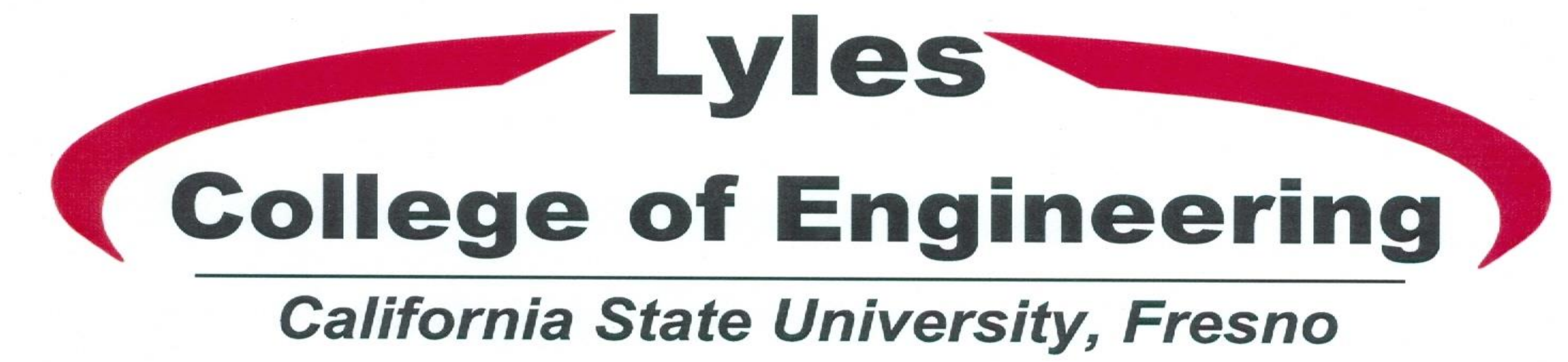


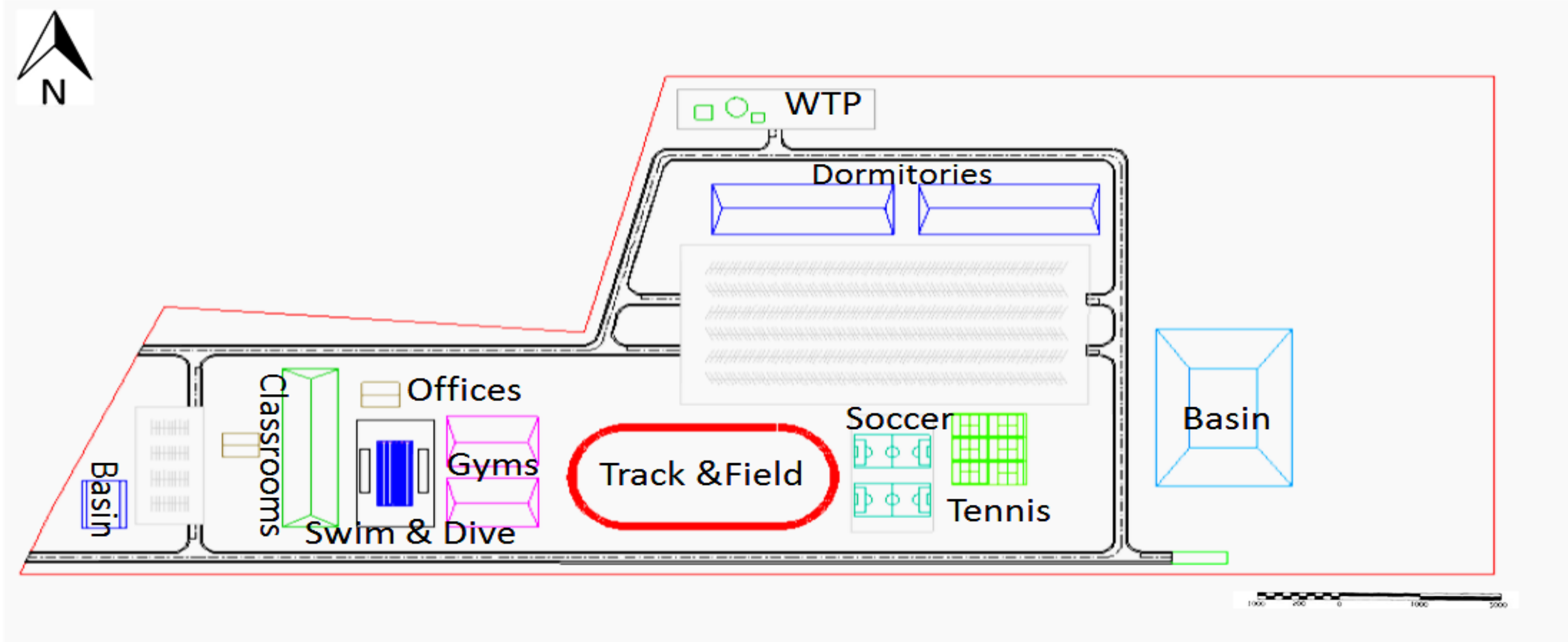
Title: National Sports School

Civil Engineering

Team: Lacey Payne, EIT, Oscar Ortiz, Daniel Bernik EIT, Oscar Solisromero, Uriel Altorre, Ashley Hotchkiss EIT
 Luqman Alragbi EIT, Sara Rastegar, Sophany Sam
 Faculty Advisors: Dr. Wright, Dr. Liu, Dr. Pasha, Dr. Xiao, Dr. Tehrani, Dr. Choo, Dr. Larralde



