

The New Nature Museum Competion

W5

THEME C-New Building Sustainablity

PROJECT LEADERS

Erez Elle, HQ Architects, Israel Jan Johansson, Architects MMA, Denmark

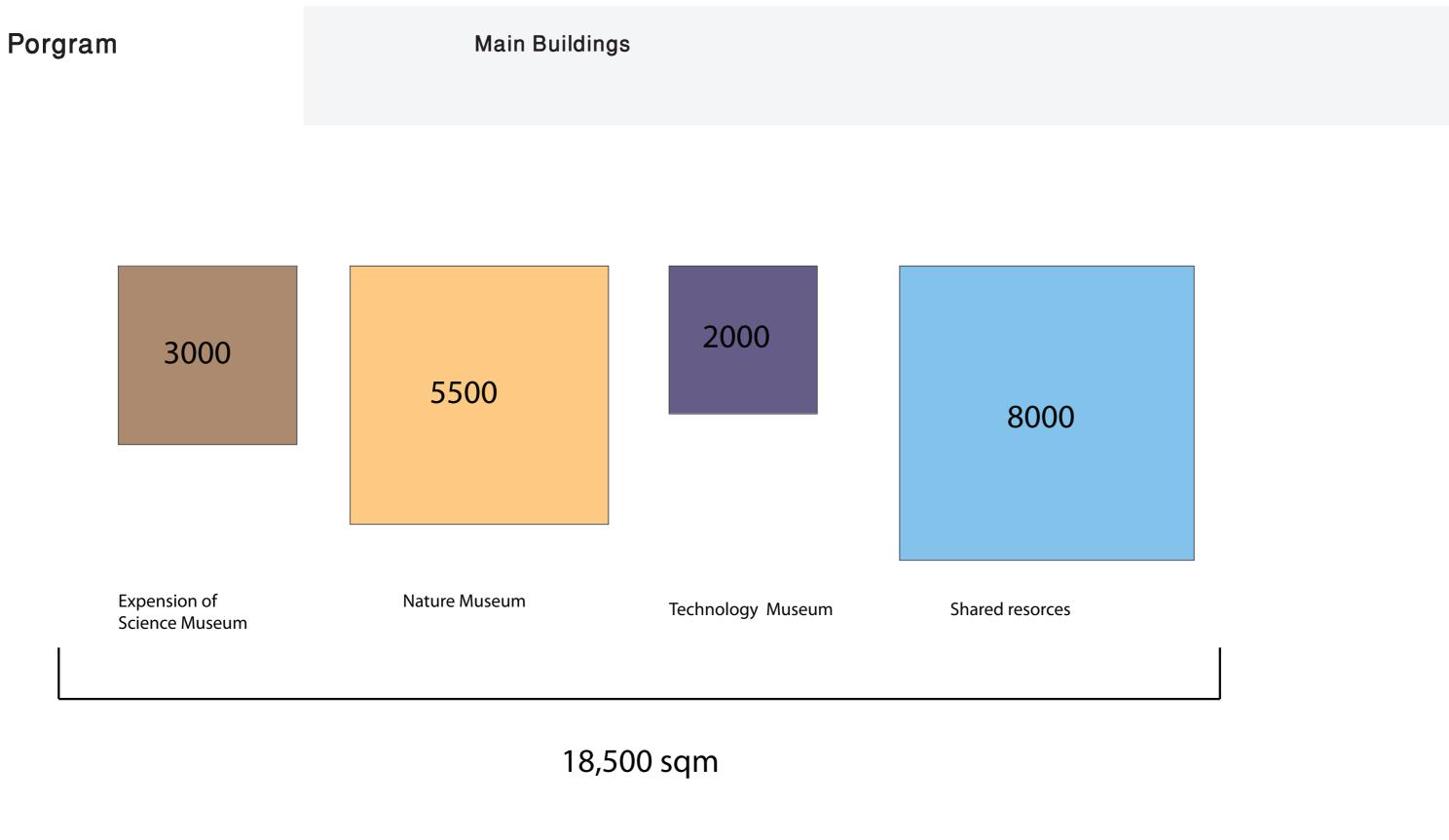
PARTICIPANTS

Moshe Ben David Ariel Pila Oded Wieder Noa Pilosof Nahalal Serok Elad Amir Zalman Nemoy Sasha Shiniakin Ron Hadar Maisa Bello Jakub Tyc Alaa Shaher Syaj Lily Sapir Yehuda Barki

