## Koa'e Makana Workforce Housing

Location: Po'ipū, Kaua'i

Client: Mark Development, Inc.

Firm: Bow Engineering & Development, Inc., Honolulu, Hawai'i





ACEC ENGINEERING AWARDS



A rendering of the proposed Koa'e Community using Infraworks



Underground detention basins to aid with storm water drainage



Underground detention basins after being buried

The Koa'e Makana Workforce Housing project was an affordable housing project based in Po'ipū, Kaua'i. With a growing need for affordable housing, the County of Kaua'i selected Mark Development to construct a community that addressed the needs of the workforce and their families. This 134, one-to-three-bedroom development was constructed on 11 acres of plush landscape next to the graceful Waikomo Stream. Spread out over 23, two-story buildings the property also includes ample tenant and guest parking, a playground for the keiki, and a community center to support family activities. The project site was determined suitable due to its central location with a close commute to job centers, schools, shopping, and established residential communities.

As of January 2021, the median price for a single-family home on the island of Kaua'i was \$1.03 million where the average income is just over \$60K. For low income families, affordable housing is a scarce necessity that needs to be more abundant. Thanks to Koa'e Makana, Kaua'i now has its largest affordable housing property and has begun to address its inequality in the housing market. With roughly 40" of rainfall a year, careful consideration of the drainage and layout led Bow Engineering to refine the flood plan to account for excess storm water runoff generated from a 100-year storm event. Solar panels were also installed on the units to aid in creating an even more affordable living situation that is environmentally friendly.

