

# Connecting People Connecting City

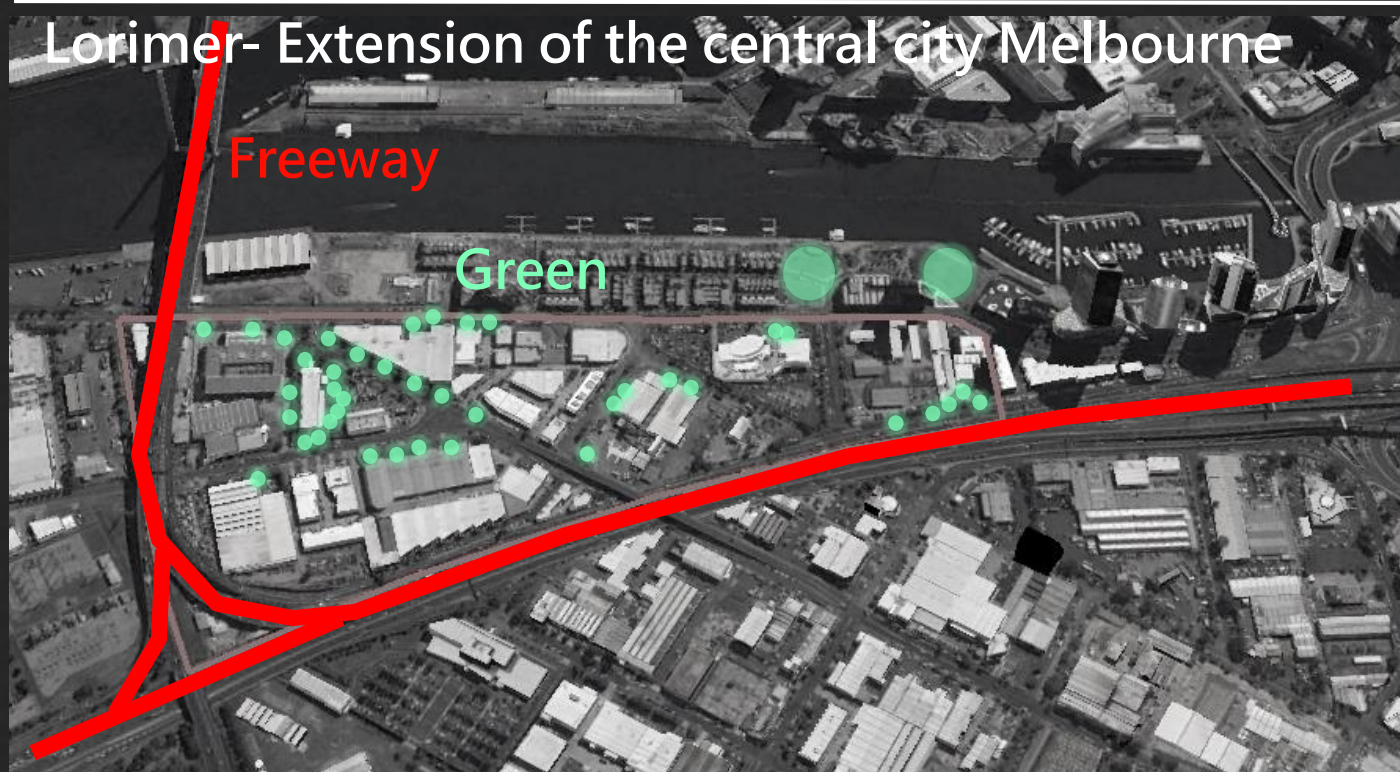
The 6th Virtual Design World Cup / Team: Let's Jump