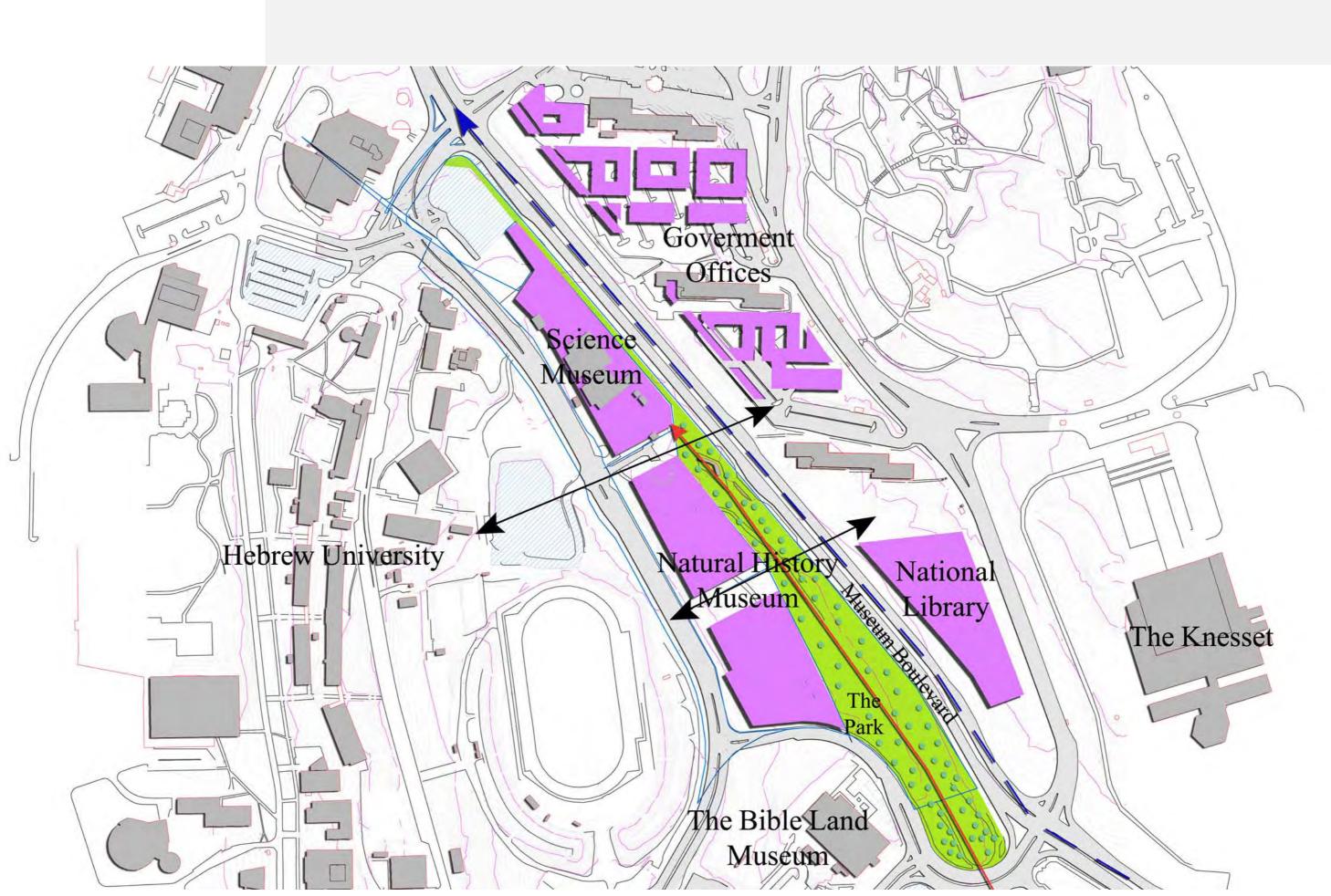
The New Nature Museum Competiton

Gross area:23,000 sqm

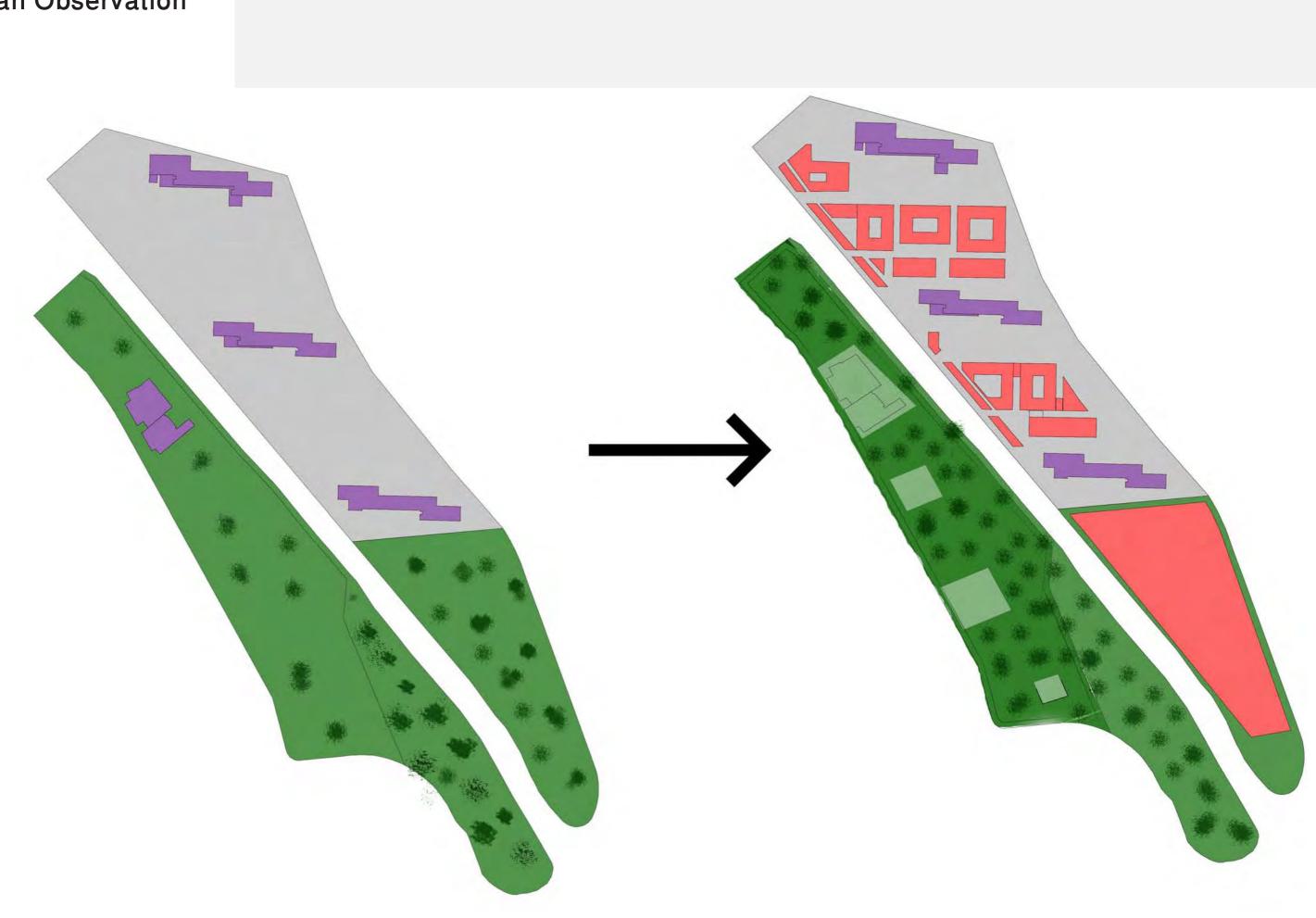




