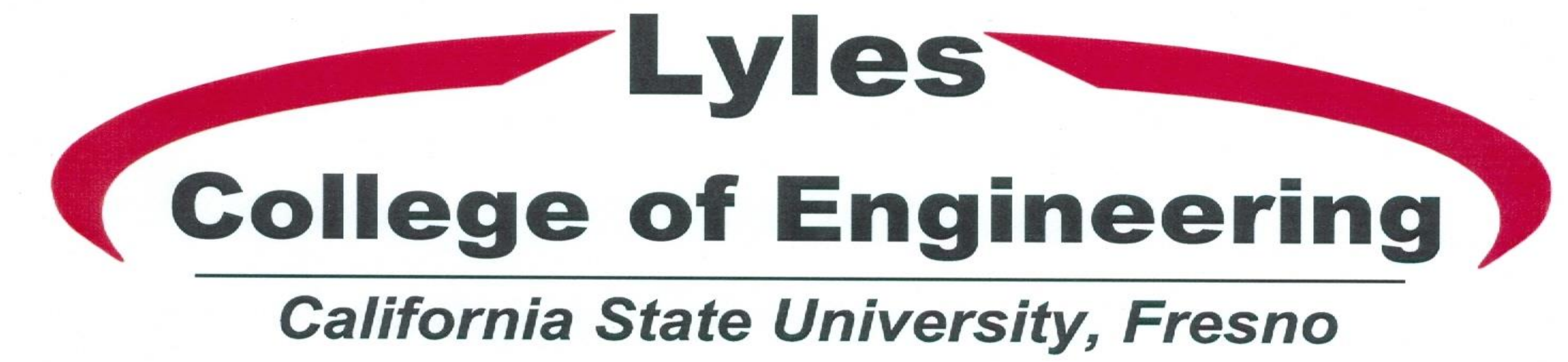


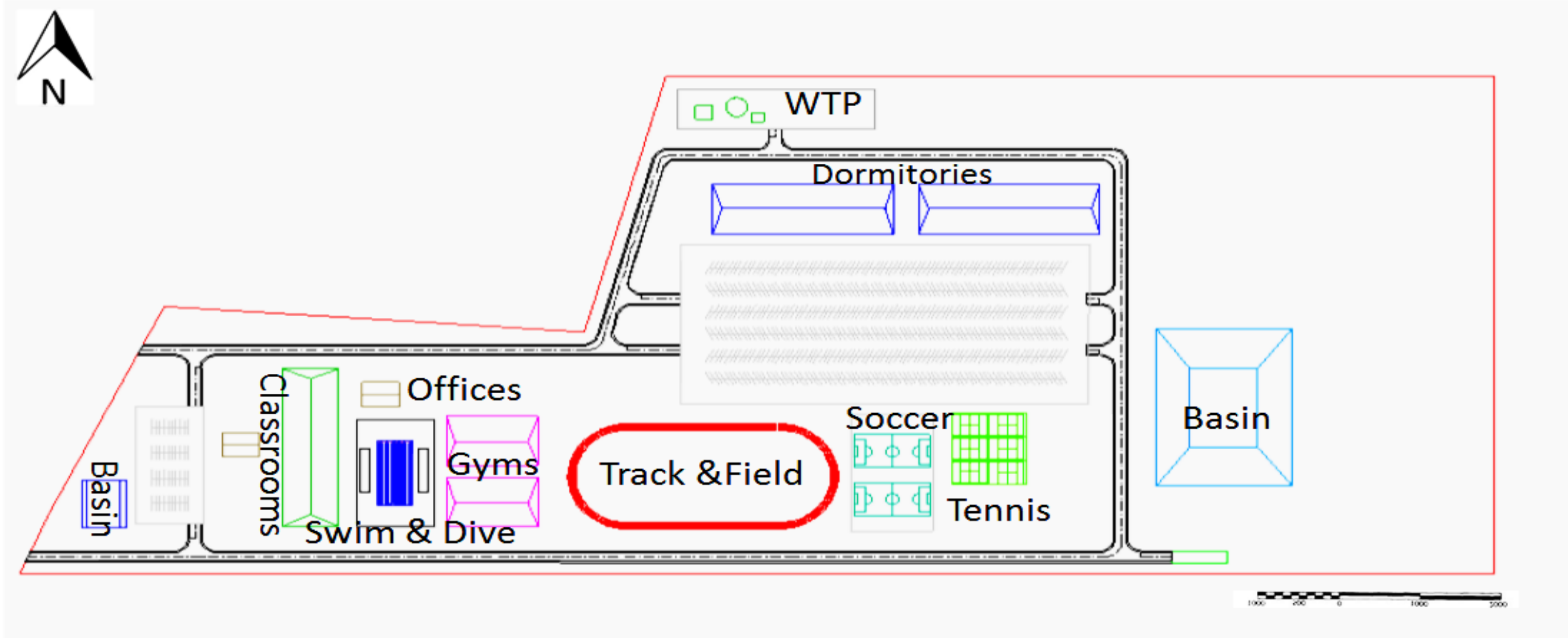
# Title: National Sports School

## Civil Engineering

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 Faculty Advisors: Dr. Wright, Dr Liu, Dr. Pasha, Dr. Xiao, Dr. Tehrani, Dr. Choo, Dr. Larralde



