

# Erasmus MC

on tour in Kirkeness



Konferanse om sykehusutbygging 2017 march 24

## Speaker



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- ① **introduction**
- ② **three world changes**
- ③ **Erasmus MC**
- ④ **concept & building process**
- ⑤ **highlights**
- ⑥ **wards**
- ⑦ **conclusion**



# ① Introduction



2000 – family – Children’s Hospital, Arequipa, Peru





① introduction

② **three world changes**

# From sketch to building

Designing for the future in a changing world



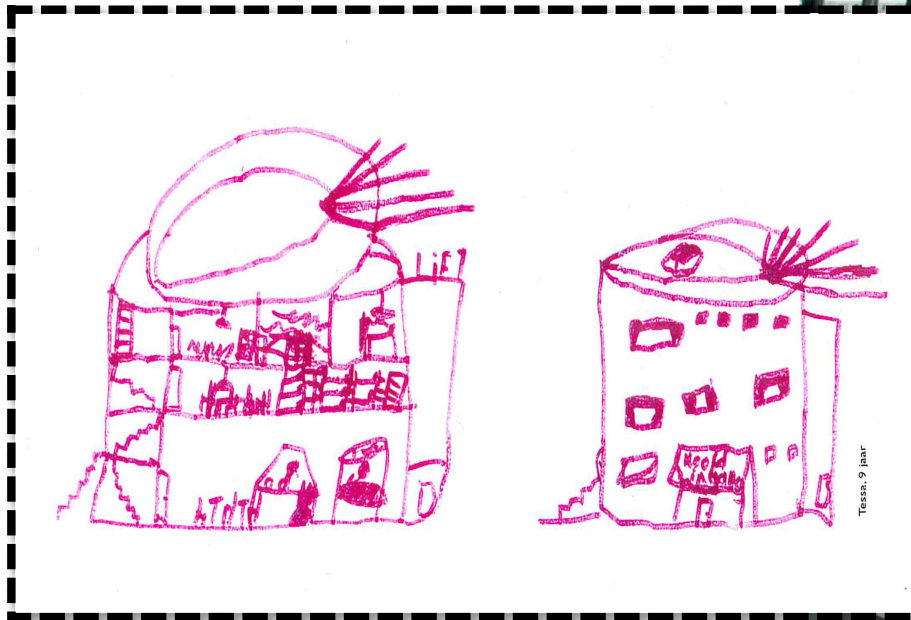
✧ **From charity to affordable healthcare**

✧ **Mens sana in corpore sano**

✧ **Architecture matters**

# From sketch to building

Designing for the future in a changing world

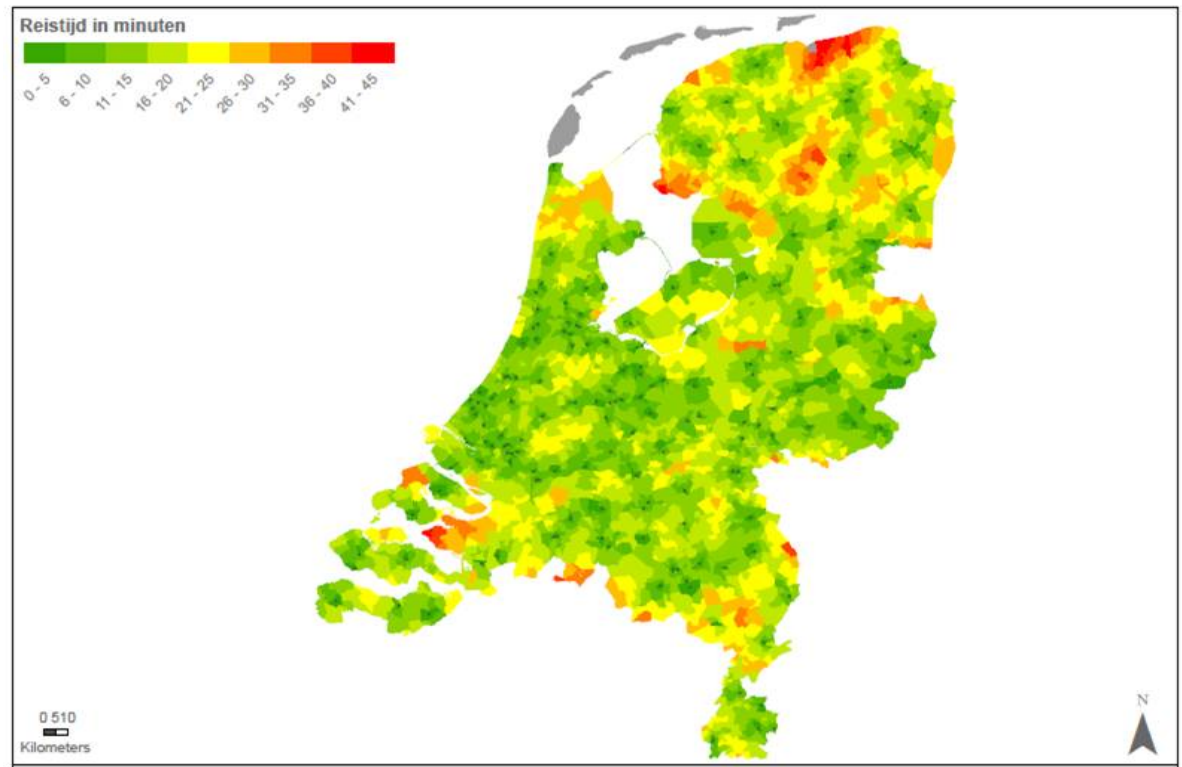
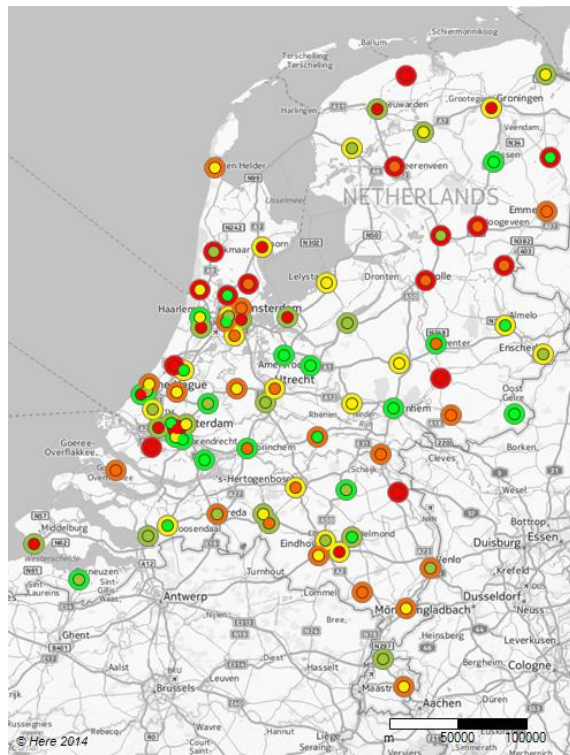