Urban condtions



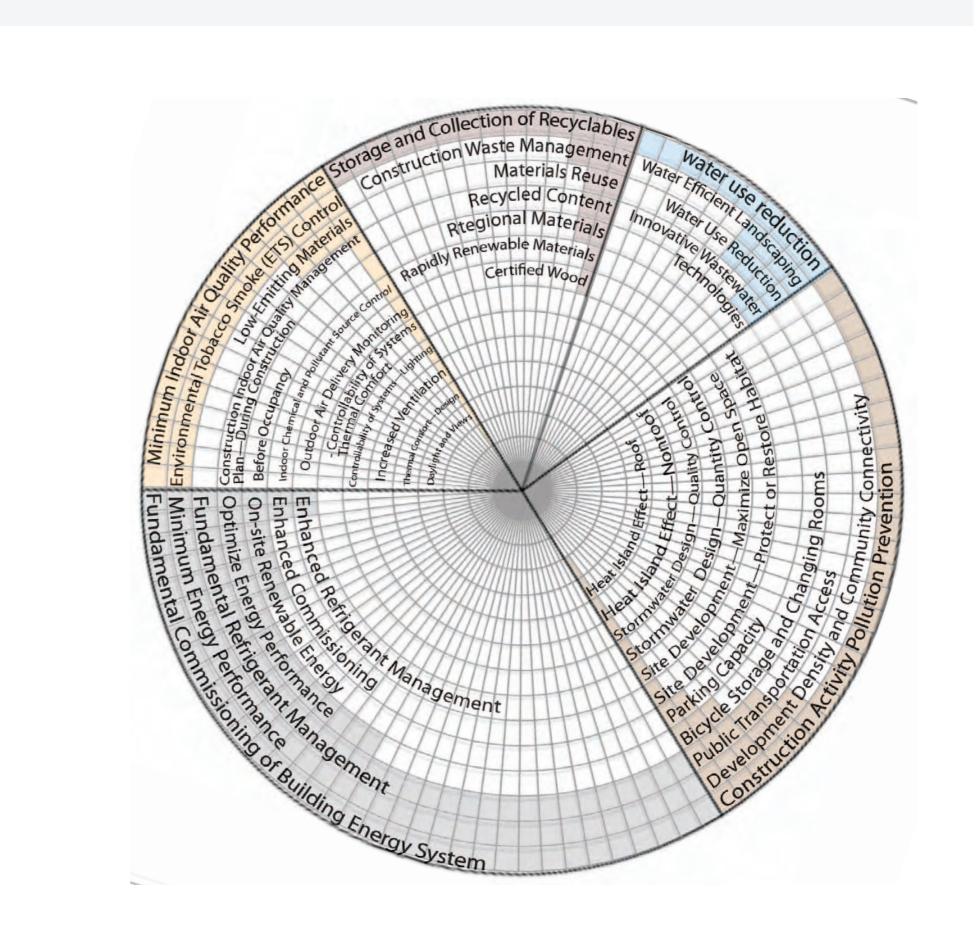
Urban Observation



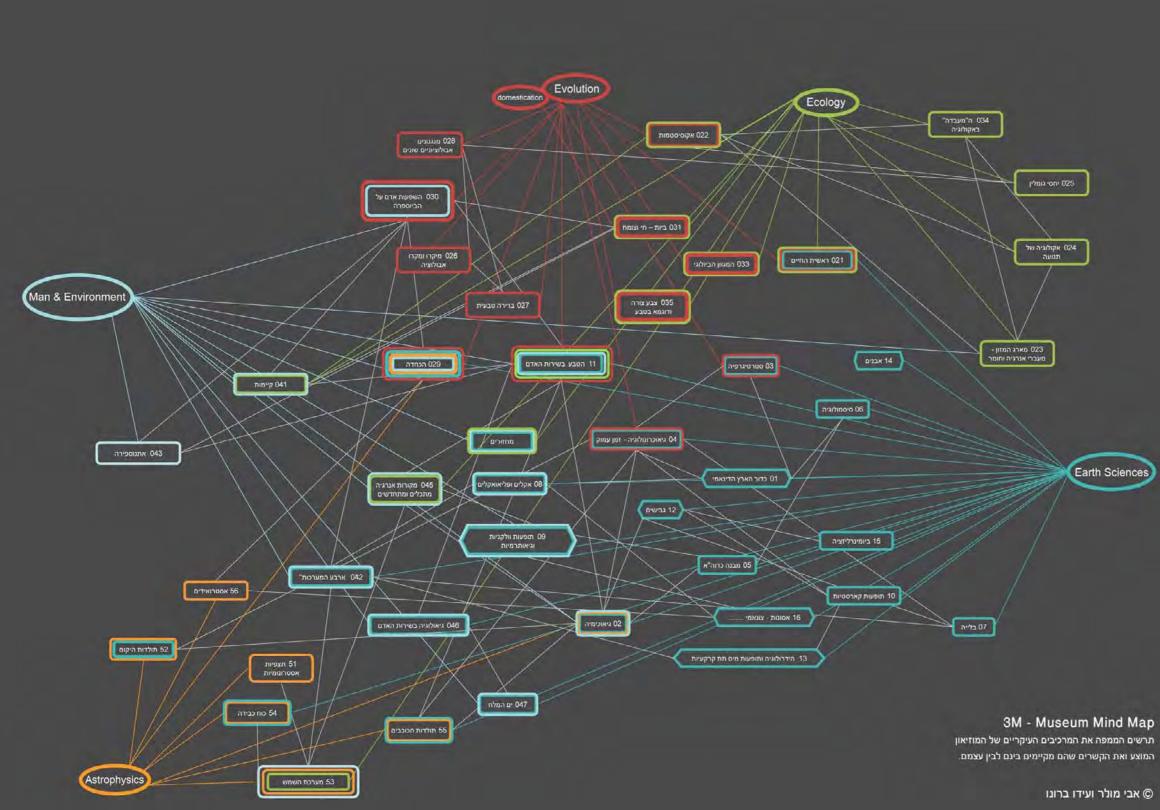
LEED-Points System

Enrgy	35pt
Site	26pt
Indoor Envirment	15pt
Materieal and Resources	14pt
Water	10pt
Innvotion in Design Regional Priority	6pt 4pt

