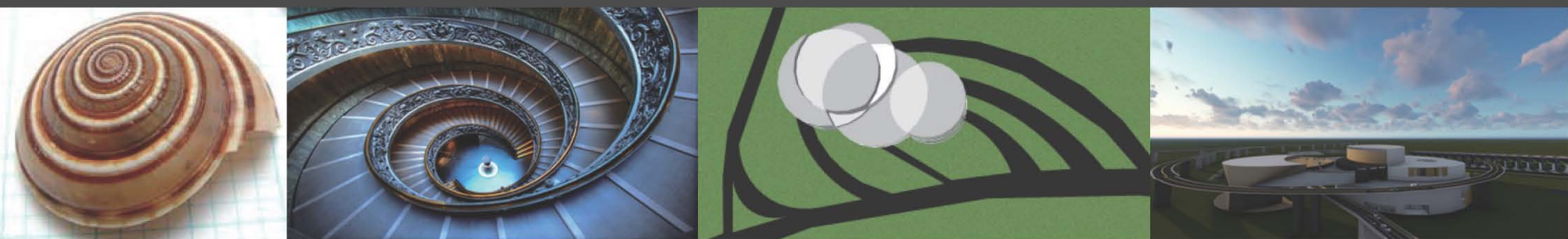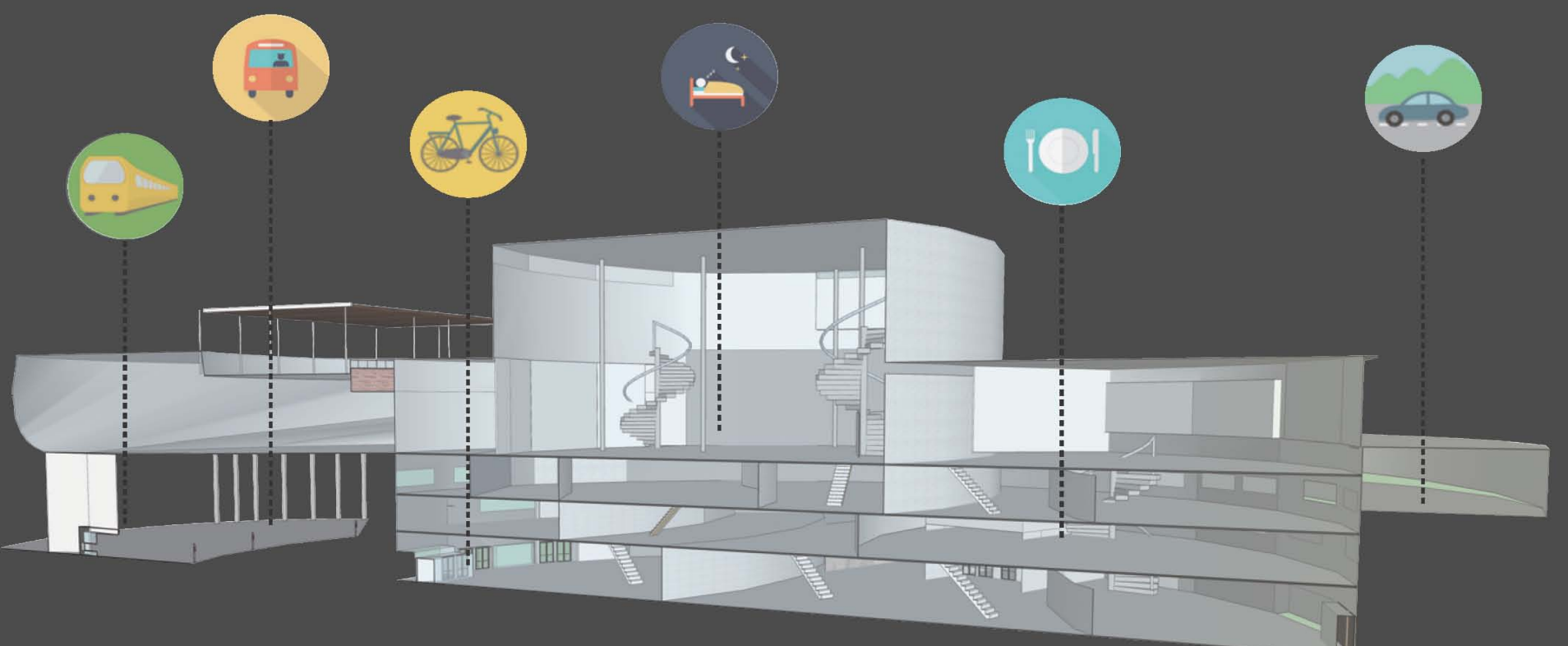# ReMelbourne Transfer Station

• DESIGN CONCEPT

In order to represent the features of Melbourne. The design concept of the transportation center is inspired by the image of plentiful shellfish and City Circle Tram in Melbourne. The main body of the building is composed of three stacked cylinders. This multifunctional transportation center will become a forest in the heart of the city by growing Australian native plants. In addition, the rainwater collection system can be used to collect rainwater for irrigation and other outdoor water uses.

