlandsvegur falls within a range of 55–65 dB LAeq (equivalent noise level over 24 hours). According to Noise Regulation No. 724/2008, noise should not exceed 55 dB at residential building walls in residential areas and 60 dB at residential walls in central and commercial areas. Regional planning and design must take noise into consideration.

2.5.3 Public transit

Three bus routes (6, 24, and 18) currently serve Grafarvogur with stops in the vicinity of Keldur, and route 15 runs along Vesturlandsvegur. A new bus network will be implemented in 2026–2027 along with the opening of the first phase of the Borgarlína BRT service. The main route leading from the city center to Egilshöll via Gullinbrú will be designated as route B. Route E is envisioned from the city center to Mosfellsbær via Keldur. Estimated travel time on the Borgarlína between Keldur and Lækjartorg in downtown Reykjavík is approx. 20 minutes.

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2.5.4 Bicycle connections

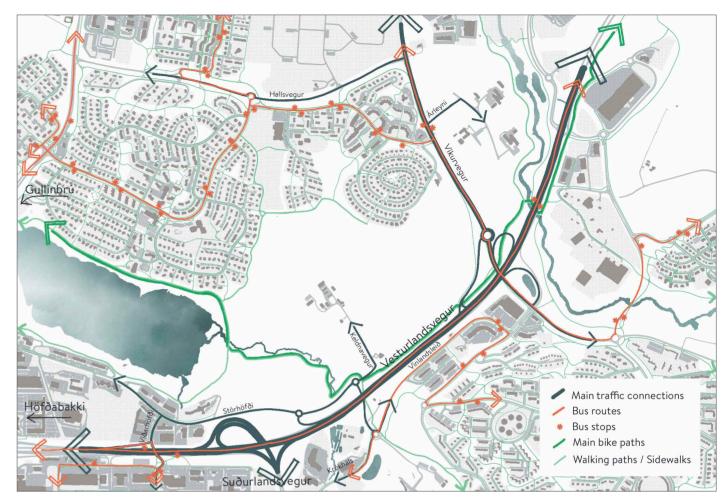
One of the Capital Region's main bicycle routes runs along Grafarvogur, up along Grafarlækur and from there along Vesturlandsvegur towards Mosfellsbær. According to the 2021–2025 Reykjavík Cycling Plan, a bicycle path is planned for the north side of Grafarvogur along the current footpath by Grafarlækur under Vesturlandsvegur up to Grafarholt. Concurrent with the development of the Borgarlína in the area, a bicycle path is to be built to the south of Grafarvogur from Ártúnshöfði via Stórhöfði and through Keldur. Electric scooters and other light vehicles may also use the bicycle paths.

2.5.5 Pedestrian connections

The scenic nature paths along Grafarvogur up into Húsahverfi and along Grafarlækur and Korpa have great value as outdoor recreation areas. However, connections from Húsahverfi west of Víkurvegur and in Keldur east in general are lacking, in particular with the path along Korpa.

The primary connections to the current area around Keldur will be pedestrian connections. Reliable pedestrian connections are key to ensuring access to public transportation and makes it easier to travel by foot, especially in the densely-populated areas along the Borgarlína routes.

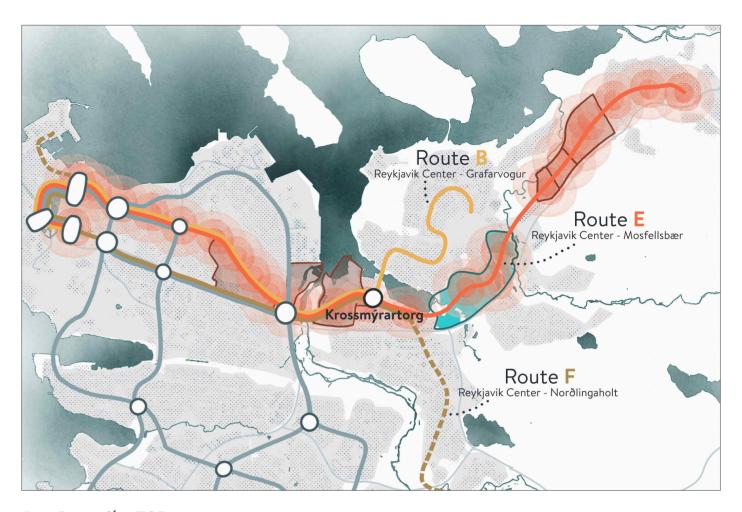






3 Current policy

The purpose of this chapter is to describe current policy but objectives, to be achieved through future development, are stated in chapter 4. Participants are free to deviate from current policy in their proposals if justified with reasonable expectations of results that are better aligned with the objectives stated in chapter 4.



3.1 Borgarlína TOD areas

3.1.1 Transit-oriented development areas

The City of Reykjavík Municipal Plan and the Capital Area Regional Plan focus on the economic growth of the region and emphasize development of urban centers and transit-oriented areas with the Borgarlína BRT service as the backbone of the public transit system.

A transit-oriented development (TOD) area is dense and diverse, with emphasis on walkability and multimodal transportation. The most vital services should be accessible within walking distance and most errands should be feasible within one kilometer, or a 10-minute walk.

Together, the Borgarlína BRT service and the Strætó bus service will form an integrated public transportation system for the Capital Region. High frequency is a priority for the Borgarlína routes and strong emphasis is placed on keeping the routes as direct as possible and serving high-density areas where the passenger population is highest. Borgarlína route E will run through Keldur from the city center into Mosfellsbær. The route will pass through the terminal at Krossmýrartorg, where Borgarlína route B towards Egilshöll via Gullinbrú and route F towards Norðlingaholt meet.

3.1.2 Borgarlína design prerequisites

The Borgarlína will have a massive impact on the design of street spaces, with multiple modes of transportation and bustling city life in mind. The intention is that the BRT lines will have dedicated lanes for buses, and will not share space with other vehicle types.

Borgarlína stations and vicinity

- The distance between stops should be in general between 600–1200 m.
- It is important that passengers recognize their stop and that stops are located in easily recognizable places.
- Stops should be designed with the needs of pedestrians at the forefront
- All stops should accommodate bicycle parking and larger stations should provide areas for shared vehicles of various kinds to make the last leg of the journey easier.
- Station platforms should be at least 26 m long and 40 m from intersections in order to minimize delays.





