

# ROOM FOR RAIN

Placemaking with Blue-Green Infrastructure

# Rain & Roots

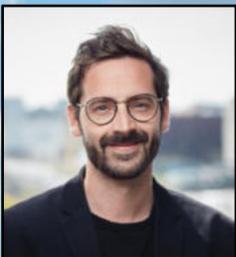
Rainwater, Ramboll and I

**RAMBOLL**



**POČÍTÁME S VODOU 2023**

Modro-zelená infrastruktura v uličním prostoru — od detailu k údržbě  
Praha, 9. listopadu 2023

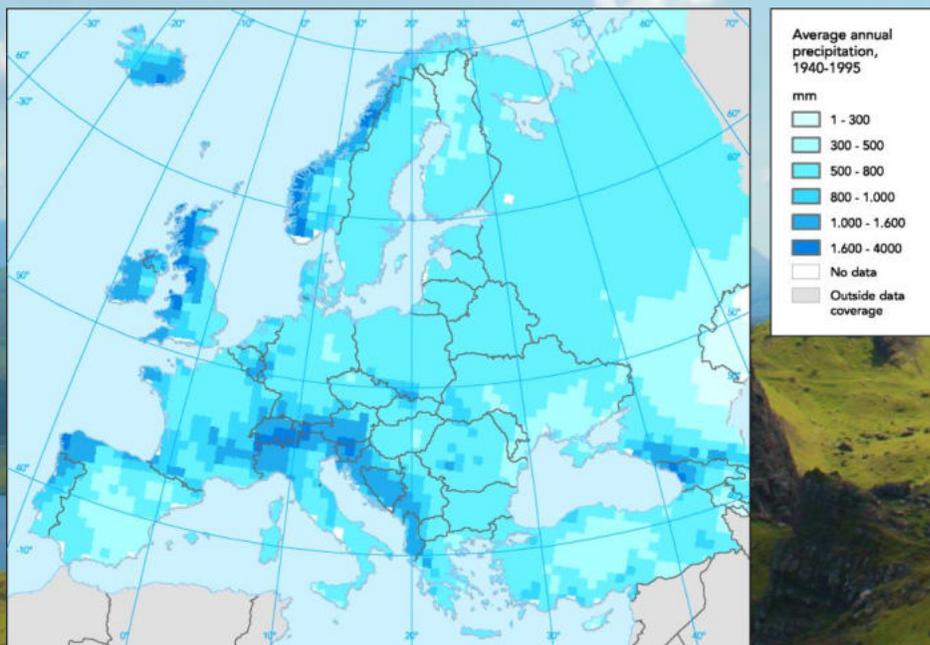


## Neil Mclean Goring

Landscape Architect

13 years of experience (3 in Scotland, 10 in Denmark)

*Old Man of Storr  
Isle of Skye  
Scotland*



3

Green Growth

2

Concrete Critique

1

Rain and Roots

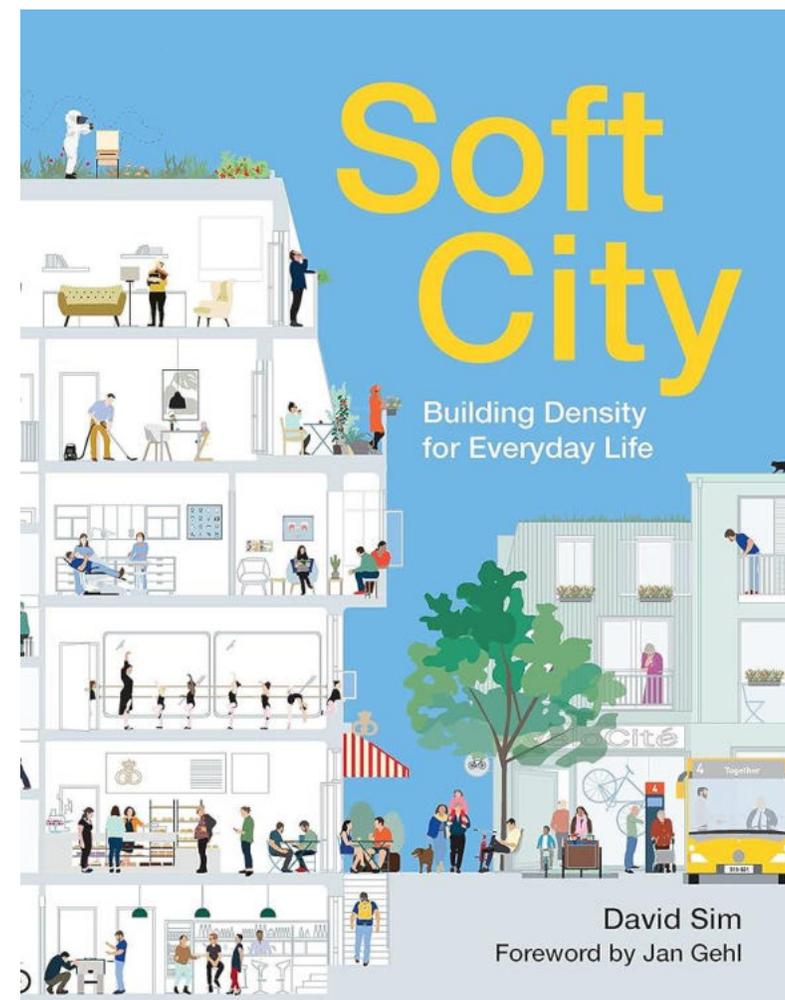
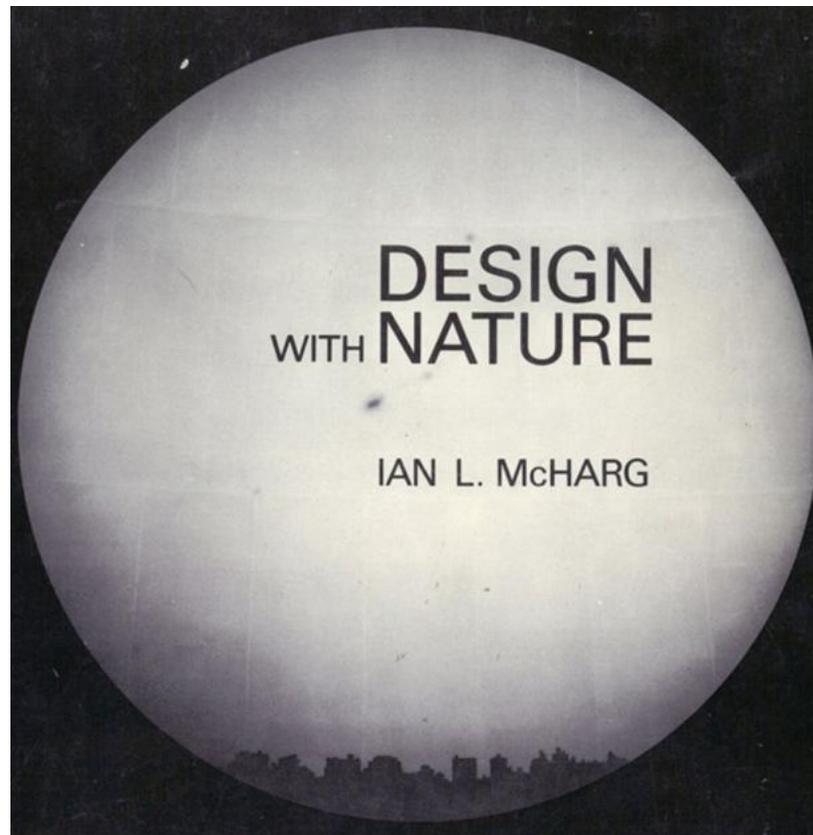
# BOOK RECOMMENDATIONS

## Design with Nature (1969)

- Ecological planning
- Overlay mapping
- Natural Systems

## Soft City (2019)

- Human-Centered Design
- Active Transportation
- Reclaiming Public Spaces



# RAMBOLL IN BRIEF

- **Independent** architecture, engineering and management consultancy
- Founded 1945 in Denmark
- **18,000 experts**
- Over 330 offices in 35 countries
- Significant presence in the Nordics, the UK, North America, Continental Europe, and Asia Pacific
- EUR 2.2 billion revenue
- **Owned by Ramboll Foundation**

## Services across the markets:

- Buildings
- Environment & Health
- Transport
- Energy
- **Water**
- Management Consulting
- Architecture and Landscape

# GEOGRAPHICAL FOOTPRINT



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# Concrete Critique.

