Slike mehaniziranog obavljanja građevinskih radova iz knjige A.C. Twort, J. Gordon Rees: *Civil Engineering Project Management* (dostupna na file:///C:/Users/Intel/Downloads/Civil_Engineering_Project_Management.pdf)



Plate 2b. A Euclid R60 522 kW dump truck, $36\,\mathrm{m}^3$ heaped capacity. VME Construction Equipment GB Ltd, Duxford, Cambridge, UK



Plate 4b. A badly rutted formation, probably due to excessive moisture content of the fill



Plate 3b. A Kato 162 kW tracked excavator, with 1.6 m³ bucket. ACP Holdings, Leicester, UK



Plate 5b. It can be easier to get out of this sort of trouble than to decide whether the conditions 'could not reasonably have been foreseen by an experienced contractor' under Clause 12 of the ICE conditions



Plate 7b. An early photo showing unsafe conditions not now permissible. The designer would now have to consider any safer alternative route for the trench, or require a safe berm to be cut into the hillside first to give a shallower trench. The contractor must fully support the trench sides and require his men to wear hard hats.



Plate 10a. It is almost universal to use the hydraulic excavator also as a crane



Plate 9a. A Mastenbroek 17/17 trenching machine with variable-offset heavy-duty cutting chain for trenches up to 0.6 m wide by 1.8 m depth. Larger machines are made. J. Mastenbroek & Co. Ltd, Boston, UK



Plate 8b. The ubiquitous backhoe loader used on many sites. That shown is the JCB 3CX 56.5 kW, with shovel up to 2.3 m wide and hoe bucket 0.3–0.9 m wide. JCB Ltd, Rocester, UK



Plate 3a. A Terex TS24C 552 kW twin-engined 36 m³ capacity scraper for earth-moving. Terex Equipment Ltd, Motherwell, Scotland



Plate 4a. Rollers compacting side slopes of power channel; filter layers and concrete to follow. Ghazi Barotha Hydropower project, Pakistan 1999



Plate 14a. The typical fluidity of pumped concrete; but it still needs vibrating in place