

# Construction Installation Guide Concrete Reinforced Shear Wall Cal Poly ARCE Department

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**Key Words:** Concrete, Shear, Earthquake, FRP, Construction

## Project Scope

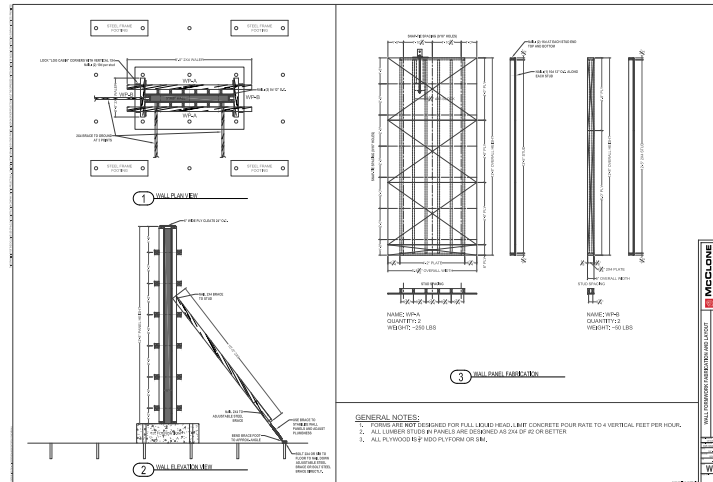
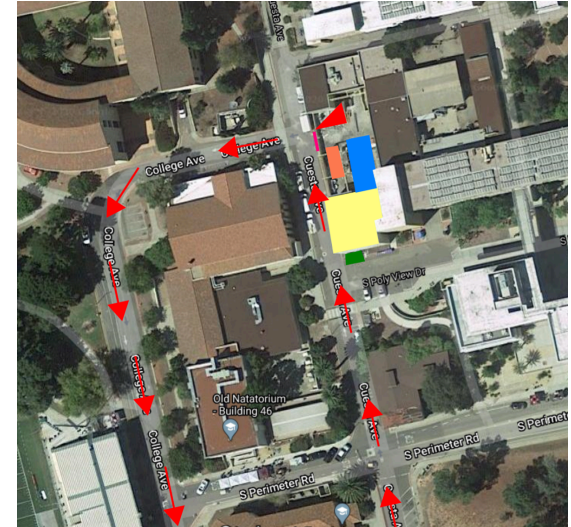
This project focuses on delivering a reinforced concrete shear wall that can reconstructed year after year by the ARCE department. The goal of this report is to present a seamless construction manual so issues and discrepancies in the construction process can be avoided. The project scope includes the construction of the concrete wall not limited to placement of concrete, rebar and wall stripping. The procedure to deliver this wall is discussed in the complete project installation manual.

## Deliverables

This project provided the deliverable of the Construction Installation Manual. This manual is broken down into the main sections of General Information, Construction Installation, Safety and Quality Assurance (QA) and Quality Control (QC). This report will discuss the contents and findings in these sections. Defined in this section is the project information that is necessary to safely deliver a quality project.

## Table of Contents

<b>General Information: Section 1</b>	
Background.....	5
Lessons Learned from the Past Project.....	6
Specifications.....	7
Foundation.....	7
Formwork.....	7
Concrete.....	7
Rebar.....	7
Materials.....	8
Necessary Tools.....	9
Drawings.....	10
Schedule.....	13
Site Logistics.....	14
Concrete Delivery Method.....	16
3 Mobilizations.....	16
Mobile Batch Plant Truck.....	16
Mixer Delivery Trailer.....	16
Mix At Concrete Lab.....	17
Placing Method.....	18
<b>Construction Installation: Section 2</b>	
Project Installation.....	20
Meetings.....	20
Construction.....	20
Formwork.....	20
Concrete.....	20
<b>Safety: Section 3</b>	
Site Safety.....	23
Safety Statement.....	23
Covid-19 Statement.....	23
Public.....	23
Construction Personnel.....	23
PPE Regulations.....	23
Jobsite Safety Instructions.....	23
Tool box Talk and JHA form.....	24
<b>QAQC: Section 4</b>	
Quality Control and Quality Assurance.....	37
QAQC Checklist.....	37
Project Images.....	39
Citations.....	42



## Concrete Reinforced Shear Wall

- Area of Work
- Concrete Wash Out
- Dumpsters
- Haul Route
- Laydown Area
- Pumping Area
- Site Entrance



## Conclusion

Making sure the concrete-reinforced shear wall is easy to construct and deliver is necessary for the continuation of the project. This project is essential to the continued learning and testing done by the ARCE department and needs to be made sustainable. This project installation guide provides the proper instructions and guidance to make this a sustainable project. It is necessary for this guide to be followed throughout the construction process. Ensuring quality needs to be of the utmost concern and in the previous year, the quality issues were caused by human error and not engineering error. This guide easily lays out the proper steps that need to be followed. Cal Poly, a university that prides themselves on their "Learn by Doing" culture, needs projects like this to continue their legacy. This project provides students with the opportunity to test real world structural applications. Making sure this is an easy-to-perform project year after year is necessary to ensure the longevity of the project.

Figure 1. Table of Contents