• INTRODUCTION

"ReMelbourne" is a redevelopment plan for Lorimer precinct.In this plan, a multifunctional transportation center will be designed by the image of shell spiral. The traffic networks include the highway, LRT, and bus transit are all considered among a background that prioritizes pedestrians and cyclists over vehicles for neighborhood access. The functions of BIM/CIM and VR will be applied in the design processes to analysis and simulate the transportation, energy consumption, and disaster prevention in this plan.
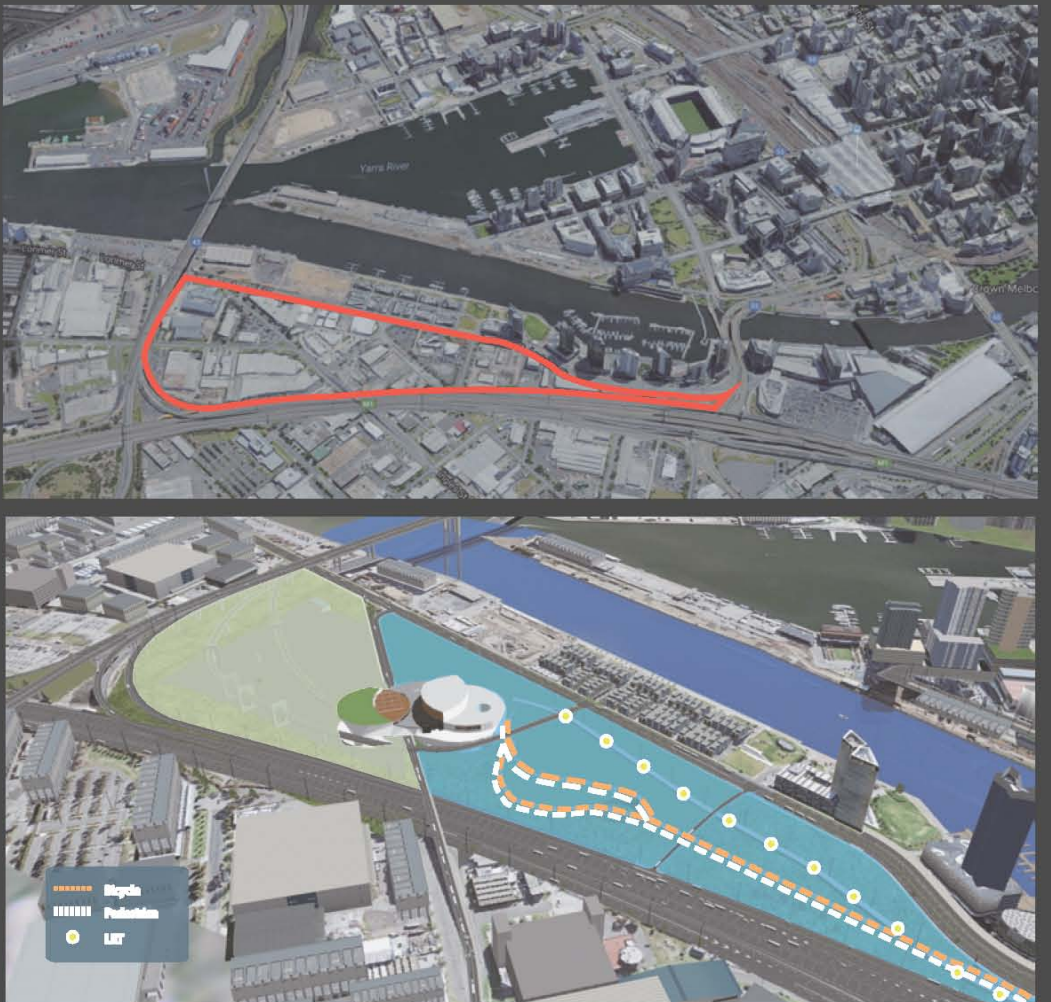

• TRANSFER STATION USABILITY

Due to the traffic chaos, we design a transfer station. This station provide tiket office,shops and hotels and comfortable relaxng site for residents.In order to cope with the problem.We seperate the trafic system into 2 sections which are pedestrian traffic flow and car traffic flow.

