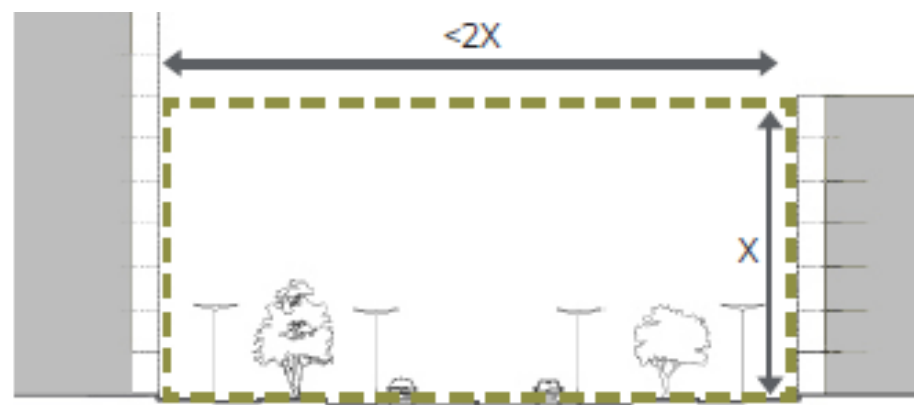


# CLIMATE AND BUILDING DESIGN STRATEGIES

## Building Heights: Enclosure and Orientation

1) Enclosure - Minimum ratio of 1:2 of building heights to street widths need to be achieved specially for major arterial and sub-arterial roads to achieve enclosure.

