

Project Overview:

Aztec Design and Construction is proud to present the following information regarding the proposed design-build services for a UCSD-City of San Diego Fire Station in the city of La Jolla, California. This document serves as visual aid to summarize the engineering analysis and conclusions pertaining to the design and construction of the project.

Background:

The UCSD-City of San Diego Fire Station will be located at the North entrance of UC San Diego's campus, near the crossing of North Torrey Pines Road and Genesee Avenue. The current area of the project spanning over 37,000 square feet contains a tennis court and various native vegetation, as shown in the figure below. The existing tennis court and vegetation shall be removed to make room for a new permanent 3 bay fire station of approximately 10,500 square feet. The facility will accommodate three fire apparatus and a crew of nine to eleven fire personnel, on-site surface parking for fire-rescue personnel, apparatus bays, dorm rooms, kitchen, watch room, ready room, station alerting system, IT data network, wet and dry utilities, electrical, mechanical and all other necessary infrastructure associated with this project.

Project Personnel



Landon Gastelum
Project Manager



Ryan Garofalo
Structural Engineer



Julio Lopez
Senior Civil Engineer



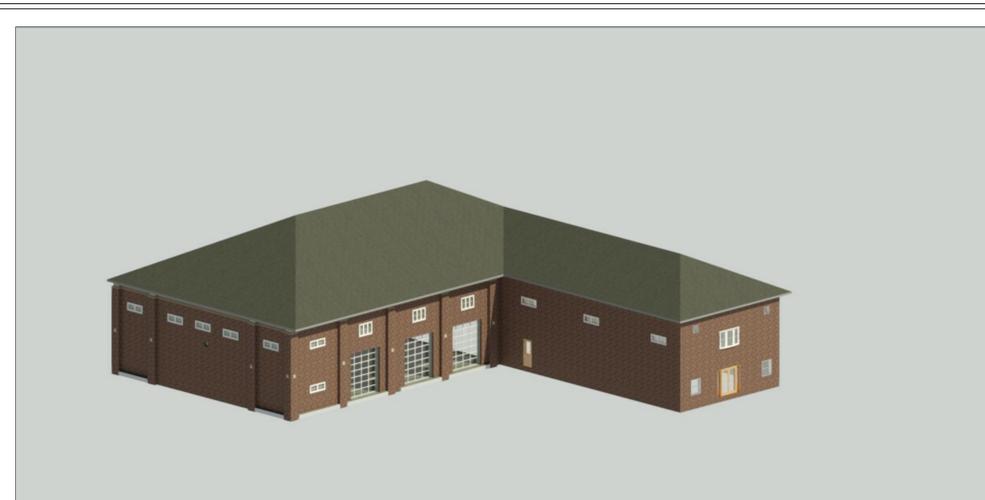
David Colera
Water Resources Engineer



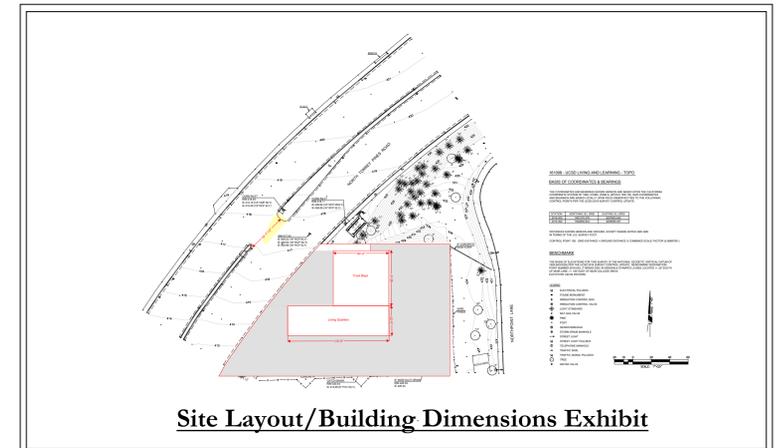
Blake Detata
Project Superintendent



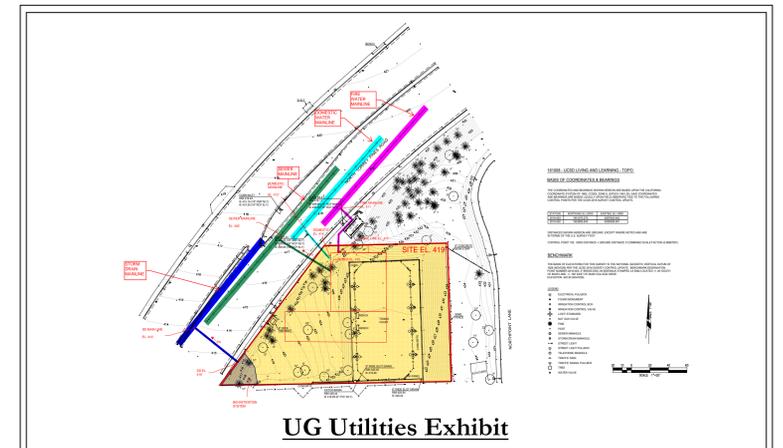
Chris Carcido
Chief Estimator



Building Render



Site Layout/Building Dimensions Exhibit



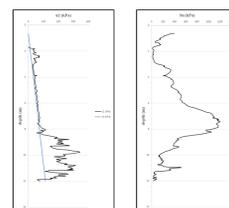
UG Utilities Exhibit



Project Area

Geotechnical Report

- Reached out to Julio Valdes to conduct a CPT test.
- With the provided data log we concluded:
 - Water table is 0.6m below the ground surface
 - Native soil is made up of clay and sand
 - Su=35-700 kPa



Water Resources Report

- | | | | |
|------------------------|---------------------------------|-------------------|--------------------------------|
| Stormwater: | • 10" HDPE
• 70 foot Lateral | Domestic: | • 4" HDPE
• 45 foot Lateral |
| | • 42" RCP Mainline | | • 16" RCP Mainline |
| | • Bio Basin
• Area: 1241 SF | | |
| Sanitary Sewer: | • 6" HDPE
• 65 foot Lateral | Fire Line: | • 6" HDPE
• 50 foot Lateral |
| | • 16" RCP Mainline | | • 16" RCP Mainline |

Structural Report

- Beams:** Steel Wide Flange
Level 1 Sizes: W12x65, W14x109, W16X100, W18X119, W21X122
Level 2 Sizes: W12X35, W14X43, W14X48, W16X67
- Columns:** Reinforced Concrete
Total Height = 24ft
Size and reinforcement varies
- Slab:** 2 Way Concrete Slab
Level 1: 6-8"
Level 2: 6"
- Foundation:** Shallow Foundation, Fully Embedded Square Footings
Width: 8-11 ft
- Seismic:** Risk Category D
Steel moment resistant frame recommended

Transportation Report

- Traffic Signal Installation
- Median removal and reconfiguration
- Dedicated Fire Truck Left Turn Lane
- U-turn Permission



Grading & Drainage Report

- Grading and drainage planning will require the demolition and removal of the current tennis court and surrounding agriculture such as trees, brush, cut and fill, and minor earth work as needed. Our overall graded site demonstrated in the yellow shaded area will reach a desired elevation of 419' – approximately 2 feet above road elevation at 417'.
- Area = 37,500 ft²
- Depth = 10 ft
- Fr³ = 375,000
- CY = roughly 14,000



Construction Report

- Scope:** Civil Site, Building Foundation/Structure, Traffic Improvements along N Torrey Pines
- Duration:** 5 months
- Budget:** \$2,041,000 (Hard Cost Construction Only)

