

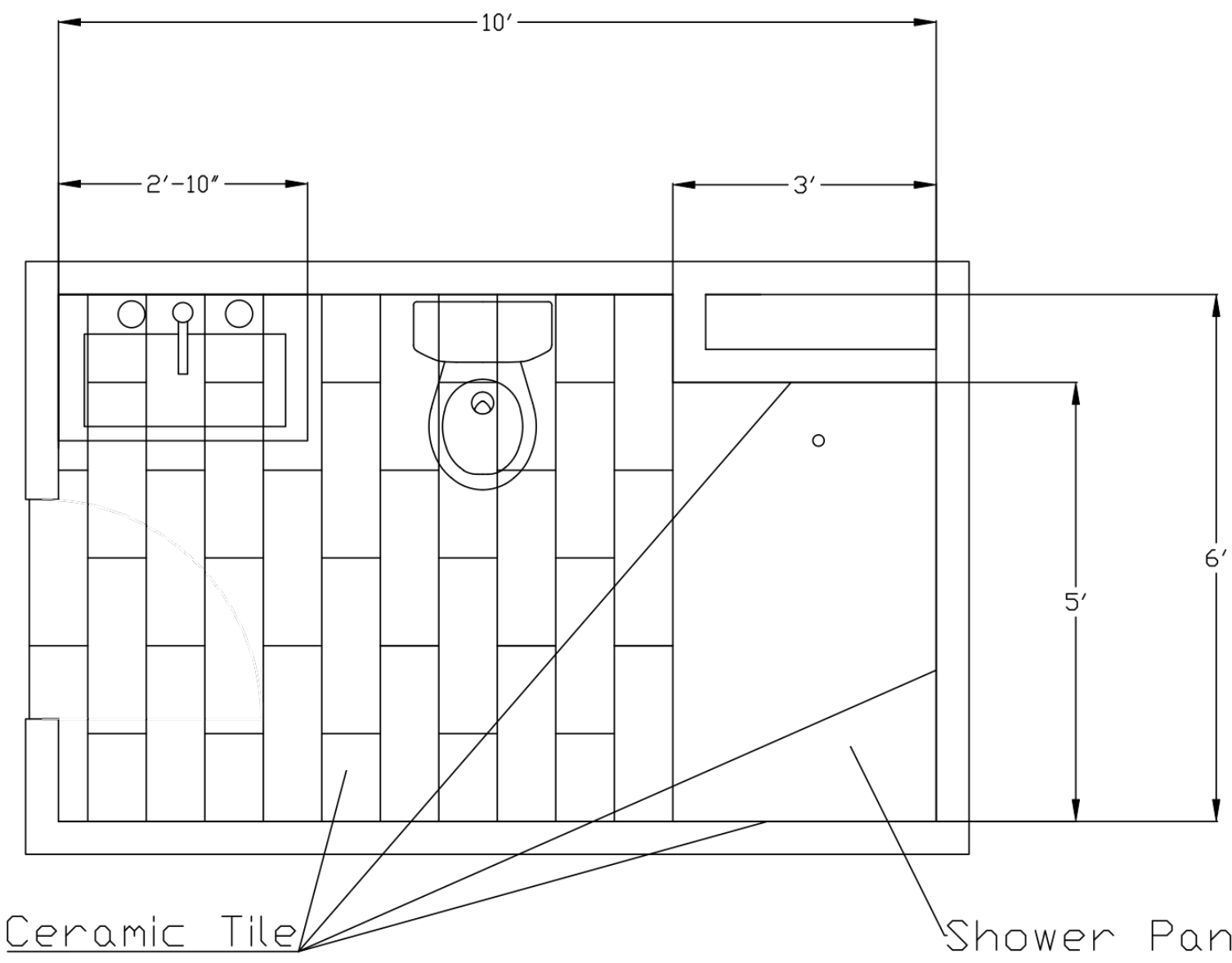


# Residential Bathroom and Tile Shower Addition During COVID-19 Quarantine

This paper outlines the design and construction of a new code compliant bathroom including: a low profile shower pan, ceramic-tile shower enclosure, and new plumbing piping and fixtures. One of the main objectives was to complete the new shower which would be easily accessible and maintenance free in order to support a local elderly couple. The selection of this project took place during the COVID-19 pandemic approximately nine months after California issued the first mandatory statewide Stay-at-Home Order. During the early design and development stages an opportunity to collaborate with a local trades-person was identified as well as the need for the selected project. The new bathroom is located on the lower level of a one-and-a-half story home. Some of the primary onsite work activities in the project are: replacing old cast iron plumbing with ABS Pipe, framing a new interior wall, installing interior cement backer board at the shower enclosure, and tile installation on the bathroom floor and the shower walls. The goal of the project was to construct a fully accessible bathroom for an elderly couple within their budget and schedule. This paper will detail the steps, key takeaways, and overall process in order to help future students and industry professionals.