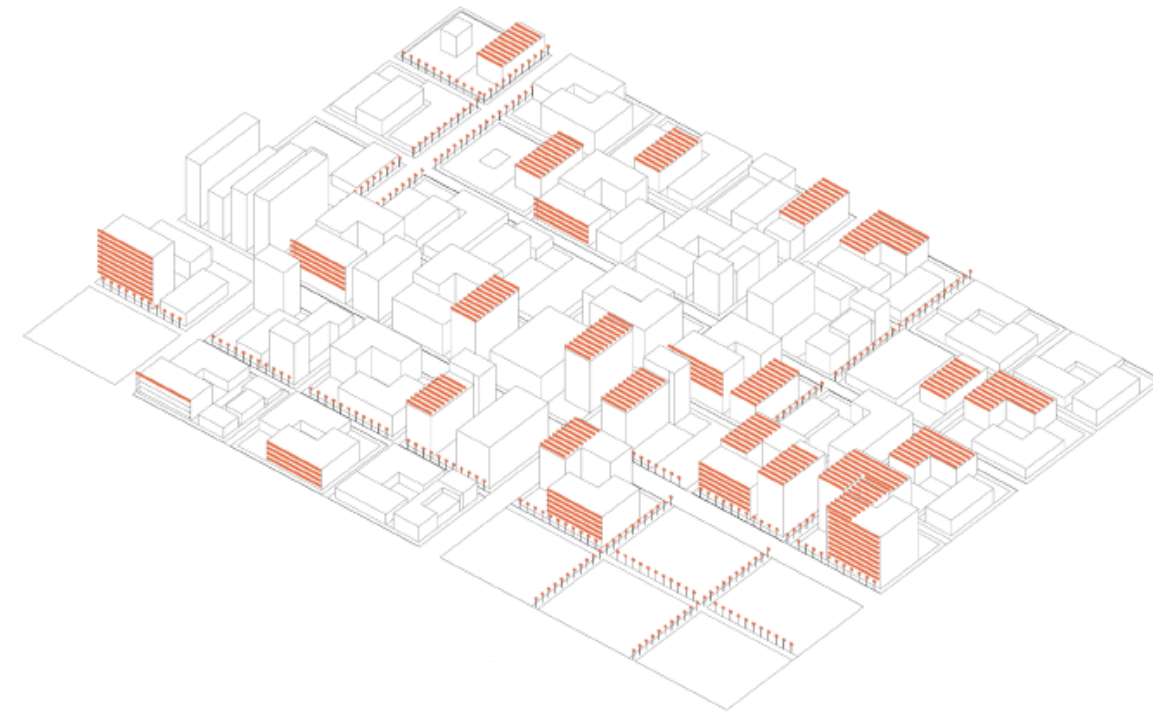
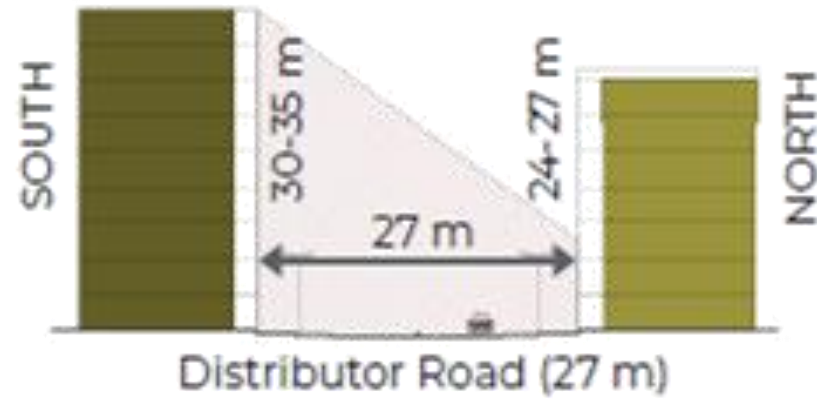
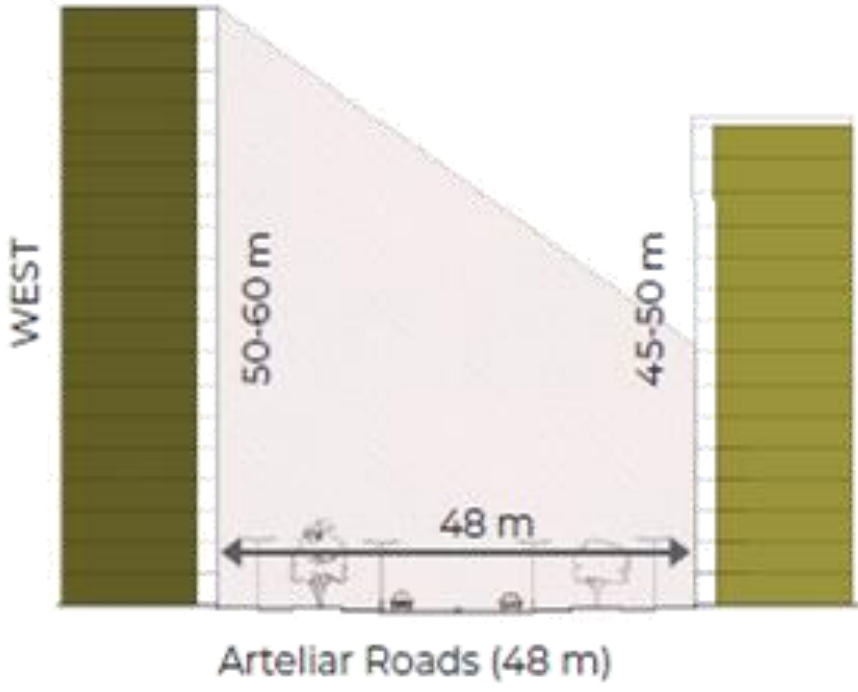
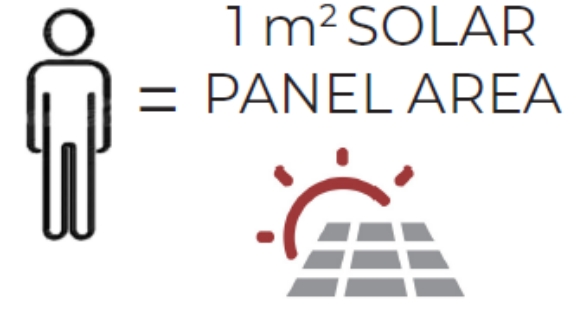