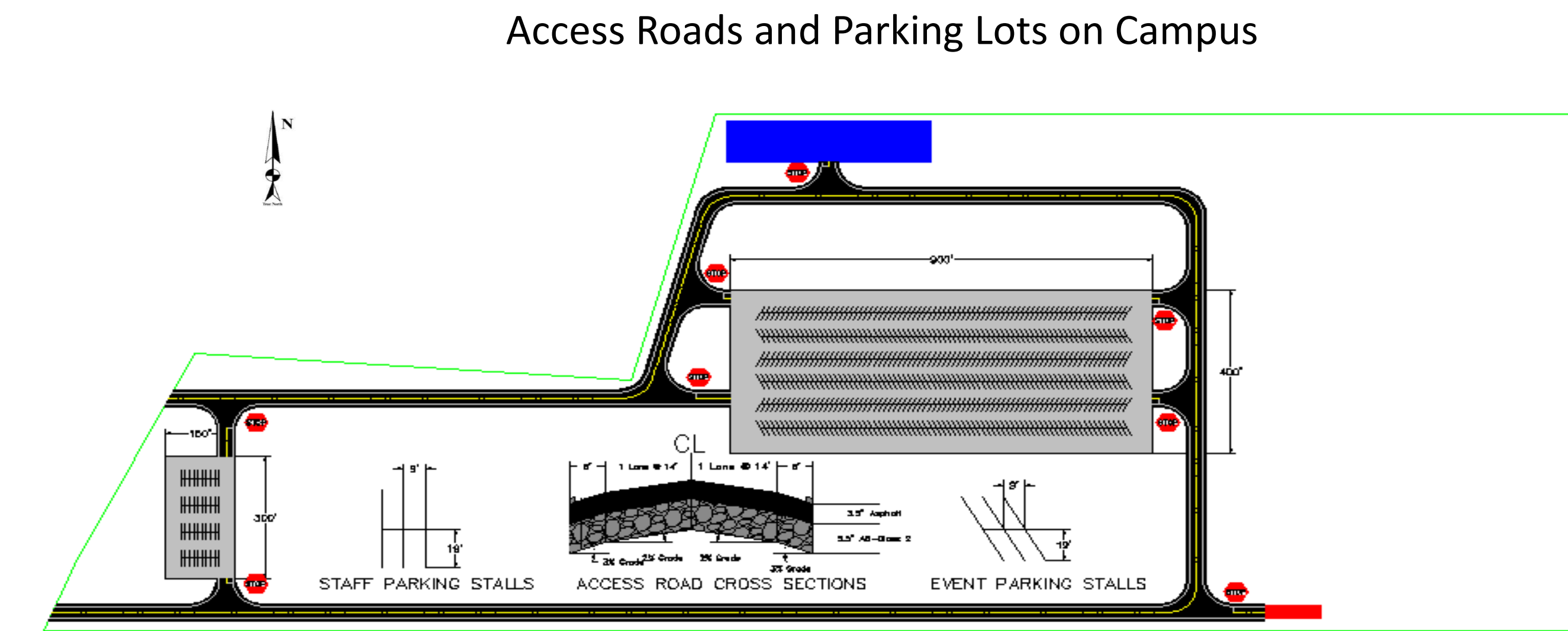
Site Plan



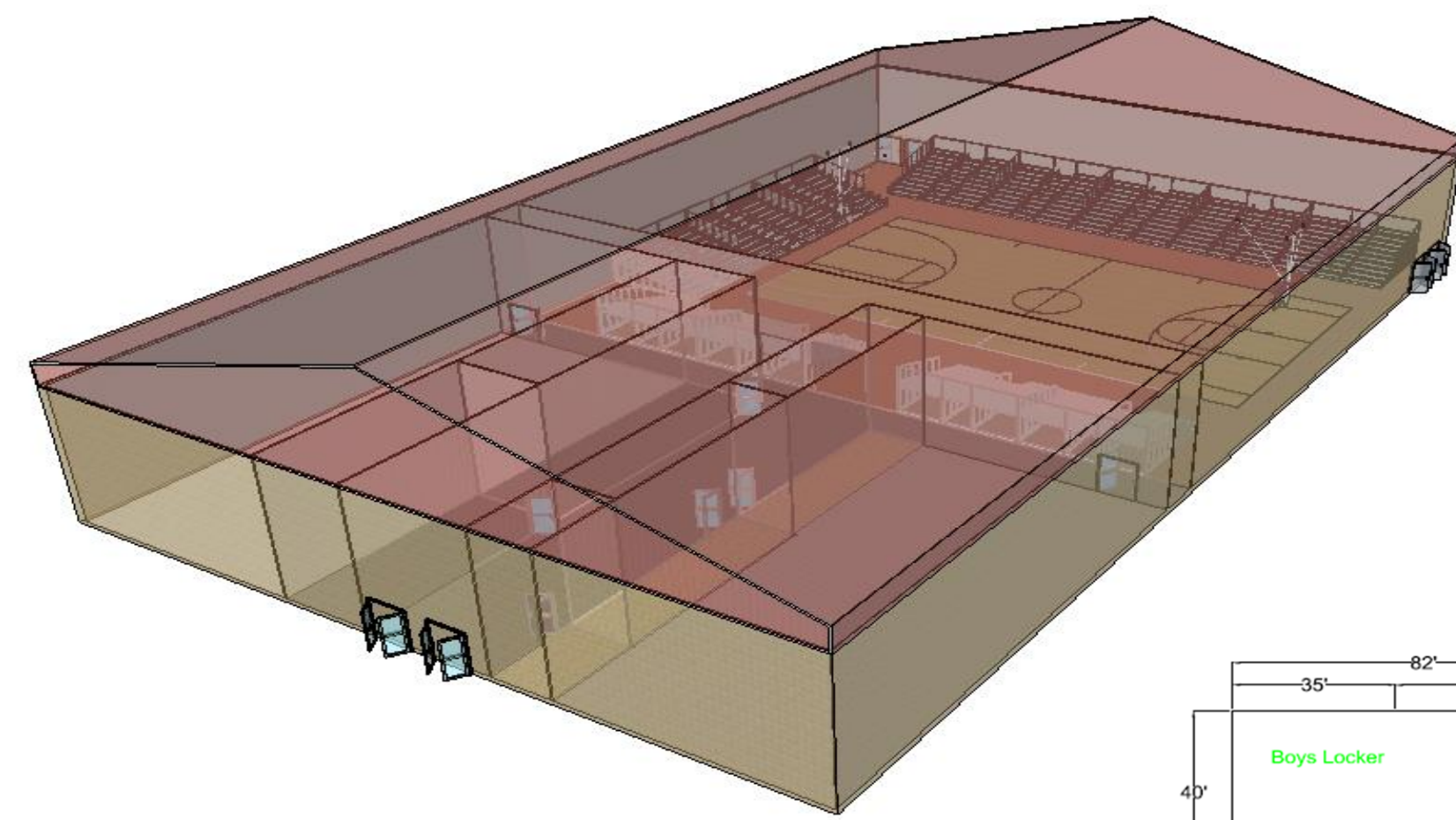
Abstract

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.

