

# BASE Line

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## Hospitality Design

From grand, complex resort developments to small, intimate retreats, our team enjoys the challenges of designing hotels to create a memorable and relaxing experience for its guests. Our hospitality resume includes the full spectrum of projects from urban high-rises to large resort master plans and smaller, intimate resorts. Large resorts require coordination of commercial structural systems with the numerous functional and aesthetic requirements of the hospitality industry. Smaller scale resorts require the knowledge and use of residential style framing often combined with heavy timber or steel to open up large areas of the units to the environment to achieve a cozy, secluded atmosphere.

### Andaz Maui at Wailea *Wailea, Hawai'i*

Andaz Maui at Wailea is a complete transformation of the former Renaissance Wailea Resort. The entire 15-acre oceanfront resort was renewed, including major reconstruction of the lobby building, renovations to all 297 guest rooms and suites, and complete landscaping improvements featuring four multiple cascading infinity pools. New additions to the resort include the construction of seven 2 - 4 bedroom luxury residential villas. The resort welcomed its first guests in September 2013.



The structural work included complicated demolition and restructuring of the existing hotel's central lobby and guest services areas. In order to better understand how the structure's gravity and lateral load resisting systems would be impacted, BASE utilized the existing 1976 construction documents to build a BIM model of the building. The model, which could be easily spun or cut to create views of important structural elements, was used to assist in determining critical areas that would need to be reinforced or replaced with new structure. The model also proved valuable in the creation of 3-D structural analysis models and as a background for permit and construction drawings.



## The Ritz-Carlton Residences Waikiki Beach *Honolulu, Hawai'i*



Construction has started on this new 39-story, 459-unit luxury residential tower in the center of bustling Waikiki. The tower will sit atop an eight-story podium that includes parking on levels two to five; fitness amenities and administrative offices on level six; a swimming pool on level seven; and a café, sky lobby, and children's pool on level eight.

Residences include studios, and 1 - 3 bedroom units. To provide this variety of unit types the floor plan changes 11 times within the 30 residential levels. This includes two-story units with large clerestories and split-level floors. In order to open up more space at the ground level for landscaping, the porte cochere, and amenities including a gourmet market, much of the tower's structure must transfer around the lower level parking and guest access facilities. BASE works closely with the team to accommodate multiple

structural transfers efficiently within very tight floor to floor heights.

## Honua Kai *Ka'anapali, Hawai'i*



This beachfront resort project includes over 1.6 million SF in two 10-story resort towers and eight stand-alone four-plex town-home buildings. The towers contain 627 condominium apartments and the stand-alone buildings contain a total of 32 town-homes. The resort features three distinct pool experiences, a boutique spa and Duke's Beach House restaurant. The project includes 409 stalls of parking in basement space constructed under the residential towers and their courtyards.

The design team worked together with the project's geotechnical engineer to evaluate a more cost-effective raft foundation instead of the expensive deep driven or drilled piles typically used in the area. Careful planning for the construction of the foundation included preloading the site to minimize settlement of the finished structure. An additional challenge included the elevation of the basement parkade which was close to the existing groundwater depth. Detailed dewatering studies to facilitate excavation for raft foundation were conducted to ensure successful placement of the mass concrete pours.

By investigating alternative foundation systems the project team found a solution that not only provided significant savings to the client but also reduced the overall project schedule. Other developments in the area closely observed this construction method and have started to adopt it for future projects, complimenting and justifying this solution. The structural engineering also included detailed 3-D finite-element analysis and design, and optimization of the structure's post-tensioned floor system. This effort assisted the team in evaluating an extremely complicated floor plan, including what appeared to be randomly placed columns and balconies, but were actually methodically located to maximize functionality rather than a consistent building grid.

## Wave Virtue Noida, India

BASE provided the structural design for this modern mixed-use building in the heart of Noida's central business district. The project consists of a 52-story structure with three basement floors of parking and 10 floors of podium structure, topped with a 49-story office/residential/hotel tower and a 21-story office tower. Features within the building include retail and office spaces, residential and serviced apartments, a 5-star hotel, and multiplex cinema.

The work included pricing level documents and structural 3-D BIM model along with structural concrete, reinforcing steel and post-tensioning steel quantities. BASE brought to the team a strong understanding of both Indian and international design codes. This knowledge was combined with a design process integrated with the contractor and both local and international consultants to work towards a structural system that met the project requirements while being economical to build in the context of construction practices available in India.



## Pauoa Beach Club Mauna Lani, Hawai'i



This project consists of four identical duplex dwelling compounds (eight units total of approximately 3,800 SF each) with a detached two-bedroom cottage, attached garage building and entry gate for each unit. With open-air pavilions and lush landscaping, the Pauoa Beach Club is a small village unto itself, dedicated exclusively for the use of members of Exclusive Resorts, a luxury residence membership club.

The scope also included a 10,000 SF luxury recreational center constructed for the exclusive resort community. The oceanfront setting consists of open architecture that includes large areas of column and wall-free space.

This project was developed under a design-assist program to meet the project's aggressive schedules and budget. With Maryl Pacific as the contractor and Reicke Sunnland Kono as the project architect, the team delivered a product that met all of the client's needs.

**Trump International Hotel & Tower**, Honolulu, HI. Structural design for a 350-foot luxury tower, featuring 14 residential floors, 15 condotel floors and spa and recreation deck levels including an infinity-edge feature pool above five levels of parking.

**King Kamehameha Hotel**, Kona, HI. Renovation of the 460-room, 291,000 SF hotel to a 3-½ star property. Work on the 1975 hotel includes complete renovation of the guestrooms, expansion of the meeting and retail spaces and a new open-air entry pavilion and breezeway connecting the two six-story towers.

**Hilton Hawaiian Village - Kalia Tower**, Honolulu, HI. Value Engineering services for a 24-story, 293,000 SF hotel tower with attached spa and service facilities.