Rev 04.03.2024 – Final version

WELL Guide

ARK Site 4016

SITE 4016

Cluster concept

Our vision – what we will strive to be
A regional knowledge and development centre for the construction industry.

Our mission – how we will achieve it
We will create a place that brings together the leading players from all areas of the construction industry. We will strengthen the businesses by facilitating collaboration and sharing in important areas of construction. Collaboration that promotes knowledge development and well-being for employees, increased digitalisation and innovation, and cost reductions for the businesses will strengthen the regional construction industry and make it more competitive for the future.

Gather → Collaborate → Strengthen

WELL Guide ARK Site 4016

This WELL feature guide for ARK Site 4016 is available to all occupants and visitors at the “barception” and through communications in the Life@Work app and Site 4016 - Byggbransjens nye lekegrind website.

Quarterly communications (e.g., emails, modules, trainings) are sent to regular occupants, and onboarding communications are given to new employees (as applicable), about health resources, programs, amenities and policies available to them addressed by the WELL features achieved by the project.

At ARK the building owner Smedvig Eiendom’s sustainability and health-oriented mission includes the following key elements:

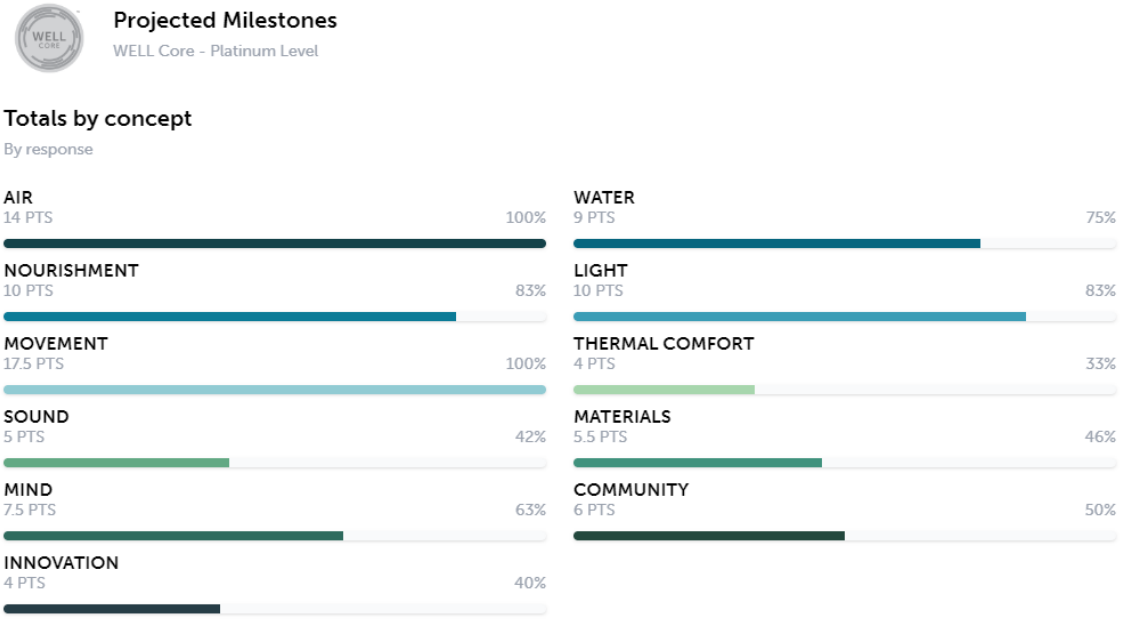
- Incorporating relevant project goals and strategies established during the stakeholder charrette and achieving WELL Building Certification Platinum and BREEAM-NOR Excellent Certification to ensure a holistic approach to social and environmental sustainability.
- Integrating handover, testing, operations and maintenance plans for facility managers and personnel to manage policy requirements related to the environment, health and well-being by a well-operated and maintained building.
- Sustainable land use through use of a brownfield site with low ecological value along with site remediation, habitat creation and improvement of long-term biodiversity for the site. Access to nature is seen as a very positive factor and tenants are encouraged to use reflection spaces in and around the building, as well as restorative walks in the neighborhood. Illustration 1 shows how the site is located near green spaces and a lake, as well as sports facilities. Occupants will be able to visit these areas on their way to or from work, or as a short break in the workday.

