Survey strategy for Longstone Edge excavation

The survey strategy can be broken into two parts, establishing the grid and recording the data. The first part of the strategy calls for a grid that will tie into the grid used in the 1995 topographic survey, so the data from the excavation can be compared with the landscape model afterwards. As this calls for some experience in survey work, it is recommended that the CAS surveyor undertake the establishment of the grid prior to the start of excavation. This will require a day on site with the T1600 TST and an assistant, and will produce survey stations as grid pegs for use during the project. At the same time, there is an area of the site that was not modelled during the topographic survey. This area will need to be recorded prior to excavation, and the obvious time for this is during the establishment of the grid. This data gathering will take a day.

The project design for Longstone Edge calls for 3-D recording of all finds by use of a total-station theodolite. The recommended instrument for this is the TC500 currently owned by the CAS. Once there are survey stations on site, the instrument can be set up and used by a member of the excavation team, with some basic instruction from the CAS surveyor. As the Project Manager has already received this instruction, he will be able to teach other team members as needed. It is highly recommended, however, that the Project Manager be given a further day of instruction prior to the start of excavation, as the CAS surveyor will not be available for the projected start of fieldwork on 12th August. The CAS surveyor will also need to visit the site during the first few weeks to ensure that the TST recording is working out, as there will be no chance of gathering data a second time if anything goes wrong.

The equipment needed for the survey work again breaks down into two parts. For the establishment of the grid the T1600 TST will be needed, as well as grid pegs, nails, a saw, and a lump hammer. A portable computer will be required to download data at the end of each day. Any necessary safety equipment is as per the main project design.

The excavation phase will require the TC500 and its attendant accessories, as well as some form of nails or markers for finds awaiting recording. A portable computer with relevant software will be needed in the site office or accommodation to download data at the end of each day, and security copies of the data on 3.5" floppy discs will be made daily. Suitable charging facilities will be needed for the batteries. Once again, see the project design for safety requirements.

It is envisaged that the TST will be set up at a safe distance from the cliff edge, and that the instrument and operator will not be in any danger of falling into the quarry. Therefore there are no special requirements to secure them by means of ropes.

The time estimates are as follows:

Setting up grid	1 day
Finishing topographic model	1 day
Site visits at 3-week intervals	1 day (x3)

Currently the first two tasks are scheduled for the 29th and 30th of July, requiring the presence of Thomas Cromwell and Peter Reeves.