



Desert Surf Resort

Palm Desert, California

Commercial MEP & Building Systems Design — Mixed-use hospitality and entertainment resort featuring hotel, surf lagoon, villas, restaurants, and recreational facilities.

Project Overview

Project Type

Hospitality & Entertainment
Development — large-scale mixed-
use resort in Palm Desert, California

Facilities

4-story luxury hotel, surf lagoon, resort
villas, clubhouse, restaurants, spa,
and fitness center

Engineering Scope

Complete 3D MEP design — HVAC,
plumbing, piping, and fire protection
— using Revit and engineering
calculations

Engineering Contributions

→ 3D MEP Modeling

Developed detailed Revit models for commercial and hospitality building systems across multiple structures

→ HVAC & Mechanical Design

Designed ducting layouts, mechanical room coordination, and equipment placement for resort-scale systems

→ Multidisciplinary Coordination

Coordinated MEP systems with architectural and structural disciplines, ensuring code-compliant and spatially efficient integration



Technical Highlights



83,000 sq. ft. Hotel

4-story luxury hotel with 91 guest rooms

5-Acre Surf Lagoon

Advanced wave-generation technology requiring specialized MEP infrastructure

83 Resort Villas

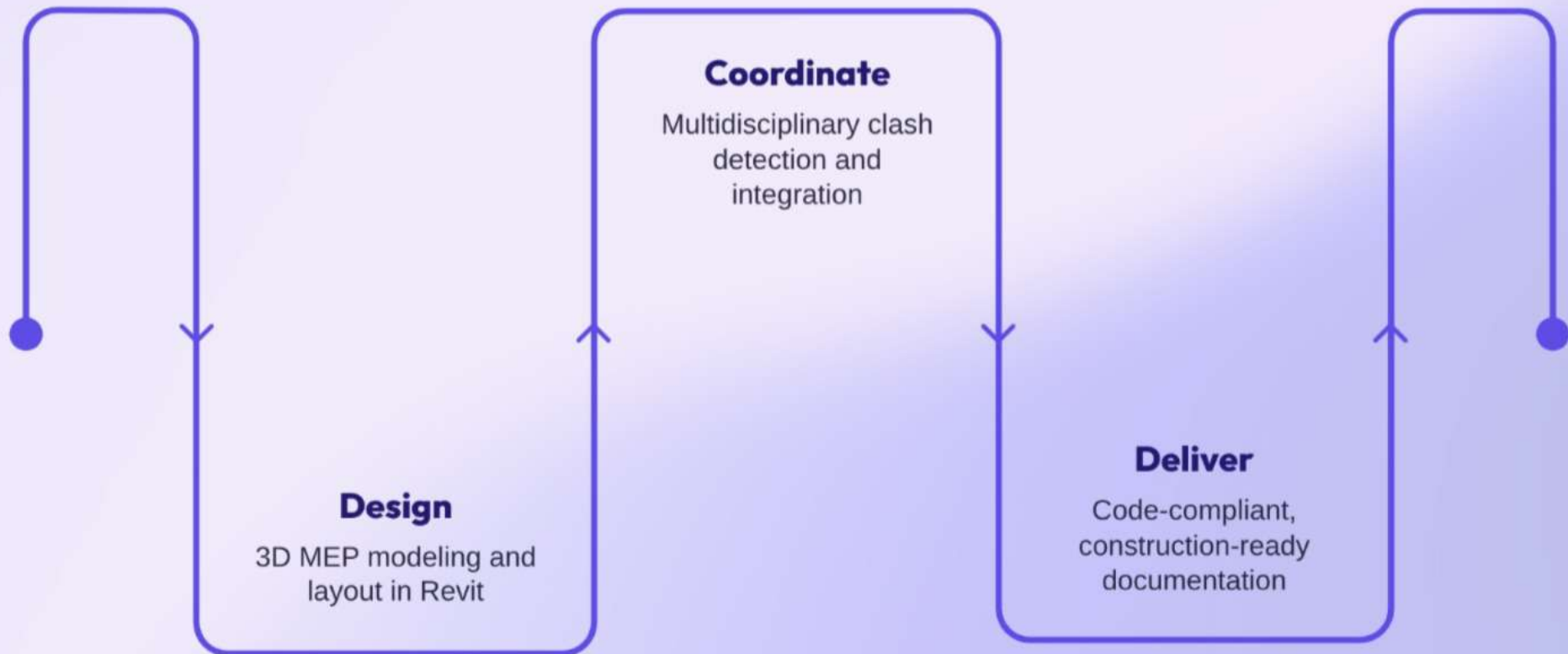
Luxury residential units with full recreational amenity support

Integrated Systems

Full HVAC, piping, and fire protection coordination across all structures

Integrated MEP Design for Luxury Resort Development

"Contributed to the integrated MEP design and 3D coordination of a large-scale luxury resort development combining hospitality, entertainment, and advanced building system infrastructure."



From concept through construction documentation, this project reflects a commitment to precision engineering, cross-discipline collaboration, and high-performance building systems at resort scale.