Illustration 1: Blue/green spaces surrounding ARK (red flag top center)

- The building and its facilities are planned for green mobility for the tenants and their visitors. The building accommodates for active use and motivates occupants to choose an active and healthy lifestyle, while the impact on the environment was reduced through the mobility plan and solutions in the BREEAM certification.

- ARK has been designed and built for prevention and control of pollution and surface water run-off associated with the building's location and use. Development is on a site with a low probability of flooding where the design minimises the impact of flooding through careful master-planning. Surface water run-off is managed to be no worse than the pre-development scenario. Watercourse pollution prevention systems are in place.
- ARK has energy efficient building solutions, systems and equipment that support low net energy demands and the sustainable use of energy in the building. Measures have been implemented to improve the inherent energy efficiency of the building, encourage the reduction of carbon emissions and support efficient management throughout the operational phase of the building's life. Energy metering systems are installed to enable energy consumption to be assigned to end uses. Sub-meters are provided for high energy load and tenancy areas. Reduced pollution through use of natural refrigerants and leak prevention/detection. Reduction in emissions of NOx arising from the building's space, ventilation and water heating systems.
- The building has been designed for resilience and robustness. Relevant building elements incorporate appropriate design and specification measures to limit material degradation due to environmental factors. The building incorporates measures to reduce impacts associated with damage and wear and tear.
- Healthy and environmentally friendly materials have been used throughout. Life cycle costs and analysis methods have been used for reductions in the building’s environmental life cycle impacts. Materials with low environmental impact have been chosen to reduce CO2-emissions. Timber has been legally harvested and responsibly sourced.
- Indoor air quality has been ensured by minimizing sources of air pollution through careful design, specification and planning. The building ventilation strategy is designed to be flexible and adaptable to potential future building occupant needs and climatic scenarios. Thermal comfort modelling and thermal zoning.
- Healthy food is offered under contract with the building owner, as well as access to drinking water of good quality.
- The tenants are encouraged to arrange both professional and social gatherings to learn from each other, with established cooperation also with local schools and the university.
- The Site 4016 website and app L@W with digital newsletters are used to promote the health, environmental and social sustainability mission of the office and shared spaces at ARK.

The WELL Core Platinum strategy for ARK is illustrated below and described for the ten WELL concepts.



This document is the basis for a communication plan that will be developed to share knowledge about design and construction techniques to create healthy and sustainable buildings where people thrive. Information will be given in various ways: on screens, signs, webpages, apps and in person on guided tours.

ARK incorporates the ten WELL concepts through the following features. Where to stop to find more information in the building though the app or on the WELL tour is suggested in brackets.

Air / Thermal comfort (Conference centre space with visualization of air quality)
Air quality thresholds will be met, monitored, and reported. Adequate ventilation will be ensured with increased outdoor air supply and particle filtration. Any construction pollution has been mitigated. Combustion is minimized and exhaust is managed. Smoking is prohibited indoors and outdoors.
An acceptable thermal environment will be provided, monitored and visualized for tenants. A flexible dress code is allowed and encouraged.

Water (Drinking station on ground and first floor)
Drinking water access for employees and guests has been ensured with drinking water stations throughout the space. Water quality thresholds will be met, monitored, and reported.
The building envelope and interiors have been designed and built for moisture protection and with legionella as well as mold/moisture management plans having been developed and implemented. Both the building envelope and interiors have been designed and built for moisture protection. Measures to reduce water usage and leaks have also been implemented.

Nourishment (Restaurant on ground and café/container first floor)
The service provider under contract with the building owner has developed the personnel restaurant, café and food offerings with nourishment in mind and included specifications for healthy diets making it easy for tenants and visitors to choose healthy options. Special diets are accommodated for, while food allergens and nutritional information are clearly labelled. Mindful eating is supported, and food access is ensured locally.