↑ BRT route in an urban center

↑ BRT route in a suburb









↑ BRT route along paths for walking and biking only

↑ BRT route only

↑ The Borgarlína street sections vary greatly according to context and circumstances. Here are some examples of different versions (Image from the preliminary draft of phase 1 of the Borgarlína)

Borgarlína street space

↑ BRT route along mixed transport

- Lanes should be 3.5 m wide and 7 m wide where the traffic is bidirectional, narrowing to 6.5 m at stops.
- In places where car traffic lanes run parallel to Borgarlína lanes, one car traffic lane in each direction is expected on either side of the Borgarlína. Lane width will generally fall between 3.5-3.75 m and 3.25-3.5 m at stops.
- Parking spaces can be parallel to the general traffic lanes and no more than three in a row. Parking spaces should ideally be used as blue-green drainage solutions and should be no wider than 2.5 m.
- · One-way bicycle paths will in most cases be located on both sides of the street closest to the driving lane or the Borgarlína lane. Bike paths should be at least 2.2 m and ideally 3.0 m wide
- · Sidewalks should be at least 2.0 m wide. As a general rule, sidewalks adjacent to building walls should be at least 3.0 m wide, and may be up to 5 m wide in places with high sun exposure and high pedestrian traffic.

3.1.3 Urban density

It is essential that urban densification takes place within walking distance to the Borgarlína to ensure access to state-of-the-art public transit for as many people as possible. The easiest way to improve transportation and reduce transportation related costs is to keep distances short, which is achieved by a combination of density, mixed-uses and well-designed infrastructure. A short distance to work, the store, school, open green areas, services, and recreation opportunities. But there are many more reasons for urban densification.

The Revkiavík Municipal Plan calls for higher density around Borgarlína BRT stations than in other areas. Within 150 m of a station, the gross density should be 1.2 - 1.5, roughly equivalent to 120-150 units per hectare. From 150 to about 400 m, gross density should taper off to 0.6 or 60 units per hectare. These are rough guidelines that should take local conditions into account.

3.1.4 Eco-friendly transportation

The Reykjavík Municipal Plan sets ambitious goals for changing travel behaviour in the city and an increased proportion of eco-friendly modes of transportation. The guiding principle is to always prioritize the eco-friendliest, most compact, and least cumbersome mode of transportation in urban planning and design. The ability to combine better travel modes (e.g. combining public transit and urban biking) into multimodal trips is also emphasized. Emphasis on better connections for eco-friendly transportation and plans for the Borgarlína call for a new approach to street space design. The number of parking spaces takes into account the area's location within the city, business operations, type of housing, and availability of eco-friendly transportation options.

3.1.5 Car and bicycle parking

The Reykjavík Car and Bicycle Parking policy states that demand for parking spaces is determined by many factors of the built environment, e.g. diversity, density and access to public transit. These factors have considerable influence over the ease of living and working in an area without using or needing to own a private car.

Current policy sets maxima for the number of car parking spaces but numbers quoted here are the preferred reference values. Minimums are stated for bike parking.

For apartments, the reference value in current policy is 0.25 to 0.75 car parking spaces, depending on their size. For all apartments, a minimum of 2 bike parking spaces must be provided.

For commercial buildings such as offices or larger retail, the reference value is 1 car parking space for every 200 m². Bike parking minimums range from 0,2 for industrial buildings to 3 for retail.

For buildings where social services are provided, such as schools and health care, the appropriate number of car parking spaces should be based on a traffic assessment for each case.

The policy requires planners and developers to examine solutions that decrease the number of parking spaces, e.g. space sharing for residential and commercial properties, car sharing schemes and development and construction of shared centrally-located parking garages instead of underground parking under every building.

↓ All major services in transit-oriented development areas are located within walking distance and access to public transportation and bicycle paths is emphasized (image from the Revkjavík Municipal Plan 2040) Walking times in the figures are one-way.

Walking time



Groceries Bakery Fish shop Restaurant Hair salon Preschool



Public park

Main walk-









Employment

center





Open nature

City park



University



Diverse employment, commercial and service center



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Communal

3.2 General land use

3.2.1 Zoning

Keldur is defined as a central land use zone (M4c and M4d) in the Reykjavík Municipal Plan:

M4. Höfðar/ Keldur (M4a,4b,4c,4d). Primarily intended for large retail, wholesalers, and offices. Light industry and workshops are permitted. No allowances are made for residential properties, guesthouses or hotels, unless specifically stated in a site plan. Zone M4c (Keldur) permits residential buildings and the requisite neighbourhood core and community services. The site plan must account for new grocery stores.

Please note that the zones referenced above extend beyond the development area and are shown with amber color.

The number of apartments is not specified in the municipal plan, but will be estimated during the development of site plans.

A tentative location of the Borgarlína and main paths through the area are shown on the map. Víkurvegur is designated as a main road where more varied land use is permitted.

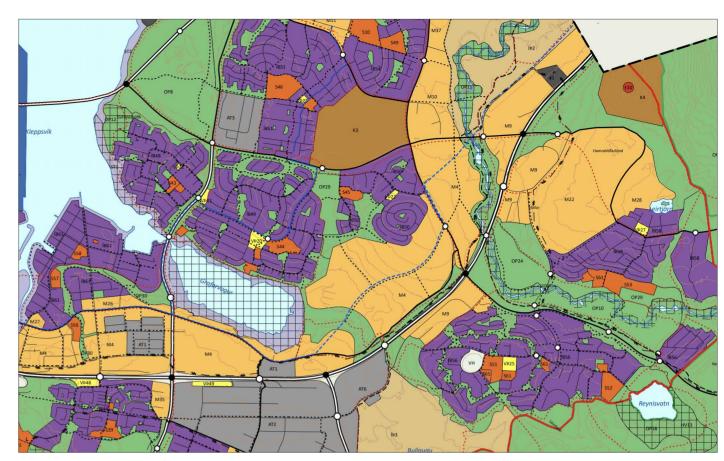
3.2.2 Development areas

The main development areas in Reykjavík, which are already in the preparatory, planning, or the implementation stage, are located along the Borgarlína development route which runs from the harbour in the west through Keldur in the east. Keldur stands out in that the area is sparsely developed, while the other areas are commercial districts that will be densified with primarily residential developments.