From monuments to individuals

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RAMBOLL HQ

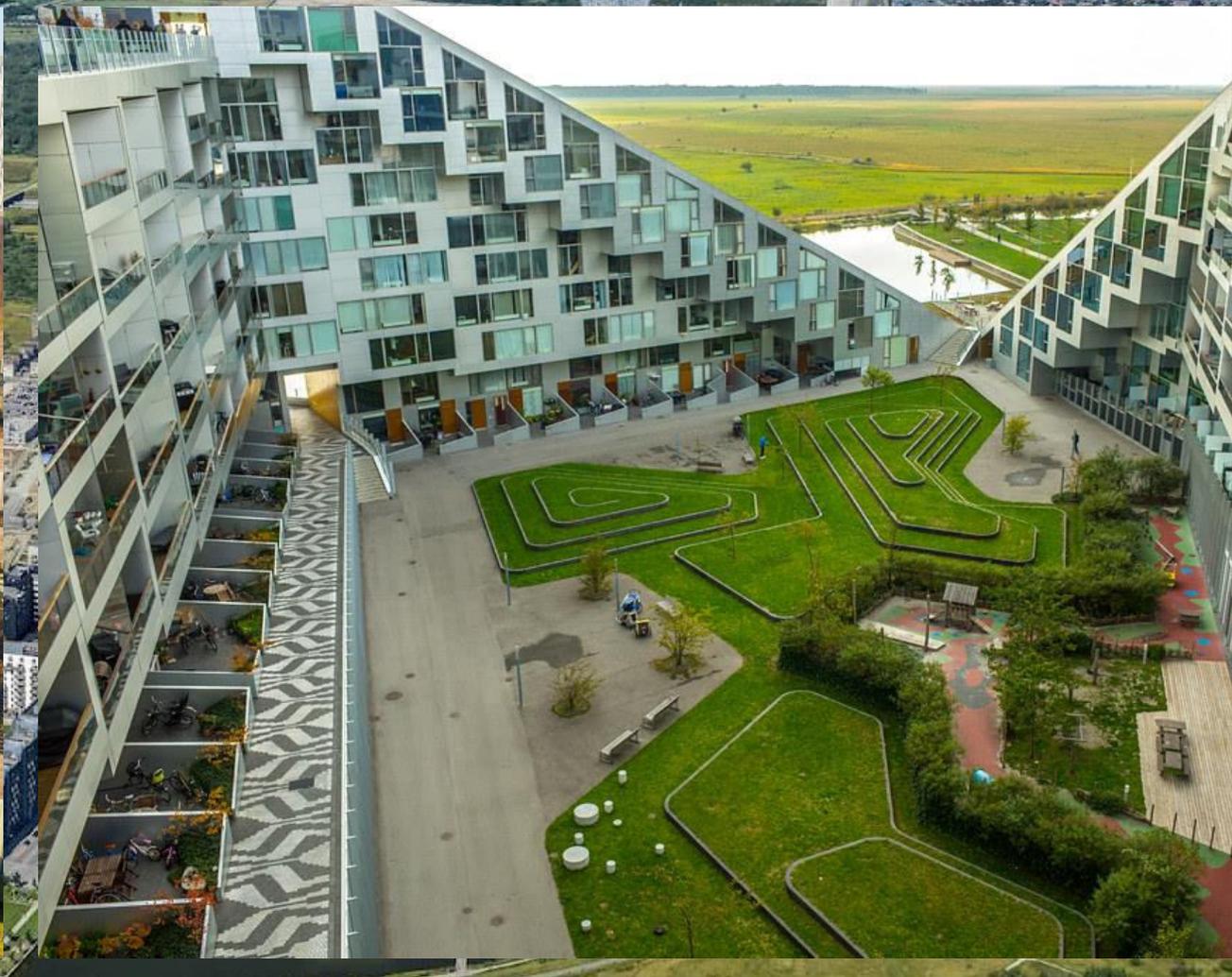
RAMBOLL



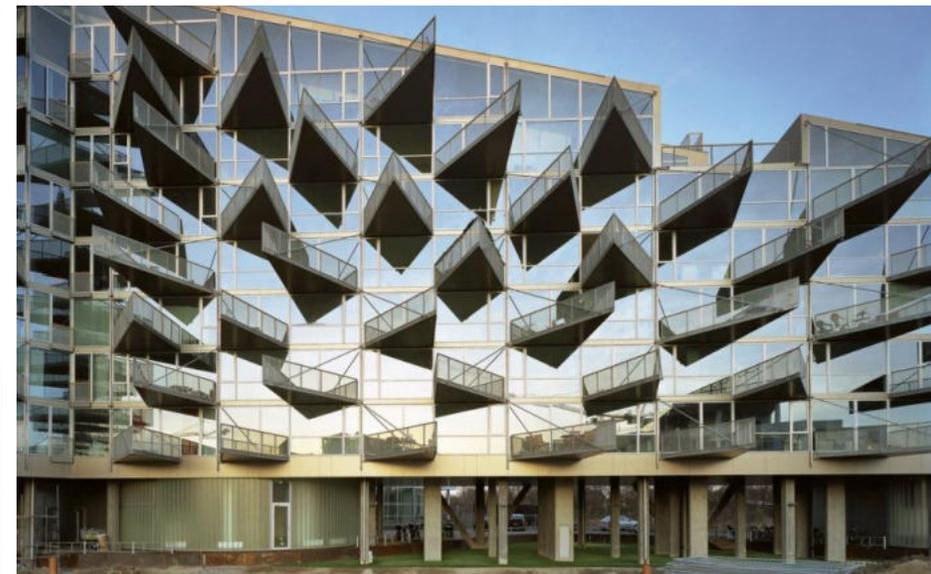
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# ØRESTAD, COPENHAGEN