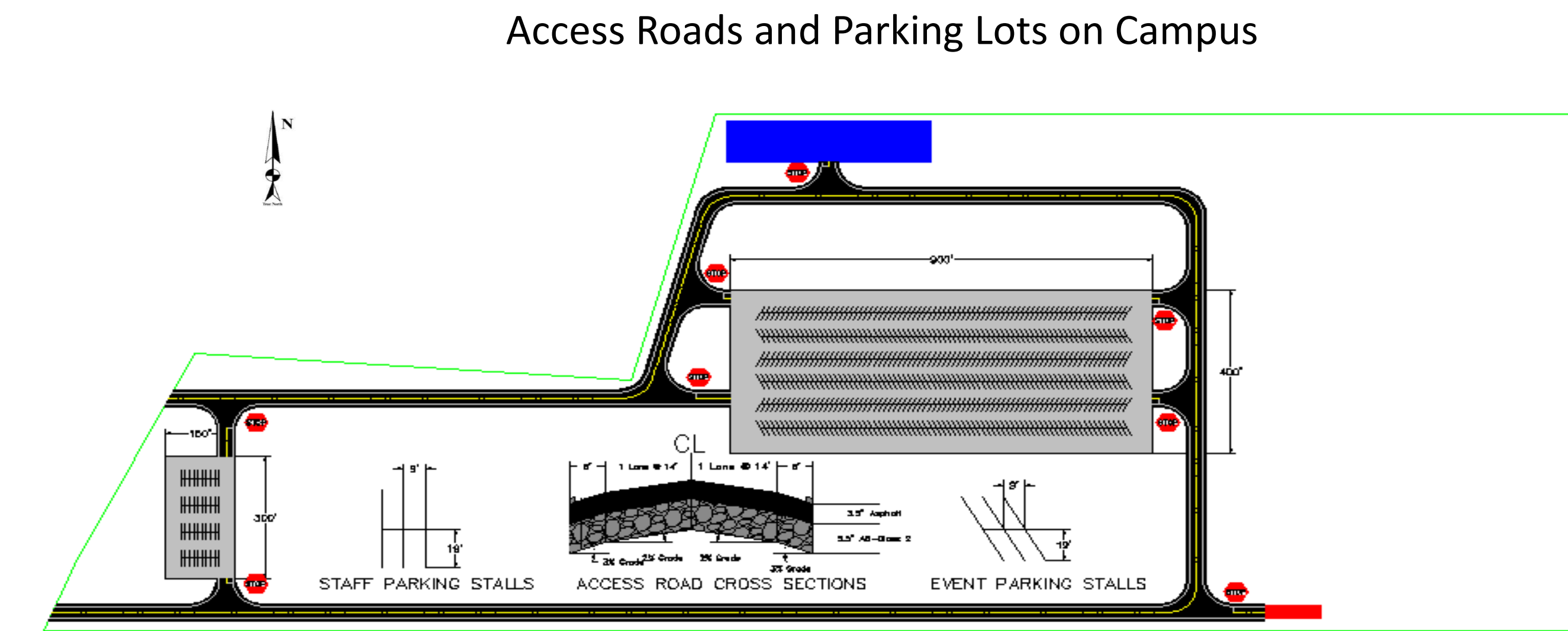
### Site Plan



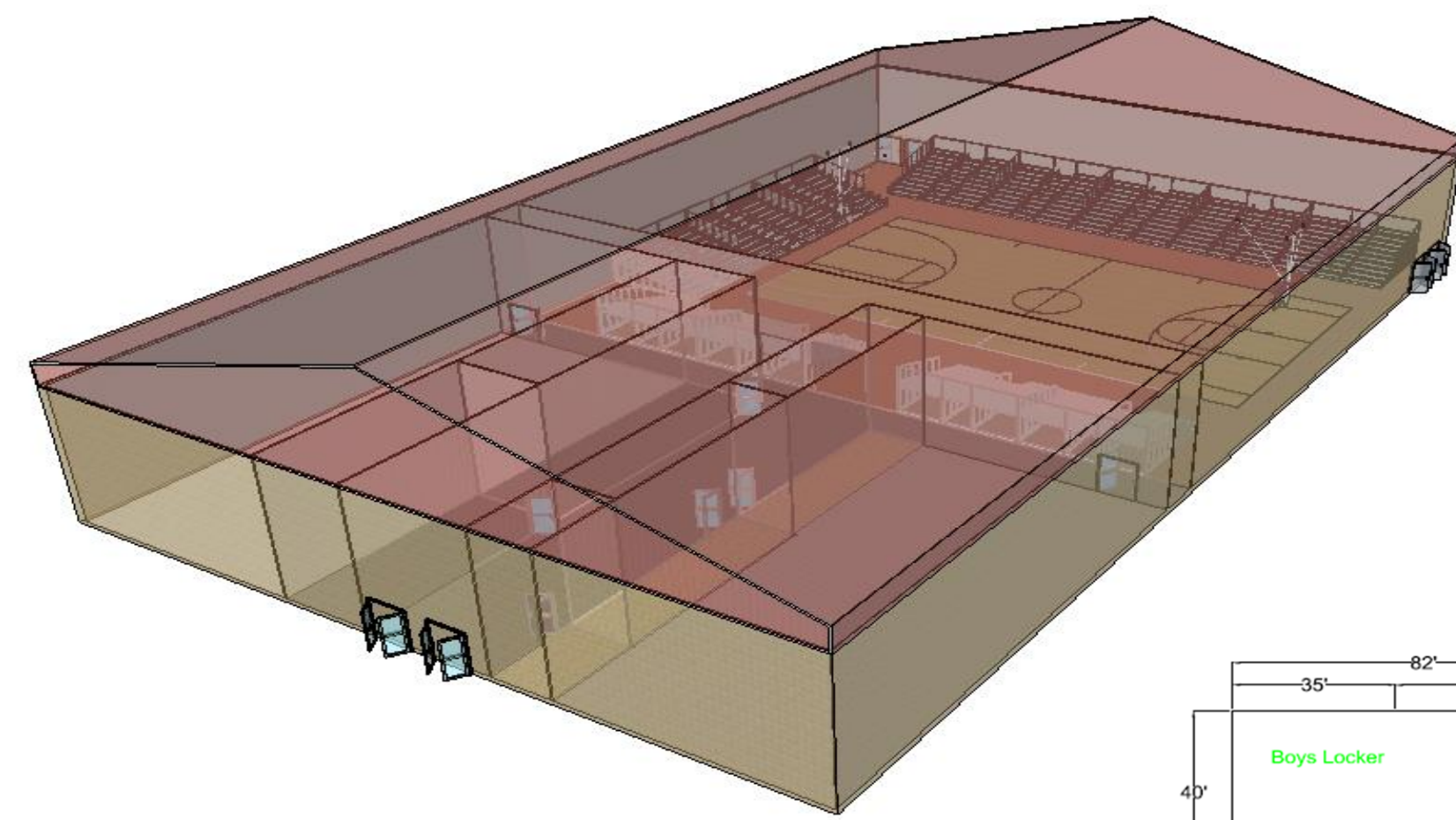
### Abstract

In the fall of 2012 Sierra Unifies School District requested a National Sports School be built in their district located in Fresno County, California. A National Sports School is a school that primarily focuses on bridging the gap between athletic achievement and education for high school students. Secondary focuses include offering sports such as cycling or skiing and implementing higher level training programs that public schools lack. The facilities should include all necessary structures, roads, and infrastructure that would help support such a school in the Sierra Unifies School District. IEC has designed and created a school that will incorporate all of the needs for high level athletes to pursue their professional careers while still competing and training at a caliber that suits them. The elements designed for the school by the IEC team includes: the gymnasiums, dormitories, and foundations for the structures, grading plans, an environmental impact report, potable water system, waste water treatment system, storm water system, access roads on campus, two school entrances, and a soils report. All of these elements will be located at 21022 Auberry road, a 76.12 acre parcel off of Auberry Road and Frontier Road just North of Sherry's Road House. Local and State Codes for California and Fresno County are followed for the design of the institution.