# From charity to affordable healthcare



# From charity to affordable healthcare



# Mens sana in corpore sano

Ornothografies, Xavi Bou, 2016



**Mens sana in corpore sano**



**Is it possible to design a new hospital that is smarter, functional and friendly, better connected to its environment and fit for the future?**





- ① introduction
- ② three world changes
- ③ **Erasmus MC**



## Mission of Erasmus MC

- 
- Erasmus MC is committed to a healthy population and excellence in healthcare through research and education



# History of Erasmus MC



**1880 - 1940**  
Coolsingel Hospital  
Bombed in WW II



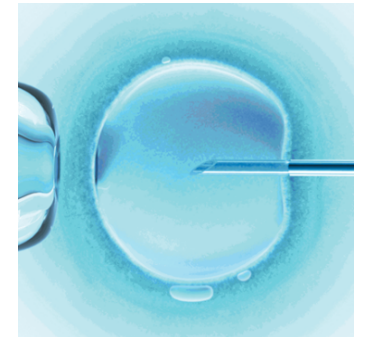
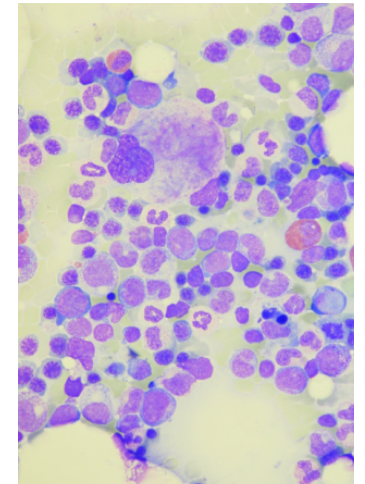
**the '60**  
The Dijkzigt Hospital in the '60 Modern Hospital  
7<sup>th</sup> academic hospital in the NL



**the '70**  
The Medical Faculty  
The tallest building in  
Rotterdam at that time



# Innovations of Erasmus MC





## Facts & Figures



530,000 outpatient visits per year  
42,000 patient admissions per year  
33,500 operations (incl. day care) per year  
13,500 employees (23rd employer in The Netherlands)  
4,500 students  
2,000 scientific publications per year  
1,000 PhD candidates  
250 PhD graduates per year  
20% of all UMC care in The Netherlands  
Only UMC providing training/education for all medical specialities

