JOPER OCTAVIANO TUPAS, P.E., CPD

Professional Certification:

Professional Engineer License No. M-35317

Professional Engineers, Land Surveyors and Geologist State of California
January 7, 2011

Professional Engineer License No. PE-16489

Department of Consumer Affairs – Professional and Vocational Licensing Division State of Hawaii May 18, 2015

Professional Engineer License No. PE-81010

Department of Business and Professional Regulation State of Florida April 6, 2016

Professional Engineer License No. PEM-26043

Board of Professional Engineers and Land Surveyors State of Nevada October 15th, 2018

Professional Engineer License No. 97336PE

Board of Examiners for Engineering and Land Surveyors State of Oregon May 1st, 2021

Professional Engineer License No. M-21016736

Board of Registration for Professional Engineers and Land Surveyors State of Washington June 1st, 2021

Professional Engineer License No. PE-142099

Texas Board of Professional Engineers and Land Surveyors State of Texas August 1st, 2021

Professional Engineer License No. ME-74229

Board of Technical Registration State of Arizona August 1st, 2021

Certified in Plumbing Design, CPD No. 60242

American Society of Plumbing Engineers April 30, 2011

NCEES Record No. 51420

National Council of Examiners for Engineering and Surveying – Records Program

Affiliation:

American Society of Plumbing Engineers (ASPE)
Full Member – Los Angeles Chapter
Member ID: 36498
November 15, 2007

National Fire Protection Association (NFPA) Associate Member – Los Angeles Chapter Member ID: 3102370 January 20, 2015

International Code Council (ICC) Member ID: 8261534 October 25, 2016

Job Experience and Previous Employments:

Managing Director

BEI Services Inc. Bacolod Philippines (May 2022 to present)

My primary function is to oversee the offshore operations and make top decisions regarding company operations as it relates to finance, operation, and performance output of the company.

Regularly conduct management meetings to tackle business plans, budget, among other business management concerns. Annual visit to Bacolod office to conduct technical trainings and review staff performance evaluations.

Senior Mechanical / Plumbing Engineer

Breen Design Group 3825 Del Amo Blvd. Torrance, CA 90503 (March 2022 to present)

Rejoined Breen Engineering after a 5-year hiatus in its rebranded name Breen Design Group. As the Senior Mechanical / Plumbing Engineer, I oversee both engineering design projects of HVAC, Plumbing, Fire Sprinkler, and Industrial Piping Systems.

Representative Projects:

- 1. EFS West Compressed Natural Gas (CNG) storage and fueling stations at the following locations:
 - a. Miramar, CA
 - b. City of Banning, CA
- 2. Disneyland Resort Sleeping Beauty Castle ISOPAR piping systems for the pyrotechnic effects of the show.

Also perform the duties of a Senior Project & Client Manager. These duties involve the development of new client and maintaining existing client relationships. Prepare bid documents in response to RFP and RFQ. Review scope of work (SOW), evaluate project fee and prepare engineering services proposals and contracts.

Director of Building Systems, MEP

The American Engineers
731 E. Ball Road, Suite 204
Anaheim, CA 92805
www.ame-eng.com
(November 2020 to February 2022)

My primary function as the Director of Building Systems to oversee the MEP Engineering Department's daily operations, and continuously research to improve the department's efficiency. I also regularly evaluate the cost of operations, prepare yearly budget, and keep a harmonious relationship with the clients.

I regularly participate in management meetings to tackle business plans, budget, marketing plans, among other business management concerns.