# ØRESTAD STREETScape



## TWO DANISH ARCHITECTS

**BIG**  
BJARKE INGELS GROUP

**Gehl**  
Architects

RAMBOLL

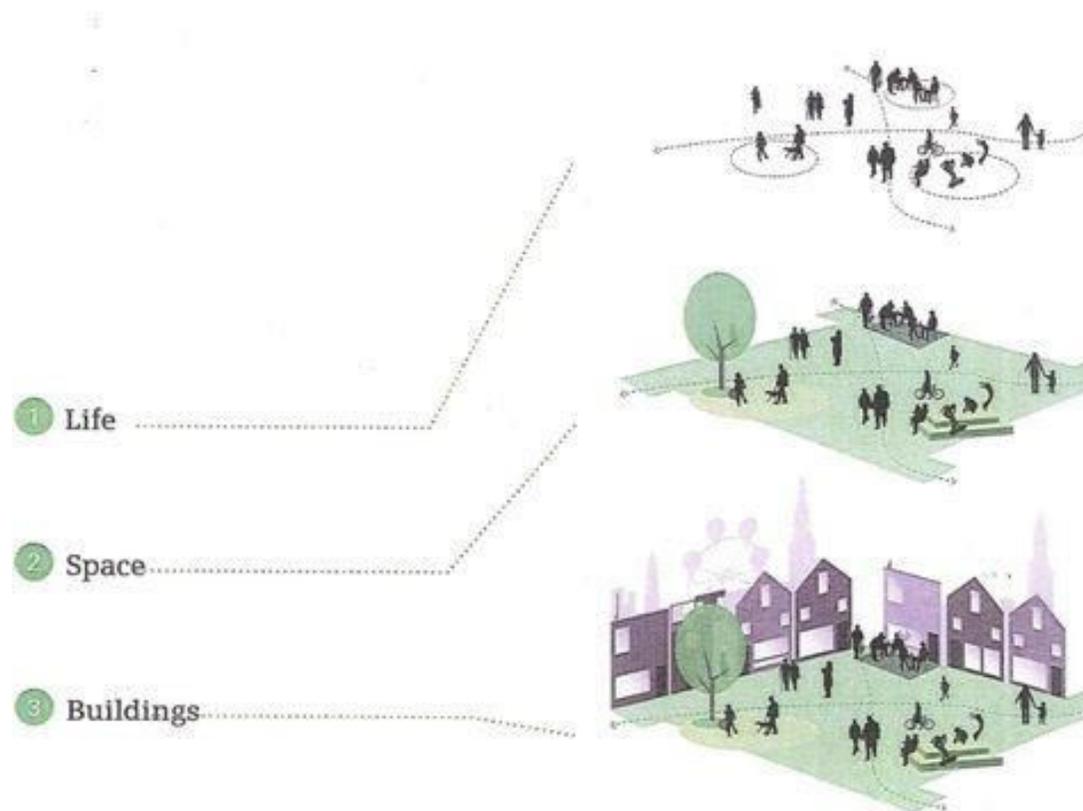
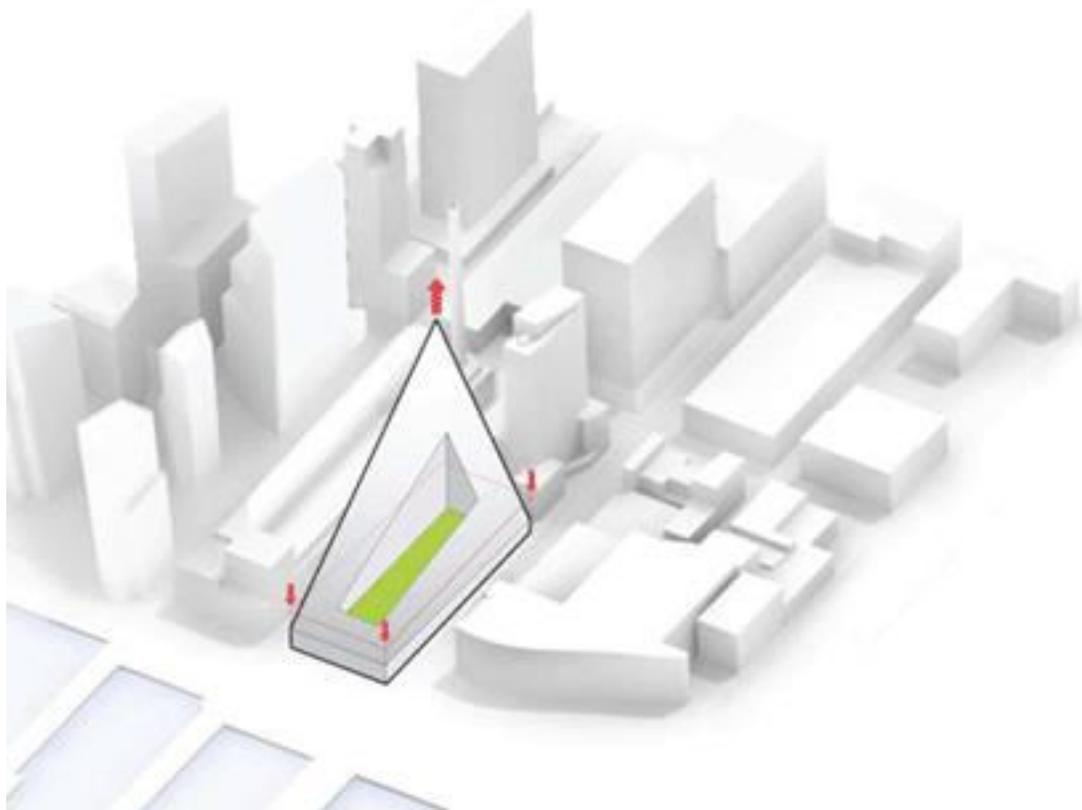


počítáme  
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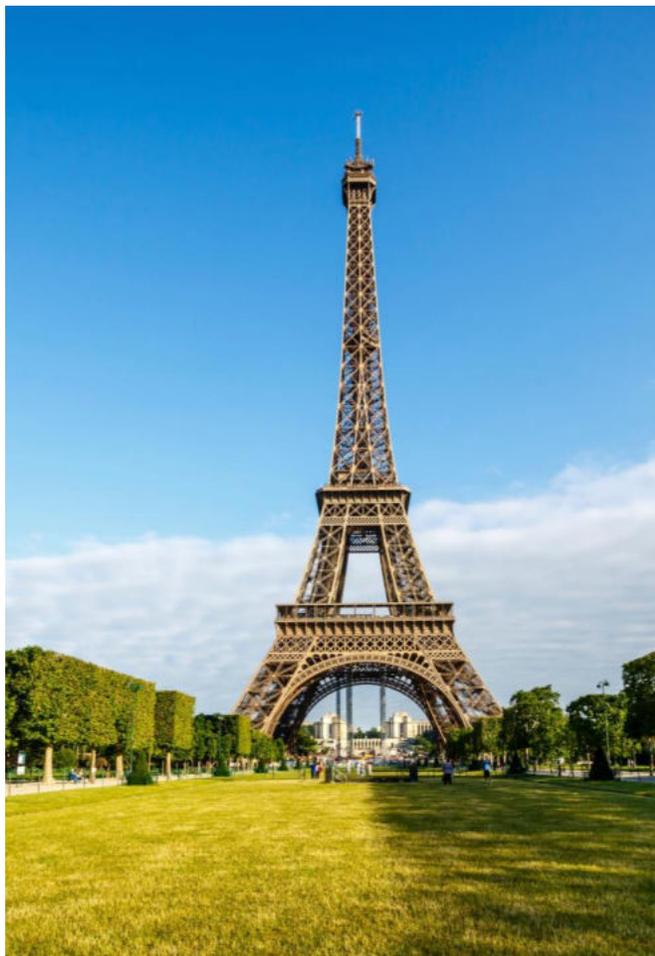
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# TWO DIFFERENT APPROACHES



