



Zack Main
Biographical Sketch
“The Future of Existing Buildings”



Zack Main is a Building Scientist with Chelsea Group, Ltd., a leading firm in building science consulting. Mr. Main leads a team of engineers tasked with providing the construction project management as a part of Chelsea Group’s consulting work. His experience and expertise includes work in advanced applications of emerging technology, including contemporary, high efficiency chillers using mag-lev technology, fan array air handling systems, air distribution system integrating demand control ventilation (DCV), and controls solutions to optimize these systems. In addition to his construction management related work, Mr. Main has worked in assessment, design, and commissioning of projects.

Currently, Mr. Main is the single point of client contact (SPOCC) and leads the construction and project management for The Queen’s Medical Center (QMC). He has SPOCC responsibility for the supply air system upgrades project, a patient room exhaust system upgrade, a chilled water and reheat water distribution upgrade, as well as replacement of a chiller and a cooling tower leading to modernization and optimization of the QMC central plant. As SPOCC for QMC, Mr. Main works with the client to develop owner project requirements and then coordinated Chelsea Group, contractor, and client resources to deliver the systems that operate reliably and at peak efficiency.

Previously at Chelsea Group, Mr. Main served as SPOCC and construction and project manager on upgrading the central plant with two 210-ton air-cooled chillers at Upper Pearlridge Shopping Center that led to recognition as Energy Project of the Year for Region V by the Association of Energy Engineers. He also served as SPOCC for the complete upgrade of the central plant at Waterfront Plaza (Restaurant Row), a project that incorporated two 800-ton variable flow chillers, four new cooling towers, and replacement of the existing controls with an entirely new system.

Mr. Main is an active member in the ASHRAE Hawaii, recently presenting on the critical topic of psychometrics – humidity control – in HVAC systems. He joined Chelsea Group as a student intern in his senior year at the University of Hawaii. During his academic years, Mr. Main participated in a laboratory internship, exploring robotics with a focus on automation and control theory. The culmination of his studies earned Mr. Main his Bachelor of Science degree from University of Hawaii at Manoa in the discipline of mechanical engineering.