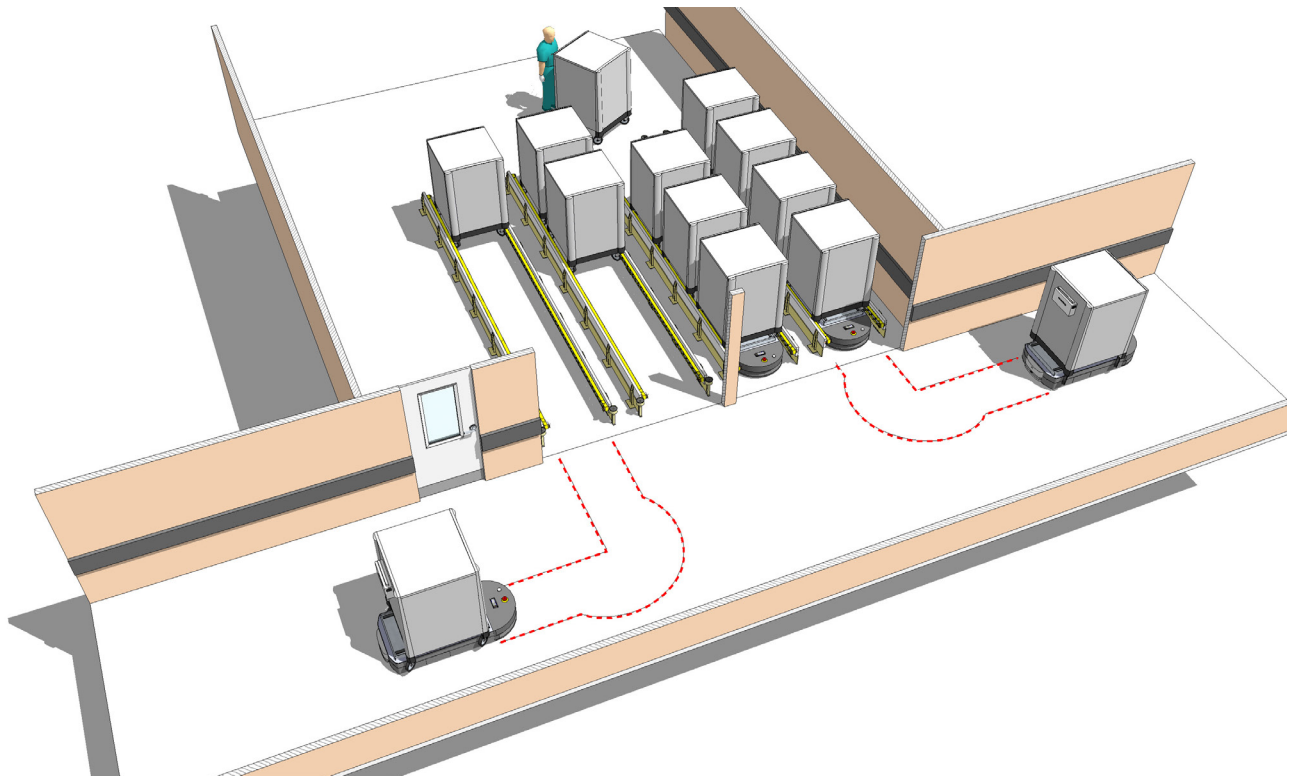


ADVANCED CARE THROUGH ENHANCED OPERATIONAL EFFICIENCY



## NEW LANDSPÍTALI HOSPITAL - WASTE, LOGISTICS & PEOPLE FLOW REYKJAVIK, ICELAND

BuroHappold Engineering was subcontracted to CORPUS 3 to provide design support to the consortium of engineers and architects engaged to develop a new 216 bed hospital in Reykjavik. Specifically, the waste and logistics team was tasked with developing a basis of design (BOD) for incorporation of a waste and linen vacuum collection system and an auto guided vehicle (AGV) goods distribution system. The client wanted to ensure AGV vehicles and goods distribution could be managed across the new campus and not just the hospital itself, as well as that the main entrance into the hospital functions in an efficient and safe manner.

In addition, our people flow team carried out a smart space study for the hospital using a combination of dynamic people flow modelling and rapid spatial analysis to evaluate and optimise layouts for user comfort and operational efficiency. Our assessment of staff, visitor and patient flows utilised our state-of-the-art people flow simulation software, SmartMove, to produce a 'day in the life' view of the building in operation.

Our analysis was used to provide advice to the developing design of the new treatment centre, ensuring patient, visitor and staff comfort and the efficient and effective distribution of materials. We demonstrated how the entrance area could be optimised for simplified flows and intuitive wayfinding, and enhanced layouts within staff areas for efficient processes during shift takeovers. Overall vertical connectivity was assessed and recommendations provided to minimise walking distances whilst ensuring appropriate segregation between patients in beds and general public flows.

The client is now engaging with suppliers of systems for AGVs and vacuum systems, confident in the knowledge the design can accommodate these modern forms of hospital logistical systems.

**CLIENT**  
Corpus3 EHF

**COLLABORATORS**  
VSO Consulting, Hornsteiner Architects,  
Basalt Architects

**PROJECT VALUE**  
Confidential

**DURATION**  
2016 - 2017

**SERVICES PROVIDED BY  
BUROHAPPOLD**  
Acoustic design, people movement, smart  
space, transport and mobility, waste  
management