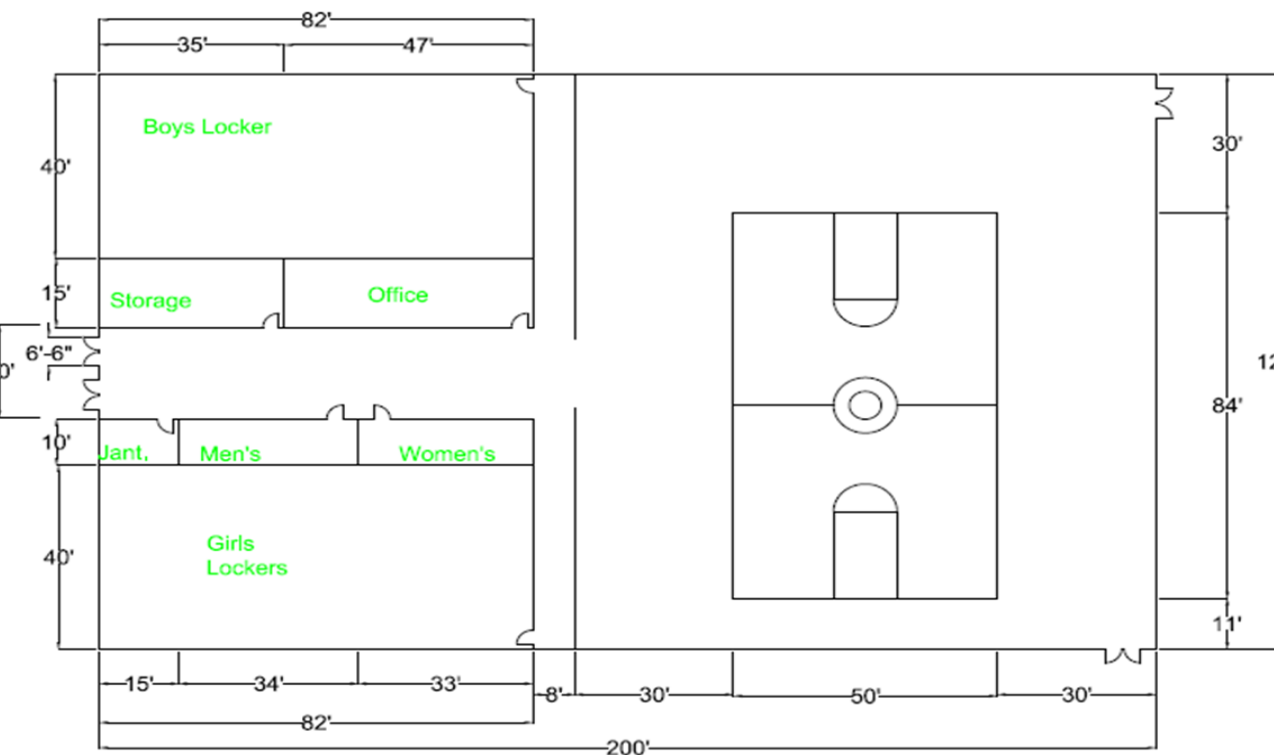
Transportation



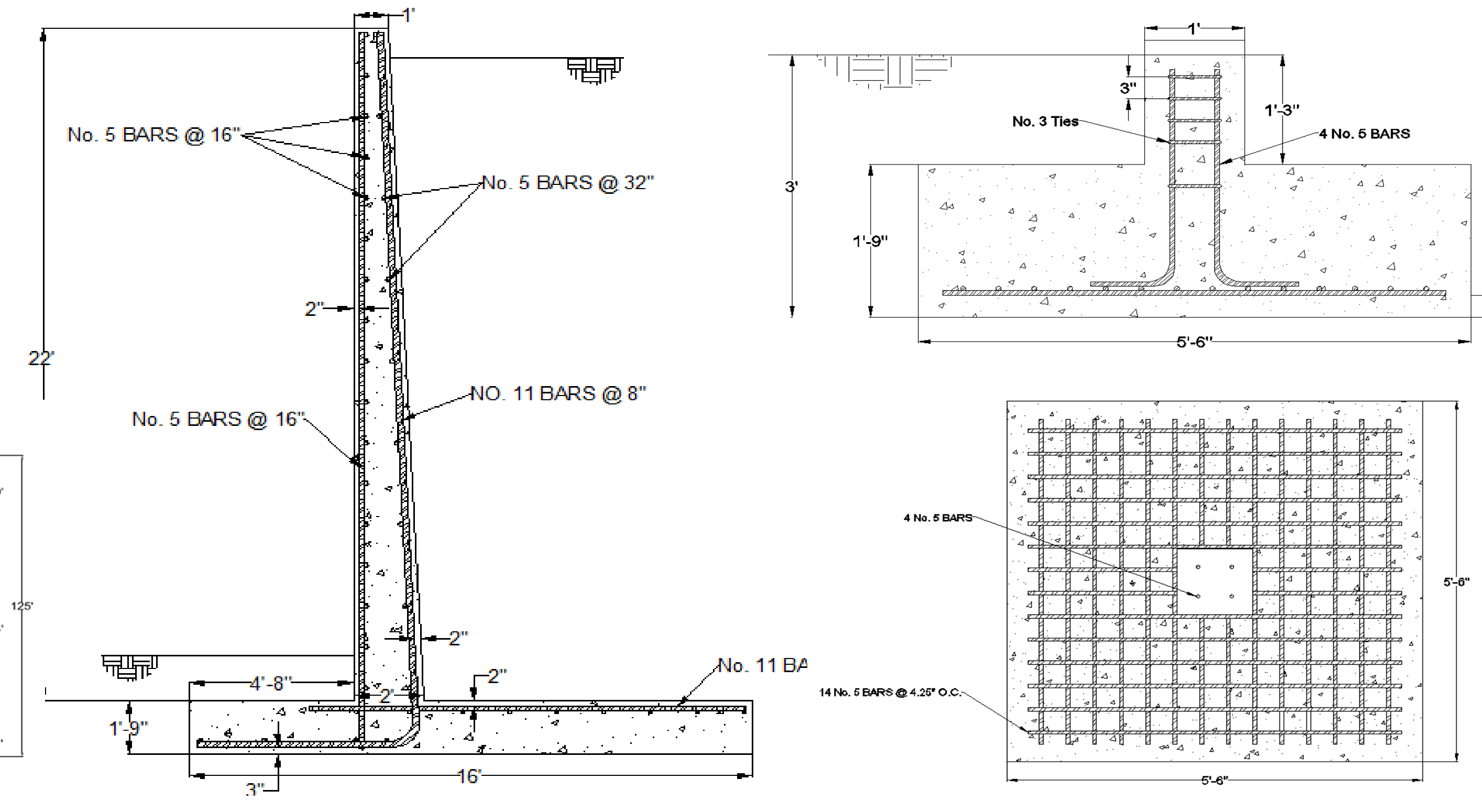
Gymnasium Design



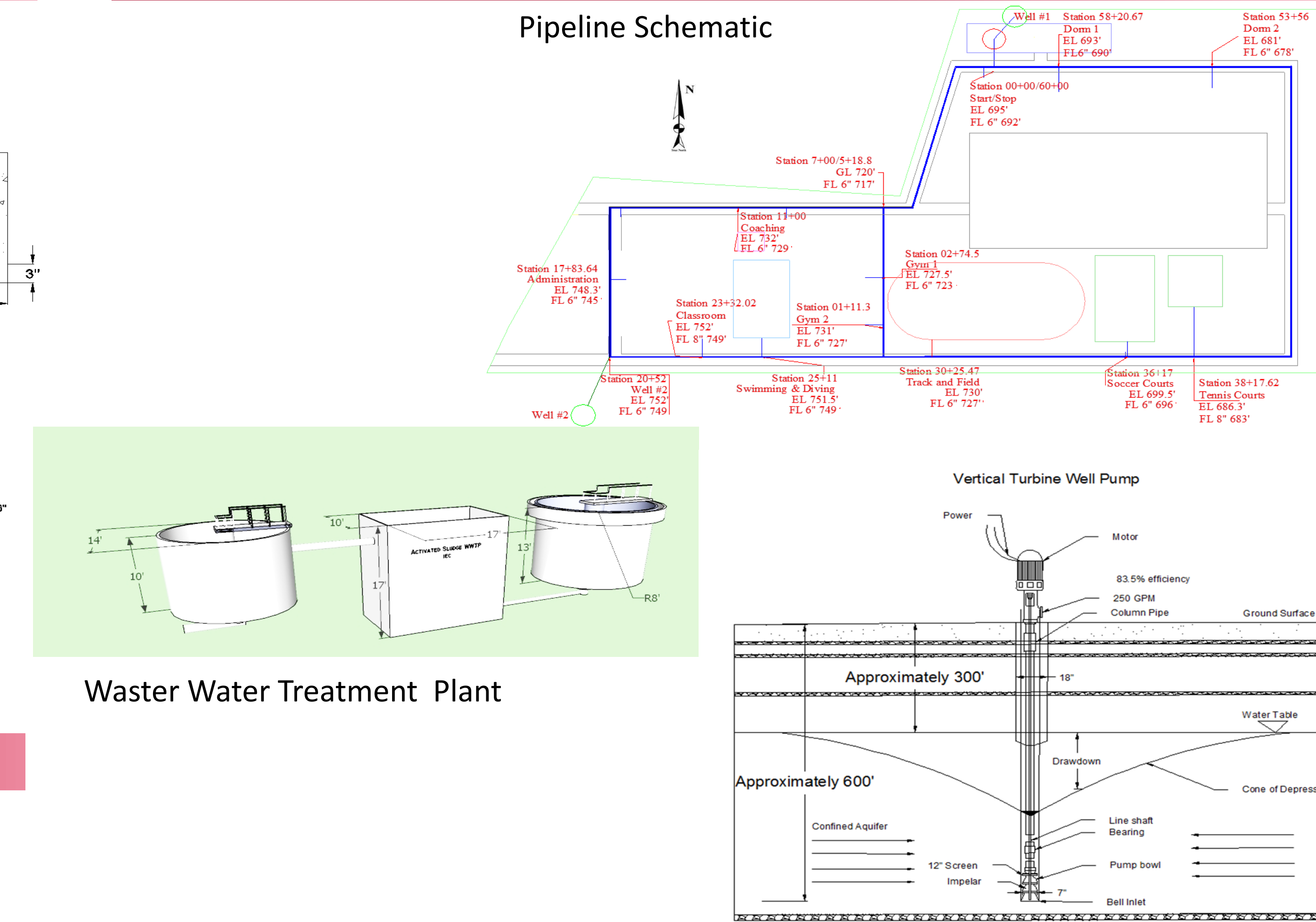
