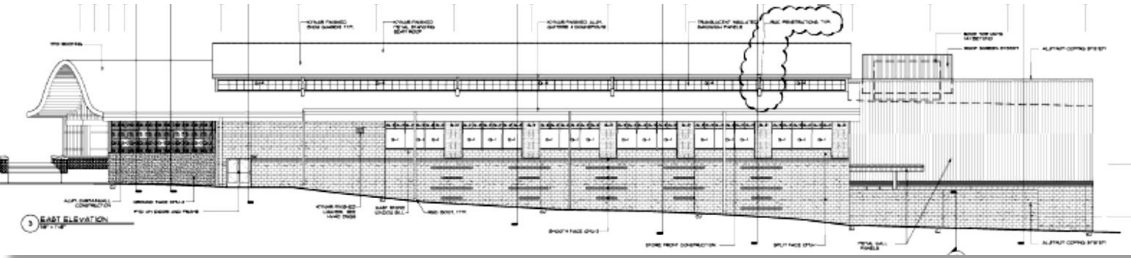


# Executive Summary

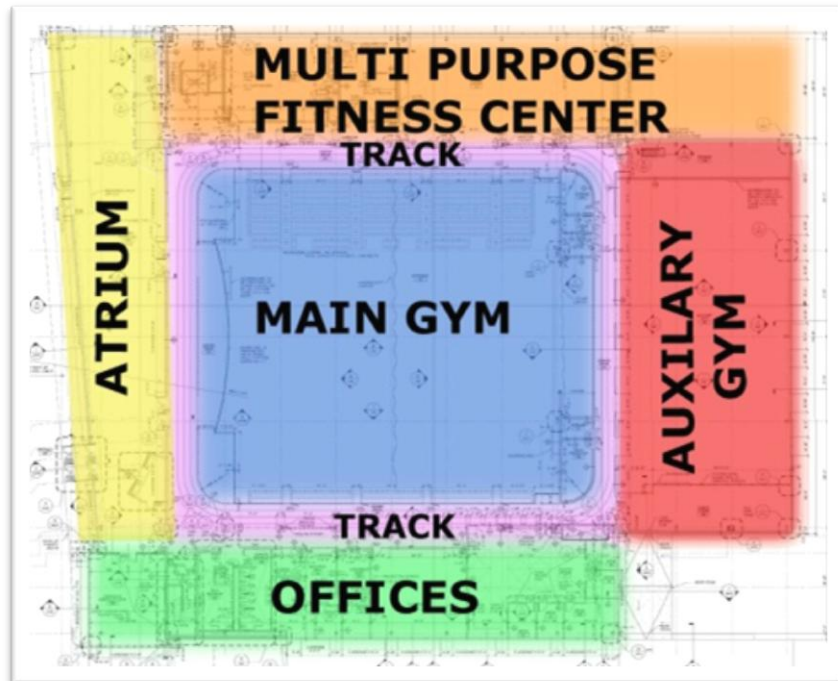
## General Building Overview

The Mirenda Center for Sports, Spirituality, and Character Development (CSSCD) is a two story building. The ground floor entrance is at the second level in the front of the building, while the lower level is underground at the front of the building while the sloping topography brings the lower level to exit at ground level in the rear of the building. See East Elevation below for orientation.



**East Elevation**

The core of the building is the main gymnasium that seats up to 1450 spectators at the lower level. Wrapped around the main gym at the second level is an indoor running track. The outer most perimeter is as follows: Offices on the east side, Auxiliary gym on the north side, multipurpose and fitness center on the west side, and open glazed atrium on the south side. See Layout below for orientation.



Layout

### **Mechanical System Overview**

The Mirenda Center is primarily heated and cooled by 6 roof top air handling units, their location is above the auxiliary gym. RTU-5&6 serve the main gymnasium and the indoor running track in unison. RTU-3 & 4 serve only the auxiliary gym. RTU-1 and 2 serve the remaining perimeter spaces: the multipurpose and fitness center, the offices, and atrium. There is a secondary split system to cool specified office areas and other specialty spaces. The condensing unit for the split system is located on the roof of the auxiliary gym with the RTU's. Liquid refrigerant is pipe to the locations of each individual load point. There is natural gas burners for heating of the RTU's and reheats for each zone in the constant air volume boxes. There is also electric resistant strip heat around the perimeter of the building. This electric strip heat is primarily to keep condensation from forming on the glazing.