My specific duties are as follows:

- Provide overall guidance, direction and management of MEP engineering design to produce Construction Documents (Plans and Specifications) for plan check submittal.
- 2. Create policies and procedures to determine scheduling, funding limitations, procedures for design, staffing requirements, and allotment of various resources to project phases.
- 3. Coordinate with project architect the projects design requirements as well as direct the senior design engineers to do the same on projects assigned to them.
- 4. Setup engineering design standards and quality in plan presentation and standard details.
- Standardized engineering calculations and created excel calculators for the following but not limited:
 - a. Plumbing Domestic Water System Hydraulic Calculations and Booster Pump Sizing.
 - b. Hot Water Heating System Sizing Calculations based on APSE and ASHRAE Standards.
 - c. How Water Recirculation Pump System Calculations and discharge time calculations for different type of pipe and tubing materials.
 - d. Sump and Sewer Ejector Pumping Calculation.
 - e. Graywater and Storm Water Harvesting Systems.
- 6. Setup regular engineering staff development training.
- 7. Write projects Basis of Design and review Specifications.
- 8. review plans and specifications done by senior design engineers for quality, code compliance and constructability.

Representative Projects 2020 to 2022:

- 3. Iwatani Corporation of America Hydrogen Piping and Fueling Station at the following locations:
 - a. Santa Ana, CA
 - b. Hawaiian Gardens, CA
 - c. Corona, CA
 - d. La Mirada, CA
 - e. Seal Beach, CA
 - f. Redondo Beach, CA

Mechanical Piping Design Work:

- a. Provide guidance to mechanical piping designers for producing piping layout of Hydrogen Fueling System from supply cabinet valve panel to station module, storage module, and dispenser.
- b. Coordinate piping layout with structural foundations.
- c. Direct CAD drafters and designers to edit necessary details for the mechanical piping section.
- d. Initially draw Safety Exposure plan for supply cabinet, valves station, and piping connection to the storage module based on the requirements of NFPA 02 and teaches junior designers on how to do it on the next projects.
- e. Initially draw Safety Equipment plan and teaches junior designers on how to do it on the next projects.
- f. Initially draw the Safety Signage plan and teaches junior designers on how to do it on the next projects.
- g. Directed the junior designers to provide necessary details per Shell Standard, Safety Signage details, and Equipment details.
- 4. Shell Compressed Natural Gas Piping and Fueling Station on multiple locations:
 - Carson CA

Mechanical Piping Design Work:

- a. Provide guidance to mechanical piping designers for producing piping layout of Mechanical Piping of Compressed Natural Gas Fueling (CNG) Station.
- b. Coordinate piping layout with structural foundations.
- c. Directed the junior designers to edit necessary details for the mechanical piping sections.
- d. Draw Safety Exposure plan for supply cabinet, valves station, and piping connection to the storage module and teaches junior designers on how to do it on the next projects.
- e. Draw Safety Equipment plan.
- f. Draw Safety Signages plan.
- g. Directed the junior designers to provide necessary Standard and Equipment details.

Engineering Manager

Murray Company 18414 S. Santa Fe Avenue, Rancho Dominguez CA 90221

www.murraycompany.com

(March 2017 to October 2020)

Primary Function:

Plan, develop, organize and supervise the engineering department. Oversee and participate in the engineering of all design-build projects. Manage AutoCAD/Revit operations related to engineering, and interface with the operations on issues relating to design and field activities. Typical Duties:

- 1. Overall guidance, direction and management of engineering department.
- 2. Review project proposals to determine scheduling, funding limitations, procedures for design, staffing requirements and allotment of various resources to project phases.
- 3. Coordinate with project architect of general contractor to ensure that all design activities are completed accurately and on time in accordance with the master schedule.
- 4. Establish projects objectives, policies, procedures, and performance standards to ensure that the project will be delivered with the appropriate level of quality and within budget.
- 5. Coordinate with the project managers to review design and construction activities to insure the project can be delivered on time and within budget.
- 6. Confer with project staff to outline work plan, assign duties, responsibilities, to provide technical advice, and resolve problems.
- 7. Ongoing direction and coordination of project staff activities to insure project progresses on schedule and within budget.
- 8. Manage financial aspects of the design as it applies to the contract to protect the company's interest while maintaining good client relations.