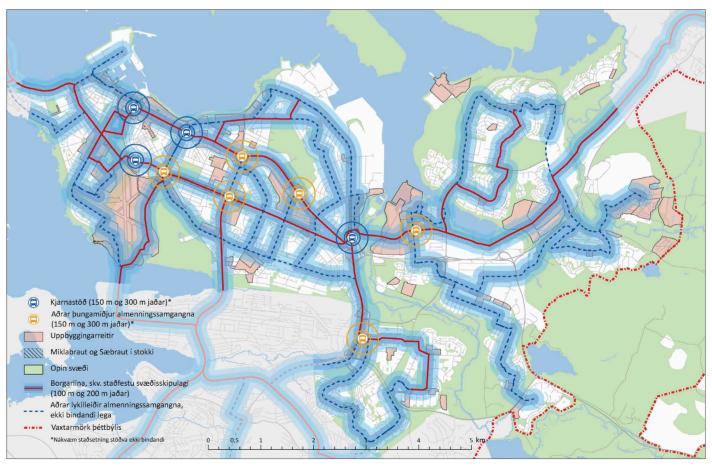
The municipal plan establishes no binding provisions regarding an exact number of apartments on specific lots and zones. Number of apartments, density, and appearance of the development in specific building zones is decided by an approved site plan, following a presentation and consultation process and specific evaluation which takes into account particular provisions and quality requirements. Among the key aspects of the decision regarding the number of apartments, building density in specific areas and their prioritization include but are not limited to Borgarlína and public transit routes, location of current and proposed primary schools, outdoor recreation areas, and the main service centers.

The Municipal Plan assumes that larger development areas will go through a master plan stage before site planning.





↑ Land use map from the Reykjavík Municipal plan 2040. Amber color indicates central areas, purple residential areas, green open areas, grey commercial areas, and tan athletic and recreational areas. Routes shown through the development area are tentative and open for modification.



[↑] Main development areas (brown colour) and areas impacted by public transit (blue colour) within the city's urban growth limit.

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3.2.3 Commercial districts

Economic activity in Reykjavík and the Capital Area is diverse. This is the area's main strength and it is vital to maintain this diversity to the greatest possible extent. Reykjavík must continue building up its role as the national capital and a leader in the growing international competition for businesses, workforce, and tourism. It is important to maintain the breadth and diversity of economic activity while at the same time creating conditions for the growth of new branches of industry, particularly tech and innovation, green energy use, and the culture and entertainment industry.

Work practices have changed considerably in recent years due to the pandemic and technological advances. The requirements made of commercial housing have changed accordingly. A substantial amount of residential housing has been planned in Reykjavík's older commercial districts, including along the Borgarlína, i.e. Múlar, Skeifa, Vogabyggð, and Ártúnshöfði. This is consistent with the policy of creating a balance between residences and jobs within each urban quarter.

Shops and services should in general be located near Borgarlína stations.

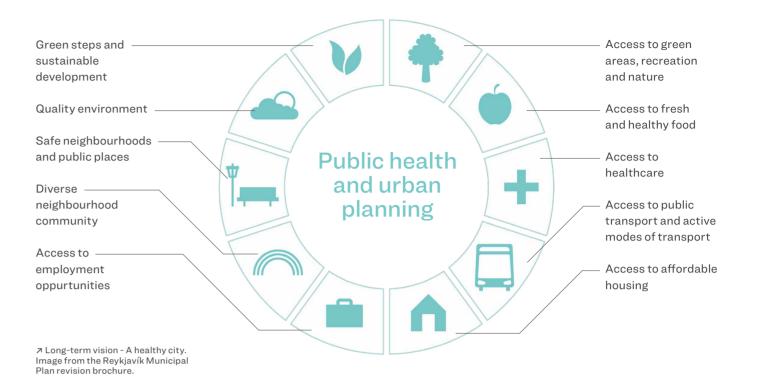
3.2.4 Quality of the built environment and green areas

The main priority of the Reykjavík Municipal Plan is the quality of built environments, both indoors and outdoors. A carefully designed environment motivates people to spend time outdoors and has a positive impact on public health. It is even more important to consider the quality of the built environment in dense areas, where it is necessary to ensure that residences are well designed and enjoy natural light, and that residents have access to attractive open spaces with sun and shelter.

The aim is for outdoor recreation areas in Reykjavík to form a continuous network of green and open spaces, interwoven with the urban landscape. Continued good connections between residential areas and diverse outdoor recreation areas must be ensured and natural diversity of the land and biome must be maintained.

3.2.5 Blue-green drainage solutions

The City of Reykjavík aims to implement blue-green drainage solutions in new development areas and retrofit older parts of the city when opportunities arise. The MoU between the City of Reykjavík and TfCA specifically calls for blue-green infrastructure in the development area. This is particularly appropriate in the Keldur development area, given the presence of delicate and protected receptors such as Korpa River, Grafarlækur stream, and the mud flat. It is important to base the design of blue-green solutions on the topography, rock permeability and hydrology of the area.



3.2.6 Building height

Tall buildings are generally not considered suitable in Iceland as a common building form, where the climate is windy and the sun is low in the sky. It can also conflict with the aim to build bright indoor spaces and sunny, sheltered outdoor areas. In pedestrian-friendly neighbourhoods with a Borgarlína station, it is important to consider the built environment on a human scale, i.e. not too tall and building lots not too extensive. In general, the Reykjavík Municipal Plan aims for 2–5 storeys, though in select places the construction of taller buildings can be justified, e.g. to achieve higher density or as iconic landmarks. Buildings are considered tall if they are 8 storeys or higher.

3.2.7 Residence types

The municipal plan does not prescribe types and sizes of housing units but calls for diversity that accommodates all social groups. Diversity should be provided within an urban quarter or neighbourhood, through mixing of unit types and sizes.

The City of Reykjavík's aims for 35% of new housing to fall within an affordable price range in accordance with the framework agreement between the state and municipalities to increase the availability of housing between 2023 and 2032.

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4 Objectives

The aim of the contest is to produce a clear development strategy and identify a highly qualified team to collaborate with the City of Reykja-vík and the TfCA in the planning of Keldur. The main focus is that participants formulate an overall vision for the site, in the context of the region, that generates high value of the land while also providing high quality.

Each section below describes objectives that the participants must pursue in their proposals.