Gymnasium Schematic



Footing and Retaining Wall for Gymnasium

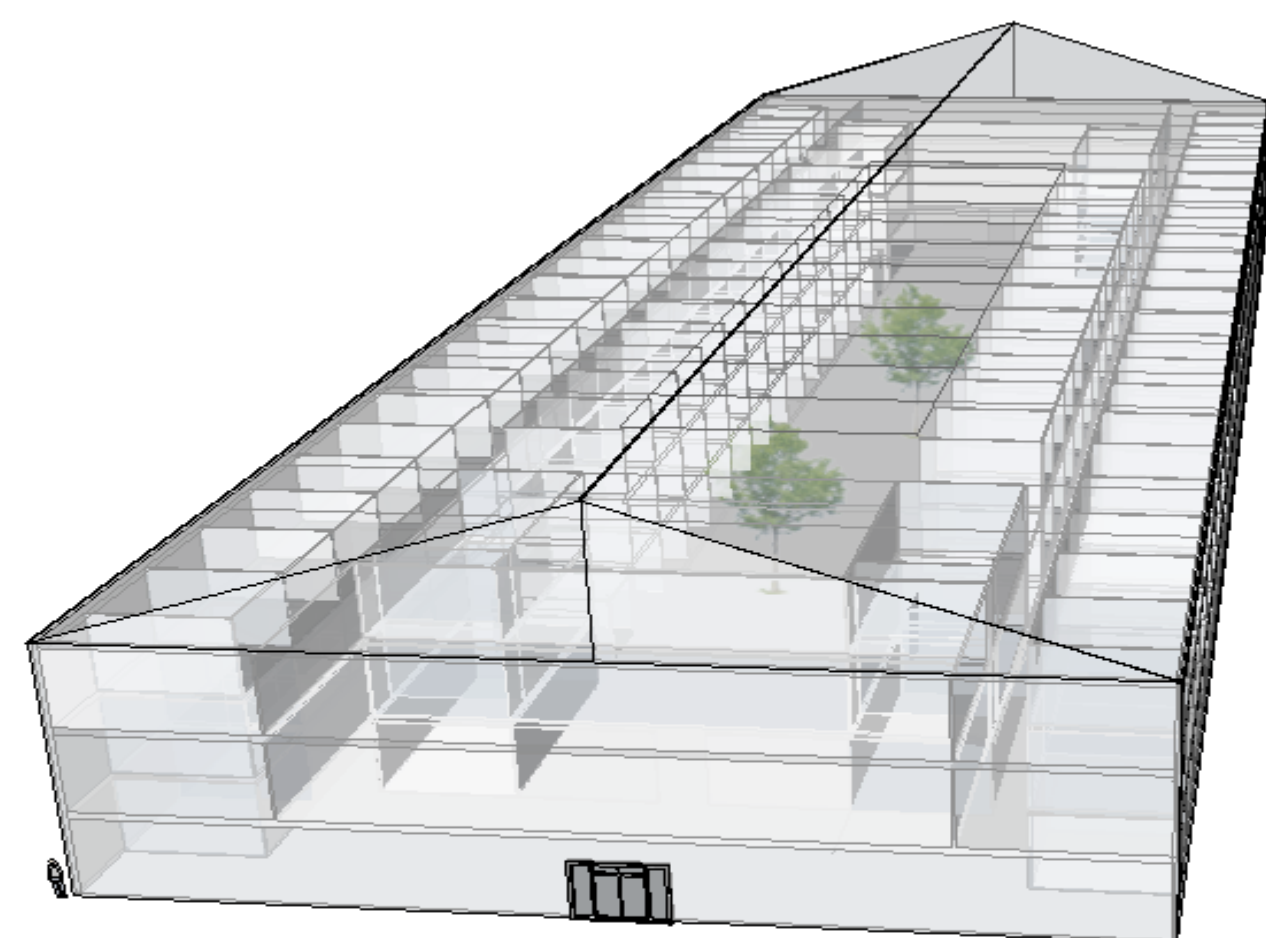


Water Resources

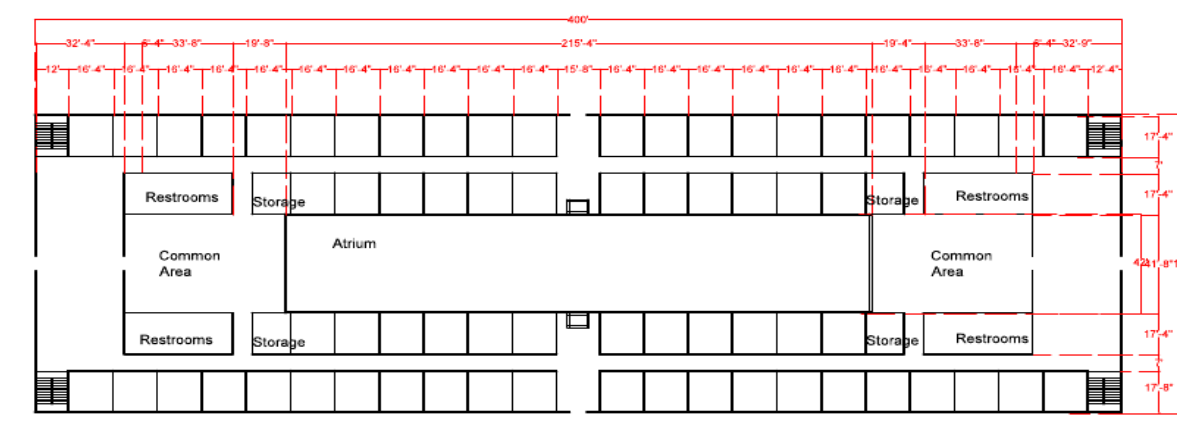