## ZEITGEIST SPIRIT OF THE TIME



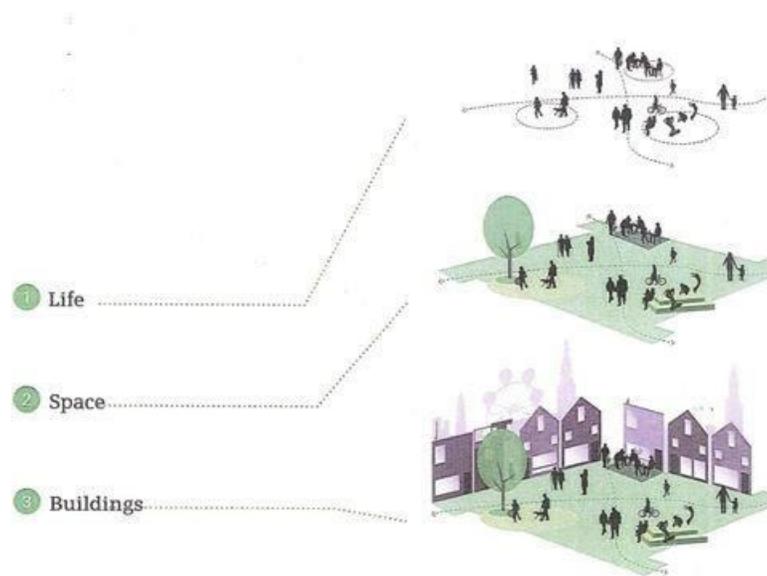
RAMBOLL

## GENIUS LOCI SPIRIT OF THE PLACE



# A NEW ZEITGEIST

## IKEA, COPENHAGEN



### • CLIMATE?



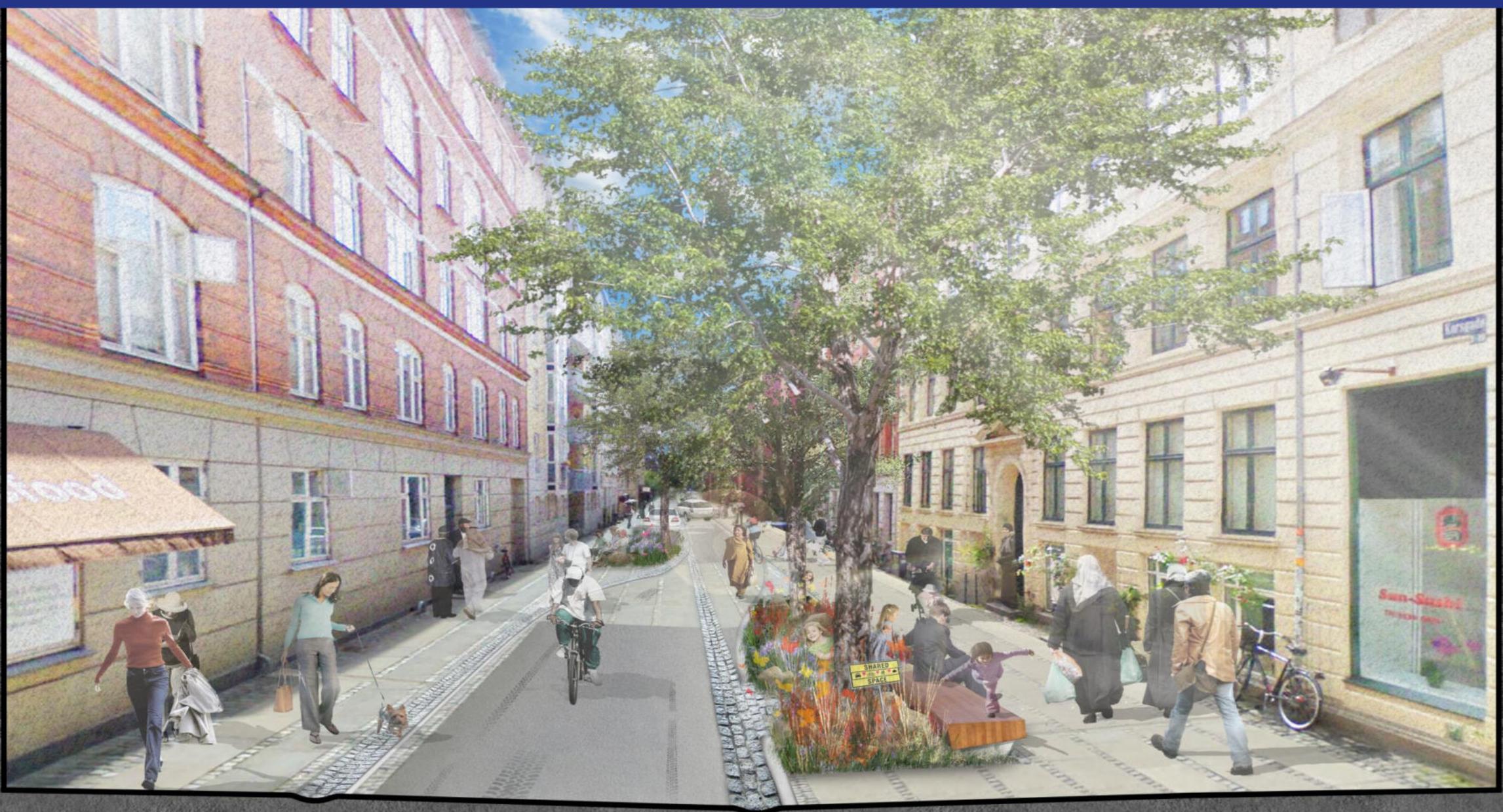
# CLouDBURST hits Copenhagen

**BEFORE:  
Extensive Flooding**

02 July 2011: > 150mm  
**RAIN** fell in **2 HOURS.**







KORSGADE – GREEN STREET



KORSGADE – FLOODED STREET