• DISASTER PREVENTION

This plan applied "UC-win/Road" and "XPSWMM" to predict inundation area and its water depth caused by possible tsunami. This simulation will assist the activity of disaster prevention.

00:03:30   00:06:30
00:08:30   00:10:30
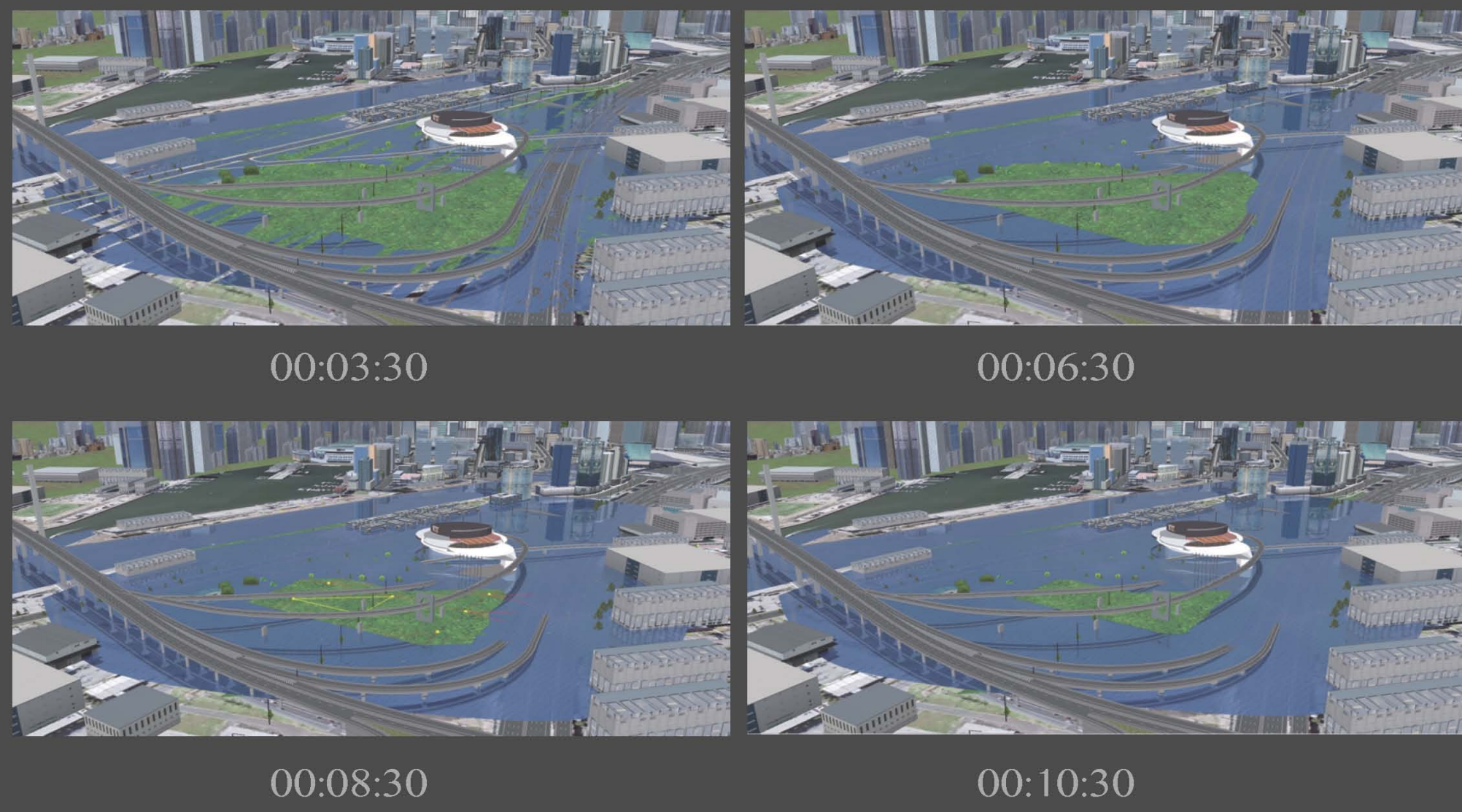
• ECO ANALYSIS