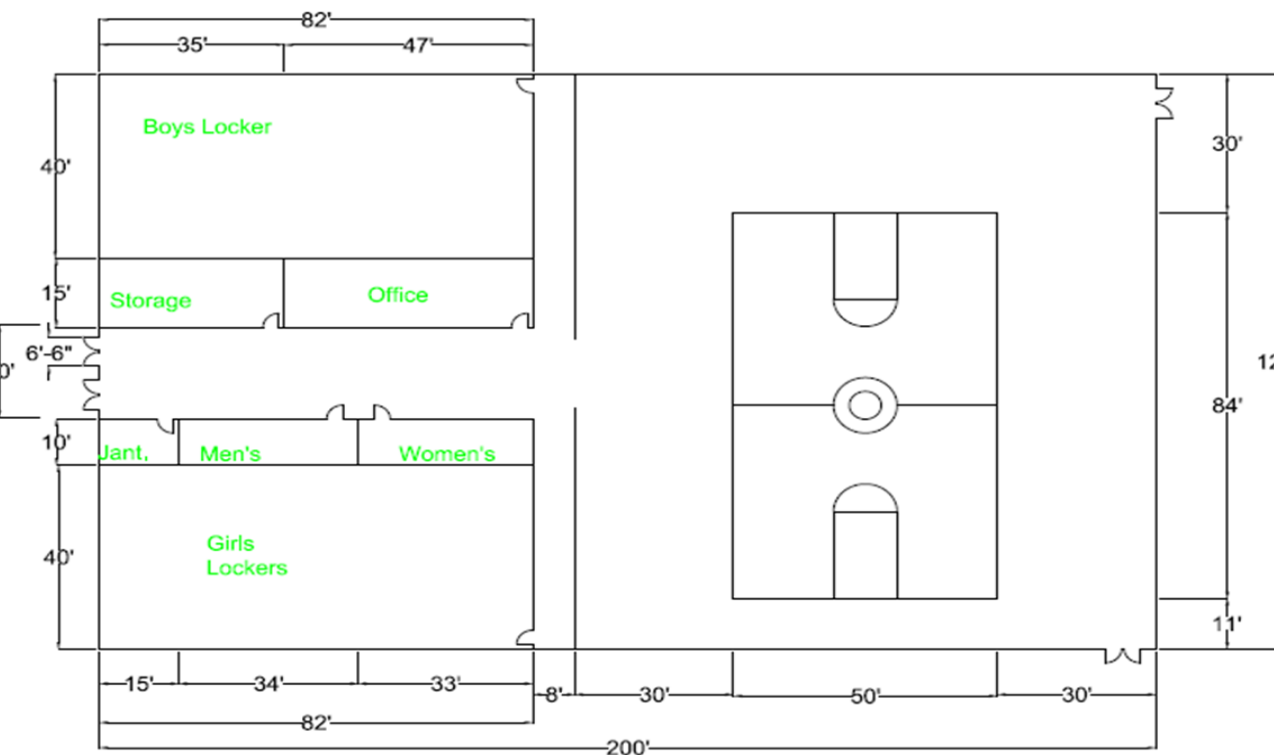
### Transportation