Current policy, as described in the previous chapter or other documents, should be regarded as a reference point. Participants are free to deviate from current policy in their proposals if justified with reasonable expectations of results that are better aligned with the objectives stated in this chapter.

Participants can suggest ideas and solutions that entail changes outside of the contest area, in particular the area affected by the Borgarlína BRT service, and also other nearby areas in the eastern part of the city, given that appropriate justification is provided.

It is important that proposals include examples that sufficiently demonstrate that the ideas are well-considered and plausible. Buildings, streetscapes and public spaces are not expected to be rendered in detail, but solutions should contain a general framework for planning and design after the contest ends. At that point, this framework is expected to be integrated into the City of Reykjavík Master Plan, with modifications as needed. Subsequently, individual site plans will be developed in accordance with the phasing and housing requirements at any given time.

Sustainability and environmental protection should be a guiding principle for all proposals.

In explaining and substantiating their strategy proposals, participants can include references to schemes that have proven successful elsewhere.

4.1 Land value and quality

As proceeds from the development of the land will be used to finance transportation infrastructure with emphasis on BRT, the land value created by the development strategy is important. The challenge is to maximize the value while also achieving premium urban quality, as set out in the other objectives below.

While land value, based on density, can be in conflict with quality, a baseline of 10,000 inhabitants and 5,000 workplaces is set for participants, also indicating the general expectations of the City of Reykjavík and the TfCA. Proposing land use that results in higher value (e.g. through higher average density) is considered positive if premium urban quality can still be achieved. The numbers quoted are based on a preliminary study of appropriate density for the area.

Participants must show in their submission:

 A strategy for achieving high land value with premium urban quality through means that may include density at or above the baseline, but also using other schemes, such as incentives, development tactics or special arrangements in financing or cooperation

4.2 Mixed uses

Mixed-use properties are an effort to guarantee local services for residents and diverse employment opportunities. A general benchmark is provided by the previously stated baseline in the previous objective. A certain degree of flexibility is desirable, i.e. that the percentage of residential and commercial properties may be adjusted in site plans without disrupting the greater context. It is also desirable that the building types have the potential to be used for different purposes to some extent after they have been built. Like the residential properties, commercial properties must also be well connected to the Borgarlína and other public transit routes. As a general rule, commercial properties with the most jobs per square meter should have the best connections to eco-friendly modes of transportation and a dense residential development. Spaces for commercial operations should ideally be diverse and of a size and type that allows them to accommodate different activities.

It is assumed that the University of Iceland's Institute for Experimental Pathology will be able to continue using its facilities at the current location, and that the Institute's main buildings will remain within the new development. There are also research institutes in Keldur east. There are no plans to relocate the aforementioned academic and research operations, though this should be considered a possibility. The framework should therefore consider their established presence as an opportunity but also be compatible with other uses in the future.

Participants must show in their submission:

- A principal concept for how the proportions of residential and commercial housing vary according to sub-divisions within the planning area and the type of commercial housing in each division.
- A strategy for the interaction between residential and commercial housing and how this interaction relates to streets, pathways, and public transit.
- Examples of building types that demonstrate how to respond to the need for different building densities on different lots, the need for variety, land slope, and access to different modes of transportation.

4.3 Density distribution and form

A design for the development is sought that finds a compromise between density and efficiency on the one hand and human scale, ambitious and diverse design, and comfort on the other. Buildings must be positioned with view, sunlight and shelter for the residents in mind. The building density must make it possible to achieve valuable land use (see 4.1) and good access to local services and public transit. Building height is not limited but 8 storeys is considered tall.

A quick look at various urban density statistics immediately reveals that high density does not necessarily require tall buildings. In many cases, high-rises are often surrounded by a large area around them and considerable building separation. This is often referred to as the "tower in the park" approach, which typically underutilizes land. In other international contexts however, taller buildings are closely assembled into urban blocks, and/or combined with mid-rise buildings in what is often referred to as "podium and tower" buildings/blocks.

When compared to "tower in the park" approaches specifically, 3–5 storey peripheral buildings can offer as high or even higher density in terms of apartments per hectare or floor area for a given lot size. Other approaches to taller buildings however, can yield significantly higher densities. More density can also mean that smaller homes (in the form of apartments) are built, but it is easier for people to live in smaller housing when there is good access to shops, services, cafés, public parks, etc.

It is important that the neighbourhoods in Keldur not be monotonous and boring for residents and pedestrians, and to ensure that the built environment is punctuated with varying building heights, vestibules, balconies, and entrances facing the street

Participants must show in their submission:

- A rough general overview of the density and height of buildings and a breakdown of the number of buildings, number of residents, average apartment size, square meterage of commercial housing, and number of parking spaces in approx. 15–25 sub-divisions of the development area that participants select, as well as totals for the entire area.
- Examples of urban design, in broad strokes, at 3-5 locations of the participant's choosing, showing a range of densities, slope, and functions. It is required that one example shows Borgarlína station and its vicinity. Examples must explain how the proposal responds to residents' needs for a quality environment in addition to density and efficiency.

4.4 Social mixing

It is assumed that 35% of housing will be in an affordable price range in accordance with the City of Reykjavík's housing policy and the framework agreement between the state and municipalities to increase housing availability between 2023 and 2032.

Ideas are sought for how to manage a residential development and housing market in a way that guarantees as much social mixing as possible. This includes integrating social housing without identifiable distinction from other residential housing, mixing different types of residence as much as possible, and appealing to different social and age groups. Solutions may refer to e.g. housing clusters, building and apartment typologies, access to public spaces, cooperation between private and public entities, economic incentives, and support measures that realistically ensure that the greatest degree of mixing in achieved and long-term balance is maintained.

Participants must show in their submisson:

- The main outline of a social mixing strategy, explained and supported in words and images in a way the authors find most suitable.
- How to respond to predicted demographic change, e.g. increased longevity and corresponding changes to the family structure.
- The composition of residential and commercial housing in the development area relative to adjacent neighborhoods.

