

Caldwell Construction Limited Work Activity Method Statement

WORK SYSTEM	TASK 9 - FORM MANHOLE OVER CULVERT
1	All personnel involved in the works will be briefed on the safe system of work including all control measures of risk assessments.
2	The drainage run will be clearly marked by the site engineer prior to any commencement of excavation. Prior to excavations being carried out checks will be made to ensure so far as is reasonable that the ground is not contaminated with any noxious substance. Operatives are advised to inform the site manager if they encounter any brightly coloured or strangely smelling ground.
3	With all the above in place and a secure work area established the area for excavation can then be surveyed using a Cable Avoidance Tool & Genny a Permit to Break Ground shall be put in place and the red book will be completed in conjunction with Permit to Break Ground and signed by all carrying out task. The area is to be marked out with Line marker spray to identify the location of the buried services. Carry out trial holes with the use of hand tools when revealing buried services, insulated hand tools to be utilised when working in close proximity to buried electrical services. Underground services are to be controlled in accordance with the Safe System of Work.
4	The whole of the working area to be completely fenced at all times. The works will be carried out by experienced operatives who will be supervised during the whole of the works. All personnel within the work area will wear the appropriate PPE. Statutory examinations will be carried out on all plant, equipment with records kept. Only authorised-trained operatives will be permitted to drive any plant vehicles and mount abrasive wheels on company machines. All excavations will be fenced off if unattended at any time
5	The road will be cut with a road saw then tarmac lifted and loosened by pneumatic drills. Excavation will commence with a 360-degree excavator. Shoring boxes will be installed as the installation guide. Once the shoring is installed the excavation will be completed to the level of the brick culvert. The brick culvert will be broken into using either a pneumatic breaker or a breaker attached to the excavator. Excavated material will be loaded into dumpers for removal. Ladders used only for access and egress. Only trained and experienced operatives are to enter the excavation
6	The pipe bedding will then be placed with the excavator and placed by the pipe layer to the correct level using the pipe laser. Once the pipe bed is correct a pipe will be lowered down into the excavation with the 360-degree excavator. Once the pipe has been placed at the correct level and jointed by the manufactures instructions pipe bedding will be placed around the pipe
7	Another one or two boxes will be installed in the same manner and the pipes laid. Backfilling will then commence using excavated material. The backfilled will be placed in layers and compacted with either plate compactors vibrating rollers. The shoring will be extracted as the backfilling is carried out. This is a rolling sequence.
8	Concrete will be lowered into the excavation in the machine bucket and laid to form the manhole base
9	Manhole rings will be lifted and lowered into the excavation by the excavator using proprietary lifting chains. The slinging and any signalling required will be carried out by a trained slinger/signaller.
10	The first ring will be installed, and the channel sections and benching completed prior to the subsequent rings being fitted. If the frame and cover is not fitted immediately a secure temporary cover will be fixed over the opening until the permanent cover is fitted. Backfilling will be with concrete around the manhole rings

Caldwell Construction Limited Work Activity Method Statement

11	If there is a possibility of water ingress, over pumping may be required
12	Any excavations left open overnight will be fenced off with Heras type panels double clipped together. Panels will not be laid flat over excavations.
13	Where work is carried out in an existing chamber confined space procedure will apply: the atmosphere will be tested, and emergency rescue equipment provided and used.