



THE GREEN THREAD THAT WEAVES THROUGHOUT THE PLAN IS THE LIFEBLOOD OF BIMINI BASIN. THIS LINEAR PARK PUMPS THROUGH EVERY SPACE PROVIDING SHADE, CLEAN OXYGEN, AND WATER FEATURES. THESE WATER FEATURES COLLECT AND FILTER THE ABUNDANT FLORIDA RAINFALL, AS WELL AS ADDING PEACEFUL SOUNDS AND OPPORTUNITIES FOR PLAY. THE WALKABILITY OF THE GREEN THREAD CUTS DOWN ON AUTOMOBILE DEPENDENCY REDUCING NOISE AND AIR POLLUTION, ALL WHILE PROVIDING A HEALTHIER LIFESTYLE.



The city of Cape Coral has a great opportunity to not only create a beautiful addition to their city but also incorporate sustainable features into all levels of construction. By layering these systems into the fabric of the urban environment the citizens of Cape Coral can enjoy downtown living without getting lost in a sea of concrete and asphalt. The Cape Coral life could include relaxing on a rooftops garden and a fresh BLT from the local coffee shop where they grow the lettuce and tomato on their roof all while reducing ground water consumption and energy use.

Integration of **Sustainability** throughout the city of Cape Coral



Roof Gardens

Some of the hottest surfaces in a city are the black rooftops found on many of our buildings. These surfaces amplify the Urban Heat Island (UHI) effect. This can be mitigated by replacing these surfaces with roof gardens. Some of the effects include a cooler city and building, improved air quality, storm-water management, waste diversion, and the building provides a new amenity spaces.

Rain Gardens

These small gardens can be incorporated into the city in various locations which includes along sidewalks planters where they collect water from gutter systems and as features in parks. Stormwater runoff can contain concentrations of nutrients including Nitrogen and Phosphorus along with many other contaminants. These small gardens not only beautify the city but act as a natural filtration system before these pollutants make it to the water table. Water catchment systems can be incorporated or the water can be allowed to drain back into the ground.



Shading Devices

(Water Catchment Systems & Electronic Vehicle Charging Stations)

Distributed throughout the public spaces in the city, shading devices provide a more pleasant pedestrian experience along sidewalks and seating areas. These systems can also prime opportunities for water catchment systems and electronic vehicle charging stations.

Water Catchment Systems - Benefits include water source for irrigation, less demand on ground water, and a reduction of soil erosion.

Electronic Vehicle Charging Station - Placed in surface parking lots located in the center of several city blocks residents will benefit from free sources of energy for golf carts and electric cars saving them money at the pumps.



Bird Safe Glass

It is estimated that hundreds of millions of birds are killed in North American due to collisions with glass on buildings. Bird safe glass is a solution to this issue that uses a UV reflective coating which is visible to birds but remains transparent to the human eye.