Plumbing / Fire Protection / Mechanical Engineer Operations Manager

Breen Engineering Inc. 1983 W. 190th St. Torrance, CA 90504 www.breeneng.com (September 2005 to February 2017)

Joined Breen Engineering as a Junior Plumbing Designer with the same status of Engineer-in-Training. Initially performed the same task and responsibility in previous company for three years. Moved up into a higher level as a Plumbing\Mechanical Designer with the following task:

- 1. Attend client meeting and project brief.
- 2. Perform job walk and site visit to determine the best engineering solution to each project.
- 3. Markup plans and delegate work and design instruction to junior designers and CAD drafters.
- 4. Perform or review engineering calculations done by the HVAC, Plumbing and Fire Sprinkler designers.
- 5. Check piping and duct layout and sizes done by designers.
- 6. Coordinate design with Architect, Civil Engineers, Structural Engineers, Electrical and Mechanical Engineers.
- 7. Coordinate with the Authority Having Jurisdiction for code compliance of the design.
- 8. Visit construction site and attend construction meetings.

All the above task is performed under the direction of the projects Engineer-of Record. Got licensed as the Professional Mechanical Engineer on the 7th day of January, 2011 and moved up to the Plumbing\Mechanical Engineer and Operations Manager position.

The task and responsibilities involve is the same as above with the addition of the following:

- 1. Manages the Mechanical, Electrical, Plumbing and Fire Protection design team's project deliverable dates.
- 2. Manages inter-discipline (MEPF) coordination and QA/QC checks with the respective project Engineer-of-Record.
- 3. Interacts with clients and the main point of contact between client and MEP design team.
- 4. Develop and maintain clients.
- 5. Prepare Engineering Service Proposal and Contracts.
- 6. Develop and maintain Resource Management Program.

Plumbing Designer / Mechanical Engineer-In-Training

Helfman\Haloossim and Associates (HNH) 1545 Pontius Ave.
Los Angeles, CA 90025 (May 2002 to August 2005)

General:

Design and prepare plumbing plans for commercial and residential building using AutoCAD program. As a junior designer/drafter, I was under the wing of a senior plumbing design engineer who is the responsible charge of the project.

CAD Design & Drafting:

Started as a drafter it was my job to layout plumbing systems in AutoCAD to produce construction documents sets of plumbing systems in a building.

Junior Designer:

Having passed the Fundamentals of Engineering and having status if Engineer-in-Training, I moved into the Junior Designer level is involved the design of plumbing systems under the supervision and guidance of a Senior Designer.

Plumbing Systems Design involves the following task:

- 1. Layout sewer, waste and venting piping systems over the architects plans.
- 2. Layout domestic water supply including hot and cold water systems.
- 3. Calculate plumbing fixture unit count to determine building load.
- 4. Perform hydraulic calculation to determine pipe sizes and pump sizes.
- 5. Draw piping diagrams of the designed systems to indicate sizes.
- 6. Draw details to support the design on plans.

Education:

Mastering the Art of Design Firm Management, Kyle Davy Consulting San Francisco, California Spring 2013

Mastering the Art of Design Firm Project Management, Kyle Davy Consulting San Francisco, California Fall 2012

University of California, Los Angeles (UCLA)
Westwood Los Angeles, California
Certificate in Sequential Program in Plumbing Systems Design
October 2002 to June 2003

Colegio San Agustin – Bacolod College of Engineering Bacolod City, Philippines **Degree in Bachelor of Science in Mechanical Engineering,** March 2000

Computer Literacy:

Building Information Management (BIM) and Computer Aided Design (CAD) using Revit, AutoCAD and Navisworks; Bluebeam; Deltek Vision; Mac OS Sierra & Microsoft Windows 10; Latest Microsoft Office (i.e. Word, Excel, PowerPoint, and Outlook). Proficient PC and Mac user.

References:

- Dennis Gruta, Fire Protection Engineer Henderson Engineers 913.617.0626
- Karl Caouette Technical Lead Henderson Engineers. 818.590.9504
- Desmond Mahony Vice President Breen Engineering 310.918.2982
- Luis Jimenez Yanagita Maffris Architect 310.558.8616