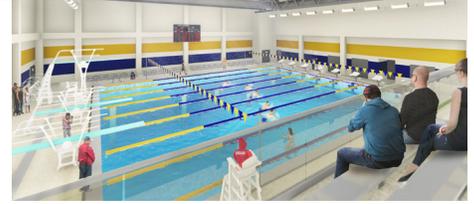


HIGHLAND PARK HIGH SCHOOL MULTI-USE BUILDING

UNIVERSITY PARK, TEXAS



YEAR COMPLETED:
July 2019

OWNER:
Highland Park ISD

CLIENT NAME:
Stantec Architecture, Inc.

RLG SERVICES:
Civil Engineering
Structural Engineering

PROJECT DESCRIPTION /SCOPE:

RLG Consulting Engineers has proudly provided engineering services for HPISD since 1991. Most recently Highland Park High School has enlisted the help of RLG Consulting Engineers to provide both structural and civil engineering services for the 50,000 square feet multi-use building. Providing the school with new and improved amenities such as a natatorium, sports offices, sports locker rooms, larger meeting spaces, 4,000 square feet weight room, 45-foot tall trophy case, monumental stairs and tiered entrance canopies. Each improvement is designed with the HPISD tradition of excellence in mind.

RLG’s civil engineering team provided paving and grading services in accordance with ADA compliance to ensure accessibility on the sidewalks adjacent to the building. Additionally, the team provided utility coordination between the city and public utilities on the site including water, wastewater, storm water and electrical.

RLG’s team of structural engineers provided engineering services for the main building structure coordinating the design of the foundations, floor framing, roof framing and lateral systems. The unique structural design of the natatorium boasts large open concrete structure with long clear-span HSS roof trusses and a roof pop-up. During the design phase, RLG’s team of structural engineers encountered a unique design challenge that required the natatorium roof trusses to be designed with strategically located block-outs in order to allow for the passage of MEP ducts. Additionally, the team was tasked with utilizing a wide variety of building structure types due to the difference in environments of the natatorium and office spaces.

To meet ADA building requirements, the structural team at RLG Consulting Engineers designed components of the natatorium at designated ADA spots in the viewing stands and lifts adjacent to the pool to assist people with disabilities. Additionally, ramps are located throughout the building to allow ease of accessibility. Centrally located outside of the natatorium, is the main long-span monumental stair, which was coordinated and designed to exist in a large open double height space to add a sense of grandeur to the building.

The multi-use building will also feature several large meeting rooms for the school’s various departments and organizations. Coupled with a state-of-the art weight room, designed with a recessed floor and a compressible mat to reduce the sound of weights hitting the floor. HPHS has collected many prestigious awards throughout the school’s 90-year history, requiring a 45-ft tall trophy case to display achievements from the past and make space for those to come.