# The new hospital building

203,000 m<sup>2</sup> Gross floor area

15,000 m<sup>2</sup> Laboratories

473 Medium care beds

94 Day Care units

38 IC-boxes

18 ICCU-boxes

8 PACU-boxes

10 Observatory units

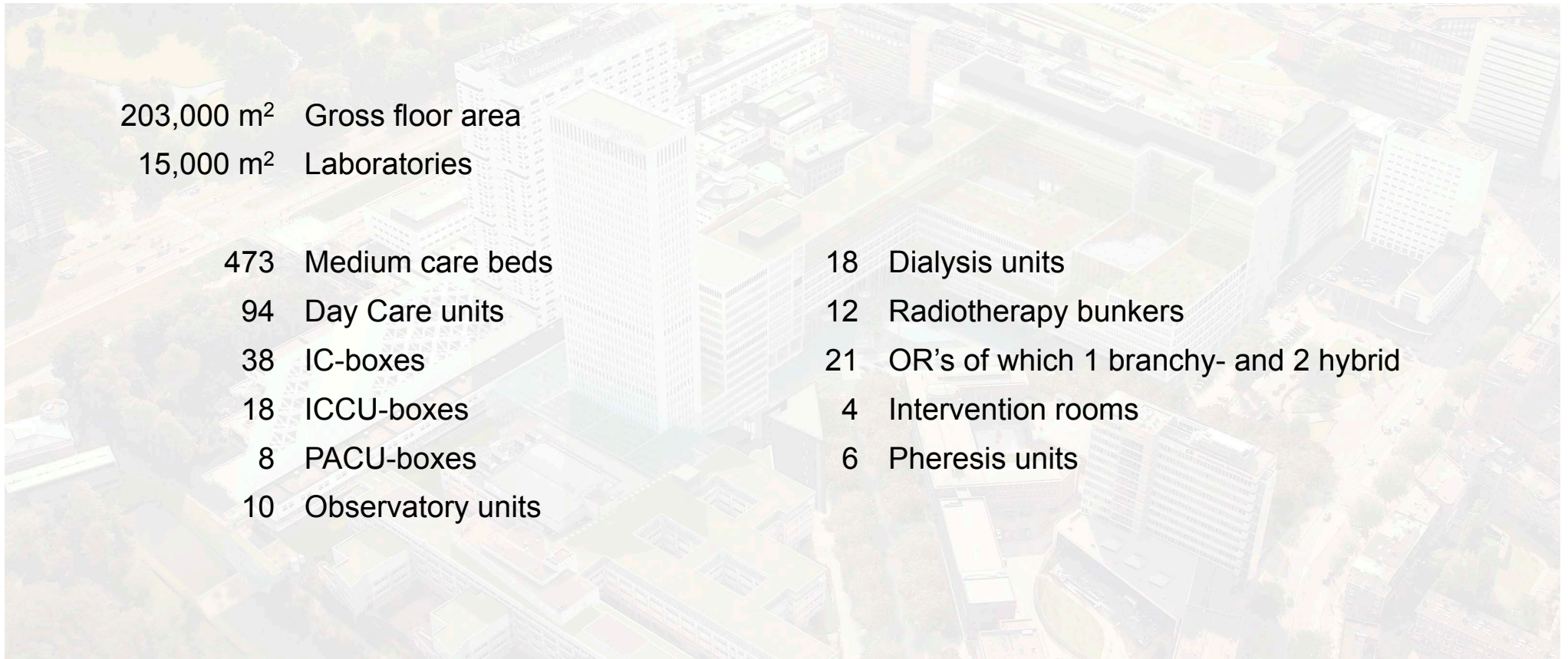
18 Dialysis units

12 Radiotherapy bunkers

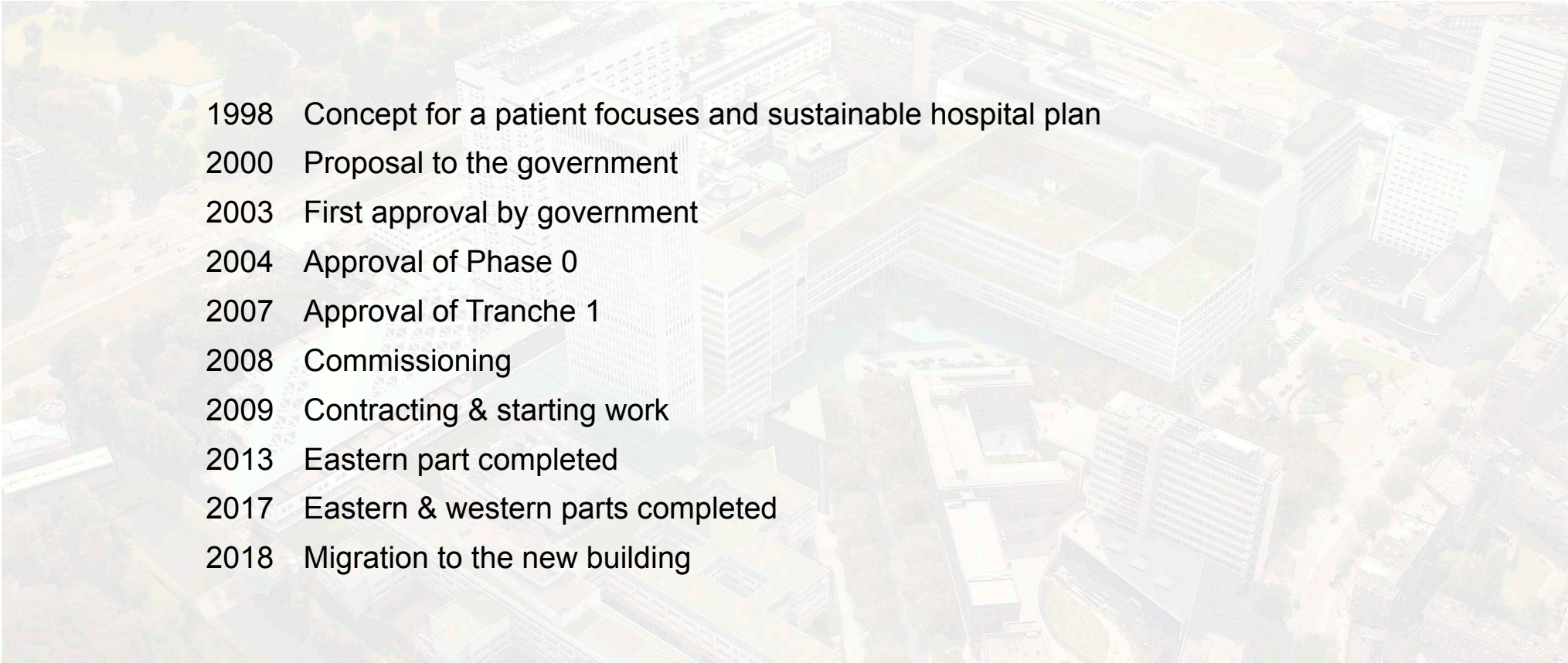
21 OR's of which 1 branchy- and 2 hybrid