## INTRODUCTION

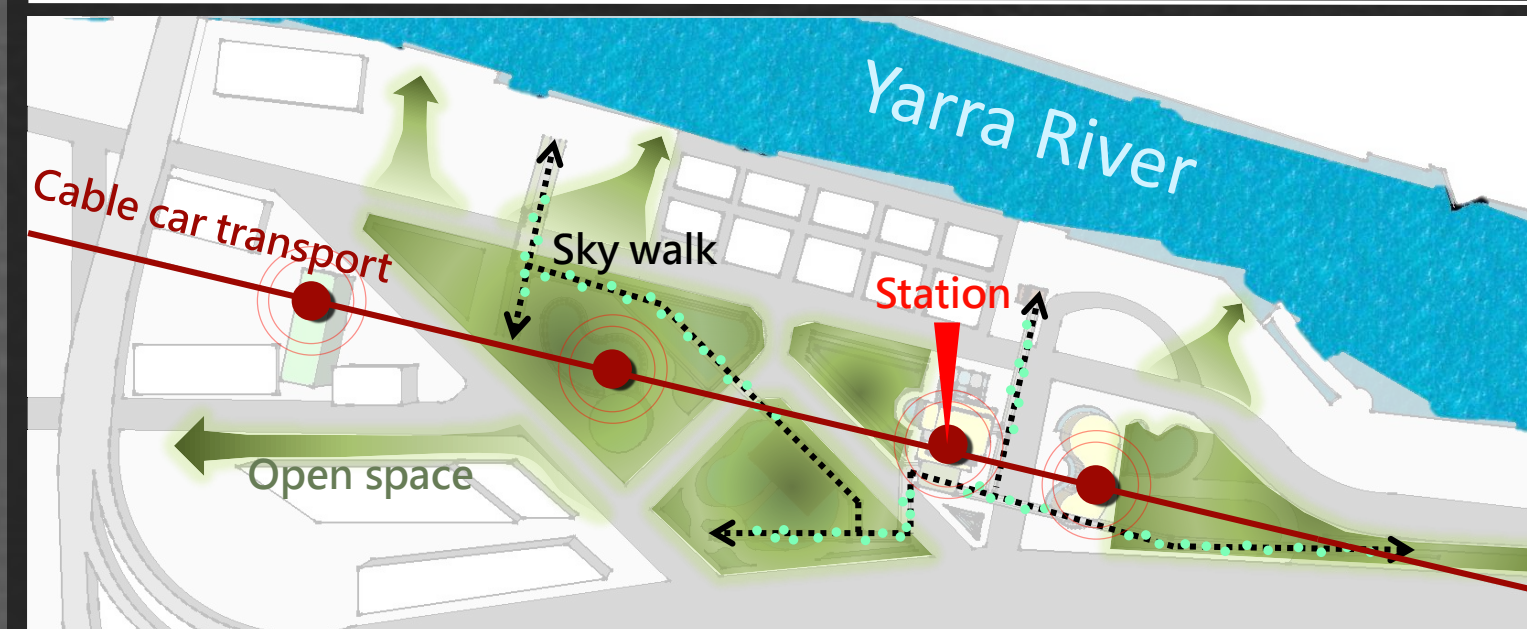
As a key part of an expanded central city, "Connecting People Connecting City" will transform former industrial precincts into a series of modern, vibrant and distinctive areas. The transformation will forge a direct connection to the bay and accommodate tens of thousands of residents and workers, driving significant economic growth and accommodating Melbourne's growing population. The functions of BIM/CIM and VR are applied in the design processes to analyze and simulate the sustainability, green transportation and disaster prevention and solutions in this re-development plan.