4.5 Borgarlína and bus routes

A preliminary study has been done of the location of the Borgarlína through Keldur. The design criteria of a maximum longitudinal grade of 5-6% along the driving route and 1% at stations must be considered. Given the challenging topography and other natural limitations, the potential for additional density near stops and the required pedestrian access, it is clear that the project is anything but easy. Two possible route examples, conforming with the design criteria, are provided for reference in the competition material. Plans should assume two stations in the west part and a third station in the east part. Dedicated BRT lanes should be assumed through the whole competition area. Designs that either do or do not include general vehicle traffic lanes along with dedicated Borgarlína lanes are accepted. Participants should consider the criteria outlined in chapter 3.1 for the location of and distance between stops, dedicated lanes, ideal walking distances to stops, standards for density and quality of the built environment with respect to appearance, shelter, light, and distinctive features of the area.

Designs must ensure that the impact of the Borgarlína, in relation to bus routes according to the new bus network, is as clear as possible and contribute to the sustainability of the development as much as possible. Development of the area should have as little impact as possible on vehicle traffic on the adjacent arterial and connecting roads, keeping in mind that public transit should be the first choice for longer trips for those who live and work in the area.

Participants must show in their submission:

- The proposed Borgarlína route with dedicated lanes through the development area from Stórhöfði at Viðarhöfði towards Korputorg.
- The location of three Borgarlína stations and explanations of why each location was chosen with respect to integration with nearby developments and other connections.
- Street cross-section for main routes and where they apply.

4.6 Parking

A substantial portion of parking spaces assumed in the area should be provided within parking garages to reduce building costs and expedite construction, reduce environmental impact, and make street spaces and lots more comfortable with less local traffic.

The parking garages, each shared by a number of residential and commercial properties on nearby lots, will mostly replace private underground parking facilities and parking within lots. They should be able to accommodate commercial uses and services for adjacent areas e.g. on the ground floor, and they should be able to be converted into commercial or residential housing should the need for parking spaces decrease in the future.

This requires a systematic plan for the location and size of parking garages, maximization of parking space sharing among commercial and residential buildings, and convenient access to parking spaces for those who use them. Car- and bike sharing schemes should be considered.

Participants must show in their submission:

- The principal concept of the arrangement and number of car and bicycle parking spaces in the planning area. How parking garages are integrated with other parking solutions and what percentage of parking spaces in the area they can accommodate.
- The principal concept of the arrangement of parking garages among other buildings and how they connect to streets and pathways, both where the land is steep and where it isn't.
- Parking facility sharing for residential and commercial housing and services.



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4.7 Streets, paths and connections

Routes and connections for pedestrians and cyclists that provide safe and easy transportation (not just recreation) access to all units within the area and to adjacent areas are called for. The emphasis is on walkability, active travel, and a healthy lifestyle with most services within a 10-minute walk. Good interaction of public transit and parking garages with routes and connections is particularly important.

Participants must show in their submission:

- Organization of transportation within the area and to/from the area, along with an assessment of the effect on vehicle traffic on arterial and connecting roads, bicycle traffic to/ from the area, and the number of passengers on the Borgarlína and bus routes.
- How routes within the development area are integrated with those in adjacent areas. How main bicycle routes run through the area and connect to the Capital Region's main system, and whether and to what extent it is possible to link the road system to/from Keldur at Víkurvegur in the east and the intersection of Vesturlandsvegur and Suðurlandsvegur in the west.
- Examples of cross-sections and planar layout, in particular how the elements in question interact, e.g. in shared spaces for different modes of transportation and where routes lead towards much-frequented places such as Borgarlína stations, shopping areas, schools, and parking garages.
- · How to deal with slope.
- How accessibility for all is guaranteed for everyone with a focus on main routes to and from the Borgarlína stations.
- How ground floor uses and facades contribute in diverse ways to an interesting and attractive streetscape.

4.8 Sense of place and place branding

In the development and planning of a large area like Keldur, it is important to identify distinctive characteristics and promote a distinct sense of place, i.e. what it is that should characterize a new urban quarter in this location. What kind of experience should those who live and work in the area and who visit this part of the city expect?

It is essential that communicating an attractive vision to prospective residents and businesses be easy. Its name, phrasing and imagery should convey the sense of place and the distinctive qualities that the area offers.

Participants must show in their submission:

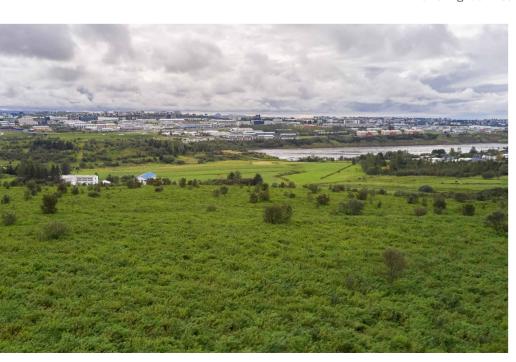
- Principal aspects of natural and cultural heritage, landscape, and the urban design that ensure a strong sense of place and can be highlighted in communication to the public.
- A short and concise text of up to 100 words that captures the desirable elements and qualities of the development, to communicate to the public.

4.9 Location of schools and other social services

Schools and other social services including sports and recreational spaces must be situated so that they are highly accessible and near to the main groups who use them, and routes to and from these amenities must be safe. School facilities and grounds should ideally have multiple roles and serve the community in as many ways as possible.

Participants must show in their submission:

- Location of schools and other social services and reasons for choosing this location.
- How the community has the most diverse and shared use of these facilities.
- How new schools and social services are integrated with existing facilities and operations in the adjacent areas.





4.10 Natural and urban context

Emphasis is placed on making use of and taking into account the area's natural quality. Blue-green drainage solutions are especially important in areas like Keldur, which are in the vicinity of delicate and protected receptors such as rivers, brooks and mudflats. Blue-green solutions should be used for surface water in the development area to support biodiversity and create an attractive, eco-friendly urban environment in close connection with nature (see Chapter 2.3). The development must be certified by BREEAM Communities at the design and planning stages.

New developments should ideally integrate with the older one on the boundaries of the development area, but this can obviously present challenges. It is necessary to examine the extent to which this is possible, guided by the idea that, if done successfully, residents of the older community benefit from the new one, e.g. with access to more diverse services and more varied connections to and from the surrounding areas. Nature and the area's natural quality is to be respected, albeit in the context of a highly urban community, e.g. on the shore and where trees have been able to grow and enrich the area.

Participants must show in their submission:

- How the new development interfaces the developed areas, along with examples of layout as appropriate, e.g. sections or ideas for landscaping.
- How the new development and public spaces connect with Kálfamói and possible other key spots in the area where rare vegetation grows.
- A main outline of a blue-green infrastructure strategy, including how to utilize natural water flow paths in the area and examples of how to design and implement them on different slopes, as well as the interplay of building and street typologies and surface materials with surface water treatment in parks and street spaces.

