

Senior Design / BS / MS Project

Introduction

EDEN Consulting Engineering was tasked with imagining a purpose for an empty lot in downtown Coral Gables, three blocks from city hall, across from a church, and surrounded by a residential neighborhood.



When deciding on what to design EDEN Consulting looked towards addressing a public need in a (1) sustainable, (2) smart, and (3) holistic way. We were inspired to create a holistic wellness center for the mind, body, and soul, devoted to community engagement and outreach as a way to support the surrounding aging residential community



UNIVERSITY OF MIAMI COLLEGE OF ENGINEERING



A Modern Day Eden

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Design

Biophilic design is achieved through:

- Central courtyard
- Green walls throughout the space
- Southeast facing glass curtain wall for natural light

Sustainable and Smart design is achieved through:

- Rooftop mangrove nursery for local shoreline restoration
- Stormwater collection for rainwater reuse
- SMART Building Sensors to limit utility usage
- *Community Centric* design is achieved through:
 - Central courtyard gathering space
 - Free weekend community health/nutrition classes
 - Hurricane shelter for emergency







Transforming Lives Through Teaching, Research, & Service



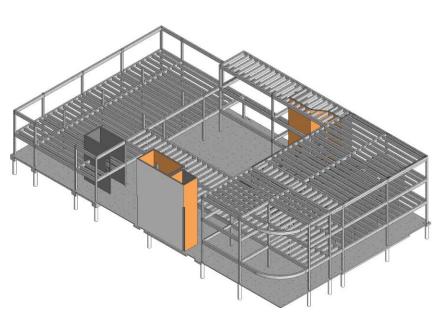
Results











Acknowledgements

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References

FBC 2017, ACI 318-14, ASHRAE 90.1, FDOT 2019 Design Manual, Coral Gables Zoning and Planning