## BACKGROUND



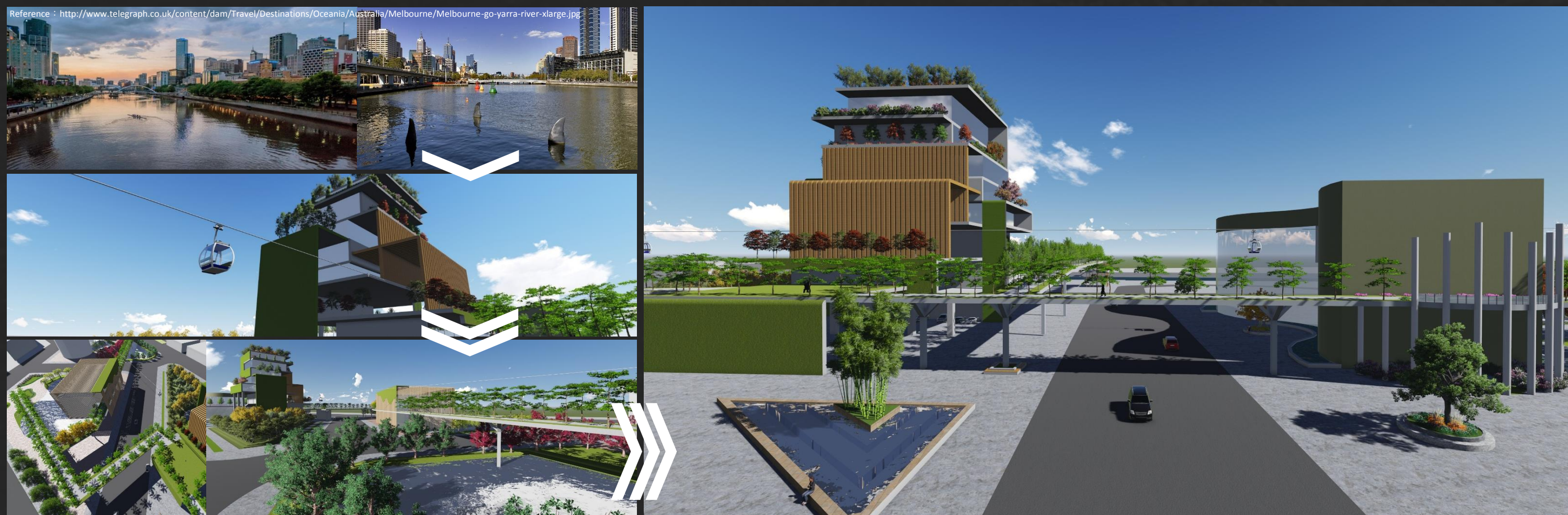
Lorimer area is facing urban green space fragmentation, a lack of human traffic construction and the existence of the West Gate Highway, resulting in urban fragmentation.

## KEY ISSUE



- Sky walk** - it connects buildings, transforms residents' life from two to three dimensions, and creates recreational spaces in the line shape.
- Open space** - it combines skywalk and cable-car stations, which keeps crowds flowing and creates a series of unique attraction spots.
- Cable car transport** - it solves the problems of public transportation in two dimensions sphere with cable car transportation, which not merely deal with the regional fragmentation in urban planned areas but bring about the development of tourism industry.

