**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 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**

- **Building Render**
- **Site Layout/Building Dimensions Exhibit**
- **UG Utilities Exhibit**

**Geotechnical Report**

- Reached out to John Valley to conduct a CPT test.
- With the provided data log we concluded:
  - Water table is 1 foot below the ground surface.
  - Native soil is made up of clay and sand.
  - Sce = 50-75 kPA.

**Structural Report**

- **Building Design**
  - Levels: 2 Stories, 17’-6” (6.35 m), 14’-9” (4.5 m), 12’-6” (3.8 m), 10’-9” (3.3 m), 9’-0” (2.7 m), 7’-6” (2.3 m), 6’-0” (2 m), 4’-0” (1.2 m), 2’-0” (0.6 m).
  - Construction: Site and infrastructure category.
    - **Type:** Bridge, 4’-0” (1.2 m).
    - **Foundation:** Poured Foundation, Fully Embedded Span.
  - **Design:** BS, 4/1/5.

**Water Resources Report**

- **Sanitary Sewer:**
  - 3’-0” (0.9 m) HDPE, 65 foot lateral.
  - 2’-0” (0.6 m) HDPE, 30 foot lateral.

- **Domestic:**
  - 6” HDPE, 45 foot lateral.
  - 4” HDPE, 8 foot lateral.
  - 3” HDPE, 12 foot lateral.

**Transportation Report**

- Traffic Signal Installation.
- Dedicated Fire Truck Left Turn Lanes.
- U-turn Permitted.

**Grading & Drainage Report**

- Grading and drainage planning will require the demolition and removal of the current tennis court and surrounding vegetation such as trees, brush, cut and fill, and interior earth work as needed. The overall grade is demonstrated in the yellow shaded area which reaches a desired elevation of 41’-0” (12.49 m) along the road elevation.
  - **Area:** 37,500 sq ft.
  - **Depth:** 30 ft.
  - **Volume:** 775,000 cubic ft.

**Construction Report**

- **Soil:** Site/Soil, Building Foundation, Structure, Traffic Improvements along N Torrey Pines
- **Duration:** 3 months.
- **Budget:** $200,000 (Hard rock excavation only).