4 Intervention rooms

6 Pheresis units



## From philosophy to stones

- 
- An aerial, semi-transparent architectural rendering of a large, multi-story hospital complex with various wings, courtyards, and green spaces, serving as a background for the timeline text.
- 1998 Concept for a patient focuses and sustainable hospital plan
  - 2000 Proposal to the government
  - 2003 First approval by government
  - 2004 Approval of Phase 0
  - 2007 Approval of Tranche 1
  - 2008 Commissioning
  - 2009 Contracting & starting work
  - 2013 Eastern part completed
  - 2017 Eastern & western parts completed
  - 2018 Migration to the new building

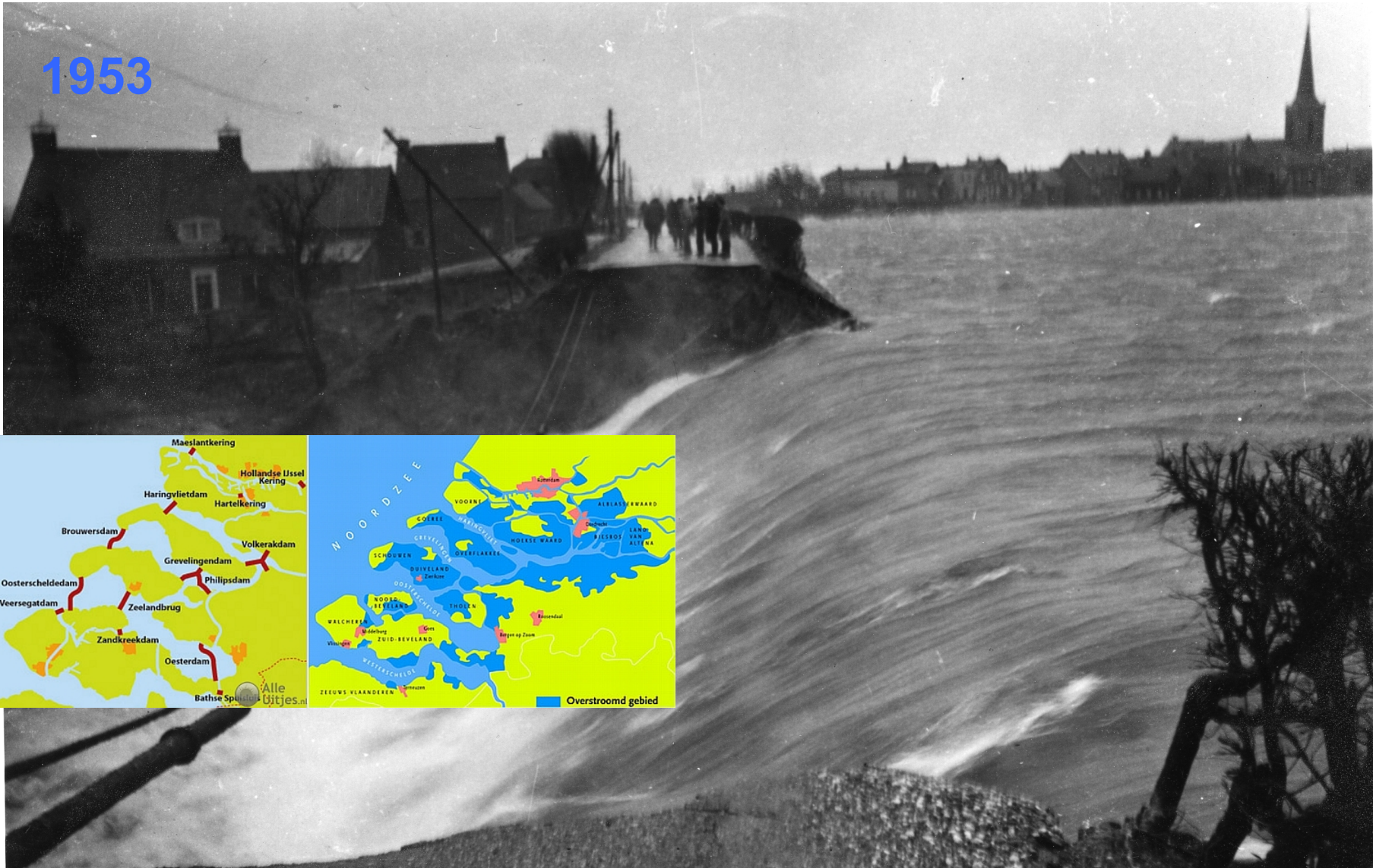
## Comitting to the principles

- **Patient first**
- **Creating identity**
- **Facilitating the professional**
- **Efficient hospital management**
- **Safety first**
- **Healing is leading**
- **Sustainability is cheaper in the end**



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- ③ Erasmus MC
- ④ **concept & building process**

1953



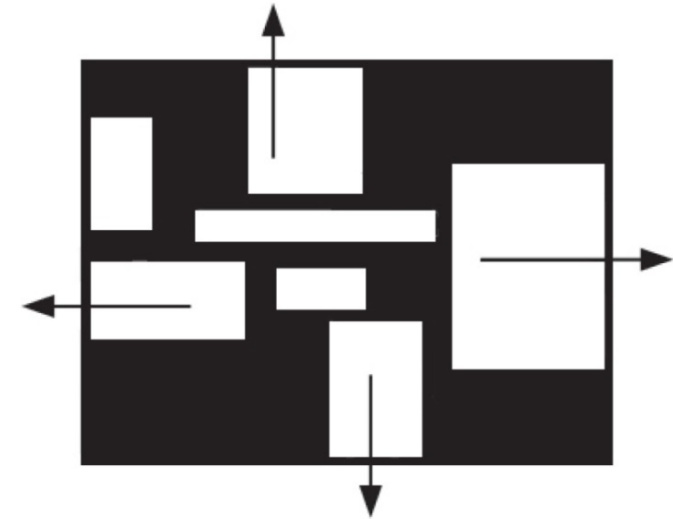
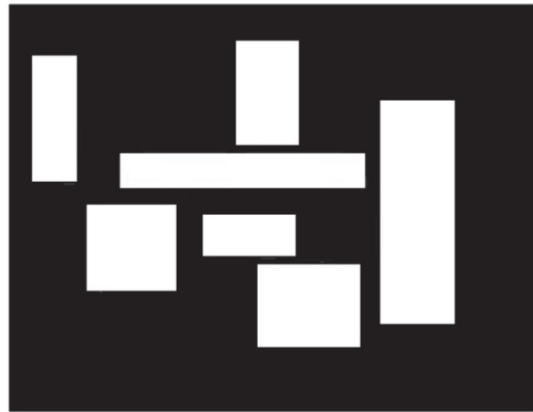
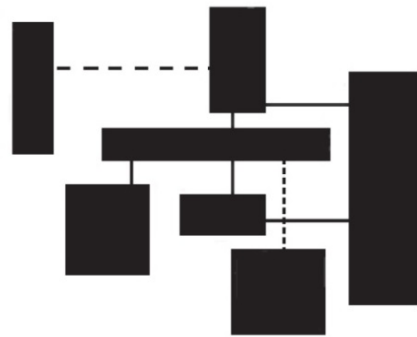
# Dike inspires logistic spine





