ELLEN WIKDAHL

LANDSCAPE DRIVEN DESIGN

- An investigation of a new building typology that seeks to preserve natural landscape qualities in urban contexts



The larger cities in Sweden are growing and densification is considered a sustainable method for societal development that counteracts urban sprawl and thereby exploitation of landscapes and agricultural land outside the cities. But there are a lot of challenges with densification such as loss of green spaces.

In today's building industry, natural urban green spaces with little or no interference from infrastructures and buildings are exploited with little concern to the site. Natural landscape features and characteristics, such as biodiversity, terrain and topography, vegetation, spatial patterns and elements, human recreation, and visual qualities, vanishes in the process of urban densification.

To ensure a sustainable green infrastructure it's important where new buildings are developed. Already exploited areas, such as parking lots, are to prefer oven virgin land. But sometimes green spaces are the only areas available. The aim of this master's thesis is to explore an alternative and more sustainable building typology and design approach for urban densification of

green spaces that seeks to preserve natural landscape qualities.

The thesis will result in a design proposal of a residential complex at an unexploited site in Lunden, Gothenburg. Emphasis will lie in research by design where different landscape analysis methods will be used and explored as design tools in an iterative design process. Case studies will be used for obtaining more knowledge of how landscape characteristics can be approached in a design process with focus on spatiality, visual effects, terrain form, and vegetation. Research about building foundations with minimal impact on the ground will be used when exploring spaces generated in the interface between building and ground.

Keywords:

Spatiality, Building design, Natural landscape character, Pedestrian experience, Construction

Supervisor: Jens Olsson Examiner: Daniel Norell