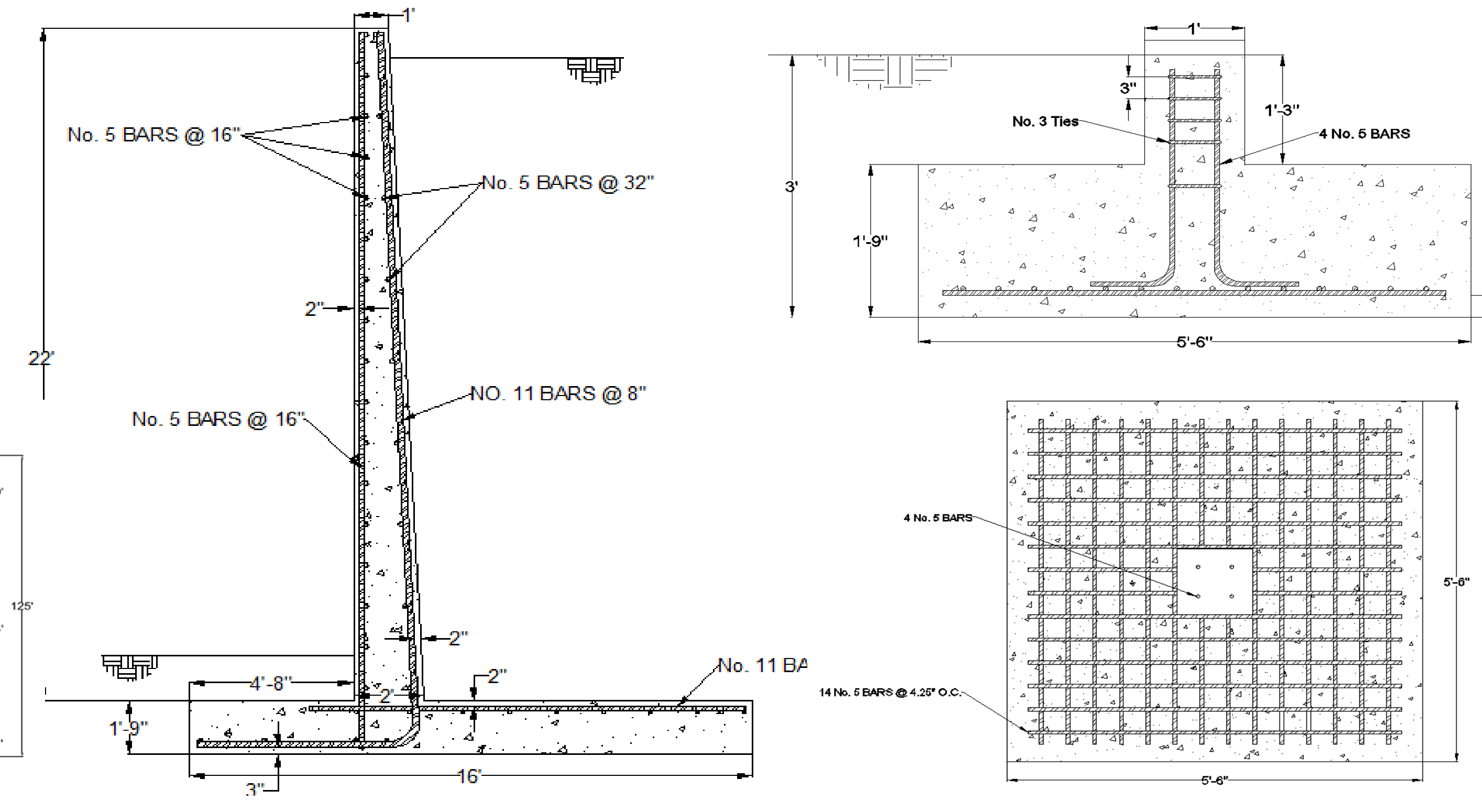
### Gymnasium Design



