Semarang Jatibarang landfill has been operated since 1992 with the open dumping method. Until now Jatibarang landfill leachate management does not have a safe for the environment, control of methane gas and landfill control other negative impacts that are still bad. It is not in accordance with the Law of the Republic of Indonesia No.18 Year 2008 on Waste Management which explained that the landfill must be processed and return the waste to the environment is safe for humans and the environment. To reduce the harm to the environment then the landfill is designed Jatibarang again use the concept of sanitary landfill with landfill method is a method used canyon and trench method. The purpose of this study is to redesign a sanitary landfill Jatibarang landfill. The results of this study is a new design of sanitary landfill by landfill leachate channel system, a gas vent pipe, the rehabilitation of various other support facilities including truck scale, and also the addition of heavy equipment required. Costs needed to redesign the sanitary landfill landfills Jatibarang is Rp 32,947,255,000.00.

Keywords: design, sanitary landfills, the Jatibarang landfill, Semarang