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# Green Growth

Example built projects

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# HANNEMANNS PARK

BRINGING BLUE-GREEN TO OUR DOORSTEP



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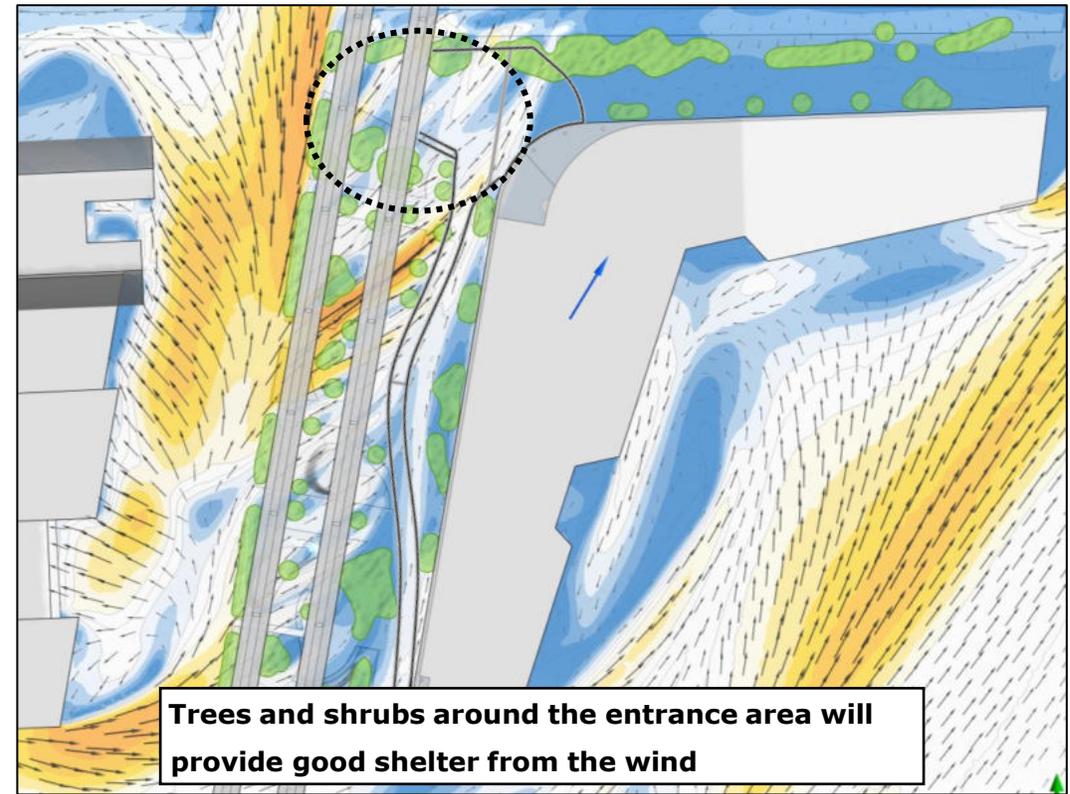
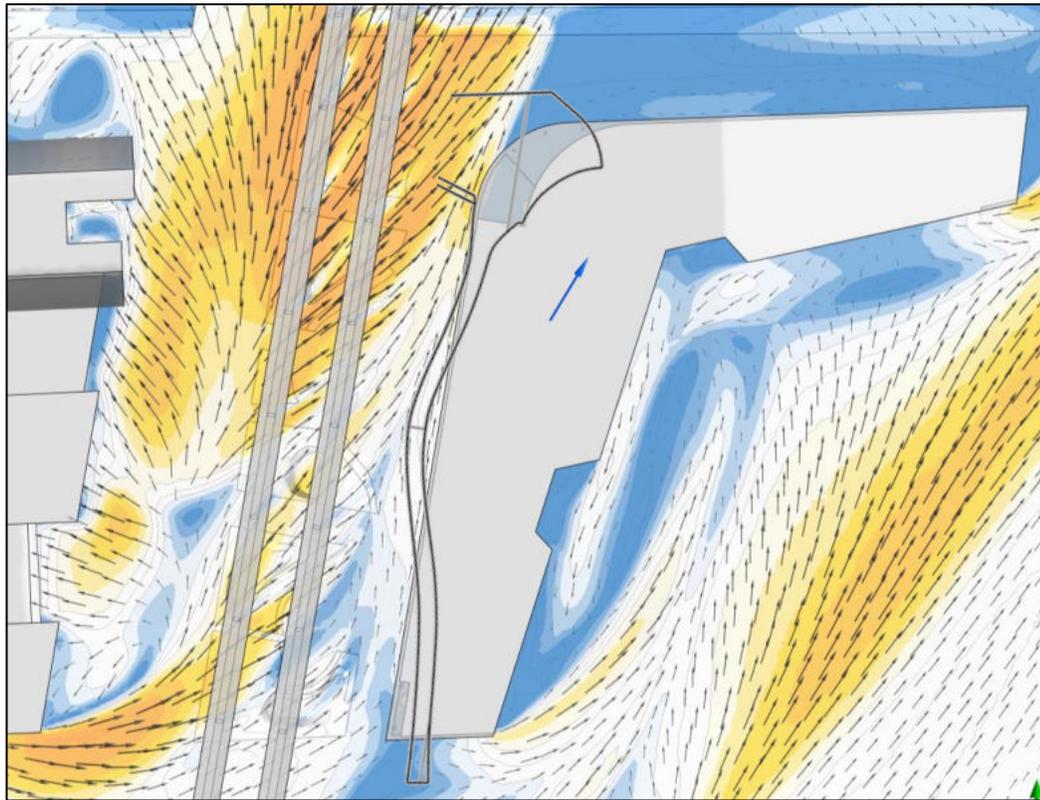
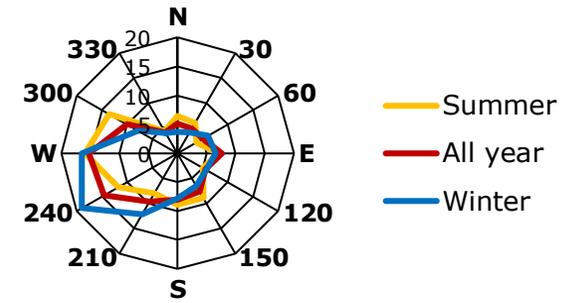
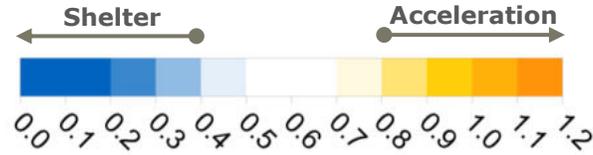