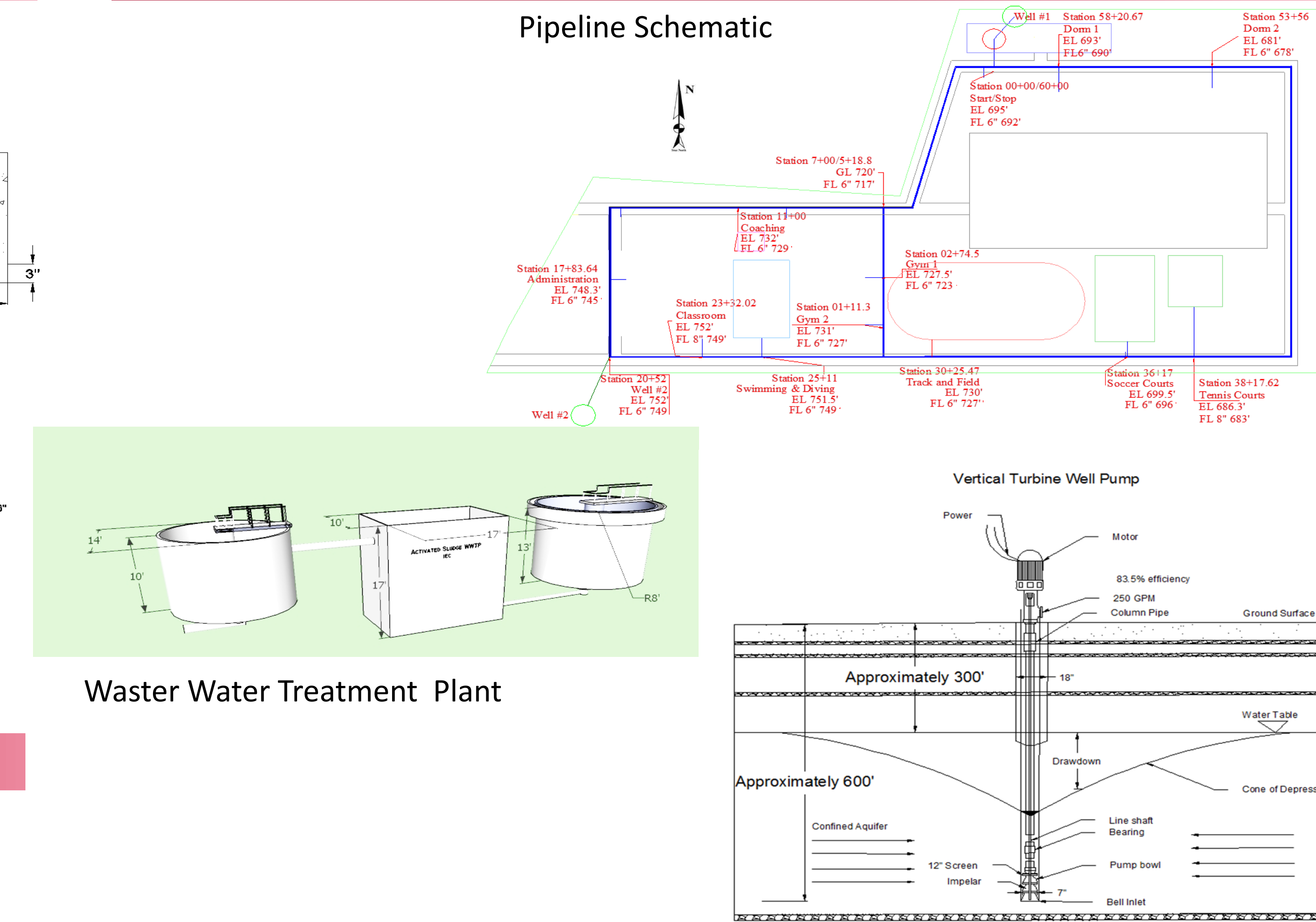
Gymnasium Schematic