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4.11 Public spaces and open areas

Public spaces and open areas, including street spaces, must form an urban network of pleasant, comfortable routes and common areas with diverse purposes and appearances. Such areas should be characterized by vegetation, making them wholesome and attractive as well as giving them a different appearance according to the time of year. Urban density and urban "green" should be well integrated, avoiding an "either-or" approach. Residents and visitors should be able to rest in sheltered places, enjoy the sun and the view, have lunch, play, etc. as each place may offer. It is important to take into account the area's current vegetation and the role it can play in the new urban quarter. It is particularly interesting to envision art installations and urban story-telling of various kinds that will inspire and pique curiosity. The aim is to simply make it fun to live in and visit the area, for all age groups and family forms.

Participants must show in their submission:

- An outline of the overall network of public spaces and open areas along with layout examples.
- A strategy for using art and story-telling in public spaces in a purposeful way that makes them interesting.

4.12 Phasing

Successful phasing means that the new urban quarter will already by the first phase be recognizable, interesting, and desirable for both residents and businesses. Construction of later phases should cause residents as little disruption and inconvenience as possible. Phasing can include a landmark or anchor investment that establishes the area's image, and key supporting uses where feasible. Later phases must be flexible enough to respond to unforeseen developments in demographics, transportation, and commercial housing demand. Phasing should first and foremost support the development of the Borgarlína and connected bus routes, and should go hand in hand with the development and construction of schools and other social services. The plan is for the construction of Borgarlína infrastructure to take place early in the process and for the services to begin at the same time as the apartments built during the first phase are delivered.

Participants must show in their submission:

- A well-reasoned phasing plan, including geographical extent and deliverables for each phase of the development.
- A strategic role for the first phase, that already delivers as much as possible of the future qualities and amenities to make the new urban quarter attractive from the very beginning.

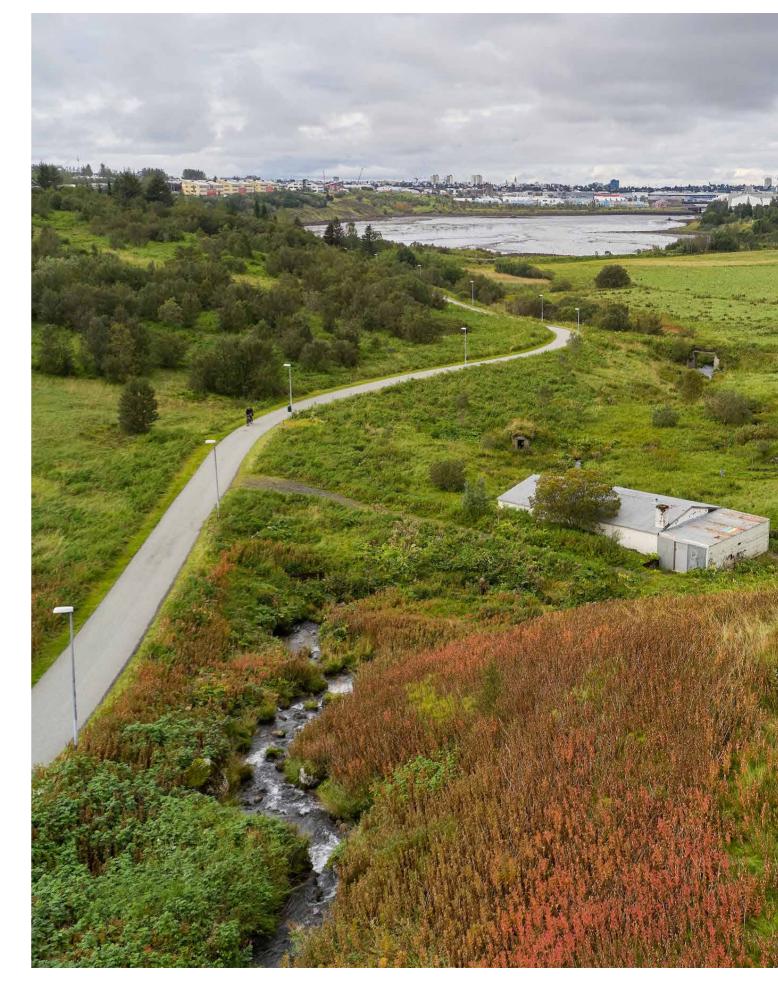
4.13 Overall integration

It is important that participants present a well-reasoned vision and strategic plan for the development of the area; what makes the area a unique and desirable location for residences, businesses, services, and recreation; what role it plays in the greater context of the urban community and the eastern part of the city in particular.

All of the aforementioned objectives should come together as an integrated whole, where each aspect is enhanced through synergy with the others.

Participants must show in their submission:

- A clear overall scheme for the area with important aspects highlighted, with emphasis on synergies and efficiency in the use of land and other resources.
- The scheme's resilience to uncertain evolution, e.g. that
 of demographics and the relationship between work and
 home.



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5 Organization of the contest

5.1 General

This competition is a design contest as described in article 44 of the Icelandic Act on Public Procurement No. 120/2016 which is based on Directive 2014/24/EU on public procurement of the European Parliament.

The competition takes place in two stages and anonymity is maintained in both stages. All material provided to participants, submissions by participants, and answers to queries, are electronic, using the City of Reykjavík tenders portal at http://utbod.reykjavik.is/. Proposals may not be submitted after the deadline.

- Contest documents will be available on the City of Reykjavík tenders portal at http://utbod.reykjavik.is/. Participants must register on the tenders portal to make sure that they receive all information regarding the contest.
- If a participant cannot access the site, it is necessary to select "New registration" (Nýskráning). The project is accessible under the tab "Tenders" (Útboð).
- Click on the project on the list or select "See more" (Skoða nánar).
- Click on "Show interest" (Sýna áhuga), and a new tab will open with access to all documents and a place to submit.
- · Documents can be viewed or downloaded.
- To take part in the contest, click "Take part" (Tek þátt).
- The Reykjavík Procurement Office cannot guarantee assistance with using the system.