# EXISTING CONDITIONS

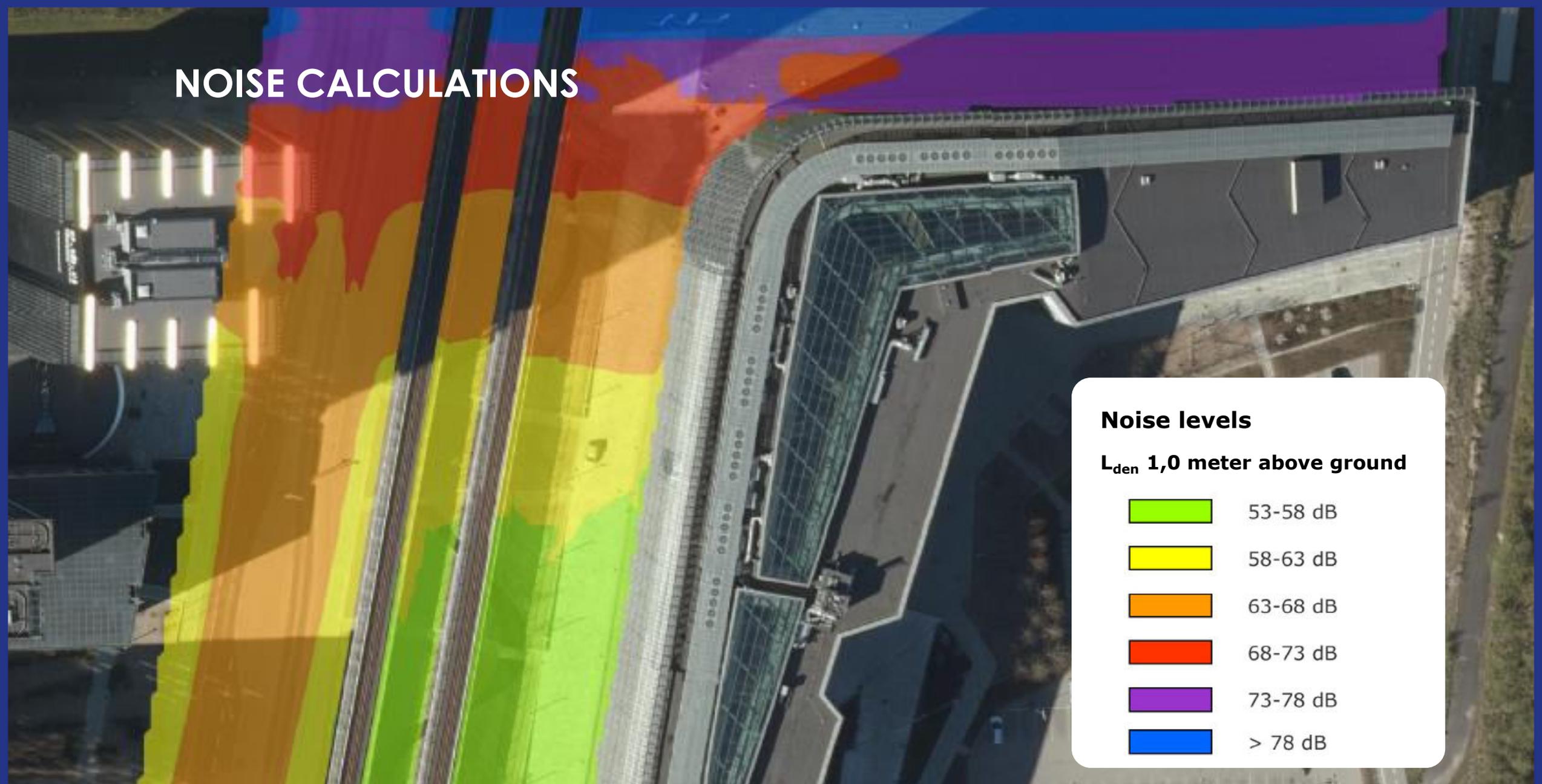


# RELATIVE WIND SPEED AT PEDESTRIAN LEVEL

RESULTS SHOWN AT A PLANE 1.7M ABOVE GROUND



# NOISE CALCULATIONS

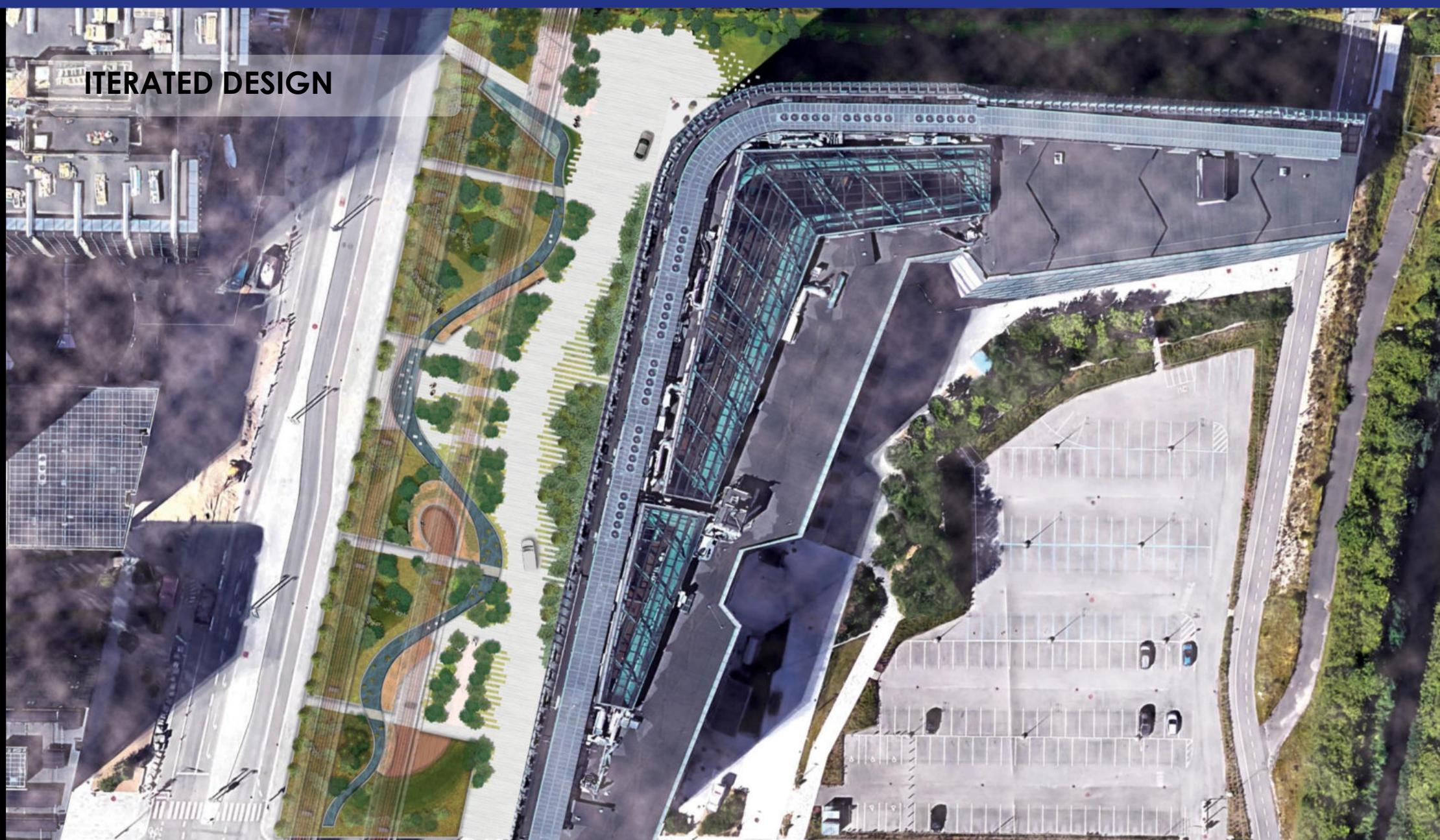


## Noise levels

$L_{den}$  1,0 meter above ground

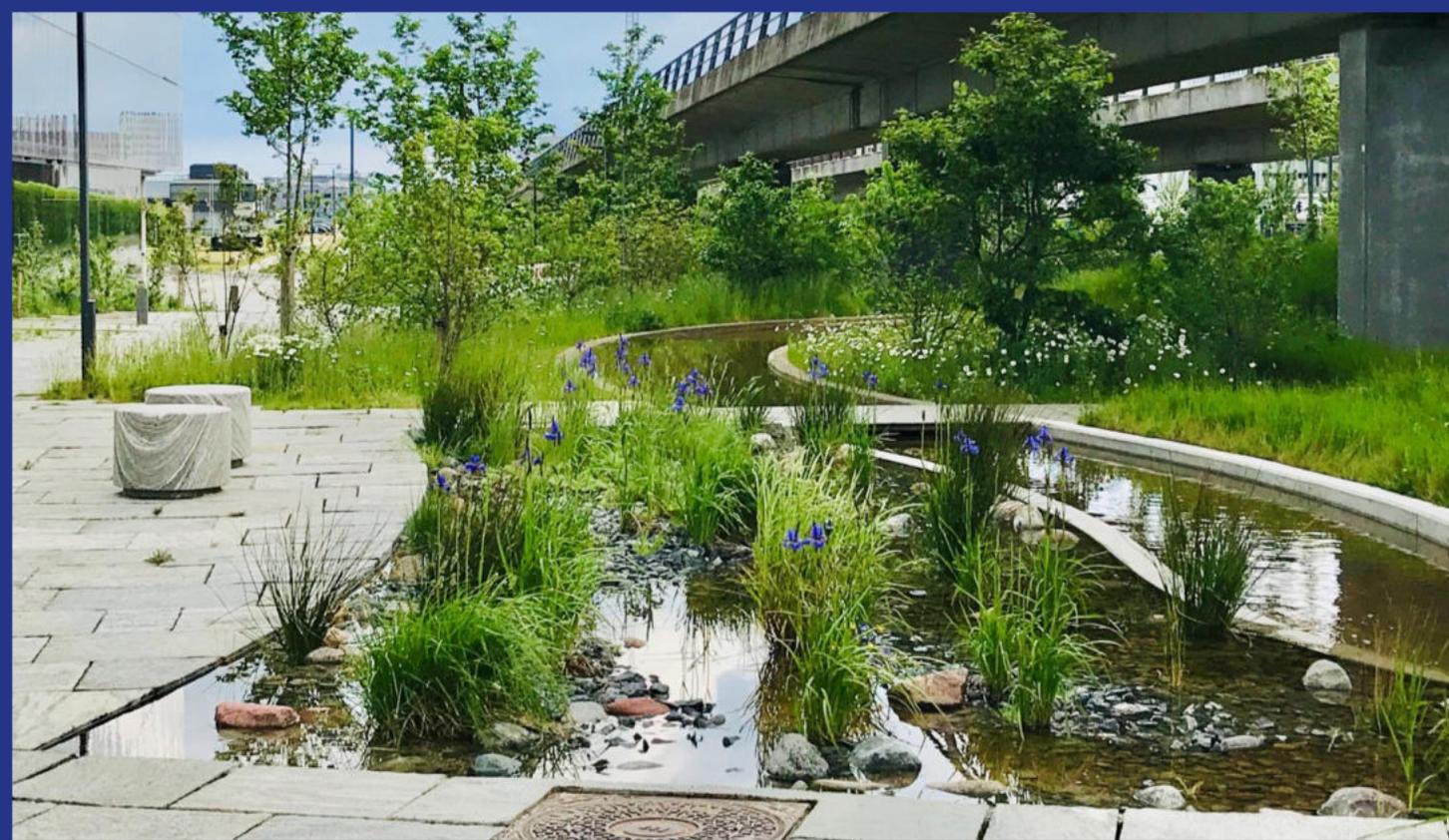
	53-58 dB
	58-63 dB
	63-68 dB
	68-73 dB
	73-78 dB
	> 78 dB