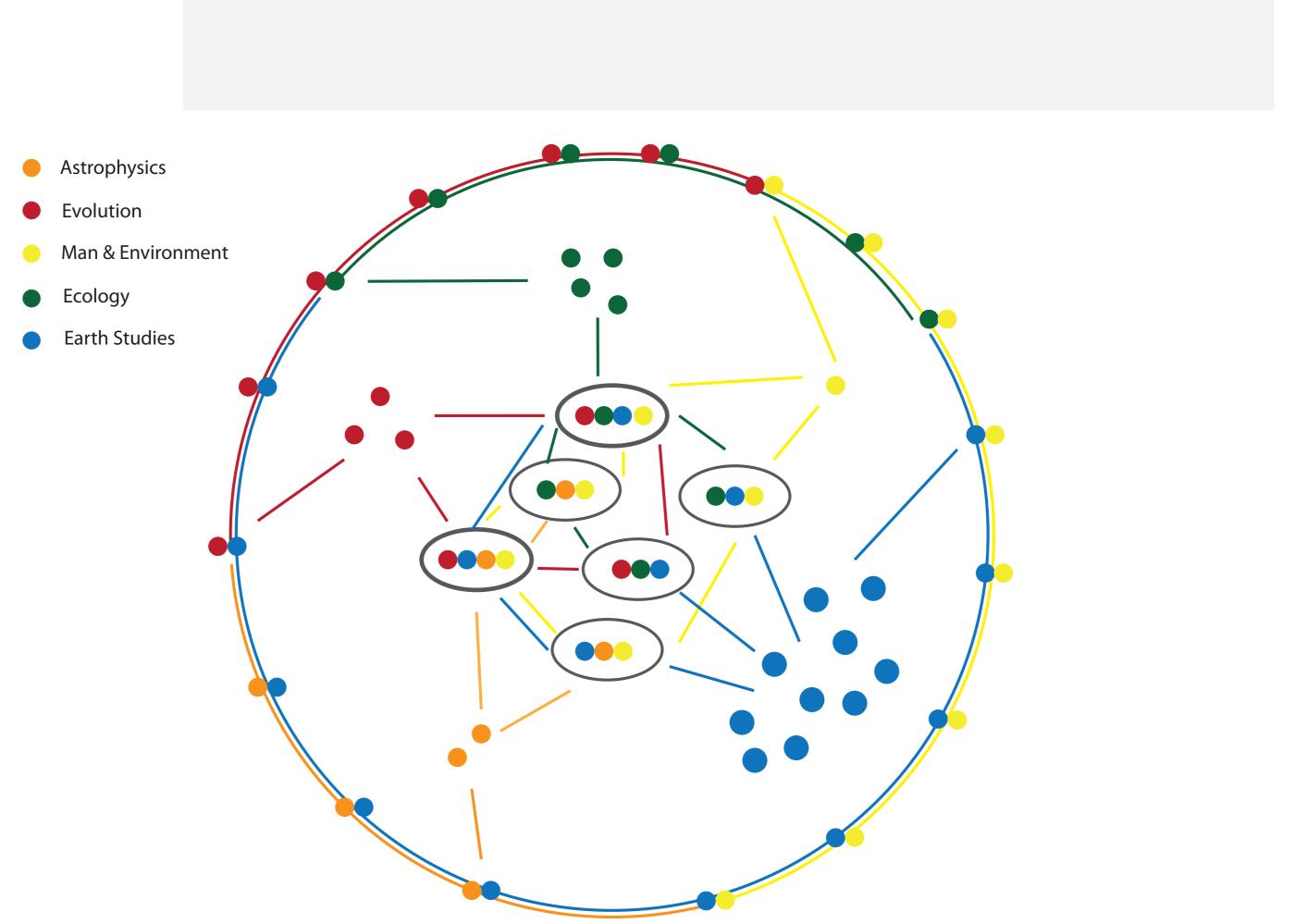
gold 60-79 platinun 80-above



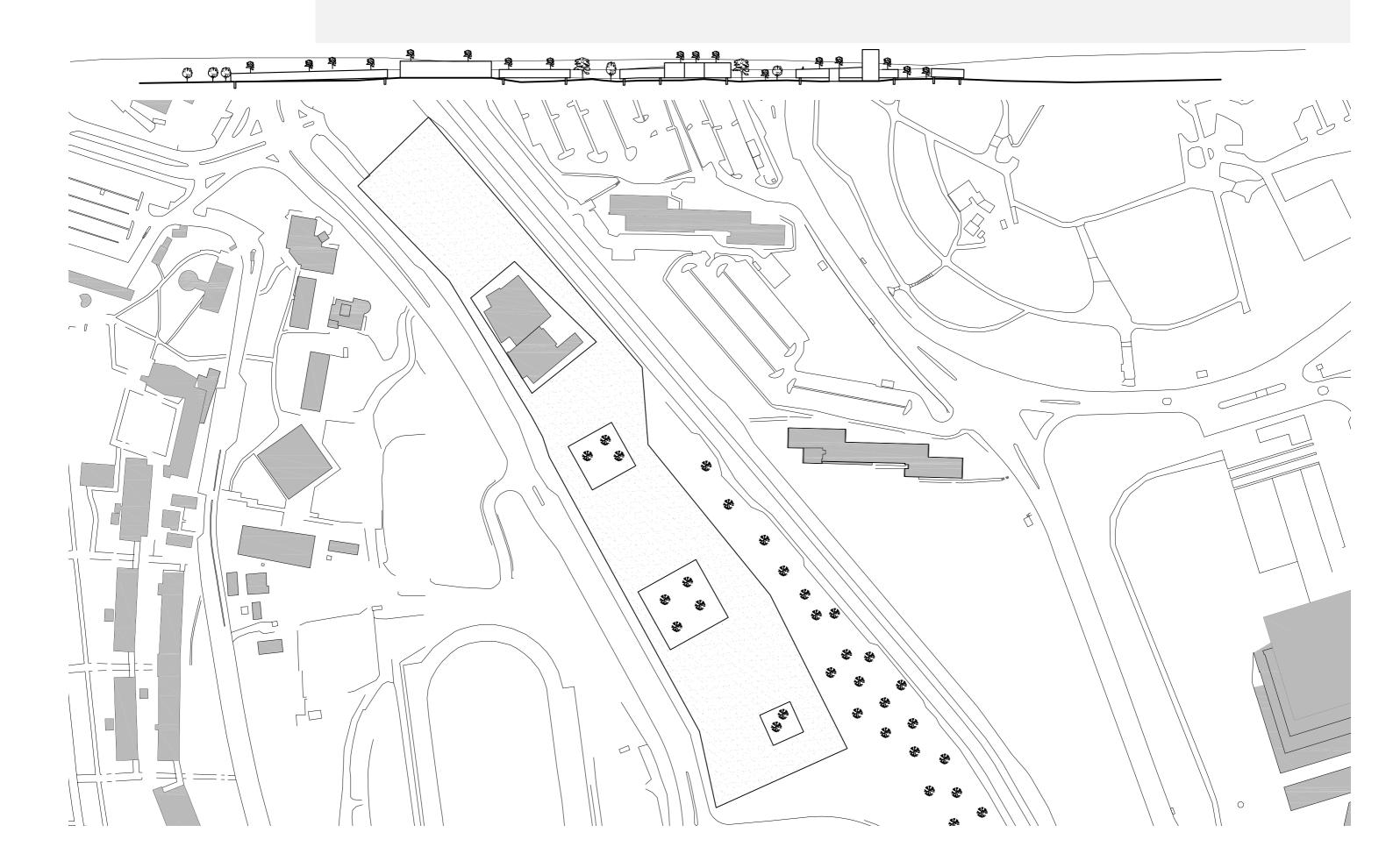
The given porgram



Program

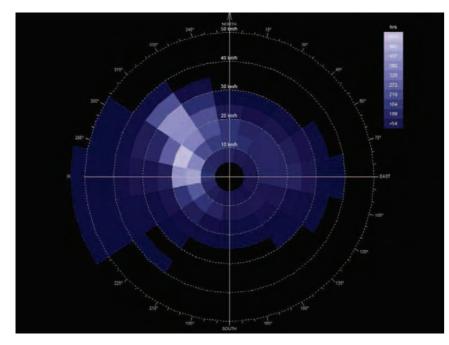


Proposal

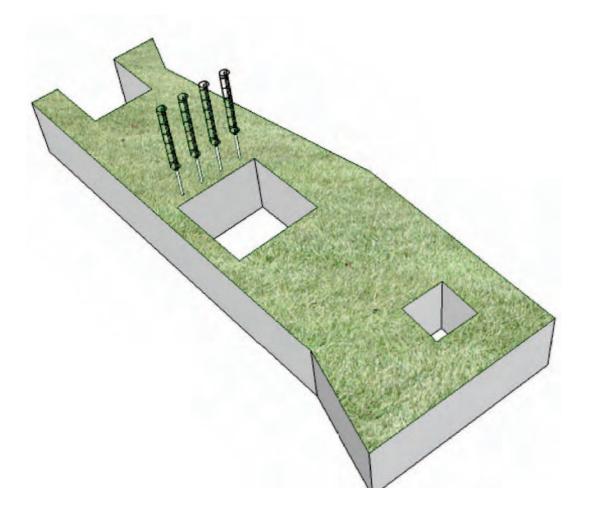


Proposal

Wind Speed Dixtion



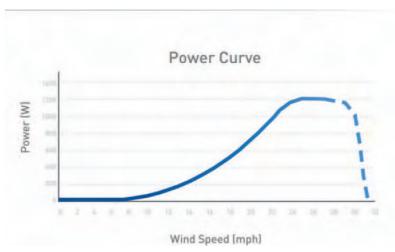
View of the roof with the torbins



4,5-5,5 m/s - Average wind speed in this location, mostly NW Average annual energy production based on average wind speed (technical specification) - 1500-2500 kWh/yr

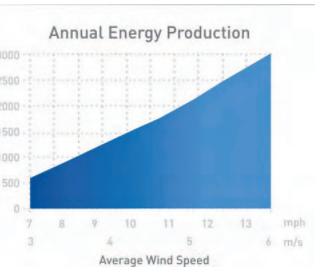
Percent of winds which are strong enough to efficiently generate electicity (based on weathe data) - $\sim 65\%$

Effective energy production for one turbine: 1300 kWh/yr



Roof of the museum is a green roof, which functions as a terrace and exhibition space. Wind turbines mounted on top produce electricity and serve as a exhibit, that educate users about the sustainable technologies. Green roof also intergrates the design into landscape, and minimizes building's impact on the environment.

Annual Energy (kWh)





Proposal