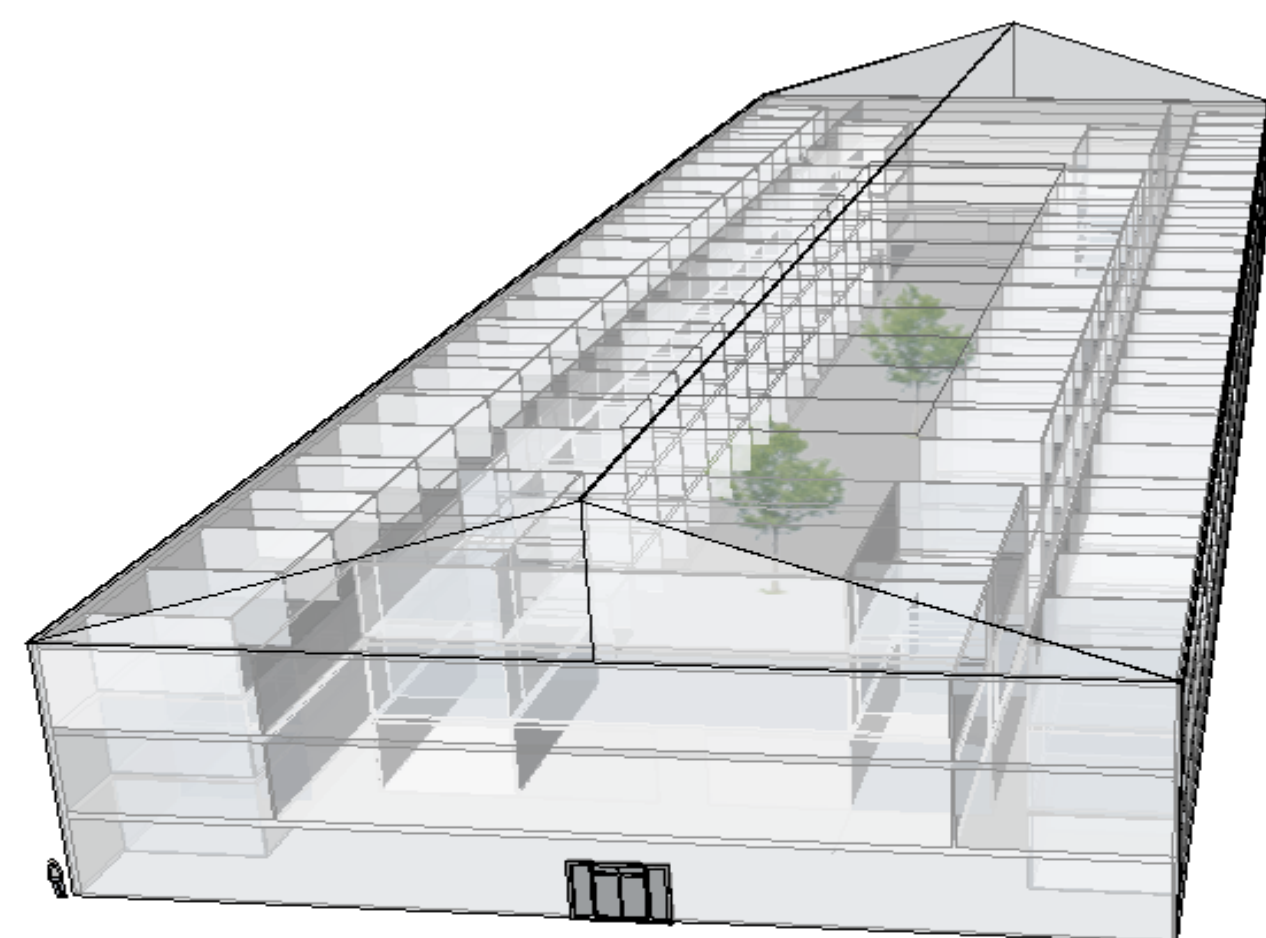
### Footing and Retaining Wall for Gymnasium