ITERATED DESIGN



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# SKT. ANNÆ SQUARE

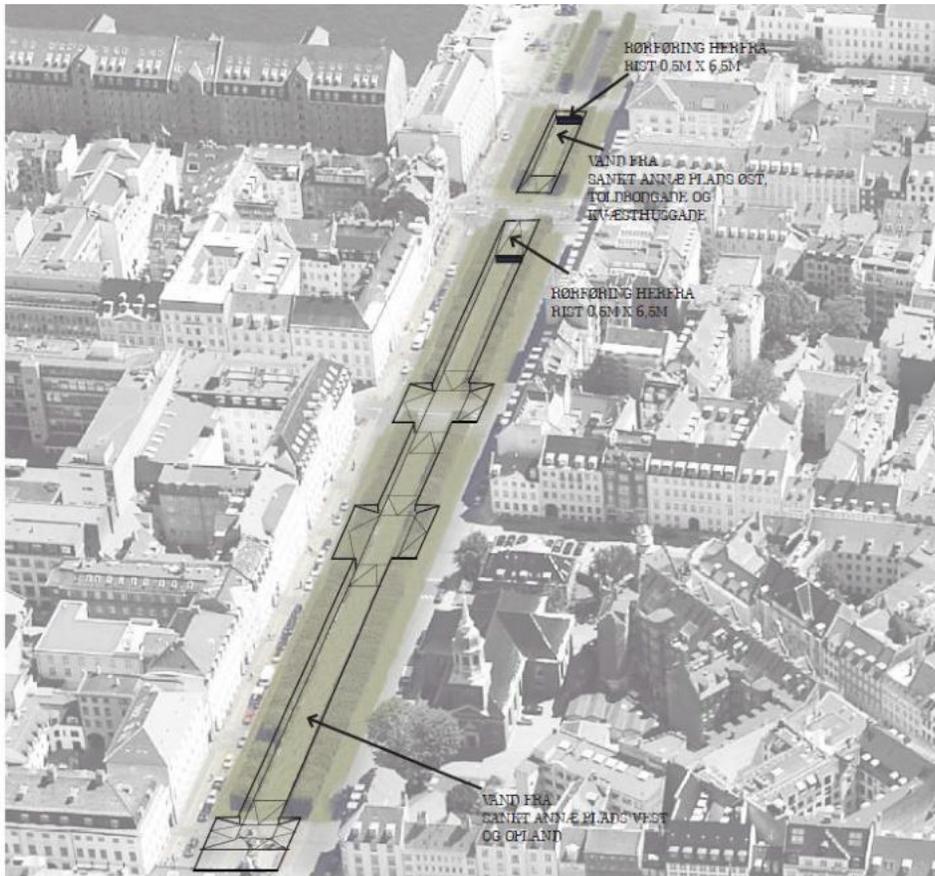
## 2<sup>ND</sup> JULY 2011







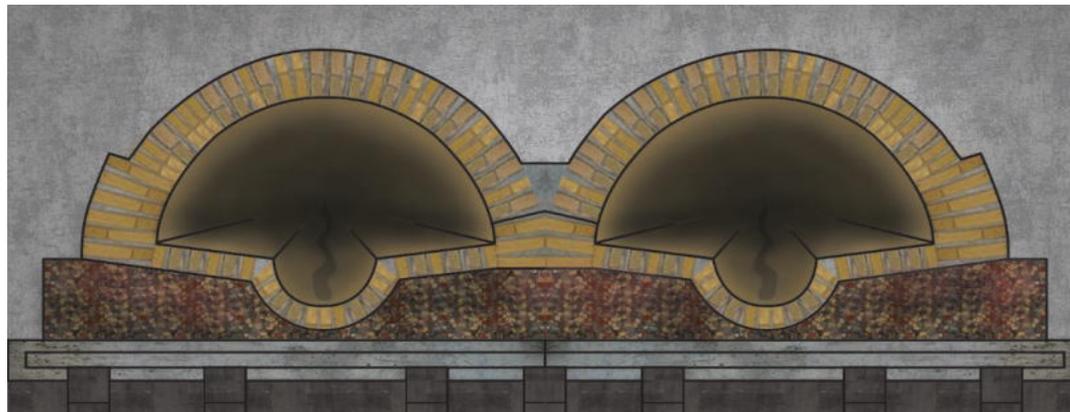
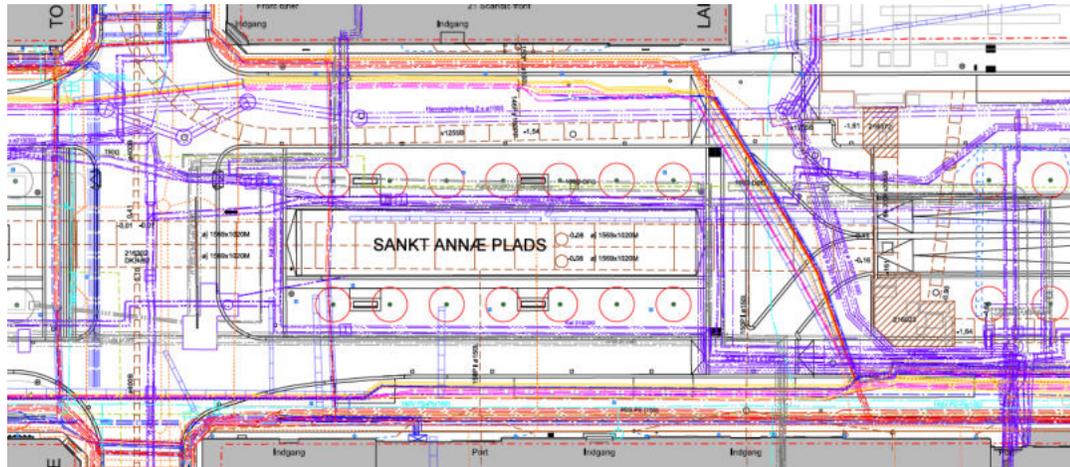
# CASE – SKT. ANNAE SQUARE



## VISION

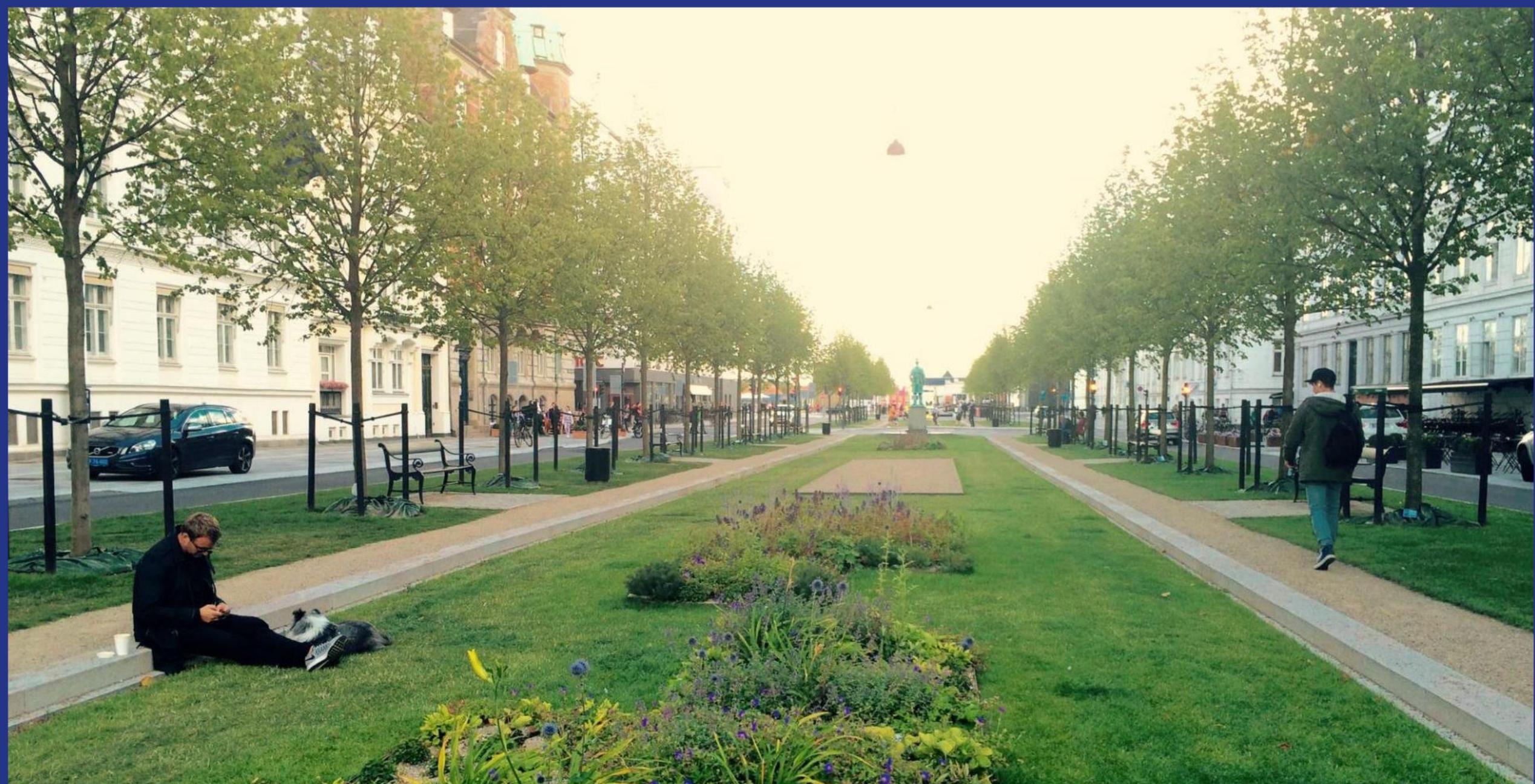
- Blue-green river along the square to store and transport storm water
- central green belt larger and more lively and inviting
- possibilities for cafés and restaurants to have outdoor service
- As few underground pipes as possible until outlet