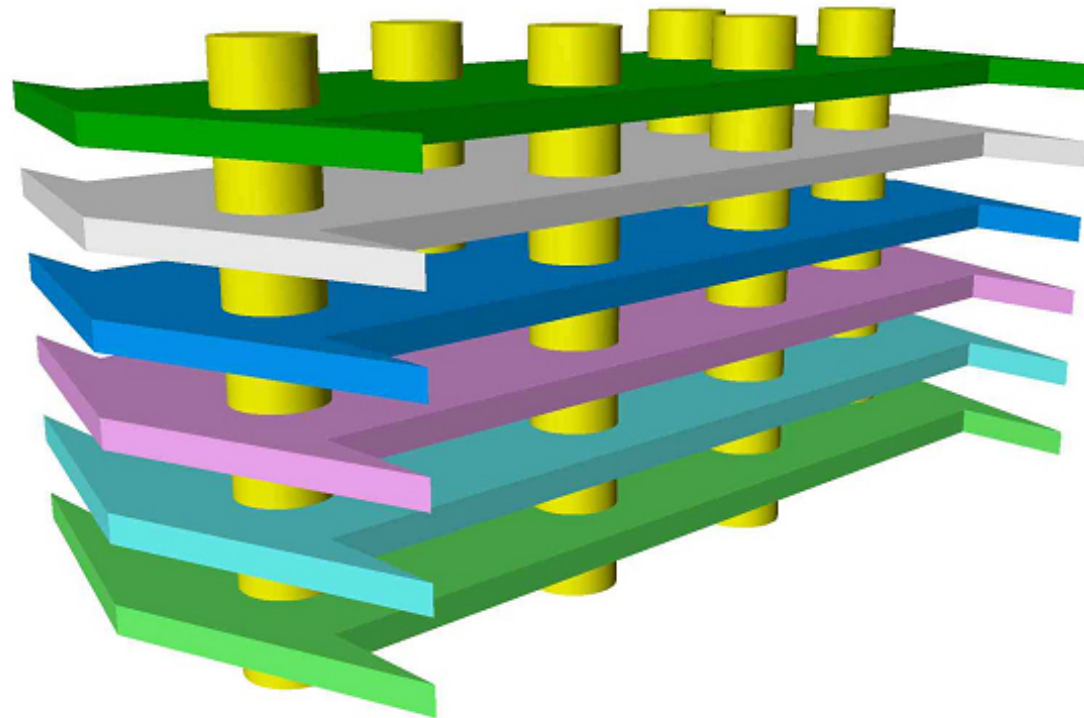
# Concept

from connected pavilions to compact building with elegant atria



# Spatial Matrix

Patient themes



clinic

building systems

OR/ICU

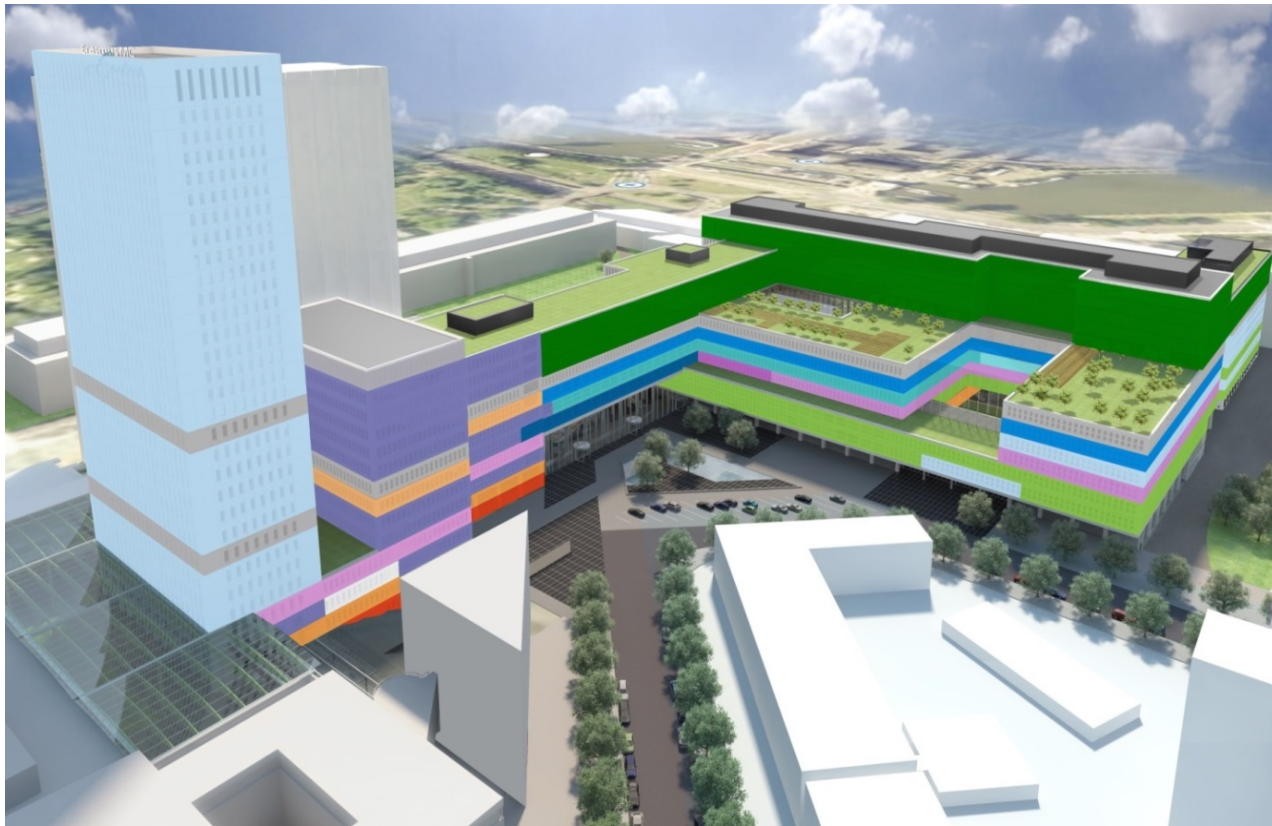
diagnostics

day care

out patient clinic



# Concept embedded



# Floorplans



Situation / Layer 0



Layer 1



Layer 2



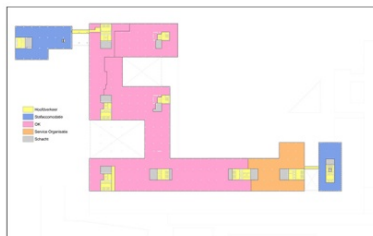
Layer 3



Layer 4



Layer 5



Layer 6



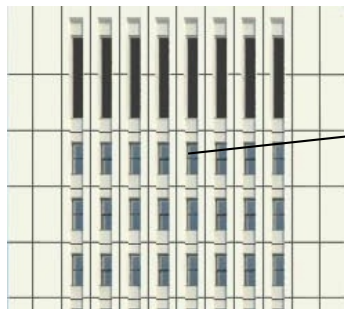
Layer 8 - 10



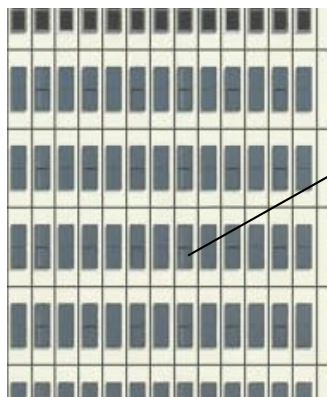
Layer 11 - 12



# Variety in facades



Vertical strips



Oriel frames



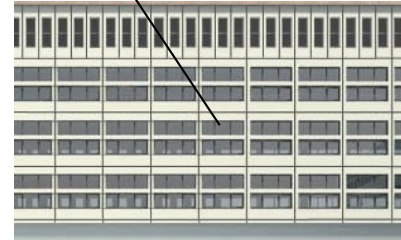
Double facade



Transparent ground level