### Renewable Energy System

1) Calculating Area for Solar Energy Production  
Energy consumption per capita per day is = 1.5 kWh

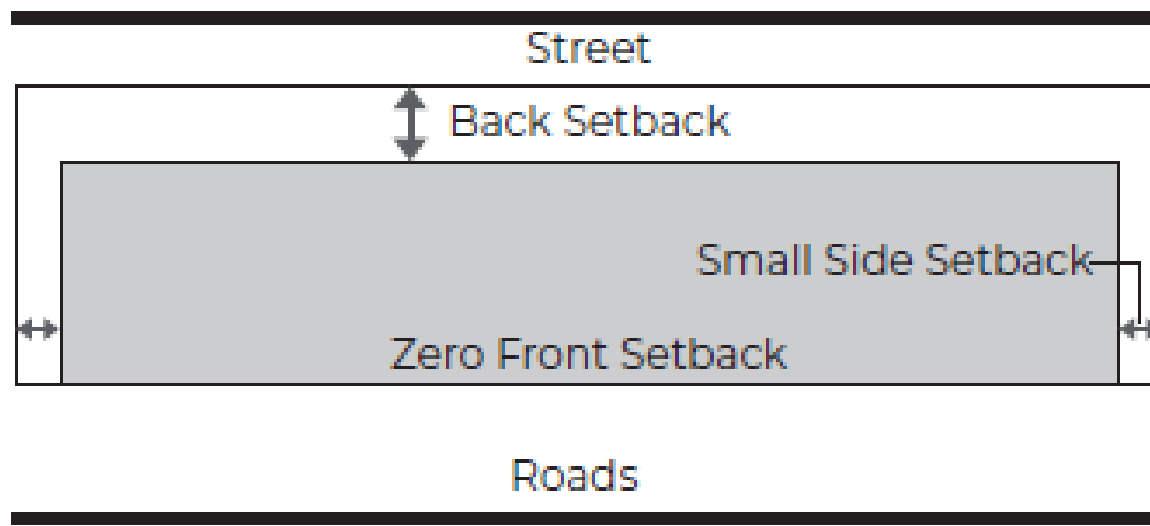
Energy produced by 1m x 2m 360W solar panel in a day =  $360 \times 8 = 2880 \text{ Wh} = 2.8 \text{ kWh}$

Area required for one person energy production is =  $\frac{1.5 \text{ kWh} \times 2 \text{ m}^2}{2.8 \text{ kWh}} = 1.07 \sim 1 \text{ m}^2$



Light and Shadow configuration for different sizes of roads.

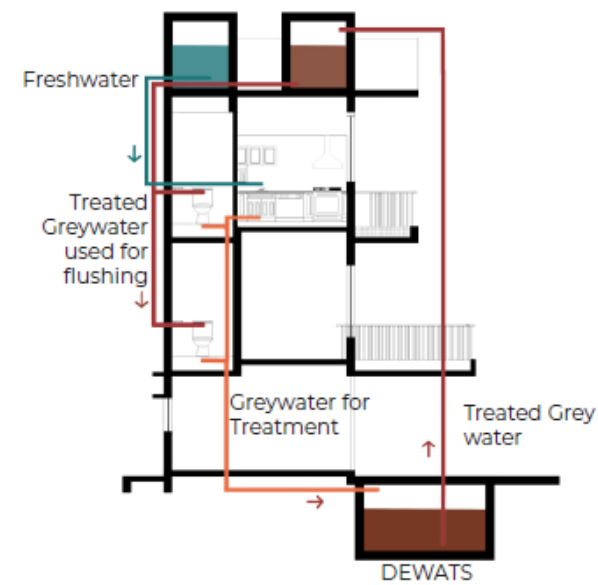
There should be no front setback from the main roads and access should be given through streets at the backside of the built form