Waster Water Treatment Plant

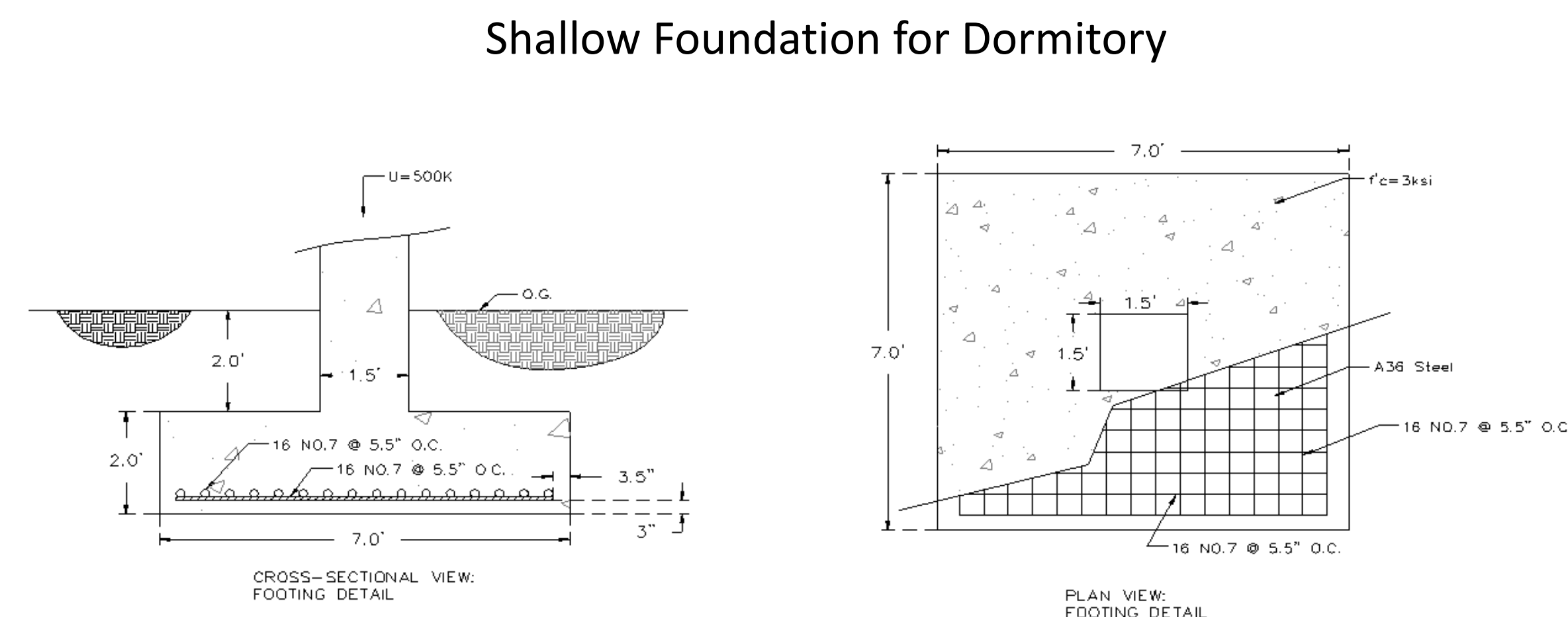
Dormitory Design



Dormitory Schematic



Dormitory Footing



Shallow Foundation for Dormitory

Sponsors

EST. 1968
PROVOST & PRITCHARD
 CONSULTING GROUP
 An Employee Owned Company
 Joe Hopkins, PE & Jerry Teng, PhD, PE
SALEM
 engineering group, inc.
 Josh Rhodes, PE

PETERS ENGINEERING GROUP
 A CALIFORNIA CORPORATION
 John Rowland, TE

BROOKS RANSOM ASSOCIATES
 CONSULTING STRUCTURAL ENGINEERS
 Rick Ransom, SE