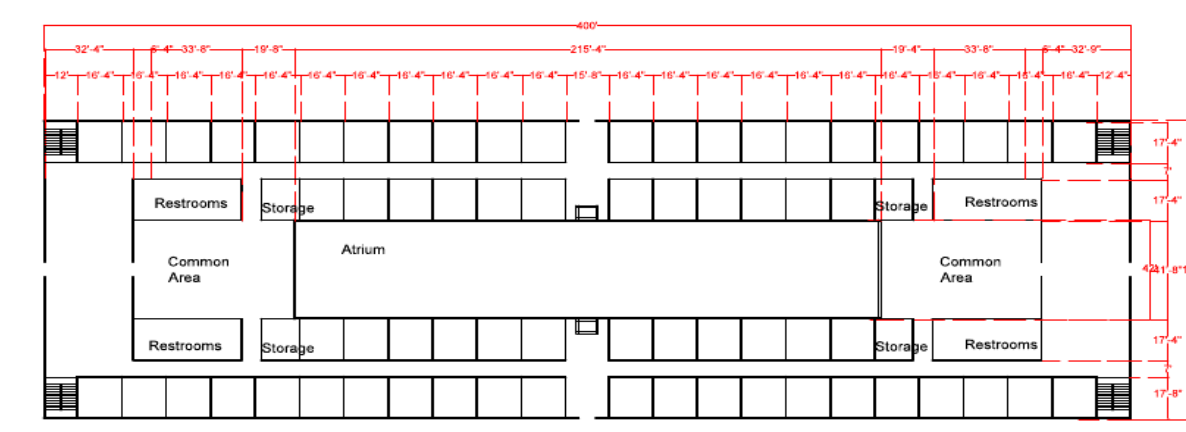
### Water Resources



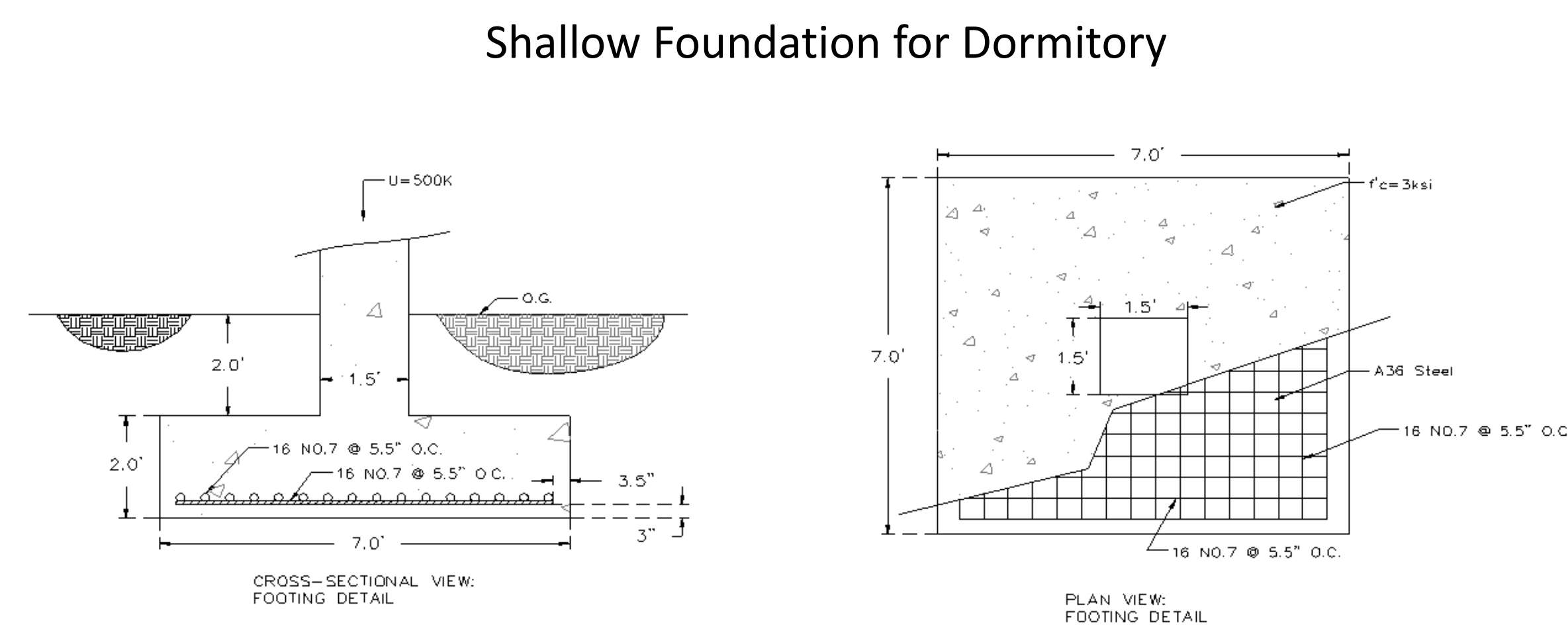
### Dormitory Design



Dormitory Schematic



### Dormitory Footing



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