**Key Words:** Design, Tile, Construction, Shower, Local

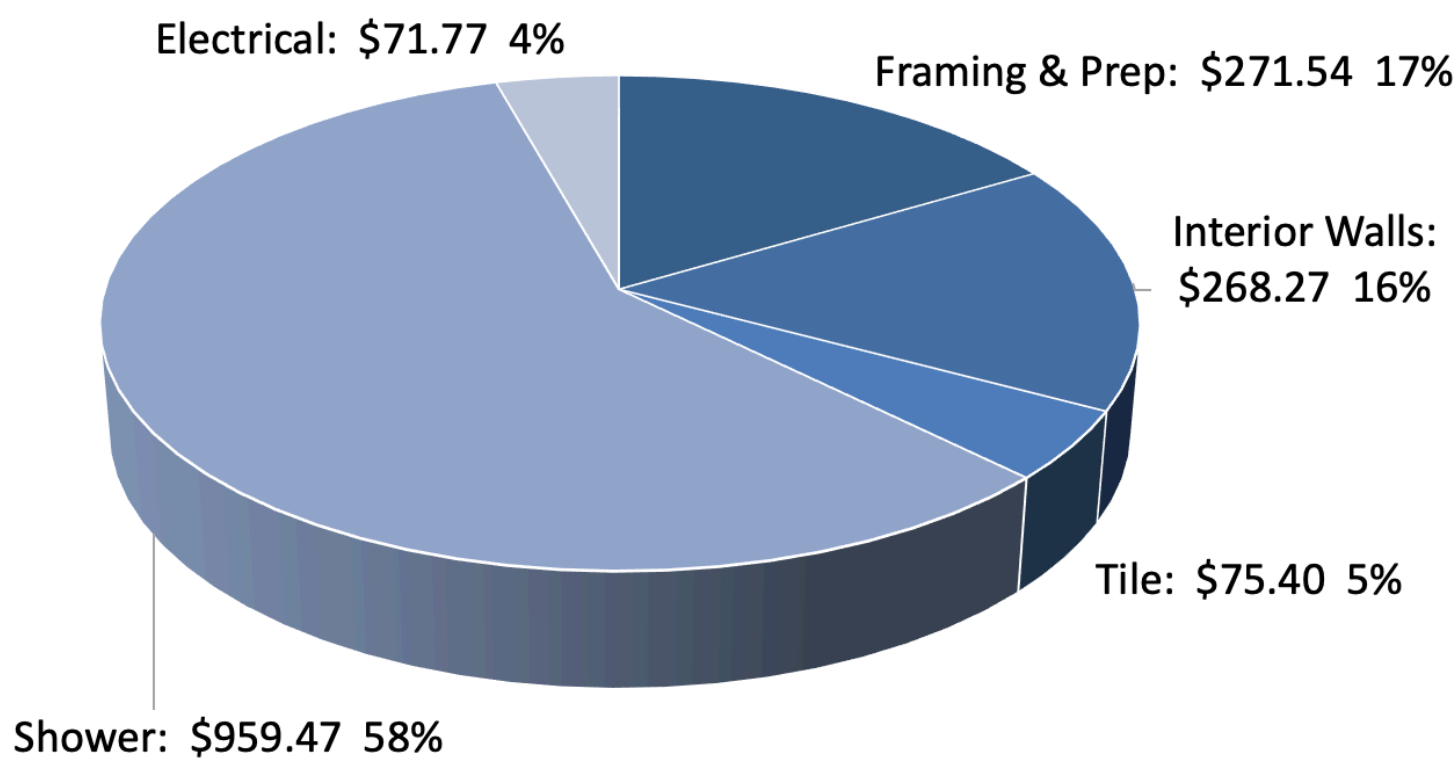
## AutoCAD Layout



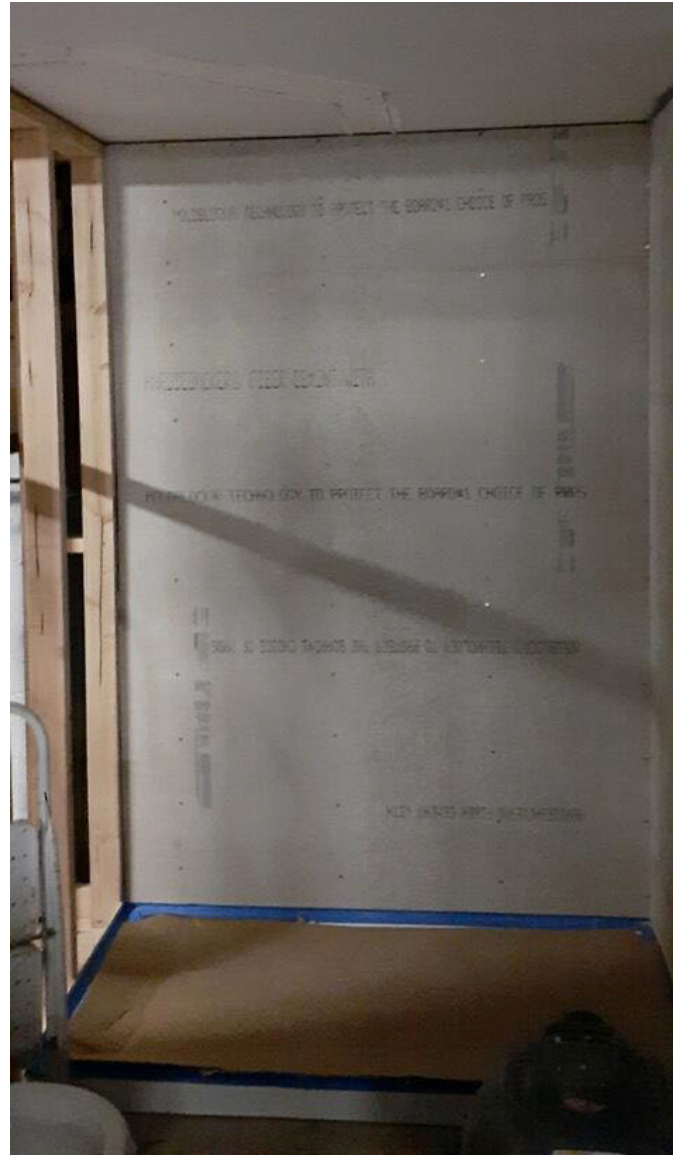
## Overview of Construction Activities

Start Date:	Finish Date:														
Tuesday, January 19, 2021	Friday, January 29, 2021														
Summary of Construction Activities	JAN													FEB	
	tue	wed	thu	fri	sat	sun	mon	tue	wed	thu	fri	sat	sun	mon	tue
	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2
On-site Construction	Construction														
Demo, plumbing, framing: 16 MH's															
Install shower pan & prep walls: 16 MH's															
Tile prep & install, texture + paint: 32 MH's															
Shower Door, Fixtures, Finishes: 16 MH's															
Present to Homeowners															
Estimated Duration of Construction	Length: 11 Days      Total Labor (MH's): 80 Hours														

## Material Cost Breakdown



Material Cost Total: \$1,646.45



CAL POLY

Joseph Q. Szillinsky  
California Polytechnic University San Luis Obispo  
San Luis Obispo, California