Grouped frames



Horizontal strips

# Building a medical city in the city



2009



2011

# Building a medical city in the city



2013



2015

# Building on a functioning hospital site











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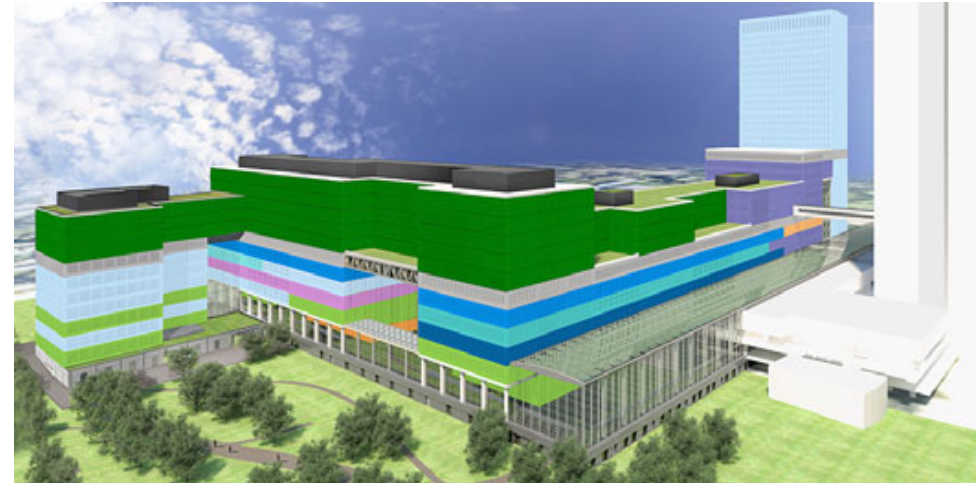
# Safety: Emergency Department



# Healing: Public spaces

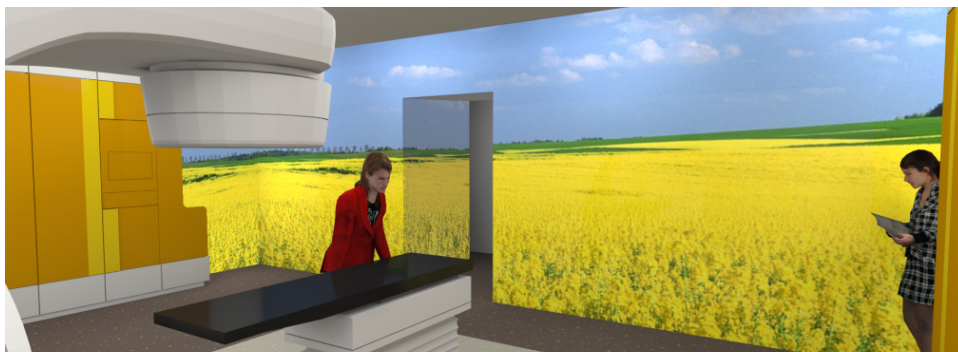


# Sustainable - Flexibility



# Sustainable - Oversize

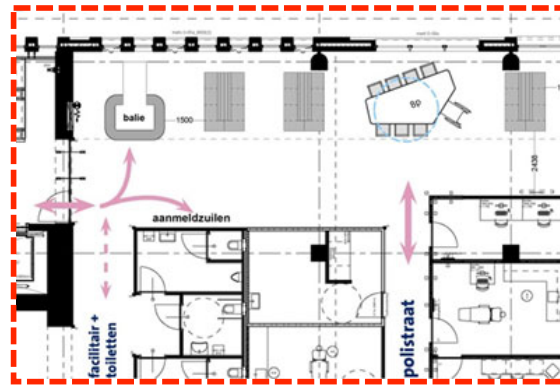
Radiotherapy vaults



# Orientation









**EGM**  
architecten

**JUURLINK** **GELUK**  
STEDENBOUW LANDSCHAP



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## ‘on stage’