The Reykjavík Procurement Office will make an effort to assist users with the tendering system if requests are received with reasonable notice, or no later than two business days before the relevant deadline. Assistance can not be guaranteed if requested on shorter notice.

An appendix to the competition brief will be made available to those selected to participate in the second stage of the contest.

5.2 Anonymity

Anonymity is maintained in both stages of the competition. The competition brief is available to anyone without anonymity. Anonymity applies to all submitted entries, queries, and answers to queries. Entries and queries must not contain personally identifiable information, copyright identifiers, or other identifiers that could violate anonymity.

Participants in both stages must maintain anonymity and confidentiality until the contest has been formally declared closed after the second stage and the winning proposal is announced. Participants are always responsible for maintaining anonymity in their submitted proposals. In the event that a participant violates anonymity, they will be dismissed from the contest

Anonymity is ensured with the following process:

- The City of Reykjavík Procurement Office is a neutral intermediary between participants and the jury, and guarantees the anonymity and confidentiality of submissions until the jury has reached its conclusion.
- The Procurement Office removes any personally identifying information that may be present before sending entries to the jury. When the jury has selected entries for participation in the second stage, the Procurement Office will notify participants of the jury's decision.



5.3 First stage submissions

In the first stage, participants submit a report containing a draft of the plan they intend to develop further in the second stage. The proposal booklet should be in A4 landscape format.

The report must contain the following:

- One page for each of the topics described in Chapter 4, each with up to 200 words of text and explanatory figures chosen at the author's discretion. The name of the topic must appear in the title of each page.
- Up to three pages that show a draft of an overall view of the development area with a total of 500 words on all three pages. This should show how the topics are intertwined to form an interesting whole. Schematic visualizations are expected but overlaid on a map of the area when applicable. The scale of such overviews should be either 1:15,000 or 1:10,000, depending on the subject of the overview.

A seven-digit identification number should appear along with page numbers in the lower right corner of every page except the front page. This number is to be used in both stages. The number must not show any obvious pattern and repetition of digits should be avoided. The number must not personally relate to the author such as date of birth, etc.

The title and identification number of the entry must be displayed prominently on the front page of the report.

In the first stage, no precise or detailed visualizations or renderings of buildings, streetscapes, or other elements are requested, only figures that explain core ideas and principles.

All text in the proposal booklet must be in English, incl. labels and legends on explanatory figures, with the exception of visual portrayal of signs and such in an Icelandic environment.

While the electronic submission format allows on-screen magnification, all text and graphics should be appropriate for a printed version, with text at least 10 points in size.

A note with information about the team's contact person must be submitted with the report. This note must include at least the contact person's name, phone number and email.

5.4 Second stage submission

An appendix to the competition brief will be published between the first and second stage, specifying the second stage submissions. Participants can expect to be required to submit a more detailed proposal than in the first stage, and thus demonstrate technical and professional expertise and integration of various factors beyond what is required in the first stage.

The second stage offers more flexibility for further explaining the core ideas and principles, while the project and tasks are fundamentally the same. The jury may, based on the participants' response in the first stage, call for exploration or development of certain aspects in the second stage. All participants in the second stage will receive the same instructions.

The second stage submission requirements will call for the visualization of 4 diverse locations within the development area, chosen by the participant, where the key concepts integrate in an interesting way and form a clear precedent for other locations in the development area. No further requests will be made for time consuming or costly visualizations.

5.5 Submission procedure

Particular care must be taken to ensure that no information about participants appears in the submitted report, see Chapter 5.2 regarding anonymity.

Participants must submit (send) documents electronically in PDF format via the City of Reykjavík's procurement portal before 15:00 local time on the day specified for each stage (see Chapter 5.13).

- Documents for the first stage are submitted electronically through the City of Reykjavík tenders portal: https://utbod.reykjavik.is/
- Documents are uploaded by clicking on "Upload document" (Hlaða upp skjali).
- Once all required documents are submitted, click on "Confirm submission" (Staðfesta skil).





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5.6 Selection criteria and report

5.6.1 First stage

The jury will evaluate all entries and select up to 5 entries for participation for the second stage.

The draft proposal presented in the entry is awarded 0–5 points for its approach to each of the objectives described in chapter 4, depending on the following criteria:

- The proposed approach promises an interesting solution that is both appropriate and realistic for the development area.
- The draft shows a good understanding of the objective and professional skills.
- The presentation is clear and interesting.

The points are interpreted as follows:

- O The solution meets the criteria insignificantly.
- 1 The solution meets the criteria in small measure, i.e. significant aspects are severely lacking.
- 2 The solution meets the criteria partially, i.e. most significant aspects are handled but lacking in development.
- 3 The solution meets the criteria fairly well while leaving significant room for improvement.
- 4 The solution meets the criteria well.
- 5 The solution meets the criteria exceptionally well and is highly interesting.

5.6.2 Second stage

The jury will evaluate all entries and select up to three for recognition. Of the three, one will be deemed the winner and thus the basis for continued elaboration of the development plan for the area.

Recognition is based on the results of scoring, using the same criteria and scale as in the first stage.

5.6.3 Total score

The total score assigned to each entry in each stage, that determines the ranking of the entries, is calculated as follows:

- 1. For each topic and each entry, the number of points awarded by every member of the jury is added together.
- 2. The entry's total score is the sum of the result of (1) across all evaluated topics.

Jury members award points independently of each other following a discussion in which each jury member presents their perspective on the basis of their knowledge and experience.

5.6.4 The jury's report

Participants receive the conclusions of the jury's discussion of their entry in the form of a total score for each task, i.e. the result of item 1 in article 5.6.3 above. This applies to both stages.

In addition, for all entries in the second stage, the jury as a whole will provide short remarks, outlining the aspects that were most prominent in the jury's discussion.

In the event that few entries are submitted in the first stage, the jury may provide similar remarks as in the second stage.

The jury will not provide further comment or discussion of results in any manner other than that described above.

At the end of the second stage, once the result has been determined, the jury's report and the proposals themselves, will be made available to the public on the contracting authority's website or another appropriate site.

5.7 Announcement of results

The Procurement Office informs all participants of their result in the first stage, including whether or not they have been selected for participation in the second stage. The notification will include information about the distribution of scores and the number of entries selected for participation in the second stage.

Scores for the entries that have been selected to continue are not revealed at this point, as these entries are still competing. The teams that do not continue to the second stage receive a breakdown of their score.

