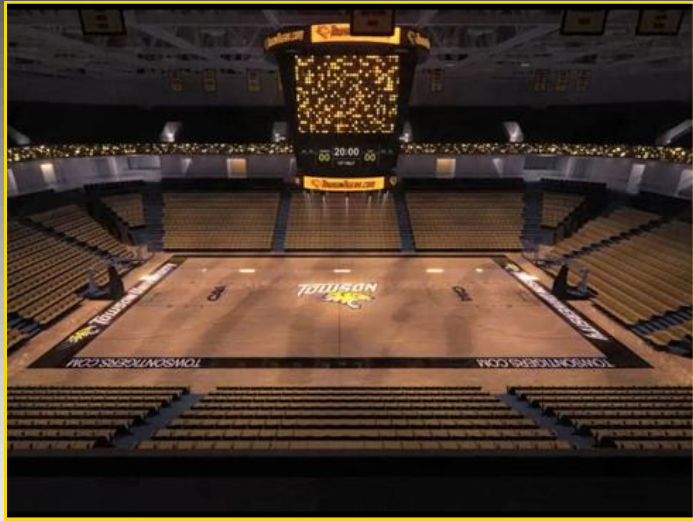


Towson Tiger Arena

Towson University, Towson, MD



Architecture

This arena, scheduled at 120,000 (GSF), will house approx. 5000 seats, several executive level suites and concession stands. Press boxes and audio/video equipment rooms will allow for broadcasting sporting events. The exterior of the new arena consists of Terra cotta, metal panels, 12" & 6" C channel, storefront glazing, curtain wall, a clear story, and split face CMU's.

Structure

Tiger Arena is built on foundation systems consisting of retaining walls, spread and continuous footings, and grade beams. CIP concrete walls, columns and beams, will be resting on these foundations systems and support the above slabs and structural steel. Precast Concrete Seat riser sections will be support by steel risers and beams from below. To complete the structure is a Pratt truss system consisting of 11, three piece trusses.

M/E/P Systems

Heating for this building will be provided by two 400hp, four pass, fire tube boiler/burner set ups. Two centrifugal Chillers rated at 450 tons each will provide chilled water for the building and two cooling towers rated at 450 tons each will provide cooling water for the chillers, each cooling tower will be rated for 1125 GPM and 450 tons of cooling. Chilled and heating water will be circulated through the building to various air handlers for temperature and humidity control within the arena. Power to the existing center arena is supplied by 15kV underground feeders. Switch gear for these 15kV lines will be provided with the new construction and transformers will be used to step down to 480/277V 3 Phase. Three 150kW generators will be installed for emergency power and will be located near the boiler room outside the existing Towson Center. Air handling units, pumps, fans and other specialties will be furnished with variable frequency drives for motor control where specified.

Project Overview

Building Function	Sports Arena
Overall Project Cost	\$56 Million
Size	120,000 S.F.
Number of Stories	4
Project Delivery Method	CM at Risk
Contract Type	GMP

Project Team

Owner	Towson University
Construction Manager	Gilbane Building Solutions
Architect	Hord Coplan Macht, Inc.
Civil Engineer	Site Resources, Inc.
Structural Engineer	Faisant, Inc.
M/E/P Engineer	James Posey Associates



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<http://www.engr.psu.edu/ae/thesis/portfolios/2013/drs5233/index.html>