- Beds
- Facilities
- Nursing stations
- Meeting area
- Kitchen
- Welcome lounge

## ‘off stage’

- Staff area



# One person bedrooms

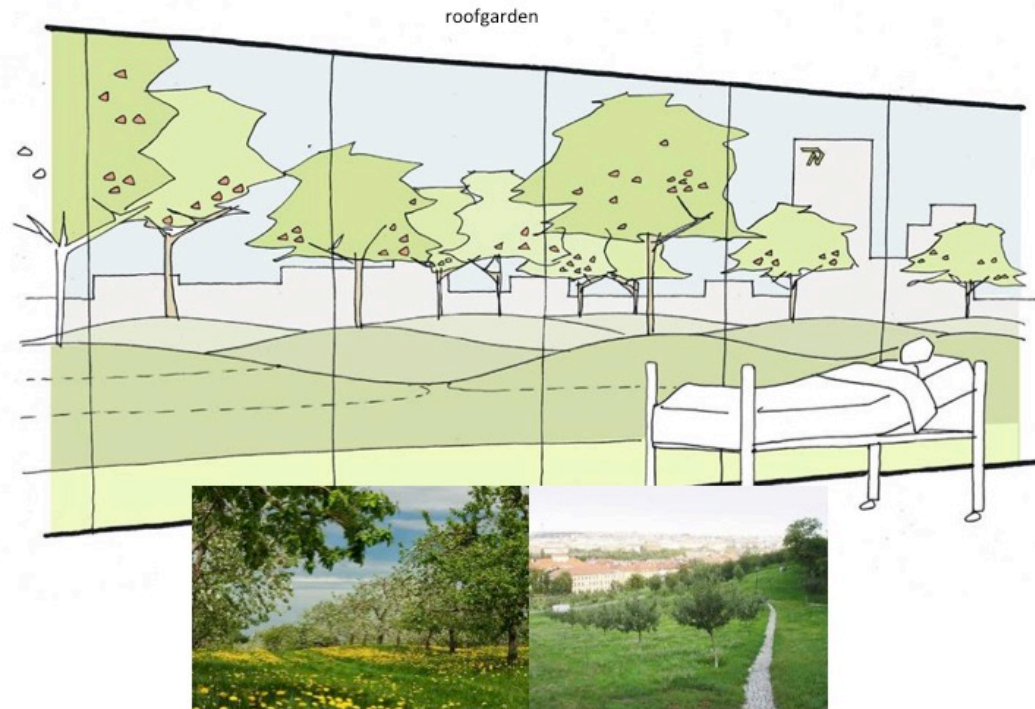


# Patient communication





# Green rooftops





# daycare



# ICU

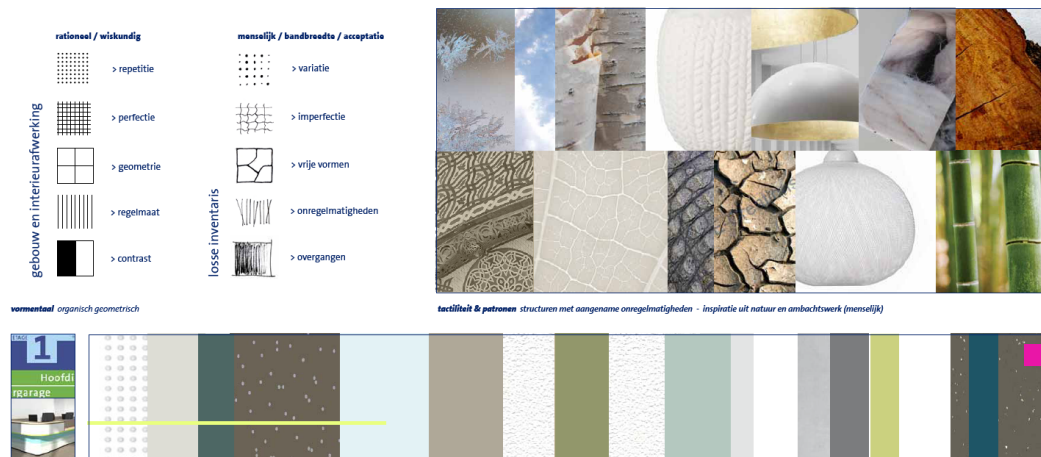




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# Be ready to adapt your plan, but stay true to the concept...

- evaluation of designs at every step
- technical Program of Requirements (2005) as our 'Bible', but...
- absorbing another patient theme on the go



**Dette er slutten og takk for oppmerksomheten**