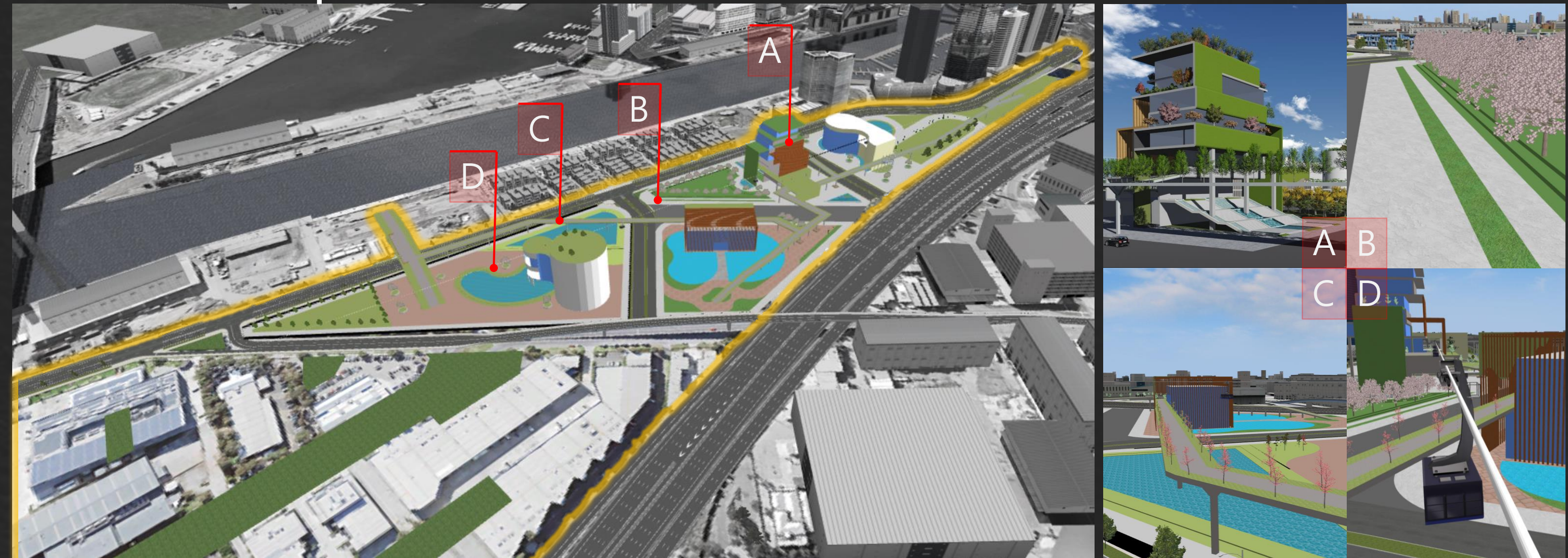
## DESIGN CONCEPT



In order to show the advantages of the Lorimer area near the Yarra River, the design concept of the cable car station is inspired by the beautiful waterfront landscape of the Yarra River. A skywalk which can connect building and the bank of Yarra River, not only take the Yarra river bank but create a friendly and a new tourism condition of Lorimer.