## Water

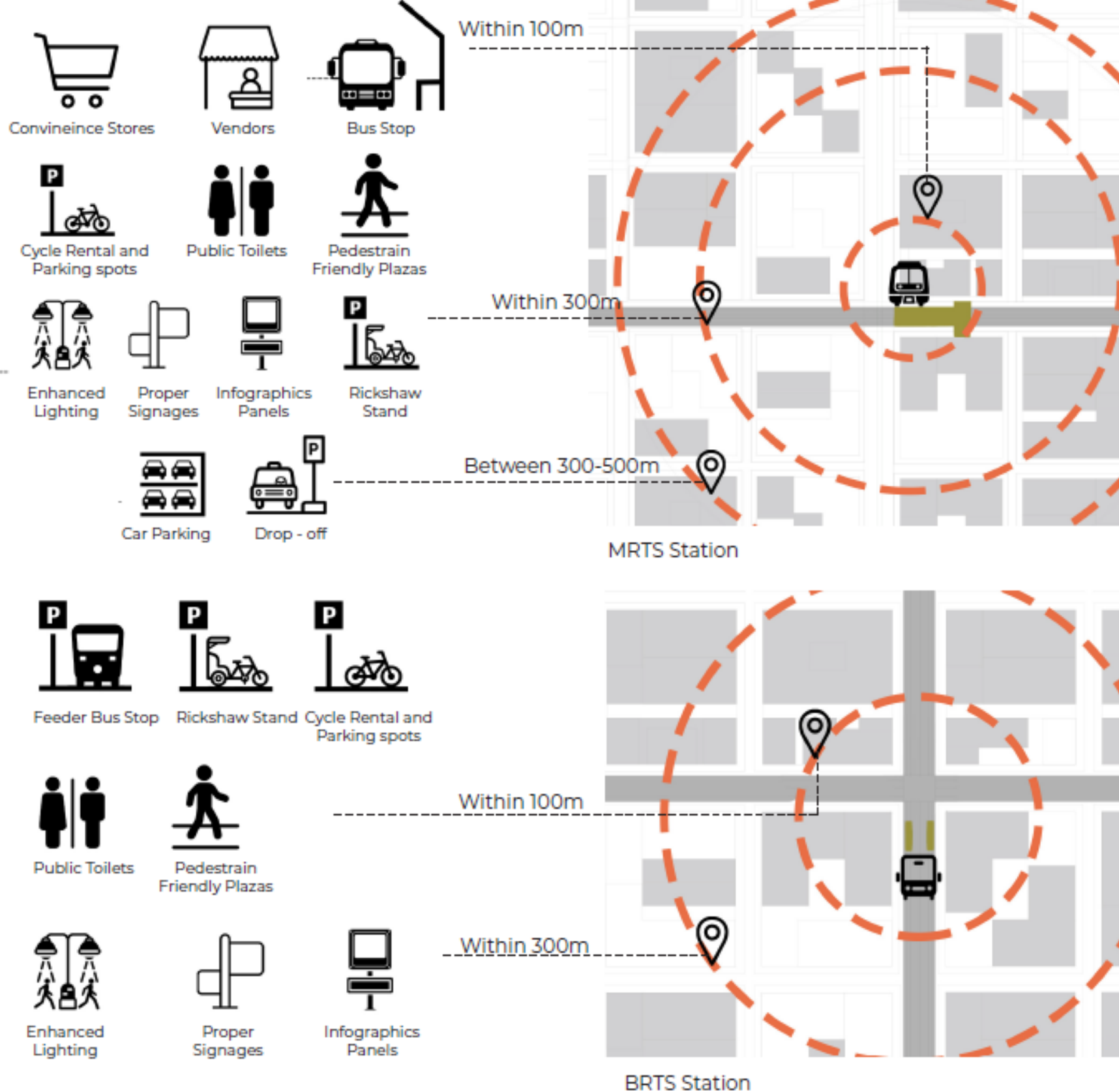
1 person = 15 m<sup>3</sup> STORAGE

1 person = 1.5 m<sup>2</sup> OF DEWATS



## Last Mile Connectivity and Infrastructure Development

2) Essential Services around the Station



## Road Sections With Integrated Greens