Light (Restaurant ground floor, Sandbox workplaces first floor, circadian lighting in Sand Castle meeting room)
Natural light is one of the main factors in providing a good workspace. There is good access to natural light. Further, lighting is designed to supplement natural light conditions to ensure the specific areas support their function, concentrated work, collaborative work, socializing, relaxation and movement respectively. Flicker has been managed through selection of lighting and solar shading is automated to reduce glare.

Movement (Park and walking routes outside, attractive stairs and common areas. Gym, bike facilities, changing rooms etc)
The building aims to encourage active occupants, as activity during the day increases happiness, concentration, and health. Because the site is centrally located and close to some of the main cycle routes, walking and biking is a popular mode of transportation for the building occupants. ARK has outdoor activity spaces and an indoor gym, changing facilities with showers, lockers and a drying space have been provided, as well as bicycle parking with bike cleaning and maintenance tools nearby. Signage promotes healthy choices and maps are available for local walking and bike routes. The main staircase was designed in order to encourage occupants to choose the stairs instead of elevators and the common spaces encourage movement through lighting and “paths”. Workstations for both the building owner and tenants have been designed with ergonomics in mind for both desks, chairs and equipment.

Sound (Sandcorn meeting room)
An acoustic design plan has been developed and implemented. Acoustic zones have been labelled.

Materials (Conference centre, social zone in tenant floors)
The contaminated land outside has been remediated. Hazardous materials have been managed in rehabilitation, while health and environmentally friendly materials have been chosen for new materials in the building. A waste management plan has been implemented and preferred cleaning products selected. Life cycle analysis and life cycle assessments have been used and CO2 has been reduced by xxxx compared to a reference building. The building owner has reused kitchen cabinets, as well as ceiling materials and office walls from other projects.

Mind (Sandbox: nature views outdoors, plant by container/bench/stairs, artwork in the stairs)
Mental health and wellbeing have been promoted through the design of the office and shared spaces with a connection to nature, place and culture. Healthy working hours are supported.
Local tradespersons, artists and students have decorated the space with art and design reflecting the culture of the building owner and tenants.
Nature has been brought in through views as well as plants. Restorative spaces are available indoors and outdoors, with access to nature. Site ecology has been enhanced and there will be a long-term improvement on biodiversity though landscaping.

Community (On-Site program, Sandbox; play area for children, stand for student displays, “Do you want to talk about it?” meeting room)

Stakeholder charettes were held to determine the health and environmental goals for ARK and implemented through integrated design and universal accessibility. Universal design has been integrated and community spaces have been provided indoors and outdoors. Risk assessments have been carried out to plan emergency preparedness. Health benefits are available to staff, including sick leave and new parent leave.
On-Site program and L@W app for connecting people to share knowledge as well as social events. The Sandbox is a knowledge center - both the restaurant and café, conference center with an auditorium, as well as the exhibition spaces that can be used by tenants, students, and others.

Energy and innovation (Technical rooms)
The Energy used to heat and cool the building is produced by heat pumps which collects heat from energy wells under the building. The energy solution in the building is part of a larger energy system that provide energy to the other buildings at the Site (Site Energy). ARK is a very energy efficient building, and it is a energy class A building. Other energy saving measures include rotary heat exchangers which recover over 80% of the energy, thermal insulation, energy efficient windows and solar shading.

ARK is heated with thermal radiant heat panels which are placed in the ceiling throughout the building. These panels get their energy from the heat pumps.

The building is cooled with cold air which is distributed by the ventilation systems. To save energy and also provide a good indoor climate the ventilation system is demand controlled (DCF).