Once the jury has made its decision for the second stage, all participants are informed of the first-prize winner and total scores of all entries in the second stage. Following this, the jury report will be made publicly available.

5.8 Queries

All queries must be submitted through the City of Reykjavík tenders portal. Attention is drawn to the fact that information, queries, and answers to queries are only published on the City of Reykjavík's procurement portal (queries and answers are sent directly to registered participants).

Deadlines for queries can be found in Chapter 5.13. Queries are to be made in English and all answers are provided in English.

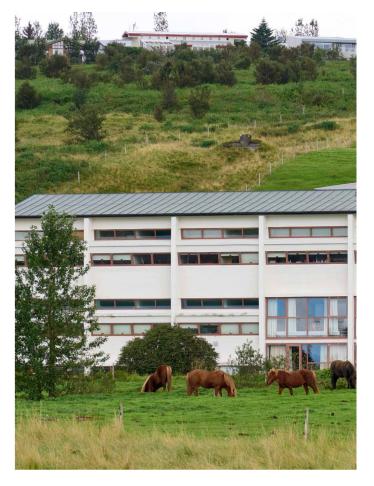
5.9 Prizes

No compensation or prizes are awarded for participation in the first stage, as it is assumed that submission requirements are not extensive.

Participants in the second stage receive EUR 50,000 in compensation for their work in the second stage on elaboration of their proposal.

One prize of EUR 50,000 will be awarded to the team that submits the winning proposal. Up to two additional proposals may receive recognition from the jury along with a sum of EUR 15,000.

The contracting authority intends to use the results of the contest, as described in chapter 5.12.



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5.10 Jury and advisors

The jury consists of the following persons:

- · Dagur B. Eggertsson, Mayor, City of Reykjavík, Chair
- Hildur Biörnsdóttir, City Councillor, City of Reykiavík
- Ólöf Örvarsdóttir, Managing Director, Environmental and Planning Department, City of Reykjavík.
- · Davíð Þorláksson, Managing Director, TfCA
- Guðrún Ögmundsdóttir, Board Member, TfCA and Director General, Ministry of Finance and Economic Affairs
- Þorsteinn R. Hermannsson, Director of Development, TfCA
- Maria Vassilakou, Vienna Solutions, Vassilakou Urban Consulting
- Brent Toderian, TODERIAN UrbanWORKS

In the event of a tie, the Chair's vote decides the result.

The jury is assisted by:

- Hrafnkell Á. Proppe, Urbana
- Árni Geirsson, Alta ehf

The jury may call upon the following experts:

- Hildur Gunnarsdóttir, nominated by AÍ, Architects' Association of Iceland
- Björn Ingi Edvardsson, nominated by FÍLA, Icelandic Landscape Architects' Association
- Ásdís Hlökk Theodórsdóttir, nominated by SffÍ, Icelandic Planning Association
- Haraldur Sigurðsson, Head of Municipal Planning, City of Reykjavik
- Björn Axelsson, Planning Director, City of Reykjavik
- Borghildur Sturludóttir, Head of Local Planning, City of Reykjavik
- Guðbjörg Lilja Erlendsdóttir, Director of Transportation, Citv of Revkiavik
- Edda Ívarsdóttir, Head of Urban Design, City of Reykjavik
- Pröstur Guðmundsson, Director of Projects and Project Control, Transport for the Capital Area

Meetings of the jury are closed. The jury has read and accepted this competition brief.

Should it come to light after anonymity is lifted that a participant has failed to report reasons for disqualification, see chapter 5.16, the jury and contracting authority reserve the right to revoke the participant's award.

5.11 Communication

All communication must go through the Procurement Office via its online tenders portal, https://utbod.reykjavik.is/.

Direct communication between participants and the contracting authority regarding issues pertaining to the contest is not permitted.

The Procurement Office may, in consultation with the jury's chair, seek the assistance of others if necessary, ensuring the confidentiality of the party whose assistance they seek.

5.12 Post-contest activities

The contracting authority expects to negotiate a consultancy contract with the winning team once the competition ends. Consultancy involves continued elaboration of a development plan and spatial plans in accordance with a later decision, to the extent that the team's expertise is of use to the contracting authority and with the proviso that the contracting authority can reach an agreement with the winning team.

The contracting authority will own the copyright and all documents submitted with the proposals that received recognition in the second stage. The contracting authority is permitted to continue working with these documents, change them, and/or delegate their implementation to others, cf. Paragraph 1, Article 28 of Copyright Act No. 73/1972.

The contracting authority will keep all proposal documents after the contest ends.

5.13 Dates

5.13.1 First stage

The process begins with an advertisement inside the European Economic Area (EEA) and the contest description is subsequently made public on the City of Reykjavík tenders portal http://utbod.reykjavík.is/.

January 25th 2023

Launch of the competition.

March 17th 2023

Submission deadline for queries regarding the first stage.

March 28th 2023

The jury provides answers to queries.

April 19th 2023

Submission deadline for the first stage entries.

May 11th 2023

Results of the first stage announced.

5.13.2 Second stage

May 17th 2023

The Second stage begins and an appendix to the competition brief is sent to participants.

June 21st 2023

Deadline for queries regarding the second stage.

June 30th 2023

The jury provides answers to queries.

August 18th 2023

Submission deadline for the second stage entries.

September 2023

Results of the second stage announced.

The jury reserves the right to change the above dates if circumstances necessitate. All changes will be announced prominently on the City of Reykjavík tenders portal, https://utbod.reykjavik.is/.



5.14 Material provided

Participants receive the following documents:

- 1. This brief
- 2. Borgarlína route option examples for reference (PDF)
- 3. An aerial photograph with world file

No other material is provided, but participants are encouraged to use the open geospatial data from the City of Reykjavík, Open Street Map and other entities that provide useful information, as it is assumed that participants are able to obtain and process such data in the public domain, also when presented in Icelandic.

5.15 Appeals process

If a participant believes that the procedure described herein has not been followed or that the contest in any way conflicts with or violates the Public Procurement Act No. 120/2016, the participant may appeal to the Public Procurements Complaints Commission, cf. Chapter XI of the same act.

5.16 Eligibility

The contest is open to everyone except the individuals listed in chapter 5.10 as well as anyone with whom the listed individuals have either close family connections or mutual business interests related to the results of the contest.

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