



SPE ELECTRICAL



CASE STUDY 13: AMBER INTEGRATED CONTROLS & AUTOMATION

WATER TREATMENT WORKS: EARTHING STUDY DESIGN

Client: AICA / Costain
Industry: Water
Plant Type: Water Treatment Works
Project: Earthing Study
Contract: Lump Sum
Date: 2017

SPE was contracted by AICA, in conjunction with Costain, to carry out a full site review and earthing design for the Wyelands WTW in Ross on Wye, UK. The work is part of a major site upgrade, which includes replacement of the 3.3kV and 400V main switchboards and generator step-up transformer.

SPE began by carrying out a detailed, non-invasive site survey of the existing earthing system. This included recording the location and size of the main earthing conductors, measurement of the soil resistivity and establishment of the existing earthing grid impedance.

Once this first stage was completed, SPE then prepared an earthing schematic diagram for the new system, proposed a neutral-earthing configuration for the new step-up generator transformer and concluded with an ENA 41-24 earthing study using the CDEGS package.

“SPE was appointed to undertake a full earthing site survey and design as part of a major site upgrade.”