# CASE – SKT. ANNAE SQUARE

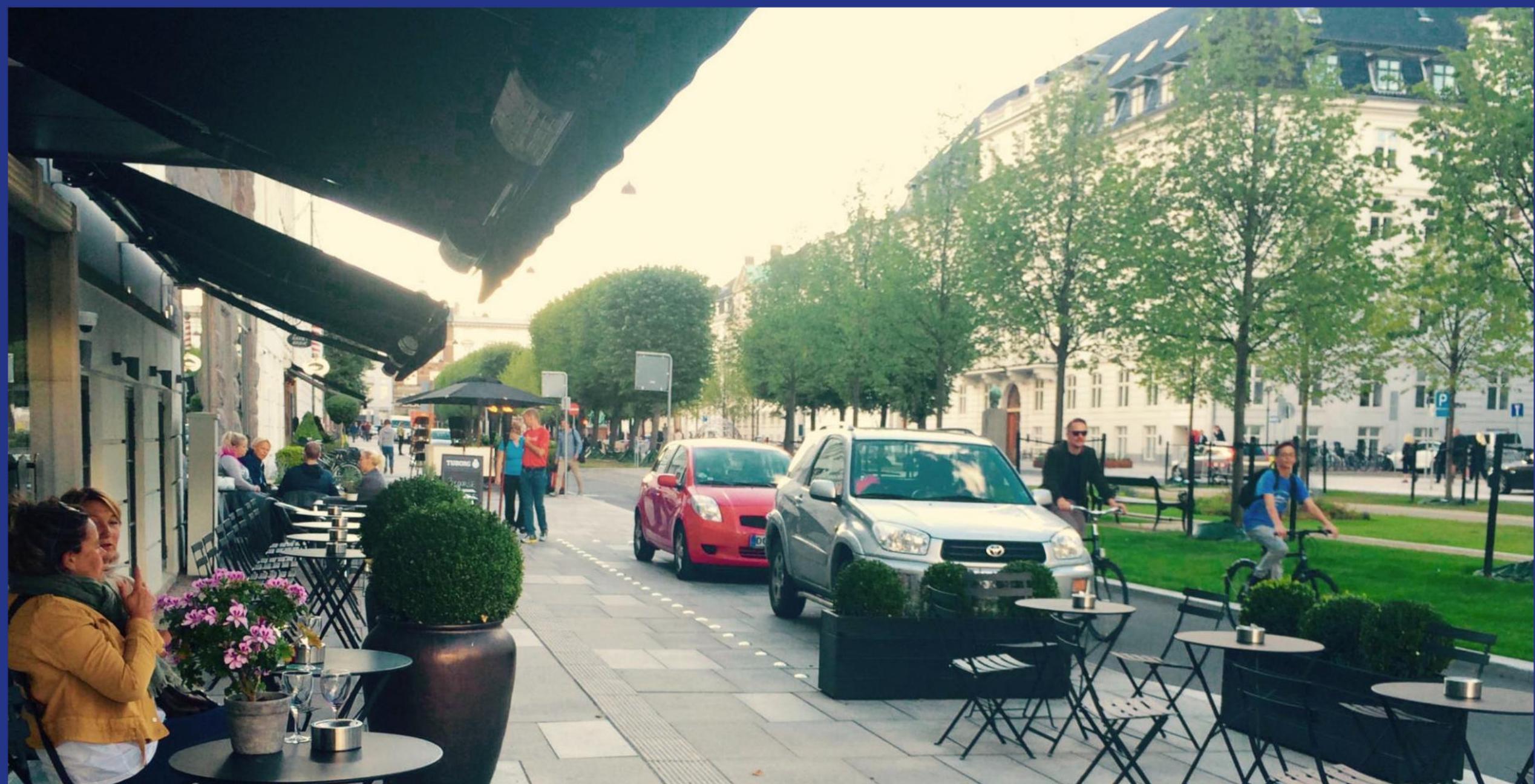


## REALITY

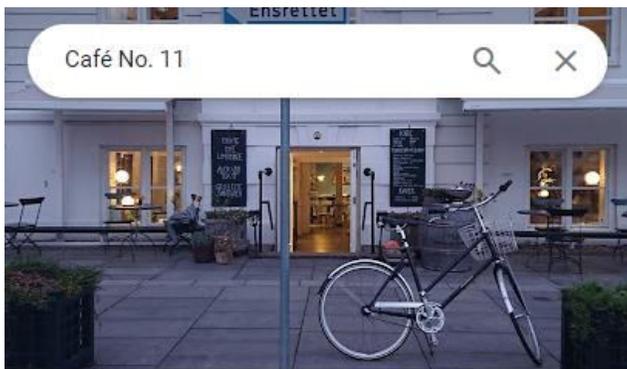
- Ridiculous amount of existing pipes
- Location of said pipes relatively unknown
- Lots of various forgotten historic constructions
- Short preliminary design phase, considering project size and complexity





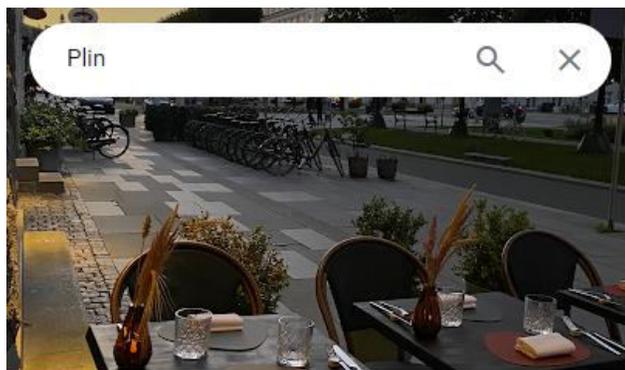


# EVERYONE WANTS IN



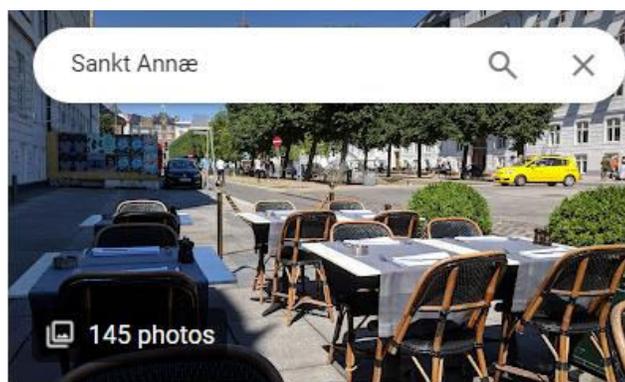
Café No. 11

3.9 ★★★★★ (321) ⓘ · \$\$  
Restaurant



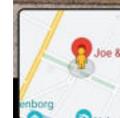
Plin

4.2 ★★★★★ (76) ⓘ  
Italian restaurant



Sankt Annæ

4.5 ★★★★★ (279) ⓘ · \$\$\$  
Restaurant



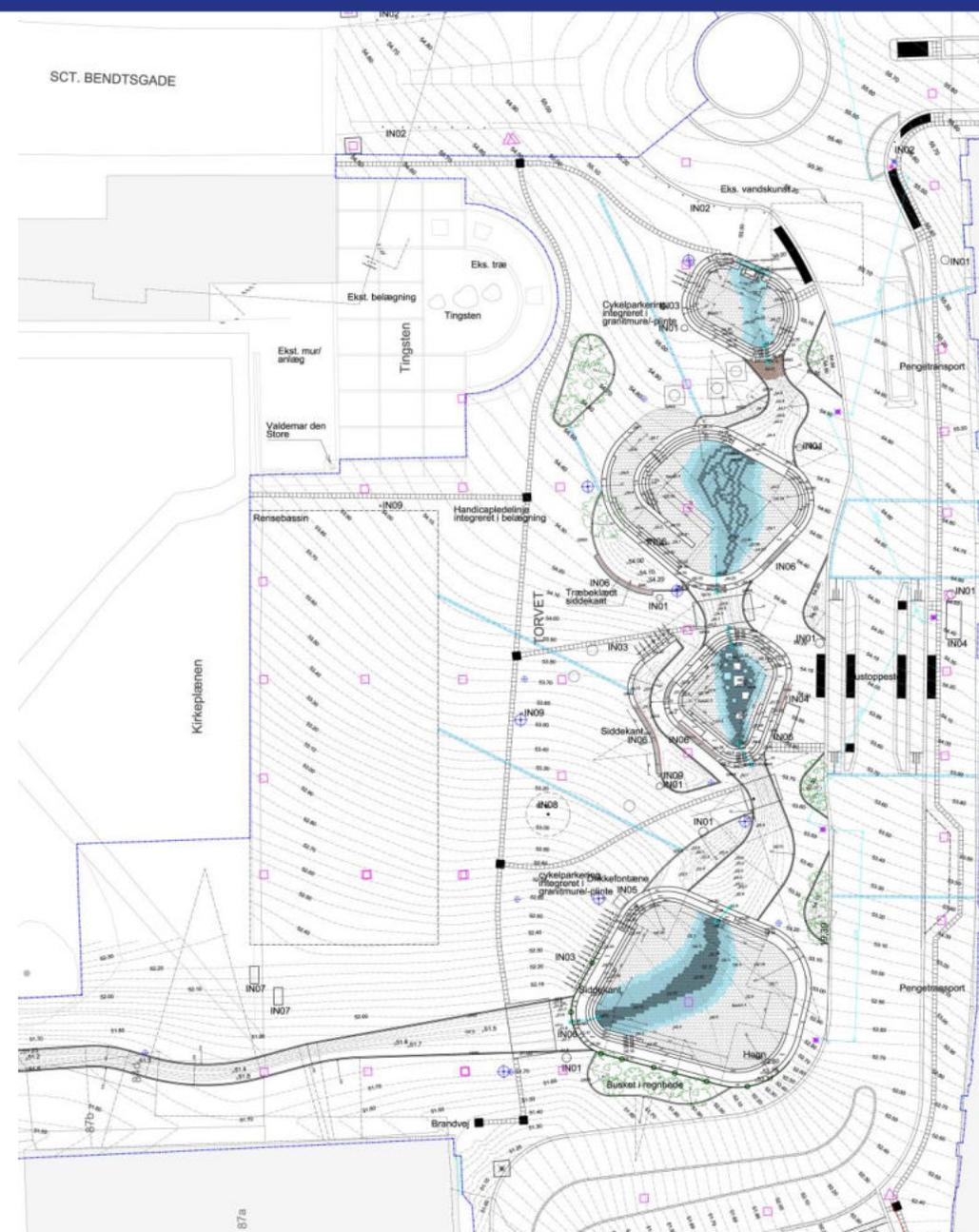
# RINGSTED SQUARE

CLIMATE ADAPTATION OF A TOWN SQUARE –  
STORMWATER, PLACEMAKING AND TRAFFIC



PREVIOUS CONDITION





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s vodou

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Overløbskant









# Thank you for listening



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