# **Michigan Stadium Renovation and Addition Project**



## **Project Description**

The 400,000-square-foot addition includes two multi-story masonry structures on both the east and west sides of the stadium; the end zones will remain open. The structures, which will stand 10 feet higher than the current scoreboards at their highest point, include 83 suites and over 3,000 club seats.

When the renovations are complete, the capacity of the Big House will top 108,000.

The plans call for buildings to be constructed on the concourse at the north and south end zones. These buildings will house additional restrooms and concessions, and support functions such as first-aid, police/security and will-call. The structures will be covered in the same brickwork as the new sideline buildings.

Stadium improvements will include an increase in the number and quality of restrooms; more concession stands with a greater variety of fare; wider aisles; handrails; additional entry and exit points for improved crowd circulation and safety; and additional dedicated seating for fans with impaired mobility.

Construction work will be phased over a period of three years in order not to interrupt home football games. It is expected to be completed prior to the 2010 fall football season.

### **Energy Efficiency Measures**

- Design building to meet energy efficiency and performance required by ASHRAE/IESNA 90.1-1999 with the exception of the glazing at suites and club areas.
- Air handling units on occupancy schedule allowing lower winter set point for heating and higher summer set point for cooling when the building is unoccupied.
- Individual controls for air handling units allow heating and cooling to specific areas as needed.
- Automatic sensors at lavatories control water flow.
- Tempered water is provided to lavatories minimizing the use of hot water.
- Thermostat controls in each suite allows for individual control.
- Use low flow toilet fixtures and waterless urinals.

### **Other Sustainability Features**

- Design site sediment and erosion control to best management practices.
- Stadium is located on bus routes.
- No new parking is provided on site.
- No net increase in storm water runoff.
- ENERGY STAR roof for all new roof surfaces.
- Reduce the use of municipally provided portable water through the use of waterless urinals and low flow fixtures.
- Zero use of CFC-Based refrigerants.

- Use regional and local material where possible, (e.g. brick).
- Ventilation meets ASHRAE 62-1999 Indoor Air Quality requirements.
- Use low-VOC materials, (e.g. adhesives, sealants, paints, coatings, and carpet).
- Use building materials that have been extracted and/or harvested as well as manufactured, within 500 miles of the project site, e.g. brick,
- Operable windows and lighting controls provided for occupied spaces on building perimeter.
- Comply with ASHRAE Standard 55-1992 for thermal control standards.
- Day lighting provided to all interior spaces thereby reducing the use of electrical lights.

### **Project Data**

- Budget: \$226M
- Schedule: Completion scheduled for Summer 2010
- Square Feet: 400,000 gsf