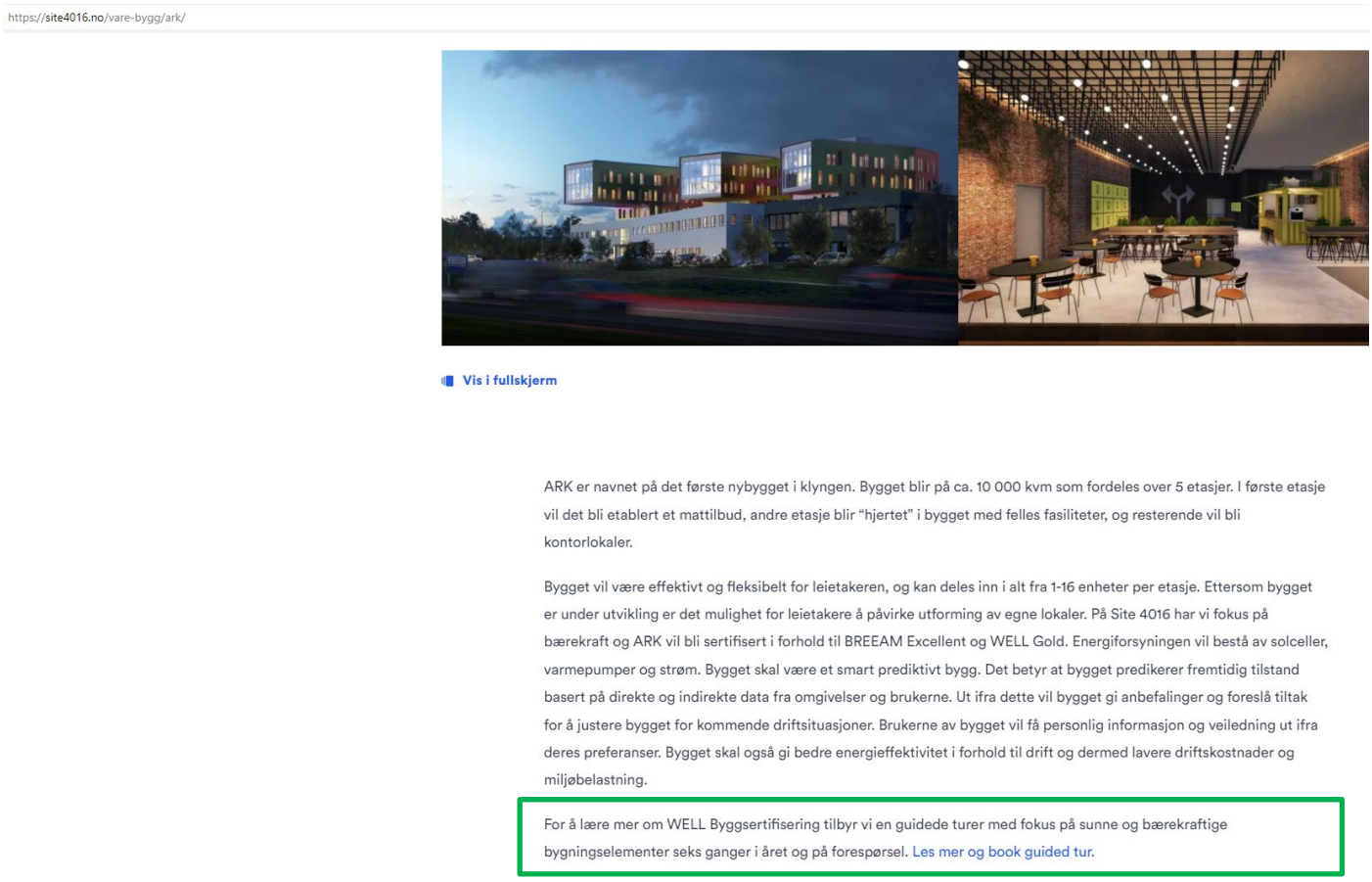
In the Sandbox meeting center the indoor climate in the meeting rooms is visualized on the information screens and also in the Life@Work App.

The WELL features achieved at ARK are attached (and may be updated after final documentation and performance reviews).

Heather Bergsland, Well AP
24.01.2024

Rune Augenstein, Project owner
04.03.2024

ARK - Site 4016



Translation: To learn more about WELL Building Certification, we offer guided tours focusing on healthy and sustainable building design six times a year and on request. Read more and book a guided tour (link).

ARK | WELL (wellcertified.com)