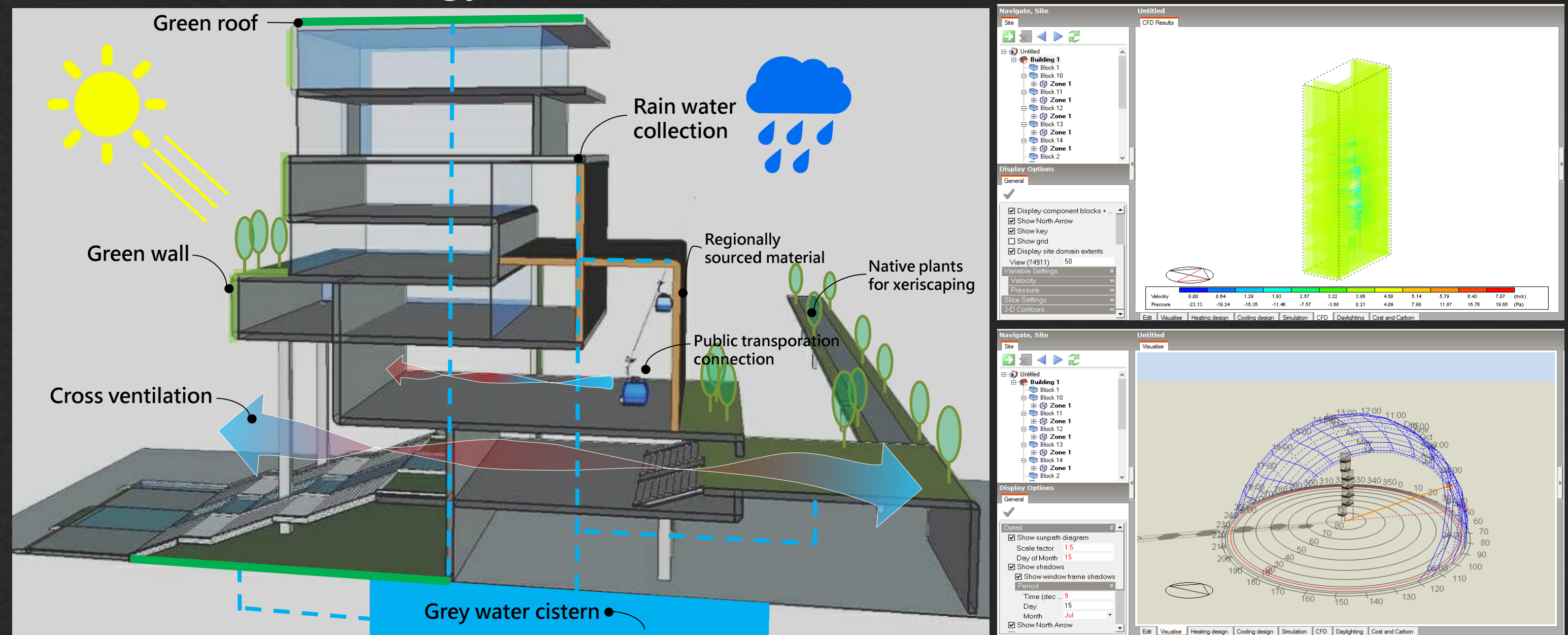
## STRATEGY

### Green Transportation



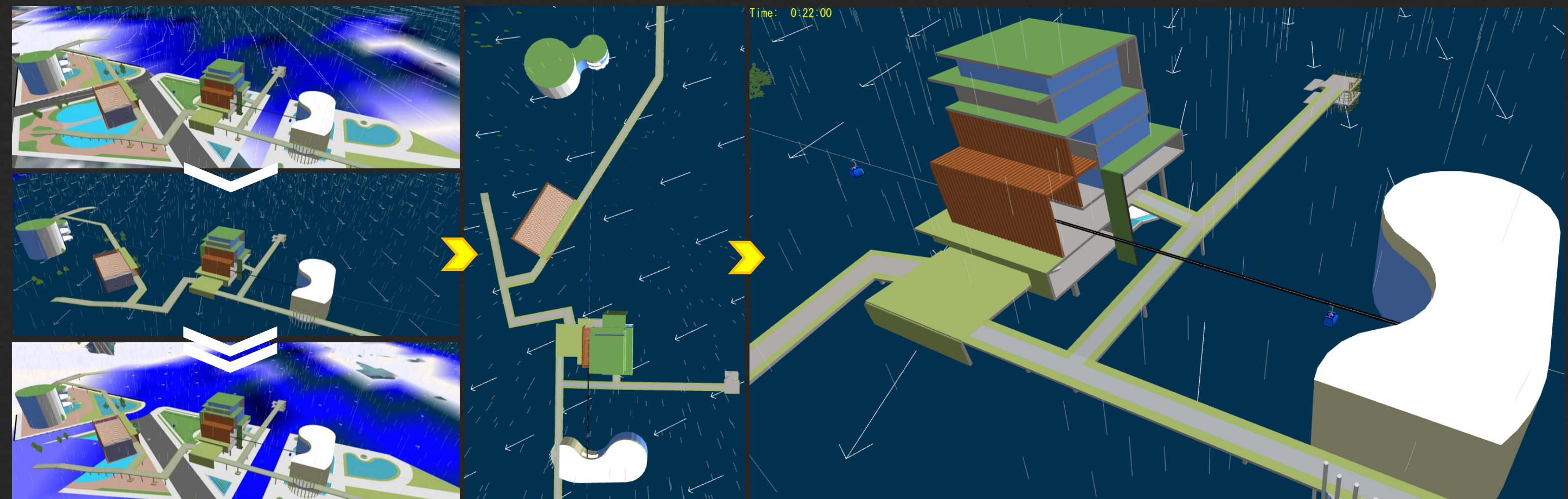
In this plan, the cable car station is utilized as an important living space and traffic nodes in the Lorimer area. The application of "UC-win / Road" software, used to simulate the BIM and VR functions. In addition, through the analysis of the transport network, the necessity of setting up cable car line is increased.

### Sustainable Strategy



Use "DesignBuilder" and "CFD" to simulate lighting, shadows, and airflow analysis of building structures to achieve the goal of energy savings.

### Disaster Prevention



Urban planned areas face flood threats due to typhoons. This study used software such as UC-win / Road and XPSWMM to simulate how much impact rain and rivers can generate on the urban planned areas. The result proves that the skywalk design reduced the impacts of disasters.