TEAM INFORMATION

Team Name/Project Title: Swift Tram - DIA

Department: Civil Engineering

Faculty Advisor(s): Peter Marxhausen

Team Members:

Sarah Parsley, Abdulla Mohammed Al Ansari, Khaled AL-Ashar, Fahad Al-Mousa, Omer Karaketir, Brian Vines, Jun Wang, Tesfaye Zeleke

PROJECT INFORMATION

Description:

Engineering Design for the installation of suspended-coach, automated people mover (APM) systems at the Denver International Airport (DIA) in Denver, Colorado.

Abstract:

Swift Tram, Inc. is a Colorado headquartered corporation founded in 2011. The primary mission of the company is to introduce Suspended Coach Automated Rapid Transit to the world as the faster, more energy efficient and more cost effective transportation mode. Swift Tram is comprised of two divisions – Production and Enterprise. The Production Division manufactures the products while the Enterprise Division engages in the installations and operations of the systems. Swift will develop the product, with strategic partners and suppliers within Colorado, and set up manufacturing for a scheduled roll-out date of 2015 for the prototype system and the first production installation during 2016.

A Swift automated people mover system consists of an overhead, fixed guideway tube; drive bogies that travel within the guideways; coaches that hang from the bogies through a slot in the bottom of the guideways; and control center IT. The guideway is a one-meter diameter steel tube with tracks on the interior and a slot in the bottom of the tube. The electrically powered bogies connect to conductors within the guideway for their 3 phase, 480 volt feed. The guideways are supported by 25 foot towers spaced at approximately 100 foot intervals. Boarding stations can be either at grade or elevated as the case may be.