Science Complex located on campus at South Columbia Street is prone to flooding during heavy storm events. It experienced severe flooding during the June 30th, 2013 storm event which resulted in 4-5 feet of floodwater at the site and caused about $125,000 in damages. This report focuses on identification of all possible causes and optimal solution development for the problem. Hydraulic modeling using SWMM, technical consultations, and field investigations were used to explore different options involving pipe resizing, addition of new pipes and storage unit to the site. Six different options were developed and compared against five criteria for a 100 year, SCS Type-II design storm. The most functional and cost effective solution was determined to be addition of new parallel pipes to the system. An implementation plan was developed and project costs were compared to the present value of future benefits from the flood damages averted.