The ECO design applied "DesignBuilder to simulate and analysis the energy conservation.The implementation includes the simulations of daylight factors and illuminance. In addition,the CFD analysiscalculates the distribution of air properties of design alternatives.
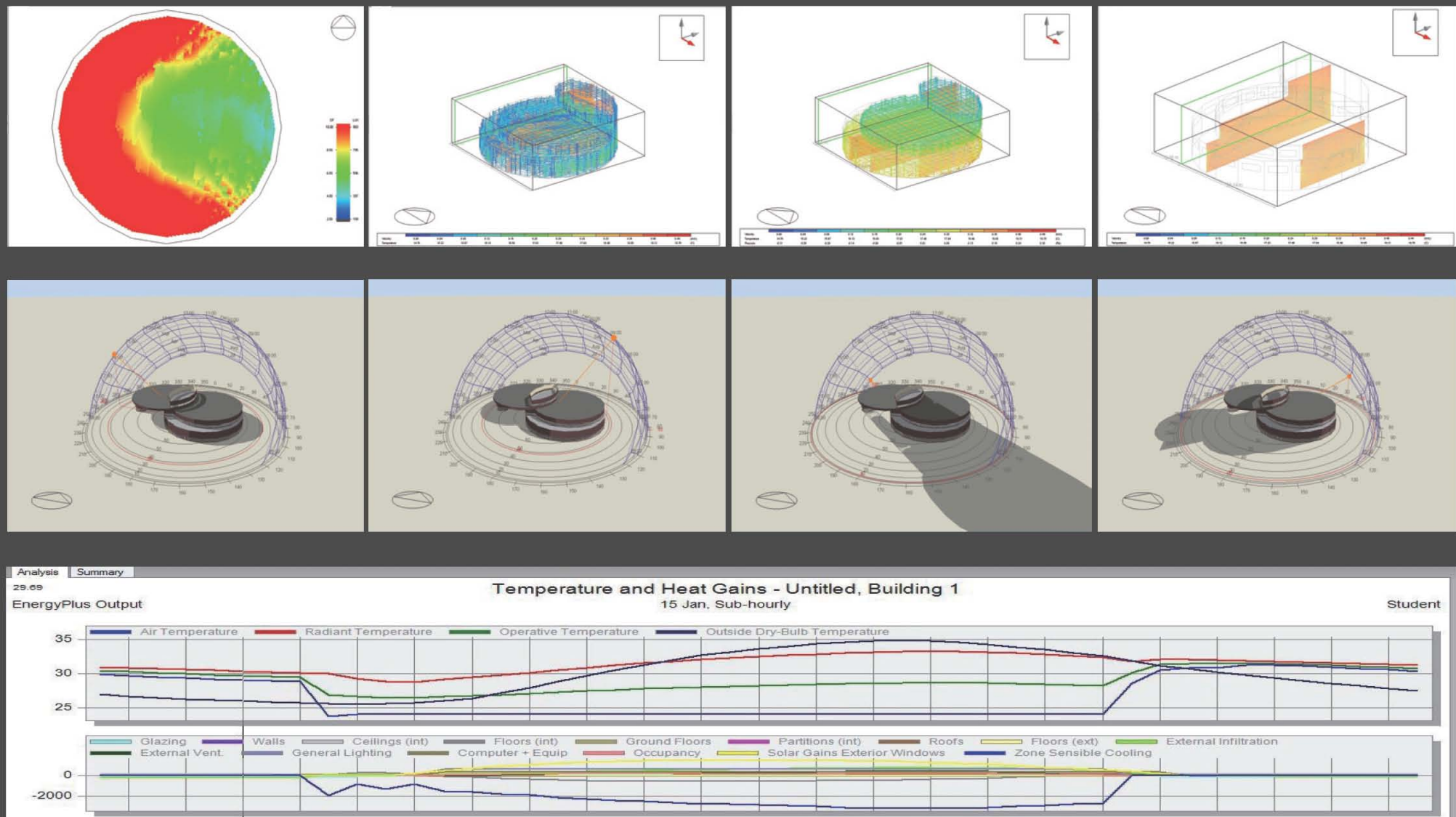
• TRANSPORTATION SYSTEM

The plan between Melbourne downton and Port Phillip Bay-Fishermans Bend has a complicated traffic system. In this plan we applied UC-win/Road as the major software to simulate traffic system. By means of the simulation result,we propose a feasible and convenient way for people,cyclists,cars, LRT and bus system.